

A. INTRODUCTION

This chapter assesses the potential for the Proposed Project to result in a significant adverse impact on open space resources. Open space is defined as publicly accessible, publicly or privately owned land that is available for leisure, play, or sport or serves to protect or enhance the natural environment.¹ An open space analysis should be conducted if a project would result in a direct effect on open space, such as the physical loss or alteration of public open space that would limit public access or change the use of an open space so that it would not serve the same user population, or an indirect effect on open space, such as when a substantial new population could place added demand on an area's open spaces. Per the 2021 *City Environmental Quality Review Technical Manual (CTM)*, if a project would generate more than 200 residents or 500 nonresidential users, an open space assessment should be conducted pursuant to the *CTM*.

As discussed in **Chapter 02.0, "Project Alternatives,"** there are three feasible alternatives under consideration for implementation of the Proposed Project. These include: Alternative 2 – the Rezoning Alternative; Alternative 3 – the Non-Rezoning Alternative; and Alternative 4– the Midblock Bulk Alternative. A discussion of Alternative 5 – the Rehabilitation and Infill Alternative, which has been determined to be infeasible, is presented in **Chapter 05.22, "Rehabilitation and Infill Alternative Analysis."** Refer to **Chapter 04.0, "Analysis Framework," Table 04.0-4,** for information on the analysis approach for the three feasible alternatives for each technical area.

The Proposed Project would not directly displace any existing public open space resources; however the development alternatives are expected to result in an incremental increase of 3,454 dwelling units (DUs) for the Rezoning Alternative and the Midblock Bulk Alternative, or an increase of 1,783 DUs under the Non-Rezoning Alternative. As compared to the 2041 No-Action Alternative, the Proposed Project would result in an incremental increase of approximately 5,803 residents for the Rezoning and Midblock Bulk Alternatives, or approximately 2,995 residents under the Non-Rezoning Alternative,² which would exceed the *CTM* preliminary screening threshold of 200 incremental residents for an indirect open space analysis. Both quantitative and qualitative assessments were conducted to determine whether the Proposed Project would significantly affect the use and enjoyment of publicly accessible open space in an identified study area. The Proposed Project is expected to introduce a net increment of 362 employees to the Project Sites under the Rezoning and Midblock Bulk Alternatives, or an increase of 378 employees under the Non-Rezoning Alternative,³ as compared to the No-Action Alternative, which is below the

¹ Pursuant to the *CTM*, "public" open space that is analyzed under CEQR is defined as open space that is accessible to the public on a constant and regular basis for active and passive recreation, including for designated daily periods. Public open space may be under government or private jurisdiction.

² The estimated number of residents is based on the average household size in Manhattan Community District 4 (1.68 persons per household) per the 2020 Decennial Census.

³ Estimate of workers based on standard rates and are as follows: three employees per 1,000 sf for daycare, medical office, and retail uses; one employee per 1,000 sf of supermarket uses, and one employee per 450 sf of neighborhood center space.

CTM preliminary screening threshold of 500 incremental nonresidential users for analysis. Therefore, the analysis of indirect open space impacts focuses exclusively on the open space needs of the area's residential population.

B. PRINCIPAL CONCLUSIONS

No significant adverse impacts to open space are anticipated as a result of the Rezoning Alternative, the Non-Rezoning Alternative, and the Midblock Bulk Alternative at the Project Sites to applicable guidance and methodologies, as discussed below. Refer to **Section E, "Environmental Effects,"** for further information.

C. METHODOLOGY

The analysis of open space resources has been conducted in accordance with the methodology set forth in Chapter 7 of the *CTM*. Using this methodology, the adequacy of open space in the study area is assessed quantitatively using a ratio of usable open space acreage to the study area population, referred to as the open space ratio. This quantitative measure is then used to assess the future changes in the adequacy of open space resources under the No-Action, Rezoning, Midblock Bulk, and Non-Rezoning Alternatives. In addition, qualitative factors are considered in making an assessment of the Proposed Project's effects on open space resources.

Study Area

The first step in assessing potential open space impacts is to establish the appropriate study area for the new population(s) to be added as a result of the Proposed Project. Pursuant to *CTM* guidance, the open space study area is generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources, which differs by user. Nonresidential users typically use passive open spaces within walking distance of their workplaces, identified as typically 0.25 miles. Residents are more likely to use both active and passive open spaces and are more likely to travel farther than nonresidential users to reach parks and recreational facilities, identified as typically 0.5 miles. While residents may also travel farther to visit certain regional parks (e.g. Riverside Park and Central Park), such open space was not included in the study area's quantitative analysis.

As the nonresidential population resulting from the Proposed Project would generate an increment of 362 nonresidents under the Rezoning and Midblock Bulk Alternatives and 378 nonresidents under the Non-Rezoning Alternative, it would not exceed the CEQR threshold of 500 incremental nonresidents and thus, a nonresidential analysis is not warranted. However, as indicated above, the new residential population resulting from the Proposed Project would generate an increment of 5,803 residents under the Rezoning and Midblock Bulk Alternatives and 2,995 residents under the Non-Rezoning Alternative, and therefore would exceed the CEQR threshold of 200 incremental residents and thus, a residential analysis is warranted. In accordance with the guidance established in the *CTM*, the residential open space study area includes all census tracts that have at least 50 percent of their area located within a ½-mile of a project area and all open spaces within it are

publicly accessible. As shown in **Figure 05.04-1**, the residential open space study area is roughly bounded by W. 38th Street and W. 34th Street to the north; 8th Avenue and 6th Avenue (Avenue of the Americas) to the east, W. 11th Street and W. 14th Street to the south, and the Hudson River to the west. The open space study area includes the following census tracts: 77, 79, 81, 83, 87, 89, 91, 93, 95, 97, 99.01, 99.02, 99.03, 101, 103, and 111. Approximately 40 open spaces are identified as being located within the study area.

Analysis Framework

Direct Effect Analysis

A project may have direct effects on open space conditions if it encroaches on or causes the loss of open space, changes the use of open space so that it no longer serves the same user population, limits public access to an open space, or results in increased noise or air pollutant emissions, odors, or shadows that would affect its usefulness, whether on a permanent or temporary basis. As no public open space resources would be physically displaced as a result of the Proposed Project, this chapter uses information from **Chapter 05.05, “Shadows,” Chapter 05.14, “Air Quality,” Chapter 05.16, “Noise,” and Chapter 05.19, “Construction,”** to determine whether the Proposed Project would directly affect any open spaces within, or in close proximity to, the Project Sites.

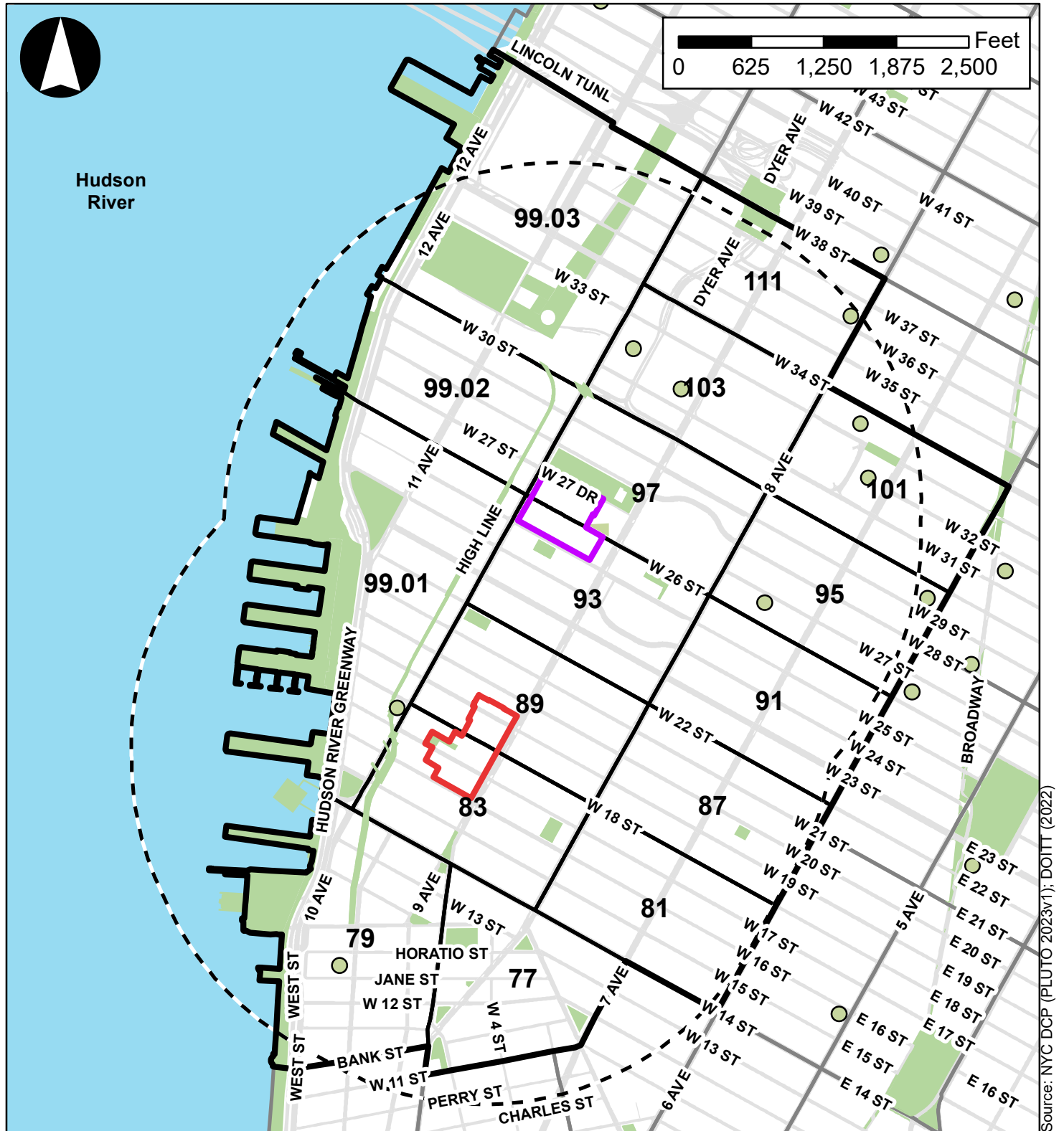
The Proposed Project would reduce the existing 7.289 acres of private, accessory open spaces on the Project Sites, with a total of 5.213 acres, 5.209 acres, and 5.369 acres of new private, accessory open spaces of comparable programming under the Rezoning, Midblock Bulk, and Non-Rezoning Alternatives, respectively.⁴ Information on these areas is provided in the **Section E** below. The open space on the Project Sites is not considered public open space as defined in the *CTM*, as it is not designated as public, such as having posted public access hours.

Indirect Effect Analysis

As part of the preliminary assessment for open space, a project should be reviewed to determine if it is located in an area of the City within a WtPSA.⁵ As shown in **Figure 05.04-2**, the Project Sites and a majority of the ½-mile study area is within an area that has been identified as a WtPSA. The portions of the study area not within a WtPSA include the blocks occupied by Penn Station and

⁴ Under the Rezoning Alternative, of the total 5.213 acres of accessory open space, 2.374 acres are located on the Fulton Houses Project Site and 2.839 acres are located on the Elliott-Chelsea Houses Project Site. Under the Non-Rezoning Alternative, of the total 5.369 acres of accessory open space, 2.287 acres are located on the Fulton Houses Project Site and 3.083 acres are located on the Elliott-Chelsea Houses Project Site. Under the Midblock Bulk Alternative, of the total 5.209 acres of accessory open space, 2.370 acres are located on the Fulton Houses Project Site and 2.839 acres are located on the Elliott-Chelsea Houses Project Site.

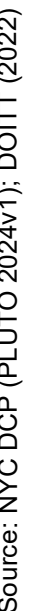
⁵ A Walk to a Park Service Area (WtPSA) is a part of the *OneNYC* plan, in which existing areas within a WtPSA are within walking distance of a park (i.e., ½-mile). Areas not located within a WtPSA are considered “walk gaps”, which are areas of New York City that are not within walking distance of a park. The Walk to a Park Initiative focuses on increasing access to parks and open spaces, concentrating on under-resourced areas of the city and where New York City residents are living further than a walk to a park. New York City’s *OneNYC 2050 Building a Strong and Fair City* plan has laid out a goal of 85 percent of New York City residents living within walking distance of a park by 2030. See also <https://www.nycgovparks.org/planning-and-building/planning/walk-to-a-park> for more information.



Source: NYC DCP (PLUTO 2023v1); DOITT (2022)

Legend

- Fulton Houses
- Elliott-Chelsea Houses
- 83 Residential Open Space Study Area
- Privately Owned Public Space (POPS)
- 1/2-Mile Radius
- Open Space Resources
- Census Tracts



Walk to a Park Service Area

Moynihan Train Hall, as well as several blocks in northern Chelsea and southern Clinton neighborhoods of Manhattan.

With an inventory of available open space resources and potential users, the adequacy of open space in the study area can be assessed quantitatively and qualitatively. The quantitative approach computes the ratio of open space acreage to the population in the study area and compares this ratio with certain *CTM* guidance. The qualitative assessment examines other factors that may affect conclusions about adequacy, including proximity to additional resources beyond the boundaries of the study area, the availability of private recreational facilities, and the demographic characteristics of the study area's population. Specifically, the analysis in this chapter includes:

- Characteristics of the existing and future residential users. To determine the number of residents in the study area, 2018-2022 American Community Survey (ACS) census data have been compiled for census tracts comprising the open space study area.
- An inventory of all publicly accessible active and passive recreational facilities in the open space study area.
- An assessment of the quantitative ratio of open space in the study area by computing the ratio of open space acreage to the population in the study area and comparing this open space ratio with the City's planning goal. In New York City, the optimal open space ratio for residential populations is 2.5 acres of open space per 1,000 residents and 0.15 acres of passive open space per 1,000 nonresidents. Ideally, this would comprise a balance of 80 percent active open space (2.0 acres per 1,000 residents) and 20 percent passive open space (0.5 acres per 1,000 residents).
- An evaluation of qualitative factors affecting open space use.
- A determination of the adequacy of open space in the residential open space study area for the existing conditions, No-Action Alternative, Rezoning Alternative, Midblock Bulk Alternative, and Non-Rezoning Alternative.

Preliminary Assessment

According to the *CTM*, a preliminary assessment may be useful to determine if a detailed open space analysis is necessary or whether the open space assessment can be targeted to a particular user group. This initial assessment calculates an open space ratio by relating the existing residential and nonresidential populations to the total open space in the study area, as applicable. It then compares that ratio with the open space ratio in the future with the Proposed Project (i.e., Rezoning Alternative, Non-Rezoning Alternative, and Midblock Bulk Alternative). If there is a decrease in the open space ratio that would approach or exceed two percent in areas exhibiting low open space ratios between 0.5 and 1.0 (such as the study area, which has an existing total open space ratio of 0.866), a detailed analysis is warranted. The detailed analysis examines passive and active open space resources available to residents within the open space study area delineated in accordance with the *CTM*, as outlined above. As the Proposed Project would introduce a sizeable residential population in an area which exhibits a total open space ratio of 0.866 acres per 1,000 residents under existing conditions (compared to a total open space ratio of 0.647 acres per 1,000 residents under the Rezoning and Midblock Bulk Alternatives and 0.663 acres per 1,000 residents under the Non-Rezoning Alternative), a detailed open space analysis is warranted and is provided below.

Impact Assessment

As described in the *CTM*, the significance of an action's effects on an area's open spaces is determined using both quantitative and qualitative factors, as compared to the No-Action Alternative. The determination of significance is based upon the context of an action, including its location, the quality and quantity of the open space in the future with the Proposed Project, and any new open space provided by an action.

An action's potential effects on an area's open space are based, in part, on how a project would change the open space ratios in the study area, as well as other qualitative considerations. According to the *CTM*, a project that would reduce the open space ratio by more than the general guidance for the open space percentage change shown in **Table 05.04-1** may be considered significant, as these reductions may result in overburdening existing facilities or further exacerbating a deficiency in open space. As shown in **Table 05.04-1**, the guidance for tolerated percent change in open space ratio is determined based on the open space ratio ranges outlined in the *CTM*.

Table 05.04-1: Guidance for Percentage Change in Open Space Ratio

| Open Space Ratio Range | Percent Change in Open Space Ratio |
|-------------------------|------------------------------------|
| 2.01 to 2.50 or Greater | 5% |
| 1.51 to 2.0 | 4% |
| 1.01 to 1.5 | 3% |
| 0.51 to 1.0 | 2% |
| 0.50 or Less | 1% |

Note:

*2.5 open space ratio is the planning goal in New York City.

Source: Table 7-1 in Chapter 7, "Open Space" of the *CTM*.

It should be noted that the City's optimal open space ratios and percentage reductions shown in **Table 05.04-1** do not constitute an absolute impact threshold. The *CTM* also recommends consideration of qualitative factors in assessing the potential for open space impacts. As such, projects that may result in significant quantitative impacts on open space are typically further assessed in a qualitative assessment to determine the overall significance of the impact.

The qualitative assessment supplements the quantitative assessment and considers the distribution of open space, whether a site is within the WtPSA, the distance from the site to regional parks, the connectivity of open space(s), and any additional open space created by the Proposed Project not available to the general public, if applicable, and determinations as to what constitutes a significant adverse open space impact are not based solely on the results of the quantitative assessment.

D. AFFECTED ENVIRONMENT

Demographic Characteristics of the Study Area

To determine the residential population served by existing open space resources, estimates from the 2018-2022 ACS data were compiled for the census tracts comprising the open space study

area. As mentioned above and shown in **Figure 05.04-1**, the open space study area is comprised of 16 census tracts. As shown in **Table 05.04-2**, the open space study area has a residential population of approximately 72,013 persons.

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

Table 05.04-2: Existing Residential Population in the ½-Mile Study Area

| Census Tract | Residential Population |
|--------------|------------------------|
| 77 | 5,706 |
| 79 | 4,211 |
| 81 | 6,639 |
| 83 | 3,798 |
| 87 | 6,133 |
| 89 | 6,314 |
| 91 | 6,654 |
| 93 | 9,632 |
| 95 | 3,217 |
| 97 | 4,565 |
| 99.01 | 1,800 |
| 99.02 | 3,057 |
| 99.03 | 916 |
| 101 | 1,824 |
| 103 | 2,648 |
| 111 | 4,899 |
| Total | 72,013 |

Source: 2018-2022 Five-Year Estimates American Community Survey (ACS)

The residential population of the study area was also broken down by age group. As shown in **Table 05.04-3**, people between the ages of 20 and 64 make up the majority (73.4 percent) of the residential population. Children and teenagers (0 to 19 years old) account for approximately 11.7 percent of the entire residential population, and persons 65 years and over account for approximately 14.9 percent of the study area population. Based on this data, the peak hours of open space demand would be expected to be concentrated during weekends and the early morning and late afternoon to evening hours during the week, as it could be assumed that most residents aged 20 to 64 would work or attend school on weekdays.

The open space study area's median age of 37.1 is approximately 1.0 years younger than the median age for Manhattan (38.1 years) and approximately 0.4 years younger than the median age for New York City as a whole (37.5 years). It should also be noted that the median age varies by census tract, with census tract 95 exhibiting the lowest median age (30.3) and census tract 97, which partly contains the Elliott-Chelsea Houses Project Site, exhibiting the highest median age (56.1). In fact, census tracts 83, 89, 93, and 97, which contain the Project Sites all exhibit higher median ages at 42.3, 41.4, 50.6, and 56.1, respectively.

Table 05.04-3: Residential Population Age Distribution in the ½-Mile Study Area

| Age Category | Residential Population | Percent of Population |
|--------------------|------------------------|-----------------------|
| Under 5 years old | 1,712 | 3.0% |
| 5 to 9 years | 1,751 | 2.6% |
| 10 to 14 years | 2,219 | 2.6% |
| 15 to 19 years | 2,684 | 3.5% |
| 20 to 64 years | 52,687 | 73.4% |
| 65 years and older | 10,960 | 14.9% |

Source: 2018-2022 Five-Year ACS

Inventory of Publicly Accessible Open Space

According to the *CTM*, open space may be public or private and may be used for active or passive recreational purposes. Pursuant to the *CTM*, public open space is defined as facilities open to the public at designated hours on a regular basis and is assessed for impacts under *CTM* guidance, whereas private open space is not accessible to the public on a regular basis and is therefore only considered qualitatively. Field surveys and secondary sources were used to determine the number, availability, and condition of publicly accessible open space resources in the study area.

An open space is determined to be active or passive by the uses that the design of the space allows. Active open space is the part of a facility used for active play such as sports or exercise and may include playground equipment, playing fields and courts, swimming pools, skating rinks, golf courses, and multi-purpose play areas (open lawns and paved areas for active recreation such as running games, informal ball-playing, skipping rope, etc.). Passive open space is used for sitting, strolling, and relaxation, and typically contains benches, walkways, and picnicking areas.

Within the defined study area, all publicly accessible open spaces were inventoried and identified by their location, size, owner, type, utilization, equipment, hours, and condition. The information used for this analysis was gathered through field inventories conducted in March 2023 and June 2024⁶, the NYC Parks website, and other secondary sources of information.

The condition of each open space facility was categorized as “Excellent,” “Good,” “Fair,” or “Poor”. A facility was considered in excellent condition if the area was clean and attractive and if all equipment was present and in good repair. A good facility had minor problems such as litter or

⁶ Field visits were conducted on Wednesday, March 22, 2023, and Monday, March 27, 2023 between 11AM to 4PM. On March 22nd and March 27th, the weather was sunny with a high temperature of 61°F. Follow up field visits of all study area resources were conducted on Thursday, June 27, 2024, and Friday, June 28, 2024 between 11AM to 4PM. On June 27th, the weather was slightly cloudy with a high temperature of 84°F. On June 28th, the weather was sunny with a high temperature of 75°F.

older but operative equipment. A fair or poor facility was one that was poorly maintained, had broken or missing equipment or lack of security, or other factors that would diminish the facility's attractiveness. Determination of the conditions was made based on a visual assessment of the facilities.

Likewise, judgments as to the intensity of use of the facilities were qualitative, based on an observed degree of activity or utilization on a weekday afternoon.⁷ If a facility seemed to be at or near capacity (i.e., the majority of benches or equipment was in use), then utilization was considered heavy. If the facility or equipment was in use but could accommodate additional users, utilization was considered moderate. If a playground or sitting area had few people, usage was considered light. **Tables 05.04-4 and 05.04-5** identify the addresses, ownership, hours, and acreage of active and passive open spaces in the study area, as well as their condition and utilization. **Figure 05.04-3** maps their location in the study area.

⁷ Pursuant to the *CTM*, field surveys should be obtained from at least two site visits during peak hours of use and in good weather. According to the *CTM*, peak hours vary for different users and facilities, in which commercial areas tend to have peak hour at lunch time (noon to 2PM) and residential neighborhoods have peak hours on weekends and after school. Based on *CTM* guidance, the weekday afternoon is a suitable period to conduct field surveys.

Table 05.04-4: Public Open Space Included in the Quantitative Assessment

| Map No. ¹ | Name | Owner/ Agency ² | Address | Amenities | Hours of Access | User Groups | Total Acres | Active Acres | Active % | Passive Acres | Passive % | Condition & Utilization ³ |
|----------------------|--|---|--|--|-------------------------------------|--------------------------------------|-------------|--------------|----------|---------------|-----------|--------------------------------------|
| 1 | Hudson Park & Boulevard (Phase 2) ⁴ | NYC Parks | W 36 th St to W 39 th St btwn. 11 th Av and Hudson Blvd E | Playgrounds, Walkways, Plazas, Landscaping & Benches | Acquisition and development by 2025 | Children, Teenagers, Adults, Seniors | 1.64 | 0.16 | 10% | 1.48 | 90% | N/A |
| 2 | Bella Abzug Park (Hudson Park & Boulevard Phase 1) | NYC Parks | Hudson Blvd E btwn. W 36 th St and W 33 rd St | Playgrounds, Plazas, Landscaping & Benches | 6AM-11PM | Children, Teenagers, Adults, Seniors | 2.15 | 0.11 | 5% | 2.04 | 95% | Excellent / Light |
| 3 | The Public Square and Gardens at Hudson Yards | N/A | W 33 rd St btwn. Hudson Yards and Hudson Blvd | Walkways, Plazas, Landscaping & Benches | 24/7 | Children, Teenagers, Adults, Seniors | 2.10 | 0.00 | 0% | 2.10 | 100% | Excellent / Heavy |
| 4 | Western Yards Open Space ⁶ | WRY Tenant LLC | W 30 th St to W 33 rd St btwn. 11 th Av and 12 th Av | Walkways, Landscaping & Benches | Expected to be completed by 2030 | Children, Teenagers, Adults, Seniors | 5.63 | 0.00 | 0% | 5.63 | 100% | N/A |
| 5 | Hudson River Park Esplanade | Hudson River Park Trust | West of Route 9A from W 14 St to W 38 St | Running, Bike Paths, Walkways & Landscaping | 6AM-11PM | Children, Teenagers, Adults, Seniors | 19.19 | 9.60 | 50% | 9.60 | 50% | Excellent / Moderate |
| 6 | Pier 66 | Hudson River Park Trust | West of Route 9A, btwn. W 26 th St and W 27 th St | Walkways, Benches & Boating | 6AM-1 AM | Children, Teenagers, Adults, Seniors | 2.05 | 0.41 | 20% | 1.64 | 80% | Excellent / Moderate |
| 7 | 525 8 th Ave | LSCH LLC | 525 8 th Av | Landscaping & Seating | 24/7 | Children, Teenagers, Adults, Seniors | 0.05 | 0.00 | 0% | 0.05 | 100% | Excellent / Moderate |
| 8 | 1 Pennsylvania Plaza | Tristan 33, Inc. | 1 Pennsylvania Plaza | Walkways, Plazas, Landscaping & Benches | 24/7 | Children, Teenagers, Adults, Seniors | 1.15 | 0.00 | 0% | 1.15 | 100% | Excellent / Heavy |
| 9 | 450 W 33 rd Street | 450 Partners, LLC | 450 W 33 rd St | Walkways, Landscaping & Benches | 6AM-11PM | Children, Teenagers, Adults, Seniors | 0.51 | 0.00 | 0% | 0.51 | 100% | Excellent / Light |
| 10 | 401 W 31 st Street | BOP West 31 st Street, LLC. Manhattan West Owners Associates LLC | 401 W 31 st St | Walkways, Landscaping & Benches | 24/7 | Children, Teenagers, Adults, Seniors | 1.13 | 0.00 | 0% | 1.13 | 100% | Excellent / Moderate |
| 11 | 2 Pennsylvania Plaza | Vornado Two Penn Property | 2 Pennsylvania Plaza | Plaza | 24/7 | Children, Teenagers, Adults, Seniors | 0.42 | 0.00 | 0% | 0.42 | 100% | Excellent / Moderate |
| 12 | 835 Sixth Avenue | 835 6 th Avenue Master LP | 835 6 th Av | Public Plaza, Movable Tables and Chairs, Benches, Café | 6AM-12AM | Children, Teenagers, Adults, Seniors | 0.25 | 0.00 | 0% | 0.25 | 100% | Fair / Moderate |
| 13 | Gansevoort Landing ⁵ | DOT (Partner: Meatpacking Improvement Association) | 9 th Av btwn. Gansevoort St and 14 th St | Seating Areas, Eating Areas | 24/7 | Children, Teenagers, Adults, Seniors | 1.06 | 0.00 | 0% | 1.06 | 100% | Excellent / Heavy |
| 14 | Chelsea Park | NYC Parks | 9 th Av to 10 th Av and W 27 th St to W 28 th St | Baseball Fields, Basketball Courts, Fitness Equipment, Handball Courts, Playgrounds, Running Tracks, Spray Showers & Benches | 6AM-11PM | Children, Teenagers, Adults, Seniors | 3.90 | 2.73 | 70% | 1.17 | 30% | Excellent / Moderate |

| Map No. ¹ | Name | Owner/ Agency ² | Address | Amenities | Hours of Access | User Groups | Total Acres | Active Acres | Active % | Passive Acres | Passive % | Condition & Utilization ³ |
|----------------------|--|----------------------------|--|--|--|--------------------------------------|-------------|--------------|----------|---------------|-----------|--------------------------------------|
| 15 | PS 33 Playground | DOE | W 26 th St btwn. 10 th Av and 9 th Av | Basketball Courts, Running Tracks, Playgrounds & Soccer Fields | M-F: School close until Dusk Sat, Sun & Holidays: 8AM to Dusk | Children | 0.24 | 0.24 | 100% | 0.00 | 0% | Excellent / Light |
| 16 | Penn South Playground | NYC Parks | W 26 th St btwn. 8 th Av to 9 th Av | Basketball Courts, Playgrounds & Benches | Mar 2-Oct 31: 6AM-9PM Nov 1-Mar 1: 6AM-6PM | Children, Teenagers, Adults, Seniors | 0.60 | 0.42 | 70% | 0.18 | 30% | Fair / Light |
| 17 | 230 West 27 th Street | FIT | 230 W 27 th St | Plaza, Landscaping, Benches | 24/7 | Children, Teenagers, Adults, Seniors | 0.07 | 0.00 | 0% | 0.07 | 100% | Fair / Moderate |
| 18 | Pier 64 | Hudson River Park Trust | West of 12 th Av and W 24 th St | Walkways, Landscaping, Benches & Lawn | 6AM-1AM | Children, Teenagers, Adults, Seniors | 1.16 | 0.00 | 0% | 1.16 | 100% | Excellent / Light |
| 19 | Chelsea Waterside Park | Hudson River Park Trust | W 24 th St btwn. 12 th Av and 11 th Av | Basketball Courts, Ballfields, Playgrounds, Dog Park & Benches | 6AM-1AM | Children, Teenagers, Adults, Seniors | 3.40 | 3.40 | 100% | 0.00 | 0% | Excellent / Heavy |
| 20 | Pier 62 | Hudson River Park Trust | Pier 62 | Skatepark, Carousel & Benches | 8AM until Dusk | Children, Teenagers, Adults, Seniors | 1.68 | 0.84 | 50% | 0.84 | 50% | Excellent / Moderate |
| 21 | Chelsea Piers | Hudson River Park Trust | Piers 59, 60, 61 | Walkways | 8AM-10PM | Children, Teenagers, Adults, Seniors | 2.42 | 0.00 | 0% | 2.42 | 100% | Excellent / Moderate |
| 22 | The High Line | NYC Parks | Gansevoort St to W 30 th St btwn. Washington St and 11 th Av | Walkways, Benches & Landscaping | Apr 1-Nov 30: 7AM-10PM Dec 1-Mar 31: 7AM-8PM | Children, Teenagers, Adults, Seniors | 2.82 | 0.00 | 0% | 2.82 | 100% | Excellent / Heavy |
| 23 | Clement Clarke Moore Park | NYC Parks | W 22 nd St and 10 th Av | Playgrounds, Spray Showers & Benches | Mar 2-Oct 31: 7AM-9PM Nov 1-Mar 1: 7AM-6PM | Children, Teenagers, Adults, Seniors | 0.49 | 0.25 | 50% | 0.25 | 50% | Good / Heavy |
| 24 | 18 th Street Plaza ⁷ | HFZ Capital Group | W. 17 th St and W. 18 th St along 10 th Ave | Landscaping, Walkways & Benches | Expected to be completed early 2025 | Children, Teenagers, Adults, Seniors | 0.22 | 0.00 | 0% | 0.22 | 100% | N/A |
| 25 | Dr. Gertrude B. Kelly Playground | NYC Parks | W 17 th St btwn. 8 th Av and 9 th Av | Basketball Courts, Handball Courts, Playgrounds, Spray Showers & Benches | Mar 2-Oct 31: 7AM-9PM Nov 1-Mar 1: 7AM-6PM | Children, Teenagers, Adults, Seniors | 0.53 | 0.48 | 90% | 0.05 | 10% | Fair / Heavy |
| 26 | Pier 57 Rooftop Park | Hudson River Park Trust | Pier 57 | Walkways, Benches & Landscaping | 6AM-1AM | Children, Teenagers, Adults, Seniors | 2.00 | 0.00 | 0% | 2.00 | 100% | Excellent / Moderate |
| 27 | 14 th Street Park | Hudson River Park Trust | W 14 th St and 10 th Av | Walkways, Benches & Landscaping | 6AM-1AM | Children, Teenagers, Adults, Seniors | 0.56 | 0.00 | 0% | 0.56 | 100% | Excellent / Moderate |
| 28 | Little Island | Hudson River Park Trust | Pier 55 | Benches, Kiosks, Amphitheater, Observation Deck & Landscaping | 6AM-12AM | Children, Teenagers, Adults, Seniors | 2.70 | 0.00 | 0% | 2.70 | 100% | Excellent / Heavy |
| 29 | Gansevoort Peninsula | Hudson River Park Trust | West of West St, btwn. Horatio St and Little W 12 th St | Soccer field, Playground, Beach, Kayaking, Walkways, Landscaping, Benches & Lawn | 6AM-1AM | Children, Teenagers, Adults, Seniors | 5.50 | 3.85 | 70% | 1.65 | 30% | Excellent / Moderate |
| 30 | Pier 51 | Hudson River Park Trust | West of West St and Jane St | Playground, Water Features, Benches, Walkways, & Landscaping | 7AM-8PM | Children, Teenagers, Adults, Seniors | 0.43 | 0.30 | 70% | 0.13 | 30% | Excellent / Heavy |
| 31 | 99 Jane Street | 101 Jane St. Co | Washington St btwn. Jane St and Horatio St | Water Feature, Landscaping, Chairs, Benches | May 1-Oct 15: 7AM-9:30PM Oct 16-Apr 30: 7AM -7PM | Children, Teenagers, Adults, Seniors | 0.16 | 0.00 | 0% | 0.16 | 100% | Excellent / Light |
| 32 | Corporal John A Seravalli Playground | NYC Parks | Hudson St btwn. Gansevoort St and Horatio St | Basketball Courts, Bathrooms, Showers, Playground | Mar 2-Oct 31: 6AM-9PM Nov 1-Mar 1: 7AM-6PM | Children, Teenagers, Adults, Seniors | 1.14 | 0.91 | 80% | 0.23 | 20% | Good / Heavy |

| Map No. ¹ | Name | Owner/ Agency ² | Address | Amenities | Hours of Access | User Groups | Total Acres | Active Acres | Active % | Passive Acres | Passive % | Condition & Utilization ³ |
|----------------------|---|---|--|---|---|---|----------------|-----------------|-------------|------------------|--------------|--|
| 33 | Jackson Square | NYC Parks | Corner of Greenwich Av, 8 th Av, and Horatio St | Fountain, Benches, Walkways, Landscaping | 6AM-1AM | Children, Teenagers, Adults, Seniors | 0.23 | 0.00 | 0% | 0.23 | 100% | Excellent / Moderate |
| 34 | Abdington Square | NYC Parks | Corner of 12 th St, Hudson St, and 8 th Av | Statue, Walkways, Landscaping & Benches | 8AM-8PM | Children, Teenagers, Adults, Seniors | 0.22 | 0.00 | 0% | 0.22 | 100% | Good / Moderate |
| 35 | Bleecker Playground | NYC Parks | Corner of Hudson St, Bleecker St, and 8 th Av | Playground & Spray Showers | Mar 2-Oct 31: 6AM-9PM Nov 1-Mar 1: 6AM-6PM | Children | 0.48 | 0.38 | 80% | 0.10 | 20% | Good / Moderate |
| 36 | NYC AIDS Memorial Park | NYC Parks | Btwn. West 12th St and Greenwich Av | Landscaping & Benches | 7AM-11PM | Children, Teenagers, Adults, Seniors | 0.38 | 0.00 | 0% | 0.38 | 100% | Excellent / Moderate |
| 37 | Chelsea Green | NYC Parks | West 20th St btwn. Ave of the Americas and 7th Av | Playground, Water Features, Benches, Landscaping | Mar 2-Oct 2: 7AM-9PM Nov 2-Mar 2: 7AM-6PM | Children | 0.23 | 0.21 | 90% | 0.02 | 10% | Excellent / Moderate |
| 38 | 33 rd Street Plaza | DOT (Partner: Vornado/34 th Street Partnership) | W 33 rd St btwn. 7 th Av and 8 th Av | Seating Areas, Eating Areas | 24/7 | Children, Teenagers, Adults, Seniors | 0.57 | 0.00 | 0% | 0.57 | 100% | Excellent / Moderate |
| 39 | Herald Square Plaza (33 rd to 34 th Streets) | DOT (Partner: 34 th Street Partnership) | Broadway btwn. 33 rd St and 34 th St | Seating Areas | 24/7 | Children, Teenagers, Adults, Seniors | 0.37 | 0.00 | 0% | 0.37 | 100% | Good / Light |
| 40 | Dyer Deck-Over Lot 9 ⁸ (Midtown Bus Terminal Replacement Project) | PANYNJ | W 37th St btwn. 9th Av and 10th Av | Open Lawn, Landscaping & Benches | Expected to be completed by 2040 | Children, Teenagers, Adults, Seniors | 1.37 | 0.00 | 0% | 1.37 | 100% | N/A |
| | | | | | | Total under Existing Conditions | 62.340 | 24.119 | 38.7% | 38.222 | 61.3% | |
| | | | | | | Total by the 2041 Analysis Year | 71.200 | 24.283 | 34.1% | 46.918 | 65.9% | |

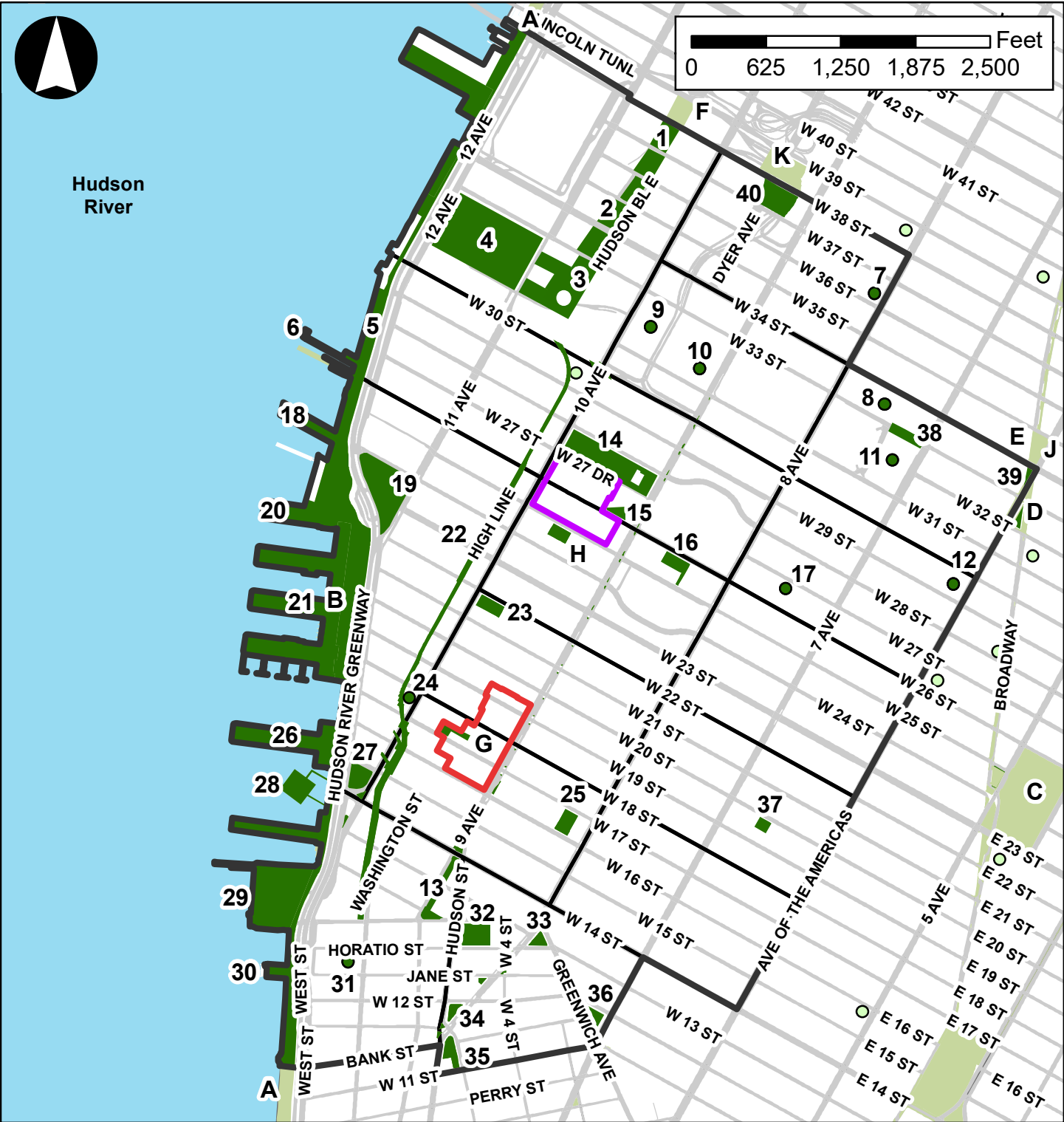
Notes:¹ Refer to **Figure 05.04-3**.² Parks = New York City Department of Parks and Recreation; DOE = New York City Department of Education; DOT = New York City Department of Transportation; PANYNJ = Port Authority of New York and New Jersey³ For open space resources labeled “N/A,” condition and utilization was unavailable at the time of the March 2023 and June 2024 field visits. These open space resources were either undergoing construction or in the design and acquisition stage, as clarified under “User Groups.” They are identified in this table and in **Figure 05.04-3** for informational purposes. Their acreages are not included in the existing quantitative analysis but are included in the No-Action Alternative quantitative analysis which serves as the baseline for comparing the effects of the Rezoning, Non-Rezoning, and Midblock Bulk Alternatives. These resources are further discussed in the following footnotes.⁴ Hudson Park & Boulevard Phase 2 is expected to be acquired and developed by 2025. The open space resource is expected to be in use by the 2041 analysis year.⁵ Field visit of Gansevoort Landing was conducted on Friday, October 11, 2024. The weather was sunny with a high of 71°F.⁶ Western Yards Open Space is expected to be developed by 2030 and will be in use by the 2041 analysis year.⁷ 18th Street Plaza is currently undergoing construction and is expected to be completed by early 2025.⁸ Dyer Deck-Over Lot 9 from the Midtown Bus Terminal Replacement Project is expected to be developed by 2040 and will be in use by the 2041 analysis year.**Sources:** NYC OASIS, NYC Parks, Initial field visits conducted in March 2023 and follow up field visits conducted in June 2024.

Table 05.04-5: Public Open Space Resources Not Included in Quantitative Assessment

| Map ID. ¹ | Name | Owner/ Agency ² | Address | Amenities | Hours of Access | User Groups | Total Acres | Active Acres | Active % | Passive Acres | Passive % | Condition & Utilization ³ |
|----------------------|--|--|--|---|--|--------------------------------------|---------------------|--------------|----------|---------------|-----------|--------------------------------------|
| A | Hudson River Park (portions outside study area) | Hudson River Park Trust | West of Route 9A from the northern boundary of Battery Park to W 59 th St | Rock Climbing, Ice Skating, Golf Driving Range, Bowling, Volleyball Courts, Basketball Courts, Soccer Fields, Gymnastics, Skate Park, Dog Park, Playgrounds, Canoe Paddling, Sailing, Baseball Fields, Running Tracks, Tennis Courts, Biking Paths, Piers, Benches, Seating Lawns & Landscaping | 6AM-1AM | Children, Teenagers, Adults, Seniors | 509.24 ⁷ | 254.62 | 50% | 254.62 | 50% | Excellent / Heavy |
| B | Chelsea Piers | Hudson River Park Trust | Piers 59, 60, 61 | Ballfields, Ball Courts, Golf Driving Range, Fitness Clubs, Youth Sports Classes | Varies depending on individual activity | Children, Teenagers, Adults | 28.00 | 28.00 | 100% | 0.00 | 0% | Excellent / Moderate |
| C | Madison Square Park | NYC Parks | Broadway and Madison Av btwn. E 23 rd St and E 26 th St | Playgrounds, Dog-Friendly Areas, Spray Showers, Lawns & Benches | Jun 1-Oct 31: 6AM-12AM Nov 1-May 31: 6AM-11PM | Children, Adults, Seniors | 6.23 | 0.62 | 10% | 5.61 | 90% | Excellent / Heavy |
| D | Greeley Square Park | NYC Parks | W 32 nd St btwn. 6 th Ave and Broadway | Plaza, Landscaping & Seating | 7AM-9PM | Children, Teenagers, Adults | 0.14 | 0.00 | 0% | 0.14 | 100% | Excellent / Heavy |
| E | Herald Square Park | NYC Parks | W 35 th St btwn. Broadway and 6 th Ave | Plaza, Landscaping & Seating | 7AM-9PM | Children, Teenagers, Adults, Seniors | 0.21 | 0.00 | 0% | 0.21 | 100% | Excellent / Heavy |
| F | Hudson Park & Boulevard (Phase 2) ⁴ | NYC Parks | W 36 th St to W 39 th St btwn. 11 th Av and Hudson Blvd E | Playgrounds, Walkways, Plazas, Landscaping & Benches | Acquisition and development by 2025 | Children, Teenagers, Adults, Seniors | 0.79 | 0.08 | 10% | 0.71 | 90% | N/A |
| G | Fulton and Elliott-Chelsea Houses (FEC) Accessory Open Spaces ⁵ | NYCHA | W 17 th St between 10 th Av and 9 th Av | Basketball Courts, Garden, Playgrounds, Spray Showers & Benches, Landscaping | No posted hours | Children, Teenagers, Adults, Seniors | 7.29 | 1.46 | 20% | 5.83 | 80% | Fair / Light |
| H | Chelsea Recreation Center ⁵ | NYC Parks | 25 th St btwn. 9 th Ave and 10 th Av | Basketball Courts, Exercise Rooms, Swimming Pool, Volleyball Courts, locker rooms | M-F: 7AM-8PM Saturday: 8AM-8PM Sunday: 8AM-2PM | Children, Teenagers, Adults, Seniors | 0.39 | 0.39 | 100% | 0.00 | 0% | Excellent / Moderate |
| I | Jane Street Garden | NYC Parks | 36 Jane Street | Landscaping and Benches | Apr 1 - Oct 31: Dawn until Dusk | Children, Teenagers, Adults, Seniors | 0.05 | 0.00 | 0% | 0.05 | 100% | Excellent / Moderate |
| J | Herald Square Plaza (34 th to 35 th Streets) | DOT (Partner: 34 th Street Partnership) | Broadway btwn. 34 th St and 35 th St | Seating Areas, Seasonal Events/Activities | 24/7 | Children, Teenagers, Adults, Seniors | 0.33 | 0.00 | 0% | 0.33 | 100% | Good / Moderate |








| Map ID. ¹ | Name | Owner/ Agency ² | Address | Amenities | Hours of Access | User Groups | Total Acres | Active Acres | Active % | Passive Acres | Passive % | Condition & Utilization ³ |
|----------------------|---|----------------------------|--|----------------------------------|----------------------------------|--|----------------|----------------|--------------|----------------|--------------|--------------------------------------|
| K | Dyer Deck-Over Lot 10 (Port Authority Bus Terminal Open Space) ⁸ | PANYNJ | W 37 th St and W 38 th St btwn. 9 th Av and 10 th Av | Open Lawn, Landscaping & Benches | Expected to be completed by 2040 | Children, Teenagers, Adults, Seniors | 2.13 | 0.00 | 0% | 2.13 | 100% | N/A |
| | | | | | | Total under Existing Conditions | 552.665 | 285.165 | 51.6% | 267.500 | 48.4% | |
| | | | | | | Total by the 2041 Analysis Year | 554.795 | 285.165 | 51.4% | 269.630 | 48.6% | |

Notes:¹ Refer to **Figure 05.04-3**² Parks = New York City Department of Parks and Recreation; DOE= New York City Department of Education; DOT = New York City Department of Transportation; NYCHA= New York City Housing Authority; PANYNJ = Port Authority of New York and New Jersey³ For open space resources labeled “N/A,” condition and utilization is unavailable as the open space resources are currently undergoing construction/renovations or are still in the design and acquisition stage.⁴ Hudson Park & Boulevard Phase 2 is expected to be acquired and developed by 2025. The open space resource is expected to be in use by the 2041 analysis year. Acreage for Hudson Park & Boulevard Phase 2 has not been included in the qualitative analysis for the existing conditions but is included in the No-Action Alternative qualitative analysis.⁵ NYCHA open spaces are not designated for the general public and do not have posted hours. They are accessory open space for NYCHA residents.⁶ Chelsea Recreation Center is a membership only center, in which adult members must pay an annual fee.⁷ Hudson River Park is an approximately 550-acre park, of which 509.247 acres are located outside of the study area.⁸ Dyer Deck-Over Lot 10 from the Midtown Bus Terminal Replacement EIS is expected to be developed by 2040 and will be in use by the 2041 analysis year.**Sources:** NYC OASIS, NYC Parks, Initial field visits conducted in March 2023 and follow up field visits conducted in June 2024.



Source: NYC DCP (PLUTO 2024v1); DOITT (2022)

Legend

- | | |
|---|--|
|  Fulton Houses |  Open Space Included in Analysis (Refer to Table 05.04-4) |
|  Elliott-Chelsea Houses |  Open Space Not Included in Analysis (Refer to Table 05.04-4) |
|  Residential Open Space Study Area |  POPs Included in Analysis (Refer to Table 05.04-4) |
| |  POPs Not Included in Analysis |

Assessment of Open Space Adequacy

Quantitative Assessment

The following analysis of the adequacy of existing public open space resources within the study area takes into consideration the ratios of active, passive, and total open space resources per 1,000 residents. As an optimal planning goal, the City tries to achieve an overall residential open space ratio of 2.5 acres per 1,000 residents (80 percent [2 acres] active and 20 percent [0.5 acres] passive) and 0.15 acres of passive open space per 1,000 non-residents for large-scale plans and proposals. Although a typical population mix may call for such a goal, it is often not feasible for many areas of the City (especially higher density areas). As such, the City's optimal open space ratios and percentage reductions do not constitute an absolute impact threshold.

In calculating the open space ratio per 1,000-user population for the study area, all of the resources listed in the "Public Open Space Resources Included in the Quantitative Analysis" section of **Table 05.04-4** were included except those which are not yet open (e.g. Map Nos. 1, 4, 24, and 40); Resources A to K in **Table 05.04-5** were not included in the quantitative analysis as they are not within the study area boundaries or are not publicly accessible, but are mentioned qualitatively as they are in close proximity to the study area boundary, in which residents may choose to utilize if willing to travel slightly further. Some facilities, such as Hudson River Park, include portions within the study area that are included in the quantitative analysis and other portions outside the study area which are only considered in the qualitative analysis.

Table 05.04-6 shows that, with an existing study area residential population of 72,013 people, the existing total open space ratio in the study area is approximately 0.866 acres per 1,000 residents; the study area has 0.335 acres of active open space per 1,000 residents and 0.531 acres of passive open space per 1,000 residents. As indicated in **Table 05.04-6**, the existing total and active residential open space ratio are below the City's open space planning goals of 2.5 and 2.0 acres per 1,000 residents, respectively.

Table 05.04-6: Adequacy of Open Space Resource in the Study Area – Existing Conditions

| | Population | Total Open Space Acreage | Active Open Space Acreage | Passive Open Space Acreage | Total Open Space per 1,000 Residents | Active Open Space per 1,000 Residents | Passive Open Space per 1,000 Residents | Total City Open Space Planning Goals | Active City Open Space Planning Goals | Passive City Open Space Planning Goals |
|-----------|------------|--------------------------|---------------------------|----------------------------|--------------------------------------|---------------------------------------|--|--------------------------------------|---------------------------------------|--|
| Residents | 72,013 | 62.340 | 24.119 | 38.222 | 0.866 | 0.335 | 0.531 | 2.50 | 2.0 | 0.50 |

Qualitative Assessment

The total and active open space resources that exist within the open space study area fall below the City's quantitative guidance, as discussed above. This quantitative deficiency may be partially ameliorated by several factors.

As shown in **Table 05.04-4**, the study area resources are in fair to excellent condition and feature low to heavy utilization levels, depending on the resource. The study area includes a variety of programming for passive and active open space uses, such as playgrounds, basketball courts,

handball courts, running tracks, benches, and landscaped areas. A variety of active programming is available and appropriate for all user groups including children, teenagers, and adults within the study area. As shown in **Figure 05.04-3**, six of the open space resources in the quantitative analysis are located within a block of the Project Sites and the largest open space resource is located within two blocks west of the Project Sites. These resources (Chelsea Park, PS 33 Playground, Penn South Playground, The High Line, Dr. Gertrude B. Kelly Playground, and Hudson River Park Esplanade) constitute 27.28 acres (approximately 42 percent) of all open space resources in the quantitative analysis and include ball courts, ball fields, fitness equipment, bike paths, running tracks, playgrounds, benches, and landscaped areas. PS 33 Playground is located to the east of Elliott-Chelsea Houses. It currently includes amenities such as basketball court, running tracks, playgrounds, and soccer fields.

In addition, the largest open space resource, Hudson River Park (Map ID. A), extends north and south of the residential open space study. Hudson River Park, which extends for roughly four miles in its entirety, has approximately 509.25 acres located outside of the study area. For the portions of the resource that are within the study area, Hudson River Park is located approximately 0.17 miles west of the Fulton Houses Project Site and approximately 0.32 miles west of the Elliott-Chelsea Houses Project Site, which is within the ½-mile distance residents typically would walk to a public open space. It is likely that residents would also make use of the portion of this resource beyond the boundaries of the residential open space study area, particularly for active recreational activities, such as biking and jogging, and thus, reducing the burden on other open space resources within the residential open space study area. Nevertheless, the portions of Hudson River Park not located within the ½-mile open space study area are not included in the quantitative analysis pursuant to *CTM* guidance. The qualitative value of Hudson River Park is enhanced by its linear connectivity with other Manhattan waterfront greenways, which enables park users to remain within a contiguous park zone along the shoreline stretching along most of the island's approximately 32-mile coastline.

The Project Sites contains a substantial amount of private active and passive open space spread across all of the Project Sites' blocks, generally dedicated for their residents use. Refer to **Figures 05.04-4a/b** for site photos of existing accessory open space conditions. These spaces total approximately 7.289 acres, including approximately 3.046 acres within the Fulton Houses Project Site and 4.243 acres in the Elliott-Chelsea Houses Project Site. These facilities are generally in fair condition but are outdated and in need of an upgrade. During field observations and as shown in **Figures 05.04-4a/b**, residents are rarely utilizing the existing accessory open spaces. In addition, approximately 5.597 acres out of the approximately 7.289 acres (or approximately 77 percent) of the total open spaces spanning the Project Sites are considered not useable accessory open space as they are comprised of landscaping that is fenced off and thus, inaccessible for residents' use (refer to **Figures 05.04-4a/b**).

Moreover, there are significant publicly accessible open spaces located just beyond the study area boundary, which are not included in the quantitative analysis but could be used by residents willing to travel slightly farther or pay a user fee (refer to "Public and Private Open Space Not Included in the Quantitative Analysis" in **Figure 05.04-3** and **Table 05.04-5**). These include sizeable parks and recreation centers, such as the 28.0-acre Chelsea Piers Recreation Center (Map ID. B) and the 6.23-acre Madison Square Park (Map ID. C), as well as smaller parks and recreation centers, such as the 0.39-acre Chelsea Recreation Center (Map ID. H), 0.79-acre Hudson Park and Boulevard



1. View looking southeast at a basketball court located on the Fulton Houses Project Site.



2. View looking northwest at a playground located on the Fulton Houses Project Site.



3. View looking northwest at fenced off landscaping located on the Fulton Houses Project Site.



4. View looking southeast at fenced off landscaping located on the Fulton Houses Project Site.



1. View looking northwest at a playground located on the Elliott-Chelsea Houses Project Site.



2. View looking northwest at a playground located on the Elliott-Chelsea Houses Project Site.



3. View looking southwest at fenced off landscaping located on the Elliott-Chelsea Houses Project Site.



4. View looking southwest at several fenced off landscaped spaces located on the Elliott-Chelsea Houses Project Site.

Phase 2 (Map ID. F), 0.21-acre Herald Square Park (Map ID. E), and 0.14-acre Greeley Square Park (Map ID. D), which features various active and passive amenities. In addition to Hudson River Park (Map ID. A), these smaller parks and recreation centers provide an additional 552.67 acres of open space for residents in the study area. It is expected that a portion of open space users in the study would frequent these spaces given their proximity, size, and range of amenities. The use of publicly accessible open space resources outside the study area is likely more common for those living in the outer portion of the study area who reside less than a ½-mile from such resources. This may be somewhat less common for Project Sites' residents, however, as noted above they have some facilities in the immediate vicinity of their homes.

E. ENVIRONMENTAL EFFECTS

Alternative 1 – No-Action Alternative

Direct Effects Analysis

No publicly accessible open space is currently located on the Project Sites. Therefore, the No-Action Alternative would not cause the physical loss of publicly accessible open space. In the No-Action Alternative, as the Project Sites would remain as under existing conditions, the No-Action Alternative would not result in any significant adverse shadows, operational air quality, operational noise, or construction impacts affecting existing open space resources. Furthermore, the No-Action Alternative would not change the use of a publicly accessible open space resource so that it no longer serves the same user population, nor would it limit public access to any open spaces. Therefore, no significant adverse direct effects on open space would occur as a result of the No-Action Alternative.

Indirect Effects Analysis

Study Area Population

As presented below in **Table 05.04-7** and shown in **Figure 05.04-5**, a considerable amount of new development is currently planned or anticipated to be completed within the ½-mile open space study area in the 2041 future without the Proposed Project, which would increase the residential population within the study area. There are approximately 34 known and anticipated residential developments which would introduce new residents within the open space study area in the No-Action Alternative. In total, these 34 developments are expected to introduce approximately 12,999 new residential units to the open space study area by the 2041 analysis year. In addition, as the analysis year is more than five years, the background growth was determined to be 2.42 percent.⁸ **Table 05.04-7** shows that the 34 known and anticipated residential developments are anticipated to increase the ½-mile study area population by approximately 21,839 residents. As

⁸ The background population growth was determined by calculating the compound annual growth rate of the 2020 Census and 2022 ACS 5-Year Estimates and then applying the growth rate to the future analysis year.

shown in **Table 05.04-8**, the total residential population within the ½-mile study area increased to approximately 104,259 residents by 2041 under the No-Action Alternative.

Table 05.04-7: Known Planned Residential No-Action Developments within the ½-Mile Study Area under the No-Action Alternative

| Map No. ¹ | Address | Dwelling Units (DUs) | Estimated Residents ² |
|----------------------|--|----------------------|----------------------------------|
| 1 | 606 W. 30 th Street | 277 | 465 |
| 2 | 534 W. 29 th Street | 6 | 10 |
| 3 | 335 8 th Avenue | 188 | 316 |
| 4 | 278 8 th Avenue | 190 | 319 |
| 5 | 428 W. 19 th Street | 32 | 54 |
| 6 | 76 11 th Avenue | 373 | 627 |
| 7 | 251 W. 14 th Street | 25 | 42 |
| 8 | 241 W. 28 th Street | 480 | 806 |
| 9 | 441 West 37 th Street | 9 | 15 |
| 10 | 450 11 th Avenue | 379 | 637 |
| 11 | 319 West 35 th Street | 166 | 279 |
| 12 | 132 West 28 th Street | 203 | 341 |
| 13 | 128 West 26 th Street | 13 | 22 |
| 14 | 142 West 19 th Street | 7 | 12 |
| 15 | 432 West 31 st Street | 220 | 370 |
| 16 | 280 8 th Avenue | 104 | 175 |
| 17 | Penn Station Site 1A | 542 | 911 |
| 18 | Penn Station Site 1B (Residential Scenario) ³ | 439 | 738 |
| 19 | 439 West 36 th Street | 52 | 87 |
| 20 | 489 9 th Avenue | 59 | 99 |
| 21 | 501 9 th Avenue | 63 | 106 |
| 22 | 170 West 22 nd Street | 26 | 44 |
| 23 | 134 Jane Street | 15 | 25 |
| 24 | 335 West 25 th Street | 66 | 111 |
| 25 | 224 West 20 th Street | 6 | 10 |
| 26 | 142 West 21 st Street | 22 | 37 |
| 27 | 430 West 37 th Street | 128 | 215 |
| 28 | 371 7 th Avenue | 615 | 1,033 |
| 29 | 141 West 14 th Street | 61 | 102 |
| 30 | 545 West 37 th Street | 131 | 220 |
| 31 | 601 West 30 th Street (Western Rail Yard Modifications) ⁴ | 3,257 | 5,472 |
| 32 | Penn Station Site 4 (Residential/Hotel Scenario) ³ | 1,102 | 1,851 |
| 33 | Penn Station Site 8 (Residential Scenario) ³ | 626 | 1,052 |
| 34 | Midtown South Mixed-Use Plan (Southwest Quadrant and portion of Northwest Quadrant) ⁵ | 3,143 | 5,280 |
| ½-Mile Total | | 12,999 | 21,839 |

Notes:

¹ Refer to **Figure 05.04-5**

² The estimated number of residents is based on the average household size in Manhattan Community District 4 (1.68 persons per household) per the 2020 Decennial Census.



- ³ Penn Station Sites 1B, 4, and 8 all have various scenarios consisting of a residential-only scenario, commercial-only scenario, or mixed-use residential and commercial scenario. For conservative analysis purposes, this EIS assumes Penn Station Sites 1B, 4, and 8 would all be developed under the residential scenario.
- ⁴ For conservative analysis purposes, this EIS assumes the mixed-use scenario inclusive of the gaming facility and hotel resort complex, as described in the Western Rail Yard Modification EIS (CEQR No. 24DCP091M). This scenario will introduce 1,507 DUs and 1,750 hotel rooms.
- ⁵ Only portions of the Midtown South Mixed-Use Plan's project area included within the residential open space study area are included in **Table 05.04-6**. The Southwest Quadrant and portions of the Northwest Quadrant within the study area are expected to introduce a total of 3,143 DUs.

Sources: NYC DOB, August 2024

Table 05.04-8: 2041 No-Action Alternative Population within the ½-Mile Study Area

| | Existing Conditions Population | 2041 Background Growth¹ | 2041 No-Action Alternative Development Population | Total 2041 No-Action Alternative Population |
|-----------|---|---|--|--|
| Residents | 72,013 | 10,407 | 21,839 | 104,259 |

Notes:

- ¹ The background population growth was determined by calculating the compound annual growth rate of the 2020 Census and 2022 ACS 5-Year Estimates and then applying the growth rate of 0.71 to the future analysis year.

Sources: 2022 ACS 5-Year Estimates

Open Space Resources

Under the 2041 No-Action Alternative, the accessory open space on the Project Sites would remain as under existing conditions. Refer to **Figures 05.04-6a/b** which show the illustrative open space site plans under both the existing conditions and No-Action Alternative.

There are four new publicly accessible open spaces expected to be added to the study area under the No-Action Alternative by the 2041 analysis year. They include Hudson Park and Boulevard (Phase 2), Western Yards Open Space, 18th Street Plaza, and the Dyer Deck-Over Lot 9. As described in **Table 05.04-4**, Phase 2 of the Hudson Park and Boulevard (Map No. 1) will be a 1.64-acre park and is expected to be acquired and developed by 2025. Western Yards Open Space (Map No. 4) will be a 5.63-acre park and it is expected to be completed by 2030. 18th Street Plaza (Map No. 24) will be a 0.22-acre POPS, it is currently under construction and is expected to be completed in early 2025. The Midtown Bus Terminal Replacement Project (PABTR), sponsored by the Port Authority of New York and New Jersey is expected to construct a new main terminal, new staging area and ramp structure along with two Dyer Deck-Overs that will serve as publicly accessible open space once the Replacement Facility is constructed. One of the two anticipated Dyer Deck-Overs falls within the study area (Map No. 40) and is anticipated to be approximately 1.37-acres of passive open space. Dyer Deck-Over Lot 10 (Map ID. K) will not be included in the quantitative assessment under the 2041 No-Action, Rezoning, Midblock Bulk, and Non-Rezoning Alternatives but can be considered qualitatively given its connectivity to Dyer Deck-Over Lot 9.

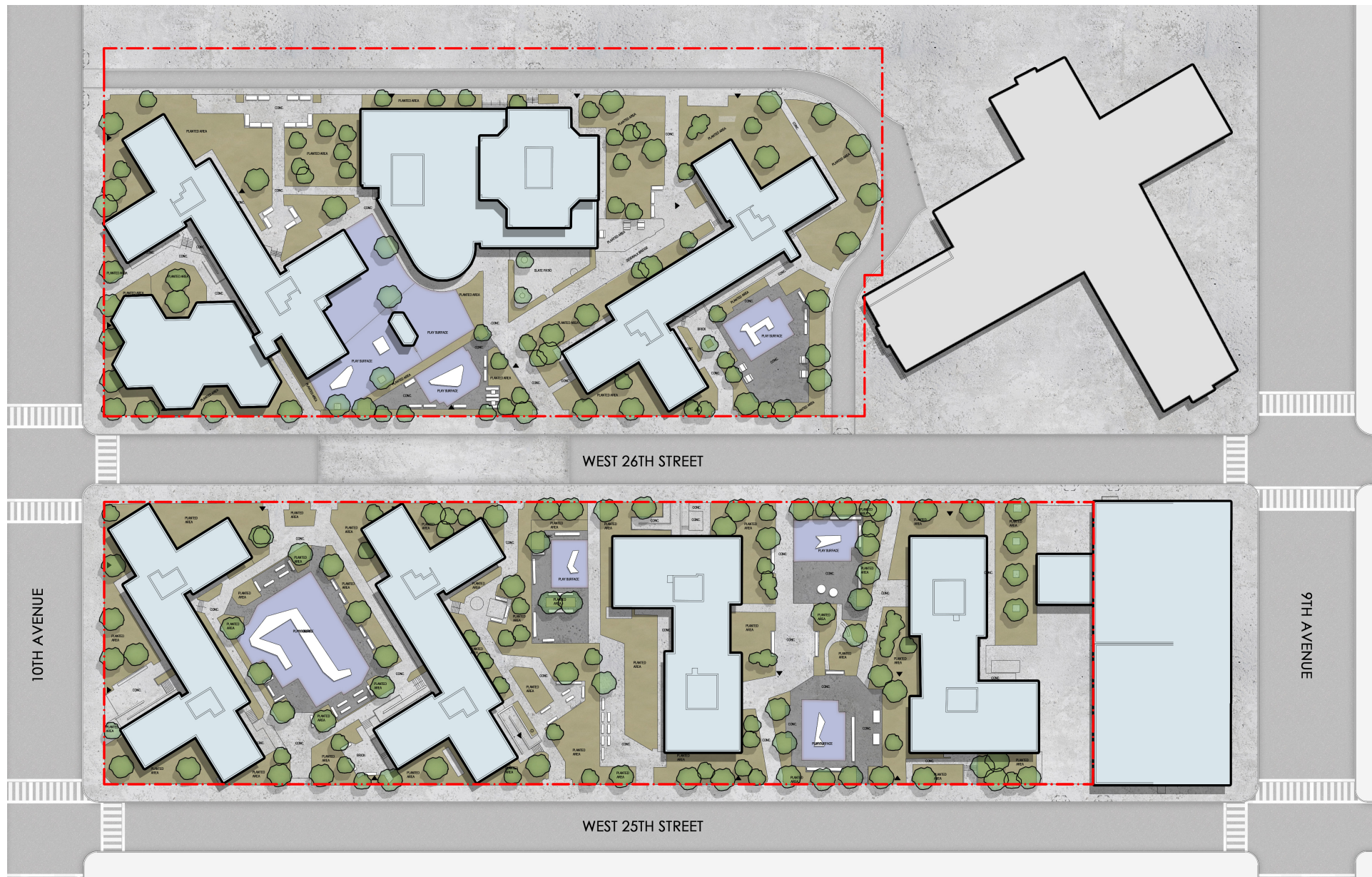
Open Space Adequacy

As detailed above, it is anticipated that under the No-Action Alternative, new development in the ½-mile study area, as well as natural population growth, would result in an increase in the population, and thus, would increase the demand on the area's open spaces. As shown in **Table 05.04-9**, the total, active, and passive open space ratios in the No-Action Alternative would be less

Fulton and Elliott-Chelsea Houses Redevelopment Project

Figure 05.04-6a
Fulton Houses Open Space Site Plan -
Existing Conditions / No-Action Alternative





SITE PLAN - EXISTING CONDITIONS / NO-ACTION ALTERNATIVE



MPFP

than the City's open space planning goals of 2.5 acres of open space per 1,000 residents (including 0.5 acres of passive open space and two acres of active open space). **Table 05.04-8** shows that, with a No-Action Alternative study area residential population of 104,259 people, the total open space ratio in the study area is approximately 0.683 acres per 1,000 residents; the study area has 0.233 acres of active open space per 1,000 residents and 0.450 acres of passive open space per 1,000 residents. The total, active, and passive open space ratios would be less than the established open space planning goal, and despite the addition of four new publicly accessible open spaces, there would be a net decrease of 0.183, 0.102, and 0.081 in the total, active, and passive open space ratios, respectively, as a result of the anticipated population growth in the 2041 No-Action Alternative.⁹ The decreases in the open space ratio would not constitute a significant adverse impact because they would occur irrespective of the Proposed Project, and no further analysis is required.

Table 05.04-9: Adequacy of Open Space Resource in the Study Area – No-Action Alternative

| | Population | Total Open Space Acreage | Active Open Space Acreage | Passive Open Space Acreage | Total Open Space per 1,000 Residents | Active Open Space per 1,000 Residents | Passive Open Space per 1,000 Residents | Total City Open Space Planning Goals | Active City Open Space Planning Goals | Passive City Open Space Planning Goals |
|-----------|------------|--------------------------|---------------------------|----------------------------|--------------------------------------|---------------------------------------|--|--------------------------------------|---------------------------------------|--|
| Residents | 104,259 | 71.200 | 24.283 | 46.918 | 0.683 | 0.233 | 0.450 | 2.5 | 2.0 | 0.5 |

Alternative 2 – Rezoning Alternative and Alternative 4 – Midblock Bulk Alternative

Direct Effects Analysis

No publicly accessible open space is currently located on the Project Sites. Therefore, the Rezoning and Midblock Bulk Alternatives would not cause the physical loss of publicly accessible open space. Additionally, the Rezoning and Midblock Bulk Alternatives would not result in any significant adverse operational air quality or operational noise impacts affecting existing open space resources. There are also no anticipated direct effects related to construction air quality or construction noise on open space resources. As described in **Chapter 05.19**, although the predicted noise level increases at Chelsea Park during construction would be noticeable and would exceed the *CTM* impact criteria, noise levels in this area already exceed *CTM*-recommended values under the existing condition. Furthermore, the predicted noise levels during construction would be comparable to existing noise levels when the park is in use. Additionally, construction would mostly occur during weekday daytime hours, leaving the park typically unaffected by noise during evenings and weekends, which are common times of use for the park. Consequently, noise associated with construction would not rise to the level of a significant adverse impact at Chelsea Park, or any other publicly accessible open spaces. The Rezoning and Midblock Bulk Alternatives would not result in any construction-related noise impacts on any publicly accessible open spaces.

As discussed above, the Project Sites contain private, accessory open spaces used by existing residents of the Project Sites. As the stages of project construction are implemented, some of these

⁹ Between existing conditions and the No-Action Alternative, the total open space ratio for residents would decrease to 0.683 acres per 1,000 residents, which represents a 21.132 percent change. The active open space ratio would also decrease to 0.233 acres per 1,000 residents, which represents a 30.448 percent change. The passive open space ratio would also decrease to 0.450 acres per 1,000 residents, which represents a 15.254 percent change.

accessory open spaces would be temporarily closed or would be subject to temporary noise effects as project implementation advances. These temporary closures and construction noise effects would not constitute significant adverse impacts.

In addition, as detailed in **Chapter 05.05**, portions of Chelsea Park and PS 33 Playground would receive significant amounts of incremental shadow from the Rezoning and Midblock Bulk Alternatives. The direct shadows impacts on these two open space resources may affect the public's use or enjoyment of these resources. Potential shadow mitigation measures will continue to be explored between the Draft and Final EIS in consultation with NYC Parks. Absent the identification and implementation of feasible mitigation measures that would mitigate the shadow impacts to the greatest extent practicable, the Proposed Project would result in unmitigated significant adverse shadows impacts.

Apart from the shadows impact disclosed herein, the Rezoning and Midblock Bulk Alternatives would not change the use of a publicly accessible open space resource so that it no longer serves the same user population, nor would it limit public access to any open spaces. Therefore, no significant adverse direct effects on open space would occur as a result of the Rezoning Alternative or the Midblock Bulk Alternative.

Indirect Effects Analysis

Study Area Population

The Rezoning and Midblock Bulk Alternatives would both introduce approximately 3,454 DUs to the Project Sites (refer to **Chapter 02.0**). Using the same planning assumptions as the No-Action Alternative of 1.68 residents per DU, the Rezoning and Midblock Bulk Alternatives are both expected to introduce a net increase of approximately 5,803 residents and would therefore increase the study area's population to 110,062 residents (refer to **Table 05.04-10**).

Table 05.04-10: 2041 Rezoning Alternative and Midblock Bulk Alternative Open Space Study Area Population

| | No-Action Alternative Population ¹ | Additional Population from the Rezoning/Midblock Bulk Alternatives ² | Future 2041 Rezoning/Midblock Bulk Alternatives Population |
|----------------------|---|---|--|
| Residential (½-mile) | 104,259 | 5,803 | 110,062 |

Notes:

¹ Refer to **Table 05.04-9**.

² Residential population estimate for the Rezoning Alternative is based on Manhattan CD 4 average of approximately 1.68 persons per household (US Census Bureau, 2020 Census).

Open Space Resources

The Rezoning Alternative would include the development of approximately 5.213 acres of private, accessory open space in the Project Sites, in which 2.374 acres would be located at the Fulton Houses Project Site and 2.839 acres would be located at the Elliott-Chelsea Houses Project Site.

Under the Midblock Bulk Alternative, due to changes in the configuration of the buildings specific to the Fulton Houses Project Site, the development would include approximately 5.209 acres of

private, accessory open space in the Project Sites, in which 2.370 acres would be located at the Fulton Houses Project Site. 2.839 acres would still be located at the Elliott-Chelsea Houses Project Site since the building configuration would remain the same as under the Rezoning Alternative.

The accessory open space in the Project Sites would be located in building courtyards and in the area between buildings. There would also be programmed rooftop terraces located throughout the Proposed Project's buildings with plantings, seating, and outdoor dining areas for the use of building residents. Refer to **Figures 05.04-7a/b** which show the illustrative accessory open space plans for the Rezoning Alternative and **Figures 05.04-8a/b** for illustrative accessory open space plans for the Midblock Bulk Alternative. For illustrative purposes, renderings of courtyards and rooftop terraces are shown in **Figure 05.04-9a/b**, showcasing a side-by-side comparison of these spaces under existing conditions and the Proposed Project, which highlight major enhancements that would be made to these spaces to make them more accessible and useable for building residents.

As shown in **Figures 05.04-7a and 05.04-8a**, the accessory open space to be constructed on the Fulton Houses Project Site would create a continuous link of open space areas under both the Rezoning and Midblock Bulk Alternatives running from Block 717, Lot 19 to Block 714, Lot 31, as well as provide additional open space in the courtyard of each building. The Rezoning Alternative would provide the Fulton Houses Project Site approximately 0.610 acres of active open space and approximately 1.764 acres of passive open space. The Midblock Bulk Alternative would provide the Fulton Houses Project Site with approximately 0.654 acres of active open space and approximately 1.716 acres of passive open space. In total, there would be approximately 2.588 acres of useable open space at the Project Sites under the Rezoning Alternative and approximately 2.619 acres of useable open space under the Midblock Bulk Alternative. Although the open space design is still evolving, and specific features are subject to change and therefore should be considered illustrative, it is expected that both the Rezoning and Midblock Bulk Alternatives would include a basketball court, three play areas, a dog walk, landscaping, shaded lounge areas, seating, and walkways.

The Elliott-Chelsea Houses Project Site, under the Rezoning and Midblock Bulk Alternatives, primarily provides open space in the building courtyards, comprising of approximately 0.540 acres of active open space and approximately 2.298 acres of passive open space (refer to **Figures 05.04-7b and 05.04-8b**). The Elliott-Chelsea Houses Project Site would offer five play areas, two dog walks, landscaping, community gardens, shaded lounge areas, seating, and walkways. The Elliott-Chelsea Houses Project Site open space design, similar to the Fulton Houses Project Site, is also illustrative and subject to change.

As the project-generated open space would not be publicly accessible open space, it is not included in the quantitative analysis presented below, as is the case for the existing accessory open space in the Project Sites. For CEQR analysis purposes, the open space is discussed qualitatively. Accordingly, the study area public open space under the Rezoning and Midblock Bulk Alternatives would remain the same as under the No-Action Alternative.





SITE PLAN - REZONING ALTERNATIVE



MPFP

Fulton Houses Open Space Site Plan -
Midblock Bulk Alternative



SITE PLAN - MIDBLOCK BULK ALTERNATIVE



MPFP



SITE PLAN - MIDBLOCK BULK ALTERNATIVE

MPFP



Courtyard - Existing Conditions



Courtyard - Rezoning / Midblock Bulk / Non-Rezoning Alternatives

For Illustrative Purposes Only



Terrace - Existing Conditions



Terrace - Rezoning / Midblock Bulk / Non-Rezoning Alternatives

Open Space Adequacy

As noted above, the open space impact analysis consists of both quantitative and qualitative assessments. The quantitative assessment considers how a proposed action(s) could change the open space ratios in the study area.

As a result of the Rezoning or Midblock Bulk Alternatives, the total open space ratio in the study area would decrease from 0.683 acres to 0.647 acres per 1,000 residents, which falls below the 2.5 acres of total open space ratio goal set by the City (see **Table 05.04-11**). The active and passive open space ratio would also decrease from 0.233 acres and 0.450 acres to 0.221 acres and 0.426 acres per 1,000 residents, respectively, and would remain below the City's open space planning ratio goal. Thus, the total, active, and passive open space ratio is expected to decrease 0.036 acres, 0.012 acres, and 0.024 acres from the No-Action Alternative to the Rezoning and Midblock Bulk Alternatives.

Table 05.04-11: Adequacy of Open Space Resource in the Study Area – Rezoning Alternative/Midblock Bulk Alternative

| | Population | Total Open Space Acreage | Active Open Space Acreage | Passive Open Space Acreage | Total Open Space per 1,000 Residents | Active Open Space per 1,000 Residents | Passive Open Space per 1,000 Residents | Total City Open Space Planning Goals | Active City Open Space Planning Goals | Passive City Open Space Planning Goals |
|-----------|------------|--------------------------|---------------------------|----------------------------|--------------------------------------|---------------------------------------|--|--------------------------------------|---------------------------------------|--|
| Residents | 110,062 | 71.200 | 24.283 | 46.918 | 0.647 | 0.221 | 0.426 | 2.5 | 2.0 | 0.5 |

Potential Effects of the Proposed Project on Publicly Accessible Open Space

Quantitative Assessment

According to the *CTM*, a significant adverse open space impact may occur if proposed actions would reduce the open space ratio by more than the general guidance for the open space percentage change provided in **Table 05.04-12**.

Table 05.04-12: Detailed Assessment – Percentage Change Guidance to Determine Possible Open Space Impact

| Total Open Space Ratio Range* | Active Open Space Ratio Range* | Passive Open Space Ratio Range* | Percentage Change in Open Space Ratio Signifying a Possible Adverse Open Space Impact |
|-------------------------------|--------------------------------|---------------------------------|---|
| 2.01 to 2.50 Or greater | 1.61 to 2.0 Or greater | 0.41 to 0.50 Or greater | 5% |
| 1.51 to 2.00 | 1.21 to 1.60 | 0.31 to 0.40 | 4% |
| 1.01 to 1.50 | 0.81 to 1.20 | 0.21 to 0.30 | 3% |
| 0.51 to 1.00 | 0.41 to 0.80 | 0.11 to 0.20 | 2% |
| 0.50 or less | 0.01 to 0.40 | 0.01 to 0.10 | 1% |

Note:

* - 2.5 open space ratio is the planning goal in NYC, with optimal distribution goal of 2.0 active open space ratio and 0.5 passive open space ratio.

Source: Table 7-5 in Chapter 7, “Open Space” of the *CTM*.

Likewise, **Table 05.04-13** expresses the percentage change from No-Action Alternative to the Rezoning and Midblock Bulk Alternatives for the study area. In the Rezoning and Midblock Bulk Alternatives, ratios of total, active, and passive open spaces to residents would continue to be lower

than the City's Optimal Planning Goals per the *CTM*. As shown in **Table 05.04-13**, the study area's total open space ratio in the Rezoning Alternative and Midblock Bulk Alternative would be 0.647 acres per 1,000 residents, which represents a 5.271 percent change from the No-Action Alternative. The active open space ratio for residents would decrease to 0.221 acres per 1,000 residents, which represents a 5.150 percent change. The passive open space ratio in the study area would also decrease to 0.426 acres per 1,000 residents, which represents a 5.333 percent change from the No-Action Alternative.

Table 05.04-13: Comparison of the No-Action Alternative to the Rezoning Alternative and Midblock Bulk Alternative Open Space Ratios in the ½-Mile Study Area

| Ratio | <i>CTM</i> Open Space Optimal Planning Goal (acres per 1,000) | Open Space Ratios Per 1,000 - Existing Conditions | Open Space Ratios Per 1,000 - No-Action Alternative | Open Space Ratios Per 1,000 - Rezoning/ Midblock Bulk Alternative | Future No-Action Alternative to Future Rezoning Alternative/ Midblock Bulk Alternative Percent Change | Threshold ^{1,2} Percent Change |
|---------------------|---|---|---|---|---|---|
| Total – Residents | 2.50 | 0.866 | 0.683 | 0.647 | -5.271% | 2% |
| Active – Residents | 2.00 | 0.335 | 0.233 | 0.221 | -5.150% | 1% |
| Passive – Residents | 0.50 | 0.531 | 0.450 | 0.426 | -5.333% | 5% |

Notes:

¹ Refer to **Table 05.04-11** to determine the threshold for the open space percent change.

² Based on Table 7-5 in Chapter 7, "Open Space" of the *CTM*, the total open space ratio range for a one percent threshold is 0.50 acres or less per 1,000 residents. As the total open space ratio for the Rezoning and Midblock Bulk Alternatives is at 0.647 acres per 1,000 residents, the Rezoning and Midblock Bulk Alternatives would utilize the two percent change threshold for total open space as the general guideline for determining if a significant adverse open space impact may occur.

As shown in **Table 05.04-13**, the Rezoning and Midblock Bulk Alternatives would result in a percentage change in open space ratio above the threshold signifying a possible adverse impact for total, active, and passive open space. As shown in **Table 05.04-13**, the Rezoning and Midblock Bulk Alternatives have different thresholds for the total, active, and passive open space ratios. As such, the quantitative assessment uses the two percent change threshold for total open space as the general guideline for determining if a significant adverse open space impact may occur. In the Rezoning and Midblock Bulk Alternatives, the expected 5.271 and 5.150 percent changes in total and active open space ratios would be higher than the applicable two and one percent change decreases referenced in **Table 05.04-13** for considering the significance of changes to the total and active open space ratios, respectively. The expected 5.333 percent change in the passive open space ratio would be slightly higher the applicable five percent change decrease referenced in **Table 05.04-13** for considering the significance of changes to the passive open space ratio. As noted in the *CTM*, before making a determination as to whether significant adverse indirect open space impacts would occur, qualitative considerations also should be considered.

Qualitative Assessment

In the Rezoning and Midblock Bulk Alternatives, the study area would have a greater shortfall of total, active, and passive open space as compared to existing conditions and No-Action Alternative. Although these open space ratios in the study area would remain less than the DCP

planning goals, the deficiency of open space resources in the study area would be ameliorated by several factors.

Most importantly, as noted above, both the Rezoning and Midblock Bulk Alternatives would provide private, accessory open space to be utilized by the existing New York City Housing Authority (NYCHA) residents and residents of the new incremental units in mixed income buildings. Under the Rezoning Alternative, the Fulton Houses Project Site would include 2.374 acres of total open space, of which 0.610 acres is active open space and 1.764 acres is passive open space. The Elliott-Chelsea Houses Project Site would include 2.839 acres of total open space, of which 0.540 acres is active open space and 2.298 acres is passive open space. In total, the Project Sites would include 5.213 acres of total open space, comprising of 1.150 acres of active open space and 4.062 acres of passive open space. Under the Midblock Bulk Alternative, the Fulton Houses Project Site would include 2.370 acres of total open space, of which 0.654 acres is active open space and 1.716 acres is passive open space. The Elliott-Chelsea Houses Project Site would include 2.839 acres of total open space, of which 0.540 acres is active open space and 2.298 acres is passive open space.¹⁰ In total, the Project Sites would include 5.209 acres of total open space, comprising of 1.194 acres of active open space and 4.015 acres of passive open space. The Project Sites would include improved and more useable facilities such as basketball courts, playgrounds and splash zones, dog walks, community gardens, shaded trellises, seating, and programmable lawns to host resident events in both the Rezoning and Midblock Bulk Alternatives. The Project Sites' open spaces are also designed to improve connectivity for more accessibility between accessory spaces. In particular, the accessory open space on the Fulton Houses Project Site is designed to bring an activated, green spine midblock spanning across three city blocks (refer to **Figures 05.04-7a and 05.04-8a**). The spine would be anchored by an outdoor basketball court and would include programming as described below.

Under the Rezoning Alternative and Midblock Bulk Alternative, the Proposed Project would reduce approximately 2.077 acres and 2.081 acres of accessory open spaces compared to existing conditions, respectively. However, since much of the current open space is restricted by barriers like fences and limited to barren soil or turf, rendering it inaccessible and unusable, the accessory open spaces under the Rezoning and Midblock Bulk Alternative would result in a significant improvement. An increase in accessible and useable accessory open spaces from 0.783 to 1.283 acres of useable open space across the Fulton Houses Project Site and from 0.909 to 1.305 acres of useable open space across the Elliott-Chelsea Houses Project Site under the Rezoning Alternative and an increase in amount of accessible and useable accessory open spaces from 0.783 to 1.314 acres of useable open space across the Fulton Houses Project Site and from 0.909 to 1.305 acres of useable open space across the Elliott-Chelsea Houses Project Site under the Midblock Bulk Alternative. In total, the amount of accessible and useable open space would increase from just 1.692 acres today to 2.588 acres under the Rezoning Alternative and 2.619 acres under the Midblock Bulk Alternative, enhancing the overall experience for users.

During field observations and as shown in **Figures 05.04-4a and 05.04-4b**, residents are rarely utilizing the existing accessory open spaces because approximately 5.597 acres out of the total approximately 7.289 acres (approximately 77 percent) of open spaces are comprised of fenced off

¹⁰ The accessory open space at the Elliott-Chelsea Houses Project Site would be arranged the same under the Rezoning and Midblock Bulk Alternatives.

landscaping that is not useable to residents, and the approximately 1.692 acres of useable space (approximately 23 percent) include play area equipment and courts that are outdated and do not provide as much opportunity for imaginative play. On the other hand, accessory open spaces under the Rezoning and Midblock Bulk Alternatives would be enhanced through the provision of accessible and useable accessory open spaces for residents, of which approximately 2.588 acres and approximately 2.619 acres would be considered useable (approximately 50 percent useable versus 50 percent of not useable space) under the Rezoning and Midblock Bulk Alternatives, respectively, despite the approximately two acre reduction of total open space area under both alternatives. This represents a 27 percent increase in the amount of useable open space under the Rezoning and Midblock Bulk Alternatives as compared to existing conditions. As shown in **Figures 05.04-7a through 05.04-8b** and discussed above, the accessory open spaces would be transformed into community hubs, featuring new amenities such as dog walks and community gardens for urban gardening. Active areas like playgrounds and splash zones would provide enhanced play opportunities, while passive spaces with shaded trellises and benches offer spots for relaxation. Programmable lawns would host resident events, from summer movie nights and lawn games, to annual holiday tree lightings. As shown in **Figures 05.04-9a and 05.04-9b**, illustrative renderings highlight the accessibility and useability of courtyard spaces, as well as elevating the experience with rooftop terraces, complete with plantings, seating, and outdoor dining areas – suitable for relaxation and social gatherings. The rooftop terraces would be provided in all replacement buildings in addition to ground level accessory open spaces and would be accessible to each building's residents.

Given the size of the open space (5.213 acres under the Rezoning Alternative and 5.209 acres under the Midblock Bulk Alternative), its close proximity to new buildings, the Proposed Project's improved connectivity between accessory spaces and improved useability to building residents (approximately 50 percent of useable space under the Rezoning and Midblock Bulk Alternatives versus approximately 23 percent of useable space under existing conditions), and that reconstructed open space amenities and attendant facilities would be much improved over the current accessory open spaces which are generally fragmented, and typically surrounded by fencing, it is expected that the accessory open space will be much more functional to accommodate the additional population added as a result of the Rezoning Alternative and Midblock Bulk Alternative.

Moreover, the public open space resources included in the quantitative analysis were generally found to be in good to excellent condition, provide a variety of active and passive recreation amenities distributed throughout the study area, include many newer facilities such as the High Line, Gansevoort Peninsula, and Hudson River Park esplanade and piers which are of high quality, singular in their design, and well maintained. While some are heavily utilized, others are characterized by low to moderate utilization (refer to **Table 05.04-4**).

In addition, as shown in **Figure 05.04-2**, the Project Sites and most of the study area are located within a WtPSA and therefore, is not located within a walk gap area (i.e., an area of the City that is not within walking distance to a park).

The population to be generated by the Rezoning and Midblock Bulk Alternatives is not expected to have any special characteristics, such as a disproportionately younger or older population, that would place heavy demand on facilities that cater to specific groups. Residents in the Rezoning

and Midblock Bulk Alternatives are expected to exhibit similar characteristics to the current residents of the study area and the breakdown in population by age group is expected to remain the same or similar.

Data from the 2018-2022 ACS indicate that approximately 73.4 percent of the population in the study area falls between the ages of 20 and 64. According to the *CTM*, this user group utilizes active recreational facilities such as courts and fields for sports, as well as individualized recreation such as biking, jogging, and rollerblading, which require bike paths, esplanades, and vehicle-free roadways. Adults also engage in passive recreational activities such as picnicking, and ad-hoc active sports such as Frisbee, and other recreation activities in which all ages can participate. Per this definition, open space resources in the Rezoning and Midblock Bulk Alternatives would generally be suitable to meet the needs of this user population (refer to **Table 05.04-4**).

Furthermore, and as described above, there are several open space resources not included in the quantitative analysis as per guidance from the *CTM*. Chelsea Piers and Chelsea Recreation Center are not considered publicly accessible open space as defined by the *CTM*. Both Chelsea Piers and Chelsea Recreation Center require a fee to access the active recreational facilities, though in the case of the latter there is no fee for people under age 25. In addition, there are six public open space resources located just outside the study area, including portions of Hudson River Park, Madison Square Park, Greeley Square Park, Herald Square Park, Herald Square Plaza between 34th and 35th Streets, and portions of Hudson Park & Boulevard (Phase 2). These open space resources are located more than a ½-mile from the Project Sites, but less than a ½-mile from portions of the study area. The largest open space resource, Hudson River Park, is an approximately 550-acre park (of which 509.25 acres is located outside of the study area) with a wide and unique variety of passive and active amenities, such as rock climbing, bowling, sailing, golf range, canoe paddling, and skate parks extending continuously along the waterfront. Though it is not considered Manhattan's regional park, given its contiguity to the study area portions of the park, it can be assumed that with its size and its facilities, residents from both the study area and those that would reside in the Project Sites would likely visit and utilize the entirety of the open space resource, not just the portions located within the residential open space study area. As discussed above, Dyer Deck-Over Lot 10 is located just beyond the study area and is anticipated to introduce an additional 2.13 acres of passive open space by the 2041 analysis year. Given its size and connectivity to Dyer Deck-Over Lot 9 (1.37 acres), which is located in the study area and included in the quantitative assessment, it is anticipated that users would utilize both Dyer Deck-Over open space resources. Combined, these open space resources offer approximately 554.795 acres (285.165 acres of active open space and 269.630 acres of passive open space) for the study area population that is not considered in the 2041 quantitative analysis.

In summary, given these factors, the demand for open space generated by the Rezoning and Midblock Bulk Alternatives is not expected to greatly exacerbate the No-Action Alternative deficiency, despite the 5.271 percent changes in the study area's respective total open space ratios. Though the population added as a result of the Rezoning and Midblock Bulk Alternatives would increase utilization of the area's open spaces as indicated by the open space ratio, the study area open space resources could likely handle increased demand. In summary, this is because, although the open space ratios are relatively low and the decrease associated with the Rezoning and Midblock Bulk Alternatives would exceed the quantitative impact threshold, as is common in many high density areas of the City, the potential for significant adverse impacts would be offset

by the presence of private, accessory open space dedicated for the use of the Project Sites' residential population combined with the close proximity to an array of study area public open spaces of high caliber.

Accordingly, the Rezoning Alternative and Midblock Bulk Alternative would not result in significant adverse open space impacts due to indirect effects.

Alternative 3 – Non-Rezoning Alternative

Direct Effects Analysis

Similar to the Rezoning and Midblock Bulk Alternative, the Non-Rezoning Alternative would not cause the physical loss of publicly accessible open space, or result in significant adverse operational air quality, operational noise, construction air quality, or construction noise on open space resources. Apart from the shadows impacts to portions of Chelsea Park and PS 33 Playground as disclosed above, the Non-Rezoning Alternative would not change the use of a publicly accessible open space resource so that it no longer serves the same user population, nor would it limit public access to any open spaces. Therefore, no significant adverse direct effects on open space would occur as a result of either the Non-Rezoning Alternative.

Indirect Effects Analysis

Study Area Population

The Non-Rezoning Alternative would introduce approximately 1,783 DUs to the Project Sites. Using the same planning assumptions of 1.68 residents per DU, the Non-Rezoning Alternative is expected to introduce a net increase of approximately 2,995 residents and would therefore increase the study area's population to 107,580 residents (refer to **Table 05.04-14**).

Table 05.04-14: 2041 Non-Rezoning Alternative Open Space Study Area Population

| | No-Action Alternative Population¹ | Additional Population from the Non-Rezoning Alternative² | Future 2041 Non-Rezoning Alternative Population |
|----------------------|---|--|--|
| Residential (½-mile) | 104,259 | 2,995 | 107,254 |

Notes:

¹ Refer to **Table 05.04-8**.

² Residential population estimate for the Non-Rezoning Alternative is based on Manhattan CD 4 average of approximately 1.68 persons per household (US Census Bureau, 2020 Census).

Open Space Resources

The Non-Rezoning Alternative would include the development of approximately 5.369 acres of private, accessory open space in the Project Sites, in which 2.287 acres would be located at the Fulton Houses Project Site and 3.083 acres would be located at the Elliott-Chelsea Houses Project Site.

As shown in **Figures 05.04-10a and 05.04-10b**, under the Non-Rezoning Alternative, the accessory open space in the Project Sites would be located in building courtyards and in the area between buildings, and would provide both active and passive amenities, including play areas, community gardens, dog walks, landscaping, shaded lounge areas, seating, programmable lawns, and walkways. As shown in the illustrative open space site plan presented in **Figure 05.04-10a**, the Fulton Houses Project Site would include 0.395 acres of active open space and 1.891 acres of passive open space. The 3.083 acres of open space at the Elliott-Chelsea Houses Project Site include 0.545 acres of active open space and 2.538 acres of passive open space (refer to **Figure 05.04-10b**). As mentioned above, the open space design for the Project Sites is still evolving, and specific features are subject to change and therefore should be considered illustrative.

Open Space Adequacy

As shown in **Table 05.04-15**, the total, active, and passive open space ratio would decrease from 0.683 acres, 0.233 acres, and 0.450 acres to 0.663 acres, 0.226 acres, and 0.437 acres per 1,000 residents, respectively and would remain below the City's open space planning ratio goal. Thus, the total, active, and passive open space ratio is expected to decrease 0.020 acres, 0.007 acres, and 0.013 acres from the No-Action Alternative to the Non-Rezoning Alternative.

Table 05.04-15: Adequacy of Open Space Resource in the Study Area – Non-Rezoning Alternative

| | Population | Total Open Space Acreage | Active Open Space Acreage | Passive Open Space Acreage | Total Open Space per 1,000 Residents | Active Open Space per 1,000 Residents | Passive Open Space per 1,000 Residents | Total City Open Space Planning Goals | Active City Open Space Planning Goals | Passive City Open Space Planning Goals |
|-----------|------------|--------------------------|---------------------------|----------------------------|--------------------------------------|---------------------------------------|--|--------------------------------------|---------------------------------------|--|
| Residents | 107,254 | 71.200 | 24.283 | 46.918 | 0.663 | 0.226 | 0.437 | 2.5 | 2.0 | 0.5 |

Potential Effects of the Proposed Project on Publicly Accessible Open Space

Quantitative Assessment

Table 05.04-16 expresses the percentage change from the No-Action Alternative to the Non-Rezoning Alternative for the study area. As noted previously, ratios of total, active, and passive open spaces to residents would continue to be lower than the City's Optimal Planning Goals per the *CTM*. As shown in **Table 05.04-16**, the study area's total open space ratio in the Non-Rezoning Alternative would be 0.663 acres per 1,000 residents, which represents a 2.928 percent change from the No-Action Alternative. The active open space ratio for residents would decrease to 0.226 acres per 1,000 residents in the Non-Rezoning Alternative, which represents a 3.004 percent change. The passive open space ratio in the study area would also decrease to 0.437 acres per 1,000 residents, which represents a 2.889 percent change from the No-Action Alternative.





Fulton and Elliott-Chelsea Houses Redevelopment Project

Figure 05.04-10b
Elliott-Chelsea Houses Open Space Site Plan -
Non-Rezoning Alternative

Table 05.04-16: Comparison of the No-Action Alternative to the Non-Rezoning Alternative Open Space Ratios in the ½-Mile Study Area

| Ratio | CTM Open Space Optimal Planning Goal (acres per 1,000) | Open Space Ratios Per 1,000 - Existing Conditions | Open Space Ratios Per 1,000 - No-Action Alternative | Open Space Ratios Per 1,000 - Non-Rezoning Alternative | Future No-Action Alternative to Future Non-Rezoning Alternative Percent Change | Threshold¹ Percent Change |
|---------------------|---|--|--|---|---|---|
| Total – Residents | 2.50 | 0.866 | 0.683 | 0.663 | -2.928% | 2% |
| Active – Residents | 2.00 | 0.335 | 0.233 | 0.226 | -3.004% | 1% |
| Passive – Residents | 0.50 | 0.531 | 0.450 | 0.437 | -2.889% | 5% |

Notes:

¹ Refer to **Table 05.04-11** to determine the threshold for the open space percent change.

As shown in **Table 05.04-16**, the Non-Rezoning Alternative would result in a percentage change in open space ratio above the threshold signifying a possible adverse impact for total and active open space. As shown in **Table 05.04-16**, the Non-Rezoning Alternative has different thresholds for the total, active, and passive open space ratios. As such, the quantitative assessment uses the two percent change threshold for total open space as the general guideline for determining if a significant adverse open space impact may occur. In the Non-Rezoning Alternative, the expected 2.928 and 3.004 percent changes in total and active open space ratios would be slightly higher than the applicable two and one percent change decreases referenced in **Table 05.04-16** for considering the significance of changes to the total and active open space ratios, respectively. On the other hand, the expected 2.889 percent change in the passive open space ratio would be a smaller decrease than the applicable five percent change decrease referenced in **Table 05.04-16** for considering the significance of changes to the passive open space ratio. However, as noted above, qualitative considerations also should be considered before making a determination as to whether significant adverse indirect open space impacts would occur.

Qualitative Assessment

The deficiency of open space resources in the study area would be ameliorated by several factors.

As noted above, the Non-Rezoning Alternative would introduce private, accessory open space, which would be utilized by the existing NYCHA residents and residents of the new incremental units in mixed-income buildings. The Fulton Houses Project Site would include 2.287 acres of total open space, of which 0.395 acres is active open space and 1.891 acres is passive open space. The Elliott-Chelsea Houses Project Site would include 3.083 acres of total open space, of which 0.545 acres is active open space and 2.538 acres is passive open space. In total, the Non-Rezoning Alternative would include 5.369 acres of total open space, comprising 0.940 acres of active open space and 4.429 acres of passive open space. The Project Sites would include more useable facilities such as basketball courts, playgrounds and splash zones, dog walks, community gardens, shaded trellises, seating, and programmable lawns to host resident events in the Non-Rezoning Alternative. The Project Sites' open spaces are also designed to improve connectivity for more accessibility between accessory spaces.

Although the Project Site's accessory open spaces would be reduced in overall size by approximately 1.920 acres from existing conditions, approximately 0.597 acres (approximately 77 percent) is restricted by barriers and limited to barren soil or turf, rendering it inaccessible and unusable, and the approximately 1.692 acres of useable space (approximately 23 percent) include play area equipment and courts that are outdated (as shown in **Figures 05.04-4a and 05.04-4b**). Accessible and useable accessory open spaces would increase from just 1.692 acres (approximately 23 percent) today to 2.071 acres (approximately 39 percent) under the Non-Rezoning Alternative, enhancing the overall experience for users. This represents a 15 percent increase in the amount of useable open space compared to existing conditions. As shown in **Figures 05.04-10a and 05.04-10b** and discussed above, the accessory open spaces would be transformed into community hubs, featuring new amenities such as dog walks and community gardens for urban gardening. Active areas like playgrounds and splash zones would provide enhanced play opportunities, while passive spaces with shaded trellises and benches offer spots for relaxation. Programmable lawns would host resident events, from summer movie nights, lawn games, to annual holiday tree lightings. As shown in **Figures 05.04-9a and 05.04-9b**, illustrative renderings highlight the accessibility and useability of courtyard spaces, as well as elevating the experience with rooftop terraces, complete with plantings, seating, and outdoor dining areas – suitable for relaxation and social gatherings. The rooftop terraces would be provided in all replacement buildings in addition to ground level accessory open spaces and would be accessible to each building's residents.

In addition, the Project Sites and most of the study area are located within a WtPSA (refer to **Figure 05.04-2**) and therefore, are not located within a walk gap. The public open space resources included in the quantitative analysis were generally found to be in good to excellent condition, with a variety of active and passive recreation amenities (refer to **Table 05.04-4**) suitable for the user population (ages 20 and 64) of the study area. There are also several open space resources not included in the quantitative analysis as per guidance from the *CTM*. Combined, these open space resources offer approximately 554.795 acres (285.165 acres of active open space and 269.630 acres of passive open space) for the study area population that is not considered in the quantitative analysis.

In summary, given these factors, the demand for open space generated by the Non-Rezoning Alternative is not expected to greatly exacerbate the No-Action Alternative deficiency, despite the 2.928 percent changes in the study area's respective total open space ratios. The potential for significant adverse impacts would be offset by the presence of private accessory open space (5.369 acres) dedicated for the use of the Project Sites' residential population, its close proximity to new buildings, the Proposed Project's improved connectivity between accessory spaces and improved accessibility to building residents (approximately 39 percent of useable space under the Non-Rezoning Alternative versus approximately 23 percent of useable space under existing conditions), and that reconstructed open space amenities and attendant facilities would be much improved over the current accessory open spaces.

Accordingly, the Non-Rezoning Alternative would not result in significant adverse open space impacts due to indirect effects.