

2.4 OPEN SPACE

2.4.1 INTRODUCTION

Open space is defined as publicly or privately owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment. According to the *CEQR Technical Manual*, an analysis of open space is conducted to determine whether or not a proposed project would have a direct impact resulting from the elimination or alteration of open space and/or an indirect impact resulting from overtaxing available open space.

According to the *CEQR Technical Manual*, a public open space is accessible to the public on a constant and regular basis, including for designated daily periods. Public open spaces may be under public (government) or private ownership. Examples include resources such as parks managed by the City, State, or Federal governments; public plazas; outdoor schoolyards that are accessible to the public outside of school hours; landscaped medians with seating; public housing grounds; gardens; and nature preserves, if publicly accessible. Private open spaces are not considered in the quantitative analysis of open space, but may be considered in the qualitative assessment. Private open spaces include private-access fee-charging spaces; recreational facilities used by community facilities, where the open space is accessible only to the institution-related population; natural areas or wetlands without public access; stoops; vacant lots; and front and rear yards.

2.4.2 METHODOLOGY

Open space resources are divided into two categories for analysis: active use resources and passive use resources. Active open space is used for sports, exercise, or active play, and can consist of facilities such as playgrounds with play equipment, playing fields, beach areas (swimming, running), greenways and esplanades, and multi-purpose play areas. Passive open space is used for relaxation, such as sitting or strolling, and can consist of facilities such as plazas or medians with seating, a percentage of beach areas (sunbathing), picnicking areas, greenways and esplanades (sitting, strolling), restricted-use lawns, and gardens. Often, an open space can be used for both active and passive uses. The residential population of an area uses active and passive open spaces, while the worker population tends to place demands on passive open space.

The *CEQR Technical Manual* presents standards by which the adequacy of open space in a community may be measured. According to the *CEQR Technical Manual*, an area with a ratio of 2.5 acres of open space per 1,000 residents is well-served by open spaces, and is consequently used as a benchmark for large-scale plans and proposals. Open space analyses involve estimating an area's open space ratio and projecting the effect of a proposed project on that ratio. In addition to the benchmark noted above, an open space analysis also considers the City's median community district open space ratio of 1.5 acres per 1,000 residents when determining impact significance. The City also seeks to attain a planning goal of a balance of 20 percent passive open space and 80 percent active open space.

According to the *CEQR Technical Manual*, a significant adverse open space impact may occur if a proposed project would result in the direct displacement or alteration of existing open space, unless the proposed project would provide a comparable replacement within the study area and there is no net loss of publicly accessible open space. A significant adverse impact may also occur if a proposed project would reduce the open space ratio by more than 5 percent in areas that are currently below the City's median community district open space ratio of 1.5 acres per 1,000 residents. These reductions may result in overburdening existing facilities or further exacerbating a deficiency in open space.

A screening process was conducted for the Proposed Project to determine whether or not there would be a direct impact resulting from the elimination or alteration of open space and/or an indirect impact resulting from overtaxing available open space.

2.4.2.1 Direct Effects

Direct effects may occur when the proposed project would encroach on, or cause a loss of, open space. Direct effects may also occur if the facilities within an open space would be so changed that the open space no longer serves the same user population. Limitation of public access and changes in the type and amount of public open space may also be considered direct effects. Other direct effects include the imposition of noise, air pollutant emissions, odors, or shadows on public open space that may alter its usability. It should be noted that direct effects may not always result in adverse effects to open space; rather, alterations and reprogramming of parks may be beneficial or may result in beneficial changes to some resources and may or may not have an adverse effect on others.

According to the *CEQR Technical Manual*, if a proposed project would have a direct effect on an open space, an assessment of the effects on open space and its users may be appropriate. Direct effects occur if the proposed project would:

- Result in a physical loss of public open space (by encroaching on an open space or displacing an open space);
- Change the use of an open space so that it no longer serves the same user population (e.g., elimination of playground equipment);
- Limit public access to an open space; or
- Cause increased noise or air pollutant emissions, odors, or shadows on public open space that would affect its usefulness, whether on a permanent or temporary basis.

The *CEQR Technical Manual* notes, however, when the direct effect would be so small that it would be unlikely to change use of the open space, an assessment may not be needed. For example, the loss of a small amount of open space to support infrastructure related to park purposes may not warrant a full open space analysis. When few users or a limited age group of users would be affected, new and comparable open space would be provided at the same location, or the proposed alterations to an existing open space would be improvements that create comparable or better facilities, significant adverse impacts are unlikely and a full assessment may not be needed. A simple comparison of conditions with and without the project and a discussion of the users affected may be adequate.

The entire Development Area is vacant and undeveloped. The amount of vegetation varies across the area, with the majority of it covered by trees and other vegetation. The western portion of the area contains some vacant open areas, with trees along the east side of Arthur Kill Road. There are no existing public parks within the Development Area. The Proposed Project would not result in a physical loss of a public open space, change the use of an open space so that it no longer serves the same user population, limit public access to an open space, or cause increased noise or air pollutant emissions, odors, or shadows on a public open space that would affect its usefulness. Therefore, an assessment of direct effects is not warranted.

Of note, the Proposed Project envisions a number of discrete development elements which would be undertaken by different entities on the approximately 66-acre Development Area and the approximately 6-acre area for the construction of Englewood Avenue (see **Chapter 1**). The overall area is divided into smaller sites for development, including a site for a proposed 23-acre park with 7.5 acres of active recreation areas and 15.5 acres of passive recreation areas. This new park would be mapped along with the adjacent approximately 20-acre Conservation Area to create approximately 43-acres of new mapped parkland. Further discussions of the proposed park are provided in section 2.4.5 of this chapter.

2.4.2.2 Indirect Effects

Indirect effects may occur when the population generated by proposed projects overtaxes the capacity of existing open spaces so that their service to the future population of the affected area would be substantially or noticeably diminished.

As stated in the *CEQR Technical Manual*, for the majority of projects, an assessment is conducted if the proposed project would generate more than 200 residents or 500 employees, or a similar number of other users (such as the visitor population that might be introduced by a large shopping area). However, the need for an open space assessment may vary in certain areas of the City that are considered either underserved or well-served by open space.

Underserved areas are areas of high population density in the City that are generally the greatest distance from parkland, where the amount of open space per 1,000 residents is currently less than 2.5 acres. If a project is located in an underserved area, an open space assessment should be conducted if the project would generate more than 50 residents or 125 workers.

Well-served areas are areas that have an open space ratio above 2.5 acres of open space per 1,000 users and accounts for existing parks that contain developed recreational resources, or are located within a one-quarter mile (approximately a 10-minute walk) from developed and publicly accessible portions of regional parks. If a project is located in a well-served area, an open space assessment should be conducted if the project would generate more than 350 residents or 750 workers in a well-served area. Higher thresholds in areas well-served by open space are appropriate because the area contains existing park re-sources that provide for the existing population and likely for a nominal amount of added population, while regional parks contain a wide variety of recreational facilities intended to serve many users at a given point in time.

The Development Area is located within Staten Island Community District 3 (“CD 3”) and is not within an area of the City considered underserved or well-served area by open space. Thus, the analysis screening threshold used in the assessment of indirect open space impacts is if the Proposed Project would generate more than 200 residents or 500 employees. The preliminary screening for the potential for new non-residential and residential open space users generated by the Proposed Project, to have a potential significant adverse effect on open space resources, is presented below.

2.4.3 PRELIMINARY SCREENING

2.4.3.1 Preliminary Screening of Potential Residential Open Space Users

As discussed in **Chapter 1**, the Proposed Project consists of a number of discrete project elements to be undertaken by different entities.

Year 2015 Analysis

By the year 2015, the NYC Department of Parks and Recreation would develop a 23-acre park site with active and passive recreational space, which would be mapped along with the adjacent approximately 20-acre Conservation Area to create approximately 43-acres of new mapped parkland. Adjacent to the park, a private developer has been selected to develop the 11-acre Retail Site “A” with medium- and large-format retail stores, along with a new library branch that will share parking. However, the components of the Proposed Project to be built by the year 2015 do not include any residential units, and as such, further assessment for the potential of indirect residential impacts is not warranted for the year 2015 analysis.

Year 2020 Analysis

By the year 2020, the remainder of the Development Area would be redeveloped with additional retail space, a public school and senior housing, along with the mapping and construction of Englewood Avenue. The NYCEDC will offer an approximately 9.1-acre site for senior housing in the future for up to 162 units, consisting of 80 affordable multi-family rental units and 82 age-restricted for-sale detached units. It is expected that each senior housing unit would have an estimated occupancy of one to two adults. For conservative analysis purposes, two adults per senior housing unit were used. This would add an estimated 324 new residents to the open space study area by the year 2020 of the Proposed Project. As the Proposed Project would potentially generate more than the CEQR threshold of 200 residents, further assessment is warranted for the year 2020 analysis, in order to determine if the change in total population relative to total open space in the area might result in a significant adverse open space impact.

2.4.3.2 Preliminary Screening of Potential Non-Residential Open Space Users

As discussed in **Chapter 1**, "Project Description," the Proposed Project is expected to result in a number of developments across the Project Area by the years 2015 and 2020.

As previously noted, the Development Area is not located within an area of the City considered underserved or well-served area by open space. Thus, the analysis screening threshold used in the assessment of indirect open space impacts for non-residential study is 500 employees. The preliminary screening for the potential for new non-residential and residential open space users generated by the Proposed Project, to have a potential significant adverse effect on open space resources, is presented below.

Year 2015 Analysis

As previously stated, by the year 2015 the NYCDPR would develop the new park, to be known as Fairview Park. No additional park employees would be directly created for the park or for the adjacent Conservation Area to be mapped, as the NYCDPR expects to maintain the park areas with existing staff.

Adjacent to the park, the 11-acre Retail Site "A" is expected to be developed by a private developer with up to 195,000 square feet of commercial space for medium- and large-format retail stores. It is estimated that the development of Retail Site "A" would introduce approximately 488 employees, assuming an average of one employee per 400 square feet of general retail floor area¹, (see **Chapter 2.2**). This site will also include an approximately 15,000-square-foot branch of the New York Public Library, which will share parking with the retail uses. For the public library, applying the same rate used for general retail of an average of one employee per 400 square feet of floor area, the 15,000 square foot library is expected to result in approximately 38 employees.

Therefore, by the year 2015, the Proposed Project has the potential to generate approximately 526 new employees to the Project Area. As this number is above the *CEQR Technical Manual* screening threshold of 500 new employees, further assessment is warranted in order to determine if the change in employees to the area would result in a significant adverse opens space impact by the year 2015.

Year 2020 Analysis

By the year 2020, the remainder of the Development Area would be redeveloped with additional retail space, a public school and senior housing, along with the mapping and construction of Englewood Avenue.

¹ Based on rates used in the Environmental Impact Statements for the Willets Point and 161st Street rezoning projects.

Along Arthur Kill Road, Retail Site “B” consists of approximately 7.3 acres that would also be privately developed in the future with an anticipated 90,000 square feet of neighborhood retail space. Assuming the same average of one employee per 400 square feet of general retail floor area (2.5 employees per 1,000 square feet of floor area), it is estimated that the development of Retail Site “B” would introduce approximately 225 employees.

The City will offer an approximately 9.1-acre site for senior housing in the future for up to 162 units. Assuming an average of 0.04 employees per dwelling unit of residential use, it is expected that the senior housing would generate approximately seven employees, such as superintendents, doormen, handymen, porters, etc.

The NYCSCA would also construct a combined elementary/middle school on an approximately 5.9-acre site with an approximately 750-seat capacity for kindergarten through 8th grade. An estimated 58 teachers and staff are expected for the combined elementary/middle school.

Therefore, by the year 2020, the Proposed Project has the potential to generate approximately 290 additional employees in the Project Area. While these projections are under the 500 employee threshold, they would be added to the area along with the 526 employees expected by the year 2015. As this total number of 816 is above the *CEQR Technical Manual* screening threshold, further assessment is warranted in order to determine if the change in employees to the area would result in a significant adverse open space impact by the year 2020.

2.4.4 EXISTING CONDITIONS

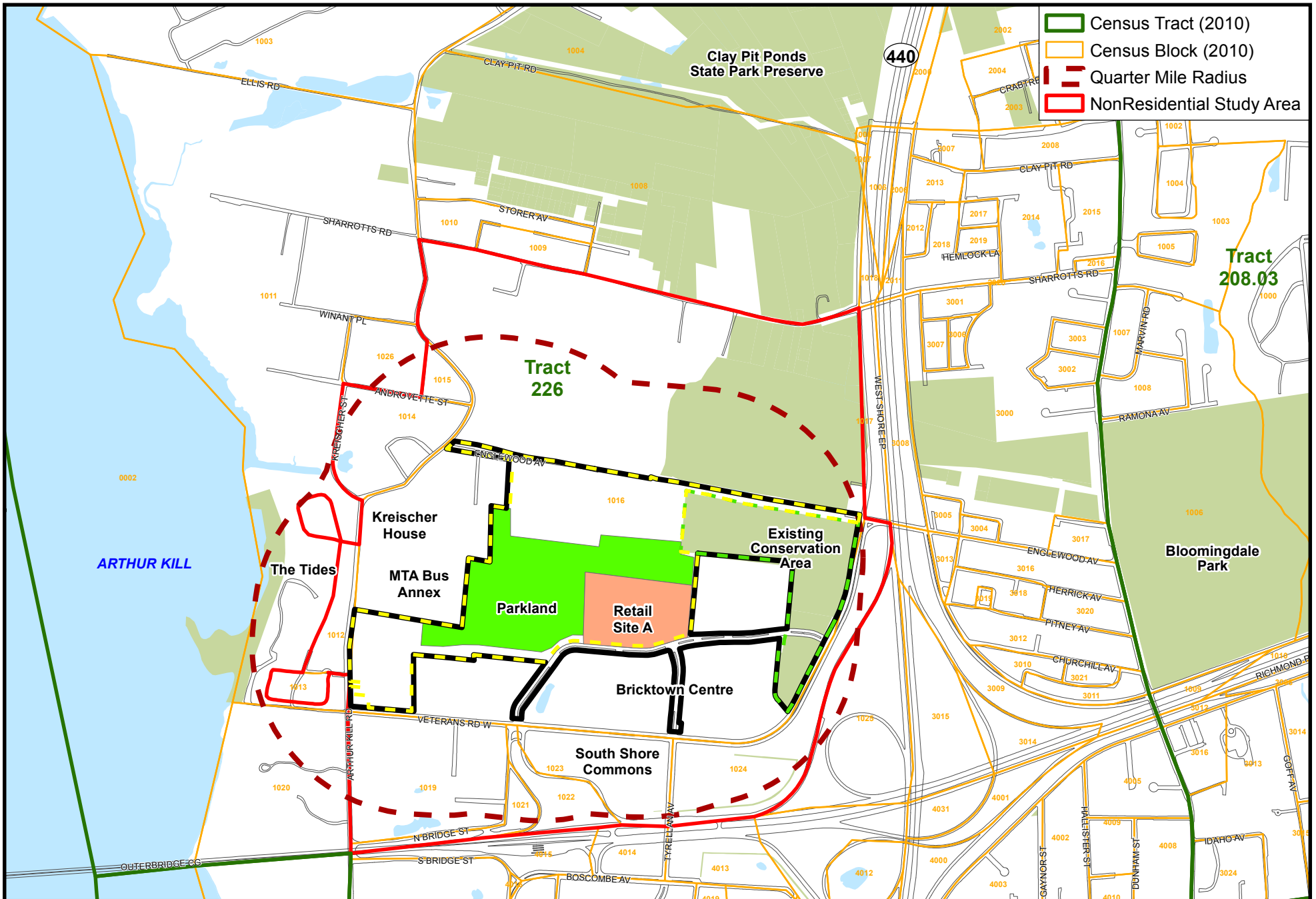
As stated in the *CEQR Technical Manual*, the first step in an open space analysis is to define and map study areas. In accordance with the guidelines established in the *CEQR Technical Manual*, open space study areas are generally defined by a reasonable walking distance that users would travel to reach local open space and recreational resources. That distance is typically a half-mile radius for residential users and a one-quarter mile radius for non-residential users (i.e., employees).

Following *CEQR Technical Manual* guidelines, census tracts with approximately 50 percent or more of their area located within the one-half mile and one-quarter mile radiuses of the Development Area were first included in the calculation of population and open space, while those census tracts with less than approximately 50 percent of their area in the half-mile and one-quarter mile radiuses were excluded. However, as population is dispersed in this section of the City, the boundaries of the census tract covering the Development Area are mapped to limits significantly away from the area. As such, using the guide of 50 percent or more of the census tract area within the one-half and one-quarter mile radiuses was not conducive to obtaining accurate population and worker estimates. To provide the necessary population details, data was assembled instead at the more detailed census block level.

The construction of Retail Site “A” and Fairview Park is expected to be completed by the year 2015. The construction of the remainder of the Development Area is expected by the year 2020, including the senior housing development, which is the only residential component of the Proposed Project, as well as the proposed school and construction of Englewood Avenue.

2.4.4.1 Study Area Around Retail Site “A” and Fairview Park (2015 Analysis)

The open space study area for the 2015 year includes an area of a quarter-mile around the boundaries of Retail Site “A” and Fairview Park, for the analysis of non-residential/workers. As the housing component of the Proposed Project would not be developed by the year 2015, an area of one-half mile around the Project Area and study for residential analysis is not warranted. The one-quarter mile study area for the year 2015 analysis, based in part on reasonable walking distances up to but not past the West Shore Expressway, is shown in **Figure 2.4-1**.



AECOM

Legend

Charleston Mixed-Use
Development

Figure 2.4-1
Open Space Study Area
Analysis I (2015)

Non-Residential Workers

The radius for non-residential users includes ten census blocks (all within Census Tract 226.00) within the one-quarter mile radius surrounding the portion of the Development Area that would be developed as part of the first phase of the Proposed Project. The census blocks included in this non-residential analysis within Census Tract 226 are: Blocks 1012, 1013, 1014, 1015, 1016, 1019, 1021, 1022, 1023, and 1024.

The non-residential worker population for this one-quarter mile study area was estimated using business summary employment data from ESRI, Inc., a commercial data provider. Based on employment data obtained from ESRI, Inc., using ESRI Business Analyst, this non-residential study area has a worker population of approximately 643 persons working within 73 businesses. The ESRI Business Summary report is provided in **Appendix B**.

Open Space Resources/Inventory Within the Study Area

There are three publicly-accessible open space resources within the non-residential one-quarter mile study area around the development sites that would be constructed by the year 2015, as shown in **Figure 2.4-1** and **Table 2.4-1**. Due east of the Development Area is the 20-acre Conservation Area, which is included as part of the overall Project Area, but will remain as natural preserve under the Proposed Project and be mapped as parkland. To the north is Clay Pit Ponds State Park Preserve (“CPPSPP”), with approximately 42.5 acres (of the overall 260 acre park) within this one-quarter mile study area (the portion situated north of Englewood Avenue and south of Sharrotts Road. To the west is an approximately 0.9 acre publically-accessible waterfront esplanade at the Tides at Charleston. A fourth publicly-accessible open space, Bloomingdale Park, is located just outside of and to the east of this one-quarter mile study area, on the other side of the West Shore Expressway.

The most recent inspection reports for the open space resources in the study area are summarized in **Table 2.4-1**, as compiled by NYCDPR or reviewed per site surveys and field inspections². Of the total approximately 63.5 acres of open space in this one-quarter mile study area, all of this open space is considered passive open space.

Table 2.4-1
Existing Open Space Resources in the One-Quarter Mile Non-Residential Study Area
Around Retail Site “A” and Fairview Park (2015 Analysis)

Name / Location	Amenities	Condition	Acreage		
			Active	Passive	TOTAL
Conservation Area – Area south of Englewood Avenue, West of the West Shore Exp.	Natural areas	Acceptable*	0.0	20.0	20.0
CPPSPP – Area south of Sharrotts Road, north of Englewood Ave., West of the West Shore Exp.	Natural areas, wetlands, ponds, trails for walking and horseback riding, picnic areas, Interpretive Center building	Acceptable*	0.0	42.5	42.5
The Tides at Charleston Esplanade – Arthur Kill Waterfront, west of Arthur Kill Road	2,500 linear foot privately owned/maintained but public accessible waterfront esplanade with benches and plantings	Acceptable*	0.0	0.992	0.992
Total Existing Open Space, Non-Residential Study Area			0.0	63.492	63.492

Sources: New York City Department of Parks and Recreation, New York City Department of City Planning District Profiles, and AECOM field surveys.

Notes: Acceptable and Unacceptable Conditions are based on most recent NYCDPR inspections (see **Appendix B**), supplemented by AECOM field surveys when NYCDPR conditions were not available (A “*” denotes parks that were not inspected by NYCDPR, and evaluated during AECOM field surveys).

² http://www.nycgovparks.org/sub_your_park/your_park.html

The three open space resources noted in **Table 2.4.1** are discussed in further detail below.

1. Conservation Area

Directly east of the northern portion of the proposed development sites is a 20-acre Conservation Area, which would remain preserved in its natural state and be designated as parkland under the Proposed Project. The conservation area contains various natural and undisturbed areas. The conservation area is situated south of Englewood Avenue and west of the West Shore Expressway.

2. Clay Pit Ponds State Park

Located north of Englewood Avenue is CPPSPP, a 260-acre nature preserve that contains a variety of natural habitats, such as wetlands, ponds, sand barrens, spring-fed streams and woodlands. The only New York State park on Staten Island, the preserve is managed to retain its ecological integrity and to provide educational and recreational opportunities. Educational programs, such as nature walks, pond ecology, bird-watching and tree and flower identification, are offered by CPPSPP, with many activities geared to schoolchildren. Designated trails allow for picnics and hikes, along with horseback riding along five miles of bridle paths for nearby stables. CPPSPP also contains an Interpretive Center, a fully-accessible building that features displays of the history of the park and its natural elements.

3. The Tides at Charleston Esplanade

The Tides at Charleston contains an approximately 2,500 linear-foot (approximately 0.9 acres) publicly accessible waterfront open space, which is accessible from the terminus of Veterans Road West. The Tides at Charleston is a gated residential complex with 190 single-family units for residents 55 years and older, located adjacent to the Arthur Kill waterfront, west of Arthur Kill Road. While the waterfront walkway is privately owned and maintained, it is accessible to the public pursuant to a restrictive declaration. The walkway includes seating surrounded by trees and other plantings.

In addition, a fourth publicly-accessible open space, Bloomingdale Park, is located just outside of and to the east of this one-quarter mile study area, on the other side of the West Shore Expressway. It is discussed below.

4. Bloomingdale Park

Bloomingdale Park is an approximately 139-acre city-owned park located on the south shore of Staten Island, situated east of the West Shore Expressway. The park contains recreational and natural areas, including playground equipment, dog runs, fitness paths and bathroom amenities. For inspection purposes at parks maintained and operated by the NYCDPR, Bloomingdale Park is separated into three zones. At the time of the last inspections in December of 2012 (see **Appendix B**), the individual zones were classified as ranging from acceptable to unacceptable due to litter in some areas, with priorities to remove multiple downed trees and limbs throughout the entire area due to Hurricane Sandy.

Assessment of Open Space Adequacy

The analysis of this non-residential study area (one-quarter mile) focuses on passive open spaces that may be used by workers and students in the area. The passive open space ratio for this non-residential study area is approximately 98.74 acres of passive open space per 1,000 workers, based on this non-residential study area containing approximately 643 workers and approximately 63.5 acres of passive open space. For non-residential populations, the *CEQR Technical Manual* states that 0.15 acres of passive open space per 1,000 workers is typically considered adequate. As such, under existing conditions, the passive open space ratio for this non-residential study area greatly exceeds the City's guideline of 0.15 acres per 1,000 workers.

In addition to the quantitative analysis, the *CEQR Technical Manual* also recommends consideration of qualitative factors in an analysis of potential open space impacts. Qualitative factors include the availability of nearby destination resources, the beneficial effects of new open space resources provided by a project, the comparison of projected open space ratios with established City guidelines, and the characteristics of the user population. A majority of open space resources in the study area are considered to be in acceptable condition. There are a variety of other passive recreational resources in the overall regional area that also offer amenities that address the needs of non-residents/workers.

2.4.4.2 Study Area Around the Entire Project Area (2020 Analysis)

The open space study area for the 2020 year includes an area of a one-half mile and one-quarter mile around the boundaries of the entire Project Area, for both the analysis of residents and for non-residential/workers. Areas of both one-quarter mile and one-half mile around the entire Project Area are shown in **Figure 2.4-2**, including areas past the Wet Shore Expressway that are accessible via Englewood Avenue.

Residential Population under Existing Conditions

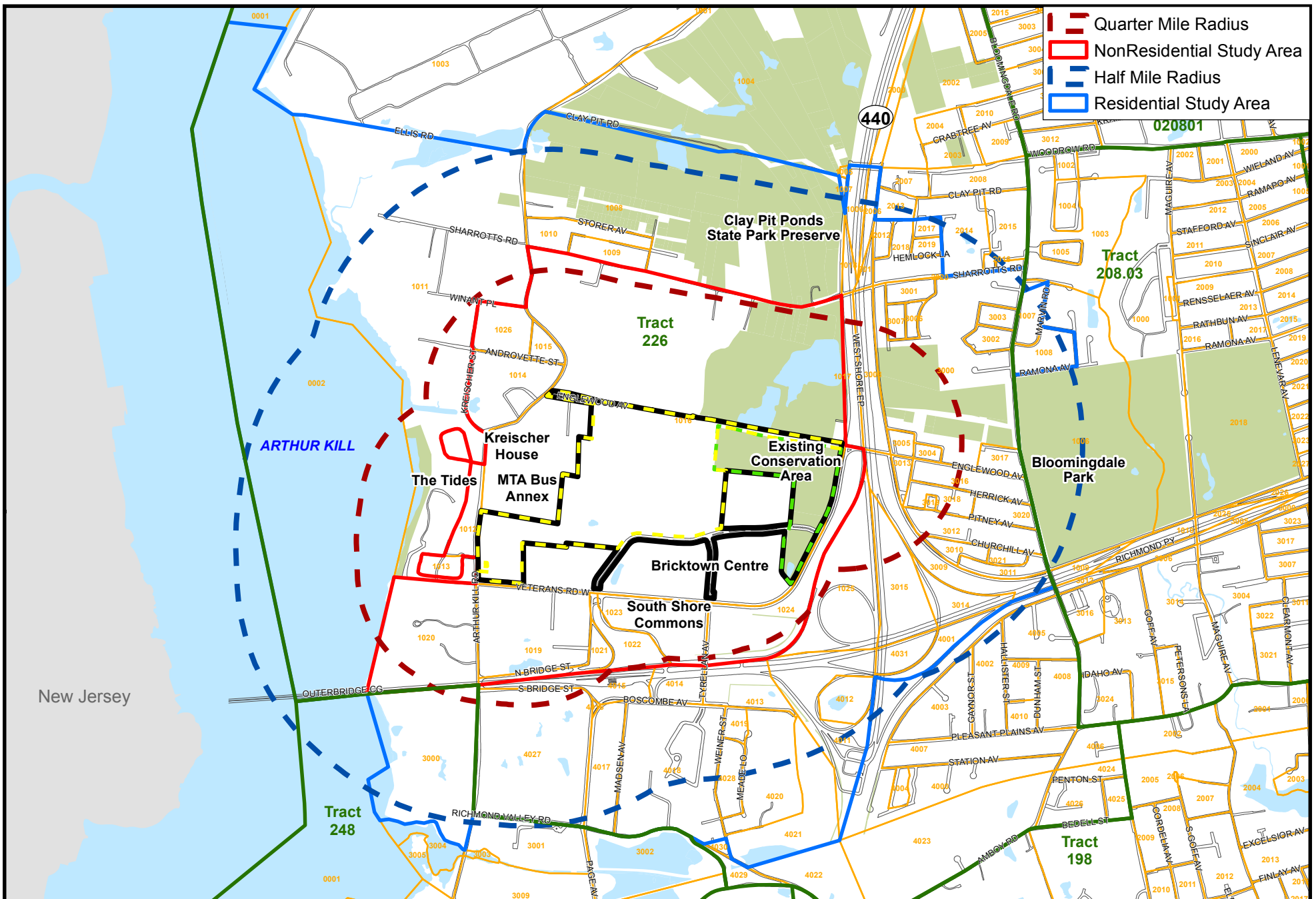
The one-half mile radius for residential users includes 68 census blocks within the one-half mile area surrounding the entire Project Area. The census blocks included in the analysis are as listed in **Table 2.4-2**.

To determine the existing residential population served in this open space study area, census data were compiled for the census blocks included in the one-half mile residential study area. According to the 2010 census data, the half-mile open space study area had an approximate overall population of approximately 4,695 persons, as shown in **Table 2.4-2**. In comparison, the Project Area is located within Staten CD 3, which contained a population of 160,209 persons according to 2010 census data, while the Borough as a whole contained a population of 468,730 persons and the City of New York contained a population of 8,175,133 persons.

Non-Residential Workers

The radius for non-residential users includes 12 census blocks (all within Census Tract 226.00) within this one-quarter mile radius surrounding the entire Project Area. The census blocks included in this non-residential analysis (within Census Tract 226) are designated with an asterisk (*) in **Table 2.4-2** below.

The non-residential worker population for this one-quarter mile study area was estimated using business summary employment data from ESRI, Inc., a commercial data provider. Based on employment data obtained from ESRI, Inc., using ESRI Business Analyst, this non-residential study area has a worker population of approximately 1,322 persons working within 155 businesses. The ESRI Business Summary report is provided in **Appendix B**.



- Quarter Mile Radius
- NonResidential Study Area
- Half Mile Radius
- Residential Study Area



Legend

 Project Area	 Census Tract (2010)
 Development Area	 Census Block (2010)
 Conservation Area	 Open Space & Recreation

Charleston Mixed-Use
Development

Figure 2.4-2
**Open Space Study Area
Analysis II (2020)**

**Table 2.4-2
Residential Open Space Study Area Existing Population**

Census Block	Population
<i>Within Census Tract 226.00</i>	
Block 0002	0
Block 1006	0
Block 1008	58
Block 1009	27
Block 1010	5
Block 1011	200
Block 1012 *	82
Block 1013 *	35
Block 1014 *	85
Block 1015 *	12
Block 1016 *	88
Block 1017	5
Block 1018	0
Block 1019 *	5
Block 1020 *	0
Block 1021 *	0
Block 1022 *	0
Block 1023 *	0
Block 1024 *	0
Block 1025	0
Block 1026 *	35
Block 2006	0
Block 2011	0
Block 2012	73
Block 2017	87
Block 2018	288
Block 2019	78
Block 2020	0
Block 3000	871
Block 3001	83
Block 3002	113
Block 3003	102
Block 3004	68
Block 3005	73
Block 3006	74
Block 3007	128
Block 3008	0
Block 3009	0
Block 3010	67
Block 3011	82
Block 3012	316
Block 3013	30
Block 3014	0
Block 3015	0
Block 3016	277
Block 3017	18
Block 3018	224
Block 3019	47
Block 3020	154
Block 3021	40
Block 4001	0
Block 4011	0
Block 4012	0

Census Block	Population
Block 4013	27
Block 4014	0
Block 4015	0
Block 4016	0
Block 4017	88
Block 4018	146
Block 4019	18
Block 4020	69
Block 4021	0
Block 4027	16
Block 4028	83
Block 4031	0
<i>Within Census Tract 208.03</i>	
Block 1007	154
Block 1008	162
<i>Within Census Tract 248.00</i>	
Block 3000	2
STUDY AREA TOTAL	4,695
STATEN ISLAND COMMUNITY DISTRICT #3	160,209
BOROUGH OF STATEN ISLAND	468,730
NEW YORK CITY	8,175,133

Sources: U.S. Bureau of the Census, 2010 Census of Population and Housing.
<http://2010.census.gov/2010census/popmap/index.php>
 New York City Department of City Planning, Population 2010 Demographic Tables.
http://www.nyc.gov/html/dcp/html/census/demo_tables_2010.shtml

Open Space Resources/Inventory Within these Study Areas

There are four publicly-accessible open space resources within both the non-residential one-quarter mile study area and the residential one-half mile study area around the development sites that would be constructed as part of the second phase of the Proposed Project, as shown in previous **Figure 2.4-2** and discussed in **Table 2.4-3**.

The open space resources within the one-quarter mile study area include resources previously discussed: the 20-acre Conservation Area; CPPSPP; The Tides and Charleston Esplanade; and Bloomingdale Park. The entire 20-acre conservation area is included within this one-quarter mile year 2020 analysis, as is the approximately 0.9 acre publically-accessible waterfront esplanade at the Tides at Charleston. Approximately 42.5 acres of CPPSPP, consisting of the portion situated north of Englewood Avenue up to and south of Sharrotts Road) is also included. Additional, to the east, approximately 14 acres of Bloomingdale Park fall within the study area (within the one-quarter mile radius. Of the total approximately 77.5 acres of open space approximated in this one-quarter mile study area, all of this open space is considered passive open space.

The same four open space resources within the one-quarter mile study area are also included in the one-half mile study area; however, additional portions of CPPSPP and Bloomingdale Park are also included in the acreage amounts. An additional 92.5 acres of open space within CPPSPP is included in this one-half mile study area, up to CPPSPP, for a total of 135 acres within CPPSPP that is included in this one-half mile assessment. An additional approximately 33.8 acres of open space within Bloomingdale Park is also included in this one-half mile study area (within the one-half mile radius), consisting of the entire portion

west of Bloomingdale Road and some of the park east of this roadway, for a total of approximately 47.7 acres within Bloomingdale Park that is included in this one-half mile assessment. Of the total approximately 203.7 acres of open space in this one-half mile study area, all of this open space is also considered passive open space. The nearest area of active open space is located within Bloomingdale Park east of Maguire Avenue and west of Lenevar Avenue, approximately three-quarters of a mile from the Project Area.

**Table 2.4-3
Existing Open Space Resources in the One-Quarter Mile Non-Residential and One-Half Mile Residential Study Areas Around the Entire Project Area (2020 Analysis)**

Name / Location	Amenities	Condition	Acreage		
			Active	Passive	TOTAL
Non-Residential (One-Quarter Mile) Study Area					
Conservation Area – Area south of Englewood Avenue, West of the West Shore Exp.	Natural areas	Acceptable*	0.0	20.0	20.0
CPPSPP – Area south of Sharrotts Road, north of Englewood Ave., West of the West Shore Exp.	Natural areas, wetlands, ponds, trails for walking and horseback riding, picnic areas, Interpretive Center building	Acceptable*	0.0	42.5	42.5
The Tides at Charleston Esplanade – Arthur Kill Waterfront, west of Arthur Kill Road	2,500 linear foot privately owned/maintained but public accessible waterfront esplanade with benches and plantings	Acceptable*	0.0	0.992	0.992
Bloomingdale Park – Area east of the West Shore Exp. within the ¼ mile radius	Natural areas, playground equipment, dog runs, fitness paths, bathrooms	Zone 1: Unacceptable Zone 2: Unacceptable Zone 3: Acceptable	0.0	13.97	13.97
Total Existing Open Space, Non-Residential Study Area			0.0	77.462	77.462
Residential (One-Half Mile) Study Area					
Conservation Area – Area south of Englewood Avenue, West of the West Shore Exp.	Natural areas	Acceptable*	0.0	20.0	20.0
CPPSPP – Area south of Clay Pit Road, north of Englewood Ave., West of the West Shore Exp.	Natural areas, wetlands, ponds, trails for walking and horseback riding, picnic areas, Interpretive Center building	Acceptable*	0.0	135.0	135.0
The Tides at Charleston Esplanade – Arthur Kill Waterfront, west of Arthur Kill Road	2,500 linear foot privately owned/maintained but public accessible waterfront esplanade with benches and plantings	Acceptable*	0.0	0.992	0.992
Bloomingdale Park – Area east of the West Shore Exp. within the ½ mile radius	Natural areas, playground equipment, dog runs, fitness paths, bathrooms	Zone 1: Unacceptable Zone 2: Unacceptable Zone 3: Acceptable	0.0	47.73	47.73
Total Existing Open Space, Residential Study Area			0.0	203.722	203.722

Sources: New York City Department of Parks and Recreation, New York City Department of City Planning District Profiles, and AECOM field surveys.

Notes: Acceptable and Unacceptable Conditions are based on most recent NYCDPR inspections (see **Appendix B**), supplemented by AECOM field surveys when NYCDPR conditions were not available (A "*" denotes parks that were not inspected by NYCDPR, and evaluated during AECOM field surveys).

Assessment of Open Space Adequacy under Existing Conditions (around Entire Project Area)

Based on the 2010 census study area population of 4,695 persons and the existing approximately 203.7 acres of open space in this half-mile study area, the open space ratio in this residential study area is 43.39 acres of open space per 1,000 residents which is substantially higher than the Citywide median community district open space ratio of 1.5 acres per 1,000 residents and the City's goal of 2.5 acres per 1,000 residents. The active open space ratio is zero acres per 1,000 residents (as this area does not

contain any active open space resources) and the passive open space ratio is 43.39 acres per 1,000 residents.

The analysis of this non-residential study area (one-quarter mile) focuses on passive open spaces that may be used by workers and students in the area. The passive open space ratio for this non-residential study area is 58.59 acres of passive open space per 1,000 workers, based on this non-residential study area containing approximately 1,322 workers and approximately 77.5 acres of passive open space. For non-residential populations, the *CEQR Technical Manual* states that 0.15 acres of passive open space per 1,000 workers is typically considered adequate. As such, under existing conditions, the passive open space ratio for this non-residential study area of 58.59 acres of open space per 1,000 workers far exceeds the City's guideline of 0.15 acres of open space per 1,000 workers.

In addition to the quantitative analysis, as previously noted, the *CEQR Technical Manual* also recommends a consideration of qualitative factors in an analysis of potential open space impacts, such as the availability of nearby destination resources. A majority of open space resources in the surrounding area are considered to be in acceptable condition, and resources were observed to be lightly or moderately used. There are also a variety of active and passive recreational resources in the surrounding regional area that offer amenities that address the needs of the various age groups, including the continuation of Bloomingdale Park as well as Long Pond Park, North Mount Loretto State Park, Butler Manner Woods, and Conference Houses Park to the south.

2.4.5 FUTURE NO-ACTION CONDITION

Under the Future No-Action Condition, if the Proposed Project is not approved, the Development Area is expected to remain in its existing vacant condition, including the area of Englewood Avenue. No other projected or potential development is planned or considered likely to occur in the Development Area of the proposed Charleston Mixed-Use Development by the 2015 or 2020 analysis years.

Several other land use changes and developments are anticipated to occur within the study area by the years 2015 and 2020, which have the potential to increase the residential and non-residential worker populations (see **Chapter 2.1**). Staff and records from the NYC Economic Development Corporation, Department of City Planning, the Department of Housing Preservation and Development, and the local community board were consulted to identify new construction projects that are proposed in the study area. In total, it is anticipated that there will be approximately 70 new residential units (by the 2020 analysis year) and approximately 206,724 square feet of added commercial space (by both the 2015 and 2020 analysis years). Some of these projects would be completed by the year 2015, while others would be completed by the year 2020. In addition, the surrounding area is expected to experience an increase in population due to background growth.

2.4.5.1 Future No-Action Condition Year 2015 Analysis

Non-Residential Workers and Analysis under the Future No-Action Condition (2015 Analysis Year)

By the year 2015, approximately 85,704 square feet of commercial space is expected to be added to the surrounding area as part of the identified separately planned No-Action projects. Assuming an average of one employee per 400 square feet of commercial retail floor area (2.5 employees per 1,000 square feet of floor area), this new added commercial space has the potential to conservatively add approximately 215 new workers to the area under this Future No-Action Condition. Based on obtained employment data, this non-residential study area has a current worker population of approximately 643 persons. The addition of 215 new workers would increase this number to approximately 858 workers in the one-quarter mile area under the Future No-Action Condition by the year 2015.

By the year 2015, under the Future No-Action Condition, no new parks, playgrounds or other open space resources are planned for the surrounding study area. While improvements may occur within existing

parks themselves, such park improvements would not expand the amount of publicly-accessible open space in the study area, but instead improve the quality of these facilities and access to the area's open space resources. Thus, the approximately 63.5 acres under this scenario for Existing Condition would remain constant under the Future No-Action Condition by the year 2015.

As previously noted, the analysis of this non-residential study area (one-quarter mile) focuses on passive open spaces that may be used by workers and students in the area. The passive open space ratio for this non-residential study area is projected to decrease from 98.74 acres of passive open space per 1,000 workers under Existing Conditions to 74.00 acres per 1,000 workers of passive open space under this Future No-Action Condition, an approximate 25 percent decrease, due to the estimated increase of 215 new workers to this study area currently with 643 workers (an no new open space to the area under the No-Action Condition). For non-residential populations, the *CEQR Technical Manual* states that 0.15 acres of passive open space per 1,000 workers is typically considered adequate. As such, under this Future No-Action Condition, the passive open space ratio for this non-residential study area of approximately 74 acres per 1,000 workers will continue to greatly exceed the City's guideline of 0.15 acres per 1,000 workers.

2.4.5.2 Future No-Action Condition Year 2020 Analysis

Residential Population and Analysis under the Future No-Action Condition (2020 Analysis Year)

As stated above, the 2010 census population of this half-mile open space study area was 4,695 persons. In order to account for background developments that are expected in the surrounding area, an annual background growth rate of 0.5 percent per year³ was applied to the existing population of the study area for the ten years to 2020, bringing the population of this open space study area to approximately 4,930 residents.

In addition, by the year 2020, it is also expected that 70 new residential units would be built as part of the Gateway Cathedral residential development project at 200 Boscombe Avenue. Assuming an average of 2.78 persons per household, per Staten Island CD 3 from the 2010 Census, the additional 70 dwelling units are estimated to yield an additional 195 new residents to the area, for a combined estimated population of 5,125 residents under the Future No-Action Condition by the year 2020, as shown in **Table 2.4-4**.

**Table 2.4-4
Future No-Action Residential Population Increases by the 2020 Year**

Analysis Condition	Population
Existing 2010 Population	4,695
Population per 0.5% background growth rate per year for 10 years	235
Year 2020 No-Action Population per Growth Rate	4,930
Residents in Gateway Cathedral (70 Units)	195
Future No-Action Population by 2020	5,125

By the year 2020, under the Future No-Action Condition, no new parks, playgrounds or other open space resources are planned for the surrounding study area. While improvements may occur within existing parks themselves, such park improvements would not expand the amount of publicly-accessible open

³ Open Space population growth rate taken from Sugar Hill Rezoning FEIS. In addition, population on Staten Island (as per U.S. Census data) grew from 2000 to 2010 at an annual average rate of 0.5 percent.

space in the study area, but instead improve the quality of these facilities and access to the area's open space resources. Thus, the 203.722 acres under Existing Conditions would remain constant under the Future No-Action Condition by the year 2020 for the one-half mile analysis.

Based on the estimated study area population of 5,125 persons by the year 2020 and the existing approximately 203.7 acres of open space in this half-mile study area that is expected to remain, the open space ratio in this residential study area is projected to decrease from 43.39 acres per 1,000 residents under Existing Conditions to approximately 39.75 acres per 1,000 residents under this Future No-Action Condition, an approximately 8.4 percent decrease due to the expected background increase in residents to the area. However, the open space ratio under this Future No-Action Condition would continue to far exceed the Citywide median community district open space ratio of 1.5 acres per 1,000 residents and the City's planning goal of 2.5 acres per 1,000 residents.

Non-Residential Workers and Analysis under the Future No-Action Condition (2020 Analysis Year)

By the year 2020, the remaining additional 121,020 square feet of commercial space is expected to be added to the surrounding area as part of the identified separately planned No-Action projects, reaching the estimated total of 206,724 square feet of added commercial space (including the approximately 85,704 square feet of commercial space expected to be added to the surrounding area as part of the identified separately planned No-Action projects by the year 2015, which would add 215 new workers to the area). Assuming an average of one employee per 400 square feet of commercial retail floor area (2.5 employees per 1,000 square feet of floor area), this newly added 121,020 square feet of commercial space has the potential to conservatively add approximately 303 additional workers to the area. Adding this number to the 215 new workers by the 2015 year under the Future No-Action Condition, a total of 518 new workers would be added to the study area by the year 2020.

Based on obtained employment data, this non-residential study area has a current worker population of approximately 1,322 persons. The addition of 518 new workers would increase this number to approximately 1,840 workers in the one-quarter mile area under the Future No-Action Condition by the year 2020.

As stated above, under the Future No-Action Condition, no new parks or other open space resources are planned for the surrounding study area by the year 2020. Thus, the approximately 77.5 acres under Existing Conditions would remain constant under the Future No-Action Condition by the year 2020 for the one-quarter mile analysis.

The passive open space ratio for this non-residential study area is projected to decrease from 58.59 acres of open space (passive) per 1,000 workers under Existing Conditions to approximately 42.09 acres of open space per 1,000 workers of passive open space under this Future No-Action Condition by the year 2020, an approximate 28.2 percent decrease, due to the estimated increase of 518 new workers to the area with currently 1,322 workers (new No-Action total of 1,840 workers). As previously noted, the *CEQR Technical Manual* states that 0.15 acres of passive open space per 1,000 workers is typically considered adequate. As such, under this Future No-Action Condition, the passive open space ratio for this non-residential study area of approximately 42.09 acres of open space per 1,000 workers will continue to greatly exceed the City's guideline of 0.15 acres per 1,000 workers.

2.4.6 FUTURE WITH-ACTION CONDITION

Developments of the Proposed Project are expected to be completed over several years. The first phase includes the construction of Retail Site "A" and Fairview Park, which are expected to be completed by the year 2015. Construction of the remainder of the Development Area are expected to be completed by the year 2020, including the developments of Retail Site "B", the school, and the senior housing, as well as the Englewood Avenue and other road constructions.

2.4.6.1 Future With-Action Condition Year 2015 Analysis

The Proposed Project would not generate any residential units by the year 2015. As such, the assessment focus is on non-residential workers by the year 2015.

As part of the Proposed Project, by the year 2015, the NYCDPR would develop a new 23-acre park, which would not generate any additional park employment, as the NYCDPR expects to maintain the proposed park areas with existing staff. However, adjacent to the park, the 11-acre site of Retail Site "A" is expected to be developed by a private developer with up to approximately 195,000 square feet of commercial space for medium- and large-format retail stores, along with approximately 633 parking spaces. Assuming an average of one employee per 400 square feet of general retail floor area (2.5 employees per 1,000 square feet of floor area)⁴, it is estimated that the development of Retail Site "A" would introduce approximately 488 employees.

This site will also include an approximately 15,000-square-foot branch of the New York Public Library, which will share parking with the retail uses. For the public library, the same rate used for general retail of an average of one employee per 400 square feet of floor area (2.5 employees per 1,000 square feet of floor area) was applied. As such, the 15,000 square foot library is expected to employ in approximately 38 persons.

Therefore, by the year 2015, the Proposed Project has the potential to generate approximately 526 new employees to the Project Area. As previously stated, by the year 2015 under the Future No-Action Condition, this one-quarter mile study area is expected to contain 858 workers. The addition of 526 new workers would increase this number to approximately 1,384 workers in the one-quarter mile area under the Future With-Action Condition by the year 2015.

Under the Proposed Project, the new 23-acre Fairview Park would be mapped, constructed, and open to the public by the year 2015. The addition of the new 23-acre park would increase parkland in this study area from approximately 63.5 acres (all passive open space) to approximately 86.5 acres. Of the new 23 acres within Fairview Park, approximately 7.5 acres would be active open space and 15.5 acre would be passive open space. As such, the passive open space in the area would increase from approximately 63.5 acres to approximately 79 acres of passive open space, as shown in **Table 2.4-5**.

**Table 2.4-5
Future With-Action Open Space Resources in the One-Quarter Mile Study Area
Around Retail Site "A" and Fairview Park (2015 Analysis)**

Name / Location	Acreage		
	Active	Passive	TOTAL
Conservation Area – Area south of Englewood Avenue, West of the West Shore Exp.	0.0	20.0	20.0
CPPSPP – Area south of Sharrotts Road, north of Englewood Ave., West of the West Shore Exp.	0.0	42.5	42.5
The Tides at Charleston Esplanade – Arthur Kill Waterfront, west of Arthur Kill Road	0.0	0.992	0.992
Total Existing Open Space, Non-Residential Study Area	0.0	63.492	63.492
Fairview Park	7.5	15.5	23.0
Total Future With-Action Open Space, Non-Residential Study Area	7.5	78.992	86.492

⁴ Based on rates used in the Environmental Impact Statements for the Willets Point and 161st Street rezoning projects.

As previously noted, the analysis of this non-residential study area (one-quarter mile) focuses on passive open spaces that may be used by workers and students in the area. The passive open space ratio for this non-residential study area is projected to decrease from approximately 74 acres of passive open space per 1,000 workers under the Future No-Action Condition to approximately 57.1 acres per 1,000 workers of passive open space under this Future With-Action Condition, an approximately 22.9 percent decrease. Although the number of workers in the area would increase by approximately 526 new workers on Retail Site "A" and within the public library, the new 23-acre park (with 15.5 acres of passive open space) would add a substantial amount of new open space to the study area, somewhat offsetting the decrease. For non-residential populations, the *CEQR Technical Manual* states that 0.15 acres of passive open space per 1,000 workers is typically considered adequate. As such, under this Future With-Action Condition by the year 2015, the passive open space ratio for this non-residential study area of approximately 57.1 acres of open space per 1,000 workers will continue to greatly exceed the City's guideline of 0.15 acres per 1,000 workers, and further assessment is not warranted.

2.4.6.2 Future With-Action Condition Year 2020 Analysis

Residential Population and Analysis under the Future With-Action Condition (2020 Analysis Year)

By the year 2020, the remainder of the Development Area would be redeveloped with additional retail space, a public school and senior housing, along with the mapping and construction of Englewood Avenue. The NYCEDC will offer an approximately 9.1-acre site for senior housing in the future for up to 162 units, consisting of 80 affordable multi-family rental units and 82 age-restricted for-sale detached units. It is expected that each senior housing unit would have an estimated occupancy of one to two adults. For conservative analysis purposes, two adults per senior housing unit were used. This would add an estimated 324 new residents to the open space study area by the year 2020 of the Proposed Project.

As previously stated, the 2010 census population of this half-mile open space study area was 4,695 persons. In order to account for background developments that are expected in the surrounding area, an annual background growth rate of 0.5 percent per year⁵ was applied to the existing population of the study area for the ten years to 2020, bringing the population of this open space study area to approximately 4,930 residents. In addition, by the year 2020, it is also expected that 70 new residential units would be built as part of the Gateway Cathedral residential development project at 200 Boscombe Avenue. Assuming an average of 2.78 persons per household, per Staten Island CD 3 from the 2010 Census, the additional 70 dwelling units are estimated to yield an additional 195 new residents to the area, for a combined estimated population of 5,125 residents under the Future No-Action Condition by the year 2020 (as shown in previous **Table 2.4-4**).

The addition of approximately 324 new residents to the area from the development of the senior housing site would increase the population of this one-half mile study area from 5,125 residents under the Future No-Action Condition to approximately 5,449 residents under the Future With-Action Condition by the year 2020, as shown in **Table 2.4-6**.

⁵ Open Space population growth rate taken from Sugar Hill Rezoning FEIS. In addition, population on Staten Island (as per U.S. Census data) grew from 2000 to 2010 at an annual average rate of 0.5 percent.

**Table 2.4-6
Future With-Action Residential Population Increases by the 2020 Year**

Analysis Condition	Population
Existing 2010 Population	4,695
Population per 0.5% background growth rate per year for 10 years	235
Year 2020 No-Action Population per Growth Rate	4,930
Residents in Gateway Cathedral (70 Units)	195
Future No-Action Population by 2020	5,125
Residents in Senior Housing (162 Units)	324
Future With-Action Population by 2020	5,449

As previously stated, under the Proposed Project, the new 23-acre Fairview Park would be mapped, constructed, and open to the public by the year 2015, and would continue to be available by the year 2020. Within the one-half mile study area, the addition of the new 23-acre park would increase parkland from approximately 203.7 acres (currently all passive open space) to approximately 226.7 acres of total open space, including both passive and active open space, as shown in **Table 2.4-7**.

**Table 2.4-7
Future With-Action Open Space Resources in the One-Quarter Non-Residential and One-Half Mile Residential Study Area (2020 Analysis)**

Name / Location	Acreage		
	Active	Passive	TOTAL
<u>Non-Residential (One-Quarter Mile) Study Area</u>			
Conservation Area – Area south of Englewood Avenue, West of the West Shore Exp.	0.0	20.0	20.0
CPPSPP – Area south of Sharrots Road, north of Englewood Ave., West of the West Shore Exp.	0.0	42.5	42.5
The Tides at Charleston Esplanade – Arthur Kill Waterfront, west of Arthur Kill Road	0.0	0.992	0.992
Bloomingdale Park – Area east of the West Shore Exp. within the ¼ mile radius	0.0	13.97	13.97
Total Existing Open Space, Non-Residential Study Area	0.0	77.462	77.462
Fairview Park	7.5	15.5	23.0
Total Future With-Action Open Space, Non-Residential Study Area	7.5	92.962	100.462
<u>Residential (One-Half Mile) Study Area</u>			
Conservation Area – Area south of Englewood Avenue, West of the West Shore Exp.	0.0	20.0	20.0
CPPSPP – Area south of Clay Pit Road, north of Englewood Ave., West of the West Shore Exp.	0.0	135.0	135.0
The Tides at Charleston Esplanade – Arthur Kill Waterfront, west of Arthur Kill Road	0.0	0.992	0.992
Bloomingdale Park – Area east of the West Shore Exp. within the ½ mile radius	0.0	47.73	47.73
Total Existing Open Space, Residential Study Area	0.0	203.722	203.722
Fairview Park	7.5	15.5	23.0
Total Future With-Action Open Space, Residential Study Area	7.5	219.222	226.722

Based on the estimated study area population of 5,449 persons by the year 2020 under this Future With-Action Condition and the new total of approximately 226.7 acres of open space in this half-mile study

area, the open space ratio in this residential study area is projected to increase from approximately 39.8 acres of open space per 1,000 residents under Future No-Action Conditions to approximately 41.6 acres of open space per 1,000 residents under this Future With-Action Condition, an approximately 4.7 percent increase. Although the number of residents in the area would increase by approximately an estimated 324 persons within the proposed senior housing complex, the new 23-acre park would add a substantial amount of new open space to the study area, including both active and passive recreational areas. The open space ratio under this Future With-Action Condition of approximately 41.6 acres of open space per 1,000 residents would continue to be well above the Citywide median community district open space ratio of 1.5 acres of open space per 1,000 residents and the City's planning goal of 2.5 acres of open space per 1,000 residents, and includes the additional active open space being provided in Fairview Park.

Non-Residential Workers and Analysis under the Future With-Action Condition (2020 Analysis)

As part of the Proposed Project, by the year 2020, the remainder of the Development Area would be redeveloped with additional retail space, a public school and senior housing, along with the mapping and construction of Englewood Avenue. Along Arthur Kill Road, Retail Site "B" would also be privately developed in the future with an anticipated 90,000 square feet of neighborhood retail space. Assuming an average of one employee per 400 square feet of general retail floor area (2.5 employees per 1,000 square feet of floor area, it is estimated that the development of Retail Site "B" would introduce approximately 225 employees.

The City will also offer an approximately 9.1-acre site for senior housing in the future for up to 162 units. Assuming an average of 0.04 employees per dwelling unit of residential use, it is expected that the senior housing would generate approximately seven employees, such as superintendents, doormen, handymen, porters, etc. East of the housing, a combined elementary/middle school would be constructed with a 750-seat capacity for kindergarten through 8th grade. An estimated 58 teachers and staff are expected for the combined elementary/middle school.

Therefore, by the year 2020, the Proposed Project has the potential to generate approximately 290 additional employees to the Project Area, which would be added along with the 526 employees expected by the year 2015, for a total of 816 workers as a result of the Proposed Project. As previously stated, by the year 2020 under the Future No-Action Condition, this one-quarter mile study area is expected to contain 1,840 workers. The addition of 816 new workers from the Proposed Project would increase this number to approximately 2,656 workers in the one-quarter mile area under the Future With-Action Condition by the year 2020.

As previously stated, under the Proposed Project, the new 23-acre Fairview Park would be mapped and constructed, and be open to the public by the year 2015 and remain available by the 2020 year. The addition of the new 23-acre park would increase parkland in this one-quarter mile study area from approximately 77.5 acres (all passive open space) to approximately 100.5 total acres. Of the new 23 acres, approximately 7.5 acres would be active open space and 15.5 acre would be passive open space. As such, the passive open space in this one-quarter mile study area would increase from approximately 77.5 acres to approximately 93 acres of passive open space, as shown above in **Table 2.4-7**.

The passive open space ratio for this non-residential study area is projected to decrease from approximately 42.1 acres of passive open space per 1,000 workers under the year 2020 Future No-Action Condition to approximately 35 acres per 1,000 workers of passive open space under this Future With-Action Condition, an approximate 16.8 percent decrease. Although the number of workers in the area would increase by approximately 816 new workers from development of the entire Development Area, the new 23-acre park would add a substantial amount of new open space to the study area, including 15.5 acres of passive open space, somewhat offsetting the ratio decrease. For non-residential populations, the *CEQR Technical Manual* states that 0.15 acres of passive open space per 1,000 workers is typically considered adequate. As such, under this Future With-Action Condition, the passive open space ratio for this non-residential study area of approximately 35 acres of open space per 1,000 workers will continue to still exceed the City's guideline of 0.15 acres of open space per 1,000 workers, and further assessment is not warranted.