A. INTRODUCTION

This chapter examines the potential effects of the Proposed Actions and associated reasonable worst-case development scenario (RWCDS) on community facilities in and around the proposed rezoning area. The *City Environmental Quality Review* (CEQR) *Technical Manual* defines community facilities as public or publicly funded facilities, including schools, health care, child care, libraries, and fire and police protection services. CEQR methodology focuses on direct impacts on community facilities and services and on increased demand for community facilities and services generated by increases in population.

As described in **Chapter 1, "Project Description,"** the Proposed Actions would facilitate the incremental development (compared to No-Action conditions) of 1,665 DUs, of which 416 would be affordable; 16,887 gsf of retail space; and 22,638 gsf of community facility space. The analysis of community facilities and services has been conducted in accordance with *CEQR Technical Manual* guidelines and the latest data and guidance from agencies such as the New York City Department of Education (DOE) the Queens Public Library (QPL), the New York City School Construction Authority (SCA), and the New York City Department of City Planning (DCP).

B. PRINCIPAL CONCLUSIONS

Pursuant to *CEQR Technical Manual* guidelines, detailed analyses of potential indirect impacts on public elementary, intermediate, and high schools, public libraries, and early childhood programs were conducted for the Proposed Actions. Based on the *CEQR Technical Manual* screening methodology, detailed analyses of outpatient health care facilities and police and fire protection services are not warranted, although they are discussed qualitatively. As described in the following analysis and summarized below, the Proposed Actions would result in a significant adverse impact on early childhood programs. No significant adverse school impacts or library impacts would result.

Public Schools

The rezoning area falls within the boundaries of New York City Community School District (CSD) 30, Sub-District 3. The RWCDS associated with the Proposed Actions would introduce 414 total students, with approximately 181 elementary school students, 66 intermediate school students, and 167 high school students.

Elementary Schools

As detailed below, CSD 30, Sub-District 3 elementary schools would continue to operate over capacity in the future with the Proposed Actions (as in the future without the Proposed Actions). CSD 30, Sub-District 3 elementary schools would increase from a No-Action utilization rate of 136.4 percent to 141.06 percent in the With-Action condition, with a deficit of 1,596 available elementary school seats. The Proposed Actions would somewhat exacerbate the projected 2031 overcrowded conditions in elementary schools

in Sub-District 3 of CSD 30. According to the 2021 *CEQR Technical Manual*, a significant adverse elementary school impact may result if a proposed action would result in both of the following: (1) A utilization rate of elementary schools that is equal to or greater than 100% in the With-Action Condition; and (2) 100 or more new students generated by the proposed development past the 100% utilization rate.[1] Under the RWCDS, the Proposed Actions would introduce approximately 181 elementary school students. As such, the Proposed Actions would result in significant adverse impacts on elementary schools, per the criteria of the 2021 *CEQR Technical Manual*.

Intermediate Schools

In the future with the Proposed Actions, CSD 30, Sub-District 3 intermediate schools would continue to operate over capacity, as under No-Action conditions. CSD 30, Sub-District 3 intermediate schools would increase from a No-Action utilization rate of 74.30 percent to 76.39 percent in the With-Action condition, with 746 available intermediate school seats. According to the 2021 *CEQR Technical Manual*, a significant adverse impact may occur if a proposed action would result in both of the following conditions: (1) A utilization rate of intermediate schools that is equal to or greater than 100% in the With-Action Condition; and (2) 100 or more new students generated by the proposed development past the 100% utilization rate. As the Proposed Actions would generate 66 intermediate school students, no significant adverse impacts on elementary schools would result, per the criteria of the 2021 *CEQR Technical Manual*.

High Schools

According to the 2021 *CEQR Technical Manual*, a significant adverse impact to high schools may occur if a proposed action would result in both of the following conditions: (1) a utilization rate of the schools in the sub-district study area that is equal to or greater than 100 percent in the future With-Action condition; and (2) an increase of five percentage points or more in the collective utilization rate between the No-Action and With-Action conditions. The additional high school students introduced as a result of the Proposed Actions would raise the utilization for high schools in Queens by 0.20 percent from approximately 90.99 percent to 91.2 percent. Accordingly, the Proposed Actions would not have a significant adverse impact on high schools.

[1] The New York City Office of Environmental Coordination (OEC) recently released the 2021 *CEQR Technical Manual* (January 31, 2021) which included revisions to the criteria for determining significant adverse impacts to public elementary and intermediate schools. While the lead agency, the New York City Department of City Planning (DCP), has instructed that the DEIS be prepared in accordance with the 2020 *CEQR Technical Manual*, a sensitivity analysis for public schools was prepared to determine if revisions included in the updated 2021 *CEQR Technical Manual* would result in significant adverse impacts that would not have occurred under the 2020 *CEQR Technical Manual*. According to the 2020 *CEQR Technical Manual*, a significant adverse impact to public elementary or intermediate schools may occur if a proposed action would result in both of the following conditions: (1) A utilization rate of elementary or intermediate schools that is equal to or greater than 100% in the With-Action Condition; and (2) an increase of five percentage points or more in the collective utilization rate between the No-Action and With-Action conditions. Based on the impact criteria included in the 2020 *CEQR Technical Manual*, the Proposed Actions would not have resulted in significant adverse impacts to public elementary or intermediate schools. According to the recently released 2021 *CEQR Technical Manual*, a significant adverse elementary or intermediate school impact may occur if a proposed action would result in both of the following conditions: (1) A utilization rate of elementary or intermediate schools that is equal to or greater than 100% in the With-Action Condition; and (2) 100 or more new students generated by the proposed development past the 100% utilization rate. Based on the updated impact criteria for public elementary and intermediate schools, the sensitivity analysis indicated that the Proposed Actions would result in a significant adverse impact to public elementary schools. Therefore, as instructed by DCP, the public schools analysis presented in the DEIS has been prepared in accordance with the 2021 *CEQR Technical Manual*.

Libraries

The Project Area is within the catchment area of the Astoria Library. Assuming 2.33 persons per household based on 2014-2018 ACS data, the Proposed Actions would result in an increase of 3,880 residents to the area. This would increase the study area population, and therefore the number of residents per branch, by 4.2 percent.

Although the Astoria Library study area population would increase by approximately 4.2 percent, the increase would not be expected to impair the delivery of library services. Existing and future residents of the Astoria Library study area would have access to the entire Queens Public Library system through the interlibrary loan system and could have volumes delivered directly to their nearest library branch. There are also three other Queens Library branches located approximately one mile from the Project Area. Therefore, as noted above, there are more library resources available to study area residents than are reflected in this quantitative analysis. Residents would also have access to libraries near their places of work. In addition, the recent renovations along with the trend toward increased electronic research and interlibrary loans are expected to free up stack space, providing for increased capacity and programs to serve the future population. As such, the Proposed Actions would not result in a significant adverse impact to public libraries.

Early Childhood Programs

The Proposed Actions would result in a significant adverse impact on early childhood programs. The RWCDS for the Proposed Actions is expected to introduce approximately 333 low- to moderate-income units eligible for publicly funded early childhood programs by 2031. Based on the most recent child care multipliers in the *CEQR Technical Manual*, this development would generate approximately 46 children under the age of six who could be eligible for publicly funded child care programs. With the addition of these children, there would be a deficit of 93 slots in the study area by 2031 (193.9 percent utilization), and the Proposed Actions would result in an increase in the utilization rate of approximately 46.5 percentage points over the No-Action condition.

According to the *CEQR Technical Manual*, a significant adverse early childhood program impact may result, warranting consideration of mitigation, if a proposed action would increase the study area's utilization rate by at least five percentage points and the resulting utilization rate would be 100 percent or more. As the Proposed Actions would result in a 46.5 percentage point increase in the study area child care facility utilization rate and early childcare programs would operate over capacity in the future With-Action condition the Proposed Actions would result in a significant adverse impact to publicly funded early childhood programs.

Police, Fire, and Health Care Services

The *CEQR Technical Manual* recommends a detailed analysis of indirect impacts on police, fire, and health care services in cases where a proposed action would create a sizeable new neighborhood where none existed before. The rezoning area is a developed area with an existing and well-established community that is served by existing police, fire, and health care services. Therefore, the Proposed Actions would not create a neighborhood where none existed before, and a detailed analysis of indirect effects on these community facilities is not warranted.

C. PRELIMINARY SCREENING

The purpose of the preliminary screening is to determine when a community facilities assessment is required. In accordance with the *CEQR Technical Manual*, a community facilities assessment is warranted if a project has the potential to result in either direct or indirect effects on community facilities. If a project would physically alter a community facility, whether by displacement of the facility or other physical change, this "direct" effect triggers the need to assess the potential effect that the physical change may have on the service delivery. New population added to an area as a result of an action would use existing services, which may result in potential "indirect" effects on service delivery. Depending on the size, income characteristics, and age distribution of the new population, there may be effects on public schools, libraries, or early childhood programs centers.

Direct Effects

There are no community facilities located within the Project Area. Therefore, the Proposed Actions would neither permanently nor temporarily alter a community facility, and there would be no displacement or physical alteration to a community facility. In accordance with the *CEQR Technical Manual*, the Proposed Actions would not result in any direct effects to community facilities. Therefore, an analysis of direct effects is not warranted.

Indirect Effects

The *CEQR Technical Manual* includes thresholds that provide guidance in making an initial determination of whether a detailed analysis is necessary to determine potential impacts. **Table 4-1** lists the *CEQR Technical Manual* thresholds for each community facility analysis area. According to the *CEQR Technical Manual*, if a proposed action exceeds the threshold for a specific facility, a more detailed analysis is warranted. A preliminary screening analysis was conducted to determine if the Proposed Actions would exceed established *CEQR Technical Manual* thresholds warranting further analysis. Based on this screening, the Proposed Actions warrant a detailed analysis for public elementary, intermediate, and high schools; publicly funded child care centers; and public libraries. Detailed analysis is not required for police and fire protection or health care facilities.

TABLE 4-1
Preliminary Screening Analysis Criteria

Community Facility	Threshold for Detailed Analysis
Public Schools	50 or more elementary/intermediate school students or 150 or more high school students
Early childhood programs (Publicly Funded)	More than 20 eligible children under age six based on the number of low- to moderate-income units
Libraries	More than 5 percent increase in ratio of residential units to libraries in the borough
Police Protection	Introduction of a sizable new neighborhood
Fire Protection	Introduction of a sizable new neighborhood
Health Care Facilities (Outpatient)	Introduction of a sizable new neighborhood
Source(s): *CEQR Technical Manual, Chapter 6, "Community Facilities, and Services."*	

Public Schools

The *CEQR Technical Manual* recommends conducting a detailed analysis of public schools if a proposed action would generate 50 or more elementary/intermediate school students and/or 150 or more high school students. As described in **Chapter 1, "Project Description,"** in the Reasonable Worst Case Development Scenario (RWCDS), the Proposed Actions would result in an increase of 1,665 dwelling units. Based on the *CEQR Technical Manual* student generation rates for CSD 30 (0.11 elementary school students per unit; 0.04 intermediate school students per unit; and 0.1 high school students per unit), the Proposed Actions would generate approximately 415 additional students (approximately 182 elementary school students, 66 intermediate school students, and 167 high school students). Because these increments exceed the thresholds of 50 additional elementary and intermediate school students and 150 additional high school students, a detailed analysis of the Proposed Actions' effects on elementary, intermediate, and high schools was conducted.

Early Childhood Programs

According to the *CEQR Technical Manual*, if a proposed action would add 20 or more children under age six eligible for child care, a detailed analysis of its potential effects on publicly funded early childhood programs is warranted. This threshold is based on the number of low-income and low- to moderate-income units generated by a proposed action (139 dwelling units in Queens).[2] The Proposed Actions are expected to result in a net increase of approximately 1,665 dwelling units, of which 416 are expected to be affordable units. In accordance with the City's MIH policy, under the Proposed Actions, the Applicant will choose either MIH Option 1 or 2, which would require 25 or 30 percent of the residential floor area be designated as affordable housing units for residents with incomes averaging between 60 and 80 percent of AMI and none of the units exceeding 130 percent of AMI. As discussed in **Chapter 1, "Project Description"**, the Applicant intends on selecting MIH Option 1, which would designate 25 percent of the residential floor area of the RWCDS as affordable housing units (416 DUs). However, as Options 1 and 2 require that at least 25 or 30 percent of the residential floor area be reserved for residents with incomes averaging 60 to 80 percent of AMI, some of these MIH units would be affordable to households earning more than 60 to 80 percent of AMI. Therefore, as requested by DCP, for conservative CEQR analysis purposes, 20 percent of the overall residential floor area (approximately 333 DUs) of the RWCDS is assumed to be set aside for "affordable" residential units, which refers to the amount residential units that would accommodate households earning 60 to 80 percent (or below) of AMI. Therefore, the Proposed Actions would yield more than 20 children under the age of six eligible for publicly funded child care, which exceeds the CEQR threshold and requires a detailed analysis of publicly funded early childhood programs.

Libraries

Potential impacts on libraries can result from an increased user population. According to the *CEQR Technical Manual*, a proposed action that generates a 5-percent increase in the average number of residential units served per branch (equivalent to a 663-unit increase in Queens)[3] may cause significant adverse impacts on library services and, therefore, requires further analysis. The Proposed Actions are

[2] *CEQR Technical Manual* (2020), Chapter 4, "Community Facilities," Table 6-1.
[3] *CEQR Technical Manual* (2020), Chapter 4, "Community Facilities," Table 6-1.

expected to generate 1,665 incremental dwelling units over the No-Action Condition. Therefore, the Proposed Actions exceed the CEQR threshold, and a detailed analysis of libraries is warranted.

Police, Fire, and Health Care Facilities

The *CEQR Technical Manual* recommends a detailed analysis of indirect impacts on police, fire, and health care services in cases where a proposed action would create a sizeable new neighborhood where none existed before. The Project Area is a developed area with an existing and well-established community that is served by existing police, fire, and health care services. Therefore, the Proposed Actions would not create a sizeable new neighborhood where none existed before and a detailed analysis of indirect effects on these community facilities is not warranted. However, for informational purposes, a description of existing police, fire, and health care facilities serving the Project Area is provided below.

The Project Area is served by the New York City Police Department's (NYPD) 114th Precinct, located at 34-16 Astoria Boulevard South. The 114th Precinct is located in the northwestern portion of Queens, and covers Astoria, Long Island City, Woodside, and Jackson Heights.

The Project Area is served by the Fire Department of New York (FDNY). There are several firehouses located near the Project Area. Engine 262 – Decon 2 is located at 30-89 21st Street, one mile south of the Project Area. Engine 263 Ladder 117 is located at 42-08 Astoria Boulevard South, approximately 1.8 miles from the Project Area. In addition, FDNY Battalion 49 Engine 312 is located approximately 1.8 miles to the west of the Project Area at 22-63 35th Street.

The two types of ambulances in the City are 911 providers and those providing inter-facility transport. Municipal FDNY and hospital-based ambulances are the sole providers of 911 services and Emergency Medical Services (EMS). There is a FDNY EMS station located within the vicinity of the Project Area at 25-3 Hoyt Avenue North, approximately 1.2 miles away. In addition, Mount Sinai Queens, which is an EMS provider, is located at 25-10 30th Avenue, approximately 1 mile to the south west of the Project Area.

According to *CEQR Technical Manual* guidance, health care facilities include public, proprietary, and nonprofit facilities that accept government funds (usually in the form of Medicare and Medicaid reimbursements) and that are available to any member of the community. Examples of these types of facilities include hospitals or public health clinics. There is one hospital located within the vicinity of the Project Area. Mount Sinai Queens is located approximately one mile south west of the Project Area at 25-10 30th Avenue. Mount Sinai Queens is the closest hospital to the Project Area and is likely to be used by the residents and workers of the area.

D. INDIRECT EFFECTS ON PUBLIC SCHOOLS

Methodology

According to the guidelines presented in the *CEQR Technical Manual*, a schools analysis focuses on potential impacts on public schools operated by the New York City Department of Education (DOE). Therefore, private and parochial schools within the study area are not included in the analysis of schools presented in this attachment.

The Proposed Actions would result in approximately 1,665 DUs which would generate approximately 181 elementary school students and 66 intermediate school student, which exceeds the threshold of 50 students for a detailed analysis. The Proposed Actions would also generate an estimated 167 new high school students compared to No-Action conditions, which would trigger the *CEQR Technical Manual* threshold of 150 students for detailed analysis of high schools.

Following the methodologies outlined in the *CEQR Technical Manual*, the study area for the analysis of elementary and intermediate schools is the community school district's sub-district in which the project is located. As indicated in **Figures 4-1** and **4-2**, the Project Area falls within the boundaries of CSD 30, Sub-district 3 (the "Elementary and Intermediate School Study Area"). **Table 4-2** below summarizes the number of new residential units and new elementary, intermediate, and high school students that are expected to result from the Proposed Actions. While the number of high school students generated by residential units is included in **Table 4-2**, high school students may attend any high school in the City if they meet the admissions criteria, and high schools compete to attract students based on specialized programs and overall reputation. Consequently, high school capacity assessments are not performed for small, localized study areas. The *CEQR Technical Manual* states that the borough in which a project is located should serve as the Study Area for high school analyses (High School Study Area).

TABLE 4-2
Projected Development Sites and Associated Number of Projected Incremental Students

Study Area	Total Dwelling Units	Number of Projected Elementary Students	Number of Projected Intermediate Students	Number of Projected High School Students
CSD 30, Sub-district 3	1,665	181	66	167

A schools analysis presents the most recent capacity, enrollment, and utilization rates for elementary, intermediate, and high schools in the respective study areas. Future conditions for the No-Action Condition are forecast based on enrollment projections and proposed development projects.[4] The future utilization rate for school facilities is calculated by adding the estimated enrollment from proposed residential developments in the school's study area to DOE's projected enrollment, and comparing that number with projected school capacity. In addition, any new school projects identified in the DOE 2020-2024 Five-Year Capital Plan (and/or subsequent amendments) are included if construction has begun. According to the *CEQR Technical Manual*, some schools may be included in the analysis if they are in the DOE Five-Year Capital Plan but are not yet under construction if the lead agency, in consultation with the SCA, concurs that it is appropriate.

To determine With-Action school utilization rates, the net elementary and intermediate school population anticipated to be generated by the Proposed Actions was added to CSD 30, Sub-district 3; the net high school students generated by the Proposed Actions was added to the borough-wide future high school population. The effect of the new students on the capacity of schools within the respective study areas was then evaluated. According to the 2021 *CEQR Technical Manual*, a significant adverse impact may occur if a proposed action would result in (i) a utilization rate of the elementary and/or intermediate schools that is equal to or greater than 100 percent in the future With-Action Condition; and (ii) 100 or more new students generated by the proposed development past the 100% utilization rate.

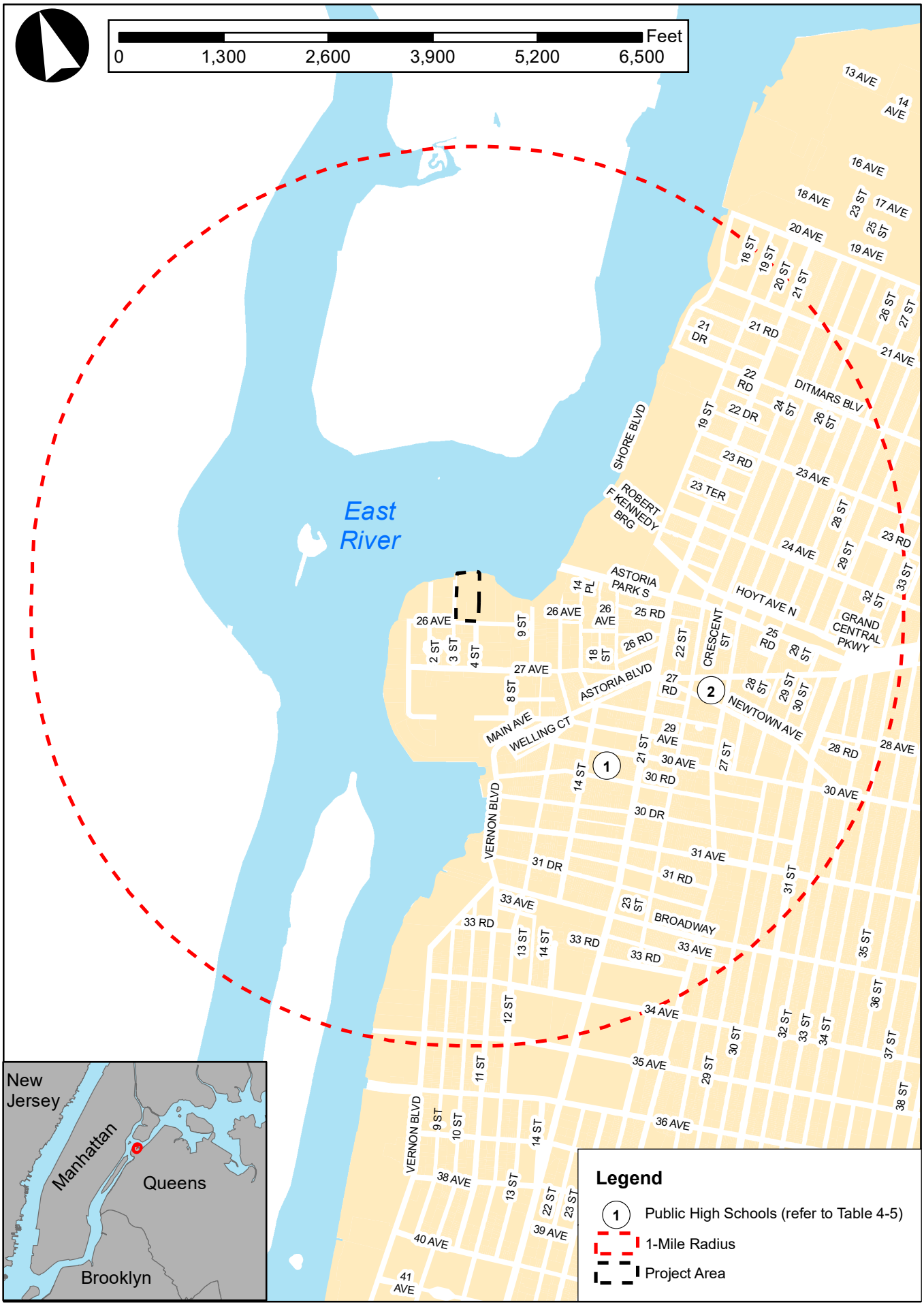
[4] School Construction Authority, "Projected New Housing Starts for the 2020-2024 Capital Plan."

Figure 4-1

Public Elementary & Intermediate Schools within the Study Area



Figure 4-2
Public High Schools within 1-Mile of Project Area



Existing Conditions

Elementary Schools

As described above, elementary schools in New York City are located in geographically defined school districts. As shown in **Figure 4-1**, the Project Area is located within the boundaries of CSD 30, Sub-district 3. Analyzed schools located in CSD 30, Sub-district 3 serving elementary students can generally be defined by one of two categories: elementary or K-8 schools. Public elementary schools (P.S.) serve pre-kindergarten or kindergarten through 5th grades and K-8 schools serve pre-kindergarten or kindergarten through 8th grades. For analysis purposes, the elementary and the P.S. component of K-8 schools have been combined.

As shown in **Figure 4-1** and **Table 4-3**, there are eight public schools located within Sub-district 3 of CSD 30 that serve elementary students, including one elementary schools serving both elementary and intermediate levels.

Table 4-3 provides the existing capacity, enrollment, and utilization figures for elementary schools within Sub-district 3 of CSD 30 during the 2019-2020 academic year. As shown in **Table 4-3**, the 8 schools within CSD 30, Sub-district 3 that serve elementary levels had a target capacity of 3,886 seats and enrollment of 3,133 students, for a utilization of approximately 81 percent with 753 available seats.

Intermediate Schools

Analyzed schools located in CSD 30, Sub-district 3 serving intermediate students can generally be defined by one of three categories: intermediate, secondary, and K-8 schools. Intermediate schools (IS) serve 6th through 8th grades; secondary schools serve 6th through 12th grades; and K-8 schools serve pre-kindergarten or kindergarten through 8th grades. For analysis purposes, the intermediate and IS components of K-8 schools and secondary schools have been combined.

Table 4-3 shows the existing capacity, enrollment, and utilization figures for intermediate schools within CSD 30, Sub-district 3. As shown in **Table 4-3**, in the 2019-2020 academic year there were eight public schools within the study area that served intermediate students, including and three schools serving both elementary and intermediate levels.

As shown in **Table 4-3**, CSD 30, Sub-district 3 had a target capacity of 2,623 intermediate school seats in the 2019-2020 academic year and an enrollment of 2,088 students, for a total utilization of approximately 80 percent with 535 available seats.

TABLE 4-3
2019-2020 Public Elementary and Intermediate School Enrollment, Capacity, and Utilization in CSD 30, Sub-district 3

Map No.[1]	Name	Address	Enrollment	Target Capacity	Available Seats	Utilization (%)
Elementary Schools						
1	**P.S. 017 Henry David Thoreau**	28-37 29th Street	591	496	-95	119%
2	**P.S. 076 William Hallet**	36-36 10th Street	421	695	274	61%
3	**P.S./I.S. 78Q**	46-08 5th Street	419	426	6	99%
4	**P.S./I.S. 78 Q**	48-09 Center Bvld.	161	195	34	82%
5	**P.S. 111 Jacob Blackwell**	37-15 13th Street	244	447	203	55%
6	**P.S. 112 Dutch Kills**	25-05 37th Street	412	372	-40	111%
7	**P.S. 171 Peter G. Van Alst**	14-14 29th Avenue	430	696	266	62%
8	**P.S. 234**	30-15 29th Street	455	560	105	81%
Total Elementary Schools in Sub-district 3 of CSD 30			**3,133**	**3,886**	**753**	81%
Intermediate Schools						
5	**P.S./I.S. 78Q**	46-08 5th Street	122	123	1	99%
6	**P.S./I.S. 78Q**	48-09 Center Blvd.	45	56	11	80%
7	**P.S. 111 Jacob Blackwell**	37-15 13th Street	84	154	70	55%
8	**I.S. 126 Albert Shanker School for Visual & Performing Arts**	31-51 21st Street	625	645	20	97%
9	**I.S. 204 Oliver W. Holmes**	36-41 28th Street	445	805	360	55%
10	**Academy for New Americans**	30-14 30th Street	85	197	112	43%
11	**Young Women's Leadership School**	23-15 Newtown Avenue	262	244	-18	107%
12	**Hunters Point Community Middle School**	1-50 51st Street	420	398	-22	106%
Total Intermediate Schools in Sub-district 3 of CSD 30			**2,088**	**2,623**	535	**80%**

Notes:
[1] Map numbers correspond to **Figure 4-1**.
Source: New York City Department of Education, Enrollment-Capacity-Utilization Report, 2019-2020 School Year.

High Schools

Table 4-4 provides summary capacity, enrollment, and utilization figures for all high schools in Queens. As shown in **Table 4-4**, the borough's high schools operated at a utilization rate of approximately 101.2 percent with a shortfall of 932 seats, in the 2019-2020 school year. Although a 1-mile radius is not used for assessment purposes, as high school students may attend any high school in the City if they meet the admissions criteria, **Figure 4-2** illustrates the locations of all high schools within an approximately 1-mile radius of the Project Area, for reference. As shown in **Figure 4-2** and **Table 4-5**, there are 2 high schools within 1 mile of the Project Area.

TABLE 4-4
Queens Public High School Enrollment, Capacity, and Utilization for the 2019-2020 Academic Year

Area	Enrollment	Target Capacity[2]	Available Seats	Utilization (%)
Queens Total	79,928	78,996	-932	101.2

Source: New York City Department of Education, Enrollment-Capacity-Utilization Report, 2019-2020 School Year.

TABLE 4-5
High Schools within a Mile Radius from the Project Site

Map No.[1]	School Name	Address	Grades Served
1	Long Island City High School (Q450)	14-30 Broadway	9-12
2	Young Women's Leadership Academy (Q286)	23-15 Newtown Avenue	6-12

Notes: [1] Map No. corresponds to Figure 4-2.

The Future without the Proposed Actions (No-Action Condition)

In the 2031 future without the Proposed Actions, future utilization of public elementary, intermediate, and high schools serving the study area would be affected by changes in enrollment mainly due to: (1) aging of the existing student body and new arrivals born in the area or moving to it; and (2) changes in capacity, or number of available seats, in the schools as a result of planned construction of new schools or building additions.

Capacity Changes

As outlined in the *CEQR Technical Manual*, No-Action school capacity changes considered in a community facilities analysis include information on proposed and adopted "Significant Changes in School Utilization" and the DOE's Five Year Capital Plan.

As discussed in the DOE's Five Year Capital Plan, the capacity at the Academy of American Studies high school would increase to 969 seats from the existing 582 seats by 2021 in the future without the Proposed Actions. Therefore, there would be an additional 387 high school seats added to the study area by 2021. In addition, as discussed in DOE's Five Year Capital Plan, a new intermediate school is planned at 44-59 45th Avenue, which would increase the number of intermediate school seats by 536 in the study area by 2025.

It should be noted that two new elementary schools and an intermediate school are planned within the study area in the future without the Proposed Actions. Approximately 740 elementary and 317 intermediate school seats are planned as part of the school associated with the Halletts Point development. While development of Halletts Point is currently underway, the completion date for the school is unknown at this time. A new elementary school is also planned as part of the approved Astoria Cove development located adjacent to the Project Area. This new elementary school is anticipated to include 456 elementary school seats. However, as development of Astoria Cove has not begun at this time, the completion date for the school is unknown. Therefore, for conservative analysis purposes, the elementary and intermediate school seats planned to be added to the study area as part of the above mentioned projects in the future without the Proposed Actions are not included within the analysis.

Enrollment Changes

Estimates of future enrollment are derived from the latest available DOE enrollment projection data for CSD 30, Sub-district 3 for 2031 (Projected 2019-2028). In the 2031 future without the Proposed Actions, DOE projections show that demand for public elementary and intermediate schools in CSD 30, Sub-district 3 is expected to increase by approximately 13 percent (to 3,548) and decrease by 9 percent (to 1,908), respectively. Demand for high schools in Queens is expected to decrease by approximately 11 percent (to 70,965). The enrollment projections focus on natural growth of the City's student population and other population increases and do not account for new residential developments planned for the area (i.e., No-Action projects).

New residential development is also planned in the study area by the analysis year of 2031. Using numbers derived from the SCA's Projected New Housing Starts for Sub-district 3 of CSD 30, approximately 1,753 new elementary school students and 439 new intermediate school students are expected to be added to the study area by the 2031 analysis year. Approximately 3,717 new high school students are expected to be added to the study area by the 2031 analysis year. As such, 2031 projected elementary and intermediate enrollment in the future without the Proposed Actions would increase to 5,301 and 2,347 respectively. Projected high school enrollment is expected to decrease to 70,965 by the 2031 analysis year.

Elementary Schools

As discussed above, in the 2031 future without the Proposed Actions, CSD 30, Sub-district 3 elementary school enrollment is expected to increase to 5,301. Based on these changes, elementary schools in Sub-district 3 of CSD 30 are expected to operate above capacity (approximately 136.4 percent utilization), with a shortfall of 1,415 seats (see **Table 4-6**).

TABLE 4-6
2031 No-Action Estimated Public Elementary and Intermediate School Enrollment, Capacity, and Utilization in CSD 30, Sub-district 3

	2031 Projected Enrollment[1]	Students Generated from Development in No-Action	Total Projected Enrollment in No-Action	Projected Capacity	Seats Available	Utilization (%)
Elementary Schools	3,548	1,753	5,301	3,886	-1,415	136.4
Intermediate Schools	1,908	439	2,347	3,159	812	74.3

Notes:
[1] DOE Enrollment Projections (Projected 2019-2028).

Intermediate Schools

As shown in **Table 4-6**, with no changes to CSD 30, Sub-district 3 intermediate school capacity anticipated in the 2031 future without the Proposed Action and intermediate school enrollment expected to decrease to 1,908 and the utilization rate for intermediate schools in CSD 30, Sub-district 3 is expected to decrease to approximately 74.3 percent, with 812 available seats.

High Schools

High schools in Queens currently operate over capacity (greater than 100 percent collective utilization rate), and are expected to continue to operate over capacity in the No-Action Condition. In the No-Action Condition, Queens high school capacity is expected to increase by 3,079 seats with the construction of a new high school at 51-30 Northern Boulevard. Enrollment is expected to decrease from approximately 78,996 students under existing conditions to approximately 74,682 students. Therefore, the collective utilization rate is expected to decrease from approximately 101.18 percent in existing conditions to approximately 90.99 percent in the No-Action Condition, with 7,393 available seats.

The Future with the Proposed Action (With-Action Condition)

As described in **Chapter 1, "Project Description,"** the RWCDS for Proposed Actions would result in approximately 1,665 DUs by 2031. Based on *CEQR Technical Manual* student generation rates, the estimated school age population generated by approximately 1,665 residential units would include 181 elementary school students, 66 intermediate school students, and 167 high school students.

Elementary Schools

In the future with the Proposed Actions, elementary schools in Sub-district 3 of CSD 30 would continue to operate above capacity as under No-Action conditions. As shown in **Table 4-7**, the addition of 181 elementary school students generated by the Proposed Actions would increase the utilization by approximately 4.66 percentage points to 141.06 percent. The Proposed Actions would somewhat exacerbate the projected 2031 overcrowded conditions in elementary schools in Sub-district 3 of CSD 30. According to the 2021 *CEQR Technical Manual*, a significant adverse impact may occur if a proposed action would result in both of the following conditions: (1) a utilization rate of the elementary schools in the sub-district study area that is equal to or greater than 100 percent in the future With-Action condition; and (2) 100 or more new students generated by the proposed development past the 100% utilization rate. As the With-Action Condition utilization rate would be 141.06 percent and the Proposed Actions would generate 181 elementary school students significant adverse impact on elementary schools would result, per the criteria of the 2021 *CEQR Technical Manual*.

TABLE 4-7
2031 With-Action Estimated Public Elementary and Intermediate School Enrollment, Capacity, and Utilization for CSD 30, Sub-district 3

	2031 No-Action Total Projected Enrollment	New Students Generated by Proposed Action	Total Future With-Action Projected Enrollment	Projected Capacity	Seats Available	Utilization (%)	Increase in Utilization (%) from No-Action Condition
Elementary Schools	5,301	181	5,482	3,886	-1,596	141.06	+4.66
Intermediate Schools	2,347	66	2,413	3,159	746	76.39	+2.09

Potential mitigation measures to address this impact are discussed in **Chapter 18, "Mitigation."**

Intermediate Schools

As shown in **Table 4-7**, the addition of 66 intermediate school students to CSD 30, Sub-district 3 would increase intermediate school enrollment to 2,347 in the With-Action condition. As under No-Action

conditions, CSD 30, Sub-district 3 intermediate schools would operate above capacity, with the Proposed Actions expected to increase the study area intermediate school utilization by 2.09 percentage points to 76.39 percent. According to the 2021 *CEQR Technical Manual*, a significant adverse impact may occur if a proposed action would result in both of the following conditions: (1) a utilization rate of the intermediate schools in the sub-district study area that is equal to or greater than 100 percent in the future With-Action condition; and (2) 100 or more new students generated by the proposed development past the 100% utilization rate.. As the Proposed Actions would generate 66 intermediate school students, no significant adverse impacts to intermediate schools would occur, per the criteria of the 2021 *CEQR Technical Manual*.

High Schools

As indicated in **Table 4-8**, in the future With-Action condition, Queens high schools are expected to continue to have available seats. The future utilization rate would increase by 0.20 percentage points over the No-Action condition, for a With-Action utilization rate of 91.2 percent with 7,227 available seats. As the increase in the collective high school utilization rate would be less than the five percentage point impact threshold, no significant adverse impacts to Queens high schools are anticipated.

TABLE 4-8
2031 Estimated With-Action Queens High School Enrollment, Capacity, and Utilization

Projected 2031 No-Action Enrollment	Students Introduced by the Proposed Actions	Total With-Action Enrollment	Capacity	Available Seats	Utilization (%)	Change in Utilization (%) from No-Action Condition
74,682	167	74,849	82,075	7,227	91.2	+ 0.20

E. INDIRECT EFFECTS ON PUBLIC LIBRARIES

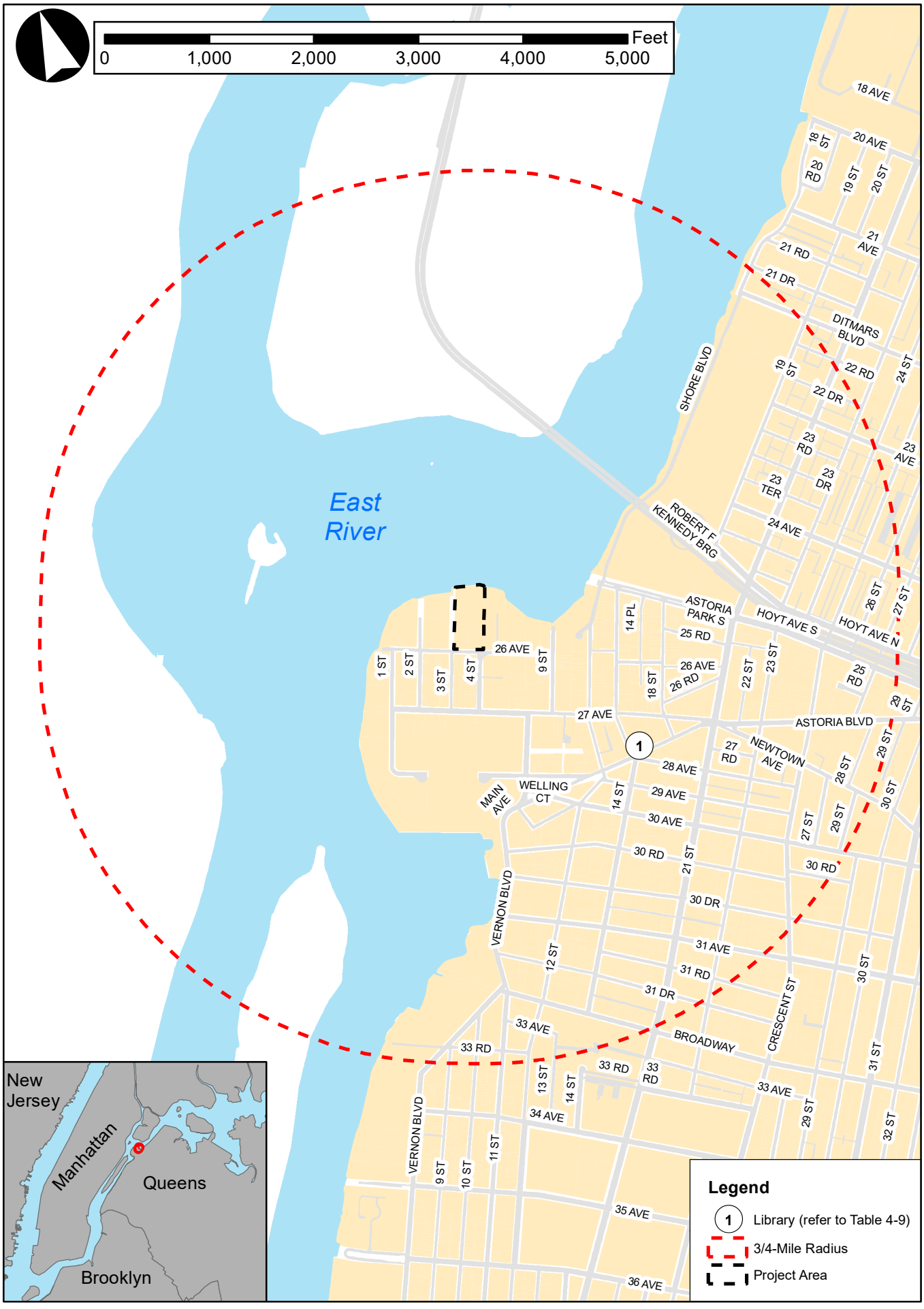
Methodology

According to the *CEQR Technical Manual*, service areas for neighborhood branch libraries are based on the distance that residents would travel to use library services, typically not more than ¾ miles; this is referred to as the library's "catchment area." Furthermore, the ¾-mile radius for the libraries analysis is typically limited to the project's borough. This libraries analysis compares the population generated by the Proposed Actions with the catchment area population(s) of the libraries available within an approximately ¾-mile area around the Project Area. As presented in **Figure 4-3**, there is one NYPL neighborhood branch that is located within a ¾-mile radius of the Project Area: the Astoria Library.

To determine the existing population of the libraries' catchment area, American Community Survey 2014-2018 Five-Year Estimates data were assembled for all census tracts that fall within ¾-mile of each library, respectively (refer to **Figure 4-3**). The catchment area population in the future without the Proposed Actions and the future with the Proposed Actions was calculated by adding the incremental residents anticipated in the library catchment area to the existing catchment area population (refer to **Chapter 2, "Land Use, Zoning, & Public Policy"**). The catchment area population in the future with the Proposed Actions was estimated by adding the anticipated population that would result from the Proposed Actions. According to the *CEQR Technical Manual*, if a project would increase a library's catchment area population

Figure 4-3

Libraries within the Study Area



by five percent or more over the No-Action condition, and if this increase would impair the delivery of library services in the study area, a significant impact could occur.

Existing Conditions

The Project Area is served by the Queens Public Library system. The Queens Public Library (QPL) system serves a population of over 2.2 million and includes 62 community libraries. Libraries within the QPL system provide free and open access to books, periodicals, electronic resources, and non-print materials. Reference, career services, Internet access, and educational, cultural and recreational programming for adults, young adults, and children are also provided. As indicated in **Figure 4-3**, there is one QPL neighborhood branch that is within a ¾-mile radius of the Project Area: the Astoria Library, located to the southeast of the Project Area. **Table 4-9**, below, provides the number of holdings for the library and the total catchment area population served by the library, along with the existing holdings-per-resident ratio. It should be noted that residents can go to any QPL branch and order books from any of the other library branches.

TABLE 4-9
Existing Holdings-per-Resident Ratios at the Astoria Library

Library Name	Address	Holdings[1]	Catchment Area Population[2]	Holdings per Resident
Astoria Library	14-01 Astoria Boulevard	37,960	42,652	0.89

Sources:
[1] 2020 holdings (QPL).
[2] 2014-2018 American Community Survey 5-Year Estimates, U.S. Census: total population for census tracts within a ¾-mile radius the Project Area: census tracts 45, 69, 71, 73, 75, 77, 79, 81, 83, 87, 91, 95, 97, 99, 101.

The Astoria Library was established in 1904. The one-story facility is located at intersection of 14th Street, 28th Avenue and Astoria Boulevard. The library features adult, young adult, and children's collections. As indicated in **Table 4-9**, the Astoria Library serves a catchment area of approximately 42,652 residents, with approximately 37,960 holdings, for a holdings-per-resident ratio of 0.89.

The Future without the Proposed Actions (No-Action Condition)

Several new residential developments are expected to be completed in the study area by 2031. A total of 4,863 residential DUs are planned within the study area. Therefore 11,330 new residents would be generated by the No-Action developments were added to the study area, as detailed in **Table 4-10.**

TABLE 4-10
Anticipated No-Action Residential Development within the Astoria Library Catchment Areas

Library Catchment Area	Population Introduced by No-Action Developments[1]	Total No-Action Population
Astoria Library	11,330	53,982

[1] Based on 2014-2018 ACS data of 2.33 persons/DU

For conservative analysis purposes, the number of holdings in the study area branch library are assumed to remain the same in 2031. Based on this assumption, **Table 4-11** presents the anticipated holdings-per-resident ratios of the Astoria Library in the future without the Proposed Actions. As indicated in the table, the No-Action holdings-per-resident ratio of Astoria Library would decrease from 0.89 to 0.70.

TABLE 4-11
No-Action Holdings-per-Resident Ratios at Astoria Library

Library Name	Address	Holdings[1]	No-Action Area Population[2]	No-Action Holdings per Resident
Astoria Library	14-01 Astoria Boulevard	37,960	53,982	0.70

Notes:
[1] 2020 holdings (QPL); Conservatively assumes no change in No-Action condition.
[2] Refer to **Table 4-10.**

The Future with the Proposed Actions (With-Action Condition)

According to the *CEQR Technical Manual*, if a project increases the study area population by five percent or more as compared to the No-Action condition, this increase may impair the delivery of library services to the study area, and a significant adverse impact could occur.

The Proposed Actions would result in an increase of 1,665 DUs, compared to No-Action conditions. As detailed further in **Chapter 1, "Project Description,"** these 1,665 DUs are expected to introduce approximately 3,879 new residents to the study area by 2031. It should be noted that several other QPL branches are located within 2,000 feet of the study area boundary including Steinway Library to the east on 31st Street (near Ditmars Boulevard), Broadway Library to the southeast on Broadway (near Steinway Street), and the Long Island City Library to the south on 21st Street (near 38th Avenue). Residents can go to any QPL branch and order books from any of the other branches in the QPL system. However, for conservative analysis purposes, only the Astoria Library was included, as it serves the local neighborhood.

Table 4-12, below, summarizes the catchment area population increase anticipated at the Astoria Library in the future with the Proposed Actions. As presented in the table, under the Proposed Actions, the catchment area population of the Astoria Library is expected to increase by 4.2 percent over the No-Action condition.

TABLE 4-12
Anticipated With-Action Astoria Library Catchment Area Population Increases

Library Catchment Area	No-Action Population[1]	Population Introduced in With-Action Condition	Total With-Action Population	Increase in Catchment Area Population over No-Action Condition
Astoria Library	53,982	3,880	57,862	4.2%

Notes:
[1] **Refer to Table 4-11**.

Table 4-13 presents the With-Action holdings-per-resident ratios for the Astoria Library. The Astoria Library's holdings-per-resident ratio would decrease from No-Action conditions of 0.70 to 0.66 in the future with the Proposed Actions.

TABLE 4-13
With-Action Holdings-per-Resident Ratios for the Astoria Library

Library Name	With-Action Holdings[1]	With-Action Catchment Area Population[2]	With-Action Holdings per Resident
Astoria Library	37,960	57,862	0.66

Notes:
[1] 2020 holdings QPL); Conservatively assumes no change in With-Action condition.
[2] Refer to **Table 4-12.**

As presented in **Table 4-13**, the population of the Astoria Library's catchment area would not increase by more than five percent in the future with the Proposed Actions. Therefore, pursuant to CEQR guidance, the Proposed Actions would not result in a significant adverse impact on public libraries.

F. INDIRECT EFFECTS ON EARLY CHILDHOOD PROGRAMS

Methodology

Publicly financed early childhood programs, under the auspices of the New York City Department of Education (DOE), early childhood education services. Early childhood programs comprise EarlyLearnNYC (Child Care and Early Head Start), 3-K, and Pre-K for All. While 3-K and Pre-K programs are free for all three and four-year-old children in New York City, there are eligibility requirement children to enroll in EarlyLearn NYC Child Care and Early Head Start programs. A space for one child in a child care center is called a "seat" (or a "slot"). These seats may be in contracted programs at a child care center run by a provider. Seats may also be in private homes licensed to provide child care services to small numbers of unrelated children. Two types of these services exist: "group family child care," which serves 6 to 12 children; and "family child care," which serves 3 to 6 children. Projects that would create a large number of subsidized residential units are examined for potential impacts on the number of seats available at contracted programs in the vicinity of the project (i.e., the study area). In certain instances, vouchers may be provided that allow an eligible child to access care from private providers. However, because the specific locations of family day care and voucher slots cannot be identified, they are not suitable for a study area analysis. The DOE provides subsidized child care in center-based group child care, family-based child care, informal child care, and Head Start programs. Publicly financed child care services are available for income-eligible children up through the age of 12. The CEQR analysis focuses on services for children under age five, as eligible children aged five through 12 are expected to be in school for most of the day.

Families eligible for subsidized seats must meet financial and social eligibility criteria as established by DOE. In general, children in families that have incomes at or below 200% Federal Poverty Level (FPL), depending on family size, are financially eligible, although in some cases eligibility can go up to 275% FPL. The family must also have an approved "reason for care," such as involvement in a child welfare case or participation in a "welfare-to-work" program. Projects that would produce substantial numbers of subsidized, low-to moderate-income family housing units may therefore generate a sufficient number of eligible children to affect the availability of seats at publicly funded early childhood programs. If the project would generate 20 or more eligible children under age 5, further analysis may be appropriate.

The City's affordable housing market is reliant on the Area Median Income (AMI) rather than the FPL. Lower-income units must be affordable to households at or below 80% AMI. Since family incomes at or below 200% FPL fall under 80% AMI, for the purposes of CEQR analysis, the number of housing units expected to be subsidized and targeted for incomes of 80% AMI or below should be used as a proxy for eligibility. This provides a conservative assessment of demand, since eligibility for subsidized child care is not defined strictly by income (generally below 200% of poverty level), but also takes into account family size and other reasons for care (e.g., low-income parent(s) in school; low-income parent(s) training for work; or low-income parents who are ill or disabled).

Since there are no locational requirements for enrollment in early childhood programs, and some parents or guardians choose a child care center close to their place of employment rather than their residence,

the service area of these facilities can be quite large and are not subject to strict delineation on a map. However, for the purposes of this child care center analysis, publicly funded group early childhood programs within approximately 1.5 miles of the Project Area were identified, reflecting the fact that the centers closest to a given site are more likely to be subject to increased demand. DCP provided the most recent information regarding publicly funded group child care facilities within the study area, including their current capacity, enrollment, and number of available slots. Family child care and voucher slots were not included in the analysis, in accordance with the *CEQR Technical Manual.*

The child care center enrollment in the future without the Proposed Actions was estimated by multiplying the number of new low-income and low- and moderate-income housing units expected in the 1.5-mile child care study area by the appropriate multiplier from Table 6-1a of the *CEQR Technical Manual*. The estimate of new publicly funded child care-eligible children was added to the existing child care enrollment to estimate enrollment in the future without the Proposed Actions. The child care-eligible population introduced by the Proposed Actions was also estimated using the *CEQR Technical Manual* child care multipliers. The action-generated publicly funded child-care eligible population was then added to the No-Action child care enrollment to determine future With-Action enrollment. According to the *CEQR Technical Manual*, if a project would result in demand for slots greater than the remaining slots for early childhood programs and if that demand would constitute an increase of five percentage points or more in the collective capacity of early childhood programs serving the study area, a significant adverse impact may result.

Existing Conditions

As indicated in **Table 4-14** and **Figure 4-4**, there are three publicly funded early childhood programs within the study area with a combined capacity of 99 slots and 74 available slots (25.3 percent utilization). **Table 4-14** shows the current capacity and enrollment for each of these facilities. As noted above, while family-based child care facilities and informal care arrangements provide additional slots in the study area, these slots are not included in the quantitative analysis.

TABLE 4-14
Study Area Publicly Funded Early childhood programs

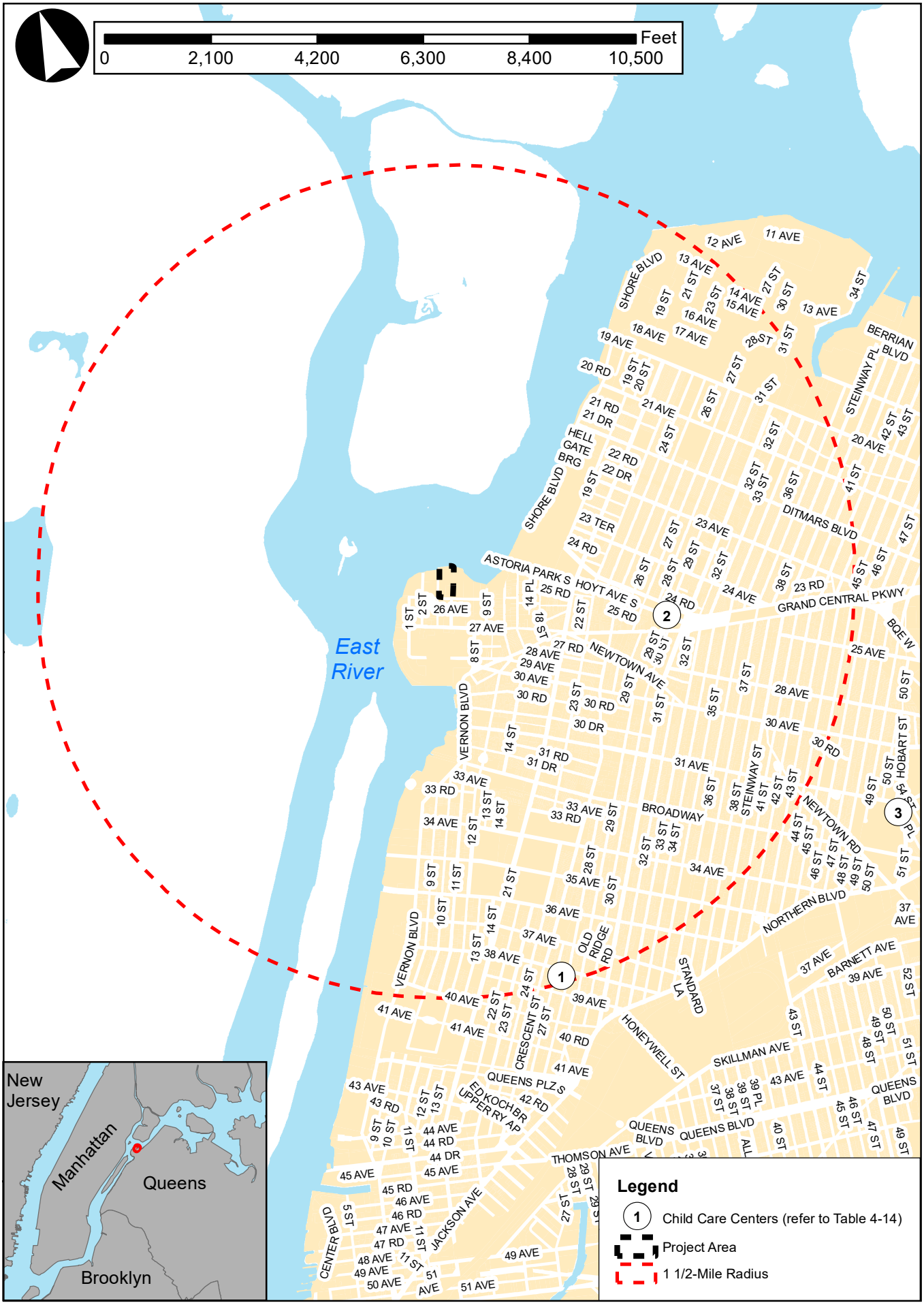
Map No.[1]	Program Name	Address	Capacity	Enrollment	Available Slots	Utilization Rate
1	Queensbridge ECDC/SCO Family of Services Long Island City Early Education Center	38-11 27th Street	66	25	41	37.9%
2	New Milestone Inc.	27-18 Hoyt Avenue South	18	0	18	0.0%
3	Mi Nuevo Mundo Corp.	31-05 51st Street	15	0	15	0.0%
		Study Area Totals	***99***	***25***	***74***	***25.3%***

Source: DCP, February 2022.
Note: [1] Refer to **Figure 4-4**.

The Future without the Proposed Actions (No-Action Condition)

Approximately 868 affordable DUs are planned in the study area in the future without the Proposed Actions. Therefore, as detailed in **Table 4-15**, approximately 121 children eligible for publicly funded child care will be added to the study area in the future without the Proposed Actions. No changes to child care center capacity are anticipated in the 1.5-mile study area in the 2031 No-Action condition.

Public Child Care Centers within the Study Area



As presented in **Table 4-15**, publicly funded early childhood programs in the study area are expected to operate over capacity in the future without the Proposed Actions. As detailed therein, the utilization of publicly funded centers in the area would increase from 25.3 percent under existing conditions to 147.5 percent in the No-Action condition, with a shortfall of 47 slots.

TABLE 4-15
Comparison of Budget Capacity, Enrollment, Available Slots, & Percent Utilization for Existing Conditions and the 2031 Future No-Action Conditions in the Study Area

	Capacity	Enrollment	Available Slots	Utilization
Existing Conditions[1]	99	25	74	25.3%
No-Action Increment	+0	+121	-121	+122.2%
2031 No-Action Condition	99	146	-47	147.5%

Note: [1]Refer to **Table 4-14**.

The Future with the Proposed Actions (With-Action Condition)

As discussed above, the *CEQR Technical Manual* requires a detailed analysis of early childhood programs when a project would produce substantial numbers of subsidized low- to moderate-income family housing units that may therefore generate a sufficient number of eligible children to affect the availability of slots at area publicly funded early childhood programs. The Proposed Actions would introduce an increase of approximately 333 permanently affordable family housing units as compared to No-Action conditions. As described above, the Applicant intends on selecting MIH Option 1, which would designate 25 percent of the residential floor area of the RWCDS as affordable housing units (416 DUs). However, as Options 1 and 2 require that at least 25 or 30 percent of the residential floor area be reserved for residents with incomes averaging 60 to 80 percent of AMI, some of these MIH units would be affordable to households earning more than 60 to 80 percent of AMI. Therefore, as requested by the Department of City Planning, for conservative CEQR analysis purposes, 20 percent of the overall residential floor area (approximately 333 DUs) of the RWCDS is assumed to be set aside for "affordable" residential units, which refers to the amount residential units that would accommodate households earning 60 to 80 percent (or below) of AMI.

Based on Table 6-1b of the *CEQR Technical Manual*, these additional 333 affordable units would generate 46 children under age six eligible for publicly funded child care services (see **Table 4-16**).

TABLE 4-16
Projected Number of Publicly Funded Child Care Pupils Generated by the Proposed Actions

Affordable Units	Generation Ratio per Unit (Children ≤ Age 6)	Number of Children≤ Age 6 Generated
333	0.139	46

Source: 2020 *CEQR Technical Manual*, Table 6-1a.

As presented in **Table 4-17**, the additional 46 children generated by the Proposed Actions who would be potentially eligible for publicly funded child care would increase the study area child care utilization rate to 193.9 percent, a 46.5 percent increase from No-Action conditions. Study area child care facilities would therefore continue to operate over capacity in the future with the Proposed Actions, with a shortfall of 93 child care slots.

TABLE 4-17
Comparison of Budget Capacity, Enrollment, Available Slots, & Percent Utilization in the Study Area for the 2031 Future No-Action and With-Action Conditions

	Budget Capacity	Enrollment	Available Slots	Utilization
2031 No-Action Condition	99	146	-47	147.5%
With-Action Increment	0	+46	-46	+46.5%
2031 With-Action Condition	99	192	-93	193.9%

According to the *CEQR Technical Manual*, a significant adverse child care center impact could occur if a project results in: (1) a collective utilization rate greater than 100 percent in the With-Action condition; and (2) the demand constitutes an increase of five percent or more in the collective capacity of early childhood programs serving the study area over the No-Action condition.

Several factors may limit the number of children in need of publicly funded child care slots. Families in the study area could make use of alternatives. There are slots at homes licensed to provide family child care that families of eligible children could elect to use instead of a publicly funded group early childhood programs. Parents of eligible children may also use vouchers to finance care at private child care centers in the study area. The voucher system could spur the development of new private child care facilities to meet the need of eligible children that would result from the increase in the low-income and low- to moderate-income housing units in the area in the future with the Proposed Actions. Lastly, parents of eligible children are not restricted to enrolling their children in child care facilities in a specific geographical area. They could use the voucher system to make use of public and private child care providers beyond the study area.

The Proposed Actions would add approximately 46 children potentially eligible for subsidized child care to the study area and would cause a 46.5 percent increase in demand over the No-Action utilization rate of publicly funded group child care facilities in the study area, over the CEQR threshold of five percent. Therefore, the Proposed Actions would result in a significant adverse impact to publicly funded early childhood programs and Head Start programs in the study area. To avoid exceeding the significant adverse impact threshold, the number of affordable units included as part of the Proposed Actions would need to be reduced to 33, which would generate only 5 children eligible for publicly funded group child care. Alternately, 27 additional child care slots would need to be provided to reduce the increase in utilization to below the 5 percentage point threshold. Potential measures to mitigate child care impacts are described in **Chapter 18, "Mitigation."**