A. INTRODUCTION

According to the *City Environmental Quality Review* (CEQR) *Technical Manual*, unavoidable significant adverse impacts are defined as those that meet the following two criteria:

- There are no reasonably practicable mitigation measures to eliminate the impacts; and
- There are no reasonable alternatives to the proposed project that would meet the purpose and need of the action, eliminate the impact, and not cause other or similar significant adverse impacts.

As described in Chapter 20, "Mitigation," the Proposed Action would result in significant adverse impacts with respect to community facilities, active open space, urban design, transportation, noise, and construction traffic and noise.

To the extent practicable, mitigation has been proposed for these identified significant adverse impacts. However, in some instances no practicable mitigation was identified to fully mitigate significant adverse impacts, and there are no reasonable alternatives to the proposed project that would meet its purpose and need, eliminate its impacts, and not cause other or similar significant adverse impacts. In other cases, mitigation has been proposed, but absent a commitment to implement the mitigation, the impacts would not be eliminated.

B. COMMUNITY FACILITIES

Public Elementary Schools

As discussed in Chapter 4, "Community Facilities," the Proposed Action would include a site for a 456-seat elementary school, which would add much-needed elementary school capacity to Community School District (CSD) 30, Sub-district 3 and lower the future elementary school utilization rate, compared to the 2023 No-Action condition. The elementary school shall be constructed pursuant to a certain Letter of Intent, dated April 17, 2014, entered into between the Applicant and the School Construction Authority (SCA). The Restrictive Declaration entered into in connection with the project shall require the Applicant to work with the SCA in accordance with the terms set forth in the Letter of Intent to implement the construction of the elementary school, which is currently contemplated in the final phase of the proposed project's development, as outlined in the Uniform Land Use Review Procedure (ULURP) Phasing Plan. Therefore, as outlined in Chapter 4, the Proposed Action would result in a temporary significant adverse impact on CSD 30, Sub-district 3 elementary schools upon occupancy of Building 2. The Proposed Action would not result in any potential significant adverse impacts on intermediate or high school students.

To mitigate the potential temporary significant adverse elementary school impact, the proposed 456-seat elementary school would need to be constructed prior to completion and occupancy of Building 2. Absent this change in the proposed project's phasing schedule, a temporary unmitigated significant adverse impact to elementary schools would result.

Child Care

Following *CEQR Technical Manual* methodology, the proposed project would result in a significant adverse impact to publicly funded child care facilities. As discussed in Chapter 20, "Mitigation," mitigation measures for this significant adverse impact will possibly include adding capacity to existing facilities if determined feasible through consultation with the New York City Administration of Children's Services (ACS) or providing a new child care facility within or near the project site. As a City agency, ACS does not directly provide new child care facilities, but, rather, contracts with providers in areas of need. ACS is also working to create public-private partnerships to facilitate the development of new child care facilities where there is an area of need. As part of this initiative, ACS may be able to contribute capital funding, if it is available, towards such projects to facilitate the provision of new facilities. Mitigation measures for this significant adverse impact will continue to be explored by the Applicant in consultation with the lead agency, the New York City Department of City Planning (DCP), and the SCA, and will be refined between the Draft and Final EIS.

However, as the demand for publicly funded child care depends not only on the amount of residential development in the area but also on the proportion of new residents who are children of low-income families (not all children meet the social and income eligibility criteria), at this point it is not possible to know exactly what type of mitigation would be appropriate or when its implementation would be necessary. Furthermore, several factors may limit the number of children in need of publicly funded child care slots in ACS-contracted facilities, including the potential for future residents to make use of family-based child care facilities, private child care facilities, or child care centers outside of the study area.

The Restrictive Declaration for the proposed project will require the Applicant implement the mitigation measures identified between the Draft and Final EIS. Absent the implementation of such needed mitigation measures, the proposed project could have an unmitigated significant adverse impact on publicly funded child care facilities.

C. OPEN SPACE

As discussed in Chapter 5, "Open Space," as the Proposed Action would result in a substantial decrease in the active open space ratio in the residential study area, and the active open space ratio would be below the City's guideline ratio in the future, the Proposed Action would result in a significant adverse active open space impact. Potential partial mitigation measures for this significant adverse impact are currently being explored by the Applicant in consultation with the lead agency, the New York City Department of City Planning (DCP), and the New York City Department of Parks and Recreation (DPR) and will be refined between the Draft and Final Environmental Impact Statement (EIS). The *CEQR Technical Manual* lists potential mitigation measures for open space impacts. These measures may include, but are not limited to, creating new open space within the study area; funding for improvements, renovation, or maintenance at existing local parks; or improving existing open spaces to increase their utility or capacity to meet identified open space needs in the area, such as through the provision of additional active open space facilities. If feasible mitigation is found, the impacts will be considered partially mitigated. As the significant adverse impact on open space would not be fully mitigated, the Proposed Action would result in an unavoidable adverse impact on open space.

D. TRANSPORTATION

Traffic

As discussed in Chapter 13, "Transportation," and Chapter 20, "Mitigation," in the 2023 future, vehicle volumes in the traffic study area are expected to increase due to both the Astoria Cove and nearby Halletts Point project. As such, in addition to the reasonable worst-case development scenario (RWCDS) No-Action and With-Action conditions, an alternate future condition without the Halletts Point development and the associated traffic mitigation measures identified in the 2013 *Halletts Point Rezoning FEIS* to determine whether the disclosed impacts would occur absent the Halletts Point development. Potential significant adverse traffic impacts were identified at a number of locations in the traffic study area under the future With-Action condition, with slightly fewer anticipated absent the Halletts Point development. It should be noted that an analysis of Saturday peak hour conditions will be conducted between the Draft and the Final EIS (FEIS), as requested by NYCDOT. This analysis may result in additional significant adverse impacts, and the need for additional and/or alternate mitigation measures. The findings of this additional analysis will be documented in the FEIS.

Many of the intersections expected to experience significant adverse traffic impacts could be mitigated through implementation of standard traffic improvements such as installing traffic signals at currently unsignalized intersections, modifying signal timing, changing parking regulation to gain a travel lane at key intersections, and restriping lanes. However, as described below, in some cases, traffic impacts from the proposed project would not be fully mitigated in the RWCDS With-Action condition and/or the Alternate With-Action condition.

Specifically, 13 of the 30 analyzed intersections that would have significant adverse traffic impacts in the future With-Action condition could not be fully mitigated in at least one peak hour. In comparison, should Halletts Point not be completed by the 2023 Build Year (the Alternate With-Action condition), six of the 30 study area intersections that would have significant adverse traffic impacts could not be fully mitigated in at least one peak hour. Table 22-1, below, compares the intersections where significant adverse traffic impacts could not be fully mitigated in at least one peak hour in one or more of the future conditions. Because these impacts would not be fully mitigated, they are considered unavoidable adverse impacts.

Between the Draft and the Final EIS, NYCDOT will review the specific measures proposed for each intersection to confirm adequacy and feasibility of their implementation and recommend changes as necessary. Should the Manual of Uniform Traffic Control Devices' (MUTCD) signal warrant analysis indicate that a traffic signal is not warranted at a location where a signal is proposed as mitigation, or if it is determined that another proposed mitigation measure is not feasible at a particular location, the Applicant, in consultation with NYCDOT will explore other mitigation measures to mitigate impacts. However, if it is determined that other measures are not available to mitigate the identified impacts, either in part or in whole, the impact will be identified in the FEIS as unmitigatable. If any impacts are determined to be unmitigatable between Draft and Final EIS, they will be unavoidable adverse impacts.

In addition, further review of potential mitigation measures that may fully or partially mitigate other significant impact locations that are identified as unmitigatable in the DEIS will be undertaken for the FEIS.

Table 22-1: Comparison of Unmitigated or Partially Mitigated Intersections under the RWCDS With-Action Condition and the Alternate With-Action Condition

Intersection	RWCDS With-Action Condition	Alternate With-Action Condition
2. 27th Avenue & 4th Street	Partially mitigated in the PM peak hour	-
3. 27th Avenue & 8th Street	Partially mitigated in the AM peak hour; Unmitigated in the midday and PM peak hours	Partially mitigated in the AM, midday, and PM peak hours
4. 27th Avenue & 12th Street	Unmitigated in the PM peak hour	-
5. 27th Avenue & 14th Street	Partially mitigated in the AM peak hour	-
7. Astoria Boulevard & 21st Street	Partially mitigated in the AM peak hour; Unmitigated in the PM peak hour	Partially mitigated in the AM and PM peak hours
9. Astoria Boulevard & Crescent Street	Partially mitigated in the AM peak hour	-
10. Astoria Boulevard & 27th Street	Partially mitigated in the AM peak hour	-
12. Astoria Boulevard & 29th Street	-	Partially mitigated in the AM peak hour
14. Astoria Boulevard & 31st Street	Unmitigated in the AM peak hour	-
18. Astoria Boulevard North & 32nd Street	Partially mitigated in the PM peak hour	-
20. 30th Avenue & 14th Street	Unmitigated in the AM peak hour	Unmitigated in the AM peak hour
22. Vernon Boulevard & Welling Court/8th Street	-	Partially mitigated in the PM peak hour
24. Hoyt Avenue North & 21st Street	Partially mitigated in the AM and PM peak hour	Partially mitigated in the AM peak hour
25. Hoyt Avenue South/Astoria Park South & 21st Street	Unmitigated in the AM peak hour	-
27. Vernon Boulevard & 31st Avenue	Unmitigated in the AM and PM peak hours	-

Transit

Subway Station Operations

As discussed in Chapter 13, "Transportation," significant adverse subway station impacts are anticipated at the 30th Avenue Station during the AM and PM peak hours. Specifically, during the AM peak hour, the station's northbound fare array would experience significant adverse impacts, and during the PM peak hour, the street stair at the northwest corner of 30th Avenue and 31st Street (S3-M3) would experience significant adverse impacts. Potential measures to mitigate these impacts will be explored in consultation with New York City Transit (NYCT) between the Draft and Final EIS, and could include relocating the proposed shuttle bus route, providing additional shuttle service to other areas subway stations, adding vertical capacity or widening the station's northwest stair, and/or adding more turnstiles at the impacted fare array. If feasible mitigation is note found, these impacts would be considered unavoidable.

Bus Line Haul

As described in Chapter 13, "Transportation," the Proposed Action would result in potential significant adverse bus line haul impacts on the southbound Q103 during the weekday AM peak hour and on the northbound and southbound Q103 during the weekday PM peak hour. NYCT and MTA Bus routinely monitor changes in bus ridership and, subject to the agencies' fiscal and operational constraints, make

necessary service adjustments where warranted. As discussed in Chapter 20, "Mitigation," the identified potential impacts could be mitigated if increased service adjustments are made. If adjustments are not made, these impacts would be considered unavoidable.

E. NOISE

As discussed in Chapter 16, "Noise," the Proposed Action would result in incremental noise increases at the intersection of 26th Avenue and 4th Street in exceedance of the CEQR impact criteria during the weekday AM and midday peak hours, and therefore would constitute a significant adverse impact, pursuant to CEQR. Two existing sensitive receptors are located in close proximity to Receptor Location 2 (at the intersection of 26th Avenue and 4th Street), and therefore potential measures to mitigate noise impacts at these locations will be examined, in consultation with DCP, between the Draft and Final EIS. Potential mitigation measures for mobile source noise impacts may include the rerouting of traffic where feasible, and/or traffic calming measures, which could result in lower noise levels than predicted in the analysis, and/or other measures including installation of new attenuated windows, air conditioning units, or other measures in non-Applicant owned buildings, if warranted, taking into account the practicability relative to project goals. While the identified significant adverse impact may be able to be mitigated by the above measures, additional evaluation and analysis will be done between Draft and Final EIS. Absent implementation of such measures, this significant adverse noise impact would constitute an unavoidable significant adverse impacts.

It should also be noted that the estimated With-Action noise levels conservatively reflect existing background noise levels, which include noise-generating industrial uses on and adjacent to the project site, it is likely that actual future With-Action noise levels would be less than the levels projected. In addition, worst-case noise levels at Receptor Location 2 would remain in the "marginally unacceptable" category, as under both existing and No-Action conditions, and the resultant L_{eq} levels would remain below the worst-case maximum existing and No-Action L_{eq} conditions at this location during both peak hours. As such, nearby existing sensitive receptors would not be exposed to noise levels greater than those currently experienced at this location.

F. CONSTRUCTION IMPACTS

Transportation

As discussed in Chapter 19, "Construction," the highest amount of construction traffic associated with construction of the proposed project is anticipated in the fourth quarter of 2022. Incremental vehicle trips (including both construction-related and operational trips) in the 2022 (Q4) construction traffic period are expected to result in significant adverse impacts at three of the five intersections analyzed for potential construction traffic-related impacts. At all other study area intersections where significant adverse traffic impacts are anticipated for the proposed project's full build, similar or lesser impacts are anticipated. By applying early the same mitigation measures as those proposed for the proposed project's full build-out, two of the three impacted intersections would be fully mitigated. However, the anticipated significant adverse impact at the intersection of 27th Avenue and 8th Street would be unmitigated during the 3-4 PM construction peak hour and only partially mitigated during the 6-7 AM construction peak hour. Because the traffic impact at this location could not be fully mitigated, it is considered an unavoidable adverse impact. This same location would also not be fully mitigated in the 2023 full build-out conditions.

Noise

As described in Chapter 19, "Construction," construction activities would be expected to result in substantially elevated noise levels that would exceed CEQR impact criteria at nine existing residential/community facility buildings and one existing open space. In addition, elevated noise levels in exceedance of the CEQR impact criteria are predicted to occur on portions of the proposed project's waterfront open space. Between the Draft and Final EIS, a more refined construction noise analysis will be undertaken to more precisely determine the magnitude and duration of the elevated noise levels resulting from construction at these locations.

Any identified existing building that currently has double-glazed windows and an alternate means of ventilation would consequently be expected to experience interior $L_{10(1)}$ values less than 45 dBA (the CEQR acceptable noise level criteria) during most of the time. However, during some limited time periods construction activities may result in interior noise levels that would be above the 45 dBA $L_{10(1)}$ noise level recommended by CEQR for these uses, and additional receptor controls would be unlikely to fully mitigate the temporary construction noise impacts. Therefore, these temporary significant adverse construction noise impacts would constitute temporary unavoidable significant adverse impacts.

Existing buildings that may not have an alternate means of ventilation could experience significant adverse noise impact for certain limited periods during construction requiring mitigation. Potential mitigation measures for these locations are currently being explored by the Applicant in consultation with the lead agency, DCP, and will be refined between the Draft and Final EIS. The *CEQR Technical Manual* lists potential mitigation measures for construction noise impacts. These measures include, but are not limited to, noise barriers, the use of low noise emission equipment, locating stationary equipment as far as feasibly away from receptors, enclosing areas, limiting the duration of activities, specifying quiet equipment, scheduling activities to minimize impacts (either time of day or seasonal considerations), and/or locating noisy equipment near natural or existing barriers that would shield sensitive receptors. Further exploration of potential mitigation measures will be conducted between the Draft and Final EIS to determine the practicality and feasibility of implementing these measure to minimize or avoid the potential significant adverse impacts, taking into account the practicability relative to project goals. Absent implementation of such measures, these existing residential and community facility buildings would experience temporary significant adverse noise impacts during the proposed project's construction, and would therefore constitute temporary unavoidable significant adverse impacts.

Lastly, with regard to open space, noise levels at both the Shore Towers waterfront esplanade and the proposed project's waterfront open space would exceed the CEQR-recommended open space noise level of 55 dBA during some periods of the proposed project's construction, as under the full build-out conditions. Potential mitigation measures, such as noise barriers or relocating some equipment within the construction sites to add distance and/or shielding between the equipment and the nearby open spaces will be examined between the Draft and Final EIS. Absent implementation of such measures, these temporary significant adverse impacts during construction would constitute temporary unavoidable significant adverse impacts.