A. INTRODUCTION

Unavoidable significant adverse impacts are defined as those that meet the following two criteria:

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

As described in Chapter 22, "Mitigation," a number of the potential impacts identified for the proposed project could be mitigated. However, as described below, in some cases, impacts from the proposed project would not be fully mitigated.

B. HISTORIC AND CULTURAL RESOURCES

As discussed in Chapter 7, "Historic and Cultural Resources," the demolition of the Goldwater Hospital complex would constitute a significant adverse impact on this architectural resource.

As described in Chapter 22, "Mitigation," Cornell is consulting with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and the Landmarks Preservation Commission (LPC) regarding appropriate measures to partially mitigate the significant adverse impact. These measures, which would include preservation of the Works Progress Administration (WPA) murals to the extent practicable, are being developed and will be implemented by Cornell, as set forth in a Letter of Resolution (LOR) to be signed by Cornell, OPRHP, LPC, and the Roosevelt Island Operating Corporation (RIOC).

An alternatives analysis was prepared in consideration of the potential to retain and reuse all or portions of the Goldwater Hospital complex as part of the Cornell NYC Tech project. The analysis concluded that it is not possible to meet the goals and objectives of the project, Cornell University, and the City of the New York while avoiding adverse impacts to the Goldwater Hospital complex (see Appendix 7, "Historic and Cultural Resources," for an assessment of alternatives for reusing the existing buildings). Consequently, there is no feasible alternative that would avoid a significant adverse impact on this architectural resource. In a letter dated September 19, 2012 commenting on the alternatives analysis, OPRHP concluded that "there are no prudent and feasible alternatives at this time to demolition of these historic buildings." LPC concurred with OPRHP's comments in a letter dated September 25, 2012. Therefore, because it is not possible to meet the goals and objectives of the project while avoiding adverse impacts to the Goldwater Hospital complex, Cornell is consulting with OPRHP and LPC regarding appropriate measures to partially mitigate the significant adverse impact on this architectural resource. These measures are being developed and will be implemented by Cornell, as set forth in a LOR to be signed by the applicant, OPRHP, LPC, and RIOC.

C. TRANSPORTATION

TRAFFIC

As discussed in Chapter 14, "Transportation," and Chapter 22, "Mitigation," the proposed project would result in significant adverse traffic impacts at locations within the traffic study area. Most of the locations that would be significantly impacted could be mitigated using standard traffic improvements, such as signal timing and phasing changes, installation of new traffic signals, parking regulation changes to gain or widen a travel lane at key intersections, and lane restriping.

Under the Phase 1-2018 With Action condition, one of the 14 study locations—the intersection of Broadway and Vernon Boulevard/11th Street—would experience unmitigatable impacts in the AM peak hour only.

Under the Full Build – 2038 With Action condition, five of the 14 study locations would experience unmitigatable impacts during the AM peak hour and four study locations would experience unmitigatable impacts during the midday and PM peak hours. The intersections of 36th Avenue/Roosevelt Island Bridge and Vernon Boulevard, Broadway and 21st Street, Broadway and Vernon Boulevard/11th Street, and Hoyt Avenue North and 21st Street would experience unmitigatable impacts during the AM, midday and PM peak hours. Thirtieth Avenue and 21st Street would experience an unmitigatable impact during the AM peak hour only. Significant impacts at these unmitigated intersections are described in detail in Chapter 22, "Mitigation."

These impacts are currently identified as unmitigatable, but additional review of potential mitigation measures that may fully or partially mitigate these significant impacts will be undertaken for the Final Environmental Impact Statement (EIS).

PEDESTRIANS

As discussed in Chapter 14, "Transportation," the proposed project would result in significant adverse pedestrian impacts under Full Build-2038 conditions at the following locations on West Road and West Main Street:

- West Road: The east sidewalk between West Main Street and the subway station; and
- West Main Street: The east sidewalk between the Tram Station West bus stop and the Queensboro Bridge.

Sidewalk widenings at both these locations to increase the effective sidewalk width would fully mitigate these impacts. However, in the event the sidewalk widening was determined to be infeasible, the projected pedestrian impacts would remain unmitigated.

D. CONSTRUCTION

TRANSPORTATION

TRAFFIC

During construction, one of the seven study locations would experience unmitigatable impacts in the AM peak hour and two study locations would experience unmitigatable impacts during the

PM peak hour. During the AM and PM construction peak hours, 36th Avenue/Roosevelt Island Bridge and Vernon Boulevard would experience unmitigatable impacts. During the PM construction peak hour, Broadway and 21st Street would experience unmitigatable impacts. The impacts at these unmitigated intersections are described in detail in Chapter 20, "Construction." These impacts are currently unmitigatable, but additional review of potential mitigation measures that may fully or partially mitigate these significant impacts will be undertaken for the Final EIS.

PEDESTRIANS

The potential pedestrian impacts projected to occur under Full Build-2038 conditions on West Road and West Main Street (described above) could potentially occur earlier during construction of Phase 2 of the project. Sidewalk widenings at both these locations to increase the effective sidewalk width would fully mitigate these impacts. However, in the event the sidewalk widening was determined to be infeasible, the projected pedestrian impacts would remain unmitigated.

NOISE IMPACTS ON OPEN SPACE

Construction of the proposed project would result in significant adverse impacts with respect to construction noise, as follows:

- During construction of Phase 1, the open space areas along Main Street would experience noise level increments resulting from construction traffic up to 6.2 dBA and would therefore experience exceedances due to trucks and workers travelling on Main Street to and from the project site during the AM construction traffic peak hour (6 to 7 AM);
- During construction of Phase 2, South Point Park and the waterfront promenades on the east and west sides of the Island adjacent to the project site would experience noise levels in the mid to high 70s of dBA for over 24 months. These exceedances would be due to the operation of on-site construction equipment.

There are no practical and feasible mitigation measures that could be implemented to reduce noise levels to below the 55 dBA $L_{10(1)}$ guideline within any of the open space areas (i.e., the open spaces along Main Street, the waterfront promenade, or South Point Park). Noise levels in these spaces would exceed the 55 dBA $L_{10(1)}$ noise level recommended for outdoor areas requiring serenity and quiet by the June 2012 *City Environmental Quality Review (CEQR) Technical Manual* noise exposure guidelines. However, while the 55 dBA $L_{10(1)}$ guideline is a worthwhile goal for outdoor areas requiring serenity and quiet, due to the level of activity present at most New York City open space areas and parks (except for areas far away from traffic and other typical urban activities) this relatively low noise level is often not achieved. For example, existing noise levels at the waterfront promenade and South Point Park are already above the 55 dBA $L_{10(1)}$ guideline due to noise from vehicular traffic on the Queensboro Bridge and on the FDR Drive. To achieve noise levels that would meet the 55 dBA $L_{10(1)}$ guideline, measures would need to be implemented to control noise from the Queensboro Bridge; the implementation of barriers on the bridge would not be possible because of the bridge's landmarked status.