Chapter 18: Mitigation

This chapter considers mitigation measures to address potential significant adverse impacts resulting from the proposed Lenox Hill Hospital (LHH) Redevelopment project (the Proposed Project).

As described in Chapter 1, "Project Description," Lenox Hill Hospital (the Applicant) is requesting a series of discretionary actions from the City Planning Commission (CPC) to facilitate the enlargement and modernization of the existing LHH on Block 1411, Lots 1 and 113 (Projected Development Site 1), bounded by Park and Lexington Avenues and East 76th and East 77th Streets in Manhattan. The Proposed Project would include a new building fronting on Lexington Avenue, as well as additions and modifications to portions of the existing hospital complex on Projected Development Site 1 and connections between the new hospital building and the renovated buildings. Two building envelopes are proposed, each of which would accommodate the Proposed Project's program. Envelope 1 would include a new approximately 771,000-gross-square-foot (gsf) building on Lexington Avenue and 56,000 gsf of additions to the existing hospital. Envelope 2 would include a new approximately 867,000-gsf building and 8,000 gsf of additions to the existing hospital. With the existing buildings to remain, the overall gross floor area of the Proposed Project on Projected Development Site 1 would be approximately 1.4 million gsf with either envelope. The program, project population (staff, patients, visitors), site access, zoning actions, and construction duration would be the same for both Envelope 1 and Envelope 2.

This Environmental Impact Statement (EIS) also considers the as-of-right development of a building with hospital support functions at 111-115 East 77th Street between Lexington and Park Avenues (Block 1412, Lots 9, 10, and 11) (Projected Development Site 1a) as part of the Proposed Project. It would be connected to Projected Development Site 1 by a utility tunnel under East 77th Street. In addition, the Applicant proposes to provide improvements to the 77th Street subway station of the Lexington Avenue (No. 6) line, providing Americans with Disabilities Act (ADA) access to the downtown platform and improving sidewalk conditions in the immediate area.

As summarized in Chapter 4, "Shadows," the Proposed Project with either Envelope 1 or Envelope 2 would cast new shadows on the Eighth Church of Christ, Scientist causing significant adverse impacts to the vegetation of the garden. As described in Chapter 17, "Alternatives, the significant adverse shadow impacts to the church garden would be unavoidable and no alternative that would avoid a significant adverse shadow impact and meet the Proposed Project's purpose and need exists. Potential mitigation measures are being explored and will be refined between the Draft EIS (DEIS) and Final EIS (FEIS).

As described in Chapter 16, "Construction," the Proposed Project with either Envelope 1 or Envelope 2 would result in temporary significant adverse impacts related to construction noise on the façades of certain adjacent residential buildings and various portions of LHH. Mitigation measures have been identified to address these significant adverse impacts where feasible and practicable. As discussed below, partial mitigation is proposed for some of the temporary significant adverse construction noise impacts of the Proposed Project.

A. SHADOWS

As summarized in Chapter 4, "Shadows," the Proposed Project with either Envelope 1 or Envelope 2 would cast new shadows on the Eighth Church of Christ, Scientist garden located across the street from Projected Development Site 1 and abutting Projected Development Site 1a, in the spring, summer, and fall, causing significant adverse impacts to the vegetation of the garden. The garden is mostly shaded in existing conditions, with some low level and dappled sunlight filtered through shade tolerant trees. The mature planting beds include shade tolerant, perennial species including hosta, ivy, pee-wee, boxwoods, and hydrangeas. The brick perimeter wall at the back of the garden has cascading Boston ivy, a strong shade tolerant species.

An alternative to reduce the shadow impact has been considered in Chapter 17, "Alternatives"; the analysis concluded that virtually any development on Proposed Development Sites 1 or 1a that would be taller than the existing buildings would cause significant adverse shadow impacts on the March 21/September 21 analysis day. Therefore, shadow impacts to the church garden would be unavoidable and no alternative that would avoid a significant adverse shadow impact and meet the Proposed Project's purpose and need exists. Potential mitigation measures are being explored and will be refined between the DEIS and FEIS.

B. CONSTRUCTION NOISE

As discussed in Chapter 16, "Construction," the Proposed Project's construction activities with either Envelope 1 or Envelope 2 would result in temporary significant adverse impacts related to noise. The construction noise analysis for Envelope 1 predicted that noise levels due to construction could exceed the construction noise impact criteria at 16 receptors surrounding the proposed construction work area. Noise levels due to construction with Envelope 2 could exceed the impact criteria at 14 receptors, most but not all of which are the same receptors as with Envelope 1. At these receptors, construction would produce noise level increases that would be noticeable and potentially intrusive during the most noise-intensive nearby construction activities; however, the predicted maximum levels would not persist throughout construction, and the noise levels would fluctuate over the course of the construction period. Even so, these locations would experience construction noise levels whose magnitude and duration could constitute temporary significant adverse impacts, as shown in Figure 16-37.

However, construction would typically occur during weekday daytime hours and would therefore not produce noise during nighttime hours when residents would be most sensitive to noise. Further, construction with either envelope would comply with New York City (NYC) Noise Control Code regulations, as well as commit to the use of lower noise emission limits for select pieces of equipment, additional shielding for Stage 2 concrete operations and along East 76th Street, and use of existing Con Edison power in lieu of a generator during Stage 3 construction. Specific noise control measures would be incorporated in noise mitigation plan(s) required under the NYC Noise Control Code. These measures would include a variety of source and path controls. The results of the construction noise analysis presented in Chapter 16, "Construction," assume that each of the measures described below would be implemented.

The control measures listed below would be implemented as Project Components Related to the Environment (PCREs) beyond NYC regulations for the construction of the Proposed Project with either Envelope 1 or Envelope 2:

- As shown in Chapter 16, "Construction" Table 16-21, equipment such as compressors and impact wrenches would be required to meet the mandated noise levels to be used for construction of the Proposed Project.
- Pile installation and foundation elements would be constructed by drilling rather than impact driving.
- In lieu of a generator, power during Stage 3 construction would be drawn from the existing Con Edison grid.
- Throughout the construction period, concrete operations would be located within the construction barrier.
- During Stages 2 and 3 of construction, noise barriers along East 76th Street would be 12 feet tall and cantilevered towards the work area, and 8 feet tall along any remaining perimeter.

Mitigation measures to control noise at the receptors predicted to experience impacts would also be offered during construction of the Proposed Project. While some of the impacted buildings feature modern façade construction, including insulated glass windows and an alternative means of ventilation that would allow for the maintenance of a closed-window condition, it is not possible to definitively determine the presence of these features at all receptors that would have the potential to experience temporary significant adverse construction noise impacts. As described in Chapter 16, "Construction," under Envelope 1, the northern façade of 122 East 76th Street, the northern façade of 114-118 East 76th Street, the northern façade of 1068 Lexington Avenue, the southern and western façades of 117 East 77th Street, the southern façades of 110-122 East 76th Street, and the northern, eastern, and southern façades of LHH buildings are predicted to experience a temporary significant adverse construction noise impact. Also as described in Chapter 16, "Construction," under Envelope 2, the northern façades of 122 East 76th Street, the northern façade of 110-118 East 76th Street, the northern façade of 1068 Lexington Avenue, the southern and western façades of 117 East 77th Street, the southern façades of 110-122 East 76th Street, and the northern, eastern, and southern façades of LHH buildings are predicted to experience a temporary significant adverse construction noise impact. As a mitigation measure at building façades that are predicted to experience temporary significant adverse construction noise impacts, the Applicant would offer to provide and install storm windows for the above façades that do not already have insulated glass windows and/or one window air conditioner per living room, bedroom, patient room, or any other noise sensitive space that does not already have an alternative means of ventilation. These mitigation measures would be implemented prior to the start of construction. Building façades with insulated glass windows or storm windows and alternative ventilation would provide sound attenuation such that even during warm weather conditions, interior noise levels would be approximately 30 dBA less than exterior noise levels. However, the most noise-intensive construction activity nearest the receptors experiencing significant adverse impacts would result in interior noise levels greater than the level considered acceptable according to the 2021 *City Environmental Quality Review* (*CEQR) Technical Manual* noise exposure guidelines, and none of the identified significant adverse construction noise impacts would be fully mitigated. Consequently, the temporary construction noise impacts predicted to occur at the above-mentioned receptors would be only partially mitigated and thus unavoidable, as discussed in Chapter 19, "Unavoidable Adverse Impacts." ✷