Chapter 23: Unavoidable Significant Adverse Impacts

A. INTRODUCTION

According to the *New York City Environmental Quality Review (CEQR) Technical Manual,* unavoidable adverse impacts are disclosed when a proposed action or project is expected to result in significant adverse impacts for which there are no reasonable or practical mitigation measures. As described in Chapter 21, "Mitigation," the potential significant adverse impacts of the proposed actions could be avoided or mitigated by implementing a number of measures. However, there are two impact areas, described below, for which mitigation may not be feasible.

B. SHADOWS

The analysis in Chapter 6, "Shadows," concluded that between 7:00 AM and 9:00 AM on June 21, incremental shadow would fall across some of the windows on the north façade of the Church of Saint Paul the Apostle. The total duration of incremental shadow would be two hours. For about 45 minutes of this period no sunlight would fall on the windows due to a combination of incremental and existing shadow; for an additional 30 minutes of this period only one window would receive direct sunlight. The incremental shadow would therefore cause a significant adverse impact on the north windows of the church and apse on the June 21 analysis day. On the May 6/August 6 analysis day the impact would be less substantial—only 30 minutes of incremental shadow—and on the other two analysis days there would not be any incremental shadow. With the contemplated modifications to the proposed action, there would be a slight reduction in the extent of the shadow. However, the significant adverse impact would not be eliminated. Other potential mitigation measures would include artificial lighting of those windows in the summer when sunlight would otherwise reach these north-facing windows. Given the context of the church complex as a whole, this mitigation measure does not seem particularly practical. Therefore, in the absence of mitigation, this would remain an unavoidable adverse impact.

The analysis in Chapter 6 also concluded that there would be significant adverse impacts on Damrosch Park and the Grove. The proposed action would add areas of new shadow to Damrosch Park on the March 21/September 21 and the December 21 analysis days. The additional areas of incremental shadow would fall in the late morning and early afternoon affecting primarily the seating areas and vegetation on the eastern side of the park. Overall, the full 2032 buildout of the proposed action would substantially reduce sunlight to Damrosch Park in the fall, winter and early spring, resulting in a significant adverse impact to this space. The health of the London plane trees and maples of the park might also be affected in the spring.

In 2032 with the full buildout, incremental shadow would fall on various sections of Lincoln Center Plaza throughout the year, with durations ranging from three to four hours depending on season. These durations would be attributed in large part to proposed buildings on the eastern end of the Fordham campus casting new shadow on the Grove. Phase II development would add approximately four hours of new shadow on this part of the Lincoln Center open space in the

spring, summer and fall, and nearly two hours in the winter, and would therefore cause a significant adverse impact to this space.

Representatives of the New York City Department of Parks and Recreation (DPR) and Fordham University have been meeting and are continuing to discuss potential mitigation measures for significant adverse shadow impact on Damrosch Park that is projected with full development of Phase II. Representatives of Lincoln Center have advised that they do not wish to address the issue of plant sensitivity at the Grove at this time, because of the long period of time that will elapse until construction of Phase II. If Fordham, DPR, and Lincoln Center do not ultimately reach agreement on implementation of mitigation measures, the increase in shadows would be considered an unavoidable significant adverse impact on Damrosch Park and the Grove.

C. NOISE DURING CONSTRUCTION

The only residential location where significant noise impacts are predicted to occur is at the Alfred, which has double-glazed windows and central air conditioning (i.e., alternative ventilation). Consequently, even during warm weather conditions, interior noise levels would be approximately 30-35 dBA less than exterior noise levels. The double-glazed windows and alternative ventilation at this residential structure would provide a significant amount of sound attenuation, and would result in interior noise levels during much of the time that are below 45 dBA L_{10} (the CEQR acceptable interior noise level criteria). However, at the terraces on all four façades of The Alfred, the highest $L_{10(1)}$ noise levels would range from approximately 76 to 82 dBA during some peak periods of construction activity. Even though this residence has double-glazed windows and alternative ventilation (i.e., central air conditioning) which would reduce interior noise levels by approximately 30-35 dBA, during some limited daytime time periods construction activities would result in interior noise levels that would be above the 45 dBA L_{10} noise level recommended by CEQR for residences and result in significant adverse noise impacts.

In addition, while noise levels at the residential terraces at The Alfred currently exceed the CEQR acceptable range (55 dBA L_{10}) for an outdoor area requiring serenity and quiet (see Appendix C.3 for existing noise levels at Receptors A, A1, A2, A3 and A4), during the weekday daytime time periods identified above when construction activities are predicted to significantly increase noise levels, construction activities would exacerbate these exceedances and result in significant adverse noise impacts at the terraces at The Alfred.

Consequently, the proposed action would have unmitigated significant noise impacts at the locations specified above for limited periods of time. ✷