Chapter 14: Public Health

A. INTRODUCTION

This chapter assesses the potential for the Proposed Project to affect public health. As defined by the 2021 *City Environmental Quality Review (CEQR) Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability, and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on human health may occur as a result of a Proposed Project and, if so, to identify measures to mitigate such effects. The potential effects of the Proposed Project were considered with regard to effects on the surrounding community.

The *CEQR Technical Manual* states that a public health assessment is warranted for a specific technical area if there is a significant adverse impact found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. As described in the relevant analyses of this Environmental Impact Statement (EIS), upon completion of construction, the Proposed Project would not result in significant unmitigated adverse impacts in any of the technical areas related to public health. However, as identified in Chapter 16, "Construction," construction of the Proposed Project has the potential to result in construction noise levels that exceed *CEQR Technical Manual* construction noise screening thresholds for an extended period of time or the additional construction noise impact criteria defined by CEQR at receptors near the Development Site. Therefore, this chapter provides a public health assessment of construction-period noise at these locations.

PRINCIPAL CONCLUSIONS

The analyses presented in this EIS concluded that the Proposed Project would not result in unmitigated significant adverse impacts in the areas of air quality, water quality, hazardous materials, or operational noise. The analysis presented in Chapter 16, "Construction," determined that construction activities would result in unmitigated significant adverse construction-period noise impacts at receptors adjacent to the Proposed Project's work areas. However, construction of the Proposed Project would not result in chronic exposure to high levels of noise, prolonged exposure to noise levels above 85 dBA, or episodic and unpredictable exposure to short-term impacts of noise at high decibel levels, as per the *CEQR Technical Manual*. Consequently, construction of the Proposed Project would not result in a significant adverse public health impact.

B. METHODOLOGY

The construction noise analysis presented in Chapter 16, "Construction," was used to identify the extent of the potential construction-period noise exposure to the public as a result of the Proposed Project. The *CEQR Technical Manual* thresholds for construction noise are based on quality-of-life considerations. In this chapter, the potential for the construction-period noise exposure identified in Chapter 16,

"Construction," to affect the health of the affected population is evaluated based on relevant health-based noise criteria. These criteria as identified in the *CEQR Technical Manual*, include chronic exposure to high levels of noise, prolonged exposure to noise levels above 85 dBA, and episodic and unpredictable exposure to short-term impacts of noise at high decibel levels.

C. PUBLIC HEALTH ASSESSMENT

Construction of the Proposed Project would be required to follow the New York City Noise Control Code, which requires the implementation of construction noise control measures. Additionally, the Proposed Project would include construction noise control measures beyond those required by the Code. Specific noise control measures would be incorporated in noise mitigation plan(s) required under the New York City Noise Code. These measures could include a variety of source controls (i.e., reducing noise levels at the source or during the most sensitive construction time periods) and path controls (e.g., placement of equipment, implementation of barriers or enclosures between equipment and sensitive receptors).

Even with the implementation of these noise control measures, the analysis presented in Chapter 16, "Construction," concluded that construction of the Proposed Project has the potential to result in construction noise levels that exceed the *CEQR Technical Manual* construction noise screening threshold for an extended period of time or the CEQR construction noise impact criteria at receptors near the proposed Development Site, including the northwest corner of 1213 York Avenue residential building; the north façade of the 434 East 66th Street residential building; the northern façades of the 436 and 438 East 66th Street residential buildings; and the eastern and southeastern façades of the 425 East 66th Street research building.

At these receptors, construction could produce noise level increases that would be noticeable and potentially intrusive during the most noise-intensive nearby construction activities and would produce noticeable increases over the course of construction. While the greatest levels of construction noise would not persist throughout construction, and the noise levels would fluctuate resulting in noise increases that would be intermittent, these locations would experience construction noise levels whose magnitude and duration could constitute significant adverse construction noise impacts.

Although the *CEQR Technical Manual* thresholds for significant adverse construction noise impacts are predicted to be exceeded at certain locations during construction, these exceedances would not constitute a significant adverse public health impact. An impact found pursuant to a quality-of-life framework (i.e., a significant adverse construction noise impact) does not necessarily indicate that an impact would occur when the analysis area is evaluated in terms of public health (i.e., a significant adverse public health impact).

CHRONIC EXPOSURE TO HIGH LEVELS OF NOISE

The predicted construction-period noise impacts identified and described in Chapter 16, "Construction," would not constitute chronic exposure to high levels of noise because of the temporary and intermittent nature of construction-period noise. The maximum predicted construction noise levels associated with the Proposed Project would occur over a limited duration during the construction period based on the amount and type of construction work occurring in the construction work areas. The activity that would generate the highest noise levels, i.e., sitework, is expected to occur for approximately seven months. Further, construction activity would typically be limited to the typical construction shift of 7 AM to 3 PM, leaving the remainder

of the day and the evening unaffected by construction noise. Since the construction noise would fluctuate in level and would not occur constantly throughout the construction period, which itself is limited in duration, construction noise would not be described as "chronic." Therefore, construction associated with the Proposed Actions would not have the potential to result in chronic exposure to high levels of noise.

PROLONGED EXPOSURE TO NOISE LEVELS ABOVE 85 DBA

The maximum short-term noise impact resulting from construction of the Proposed Project would not exceed an $L_{eq(1)}$ of 85 dBA during peak construction periods at any of the analyzed receptors (see **Appendix D** for predicted $L_{eq(1)}$ noise levels at each receptor during each phase of construction). Additionally, each of the receptors at which significant adverse construction noise impacts were predicted to occur represent indoor uses (i.e., not open space), and the building façade at each receptor would consequently offer further reductions in noise exposure for the occupants of these spaces. Therefore, construction of the Proposed Project would not have the potential to result in prolonged exposure to noise levels above 85 dBA at any of these receptor locations or others in the study area.

UNPREDICTABLE EXPOSURE TO SHORT-TERM HIGH NOISE LEVELS

Based on the predicted noise levels described in Chapter 16, "Construction," construction associated with the Proposed Project is not expected to result in unpredictable exposure to short-term impacts of noise at high decibel levels, as per the *CEQR Technical Manual*. The maximum short-term noise impact resulting from construction of the Proposed Project would not exceed 85 dBA during peak construction periods at any of the analyzed receptors. Because exterior $L_{eq(1)}$ noise levels would not exceed the acceptable 85 dBA threshold at the other receptors, and because construction noise at the most sensitive receptors (i.e., the residences) would not occur during the nighttime when residences are most sensitive to noise, predicted noise levels due to construction of the Proposed Project would not constitute unpredictable exposure to short-term impacts of noise at high decibel levels at these receptors. ✷