A. INTRODUCTION

This section assesses the proposed project's effect on public health. As defined by the 2014 *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.

According to the *CEQR Technical Manual*, for most proposed projects, a public health analysis is not necessary. Where no significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise, a public health analysis is not warranted. If an unmitigated significant adverse impact is identified in one of these analysis areas, the lead agency may determine that a public health assessment is warranted for that specific technical area. This assessment represents a distinct layer of inquiry; as its criteria are informed by public health considerations and are therefore different from the criteria that trigger the need to conduct a public health assessment.

As described in the relevant analyses of this DEIS, upon completion of construction, the proposed project at the Brooklyn Site would not result in significant adverse impacts in any of the technical areas related to public health. However, as described in Section 3.14, "Construction," construction activities for the proposed project could potentially result in unmitigated significant adverse noise impacts. This significant adverse noise impact would be temporary as it is due to construction of the proposed project.

PRINCIPAL CONCLUSIONS

The proposed project would not result in significant adverse public health impacts. As described in the relevant analyses of this DEIS, the proposed project would not result in unmitigated significant adverse impacts in the areas of air quality, operational noise, water quality, or hazardous materials. However, as discussed in Section 3.14, "Construction," the proposed project could result in temporary unmitigated construction noise impacts, as defined by *CEQR Technical Manual* thresholds at Kings County Criminal Court and a residential building at 239 State Street. As such, it was determined that a public health assessment of construction noise was appropriate. The assessment was conducted, and for the reasons discussed below, it was determined that the construction noise impact would not constitute a significant adverse public health impact.

B. METHODOLOGY

The construction noise analysis presented in Section 3.14, "Construction," identified the extent of the potential noise exposure to the public as a result of construction of the proposed project. At locations and during times where either noise analysis determined the potential for significant adverse noise impacts, the projected noise effects were examined further to determine whether

they would constitute significant adverse impacts to public health. The *CEQR Technical Manual* thresholds for noise exposure and construction noise impacts are based on quality of life considerations and not on public health considerations. The potential noise exposure identified in Section 3.14, "Construction" was evaluated for its potential to impact the health of the affected population by comparing it with the relevant health-based noise criteria as described in the *CEQR Technical Manual*, which identifies chronic exposure to high levels of noise, prolonged exposure to noise levels above 85 dBA (the *CEQR Technical Manual* recommended threshold for potential hearing loss), and episodic and unpredictable exposure to short-term impacts of noise at high decibel levels of concern for public health effects.

C. PUBLIC HEALTH ASSESSMENT

Construction of the proposed project would include noise control measures as required by the *New York City Noise Control Code.* These measures include a variety of source (i.e., reducing noise levels at the source or during the most sensitive time periods) and path (e.g., placement of equipment, implementation of barriers or enclosures between equipment and sensitive receptors) controls. Even with these noise control measures, the analysis presented in Section 3.14, "Construction," found that predicted noise levels due to construction-related activities would result in noise levels at receptors at Kings County Criminal Court and a residential building at 239 State Street that would constitute potential significant adverse impacts. These significant adverse noise impacts would be temporary as they are due to construction of the proposed project.

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. As discussed above, the *CEQR Technical Manual* thresholds for construction noise are based on quality of life considerations and not on public health considerations. An impact found pursuant to a quality of life framework (i.e., significant adverse construction noise impact) does not definitively imply that an impact will exist when the analysis area is evaluated in terms of public health (i.e., significant adverse public health impact).

The predicted noise impacts identified would not constitute chronic exposure to high levels of noise because of the short term and intermittent nature of construction noise as described in Section 3.14, "Construction." The maximum predicted construction noise levels occur over a limited duration during the construction period based on the amount and type of construction work occurring in the construction work areas. Furthermore, construction activity would typically be limited to a single shift during the day with limited exceptions that would require variances from the New York City Department of Buildings, 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, it would not be described as "chronic." Consequently, construction of the proposed project would not have the potential to result in chronic exposure to high levels of noise.

The predicted absolute noise levels would be below the threshold for potential hearing loss of 85 dBA at all analyzed receptors. Based on the predicted noise levels described in Section 3.14, "Construction," it is also not expected that construction of the proposed project would result in unpredictable exposure to short-term impacts of noise at high decibel levels. Because of the limited magnitude by which interior noise levels would exceed the acceptable threshold at residential receptors and construction noise 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.

Additionally, the predicted noise exposure for occupants of the buildings that could experience potentially significant adverse construction noise impacts would depend on the amount of façade noise attenuation provided by the buildings. The façade noise attenuation is a factor of the building façade construction as well as whether the building's windows can remain closed. Buildings that have an alternate means of ventilation (e.g., some form of air conditioning) are assumed to be able to maintain a closed-window condition, which results in a higher level of façade noise attenuation.

Since, as described above, the noise would not be chronic, and would not exceed the threshold of short-term high decibel levels, the predicted noise resulting from construction of the proposed project would not constitute a potential significant adverse public health impact. Therefore, there would not be significant adverse public health impacts due to construction of the proposed project. ✷