

West 108th Street WSFSSH Development

Chapter 13: Mitigation

A. INTRODUCTION

As detailed in Chapter 1, “Project Description,” the City of New York – Department of Housing Preservation and Development (HPD) and the project sponsor, the West Side Federation for Senior and Supportive Housing (WSFSSH), as co-applicants, are seeking approval for several discretionary actions to facilitate the development of an estimated combined ~~28177~~ affordable units, an approximately 31,000 gross square foot (gsf) transitional housing facility for older adults with 110 shelter beds, and approximately 6,400 gsf of community facility space in the Project Area (the “Proposed Project”).

In accordance with the *City Environmental Quality Review (CEQR) Technical Manual*, where significant adverse impacts are identified, mitigation measures to reduce or eliminate the impacts to the fullest extent practicable are developed and evaluated. ~~This chapter~~The DEIS identified potential mitigation measures to address significant adverse impacts generated by the Proposed Project. ~~Mitigation measures, which were~~will continue to be evaluated between the DEIS and FEIS. Therefore, the FEIS ~~may~~includes additional information on feasible and practicable mitigation measures to address significant adverse impacts of the Proposed Project.

The Proposed Project has the potential to result in significant adverse construction noise impacts. ~~Potential~~Mitigation measures for the identified significant adverse impact are identified below.

B. PRINCIPAL CONCLUSIONS

As described in greater detail in Chapter 12, “Construction,” in addition to deploying standard noise control measures required pursuant to the New York City Noise Control Code, the project sponsor will provide a temporary fifteen-foot perimeter noise wall as a special noise control measure as part of the Proposed Project. While these measures would serve to reduce noise levels and were incorporated into the detailed analysis, the detailed construction noise analysis presented in Chapter 12 found that predicted noise levels due to construction-related activities associated with the Proposed Project would still result in potentially significant adverse noise impacts to adjoining residential buildings (along West 109th Street and Amsterdam and Columbus avenues) on a temporary basis during portions of the construction period. Potential noise mitigation measures—~~including voluntary outreach efforts by the project sponsor to improve window/wall attenuation for identified sensitive receptors, continuous construction noise monitoring, and enhanced community outreach and coordination with regard to the construction schedule and anticipated high noise periods~~—were explored and will continue to be evaluated between the DEIS and FEIS, and the project sponsor has committed to the following partial mitigation measures: the offer of AC units to impacted residential units, continuous construction noise monitoring, and enhanced community outreach and coordination with regard to the construction schedule and anticipated high noise periods. A final description of construction noise mitigation measures will be presented in the FEIS, taking into consideration public comments received on the potential measures discussed in the DEIS and the feasibility and practicability of such measures. ~~While t~~The incorporation of feasible and practicable the above-listed

mitigation measures (to be enforced through the Land Disposition Agreement (LDA) between the City of New York – Department of Housing Preservation and Development (HPD) and the project sponsor) will substantially reduce construction noise exposure, ~~but it~~ is not expected to eliminate the significant adverse impact; therefore construction noise is considered an unavoidable significant adverse impact and is discussed in Chapter 15, “Unavoidable Adverse Impacts.”

C. CONSTRUCTION NOISE

As described in greater detail in Chapter 12, “Construction,” in addition to standard noise control measures required pursuant to the New York City Noise Control Code (including a variety of source and path controls, such as ensuring that all equipment employs the manufacturer’s appropriate noise reduction device(s) and that construction devices with internal combustion engines keep their engine’s housing doors closed, covering portable noise-generating equipment with noise-insulating fabric, preventing vehicle engine idling on-site, etc.) the project sponsor will provide a temporary fifteen-foot perimeter noise wall as a noise control measure. The noise wall would serve to considerably reduce noise exposure, particularly at ground level. However, ~~while~~ these measures would be effective to reduce noise levels, the detailed construction noise analysis presented in Chapter 12 found that predicted noise levels due to construction-related activities associated with the Proposed Project would still result in potentially significant adverse noise impacts to adjoining residential buildings (along West 109th Street and Amsterdam and Columbus avenues). No significant adverse construction noise impacts would occur to the Booker T. Washington Middle School or area open spaces. Similarly, no significant impact was predicted for the impact of Building 2 construction on the occupied Building 1.

The following sections discuss mitigation options for the residential buildings where construction noise impacts were identified that would supplement the above described measures incorporated in the construction noise modeling. Construction noise mitigation measures discussed in this section ~~will continue to be~~ evaluated and finalized between the DEIS and FEIS. ~~A final description of construction noise mitigation measures will be presented in the FEIS,~~ taking into consideration public comments received on the potential measures discussed in the DEIS. The incorporation of ~~feasible practicable~~ the mitigation measures described below would ~~can~~ serve to further reduce construction noise exposure, but is not expected to eliminate the significant adverse impact; therefore, construction noise is considered an unavoidable significant adverse impact and is discussed in Chapter 15, “Unavoidable Adverse Impacts.”

Window/Wall Attenuation Improvements

During the construction of Building 1, significant adverse construction noise impacts are anticipated on at least one floor of the following locations: 124, 126, 132, 134, 136, 138, 140, 142, 144, 170, and 172 West 109th Street and 973, 981, 983, 985, and 987 Amsterdam Avenue. At these locations, residential interior noise levels could exceed 45 dBA intermittently during Building 1’s 28-month construction period, and during the peak of construction activity could involve an exceedance of 45 dBA by ten dBA or more. During the construction of Building 2, significant adverse construction noise impacts are anticipated on at least one floor of the following locations: 102, 106, 110, and 114 West 109th Street and 980 Columbus Avenue. At these locations, residential interior noise levels could exceed 45 dBA intermittently during Building 1’s 22-month construction period, and during the peak of construction activity could involve an exceedance of 45 dBA by ten dBA or more. It should also be noted that, while the representative construction equipment mix for each modeled month was conservatively used to estimate the overall duration of

impacts, by its very nature, construction noise varies substantially day to day depending on the specific work activities being undertaken. The predicted elevated noise levels due to construction would occur intermittently during the construction period. Noise levels during certain periods would be lower than the worst-case noise levels determined as part of the construction noise analysis; and outside of the construction work hours, when residents are more likely to be at home and (when residences would be most sensitive to noise), these receptors would not experience elevated noise levels as a result of construction.

Based on a pedestrian field review, the majority of the residential buildings affected appear to have standard double-paned windows and window air conditioning (AC) units, rather than central heating ventilation and air conditioning (HVAC) systems, and the above results assume their use to provide a level of exterior to interior noise attenuation during warm weather when windows would otherwise be opened for ventilation. Absent the use of a window AC, interior noise levels would be higher than described above.

Between the DEIS and FEIS, an additional field survey ~~will be~~was conducted to confirm the presence of operable window AC units in impacted residential units. Based on the estimated number of units that lack a functional window AC, the ~~feasibility of a program under which the project sponsor would~~has committed to provide offering window ACs to those units ~~to those units~~, upon request, ~~will be evaluated~~.

However, as the use of window ACs would not completely eliminate the significant adverse impact, unmitigated significant adverse construction impacts could occur.

Construction Noise Monitoring

A construction noise monitoring program is a potential mitigation measure that would aid in the identification and proactive resolution of noise exposure issues. For example, monitoring can help identify a specific piece of equipment requiring additional maintenance due to unexpectedly high noise levels or a problem with the effectiveness of a temporary noise barrier requiring corrective action. Noise monitoring is an adaptive management approach that cannot be quantitatively modeled, but would meaningfully contribute to minimizing community exposure to construction noise. A detailed monitoring protocol ~~would need to be~~was developed between the DEIS and FEIS, which is included in Appendix V. The noise monitoring protocol ~~to~~ specifies the location(s) of noise monitoring during different construction phases, as well as the construction noise action levels triggering additional investigation or changes in the construction approach. ~~Sophisticated commercial monitoring equipment packages are available that could make the monitoring data accessible to the project sponsor and contractor online and provide automatic notification if preset thresholds are exceeded.~~

As presented in Appendix V, the project sponsor will conduct continuous noise monitoring from the start of demolition until substantial completion of the superstructure and window/walls, to capture noise levels during the noisiest phases of construction. Two noise monitors would be utilized throughout each building's construction: one to monitor noise levels at Booker T. Washington Middle School and a second to monitor noise levels at adjacent residential buildings. Three "action" noise threshold values will be used to assess the effectiveness of mitigation during construction: a "warning" noise threshold of 80 dBA L_{eq} , a "temporary halt" noise threshold of 85 dBA L_{eq} , and a "stop work" noise threshold of 90 dBA L_{eq} . If the warning noise threshold is exceeded, the cause will be investigated; if the noise is due to construction activity, mitigation measures (e.g., movable sound curtain, moving equipment) would be initiated and or verified to ensure that they are optimized for noise mitigation. If the temporary halt noise threshold is exceeded, then would be temporarily halted while the apparent cause is investigation and corrections are

made. Lastly, if the stop work noise level is exceeded, then a review of the cause would immediately be investigation, construction activity responsible for the exceedance would stop, the effectiveness of the implemented mitigation measures would be reviewed, and additional mitigation measures would be implemented. The results of the monitored data would be reviewed by the resident engineer on a daily basis when exceedances of monitoring thresholds are recorded.

Enhanced Community Outreach

Even though it does not directly reduce construction noise levels, providing the affected residences/institutions information on the Proposed Project' construction and when to expect elevated noise levels associated with its construction can be effective in helping to manage construction noise impacts. As described in Chapter 12, "Construction," the project sponsor has already committed to keep residents informed about the construction schedule through the establishment of a Construction Advisory Group (CAG) through Community Board (CB) 7. The CAG will be comprised of representatives of local stakeholders and the development team; ~~electd officials, the contractor, the project sponsor,~~ and City agencies would also be invited to attend. Based on preliminary discussions with CB 7, it is anticipated that area stakeholders would include representatives of adjacent residential properties, in addition to Booker T. Washington Middle School. The CAG will allow for review and comment on scheduling and construction issues for the Proposed Project, both through public meetings and other means of public comment. The CAG will review plans, monitor community impacts, and implement a communication system and notifications, including. ~~A potential additional mitigation measure could involve supplemental noise-specific outreach activities so that affected individuals can (1) plan around periods of particularly high noise levels; and (2) express concerns and direct complaints with a rapid response mechanism.~~ Potential ~~The~~ enhanced community outreach program that could be implemented through the CAG include one or more of the following:

- Targeted postcard mailings providing construction updates and advance notice of particularly noisy activities or night/weekend work;
- Project hotline for receiving construction-related noise and vibration complaints;
- Noise complaint tracking and rapid follow-up procedures; and/or
- Digital and internet communication.

This group will commence its activities just prior to the start of construction of the Proposed Project and will hold public meetings throughout the Proposed Project's construction during which the development team will present the work underway and anticipated near-time, the community would have opportunities to raise issues, and the CAG will follow up on the resolution to previous complaints/comments.