

City of Seattle

Department of Planning and Development

Diane M. Sugimura, Director

CITY OF SEATTLE

ANALYSIS AND DECISION OF THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND DEVELOPMENT

Major Public Project Construction Variance

Application: Request for a Major Public Project Construction Variance (“MPPCV”) from the maximum permissible sound level requirements of the Noise Control Code, Seattle Municipal Code (“SMC”) Chapter 25.08, during construction of the Northgate Link Extension (formerly known as North Link) Light Rail Tunnel and underground station box at the Roosevelt Station site. This variance application pertains only to the above-ground construction activities required to support tunneling and other below-ground operations that need to take place during nighttime hours, as those hours are defined in SMC 25.08.

Project No.: 3013221

Site Address: 6600 Roosevelt Way NE

Applicant: Central Puget Sound Regional Transit Authority (Sound Transit)

SUMMARY OF PROPOSED ACTION

The proposed action is related to Sound Transit’s Northgate Link Extension Light Rail Project, which consists of 4.3 miles of new light rail track extending from the UW Station to Northgate. The Project’s alignment is routed underground, elevated, and with surface configurations, with three stations: the U District Station (formerly known as the Brooklyn Station) in the University District, the Roosevelt Station in the Roosevelt commercial district, and the Northgate Station adjacent to the Northgate Park and Ride lot and Shopping Mall. The tunnel portion consists of 3.3 miles of twin-bored tunnels, which will extend from the UW Station through the proposed U District and Roosevelt Stations to the Maple Leaf Portal (formerly known as the North Portal), which would be located on the east side of the Interstate 5 (I-5) right-of-way. At the Maple Leaf Portal the light rail track alignment will transition from underground to a combination of approximately 1.0 mile of at-grade, retained cut and fill, and elevated structures within portions of the I-5 and City of Seattle rights-of-way, until it crosses over 1st Avenue NE near NE 100th Street. The alignment will continue in an elevated guideway along the western boundary of the King County Transit Center. The guideway would then cross over NE 103rd Street to its terminus at the above-ground Northgate Station located to the southwest of the Northgate Shopping Mall.

The proposed work at the Roosevelt Station Site (RSS) would be accomplished in four phases:

- Phase 1: Site set up, utility revisions, and site preparation, including site grading and paving;
- Phase 2: Installation of secant pile wall shoring system, station box excavation, tieback and internal bracing, groundwater pumping, and base slab pour;
- Phase 3: Assembly, testing, and launching of Tunnel Boring Machines, completion of twin bore tunnels from Roosevelt to UW Station, receive Tunnel Boring Machine (TBM) tunneling southbound from Maple Leaf Portal at Roosevelt, construction of tunnel cross passages and tunnel invert, final cleanup of tunnel;
- Phase 4: Receive south-bound TBM from Maple Leaf Portal, complete station concrete and finishes, complete station entrances and access, and install and test mechanical, electrical, and systems equipment.

Nighttime activity is not anticipated for Phases 1 and 4; any nighttime work during these phases will need to comply with Noise Ordinance standards. The Major Public Project Noise Variance covers activities scheduled for Phases 2 and 3.

On April 3, 2012, the applicant submitted a complete application for this MPPCV to DPD; a revised application was submitted on June 22. This MPPCV is requested pursuant to SMC 25.08.590 and 25.08.655 to allow construction noise generated on site to exceed the maximum permissible sound level during nighttime hours (between 10:00 p.m. and 7:00 a.m. on weekdays and between 10:00 p.m. and 9:00 a.m. on weekends and legal holidays) as specified in SMC 25.08.410 - 25.08.425. These provisions of the Code limit nighttime project sound levels (hourly L_{eq}) generated in Commercial districts to 47 dBA in Residential receiving districts and 60 dBA in Commercial receiving districts.

Based on the current anticipated construction schedule, Phase 2 and 3 construction activities are expected to extend over an approximate 45-month period, starting roughly in November 2013 and lasting until about August 2017. Sound Transit is requesting a 48-month variance starting from the date that nighttime construction activities commence on the site to allow for potential schedule delays.

BACKGROUND

It is the express intent of the City as stated in the Noise Control Code to "control the level of noise in a manner that promotes commerce; the use, value, and enjoyment of property; sleep and repose; and the quality of the environment." SMC 25.08.010. The standards for issuing a noise variance are stated in SMC 25.08.590, and the specific standards for issuing a MPPCV are stated in SMC 25.08.655. DPD's rules governing the issuance of noise variances are set forth in DR 3-2009.

The application materials submitted for this MPPCV identify the following activities that may occur during nighttime hours and may exceed the allowable nighttime construction noise limits:

- Excavation of the station box.
- Installation of secant piles and tiebacks.

- Construction of the tunnels from the RSS to the UW station, including TBM operations and tunnel cross-passage work.
- Material handling, hoisting and on-site truck hauling operations to transport spoils from the tunnel excavation.
- Hoisting and transporting the precast tunnel liner segments into the tunnel.

In the application materials submitted for this MPPCV, the applicant identified the closest residential uses likely to be affected by the nighttime noise, presented data on existing sound levels and projected construction sound levels, provided documentation of sound levels for specific activities and equipment, and outlined required noise mitigation proposals to be followed by the contractor.

The nighttime construction activities proposed under Phase 2 – installation of the secant pile wall shoring system, station box excavation, tieback and internal bracing, groundwater pumping, and base slab pour – are all necessary activities prior to Phase 3 tunneling activities. The Phase 2 activities will require the Contractor to work at night in order to maintain the project schedule. Secant pile construction has been chosen as the support of excavation (SOE) method for the deep station box excavation. Sound Transit chose this method because of its ability to better manage and control the excessive amount of groundwater that will enter this site, and to limit the dewatering that will be required. The secant pile method will require approximately 450 piles, a majority of which must be completed before any mass excavation of the station box begins. Additionally, the piles must be installed first because they extend the full depth of the station box and beyond to approximately 120 feet below grade. Tiebacks will be installed as excavation proceeds. In order to effectively control groundwater seepage during the SOE phase, the secant piles and shoring system need to be installed one at a time and in a continuous manner. The large number of secant piles needed for the SOE will require the Contractor to work at night. This is the safest and most efficient method to support the excavation prior to tunneling, and to control mass volumes of groundwater from entering the site.

Operating the TBM on a continuous basis is the most efficient and safest way to excavate a tunnel. Stopping the TBM increases the risk of ground movements around the TBM and concrete tunnel lining. This could lead to additional settlement and/or convergence of ground onto the TBM, jeopardizing worker safety and potentially causing damage to surface structures.

The application materials note that noise-producing, above ground construction activities and equipment are required to support around-the-clock operation of the TBM. Ventilation fans and power generators are needed at the surface to provide fresh air to the workers in the tunnel and a reliable power source for the underground equipment. Most of the work will occur at the bottom of the excavation and within the tunnel, reducing noise and activity at the ground surface.

The aboveground loading and unloading of required tunnel construction materials and the conveyance of spoil materials removed from the site also are required to efficiently maintain continuous tunnel operations. Scheduling construction activities during nighttime hours will allow the proposed project to be completed in a more timely, safe, and cost-effective manner.

Sound Transit's application includes the Noise Management and Mitigation Plan ("NMMP") required by SMC 25.08.590D. The NMMP includes a description of the type of construction activities and equipment that will generate noise during nighttime hours. It also describes the expected exterior sound

levels at each of the receiving sites, and compares these to the nighttime hourly L_{eq} that would be established through the variance process.

The NMMP includes prescriptive specifications for noise control at the construction sites that require the applicant's contractor to implement measures to establish compliance with the nighttime noise limits established in the variance application. Mitigation measures include lining muck haul truck beds, prohibiting the use of compression brakes and tonal backup alarms, generating no impact sounds after 5 p.m., using radios for all long-range communication, and requiring the Contractor to use the quietest equipment available based on industry standard practice. Potential additional mitigation measures include lining or covering storage bins, conveyors, tailgates and chutes with sound deadening material; placing acoustic shields or shrouds on equipment; enclosing electrical generators, ventilation fans, pumps, concrete batch plants, and air compressors; and using moveable noise barriers at the source of the construction activity. The applicant's proposal also includes procedures and programs for effectively monitoring, evaluating and resolving public complaints by taking appropriate corrective measures. A 24-hour construction hotline will be maintained by the applicant. A Nighttime Noise Monitor will act as an independent third party and provide oversight on nighttime work to ensure that the public's interest is represented and that the contractor strictly adheres to the Noise Control Code and permit conditions.

DPD held a public meeting on July 26, 2012, to take public comment on the variance application. As required by DPD Director's Rule 3-2009, Section D.2, notice of the July 26 public meeting was published in the Seattle Times more than 21 days prior to the meeting. Notice of the meeting also was published in DPD's Land Use Information Bulletin on July 2, 2012. At that time notice was mailed to residents within the immediate vicinity of the sound sources covered by the application.

Public comments and letters from citizens were received and considered during the preparation of this Analysis and Decision. Copies of all written public comments received by DPD are contained in the DPD file. Public comments on the variance application proposed by the applicant regarding nighttime construction activities were considered only in relation to the noise impacts of the proposed activities.

DPD retained the services of BRC Acoustics and Technology Consulting ("BRC") to assist in reviewing and analyzing the variance application. BRC reviewed the MPPCV application and the written public comments, and provided comments and recommendations to DPD.

Sound Transit is the lead agency for purposes of SEPA compliance. A Final Supplemental Environmental Impact Statement (FSEIS) was issued by Sound Transit in April 2006 for the North Link Light Rail Transit proposal which includes the Roosevelt Station site. The actions proposed in this application (i.e., nighttime project sound levels during the construction phase) were disclosed and evaluated in the FSEIS. The Federal Transit Administration, acting as lead agency under the National Environmental Policy Act, issued its Record of Decision in June 2006.

FINDINGS

In accordance with DPD Director's Rule 3-2009, Section E, the following standards for a MPPCV were considered in reviewing the application.

1. Whether the applicant's information and analysis is accurate and complete (i.e., does it contain all of the elements required by the code).

The information submitted by the applicant has been reviewed by DPD and BRC and has been determined to be accurate and complete.

2. The physical characteristics of the sound proposed to be emitted pursuant to the variance.

As noted above, Phases 2 and 3 of the construction activities planned at the Roosevelt Station site would generate nighttime noise above the limits specified in the City's Noise Ordinance, and are the subject of the proposed variance. The Technical Noise Analysis developed by the Greenbusch Group identified the following construction equipment as likely to be used at night in either or both phases: air rotary drill rig, compressors, concrete pump, concrete pump truck, conveyor, crane, dozer, drill rig, excavator, generators, grout plant, haul trucks, loader, pumps, transformer, and tunnel ventilation fans. The MPPCV application lists the anticipated sound levels produced by the nighttime equipment that will be used on the site, as well as predicted nighttime project sound levels at nearby residential and commercial receiving sites and the pre-construction ambient sound levels at these sites. The existing nighttime ambient conditions and the predicted project sound levels are described below.

During April, May, and October 2011, the applicant took measurements of existing ambient sound levels at the following four sites identified as representative of nighttime noise – sensitive land uses close to each construction area. These sites are located in residential and commercial zones.

- Strada 67 Apartments, 6619 Roosevelt Way NE
- Dwell Roosevelt Condominiums, 1026 NE 65th Street
- Roosevelt Apartments, 6700 Roosevelt Way NE
- Adjacent to the residential property at 6717 NE 68th Street

The results of these measurements are set forth in the MPPCV application and summarized in Table 1 below.

Table 1. Average Measured Existing Nighttime Noise Levels – 1-Hour L_{eq} (dBA)

<i>Location</i>	<i>Average Nighttime Noise Level (10:00 p.m. - 7:00 a.m.) L_{eq}</i>	<i>Average Late Nighttime Noise Level (midnight – 5:00 a.m.) L_{eq}</i>
<i>Strada 67 Apartments, 6 feet above rooftop</i>	62	60
<i>Dwell Roosevelt Condominiums, 4 feet above patio of Unit 603</i>	54	51
<i>Roosevelt Apartments, 6 feet above rooftop</i>	56	54
<i>Vacant lot adjacent to 6717 NE 68th Street, 8 feet above elevated grade</i>	56	53

The nighttime code limit on construction noise in commercial receiving districts is an hourly L_{eq} of 60 dBA, and the limit in residential receiving districts is an hourly L_{eq} of 47 dBA. Of the four sites listed above, the first three are in commercial districts and the last is in a residential district.

The Technical Noise Analysis modeled sound levels that would be produced by the equipment that is anticipated for use during Phases 2 and 3 of the RSS construction. This modeling assumed solid construction walls 12' to 16' in height around most of the perimeter of the project site. The noise modeling determined that higher walls, and walls with sound-absorptive surfaces, would not produce significant additional mitigation of project sound levels below the levels produced by these proposed walls. The results of this modeling are shown in the tables below:

Table 2: Existing and Projected Phase 2 Sound Levels, Hourly Leq

Receiving Property	Existing Ambient Levels	Predicted Level with Mitigation	Code Limit
Strada 67 Apartments	62	60	60
Dwell Roosevelt Condominiums	54	67	60
Roosevelt Apartments	56	64	60
Vacant Lot near 6717 NE 68 th St.	56	53	47

Table 3: Existing and Projected Phase 3 Sound Levels, Hourly Leq

Receiving Property	Existing Ambient Levels	Predicted Level with Mitigation	Code Limit
Strada 67 Apartments	62	61	60
Dwell Roosevelt Condominiums	54	66	60
Roosevelt Apartments	56	62	60
Vacant Lot near 6717 NE 68 th St.	56	51	47

As shown in the tables, code limits would be exceeded at three of the four receiving sites during Phase 2 construction, and at all of the receiving sites during Phase 3 construction. To accommodate these construction activities, Sound Transit proposes that the variance allow the one-hour equivalent nighttime noise-level limit (L_{eq}) to exceed the Code limit at identified receiving sites in commercial districts by no more than 6 dBA, and to exceed the late-nighttime ambient noise levels in residential districts by no more than 6 dBA. In addition, the nighttime allowable noise limit would be 10 dBA above the one-hour equivalent nighttime noise-level limit (L_{eq}) to account for potential short-term noises. Therefore, the proposed variance limits would be 66 dBA (L_{eq}) and 76 dBA (L_{01}) for all commercial properties and 59 dBA (L_{eq}) and 69 dBA (L_{01}) for all residential properties. Table 4 compares the proposed variance limits with the predicted nighttime sound levels.

Table 4: Proposed Variance Sound Level Limits and Predicted Mitigated Nighttime Sound Levels, Hourly Leq

Receiving Property	Predicted Levels, Phase 2	Predicted Levels, Phase 3	Variance Limits
Strada 67 Apartments	60	61	66
Dwell Roosevelt Condominiums	67	66	66
Roosevelt Apartments	64	62	66
Vacant Lot near 6717 NE 68 th St.	53	51	59

Table 4 indicates that the variance limits would be met at three of the four sites during Phase 2 and at all of the sites in Phase 3. The predicted sound level at the Dwell Roosevelt Condominiums during Phase 2 would be 67 dBA, one dBA above the maximum allowable limit under the variance. The Contractor’s Noise Management and Mitigation Plan would be required to demonstrate that the variance limits would be met at all sites during both phases. During Phase 2, additional mitigation measures will be necessary to reduce nighttime construction noise. Supplemental mitigation measures that could be implemented to meet the noise variance nighttime limits may include:

- Providing lined or covered storage bins, conveyors, tailgates, and chutes with sound deadening material;
- Employing acoustic shields or shrouds for equipment;
- Enclosing electrical generators, ventilation fans, pumps, concrete batch plants, and air compressors;
- Minimizing the use of generators to power equipment;
- Grading surface irregularities on construction sites;
- Using moveable noise barriers at the source of the construction activity;
- Limiting or avoid certain noise-generating activities during nighttime hours;
- Driving equipment forward rather than backward to minimize use of back-up alarms, where feasible;
- Placing ventilator fans within shafts and use acoustically absorptive ducting and/or in-line silencers;
- Using electric and hydraulic equipment in lieu of diesel or pneumatic.

In summary, Table 4 indicates that, at most locations and for most nighttime construction activities, the noise variance limits would be met without additional mitigation measures. For those activities that are projected to generate exceedences of the nighttime noise limits, further steps will be necessary to ensure that maximum noise levels are not exceeded at any of the sensitive receptor sites.

3. The proposed times and proposed duration of the sound to be emitted.

Sound Transit is requesting a variance for construction-related noise producing activities from 10 p.m. to 7 a.m. on weekdays and from 10 p.m. to 9 a.m. on weekends and legal holidays for work associated with the construction of the light rail tunnel and the Roosevelt Station. The construction work is anticipated to be completed over a 45-month period; the variance application covers 48 months to account for unanticipated delays. The work currently is

expected to begin in Fall 2013. As required by SMC 25.08.665 D, the MPPCV will be subject to review by DPD following one year of operation, with an opportunity for public comment.

4. The topography and population density of the area in which the sound is proposed to be emitted.

The topography of the project area slopes from southwest (lowest) to northeast (highest), with an approximate 30' grade change over the site. The majority of the site is zoned NC3P-85, with the northeast corner zoned NC3P-65. NC3P-85 zoning predominates south and west of the site. North of the site, lots are zoned NC3P-65 and LR3. East of the site, lots are zoned NC2P-65 south of NE 66th Street and SF5000 north of NE 66th Street.

There is a mixture of commercial and residential development surrounding the RSS, with commercial development predominating along NE 65th Street and Roosevelt Way NE. As noted above, several residential uses are close to the project site, including:

- Dwell Roosevelt Condominiums, abutting the southwest portion of the RSS;
- Strada 67 Apartments, across Roosevelt Way NE from the western edge of the RSS;
- A 30-unit apartment building across Roosevelt Way NE and northwest of the RSS;
- The 6700 Apartments, on the north side of NE 67th Street between Roosevelt Way NE and 12th Avenue NE, abutting RSS to the west and across the street from it to the north;
- Three single-family houses with frontage on NE 68th Street, the backyards of which abut the northern edge of the RSS at the northwest corner of 12th Avenue NE and NE 67th Street.

Roosevelt High School is located in the SF5000 parcels to the east of 12th Avenue NE.

5. Whether the public health and safety is endangered.

It is generally accepted that very high levels of noise have adverse physical impacts on humans including, but not limited to, hearing damage. Many standards apply to occupational exposures at high levels for prolonged periods of time. For example, the Occupational Safety and Health Act mandates a hearing conservation program by employers if sound levels exceed 85 dBA continuously over an 8-hour workday. If sound levels exceed 90 dBA continuously over an 8-hour workday, hearing protection is required. The project sound level limits anticipated by this Variance Application would maintain sound levels well below these identified levels, as shown in tables 2-4.

The Federal Transit Authority's (FTA) guidelines recommend that a nighttime 8-hour L_{eq} of 70 dBA not be exceeded. Because this federal guideline is stated in terms of 8-hour L_{eq} , it would allow the sounds in any given hour to be louder than 70 dBA so long as the sound during other hours were quieter, to bring the 8-hour average down to 70 dBA. The proposed variance limit is 66 dBA in commercial receiving districts and 59 dBA in residential receiving districts, both below the 70 dBA recommended limit. The variance limit also would be stricter than the FTA limit, as it would not allow louder hours to be averaged down by quieter hours.

The increases from on-site nighttime project sound levels that are sought by the applicant and the resulting noise levels will likely affect some people but are not expected to cause a danger to public health or safety.

6. Relative interests of the applicant, other owners or possessors of property likely to be affected by the noise, and the general public.

The interests of the applicant in the construction of this proposed essential public facility are described in the application. Permitting construction 24 hours a day would allow excavation and support of the tunnel in the safest practical manner and minimize surface settlements and potential resulting damage to the built environment. Continuous tunneling operations also would permit earlier completion of the proposed project and substantial cost savings for the public due to reduced administrative expenses, reduced length of construction time needed for equipment and personnel, and savings on the inflation that would otherwise compound the cost of construction in later years. The condensed construction schedule would lessen the duration of construction impacts, including traffic, dust, and noise.

While the conditions imposed on this variance will require additional cost, effort and flexibility on the part of the applicant, they are not expected to cause undue hardship. The applicant appropriately identifies several affected receiving properties. Mitigation described elsewhere in this analysis, including lining muck haul truck beds, prohibiting the use of compression brakes and tonal backup alarms, generating no impact sounds after 5 p.m., using radios for all long-range communication, and requiring the Contractor to use the quietest equipment available based on industry standard practice, are expected to substantially reduce impacts to these and other affected properties. The noise reduction provided by the noise walls around the site will reduce off-site noise impacts during the day as well as at night.

The interests of the general public also will be served by the earlier completion of this transportation project and by the shorter overall construction period that nighttime construction will make possible, as a shortened construction schedule will result in both cost savings and in reduced construction-related impacts.

7. Whether the proposed noise mitigation approaches are likely to be effective.

The applicant's NMMP includes mitigation that will be implemented during the proposed nighttime construction activities. Sound Transit will comply with DR 3-2009 by providing an Independent Noise Monitor who is independent from Sound Transit control. The applicant will also implement and maintain the public outreach and community involvement provisions described in the NMMP, including a 24-hour construction hotline to be answered by a live person.

DPD's noise consultant, BRC, concurs that the applicant's proposed noise walls around the perimeter of the construction, as well as other mitigation described in the MPPCV application, will be effective in reducing project sound levels such that impacts to the surrounding residential uses will be substantially reduced.

In addition to the requirements of DR 3-2009 that are discussed above, an applicant for a MPPCV must demonstrate that the standards in SMC 25.08.655A are met:

A. The Administrator may grant a major public project construction variance to provide relief from the exterior sound level limits established by this chapter during the construction periods of major public projects. A major public project construction variance shall provide relief from the exterior sound level limits during the construction or reconstruction of a major public project only to the extent the applicant demonstrates that compliance with the levels would:

1. Be unreasonable in light of public or worker safety or cause the applicant to violate other applicable regulations, including but not limited to regulations that reduce impacts on transportation infrastructure or natural resources; or

2. Render the project economically or functionally unreasonable due to factors such as the financial cost of compliance or the impact of complying for the duration of the construction or reconstruction of the major public project.

With regard to subsection 1, the applicant has demonstrated that it is not possible to operate the equipment necessary to support nighttime construction activities without violating the nighttime noise limits in SMC 25.08.410 and 420. Nighttime work for the secant piles and support of excavation for the station box is necessary to substantially reduce dewatering of the site, avoid potential groundwater impacts, and promote worker safety prior to the tunneling phase. Nighttime work would allow construction of the Northgate Link Extension Tunnel in the safest way practical and minimize surface settlements and potential resulting damage to the built environment. Additionally, limiting nighttime work would extend the project duration, increasing traffic, dust, and noise impacts. With regard to subsection 2, the applicant has demonstrated that delay in construction of the Northgate Link Extension Light Rail Project and associated increased costs will result without nighttime construction.

CONCLUSIONS

1. Findings numbers 1 through 7 above are adopted as Conclusion number 1.
2. Proper notice was given of the proposed variance and the required public meeting took place.
3. Requiring Sound Transit to comply with the nighttime noise limits in SMC 25.08.410 and 420 would be unreasonable in light of the increased risks to both worker safety and public safety that would result from not allowing nighttime construction at the Roosevelt Station Site. The delay and increased cost that would result from compliance with SMC 25.08.410 and 420 would render the construction of the Northgate Link Extension Tunnel and excavation and shoring of the RSS station box economically and functionally unreasonable.
4. Practical known and available mitigation measures for reducing the nighttime project sound levels and their effects on nearby residents are described in the application and will be incorporated into the project.
5. Chapter 25.08 provides adequate authority to mitigate the impacts of nighttime construction activity at the subject site and, pursuant to the SEPA Overview Policy in SMC 25.05.665, no additional mitigation is required pursuant to SEPA.

6. Based upon the written information submitted by the applicant and interested citizens, statements made at the public meeting, federal guidelines and the current body of scientific knowledge, there is no known danger to public health and safety if mitigating measures are put in place and followed, as provided in this Decision and Order.

DECISION AND ORDER

This variance is GRANTED for the noise related to the nighttime construction activities described in this Analysis and Decision and the applicant's submittal of April 3, 2012, as revised in the submittal of June 22, 2012, subject to the following:

1. This variance is subject to the conditions set forth below and to all requirements, specifications, standards, limits, and other mitigation measures identified by the applicant in its original application submitted on April 3, 2012, as revised in its submittal dated June 22, 2012, collectively "the application". Specifically, the applicant, the primary contractor, and any subcontractors are required to fully follow and execute all of the mandatory noise control measures identified in the application and its appendices and attachments in addition to the provisions set forth in this Decision and Order. If there is a conflict between the noise mitigation and control requirements or specifications of the application and this Decision and Order, the requirements of this Decision and Order shall be followed.
2. Nighttime project sound levels shall not exceed the proposed limits specified in Tables 2-4 of this Analysis and Decision. These sound level limits are intended to ensure that nighttime project sound levels will not exceed the Code limit at identified receiving sites in commercial districts by more than 6 dBA (L_{eq}), and will not exceed late-nighttime ambient noise levels at identified receiving sites in residential districts by more than 6 dBA (L_{eq}). In addition, the nighttime allowable noise limit (L_1 based on a slow-response A-weighted level) would be 10 dBA above the one-hour equivalent nighttime noise-level limit (L_{eq}) to account for potential short-term noises. These limits will apply during the following schedule:
 - Weekdays 10:00 p.m. to 7:00 a.m.
 - Weekends (including legal holidays) 10:00 p.m. to 9:00 a.m.
3. As noted in Section 3.5 of the June 22, 2012 report, Sound Transit shall require the Contractor to use its equipment and trucks in a manner that minimizes the sound that is generated. Specific measures are identified as "Controls For Nighttime Haul Trucking" and "Controls For Construction Site Equipment". Measures listed under these headings are incorporated by reference into this decision.
4. Section 3.5 of the June 22, 2012 report identifies the heights and configurations of solid construction walls recommended by the Greenbusch Report to be installed at various locations on the perimeter of the RSS. The locations and heights of these walls are shown in Figure 2 of the June 22 report, and are as follows:

* a solid 12-foot high wall along NE 65th Street frontage of the RSS;

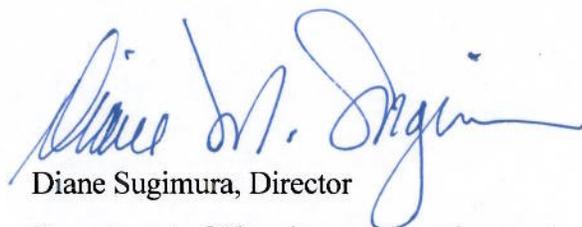
- * a solid 16-foot high wall starting at the northwest corner of NE 65th Street along the 12th Avenue NE frontage to approximately NE 66th Street where the wall height transitions to 12 feet to the northern end of the RSS, mid-block between NE 67th and NE 68th Streets;
- * a solid 16-foot high wall along the entire western and northern boundaries of the RSS.

The walls shall be constructed to the specifications identified in this report, or as modified by the contractor's supplemental NMMP. All noise barriers proposed by the applicant shall be installed per Sound Transit's Noise Management and Mitigation Plan (dated June 22, 2012) prior to commencement of nighttime noise-producing construction activities as necessary to meet the sound levels permitted by this variance.

5. Section 4.0 and subsections 4.1 – 4.4 of the June 22, 2012 report identify Sound Transit's proposed contractor requirements for noise mitigation. Mitigation requirements identified in subsections 4.1 – 4.4 are incorporated by reference into this decision.
6. As noted in the NMMP, exceedences of the noise limits established by the variance are anticipated at the Dwell Roosevelt Condominiums during Phase 2 construction work. The NMMP identifies additional potential mitigation that could reduce the noise generated at this site to the levels approved in this variance. To ensure that noise levels during Phase 2 do not exceed variance limits, the Sound Transit Contractor is required to provide its own NMMP prior to starting any Phase 2 work. This Contractor-supplied NMMP must identify the selected additional mitigation measures and provide calculations demonstrating that the measures will be effective in meeting the variance noise limits.
7. Public notification and communication will occur as described in the NMMP dated June 22, 2012.
8. DPD will provide oversight of the nighttime work to ensure that the public interest is protected and that the contractor strictly adheres to the Noise Control Code and the conditions imposed by this Analysis and Decision. DPD will assign a Noise Control Program Specialist who will serve as the City's primary contact for noise-related issues at this site. Representatives of the applicant with authority to stop work will be present on the project site during all work hours to ensure that mitigation measures are being followed. Periodic noise monitoring will occur consistent with Director's Rule 3-2009. Specifically, monitoring for this project will occur as described in the June 22, 2012 Variance Application and the accompanying Noise Management & Mitigation Plan (June 22, 2012).
9. Fourteen (14) days prior to the commencement of the construction that is subject to this variance, the applicant shall provide notice of such commencement to the Administrator and to those community members who were notified of the original application. The form and content of the notification must be approved by the Administrator.
10. The applicant or its Contractor shall be responsible for the implementation of the Noise Management and Mitigation Plan. Implementation of this plan includes adherence to the NMMP by all contractor and sub-contractor work affiliated with this application. The applicant or its Contractor shall be responsible for all equipment being used on site whether being used by the Contractor or sub-contractor. If barriers are used to mitigate sound, the Contractor shall be responsible for the provision of such barriers.

11. This variance shall expire forty-eight (48) months from the commencement of nighttime construction.
12. Violation of any condition of this variance will result in a review of the conditions imposed by this variance, and possible imposition of new conditions or revocation of this variance.
13. Pursuant to SMC 25.08.655 D, the Administrator shall conduct a one-year review and may modify the terms and conditions of the variance or the NMMP as needed if it is determined that the current variance, the conditions of the variance, or the NMMP are not adequately protecting the public health and safety or reasonably controlling or mitigating the construction noise, or that there are more reasonable methods of doing so.

Dated the 26th of November, 2012



Diane Sugimura, Director

Department of Planning and Development

& Administrator, Chapter 25.08 of the Seattle Municipal Code

APPEAL

The Noise Control Code SMC 25.08 provides that any person aggrieved by the denial, approval, or the terms and conditions imposed on a variance or by the extension of a variance by the Administrator, may appeal such decision to the City of Seattle. Hearing Examiner pursuant to the provisions of the Seattle Municipal Code Section 25.08.610.

Appeals of this decision must be received by the Hearing Examiner no later than ten days following the date of the decision and be accompanied by a check for \$50 made payable to the City of Seattle.

