



**CITY OF SEATTLE
ANALYSIS AND DECISION OF THE DIRECTOR
OF THE SEATTLE DEPARTMENT OF CONSTRUCTION AND INSPECTIONS**

Major Public Project Construction Noise Variance

Application: Request for a Major Public Project Construction Noise Variance from the maximum permissible sound level requirements of the Noise Control Code, Chapter 25.08 of the Seattle Municipal Code, during the Alaska Way Viaduct Replacement Program and the demolition of the Alaska Way Viaduct. This Noise Variance application pertains only to construction and demolition activities taking place during nighttime hours as those hours are defined in Chapter 25.08.

Project No.: 3029782

Site Address: Alaskan Way Viaduct Demolition

Applicant: Washington State Department of Transportation

I. SUMMARY OF PROPOSED ACTION

The Washington State Department of Transportation (“WSDOT”) has requested a one-year Major Public Project Construction Noise Variance (“Noise Variance”) for the proposed Alaskan Way Viaduct (“Viaduct”) demolition to allow necessary work activities to occur during the Noise Control Code’s (“noise code”) restricted hours.

The City’s noise code allows work on public projects to produce sound levels that are 25 dBA higher than for other noise sources from 7:00 a.m. to 10:00 p.m. on weekdays, and 9:00 a.m. to 10:00 p.m. on weekends and legal holidays. WSDOT is requesting to work outside those hours.

The City’s noise code further allows impact equipment to produce yet higher sound levels (average 90 dBA) from 8:00 a.m. to 5:00 p.m. on weekdays and 9:00 a.m. to 5:00 p.m. on weekends and legal holidays. WSDOT also requests that this Noise Variance extend the higher sound limits for impact work to the hours between 7 a.m. to 10 p.m. on weekdays, weekends, and legal holidays.

Under the WSDOT request, demolition would occur two blocks at a time and close three intersections at a time. Work would take place within and from public rights-of-way or where WSDOT obtains temporary construction easements. The entire work zone would be closed to the public with no crossings for vehicles or pedestrians. Following demolition, the surface would be restored to current conditions.

Access to buildings and property adjacent to active work zones would be limited; in some locations access would not be possible. WSDOT would provide reasonable modifications to allow tenants or residents to remain in place throughout the demolition. However, in several locations continued occupancy may not be feasible; in which case alternative accommodations or relief would be developed by WSDOT to address specific circumstances.

On October 9, 2017, WSDOT submitted a complete application for this Noise Variance to the Seattle Department of Construction and Inspections (“SDCI”). The Noise Variance was requested as provided for in SMC 25.08.590 and 25.08.655 to allow on-site construction noise to exceed the maximum permissible sound level during nighttime hours as provided for in SMC 25.08.410 through 25.08.425. These code provisions limit nighttime project sound levels (hourly Leq) generated and received in residentially-zoned districts to 45 dBA, and to 60 dBA in commercially-zoned districts.

The Noise Variance requested is for one year to complete the activities. Work is scheduled to start in 2018 with work substantially complete in 2019. The three phases of construction include early work, demolition, and finish work. The contractor will update the schedule, order, and timing of activities in an updated Noise Management and Mitigation Plan (“NMMP”) to be submitted by the design-build contractor following contract award.

II. BACKGROUND

The intent of the Noise Control Code, Chapter 25.08 SMC, is 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 general standards for issuing noise variances are in SMC 25.08.590, and the standards for issuing this Noise Variance are in SMC 25.08.655. Directors Rule 3-2009 also applies to issuing noise variances.

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

Initial stages of preparation for demolition includes the Alaskan Way traffic switch, including installing a series of temporary span wire signal systems along Alaskan Way between Yesler Way and Pike Street. Additional night time work in this early stage includes installing permanent sign posts along Alaskan Way between S. King Street and Pike Street.

For most of the Viaduct mainline demolition, the deck will be disassembled with the use of excavators with impact hammers. The inside beams will be broken apart with a hydraulic concrete crusher. WSDOT requests that allowances for higher sound levels for impact equipment, SMC 25.08.425.C, be extended to the hours between 7 a.m. and 10 p.m. on weekdays, weekends, and legal holidays.

Burlington Northern Santa Fe (“BNSF”) railroad has imposed specific conditions for working around their tracks. Due to railroad restrictions, WSDOT is only allowed to work over the

railroad during certain nighttime hours. WSDOT is restricted to working only between October 1 and December 31, between 1 a.m. and 4 a.m. on Saturdays, Sundays, and Mondays. For the first 100 feet north of the railroad tracks, the deck will be disassembled with the use of excavators and hammers and the inside beams will be broken up with a concrete crusher. The footings will be demolished, and the debris will be loaded out.

From the north railroad construction boundary area to the Battery Street Tunnel, excavators with concrete breakers, both impact rams and hydraulic crushers (concrete cracker), will demolish the structure and it will be loaded out. This work would occur for approximately 3 months. WSDOT requests that allowances for higher sound levels for impact equipment, SMC 25.08.425.C, be extended to the hours between 7 a.m. and 10 p.m. on weekdays, weekends, and legal holidays.

WSDOT proposed that for the Seneca and Columbia Street ramps, the bridge deck supports would be saw cut, lifted out by crane, and loaded onto flatbed trucks. The bridge diaphragms would be removed with impact hammers. The footings will be hammered out and the debris will be loaded out. WSDOT expects that each ramp would take 40 days to demolish, but each ramp would require a 7-day period with limited impact work that could occur around-the-clock.

Following the completed roadway demolition, activities during the project closeout, will include cleanup, dismantling staging areas, and restoration where required.

WSDOT's application includes a framework for a NMMP. 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 site and compares these to the nighttime hourly Leq that would be established through the Noise Variance process.

The NMMP includes specifications for noise control at the construction sites that require WSDOT's contractor to implement measures for compliance with the nighttime noise limits established in the Noise Variance application. The contractor will be required to meet the noise levels established in the Noise Variance.

Mitigation measures include prohibiting the use of compression brakes and tonal backup alarms, not allowing equipment to idle unused for longer than five minutes, securely fastening truck tailgates, and using better (reduced noise) mufflers during certain activities. Potential additional mitigation measures include using electric welders, critical or double mufflers on equipment such as cranes, noise blankets for mobile equipment, and using temporary noise barriers including blankets, skirts, walls, etcetera. Individual property mitigation includes providing ear-plugs and white noise machines, installing sound dampening drapes, and providing hotel rooms for residents during high-impact or extremely noisy operations. WSDOT'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 shall be maintained by WSDOT. A Nighttime Noise Monitor shall act as an independent third party and provide oversight on nighttime work to represent the public's interest and to determine that the contractor strictly adheres to the Noise Control Code and permit conditions.

Public Comment and Meetings

SDCI held two public meetings, one on November 14, 2017 and a second on March 8, 2018, to take public comment on the Noise Variance. As required by SDCI Director's Rule 3-2009, Section D.2, notice was sent more than 21 days before the meeting. Notice of the meeting was also published in SDCI's Land Use Information Bulletin on October 23, 2017 and on February 15, 2018. Notice of the application and public meeting was also mailed to residents within the immediate vicinity of the sound sources covered by the application. Notice was again posted on February 15, 2018.

Public comments and letters were received and considered during preparing this Analysis and Decision. Copies of all written public comments received by SDCI are in the SDCI file and are posted on the Public Resource Center webpage: <http://web6.seattle.gov/dpd/edms/> (enter SDCI Project Number 3029782).

Public comments on the Noise Variance application regarding nighttime construction activities were considered in relation to the noise impacts of the proposed activities.

Consultant Review

SDCI retained BRC Acoustics and Audiovisual Design ("BRC") to assist in reviewing and analyzing the Noise Variance application. BRC reviewed the Noise Variance application, the written public comments, and provided comments and recommendations to SDCI.

Environmental Impact Statement and Record of Decision

In July 2011, a Final Environmental Impact Statement ("FEIS") was jointly issued by the Federal Highway Administration ("FHWA"), WSDOT, and Seattle Department of Transportation for the Alaskan Way Viaduct Replacement Program, which includes demolishing the viaduct. The actions proposed in this application, extended hours of construction, and increased noise levels were disclosed and evaluated in the FEIS. In August 2011, the FHWA issued its Record of Decision ("ROD") approving the preferred alternative. The FEIS and ROD are consistent with this Analysis and Decision.

III. FINDINGS

Under DPD Director's Rule 3-2009, Section E, the following standards for a Noise Variance were considered in reviewing the application. SDCI comments follow each code section.

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

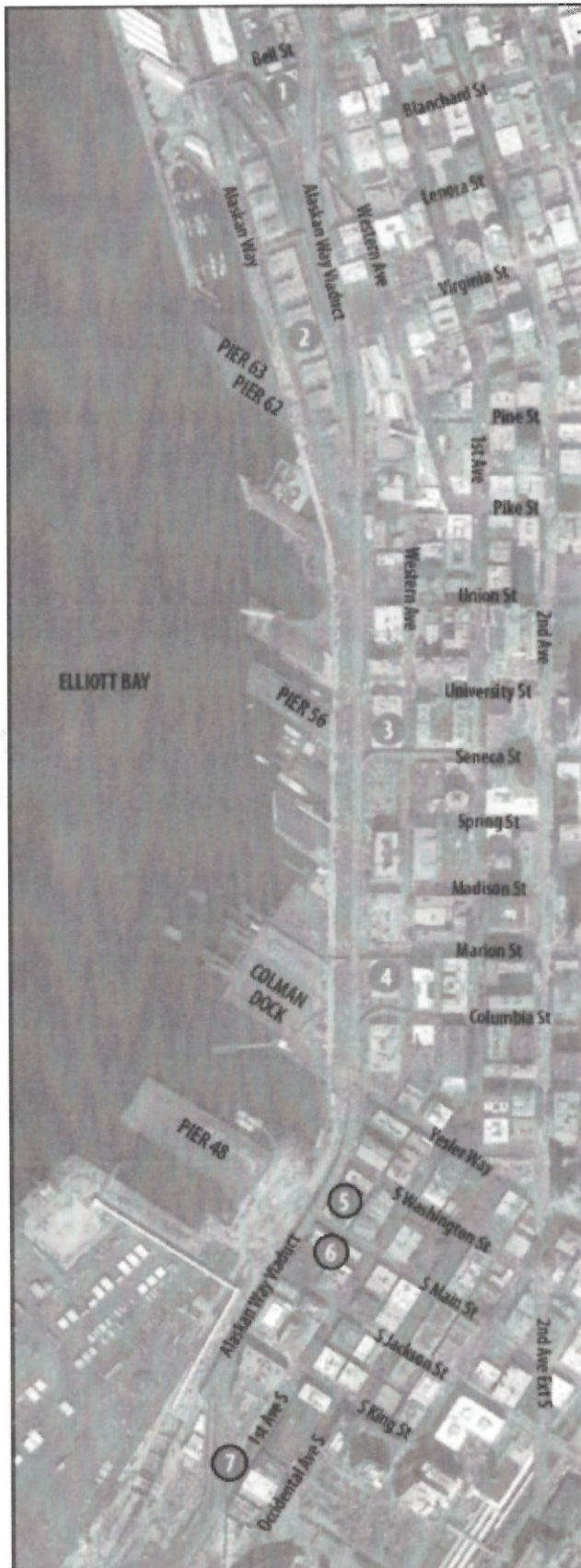
The information submitted by WSDOT has been reviewed by SDCI and BRC and has been determined to be accurate and complete.

SEPA reviews and determinations are found to be complete through a review of FHWA's and WSDOT's environmental review process. The FEIS and ROD have been reviewed and this variance decision incorporates applicable findings as appropriate. Conditions from the FEIS and ROD point WSDOT to the City's Noise Variance process.

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

WSDOT developed expected construction activities and a schedule for Viaduct demolition. The contractor will propose its own construction activities and schedule and create a detailed NMMP to meet the commitments WSDOT made in this Noise Variance application and the Noise Variance permit conditions issued by SDCI. The design-build contractor's construction activities and equipment shall be substantially similar to those WSDOT identified.

During the summer months of 2017, WSDOT took measurements of existing ambient sound levels at four sites identified below (Locations 1 - 4). In addition, WSDOT used the baseline levels measured in 2011 before the start of the AWW tunnel project (Locations 5 - 7). This combination of monitoring sites is representative of nighttime noise—sensitive land uses close to each construction area.



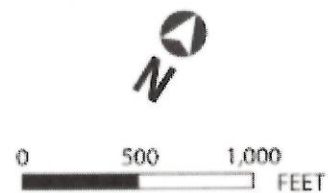
Alaskan Way Viaduct Demolition Baseline Noise Monitoring Sites

Locations Measured in 2017

- ① Elliott Point Apartments
- ② Waterfront Landings Condominiums
- ③ 1201 Western Avenue
- ④ 815 Western Avenue

Locations using noise data measured in 2011

- ⑤ Compass Center, 210 Alaskan Way S
- ⑥ Our Home Hotel Condominiums,
75 S Main Street
- ⑦ Triangle Building, 553 First Avenue S



The results of these measurements are in the Noise Variance application and summarized in Table 1 below.

Table 1. Average Measured Existing Nighttime Noise Levels – 1-Hour Leq (dBA)

Location	Average Late Nighttime Noise Level (midnight – 5:00 a.m.) Leq
Site 1	65
Site 2	69
Site 3	66
Site 4	68
Site 5	79*
Site 6	67*
Site 7	67*

***Sound levels measured in 2011**

The nighttime code limit on construction noise in residential receiving districts is an hourly Leq of 45 dBA. One of the seven sites listed above are in residential districts. Site 2-7 are in commercial district with a nighttime hourly Leq code limit of 60 dBA.

Table 2: Ambient levels, SMC limits, and Requested Nighttime Sound Levels, Hourly Leq

Receiving Property	District	Ambient Levels dB(A)	SMC Limits dB(A)	Requested LEQ Limits dB(A)	Requested L1 Limits
Site 1	Residential	65	45	71	80
Site 2	Commercial	69	60	75	85
Site 3	Commercial	66	60	72*	82*
Site 4	Commercial	68	60	74*	84*
Site 5	Commercial	79	60	85	85
Site 6	Commercial	67	60	73	83
Site 7	Commercial	67	60	73	83
<i>*Proposed Limits at Sites 3 and 4 to be increased by 10 dB during Demolition of the Seneca and Columbia St. Ramps</i>					

Sound level compliance monitoring for prior noise variances has revealed challenges with monitoring Leq and Lmax to assess compliance with Noise Variance limits. Leq has been found to be easily influenced by changes in ambient conditions from non-project noise sources. Lmax measures the loudest single event in an hour, which may have nothing to do with construction noise and may represent jet planes, vehicles, non-project sources, an accident, or the dropping of equipment that only lasts for a second or two and is unlikely to be repeated. In a prior Noise

Variance decision, SDCI shifted to tracking hourly L01 sound levels to assess compliance under the nighttime Noise Variance limits. L01 measures the sound level that is exceeded one percent of the time, or 36 seconds each hour. After moving to the L01 metric, compliance assessment at job site became more efficient, and the occurrences of potential but unverified site exceedances were greatly reduced. Leq and L01 shall be used to ensure compliance with variance limits for this Noise Variance.

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

Seattle Noise code makes allowances for demolition and construction on public projects to produce sound levels that are 25 dBA higher than for other noise sources from 7:00 a.m. to 10:00 p.m. weekdays and 9:00 a.m. to 10:00 p.m. weekends and legal holidays. The allowed average sound levels are 82 dBA at residential receivers and 85 dBA at commercial receivers. “Impact” noise is further allowed to produce average sound levels of 90 dBA from 8:00 a.m. to 5:00 p.m. weekdays and 9:00 a.m. to 5:00 p.m. weekends and legal holidays. WSDOT requested relief from these standard working hours and proposed non-impact demolition construction to occur around-the-clock and the impact noise hours to be extended to the hours between 7:00 a.m. and 10:00 p.m.

The Viaduct demolition will require up to one year of substantial work. Work on the Viaduct demolition is scheduled to commence in 2018 with work substantially complete in 2019. The length of the variance requested is one year to complete substantial construction activities.

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

The Viaduct, an elevated structure with two levels of multi-lane highway, divides the Seattle waterfront on the west from the downtown core on the east. Further, the topography of the project area slopes from north (highest) to south (lowest). The affected areas are heavily populated with residential use properties and include but are not limited to apartments, hotels, and condominiums. The zoning of the receiving properties is mostly commercial but includes residentially-zoned properties.

WSDOT has proposed that demolition would occur two blocks at a time and would require closing three intersections at a time to create a safe work zone. The entire work zone would be closed to the public with no crossings for vehicles or pedestrians. During demolition, access to buildings and property adjacent to active work zones would be limited; in some locations access would not be possible.

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 proposed by this Noise Variance application, as shown in Table 2, would maintain sound levels well below these identified levels.

The requested 6 dBA increase over existing hourly average noise levels that are sought by WSDOT may affect some people. It is not, however, expected that a 6 dBA increase over ambient levels will cause a significant danger to the general public's health or safety.

During the Seneca and Columbia Street ramp demolition, WSDOT requested an additional 10 dBA (total of 16 dBA) for 7 days of around-the-clock work (including impact work) for each ramp. The hours of impact work will be limited by the Variance conditions. WSDOT's contractor will be required to provide further mitigation to the residents living near the ramps.

Demolition activity near the railroad is further constrained by BNSF. Due to these limitations, work will be performed at the railroad during the hours of 1:00 a.m. to 4:00 a.m. including impact noise. It is expected this scope of work may be an annoyance, but not be a significant harmful disturbance.

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

WSDOT completed the Noise Variance application because construction crews will work at night within City limits during the Viaduct's demolition. Since nighttime work will be unavoidable, this Noise Variance shall set noise level limits for nighttime construction activities.

Mitigation described in this Analysis and Decision, including prohibiting using compression brakes and tonal backup alarms, not allowing equipment to idle unused for longer than five minutes, and requiring the contractor to fasten tailgates and use better mufflers are expected to substantially reduce impacts to affected properties.

Allowing nighttime construction will shorten the overall construction period, which will serve the general public with completing this transportation project earlier. A shortened construction schedule will also result in cost savings and in reduced construction-related impacts.

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

WSDOT's "Proposed Noise Mitigation Measures," see pages 35 and 36 of the application, include mitigation that shall be implemented during the proposed nighttime construction activities. WSDOT proposed that the contractor will update the Noise Management and NMMP upon contract award. WSDOT has proposed review of the NMMP by WSDOT and submittal to SDCL.

WSDOT shall comply with DR 3-2009 by providing an Independent Noise Monitor (INM) who is independent from WSDOT control. WSDOT shall 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.

In addition to the requirements of DR 3-2009 that are discussed above, a Noise Variance applicant shall demonstrate that these standards in SMC 25.08.655.A.1 and .2 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.

Regarding subsection 1, WSDOT 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. Limiting nighttime work would extend the project duration, increasing traffic, dust, and noise impacts.

Regarding subsection 2, WSDOT has demonstrated that delay in demolishing the Alaskan Way Viaduct and associated increased costs will result without nighttime construction.

IV. CONCLUSIONS

1. Findings 1, 3, 4, 5, 6, and 7 above are incorporated as Conclusion 1.
2. Addressing finding 2, WSDOT does not adequately propose measures to ensure compliance with noise levels proposed in the application and included in Finding 2 above. The application section identified as “Compliance Monitoring and Reporting” calls for four monitor locations. The seven locations used to establish baseline sound levels are, however, necessary as measurement and recording instrument locations for the project’s duration. Further, the application is not clear how an INM will independently function from the project’s production efforts. WSDOT proposed to have a trained staff member as the INM but identified no means for how independence would be established.
3. Proper notice of the Noise Variance was given, and the required public meeting took place.
4. Requiring WSDOT to comply with the nighttime noise limits in SMC 25.08.410 and .420 would be unreasonable considering the delay and substantial estimated increased cost that

would result from compliance with SMC 25.08.410 and .420, which would render the Viaduct demolition economically and functionally unreasonable.

5. Practical known and available mitigation measures for reducing the nighttime project sound levels and their effects on nearby residents are described in the Noise Variance application and shall be incorporated into the project. The contractor's construction activities, equipment, and mitigation measures shall be substantially similar to those identified in the Noise Variance application.

DECISION

This Noise Variance is granted for 12 months starting at the beginning of nighttime construction, subject to revocation as provided for in SMC 25.08.615 for the noise related to the nighttime construction activities described in this Analysis and Decision, and WSDOT's October 9, 2017 submittal.

This Noise Variance is subject to the below conditions and to all requirements, specifications, standards, limits, and mitigation measures identified by WSDOT in its application.

CONDITIONS

1. WSDOT, the primary contractor, and all subcontractors shall follow and execute all noise control measures identified in the Noise Variance application, appendices, attachments, and this Analysis and Decision. If there is a conflict between the WSDOT's noise mitigation and control requirements or specifications and this Analysis and Decision, the requirements of this Analysis and Decision shall control.
2. Nighttime project sound levels shall not exceed the requested values at the identified receiving sites for LEQ and L1 listed in Table 2 located in the Findings, subsection III.2, of this decision. These limits shall apply to non-impact equipment during the following schedule: weekdays 10:00 p.m. to 7:00 a.m.; and weekends including legal holidays 10:00 p.m. to 9:00 a.m. See also Exhibit I at the end of this decision for the Table of Leq Noise Limits which apply to this decision.
3. During demolition of the entire length of the AWW, impact work at the sound levels permitted by SMC 25.08.425.C is further limited to the hours of 7:00 a.m. to 8:00 p.m. on weekdays and between 9:00 a.m. to 8:00 p.m. on Saturday and 9:00 a.m. to 5:00 p.m. on Sundays and legal holidays.
4. Demolition work at the BNSF railroad location will be allowed within the constraints mandated by BNSF. These constraints were presented in the application as: (1) no work between October 1 and December 31; and (2) demolition is only allowed between 1:00 a.m. and 4:00 a.m. on Saturdays, Sundays, and Mondays.

5. At the Seneca and Columbia Street ramps, impact equipment and saw cutting demolition will be allowed to occur for one 7-day period at each location between the hours of 7:00 a.m. and 8:00 p.m. During the 7-day period only, the noise limits of SMC 25.08.425.C for impact equipment shall apply.
6. As noted in the October 9, 2017 application, WSDOT shall require the contractor and all subcontractors to use their equipment and trucks in a manner that minimizes the sound that is generated. Specific measures are identified as “Minimum Mitigation Measures” and “Additional Noise-Control Measures.” Measures listed under these headings are incorporated into this Analysis and Decision.

All seven monitoring locations used as baseline measurement locations shall be equipped with permanent monitoring devices. The monitors shall provide real-time accessible data to SDCI. Additional moveable monitoring stations shall be located 50 feet from each active demolition site and shall record data when any demolition or work subject to this Noise Variance is occurring.

7. The independence of the INM shall be established by WSDOT and approved by SDCI prior to starting nighttime construction. WSDOT shall provide an organizational chart to show a separate reporting structure for the INM outside of Construction Management.
8. WSDOT shall provide a staffed complaint hotline phone number and shall respond to all noise complaints within 1-hour. Response shall be directly to the complaint caller and to the SDCI at 206-615-1190.
9. The design-builder shall be required to submit a revised NMMP for SDCI’s approval before starting nighttime work.
10. SDCI shall provide oversight of the nighttime work to determine that the public interest is protected, and the contractor and subcontractors adhere to the Noise Control Code and the conditions imposed by this Analysis and Decision. SDCI shall assign a Noise Control Program Specialist who shall serve as the City’s primary contact for noise-related issues at this site. WSDOT representatives with authority to stop work shall be present on the project site during all work hours to ensure that mitigation measures are being followed. Periodic noise monitoring shall occur consistent with Director’s Rule 3-2009. Specifically, monitoring for this project shall occur as described in the October 9, 2017 Noise Variance application. WSDOT shall be required to keep the community informed of upcoming work at least 72 hours before starting nighttime work. Notice may be in the form of email lists, mailers, or door-to-door, and all notices given shall include SDCI Noise Abatement staff.
11. Fourteen days before starting construction that is subject to this Noise Variance, WSDOT shall provide notice of the start date to the Administrator and to all community members who were notified of the Noise Variance application. The notification form and content shall be approved by the Administrator.

12. WSDOT, its contractor, and subcontractors shall be responsible for implementing and adhering to all NMMPs. WSDOT's contractor shall submit their NMMP to SDCI for review and approval.
13. WSDOT, its contractor, and subcontractors shall be responsible for all equipment used on site whether being used by the contractor or sub-contractor. If noise barriers are used to mitigate sound, the contractor or subcontractor shall be responsible for providing the barriers. Where necessary, due to repeated non-compliance with sound levels established in this variance, substantial sound walls shall be erected to provide effective barriers between the project and adjacent residents.
14. Violating any condition of the Noise Variance or Analysis and Decision shall result in a review of the conditions imposed by the Noise Variance and this Analysis and Decision and may result in modifying the conditions or revoking this Noise Variance as allowed by SMC 25.08.615.

Dated the 19th day of March 2018



Nathan Torgelson

Director, City of Seattle Department of Construction and Inspections
Administrator, Chapter 25.08 SMC

APPEAL

The Noise Control Code, Chapter 25.08 SMC, provides that any person aggrieved by the denial, approval, or the terms and conditions imposed on a Noise Variance or by the extension of a Noise Variance by the Administrator, may appeal the decision to the City of Seattle Hearing Examiner according to SMC 25.08.610. Appeals of this decision shall be received by the Hearing Examiner no later than ten days following the date of the decision and shall be accompanied by a check for \$85 made payable to the City of Seattle.

Exhibit 1
BRC/SDCI Acoustics Table of Construction Hours

Source	Day	Hours	Leq Noise Limits					
			Allowed by SMC 25.08 outright	Allowed by SMC 25.08 for Major Public Project	Requested in AWV Variance Application/Granted by Decision			
					Mainline Demo	Ramps Demo	Over and within 100' of Railroad	North End (Residential Zone)
Non- impact	Mon-Fri	7 a.m.-7 p.m.	85	85	85/85	Not specified/85	No activity	Not specified/82
		7 p.m. -10 p.m.	60	85	85/85	Not specified/85	No activity	Not specified/82
		10 p.m. -7 a.m.	60	60	72-85/72-85	82-84/82-84	75/75	71/71
	Sat/Sun/ Hol	7-9 a.m.	60	60	71-85/72-85	82-84/82-84	No activity	Not specified/71
		9 a.m. -7 p.m.	85	85	85/85	Not specified/85	No activity	Not specified/82
		7-10 p.m.	60	85	85/85	Not specified/85	No activity	Not specified/82

		10 p.m. - 7 a.m.	60	60	72-85/72-85	82-84/82-84	75/75	71/71
Impact	Mon-Fri	7 - 8 a.m.	85	85	90/90	90/90	No activity	90/90
		8 a.m. – 5 p.m.	90	90	90/90	90/90	No activity	90/90
		5 - 7 p.m.	85	85	90/90	90/90	No activity	90/90
		7 - 8 p.m.	60	85	90/90	90/90	No activity	90/90
		8 - 10 p.m.	60	85	90/85	90/85	No activity	90/82
		10 p.m. – 7 a.m.	60	60	No activity	82-84/60	75/75	No activity
	Sat	7-9 a.m.	60	60	90/60	90/90	No activity	90/45
		9 am. -5 p.m.	90	90	90/90	90/90	No activity	90/90
		5-7 p.m.	85	85	90/90	90/90	No activity	90/90
		7-8 p.m.	60	85	90/90	90/90	No activity	90/90
		8-10 p.m.	60	85	90/85	90/85	No activity	90/82
		10 p.m.-7 a.m.	60	60	No activity	82-84/60	75/75	No activity
	Sun/Hol Hol	7-9 a.m.	60	60	90/60	90/90	No activity	90/45
		9 am. -5 p.m.	90	90	90/90	90/90	No activity	90/90
		5-7 p.m.	85	85	90/85	90/90	No activity	90/90
		7-8 p.m.	60	85	90/85	90/90	No activity	90/90
		8-10 p.m.	60	85	90/85	90/85	No activity	90/82
		10 p.m.-7 a.m.	60	60	No activity	82-84/60	75/75	No activity