



August 22, 2016

Subject: South Bellevue Segment
16-124380 LY

Reference Permit: 15-107662 GD

Location: 2700 Bellevue Way SE

EXPANDED EXEMPT WORK HOURS

SOUND TRANSIT REQUEST

East Channel Bridge to South End of the South Bellevue Station: Sound Transit requests approval of expanded exempt hours of operation for construction activities in this area, for a period of 39 months. For work anticipated to occur in 10-hour to 12-hour shifts, varying in timing across the 24-hour day based on site access as arranged with WSDOT, Sound Transit proposes a maximum noise level of 77 dBA Leq(h) (Equivalent Sound Level over one hour) during expanded exempt hours.

North of South Bellevue Station to Wye at 112th Avenue SE: Sound Transit requests approval of expanded exempt hours of operation for construction activities in this area, for a period of 34 months. For work anticipated to occur from 7 am to 10 pm on weekdays, and from 7 am to 9 pm on weekends, Sound Transit proposes a maximum noise level of 80 dBA Leq(h) during expanded exempt hours.

CITY FINDINGS

Staff has completed its review of Sound Transit's request for extended construction noise hours for the South Bellevue Segment of East Link. In support of this review, the Greenbusch Group, Inc. has provided a peer review of this request titled "Contract E320 Final Noise Study for Expanded Exempt Hours of Construction – Peer Review" dated May 27, 2016. The conclusions and mitigation recommendations from this peer review have been incorporated in these findings and the conditions of approval.

Peer review confirms that the noise study for the expanded exempt hours for Construction Noise conforms to industry standards and complies with best practices for evaluation of the potential construction noise levels. Section 5 of City of Bellevue Resolution No. 8903 related to Sound Transit's East Link light rail project authorizing execution of the Amended and Restated Umbrella Memorandum of Understanding between the City of Bellevue and Sound Transit for the East Link Project (Amended and Restated MOU) contains language related to noise mitigation measures. In all cases Sound Transit's noise mitigation plans for the construction of East Link are required to be equal to or better than applicable precedent established in Seattle under DR 3- 2009 and previously issued construction noise variances for Major Public

Projects, to the extent permissible by law. This specifically includes, without limitation, standards for installation of permanent and temporary sound walls, limits for interior sound levels measured from the inside of buildings, requirements for noise control and monitoring plans, requirements for compliance with noise variance and other related permit requirements, and requirements for community outreach.

Per the peer review completed by the Greenbusch Group, the proposed limits of 77 dBA and 80 dBA Hourly L_{eq} are significantly higher than allowed on previous Sound Transit projects in the City of Seattle. If the goal, as stated, is to be consistent with the City of Seattle Major Public Project Construction Variance (MPPCV) decisions for the various Sound Transit projects in Seattle, additional mitigation must be provided during the construction phase to reduce the impact to the residents.

The following conditions are intended to mitigate for expected noise created by construction activities in the South Bellevue Segment of East Link.

1. During the expanded exempt hours of construction, the Contractor will be required to implement mitigation. All of the mitigation techniques listed are in line with industry standards and best practices. Required noise control measures include the following:
 - Noise generating stationary equipment will be partially enclosed
 - Vehicle back-up alarms will be switched to broadband back-up alarms during any expanded exempt hours
 - Spoil haul trucks to have beds lined with sound deadening material
 - Concrete crushers or pavement saws will be used instead of hoe rams.
 - Pneumatic tools will have intake and exhaust mufflers.
 - All construction equipment should be of recent manufacture and have effective noise suppression design.
 - Storage bins and chutes will be lined with sound deadening material. All internal combustion engines to have mufflers or other shielding.
 - Noisier equipment and activities should be located as far as possible from the noise sensitive locations.
 - Minimize noisier operation during most noise sensitive hours.
2. Sound Transit or its agent shall establish a 24 hour construction hotline to provide a single point of contact for construction inquiries and complaints per the terms included in your permit submittal. However, complaints received by Code Compliance during work hours and City of Bellevue Police during evening hours will be directed back to the 24 hour hotline. The City of Bellevue and Sound Transit will maintain logs of complaint activity and that information will be shared

between agencies. Sound Transit or its agent shall address these noise complaints and implement appropriate measures to resolve these complaints.

3. A plan for public outreach shall be undertaken by Sound Transit public outreach staff. Once the permit is issued, Sound Transit will be responsible for implementing the plan and a pro-active program of notification and communication identified in the permit application including, but not limited to, an "informational" public meeting attended by both agencies and construction contractor a minimum of 30 days prior to the start of any heavy civil construction covered by this permit, early written notice of construction activities, hosting public meetings, and communicating with businesses in the vicinity. Sound Transit's contractor will be required to participate in public outreach activities and meetings as appropriate during construction.
4. A minimum of 14 calendar days prior to the commencement of the construction activity related to this request, Sound Transit or its agent shall provide public notice to the City of Bellevue and properties within 1,000 feet of the South Bellevue Station and guideway. The form of the communication shall be developed by consensus between the two agencies.
5. A copy of the public notice described in condition number 4 shall be provided to the Development Services Department at least 14 calendar days in advance of proposed construction outside the normal exempt construction noise hours.
6. Sound Transit or its agent shall be responsible to establish a Noise and Vibration Control Plan per the terms listed in Section 1.06 of the Contract Specifications submitted as part of this extended work hour request. The Noise and Vibration Control Plan shall be submitted to the City of Bellevue Development Services Department for review and approval prior to initiating expanded exempt hour construction noise activities.
7. Sound Transit or its agent shall be responsible for implementing the Construction Methods for Operations and Construction Methods for Noise Abatement Measures identified in the E320 Contract Specification 01 57 15 Sections 3.04 and 3.05 submitted as part of this extended work hour request.
8. Sound Transit or its agent shall be responsible to implement the Noise and Vibration Measurement Procedures identified in Section 3.06 of the Contract Specifications submitted as part of this extended work hour request.
9. In order to reduce construction noise levels to reflect Variance conditions of Ambient +6 dBA Leq(h), as established on Sound Transit Seattle construction projects for work from midnight to 5:00 AM, it will be necessary to provide additional mitigation.

- Offers of temporary sound insulation packages, prior to the start of expanded exempt hour work, are warranted for properties predicted to receive expanded exempt hour construction noise greater than ambient +6 dBA Leq(h) (at the property line nearest to construction). The offered packages shall include, but are not limited to, temporary treatments for windows and white noise machines, etc. The offered temporary sound insulation packages shall be sufficient (based on industry standards for attenuation achievable via respective insulating elements) to attenuate construction noise levels to Ambient +6 dBA Leq(h) for properties where the predicted difference between pre-construction (Ambient) noise levels and expanded exempt hours construction noise levels does not exceed 16 dBA Leq(h). For properties where the predicted difference between pre-construction (Ambient) noise levels and expanded exempt hours construction noise levels does exceed 16 dBA(h), a minimum sound attenuation of 10 dBA Leq(h) shall be achievable with the offered temporary sound insulation packages.

Properties with predicted expanded exempt hour construction noise levels above the precedent set in Seattle Sound Transit projects, of Ambient + 6dBA Leq (h), include:

- For East Channel - EL 100b, 100c, 100d, 100e, 100g, 100h, 100i, 100j, 100k, 100l, 100m, 100n, 100o, 100p, 101q, 104, 105, 108, 109.1, 109;
- For South Bellevue Station to Wye - EL 118, 119, 121, 122, 124, 125, 126, 127, 129, 130, 131, 132, 133, 134, 135, 137, 138, 139, 140, 142, 143, 144, 145.

Temporary sound insulation package offers will be necessary for these properties if expanded exempt hour construction noise levels cannot be otherwise mitigated to below Ambient + 6dBA Leq(h), as demonstrated in future testing.

- Sound Transit shall provide a copy of the proposed temporary sound insulation package offers to the City of Bellevue Development Services Department for review and concurrence prior to offers being made to property owners. Sound Transit shall also provide a table or matrix to the City of Bellevue Development Services Department that indicates which properties have been offered temporary sound insulation packages, the dates of acceptance or denial, the methods of sound attenuation, the predicted sound attenuation (based on industry standards for attenuation achievable via respective insulating elements), and anticipated implementation dates.

10. Expanded exempt hour project sound levels shall not exceed the proposed limits of:

- 77 dBA Leq(h) from East Channel Bridge to the South End of South Bellevue Station, and

- 80 dBA Leq(h) from North of South Bellevue Station to the Wye at 112th Avenue SE, as identified in the permit application.

These numbers are based on predicted expanded exempt hour noise levels with on-site mitigation deployed.

11. If noise levels are determined to be above the respective thresholds defined in number 10, Sound Transit will require the contractor to cease the associated noise-generating activity immediately. Such exceedance may result in a review or modification of the conditions imposed by this approval.

12. Sound Transit or its agent shall be required to obtain approval from the City of Bellevue Right of Way Use (ROW) Division for expanded exempt hour construction activities that impact the ROW outside the scope of this approval such as haul routes and staging activities which have been identified in your ROW Use Permit.

13. This approval of expanded exempt hours shall expire:

- 39 months from the commencement of expanded exempt hour construction from East Channel Bridge to the South End of South Bellevue Station, and
- 34 months from the commencement of expanded exempt hour construction from North of South Bellevue Station to the Wye at 112th Avenue SE.

14. The City of Bellevue or its agent shall conduct a one year review of noise levels and mitigation and may modify the terms and conditions of this approval as needed if it is determined that the current approval and current conditions are not adequately protecting the public health and safety or reasonably controlling or mitigation the construction noise, or that there are more reasonable methods of doing so based on best management practices.

15. A copy of this authorization shall be kept available at the job site.

The conditions established by this permit approval are based on the nature and merits of the request, staff review, and third party peer review. Any change of scope of work or environmental conditions may require review or modification of the conditions contained herein.

Section 1.06 of the Contract Specifications
Section 1.07 of the Contract Specifications
Section 3.04 of the Contract Specifications

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Section 3.05 of the Contract Specifications
Section 3.06 of the Contract Specifications