



File No. 247-22-000243-V

COMMUNITY

NOISE PERMIT APPLICATION
INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED

1. Complete the application form and provide appropriate original signatures. To ensure timely processing of your application, all materials must be submitted on single-sided, 8.5" x 11" paper. Do not use binders, tabs/dividers, staples or tape.
2. Include a copy of the current deed showing the property owners.
3. Attach correct fee.
4. Include a plot plan that shows all property lines and existing and proposed structures, parking, landscaping, lighting, etc.
5. If this application includes oversized plans a single, reduced-size plan no larger than 11" x 17" with graphic scale shall also be included.
6. All applicable standards and criteria must be addressed in writing prior to acceptance of the application. Detailed descriptions, maps and other relevant information must be attached to the application.

FEE: _____

Applicant's Name (print): Cody Smith, Deschutes Co. Road Dept.
Mailing Address: 61150 SE 27th St.
Applicant's Email Address: Cody.Smith@deschutes.org

Phone: (541) 322-7113
City/State/Zip: Bend, OR 97702

Property Owner's Name (if different)*: N/A
Mailing Address: N/A

Phone: (N/A)
City/State/Zip: N/A

1. Property Description:
T16S R 12E, Section 26. (No tax lots - County road right of way)
2. Property Zone(s): EFU & RI
Property Size (acres or sq. ft.): N/A
3. Lot of Record? (State reason): N/A, County road right-of-way
4. Property Address: N/A, County road right-of-way
5. Present Use of Property: County road, Rural Collector/Rural Arterial
6. Existing Structures: Five public highway bridges (BR#18394, BR#18208, BR#18299, BR#18493, BR#18494)
7. Request:

Deschutes County Road Department (Road Department) is requesting a nighttime noise variance to construct bridge approach repairs and pavement rehabilitation on Tumalo Rd and Deschutes Market Rd between Tumalo Place and 19th Street. Due to high daytime traffic volumes in the Project

vicinity (Average Daily Traffic of 7,369), construction needs to be performed during nighttime hours (10 p.m.-6 a.m.).

Single-lane closures will be required to perform the work, requiring temporary traffic control in the form of flagging and pilot car operations. Performing construction during nighttime hours will reduce the inconvenience to public road users by reducing the length of traffic queues resulting from flagging operations. Traffic volumes during nighttime hours within the Project corridor are approximately 90% less than daytime volumes, according to a Road Department traffic study conducted within the Project limits in August 2019. Daytime traffic volumes are high enough to cause extensive traffic queues upstream of the Project on Tumalo Rd/Tumalo Pl and Deschutes Market Rd, as well as US 97. Nighttime construction will minimize the propensity for traffic queues to become excessively long and cause delays to the public.

It is the Road Department’s opinion that the public nuisance caused by nighttime construction will be benign in comparison to the nuisance caused by traffic queues resulting from daytime construction. The Project is located primarily in a Rural Industrial (RI)-zoned area, and there are no residences in the immediate vicinity of the Project site. The Federal Highway Administration (FHWA) “Construction Noise Handbook” describes construction equipment noise levels and provides the following information for all equipment that may be used on the project. This data is for the period beginning in 1970 through 2006. The information is for both stationary and mobile sources and for steady, intermittent, and impulse type noises.

Equipment Description	Spec. 721.560 L_{max} @ 50 feet (dBA, slow)	Actual measured L_{max} @ 50 feet (dBA, slow) (Samples averaged)
Backhoe	80	78
Compactor (ground)	80	83
Compressor (air)	80	78
Dump Truck	84	76
Flat Bed Truck	84	74
Front End Loader	80	79
Generator	82	81
Grader	85	N/A
Pavement Scarifier	85	90
Paver	85	77
Pickup Truck	55	75
Pneumatic Tools	85	85
Roller	85	80
Vacuum Street Sweeper	80	82
Warning Horn	85	83

Source: Table 9.1 RCNM Default Noise Emission Reference Levels and Usage Factors

For each generic type of equipment listed in the table, the following information is provided:

- The specification “Spec” limit for each piece of equipment expressed as L_{max} level in dBA “slow” at a reference distance of 50 feet from the loudest side of the equipment.
- The measured “Actual” emission level at 50 feet for each piece of equipment is based on hundreds of emission measurements performed on Central Artery/Tunnel (CA/T) work sites.

The National Highway Institute (NHI) provides additional information on what occurs when there are no barriers or objects between the source and receptor. Noise levels decrease 6 dBA each time

the distance from the point source doubles in paved environments. In locations where soft ground exists, an additional 1.5 dBA decrease occurs per doubling distance. When the above numbers differ, the Road Department has used the higher (noisier) values when determining the dBAS for the equipment to be used.

The Planning Division utilizes the Department of Environment Quality (DEQ) standards for noise as set forth in Oregon Administrative Rule (OAR) 340-035-0035 when reviewing noise permits under Deschutes County Code (DCC) 8.08. The Road Department has used Table 8, New Industrial and Commercial Noise Source Standards, from OAR 340-035-0035 to determine the potential noise impact area. Table 8 sets a nighttime standard of 50 dBA for noise. The highest dBA from the equipment table is 90 dBA, resulting in a potential noise impact area of a 3,200-foot radius from Tumalo Road and Tumalo Place. At 3,200 feet the highest expected dBA from any equipment would be 48 dBA, which meets the DEQ standard. Approximately 227 properties are within the noise radius area, many of which do not have residences. The impacted properties are shown on the attached map, Figure 1.

The nighttime work is expected to begin no sooner than June 1, 2022. The duration of the nighttime work is anticipated to be no more than three weeks. The work will be completed by August 31, 2022. Nighttime work will occur between 10 p.m. and 6 a.m. Sunday night through Friday morning each week. The Road Department will issue a media release to inform the travelling public no later than one week prior to start of work. Additionally, portable changeable message boards will be installed on Deschutes Market Rd and Tumalo Rd no later than two weeks prior to start of work.


8. Property will be served by:

Sewer: N/A as project occurs on public right of way and no sewer is present.

Onsite Disposal System: N/A, on-site portable systems will be used as necessary.

9. Domestic Water Source: N/A.

To the best of my knowledge, the proposal complies with all previous conditions of approval and all other applicable local, state, and federal laws. By signing this application, I acknowledge that Deschutes County planning staff may make a site visit(s) to the address(es) listed on this application in order to evaluate the property(ies) with the Deschutes County Code criteria applicable to the land use request(s) submitted. Please describe any special circumstances regarding a potential site visit:

Applicant's Signature:  Date: 2022.02.22 13:36:52 -08'00' Date: _____

Property Owner's Signature (if different)*: _____ Date: _____

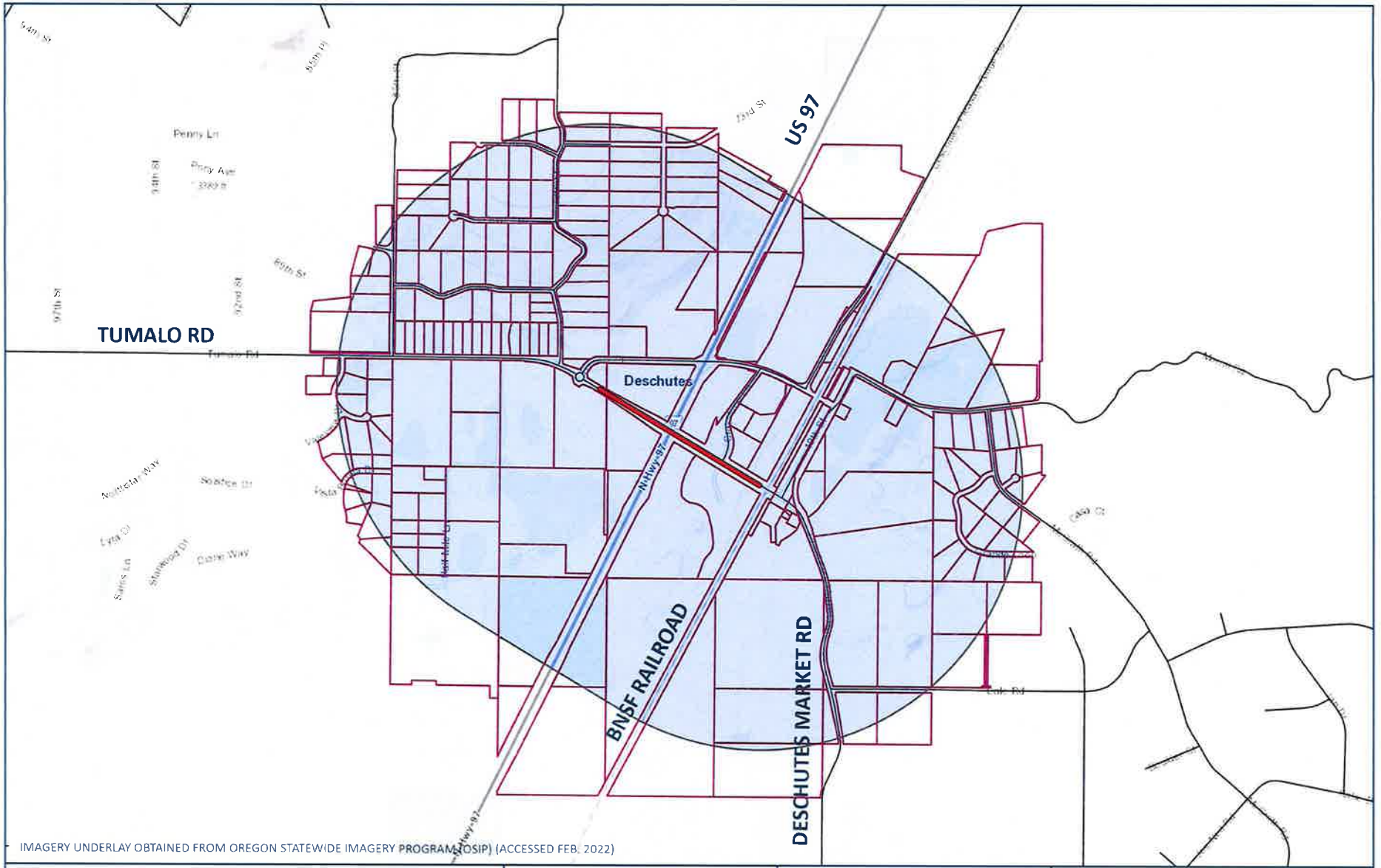
Agent's Name (if applicable): _____ Phone: (____) _____

Mailing Address: _____ City/State/Zip: _____

Agent's Email Address: _____





***If this application is not signed by the property owner, a letter authorizing signature by the applicant must be attached. By signing this application, the applicant understands and agrees that Deschutes County may require a deposit for hearings officers' fees prior to the application being deemed complete. If the application is heard by a hearings officer, the applicant will be responsible for the actual costs of the hearings officer.**





IMAGERY UNDERLAY OBTAINED FROM OREGON STATEWIDE IMAGERY PROGRAM (OSIP) (ACCESSED FEB. 2022)

LEGEND

-  PROJECT SEGMENT
-  IMPACTED PROPERTIES
-  NOISE IMPACT AREA (3,200 FEET)
-  DESCHUTES COUNTY ROADS

N



**NOISE IMPACT AREA
FIGURE 1**

**PAVING OF
DESCHUTES JUNCTION**

FEB. 2022

SHT. 1 OF 1



**ROAD
DEPARTMENT**