

# Council Business Meeting

April 5, 2022

<b>Agenda Item</b>	Oregon Department of Transportation Nighttime Work Request-Bridge Improvement Project	
<b>From</b>	Scott Fleury PE	Public Works Director
<b>Contact</b>	<a href="mailto:Scott.fleury@ashland.or.us">Scott.fleury@ashland.or.us</a>	541-552-2412

## **SUMMARY**

Before the Council is a request to authorize a permit for night work for the Oregon Department of Transportation (ODOT) Bridge Upgrades Project.

## **POLICIES, PLANS & GOALS SUPPORTED**

Council Goals-Essential Services:

- Streets

Department Goals:

- Maintain existing infrastructure to meet regulatory requirements and minimize life-cycle costs
- Deliver timely life cycle capital improvement projects
- Maintain and improve infrastructure that enhances the economic vitality of the community

## **PREVIOUS COUNCIL ACTION**

The City Council has previously approved nighttime construction work within City limits to minimize the disturbance to the traveling public that can be created with daytime construction activities. Council previously authorized ODOT nighttime work associated with their signal maintenance project ([Staff Report](#)).

## **BACKGROUND AND ADDITIONAL INFORMATION**

ODOT has requested the ability to perform nighttime work associated with their Bridge Improvement Project. Ashland Municipal Code (AMC 9.08.170(6)) details work hours for construction projects within the public right of way. Approved hours are from 7:00 am to 7:00 pm on weekdays and 8:00 am to 6:00 pm on weekends. Nighttime work under certain circumstances can be approved by the City Manager as allowed by the AMC. ODOT's proposed nighttime work for the Bridge Improvement Project will exceed the ten (10) days total time allowable under Manager approval, thus staff is bringing forward the request to Council for approval of nighttime work to exceed 10 total days.

## **Work Proposed**

This project includes installation of new bridge decks for two bridges located within the City of Ashland. The first is the bridge located on Ashland Street (OR 66) over the Central Oregon and Pacific Railroad line and the second is located on East Main over I-5. Only the OR 66 bridge over the RR is located within the Ashland city limits, the East Main Street bridge is within the Urban Growth Boundary. The goal is to complete both deck repairs this year by accelerating the construction schedule. In order to do this ODOT has estimated they will need the following to perform night work for each location.

- OR 66 bridge over RR (inside city limits) - 15 nights from mid-August through September of 2022.
- E. Main St. bridge over I-5 - 10 nights from October through November of 2022.

Night work provides many benefits, with the most prominent being safety, as traffic volumes are at their lowest. Historically, ODOT has found that exposure to increased volumes of traffic during the day to be one of the most dangerous parts of our projects, for both our employees and the contractor's employees. The higher traffic volumes during the daytime also poses a hazard for the public traveling through the work zones, as the lane transition area entering the work zone is one of the most dangerous areas of the project. Likewise, noise impacts to the residential areas is also a concern but we have found that construction can be completed sooner, benefiting everyone.

### **Permit Conditions of Approval**

If approved by Council staff recommends specific conditions of approval that include:

1. Notification by ODOT to City 24 hours in advance of construction activities with specific location and hours of proposed nighttime work.
2. ODOT to notify adjacent residents via door hanger of nighttime work activities and provide associated contact information.

*City will post on the Public Works website and Facebook page indicating details about the construction project. the specific locations and times of nighttime work activities.*

### **AMC 9.08.170 (6)**

*Construction or Repair of Buildings, Excavation of Streets and Highways.* The construction, demolition, alteration or repair of any building or the excavation of streets and highways other than between the hours of 7:00 a.m. and 7:00 p.m., on weekdays, and 8:00 a.m. and 6:00 p.m. on weekends and holidays, except in the case of an emergency in the interest of the public welfare and safety. In cases of emergency, construction or repair noises are exempt from this provision. In nonemergency situations, the City Manager may issue a permit, upon application, if the City Manager determines that the public health and safety, as affected by loud and raucous noise caused by construction or repair of buildings or excavation of streets and highways between the hours of 7:00 p.m. and 7:00 a.m. will not be impaired, and if the City Manager further determines that loss or inconvenience would otherwise result. The permit shall grant permission in nonemergency cases for a period of not more than five days. The permit may be renewed once for a period of five days or less. The actual owner of property may do work on property which is owner occupied between the hours of 6:00 p.m. and 10:00 p.m. without obtaining a permit under this paragraph.

### **FISCAL IMPACTS**

The only fiscal impacts are associated with staff time to bring the request before the City Council.

### **STAFF RECOMMENDATION**

Staff recommends approval of the nighttime construction activities with appropriate noticing to be done by ODOT and City staff.

A secondary option is to not approve the nighttime work permit and require ODOT to direct the contractor to complete all construction activities between 7:00 a.m. and 7:00 p.m.

### **ACTIONS, OPTIONS & POTENTIAL MOTIONS**

I move approval of nighttime construction activities within the City of Ashland for the Oregon Department of Transportation Bridge Improvement Project.

### **REFERENCES & ATTACHMENTS**

Attachment #1: ODOT Memo

**STATE OF OREGON**  
**Department of Transportation**  
**Region 3**  
Planning and Programming Unit  
3500 NW Stewart Parkway  
Roseburg, Oregon 97470  
(541) 957-3521 FAX (541) 957-3547

**MEMO**

File Code: PLA

Date: 2.7.22

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**TO:** Scott Fleury, City of Ashland Engineering Services Manager

**FROM:** Janell Stradtner, Transportation Planner

**SUBJECT:** **K21180 - OR66 Bridge over RR & E. Main St. Bridge over I-5– Noise Exemption**

The Oregon Department of Transportation is requesting a noise exemption to the normal operating hours of 7 AM to 7 PM weekdays and 8 AM to 6 PM on weekends and holidays for this STIP project. Night work will allow for a safer working environment while limiting the impacts to the traveling public.

This project will install deck overlays for two bridges: OR 66 over the CORP RR and E. Main St. over I-5. Only the OR 66 bridge over the RR is located within the Ashland city limits. The goal is to complete both deck repairs this year by accelerating the construction schedule. In order to do this, it was estimated that we will need the following:

- OR 66 bridge over RR (inside city limits) - 15 nights from mid-August through September of 2022.
- E. Main St. bridge over I-5 - 10 nights from October through November of 2022.

Night work provides many benefits, with the most prominent being safety, as traffic volumes are at their lowest. Historically, ODOT has found that exposure to increased volumes of traffic during the day to be one of the most dangerous parts of our projects, for both our employees and the contractor's employees. The higher traffic volumes during the day time also poses a hazard for the public traveling through our work zones, as the lane transition area entering the work zone is one of the most dangerous areas of the project. Likewise, noise impacts to the residential areas is also a concern but we have found that construction can be completed sooner, benefiting everyone.

The OR 66 bridge over the RR is located within the Ashland city limits and is zoned R-2, C-1 with R-1-5 adjacent to the south. The E. Main Street Bridge is located just outside of the Ashland city limits but is inside the UGB. The city limits and a residential area zoned R-1-5 lies just southwest of the bridge. Attached is the zone map showing the two bridges.

ODOT has standard construction-related noise mitigation measures (Oregon Standard Specifications for Construction, Specification 00290.32 Noise Control, ODOT, 2018) that we will include in the contract specifications for this project. All construction activities must comply with the Oregon Revised Statute, Chapter 467 (ORS-467) and the Oregon Administrative Rules Chapter 340, Division 35 Department of Environmental Quality (OAR 340-035). In addition the following construction noise mitigation measures from the Oregon Standard Specifications for Construction are required to be included in all ODOT contract specifications:

- Use equipment with sound control devices no less effective than those provided on the original equipment. Equipment with un-muffled exhausts is prohibited.
- Use equipment complying with pertinent equipment noise standards of the EPA.
- Do not drive pilings or perform blasting operations within 3,000 feet of an occupied dwelling on Sundays, legal holidays, or between the hours of 8:00 p.m. and 8:00 a.m. on other days, without the approval of the ODOT construction project manager.
- Mitigate the noise from rock crushing or screening operations performed within 3,000 feet of all occupied dwellings by placing material stockpiles between the operation and the affected dwellings, or by other means approved by the ODOT construction project manager.
- Locate stationary construction equipment as far from nearby noise sensitive properties as feasible.
- Shut off idling equipment.

Jackson County does not have a noise ordinance but they have been requesting that we provide notice to residences within 1000 feet of a project. We have been sending out mailers with details of the night work and the dates. Our Public Information Specialist, Gary Leaming, has been coordinating the notifications and is very familiar with the process. His email address is: [gary.w.leaming@odot.oregon.gov](mailto:gary.w.leaming@odot.oregon.gov).

Below is an example of a typical deck preservation project with construction activities expected for this project. We realize there will be an impact to the neighboring residences and do not take the request lightly, but we are forced to weigh the safety of the highway workers over the noise disruption. The requested number of nights for each deck preservation is the minimum request to complete the work in a safe and effective manner.

### **Reference Construction Noise Levels at 50 Feet**

In order to predict potential noise levels related to the project's construction activities, several assumptions must be made, including the number of individual pieces of equipment in operation, general location of the equipment relative to the receiving properties and types of activities taking place. The list below provides the 5 major construction phases used in this analysis, with a description of the activities and equipment to follow.

1. Light Construction and Traffic Control Activities
2. Containment Installation and Removal
3. Heavy Construction for Expansion Joint Replacement
4. Normal Construction for Seal Replacement
5. Grinding and Pavement Overlay

For each of the five activities, reference construction noise levels at 50 feet were predicted. The reference construction noise levels predicted include the Lmax and 15 minute Leq, in dBA, at 50 feet from the construction site, with no additional attenuation for equipment shielding or distance. The Lmax noise level is the typical maximum noise level during the activity and the Leq is the worst-case 15-minute noise level that typically only occurs for short periods when all the equipment is in operation and the activities are located directly next to a noise sensitive property. Table 2 provides the predicted reference noise levels for each of the construction scenarios at 50 feet from the construction site. It is important to note that the maximum construction noise levels

during the majority of time would be 3 to 7 dB lower than these worst-case levels. Furthermore, the typical Leq noise levels would also be 7 to 12 dB lower than the Leq provided in Table 2.

<b>Table 2: Reference Construction Noise Levels</b> <i>(Combined worst-case noise levels for all equipment under typical operations at 50 feet from work site)</i>			
<b>Scenario<sup>1</sup></b>	<b>Equipment<sup>2</sup></b>	<b>Lmax<sup>3</sup></b>	<b>Leq<sup>4</sup></b>
Light Construction and Traffic Control	Flatbed Delivery Truck, Generator, Light Plant, Service Trucks	85	82
Containment Installation and Removal	Compressor, Crane, Flatbed Delivery Truck, Generator, Man Lift, Light Plant, Service Trucks, Pneumatic Tools, Welder/Torch	89	86
Expansion Joint Replacement	Back Hoe, Compressor, Concrete Saw, Generator, Jack Hammer, Light Plant, Service Trucks, Pneumatic Tools	91	88
Expansion Seal Replacement	Back Hoe, Compressor, Generator, Jack Hammer, Light Plant, Service Trucks, Pneumatic Tools	88	85
Grinding and Pavement Overlay	Compressor, Compactor, Dump Trucks, Generator, Pavement Grinder, Paver, Light Plant, Service Trucks, Vacuum Street Sweeper	90	86

1. Operational conditions under which the noise levels are projected  
 2. Normal equipment in operation under the given scenario  
 3. The Lmax (dBA) higher of the Lm and the L10 output from the RNCM.  
 4. The Leq (dBA) presented here is the typical and worst case short-term energy average noise emissions for the various construction equipment under the given scenario. The lower value is a typical Leq, and the second value is the worst case Leq.

## Light Construction and Traffic Control Activities

Traffic control activities include the installation of temporary signs, safety barriers and project related traffic detours required for project construction. Although some of this work will be performed during daytime hours, with major detour signs installed early in the process, the actually closing of the highways and ramps for night work and full weekend closures will require setting up traffic control nightly and removing it during early morning hours. Noise producing vehicles for this phase are similar to the vehicles currently using the highways and arterial roadways. Equipment in this phase would include flatbed delivery trucks, light plants, and service trucks. Typical maximum noise levels from this construction activity at 50 feet are 85 dBA Lmax, with a typical 15 minute Leq of 82 dBA Leq. Typical hourly Leq for this activity, assuming background noise levels of 65 dBA, is 76 dBA Leq.

## Containment Installation and Removal

The containment structures will be required in locations where the expansion joint is on an open bridge deck and located above another roadway or any other accessible area. Containment structure installation will require air compressors, a crane, flatbed delivery trucks, generators, man lifts, light plants, service trucks, pneumatic tools, and welding. Because the work also requires highway closure, it also must be performed at night. Typical maximum noise levels from this construction activity at 50 feet are 89 dBA Lmax, with a typical 15 minute Leq of 86

dBA Leq. Typical hourly Leq for this activity, assuming background noise levels of 65 dBA, is 80 dBA Leq.

## **Expansion Joint Removal and Replacement**

Construction equipment necessary for the replacement of the expansion joints could include air compressors, backhoe, concrete saws, flatbed delivery trucks, generators, jackhammer, light plants, service trucks, pneumatic tools, and welding. Jackhammers and concrete saws are among the loudest equipment used for this operation. Typical maximum noise levels from this construction activity at 50 feet are 91 dBA Lmax, with a typical 15 minute Leq of 88 dBA Leq. Typical hourly Leq for this activity, assuming background noise levels of 65 dBA, is 82 dBA Leq.

## **Seal Removal and Replacement**

Construction equipment necessary for the replacement of the expansion joint seals is similar to the equipment necessary for the joint. Notable exceptions under this activity are no need for concrete saw cutting or concrete breaking with a jackhammer, which reduces the overall noise levels for this activity when compared to the expansion joint work. Typical maximum noise levels from this construction activity at 50 feet are 88 dBA Lmax, with a typical 15 minute Leq of 85 dBA Leq. Typical hourly Leq for this activity, assuming background noise levels of 65 dBA, is 79 dBA Leq.

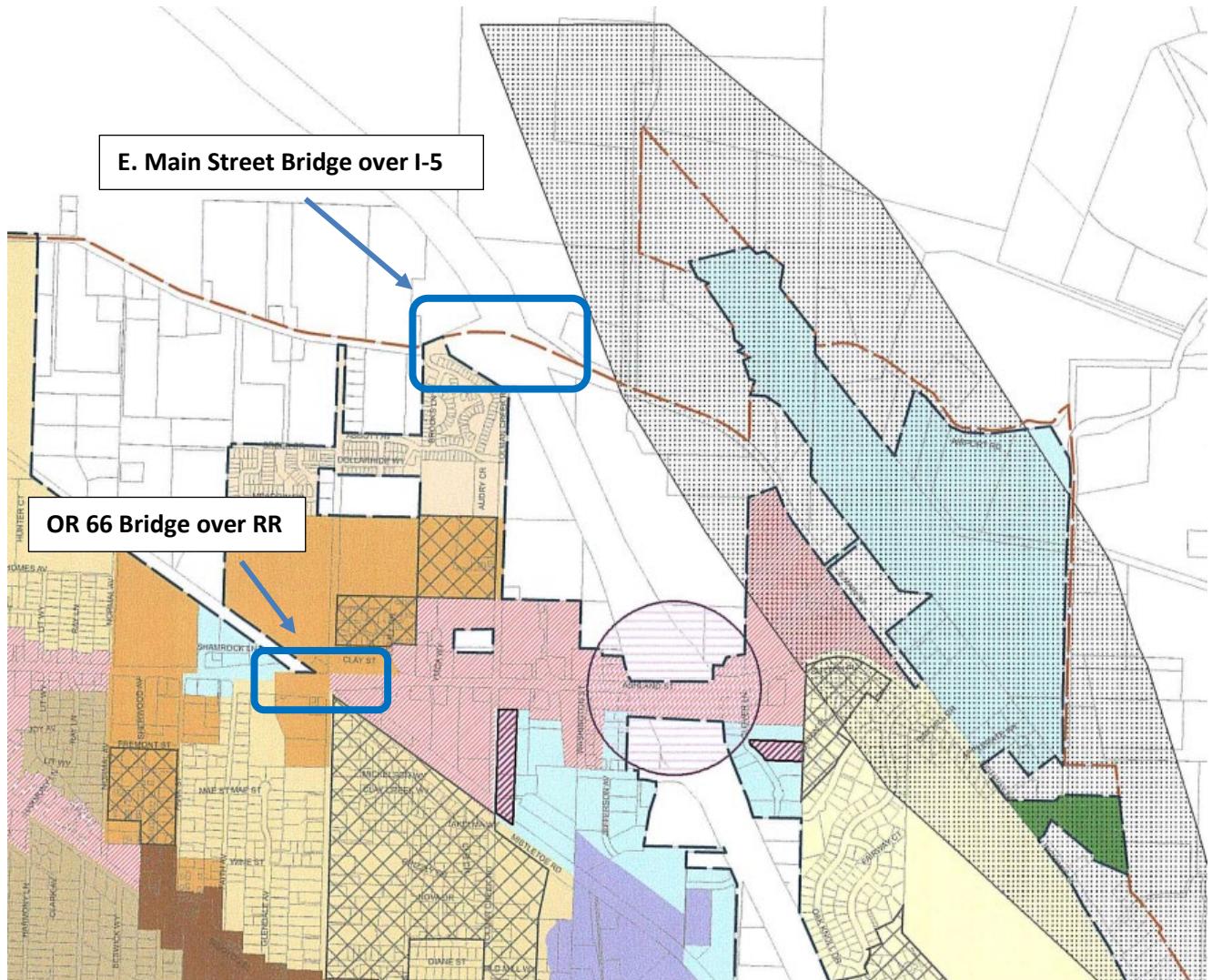
For joint replacements in the East Approach area, where no overlay is planned, some limited paving to match the existing roadway was assumed in the analysis. Noise levels and equipment for this activity are the same as described below under Pavement Overlay.

## **Pavement Overlay**

The pavement overlay will also require a pavement grinding prior to applying the overlay. The pavement grinder is only of the louder pieces of equipment used during construction. Other equipment necessary for the paving process includes air compressors, dump trucks, flatbed delivery trucks, generators, light plants, pavers, service trucks, pneumatic tools and a vacuum street sweeper. Typical maximum noise levels from this construction activity at 50 feet are 90 dBA Lmax, with a typical 15 minute Leq of 86 dBA Leq. Typical hourly Leq for this activity, assuming background noise levels of 65 dBA, is 80 dBA Leq.

ODOT STIP KN 21180

OR 66 bridge over Railroad and East Main Street bridge over I-5 (BR08743)



## Zoning Map

City Limits	C-1
Urban Growth Boundary	C-1-D
P-overlay	E-1
Airport Overlay	HC
Freeway Overlay	M-1
Residential Overlay	NM
Taxlots	R-1-3.5
	R-1-5
	R-1-7.5
	R-2
	R-3
	RR-5
	RR-1
	SO
	WR
	WR-20

Mapping is schematic only and bears no warranty of accuracy.  
All features, structures, facilities, easement or roadway locations  
should be independently field verified for existence and/or location.



# EAST MAIN AND ASHLAND STREET BRIDGES

## *Bridge decks set for improvements*

Two bridge decks in southeast Ashland will get needed facelifts next summer and fall.

We're improving the Ashland Street over CORP Railroad Bridge and the East Main Street Bridge over Interstate 5 in 2022. After consulting with Ashland Fire and Police, as well as the Ashland School District, we've agreed that construction closing the East Main Street Bridge over I-5 will be scheduled for the fall — outside the fire season.

"Given the sensitivities after the 2020 fire season and the Almeda Fire, it made sense to keep those evacuation routes open," said ODOT Transportation Project Manager Eli Oberlander.

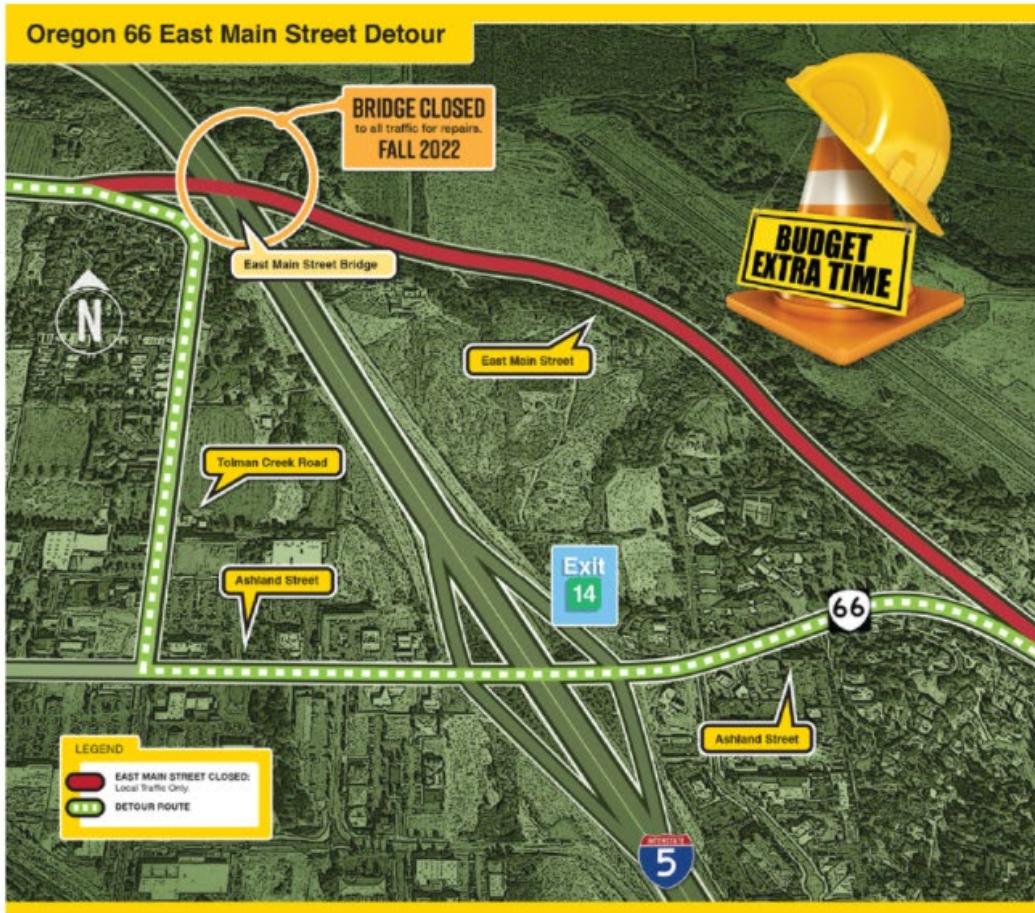
The work on both bridges will include improving the concrete decks which will allow the bridges to remain in service for years to come.

The Ashland Street Bridge over the CORP railroad tracks will be done first, near the beginning of the summer. This work is expected to take about two months. The work will allow traffic to continue using the bridge, although traffic will be funneled into a single lane in each direction.

The East Main Street Bridge over I-5 work will require a full closure of the bridge for just over a month. The bridge deck is integral to the structural integrity of the bridge. This bridge is frequently listed as one of the worst in the state and in need of repair. This work will take it off the list.

"Looking at the bridge from the air, it looks like the deck is pockmarked with patches," said Oberlander.





## Key route in and out of Ashland

Because East Main Street is also a key route into and out of Ashland, work won't begin on the structure until after the end of fire season, September 30. By then the Ashland Street Bridge will be complete, school will be in session, and fire season for the year should have passed.

Traffic that normally uses the bridge will need to factor in extra time. The detour will include Tolman Creek Road and Ashland Street.

