



Oregon

Tina Kotek, Governor

Oregon Transportation Commission

Office of the Director, MS 11

355 Capitol St NE

Salem, OR 97301-3871

DATE: April 25, 2024

TO: Oregon Transportation Commission

FROM: Kristopher W. Strickler
Director

SUBJECT: **Agenda Item J3** – Increase Construction Authorization for the OR217: OR10 – OR99W project

Requested Actions:

Approve an increase in the Construction Authorization for the OR217: OR10 - OR99W project from \$129,693,018 to \$147,081,690 for a total increase of \$17,388,672. The funding for the increase will be provided from \$3,523,663 from the state bridge program funding reserves, \$11,865,009 from cancelling the construction phase of the I-5: Capitol Highway – OR217 project and \$2,000,000 already accounted for in the project bottom line from canceling the utility relocation phase in a previous OTC action.

Project to modify funding:

OR217: OR10 - OR99W (K18841)				
PHASE	YEAR	COST		
		Current Estimate	Proposed	Delta
Preliminary Engineering	2014	\$22,490,267	\$22,490,267	\$0
Right of Way	2020	\$3,000,000	\$3,000,000	\$0
Utility Relocation	N/A	\$0	\$0	\$0
Construction	2021	\$131,693,018	\$147,081,690	\$15,388,672
Other	2019	\$1,600,000	\$1,600,000	\$0
TOTAL		\$158,783,285	\$174,171,957	\$15,388,672

Funding plan:

Source of funding	Funding Program	Funds
Cancel the CN phase of I-5: Capitol Highway - OR217 (K22719)	SW Enhance	\$ 11,865,009
Bridge Program Funds	Fix-It SW Bridge/ HB2017 Bridge Seismic	\$3,523,663
TOTAL		\$15,388,672

Background:

The purpose of the OR217: OR10 – OR99W project is to address long-standing bottlenecks on the highway from too many closely-spaced interchanges. The project scope includes adding auxiliary lanes, replacing two freeway ramps with a new frontage road, replacing a freeway overpass, installing sound walls, repaving multiple overpasses, retrofitting bridge railing, widening an overpass to add sidewalks and bike lanes and additional targeted improvements in partnership with the City of Beaverton and Washington County to complete the OR217 North/South bicycle and pedestrian connections. The project started construction in early 2022 and is scheduled for completion in 2025.

Since elements of this project were first programmed back in 2014, ODOT performed two value engineering studies (2018 & 2019), from which the team actively reduced scope and performed a Cost Risk Assessment workshop in 2020 to contain costs prior to beginning construction. While these efforts did reduce project costs and reduce overall risk to the project plan for on-time and on-budget delivery, the following factors were not fully accounted for and are contributing to the construction authorization increase request:

1) Contractor Staging and Contract Inspection Services:

More inspectors were required than anticipated when the construction budget was originally established and more consultant resources were needed to align with the contractor staging of the work area. In addition, retirements, hiring challenges, and shifting ODOT resources to other high priority projects within the Portland Metro area, required the utilization of consultant inspectors at a 25% cost premium over ODOT in-house inspection costs.

2) Extent of Traffic Control Plan Revisions for Public Safety:

Significant revisions to the traffic control staging plan required designers to evaluate the proposed changes and develop new traffic control plans to safely accommodate the traveling public through the project area, included working with TriMet to ensure bus travel through the corridor and temporary routing for pedestrians at highway interchanges was accommodated.

3) Bridge Retrofits:

This project has thirteen bridge retrofits. Significant challenges were encountered with conditions not matching as-built plans requiring redesign. This led to additional cost to retrofit the structures and make the necessary modifications so that improvements could be matched up to the existing structures.

4) Managing Hazardous Materials:

Project designers identified the need to manage hazardous material that needed to be relocated as part of this project. As construction continued, more hazardous material was identified than anticipated requiring additional coordination between ODOT, the Department of Environmental Quality (DEQ), and the contractor, to locate an appropriate disposal site, resulting in higher hauling and disposal costs. In addition, the discovery of construction debris (wood, metal,

guardrail, and asbestos) left over from the original construction of Highway 217, buried near the Allen Boulevard Interchange, resulted in additional specialty disposal costs.

5) Regulatory Changes:

New DEQ regulations went into effect after construction was underway. These changes increased the contractor's costs to manage erosion within the project site and increased the level of effort for ODOT to monitor and provide the appropriate reporting. New diesel emissions reporting requirements (OAR 340-261-0010, revised 11/17/2021) also required additional effort by both ODOT and the contractor to manage.

6) Challenges of a Five-Year Contract

Multi-year construction projects have unique challenges that were not adequately accounted for, including the long-term availability of subcontractors, increased material costs, and inflationary impacts on contract changes.

ODOT continues to monitor project costs as this project through construction completion in 2025.n. ODOT is also developing lessons learned from this project to inform and make improvements statewide, specifically to improve risk management processes, contract management of multi-year projects, and cost forecasting for inspection services.

Cost reduction efforts and opportunities during the project:

Some unanticipated work was completed by ODOT staff at a lower cost than negotiating a change order with the contractor. This work included producing and installing public-facing banners at the soil disposal site, tree removal and culvert repair.

In addition, working with Clean Water Services, ODOT moved \$2 million of work originally intended to be delivered in a separate utility phase into the main construction contract. Doing this work as part of the project saved time and eliminated the potential for multiple contractors being on site at the same time. This change resulted in a net savings of \$200,000.

Opportunities to reduce costs and reduce the overall request amount:

ODOT considered removing mainline re-paving work over the entire project limits, a potential savings of \$4.5 million. The team did not move forward with that option due to poor pavement conditions, increased maintenance costs and safety risks to ODOT Maintenance staff making critical repairs, the opportunity to utilize on-site contractor resources now and the likelihood of higher costs and traffic disruption to repave in the future.

ODOT also considered removing some bridge deck overlays with a potential savings of \$1.8 million. However, doing so would have resulted in higher future costs for the same work, lost opportunity to utilize our contractor already on-site and increased maintenance costs.

Outcomes:

With approval, ODOT will continue to deliver the full scope of the project.

Without approval, scope will need to be adjusted to fit the available budget.

Attachments:

- Attachment 01 – Location Map
- Attachment 02 – Vicinity Map

STIP PROJECT LOCATION

Agenda Item J3, Attachment 01

K18841

OR217: OR10 - OR99W

Key 22719 - OTC Staff Report Item

PROJECT LOCATION



REGION



COUNTY



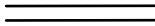
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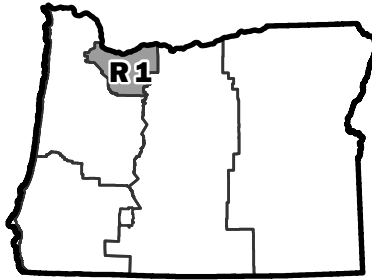
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LOCAL ROAD

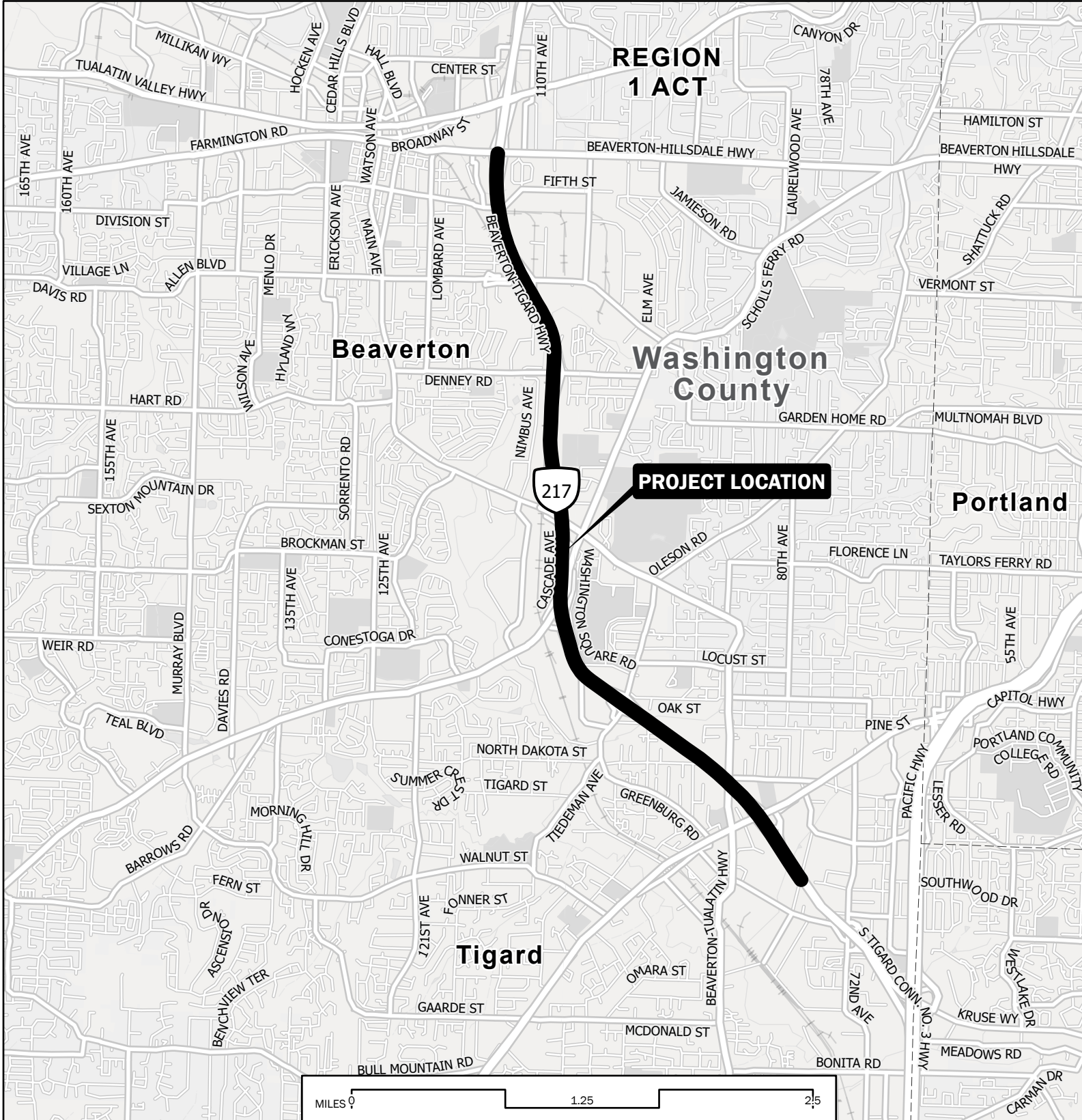


RAILROAD



DATE: 11/6/2023
PROJECT NO. 23-52
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STIP PROJECT VICINITY

Agenda Item J3, Attachment 02

K18841

OR217: OR10 - OR99W

Key 22719 - OTC Staff Report Item

PROJECT LOCATION



REGION



COUNTY



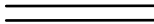
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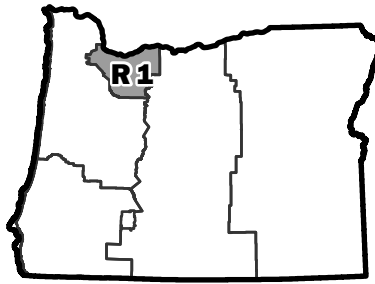
STATE ROAD



LOCAL ROAD



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