

# BIDDING DOCUMENTS

**PROJECT:** PAVING OF ROSLAND RD:  
US 97 TO DRAFTER RD

**PROJECT #:** W66127

**BID OPENING:** APRIL 19, 2023

**COMPLETION DATE:** JULY 31, 2023

**CONTRACTING AGENCY:**



**ROAD  
DEPARTMENT**

**61150 SE 27<sup>TH</sup> STREET  
BEND, OREGON 97702  
PHONE: (541) 388-6581  
FAX: (541) 388-2719  
WEB: [www.deschutescounty.gov/road](http://www.deschutescounty.gov/road)**



**ROAD  
DEPARTMENT**

**BIDDING DOCUMENTS**

**PAVING OF ROSLAND RD: US 97 TO DRAFTER RD**

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**DESCRIPTION OF PARTS OF BIDDING DOCUMENTS WHICH ARE NOT BOUND HEREIN:**

OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2021

The Specification that is applicable to the Work on this Project is the 2021 edition of the "Oregon Standard Specifications for Construction". All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.



**DESCHUTES COUNTY, OREGON  
ROAD DEPARTMENT  
INVITATION TO BID  
PAVING OF ROSLAND RD: US 97 TO DRAFTER RD**

Sealed bids will be received at the Deschutes County Road Department, 61150 SE 27<sup>th</sup> Street, Bend, Oregon 97702, until but not after, **2:00 p.m. on April 19, 2023**, at which time and place all bids for the above-entitled public works project will be publicly opened and read aloud.

The Class of Work of this Project is Asphalt Concrete Paving and Oiling. The value for this Contract is estimated to be between \$450,000 and \$650,000. The Work will consist of, but not be limited to, the following:

- Install and maintain temporary traffic control.
- Remove existing surfacing and perform excavation.
- Construct new asphalt concrete pavement and aggregate base.
- Install permanent pavement markings.
- Perform additional and incidental work as called for by the specifications and plans.

Specifications and other bid documents may be inspected and obtained from the Deschutes County Bids and RFPs website at <https://www.deschutescounty.gov/rfps>. Inquiries pertaining to these specifications shall be directed to Blaine Wruck, Transportation Engineer, in writing at [Blaine.Wruck@deschutescounty.gov](mailto:Blaine.Wruck@deschutescounty.gov) or the address above.

Bids shall be made on the forms furnished by the County, including a Bid Bond or Cashiers Check for the minimum amount of 10% of the Bid Price, addressed and mailed or delivered to Chris Doty, Department Director, 61150 SE 27<sup>th</sup> Street, Bend, Oregon 97702 in a sealed envelope plainly marked "BID FOR PAVING OF ROSLAND RD: US 97 TO DRAFTER RD" and the name and address of the bidder.

Bidders must submit a Subcontractor Disclosure Statement. The subcontractor disclosure statement may be submitted in the sealed bid prior to 2:00 p.m. on April 19, 2023 or in a separate sealed envelope marked "SUBCONTRACTOR DISCLOSURE STATEMENT - PAVING OF ROSLAND RD: US 97 TO DRAFTER RD" prior to 4:00 p.m. on April 19, 2023 at the above location.

Because the work called for under this contract is for a public works project subject to state prevailing rates of wage under ORS 279C.800 to 279C.870, the County will not receive or consider a bid unless the bid contains a statement by the bidder that the bidder will comply with ORS 279C.838 and ORS 279C.840. Each bid must contain a statement as to whether the bidder is a resident bidder, as defined in ORS 279A.120. Vendors shall use recyclable and/or sustainably sourced products to the maximum extent economically feasible in the performance of the contract work set forth in this document.

Bidders shall be prequalified with the State of Oregon for the Class of Work stated above in accordance with ORS 279C.430 through 279C.450 and Deschutes County Code 12.52.020. The successful bidders and subcontractors providing labor shall maintain a qualified drug testing program for the duration of the contract. Bidders shall be licensed with the Construction Contractor's Board. Contractors and subcontractors need not be licensed under ORS 468A.720.

Deschutes County may reject any bid not in compliance with all prescribed bidding procedures and requirements, and may reject for good cause any or all bids upon a finding of Deschutes County it is in the public interest to do so. The protest period for this procurement is seven (7) calendar days.

CHRIS DOTY  
Road Department Director

PUBLISHED:  
DAILY JOURNAL OF COMMERCE: March 29, 2023  
THE BEND BULLETIN: March 29, 2023

## INFORMATION FOR BIDDERS

1. **General Description of Project.** A general description of the Work to be performed is contained in the Invitation to Bid. The scope is indicated in the applicable parts of these Solicitation Documents.
2. **Solicitation Documents.** The Solicitation Documents under which it is proposed to execute the Work consist of the material bound herewith. These solicitation documents are intended to be mutually complementary and to provide all details reasonably required for the execution of the proposed work.
3. **Form of Proposals.** All proposals must be submitted on the forms furnished. Subcontractor disclosure form may be submitted with the bid or in a separate envelope.
4. **Substitutions.** Materials and/or products called for in the specifications are named in order to establish a standard of quality design. Manufacturers or suppliers of products similar to those specified may submit bids on the work providing requests for approval of substitution materials are made at least seven (7) calendar days prior to the bid opening. Adequate information on which to base approval or disapproval must be furnished to the Road Department Director or his representative and the Road Department Director shall be the sole judge of any request. When the Road Department Director approves a substitution, it is with the understanding that the Contractor guarantees the substituted article or materials to be equal or better than the specified.
5. **Preparation of Proposals.** All blank spaces in the proposal form must be filled in, in ink, or typed, in both words and figures where required. No changes shall be made in phraseology of the forms. Written amount shall govern in cases of discrepancy between the amount stated in writing and amount stated in figures.

Any proposal shall be deemed informal which contains omissions, erasures, alterations, or additions of any kind, or prices uncalled for, or which, in any manner shall fail to conform to the conditions of the published invitation to bidders.

The bidder shall sign his/her proposal in the blank space provided therefore. Proposals made by corporations or partnerships shall contain names and addresses of the principal officers or partners therein. If a corporation makes a proposal, it must be signed by one of the principal officers thereof, and the corporate seal affixed.

If made by a partnership, it must be signed by one of the partners, clearly indicating that he is signing as a partner of the firm. In the case of a proposal made by a joint venture, each of the joint venturers must sign the proposal in his personal capacity.

The wording of the proposal shall not be changed. Any additions, conditions, limitations or provisions inserted by the bidder will render the proposal irregular and may cause its rejection.

6. **Submission of Proposals.** All proposals must be submitted in the time and place and in the manner prescribed in the invitation to bid. Proposals must be made on the prescribed proposal forms furnished. Each proposal must be submitted in a sealed envelope, so marked as to indicate its contents without being opened. If the proposal is submitted by mail, the sealed envelope containing the bid must be enclosed in a separate envelope plainly addressed for mailing to conformance with instructions in the Invitation to Bid.

A responsive bid proposal must include the following completed items:

- Bid Proposal Form
- Schedule of Bid Items
- Bid Guaranty Form

7. **Modification or Withdrawal of Proposal.** Any bidder may modify his bid by written or telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such communication is received by the County prior to the closing time, and provided further that a written confirmation of a telegraphic modification over the signature of the bidder was mailed prior to the closing time. If written confirmation of a telegraphic communication is not received within at least two calendar days of the closing time, no consideration will be given to the modification. The written or telegraphic communication should not reveal the bid price, but should state the addition or subtraction or other modification so that the County will not know the final prices or terms until the sealed bid is opened.

Proposals may be withdrawn prior to the scheduled time for the opening of the proposals either by telegraphic or written request, or in person. No proposal may be withdrawn after the time scheduled for opening of proposals, unless the County has failed to comply with the time limits applicable to award of the Contract.

8. **Disclosure of First Tier Subcontractors.** Bidders are required to disclose information about certain first-tier subcontractors (see ORS 279C.370). Specifically, when the contract amount of a first-tier subcontractor furnishing labor or labor and materials would be greater than or equal to: (i) 5% of the project Bid, but at least \$15,000; or (ii) \$350,000 regardless of the percentage, the Bidder must disclose the following information about that subcontract either in its Bid submission, or within two hours after Bid Closing:

(A) The subcontractor's name;

(B) The category of Work that the subcontractor would be performing, and

(C) The dollar value of the subcontract.

If the Bidder will not be using any subcontractors that are subject to the above disclosure requirements, the Bidder is required to indicate "NONE" on the accompanying form.

THE CONTRACTING AGENCY MUST REJECT A BID IF THE BIDDER FAILS TO SUBMIT THE DISCLOSURE FORM WITH THIS INFORMATION BY THE STATED DEADLINE (see OAR 137-049-0360).

A Bidder shall submit the disclosure form either in its Bid submission or within two working hours after Bid Closing in the manner specified by the Invitation to Bid.

Compliance with the disclosure and submittal requirements of ORS 279C.370 and OAR 137-049-0360 is a matter of Responsiveness. Bids that are submitted by Bid Closing, but for which the disclosure submittal has not been made by the specified deadline, are not Responsive and shall not be considered for Contract Award.

Substitution of affected first-tier subcontractors shall be made only in accordance with ORS 279C.585.

9. **Bid Security.** The Bid Bond or Cashier's Check will be for a minimum of ten per cent (10%) of the amount of the bid price. If a bidder bids more than one bid proposal, each proposal must be accompanied by separate bid security. The County reserves the right to retain the bid security of the three (3) lowest bidders until the successful bidder has signed and delivered the contract and furnished one hundred percent (100%) Performance and Payment Bonds.
10. **Conditions of Work.** Each bidder must inform himself of the conditions relating to the execution of the work, and make himself thoroughly familiar with all the Contract documents. Failure to do so will not relieve the successful bidder of his obligations to enter into a Contract and complete the contemplated work in strict accordance with the Contract documents. Each bidder must inform himself on all laws and statutes, both Federal and State, relative to the regular execution of the work, the employment of labor, protection of public health, access to the work and similar requirements.
11. **Award of Contract.** The award of the contract will be made by the County on the basis of the proposal which in its sole and absolute judgment will best serve the interest of the County.

County will issue a notice of intent to award contract. Any bidder may protest the notice of intent to award contract within seven (7) calendar days of the notice of intent to award contract.

The County reserves the right to accept or reject any or all proposals, and to waive any informalities and irregularities in said proposals.

12. **Payment and Retainage.** Payment for work performed will be made by the County as specified in the Special Provisions based upon the contract unit prices on the Bid Schedule.

Upon substantial completion of the contract, Contractor may request a partial release of retainage held by the County. The maximum amount of a request for a partial release retainage shall be the Contract amount less 150 percent of the estimated cost of the Contract yet to be performed through final completion. Upon final completion, Contractor may request release of the remaining retainage. Each request for the release of retainage shall be accompanied by the Consent of the contractor's surety.

13. **Performance Bond and Payment Bond.** The successful bidder shall file with the County, at the time of execution of the contract, a Performance Bond and a Payment Bond each of not less than the contract price on the forms furnished by the County. The Surety Company furnishing the required bonds shall have a sound financial standing and a record of service satisfactory to the County, and shall be authorized to do business in the State of Oregon. In lieu of a Performance Bond, the contractor may file cash, a Certified or Cashier's Check made payable to Deschutes County, Oregon. This money, check or certificate will be held by the County conditioned on and subject to the same provisions as set forth in the attached Performance Bond. ORS 279C.380 allows no flexibility for a cash deposit in lieu of a Payment Bond.
14. **Required Public Works Bond.** Before starting work on this project the Contractor and every subcontractor to which Contractor is a party for the performance of work under this contract must have a public works bond filed with the Construction Contractors Board, 700 Summer St. NE, Suite 300, Salem, Oregon 97309-5052, before starting work on the project, unless exempt under section 2 (7) or (8) of 2005 Oregon Laws Chapter 360 ORS 279C.836(7) or (8). Every subcontract to which Contractor is a party for the performance of work under this contract shall contain a provision requiring the subcontractor to have a public works bond filed with the Construction Contractors Board before starting work on this project, unless exempt under ORS 279C.836 (7) or (8) section 2 (7) or (8) of 2005 Oregon Laws Chapter 360.
15. **Failure to Execute Contract.** Upon failure by the successful bidder to enter into the Contract and furnish the necessary bond within fifteen (15) calendar days from the date the Contract documents are sent or otherwise conveyed to the Bidder, the bid bond accompanying the bid shall be forfeited, the proceeds paid to the County, and the award withdrawn. The award may then be made to the next lowest responsible bidder, or all bids rejected and the work is re-advertised.
16. **Disclaimer of Responsibility.** Neither the County nor the Road Department Director will be responsible for oral interpretations. Should a bidder find discrepancies in, or omissions from the drawings, specifications, or other pre-bid documents, or be in doubt as to their meaning, he shall notify the County at least seven (7) calendar working days prior to the bid opening date. Any and all such interpretations, any supplemental instructions or approval of manufacturer's materials to be substituted will be made only in the form of written addenda to the specifications, which, if issued, will be hand delivered or sent by regular mail, email and fax to all prospective bidders receiving a set of such documents, not later than two (2) calendar days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued are to be covered in the bid for such addenda to become part of the Agreement.
17. **Permits and Licenses.** The successful bidder shall be required to have or obtain, at his expense, any and all permits and licenses required by Deschutes County, any City within the County, and the State of Oregon, pertaining to the service he proposes to furnish. Licensing shall include

without limitation registration with Construction Contractors Board and in the case of professional engineers and architects proof of current licensing with the appropriate State licensing board.

18. **Minimum Requirements of Bid.** The following minimum requirements as to the form and manner of submitting bids must be strictly observed; variance from these requirements will result in rejection of the bid as unresponsive.
- a. Each Bid must be submitted on forms furnished by the County. The completed forms required for a bid to be considered responsive, which are included herein, are listed below:
    - Bid Proposal Form
    - Schedule of Bid Items
    - First-Tier Subcontractor Disclosure Form
    - Bid Bond
    - Signed Addenda (if issued)
  - b. Each Bid must be signed by the bidder.
  - c. Bid security, in the required form and amount, must accompany each bid.
  - d. Each blank in the proposal must be filled in unless an alternative is provided. Each separate bid item must be bid on, unless the proposal form clearly indicates otherwise.
  - e. Each Bid must be submitted in a separate sealed envelope, marked to identify without opening, and in the hands of the Road Department Director at the time and place specified for bid opening.
  - f. A proposal containing modifications, deletions, exceptions or reservations which in any way conflict with or purport to alter any substantive provision contained in the bid documents, will not be considered.
  - g. A conditional bid will not be considered.
  - h. Any bid submitted without all of the pages of the bid documents shall be deemed to have been submitted with the missing pages for purposes of bid evaluation if, at a minimum, the completed pages identified above in (a) are included in the submission. The missing pages of the bid documents shall be deemed to be incorporated into bid by reference.
19. **Plans.** Plans are not to be taken or construed as being reproduced at precisely the indicated scale. Where the plans are photographic reductions of the original tracings, the approximate amount of reduction is indicated by a note on the plans.
20. **Specifications.** The specifications are the minimum acceptable specifications for the project for which proposals are sought. Any deviation

from the specifications contained herein, shall render the bid non-responsive.

21. **Examination of Site and Conditions.** Bidders are required, prior to submission of bids, to carefully examine the site and the Plans and Specifications of the contemplated work. Errors and omissions in the Plans or Specifications shall be called to the attention of the Agency prior to submission of bid so that addenda may be issued. Failure to do so on the part of the Contractor does not relieve him of responsibility for a correct and completely finished job. Only a written interpretation or correction by addendum shall be binding.
22. **Pre-Bid Inquiries.** Bidders with pre-bid inquiries shall contact Blaine Wruck, Transportation Engineer, in writing at [blaine.wruck@deschutescounty.gov](mailto:blaine.wruck@deschutescounty.gov) or 61150 SE 27<sup>th</sup> Street, Bend, Oregon 97702.

Contracting Agency will not mail notice of Addenda, but will publish notice of any Addenda on Contracting Agency's Web site. Addenda may be downloaded off the Contracting Agency's Web site. Bidders should frequently check the Contracting Agency's Web site until closing, i.e., at least once weekly until the week of Closing and at least once daily the week of the Closing.

23. **Prequalification of Bidders.** Bidders shall be pre-qualified with the State of Oregon in accordance with ORS 279C.430 and Deschutes County Code 12.52.020. The prequalification class is as shown in the Invitation to Bid. Bidders shall be prequalified in the appropriate class of work at the time of bid opening. Bidders shall be licensed with the Construction Contractor's Board under OAR 137-049-0230. Contractors and subcontractors need not be licensed under ORS 468.710.
24. **Contract Award.** Deschutes County reserves the right to postpone award of the contract for fourteen (14) calendar days from the date of the bid opening, or until a final decision is made on a protest, whichever is later.
25. **Bidder Statement.** This Contract is subject to ORS 279C.800 to ORS 279C.870. Submission of a bid for the project shall constitute a statement that the bidder agrees to be bound by and will comply with provisions of 279C.838, 279C.840 or 40 U.S.C. 3141 to 3148. The successful bidder and subcontractors providing labor shall maintain a qualified drug-testing program for the duration of the Contract.

By submitting a bid for the project, the bidder certifies that the bidder has not discriminated and will not discriminate against any disadvantaged business enterprise, minority-owned business, women-owned business, emerging small business, or business that a service-disabled veteran owns, in obtaining any required subcontracts. Failure to do so shall be grounds for disqualification.

# BID PROPOSAL FORM

## PAVING OF ROSLAND RD: US 97 TO DRAFTER RD

\_\_\_\_\_

BIDDER NAME

\_\_\_\_\_

CCB#

\_\_\_\_\_

ADDRESS

\_\_\_\_\_

CITY

\_\_\_\_\_

STATE

\_\_\_\_\_

ZIP CODE

\_\_\_\_\_

CONTACT NAME

\_\_\_\_\_

CONTACT PHONE NUMBER

\_\_\_\_\_

CONTACT EMAIL ADDRESS

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein; that this Proposal is, in all respects, fair and without fraud; and it is made without collusion with any official of Deschutes County, Oregon, hereinafter called County; and that the Proposal is made without any connection or collusion with any person making another proposal on this contract.

The Bidder further declares that Bidder has carefully examined the contract documents; that Bidder is satisfied as to the quantities involved, including materials and equipment, and conditions of work involved; and that this proposal is made according to the provisions and under the terms of the contract documents, which documents are hereby made a part of this Proposal.

The Bidder agrees that all of the applicable provisions of Oregon law relating to public contracts (ORS Chapter 279) are, by this reference, incorporated in and made a part of this Proposal.

The Bidder declares that (check appropriate box):

Bidder is a resident bidder of the State of Oregon.

Bidder is a nonresident bidder from the State of \_\_\_\_\_.

The Bidder declares that Bidder is not in violation of any tax laws of the State of Oregon and Deschutes County, including but not limited to those programs listed in ORS 305.380(4),

The Bidder further agrees that if this Proposal is accepted, Bidder will, within fifteen (15) calendar days after conveyance of the contract documents to the Bidder, execute the contract with the County in the form of contract annexed hereto; and will, at the time of execution of the contract, deliver to the County the Performance and Payment Bonds (See Section 13 Information for Bidders) required herein; and will, to the extent of this Proposal, furnish all materials necessary to complete the work in the manner, in the time, and according to the methods as specified in the contract documents and required by the Road Department Director.

The Bidder certifies that it has a drug testing program in place for its employees, or warrants that a drug testing program will be in place prior to execution of this contract, that the drug testing program is in writing, that new employees must pass a drug screening, that existing employees may be tested for reasonable cause or when an employee is injured or involved in an accident resulting in property



damage. The Bidder agrees that each subcontractor providing labor under this Contract shall maintain a qualifying drug testing program for the duration of the Contract.

The Bidder agrees to comply with the provisions of 279C.838, 279C.840 or 40 U.S.C. 3141 to 3148 ORS 279C.840.

The Bidder certifies that the Bidder has not discriminated and will not discriminate against any disadvantaged business enterprise, minority-owned business, women-owned business, emerging small business, or business that a service-disabled veteran owns, in obtaining any required subcontracts in accordance with ORS 279A.110(4).

The Bidder agrees to commence work upon the issuance of a "Notice to Proceed" by the County and fully complete the project according to the time schedule specially set forth in the contract documents.

The Bidder further agrees to pay liquidated damages for failure to complete within the specified time.

It is agreed that if the Bidder is awarded the contract for the work herein proposed and shall fail or refuse to execute the contract and furnish the contract and furnish the specified Performance and Payment Bond within fifteen (15) calendar days after the contract documents are sent or otherwise conveyed to the Bidder, then, in that event, the bid security deposited herewith according to the conditions of the Invitation to Bid and Information for Bidders shall be retained by the County as liquidated damages; and it is agreed that the said sum is a fair measure of the amount of damage the County will sustain in case the Bidder shall fail or refuse to enter into the contract for the said work and to furnish the Performance and Payment Bonds (See Section 13 Information for Bidders) as specified in the contract documents. Bid security in the form of a certified check shall be subject to the same requirements as a bond.

**(SIGNATURE PAGE TO FOLLOW)**

(IF SOLE PROPRIETOR OR PARTNERSHIP)

IN WITNESS HERETO, the undersigned has set hand this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
SIGNATURE OF BIDDER

\_\_\_\_\_  
TITLE

(IF CORPORATION)

IN WITNESS WHEREOF, the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

\_\_\_\_\_  
NAME OF CORPORATION

By: \_\_\_\_\_

Title: \_\_\_\_\_

Attest: \_\_\_\_\_

**(SCHEDULE OF BID ITEMS TO FOLLOW)**

ITEM NO.	SPEC SECTION	ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
<u>Part 00200 - Temporary Features and Appurtenances</u>						
001	00210	Mobilization	LS	1	\$	\$
002	00221	Temporary Protection and Direction of Traffic	LS	1	\$	\$
003	00222	Temporary Signs	SQFT	484	\$	\$
004	00222	Portable Changeable Message Signs	EACH	4	\$	\$
005	00223	Flaggers	HOUR	336	\$	\$
006	00224	Temporary Barricades, Type III	EACH	5	\$	\$
007	00230	Construct and Remove Temporary Roadbed and Surfacing	LS	1	\$	\$
<u>Part 00300 - Roadwork</u>						
008	00310	Removal of Surfacing	SQYD	1447	\$	\$
009	00310	Asphalt Pavement Saw Cutting	FOOT	851	\$	\$
010	00330	General Excavation	CUYD	2376	\$	\$
011	00350	Subgrade Geotextile	SQYD	6122	\$	\$
012	00350	Subgrade Reinforcement Geogrid	SQYD	4170	\$	\$
<u>Part 00600 - Bases</u>						
013	00610	Reconditioning Existing Bases	SQYD	1447	\$	\$
014	00641	Aggregate Base	TON	3300	\$	\$
015	00641	Aggregate Shoulders	TON	440	\$	\$
<u>Part 00700 - Wearing Surfaces</u>						
016	00744	Level 3, 1/2 Inch ACP Mixture	TON	2300	\$	\$
017	00749	Extra for Asphalt Approaches	EACH	10	\$	\$
<u>Part 00800 - Permanent Traffic Safety and Guidance Devices</u>						
018	00865	Thermoplastic, Sprayed, Surface, Non-Profiled	FOOT	9000	\$	\$
019	00867	Pavement Bar, Type AB	SQFT	94	\$	\$

**TOTAL BID:** \_\_\_\_\_

**FOR DESCHUTES COUNTY USE ONLY**

ADD \_\_\_\_\_ % FOR NON-RESIDENT BIDDER \_\_\_\_\_

TOTAL BID \_\_\_\_\_

The Bidder acknowledges receipt of the following Addenda: (insert addenda numbers)

No.\_\_\_\_ No.\_\_\_\_ No.\_\_\_\_ No.\_\_\_\_ No.\_\_\_\_ No.\_\_\_\_ No.\_\_\_\_ No.\_\_\_\_

# FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

Project Name: PAVING OF ROSLAND RD: US 97 TO DRAFTER RD

Bid #: W66127      Bid Closing Date: April 19, 2023      Time: 2:00 P.M.

Name of Bidding Contractor: \_\_\_\_\_

This form must be submitted at the location specified in the Invitation to Bid on the advertised bid closing date and within two working hours (4:00 p.m.) after the advertised bid closing time.

List below the name of each subcontractor that will be furnishing labor or materials and that is required to be disclosed, the category of work that the subcontractor would be performing and the dollar value of the subcontract. Enter "NONE" if there are no subcontractors that need to be disclosed. (ATTACH ADDITIONAL SHEETS IF NEEDED).

	NAME	DOLLAR VALUE	CATEGORY OF WORK
1)	_____	\$ _____	_____
2)	_____	\$ _____	_____
3)	_____	\$ _____	_____
4)	_____	\$ _____	_____
5)	_____	\$ _____	_____
6)	_____	\$ _____	_____
7)	_____	\$ _____	_____
8)	_____	\$ _____	_____

Failure to submit this form by the disclosure deadline will result in a non-responsive bid. A non-responsive bid will not be considered for award.

Form submitted by

Bidder name: \_\_\_\_\_

Contact name: \_\_\_\_\_ Phone number: \_\_\_\_\_

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, That \_\_\_\_\_

\_\_\_\_\_ ,

hereinafter called the Principal, and \_\_\_\_\_

\_\_\_\_\_ ,

a corporation duly organized under the laws of the State of \_\_\_\_\_ ,

having its principal place of business at \_\_\_\_\_

\_\_\_\_\_ , in the State of \_\_\_\_\_ ,

and authorized to do business in the State of Oregon, as Surety, are held and firmly bound unto the

County of Deschutes, hereinafter called the Obligee, in the penal sum of \_\_\_\_\_

\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_),

for the payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of this Bond is that, whereas, the Principal is submitting a bid proposal for the PAVING OF ROSLAND RD: US 97 TO DRAFTER RD project hereby made a part hereof;

NOW THEREFORE, if the said bid proposal submitted by the said principal be accepted, and the contract be awarded to said Principal, and if the said Principal shall execute the proposed contract and shall furnish the Performance and Payment Bond as required by the bidding and contract documents with the time fixed by said documents, then this obligation shall be void, otherwise to remain in full force and effect. Signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, 2023.

SURETY:

CONTRACTOR:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

# CONTRACT

## FOR

### PAVING OF ROSLAND RD: US 97 TO DRAFTER RD

THIS CONTRACT is made and entered into, this \_\_\_\_\_ day of \_\_\_\_\_, 2023, by and between DESCHUTES COUNTY, a political subdivision of the State of Oregon, by and through its Board of County Commissioners, hereinafter called "County", and \_\_\_\_\_, an Oregon corporation, hereinafter called "Contractor."

#### WITNESSTH:

THAT the said Contractor, in consideration of the sums to be paid by the County in the manner and at the time herein provided, and in consideration of the other covenants and agreements herein contained, hereby agrees to perform and complete the work herein described and provided for and to furnish all necessary machinery, tools, apparatus, equipment, supplies, materials and labor and do all things in accordance with the applicable Plans, the applicable Standard Specifications, the Special Provisions and other required provisions bound herewith or incorporated therein, and in accordance with such alterations or modifications of the same as may be made by the County, and according to such directions as may from time to time be made or given by the Engineer under the authority and within the meaning and purpose of this Contract. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the Contractor.

THAT the applicable Plans, the applicable Standard Specifications, the Special Provisions and other required provisions bound herewith or incorporated therein and the Schedule of Items bound herewith are hereby specifically referred to and by this reference made a part hereof, and shall by such reference have the same force and effect as though all of the same were fully written or inserted herein.

THAT the Contractor shall faithfully complete and perform all of the obligations of this Contract, and in particular, shall promptly, as due, make payment of all just debts, dues, demands and obligations incurred in the performance of said Contract; and shall not permit any lien or claim to be filed or prosecuted against the County, its agents or employees. It is expressly understood that the laws of the State of Oregon and the Ordinances of the County shall govern this Contract in all things.

THAT in consideration of the faithful performance of all of the obligations, general and special, herein set out, and in consideration of the faithful performance of the work as set forth in the Contract Documents in accordance with the directions and to the satisfaction of the Engineer, the County agrees to pay to the said Contractor the amount earned, as determined from the actual quantities of work performed, and taking into consideration any amounts that may be deductible and under the terms of the Contract, and to make such payments in the manner and at the times provided in the applicable provisions.

**(SIGNATURE PAGE TO FOLLOW)**

IN WITNESS WHEREOF, the parties hereto have subscribed their names and affixed their respective official seals as of the date first above written

**CONTRACTOR**

**BOARD OF COUNTY COMMISSIONERS  
OF DESCHUTES COUNTY, OREGON**

BY: \_\_\_\_\_

\_\_\_\_\_  
ANTHONY DeBONE, CHAIR

TITLE: \_\_\_\_\_

\_\_\_\_\_  
PATTI ADAIR, VICE CHAIR

DATE: \_\_\_\_\_

\_\_\_\_\_  
PHIL CHANG, COMMISSIONER

ATTEST:

\_\_\_\_\_  
RECORDING SECRETARY

APPROVED AS TO CONTENT:

\_\_\_\_\_  
ROAD DEPARTMENT DIRECTOR

APPROVED AS TO FORM:

\_\_\_\_\_  
COUNTY LEGAL COUNSEL

Bond # \_\_\_\_\_

**PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: that

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

a \_\_\_\_\_, hereinafter called  
(Corporation, Partnership, or Individual)

“Principal”, and \_\_\_\_\_  
(Name of Surety)

hereinafter called “Surety”, are held and firmly bound unto Deschutes County, Oregon

hereinafter called “Owner”, in the penal sum of \_\_\_\_\_

\_\_\_\_\_ Dollars, \$(\_\_\_\_\_)  
in lawful money of the United States, for the payment of which sum well and truly to be made,  
we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a  
certain contract with the OWNER, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2023, a copy of  
which is hereto attached and made a part hereof for the construction of:

**PAVING OF ROSLAND RD: US 97 TO DRAFTER RD**

NOW THEREFORE, if Principal shall well, truly and faithfully perform its duties, all the  
undertakings, covenants, terms, conditions, and agreements of said contract during the original  
term thereof, and any extensions thereof which may be granted by Owner, with or without notice  
to Surety and during the **two year guaranty period**, and if Principal shall satisfy all claims and  
demands incurred under such contract, and shall fully indemnify and save harmless Owner from  
all costs and damages which is may suffer by reason of failure to do so, and shall reimburse  
and repay Owner all outlay and expense which Owner may incur in making good any default,  
then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED FURTHER, that Surety, for value received hereby stipulates and agrees that no  
change, extension of time, alteration or addition to the terms of the contract or to work to be  
performed thereunder or the specifications accompanying the same shall in any wise affect its  
obligation on this bond, and it does hereby waive notice of any such change, extension of time,  
alteration or addition to the terms of the contract or to the work or the specifications.

PROVIDED, FURTHER, that no final settlement between Owner and Principal shall abridge the  
right of any beneficiary hereunder, whose claim may be unsatisfied.



IN WITNESS WHEREOF, this instrument is executed in two counterparts, each one of which shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_ 2023.

(SEAL)

**PRINCIPAL:** \_\_\_\_\_

By \_\_\_\_\_  
Signature

\_\_\_\_\_  
Official Capacity

Attest: \_\_\_\_\_  
Corporation Secretary

(SEAL)

**SURETY:** \_\_\_\_\_

*[Add signatures for each surety if using multiple bonds]*

**BY ATTORNEY-IN-FACT:**  
*[Power-of-Attorney must accompany each surety bond]*

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone Fax

NOTE: Date of bond must not be prior to date of Contract.  
If Contractor is Partnership, all partners should execute bond.

Bond # \_\_\_\_\_

**PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS: that

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

a \_\_\_\_\_, hereinafter called  
(Corporation, Partnership, or Individual)

“Principal”, and \_\_\_\_\_  
(Name of Surety)

hereinafter called “Surety”, are held and firmly bound unto Deschutes County, Oregon

hereinafter called “Owner”, in the penal sum of \_\_\_\_\_

\_\_\_\_\_ Dollars, \$(\_\_\_\_\_)  
in lawful money of the United States, for the payment of which sum well and truly to be made,  
we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a  
certain contract with the OWNER, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2023, a copy of  
which is hereto attached and made a part hereof for the construction of:

**PAVING OF ROSLAND RD: US 97 TO DRAFTER RD**

NOW, THEREFORE, if Principal shall promptly make payment to all persons, firms,  
subcontractors, and corporations furnishing materials for or performing labor in the prosecution  
of the work provided for in such contract, and any authorized or modification thereof, including  
all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery,  
equipment and tools, consumed or used in connection with the construction of such work, and  
all insurance premiums on said work, and for all labor, performed in such work whether by  
subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force  
and effect.

PROVIDED, FURTHER, that Surety for value received hereby stipulates and agrees that no  
change, extension of time, alteration or addition to the terms of the contract or to the work to be  
performed thereunder or the specifications accompanying the same shall in any wise affect its  
obligation on this bond, and it does hereby waive notice of any such change, extension of time,  
alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between Owner and Principal shall abridge the  
right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in two counterparts, each one of which shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_, 2023.

(SEAL)

**PRINCIPAL:** \_\_\_\_\_

By \_\_\_\_\_  
Signature

\_\_\_\_\_  
Official Capacity

Attest: \_\_\_\_\_  
Corporation Secretary

(SEAL)

**SURETY:** \_\_\_\_\_  
*[Add signatures for each surety if using multiple bonds]*

**BY ATTORNEY-IN-FACT:**  
*[Power-of-Attorney must accompany each surety bond]*

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip

\_\_\_\_\_  
Phone Fax

NOTE: Date of bond must not be prior to date of Contract.  
If Contractor is Partnership, all partners should execute bond.

# **SPECIAL PROVISIONS**

**PROJECT:** PAVING OF ROSLAND RD:  
US 97 TO DRAFTER RD

**PROJECT #:** W66127


**CONTRACTING AGENCY:**



**ROAD  
DEPARTMENT**

**61150 SE 27<sup>TH</sup> STREET  
BEND, OREGON 97702  
PHONE: (541) 388-6581  
FAX: (541) 388-2719  
WEB: [www.deschutescounty.gov/road](http://www.deschutescounty.gov/road)**

**PROFESSIONAL OF RECORD CERTIFICATION:**

<p>Seal w/signature</p>  <p>REGISTERED PROFESSIONAL ENGINEER 83448PE OREGON NOVEMBER 10, 2009 CODY C. SMITH RENEWS: JUNE 30, 2024</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections <u>00210 through 02630</u></p>
<p>Date Signed: <u>3-27-23</u></p>	

**SPECIAL PROVISIONS**

**WORK TO BE DONE**

The work to be done under this contract consists of the following on the PAVING OF ROSLAND RD: US 97 TO DRAFTER RD project:

1. Install and maintain temporary traffic control.
2. Remove existing surfacing and perform excavation.
3. Construct new asphalt concrete pavement and aggregate base.
4. Install permanent pavement markings.
5. Perform additional and incidental work as called for by the specifications and plans.

**APPLICABLE SPECIFICATIONS**

The Specification that is applicable to the Work on this Project is the 2021 edition of the “Oregon Standard Specifications for Construction.”

All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications and Supplemental Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.

Copies of the Oregon Standard Specifications may be purchased or viewed online at

[http://www.oregon.gov/ODOT/Business/Pages/Standard\\_Specifications.aspx](http://www.oregon.gov/ODOT/Business/Pages/Standard_Specifications.aspx).

**APPLICABLE RULES**

The rules applicable to this contract are the Attorney General’s Model Public Contract Rules, Chapter 137-046 and Chapter 137-049, as presently constituted and Deschutes County Code (DCC) Chapter 2.37. The provisions of DCC Chapter 2.37.150 are incorporated herein by reference. These provisions may be viewed at the following web address:

<http://www.co.deschutes.or.us/administration/page/deschutes-county-code>

**CONTRACT TIME**

The Contractor shall complete all Work to be done under the Contract not later than July 31, 2023.

**CLASS OF WORK**

The Class of Work for this Project is Asphalt Concrete Paving and Oiling.

**SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS**

Comply with Section 00110 of the Standard Specifications modified as follows:

**00110.20 Definitions** - Replace the definitions of the words and phrases list below with the following definitions :

**Agency** – County of Deschutes

**Bid Booklet** - The version that can be accessed and printed from the Deschutes County Bids and RFPs website, which contains the information identified in 00120.10.

**Engineer** - The Road Department Director of Deschutes County acting either directly or through his authorized representatives.

**SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES**

Comply with Section 00120 of the Standard Specifications modified as follows:

**00120.00 Prequalification of Bidders** – Replace the last paragraph with the following:

Deschutes County Road Department will regularly evaluate the performance of Contractors on its projects for purposes of responding to reference checks, future prequalification and determinations of responsibility.

**00120.01 General Bidding Requirements** - Replace this subsection, except for the subsection number and title, with the following:

Bidders shall submit bids by paper.

The standard prequalification forms furnished by the ODOT Procurement Office shall be used by the bidder to file authorized signatures with Deschutes County Road Department. Signatures are of personnel authorized to submit Bids, modify Bids, or withdraw Bids.

**00120.05 Request for Plans, Special Provisions, and Bid Booklets** – Replace this subsection, except for the subsection number and title, with the following:

Bidders shall obtain solicitation documents from the Deschutes County Bids and RFPs website:

<https://www.deschutescounty.gov/rfps>

Each request shall include both the name of the person ordering or obtaining the Solicitation Documents, and the name of the Entity intending to use them. The Agency will add the name of the Entity intending to use the Solicitation Documents to the list of Holders of Bidding Plans. Bidders are cautioned that only Solicitation Documents obtained properly from the Deschutes County website may be used to submit Bids.

Only paper Bids will be accepted.

Copies of the Oregon Standard Specifications may be purchased or viewed online at

[http://www.oregon.gov/ODOT/Business/Pages/Standard\\_Specifications.aspx](http://www.oregon.gov/ODOT/Business/Pages/Standard_Specifications.aspx).

The Plans, which are applicable to the Work to be performed under the Contract, are bound herewithin.

**00120.10 Bid Booklet** – Replace this subsection, except for the subsection number and title, with the following:

The Bidding Documents Booklet may include, but is not limited to:

- Cover Page
- Index
- Invitation to Bid
- Information for Bidders
- Bid Proposal Form
- Schedule of Bid Items
- Subcontractor Disclosure Form
- Bid Guaranty Form
- Contract Form (for review only)
- Payment and Performance Bond Forms (for review only)

Depending on the Class of Project, other certificates or statements may be bound within the Bidding Documents Booklet. Plans, specifications, and other documents referred to in the Bidding Documents Booklet will be considered part of the Bid.

**00120.30 Changes to Plans, Specifications, or Quantities before Opening of Bids** –

Replace all instances of “ODOT eBIDS” with “Deschutes County Bids and RFPs”.

Replace the first paragraph with the following:

The Agency reserves the right to issue Addenda making changes or corrections to the Plans, Specifications, or quantities. The Agency will provide Addenda only by publishing them on the Agency's web site at:

<https://www.deschutescounty.gov/rfps>

Delete the last paragraph.

**00120.40(a) (2) Electronic Bids** – Delete this subsection.

**00120.40(c) (2) Electronic Bid Schedule Entries** – Delete this subsection.

**00120.40 (d) Bidder's Address and Signature Pages** – Replace this subsection, except for the subsection number and title, with the following:



Bidders shall include in the Bid the address to which all communication concerning the Bid and Contract should be sent. The Bid shall be signed by a duly authorized representative of the Bidder.

**00120.40(e) (2) Bid Guaranty with Electronic Bids** – Delete this subsection.

**00120.40(f) Disclosure of First-Tier Subcontractors** – Under the paragraph “The Subcontractor Disclosure Form may be submitted for a paper Bid...” replace the second bulleted item with the following:

- By removing it from the paper Bid Booklet, filling it out and submitting it separately to the Deschutes County Public Works Engineering and Construction Division at the address given in the Bid Booklet.

Delete the third bulleted item.

Delete the paragraph which begins “The Subcontractor Disclosure Form may be submitted for an electronic Bid either:”

Replace the paragraph that begins “Subcontractor Disclosure forms submitted by...” with the following:

Subcontractor Disclosure Forms submitted by any method will be considered late if not received by the Agency within two working hours of the time designated for receiving Bids.

**00120.45 Submittal of Bids** – Replace this subsection, except for the subsection number and title, with the following:

Bids shall be submitted in the manner and prior to the time listed in the Bidding Documents Booklet. Bids may be submitted by mail, parcel delivery service, or hand delivery. Bids submitted after the time set for receiving Bids will not be opened or considered. The Agency assumes no responsibility for the receipt and return of late Bids.

**00120.50 Submitting Bids for More than One Contract** – Delete this subsection.

**00120.60(a) Paper Bids** – Replace all references to “ODOT Procurement Office” with “Agency.”

Delete the third bullet point.

**00120.60(b) Electronic Bids** – Delete this subsection.

**00120.70 Rejection of Nonresponsive Bids** – Add the following bullet to the end of the bullet list:

- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.

**00120.95 Opportunity for Cooperative Arrangement** – Delete this subsection.

### **SECTION 00130 – AWARD AND EXECUTION**

Comply with Section 00130 of the Standard Specifications modified as follows:

**00130.10 Award of Contract** – Replace the paragraph that begins “The Agency will provide Notice of Intent...” with the following:

The Agency will provide Notice of Intent to Award on the Agency’s website:

<https://www.deschutescounty.gov/rfps>

Delete the paragraph that begins “The Award will not be final until...”

**00130.15 Right to Protest Award** – Replace this subsection, except for the subsection number and title, with the following:

Adversely affected or aggrieved Bidders, limited to the three apparent lowest Bidders and any other Bidder directly in line for Contract Award, may submit to the Board of County Commissioners of Deschutes County a written protest of the Agency’s intent to Award within five working days following the Bid Opening. The protest shall specify the grounds upon which it is based.

The Agency will not consider late protests.

**00130.50 Execution of Contract and Bonds:**

**(a) By the Bidder** – In the sentence that begins “The successful Bidder...” replace “ODOT Procurement Office – Construction” with “Agency”.

**(b) By the Agency** – In the sentence that begins “Within 7 Calendar Days...” replace “7” with “21 (twenty-one)”.

### **SECTION 00140 – SCOPE OF WORK**

Comply with Section 00140 of the Standard Specifications.

### **SECTION 00150 - CONTROL OF WORK**

Comply with Section 00150 of the Standard Specifications modified as follows:

**00150.05 Cooperative Arrangements** – Replace this subsection, except for the subsection number and title, with the following:

Agency is not, by virtue of this Contract, a partner or joint venturer with Contractor in connection with activities carried out under this Contract, and shall have no obligation with respect to Contractor’s debts or any other liabilities of each and every nature.

**00150.15(b) Agency Responsibilities** - Replace this subsection, except for the subsection number and title, with the following:

The Engineer will:

- Provide copies of plans and specifications.
- Evaluate grade for acceptance at each course of material.
- Perform measurements and calculations for pay quantities.
- Perform final "as constructed" measurements.

**00150.15(c) Contractor Responsibilities** – Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall:

- Layout and set construction stakes and marks to establish the lines, grades, Slopes, Cross Sections and curve super-elevations for Roadwork to construct the Project as shown and specified, by means approved by the Engineer.
- Make calculations, field notes and survey drawings for the layout and control of work as are necessary to construct the Project as specified.
- Provide original or copies of notes, calculations and drawings as requested.
- Preserve survey monuments and control stations as governed by applicable law.
- Establish control stations as necessary to control the Project.
- Replace and augment control stations as necessary to control the Project.
- Remove and dispose of all flagging, lath, stakes and other temporary staking material after the Project is completed.
- Protect from damage or disturbance any Utility that remains within the area in which Work is being performed. Maintain and re-establish location marks according to OAR 952-001-0090(3)(a). Coordinate re-establishment of the location marks with the associated Utility.
- Determine the exact location before excavating within the tolerance zone according to OAR 952-001-0090(3)(c);
- In addition to the notification required in OAR 952-001-0090(6), notify the Engineer and the Utility as soon as the Contractor discovers any previously unknown Utility conflicts or issues. Contrary to the OAR, stop excavating until directed by the Engineer and allow the Utility a minimum of two weeks to relocate or resolve the previously unknown Utility issues.

**00150.50(c) Contractor Responsibilities** – Replace the bullet that begins "Protect from damage or disturbance any Utility that remains..." with the following bullet:

- Protect from damage or disturbance any Utility that remains within the area in which Work is being performed. Maintain and re-establish location marks according to OAR 952-001-0090(3)(a). Coordinate re-establishment of the location marks with the associated Utility;

Replace the bullet that begins "Determine the exact location before excavating within ..." with the following bullet:

- Determine the exact location before excavating within the tolerance zone according to OAR 952-001-0090(3)(c);

Replace the bullet that begins "In addition to the notification required in OAR 952-001-0090(5), notify the Engineer..." with the following bullet:

- In addition to the notification required in OAR 952-001-0090(6), notify the Engineer and the Utility as soon as the Contractor discovers any previously unknown Utility conflicts or issues. Contrary to the OAR, stop excavating until directed by the Engineer and allow the Utility a minimum of two weeks to relocate or resolve the previously unknown Utility issues; and

**00150.50(f) Utility Information:**

There are no anticipated conflicts with Utilities. The Contractor shall contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

**SECTION 00160 – SOURCE OF MATERIALS**

Comply with Section 00160 of the Standard Specifications modified as follows:

**00160.30 Agency-Furnished Materials** – Add the following paragraph:

No Agency materials are being offered for use on this project. Contractor shall provide all required materials.

**00160.40 Agency-Furnished Sources**– Add the following paragraph:

No Agency sources are being offered for use on this project. Contractor shall provide all required materials.

**SECTION 00165 - QUALITY OF MATERIALS**

Comply with Section 00165 of the Standard Specifications modified as follows:

**00165.03 Testing by Agency** – Delete this subsection.

**00165.04 Costs of Testing** – Delete this subsection.

**00165.50(b)(1) Specification Materials** – Delete the second sentence.

**00165.10(a) Field-Tested Materials** – Add the following sentence to the end of this subsection:

This is a Type D project.

**SECTION 00170 – LEGAL RELATIONS AND RESPONSIBILITIES**

Comply with Section 00170 of the Standard Specifications modified as follows:

Add the following subsection:

**00170.09 Debt Limitation** - This Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provision herein which would conflict with law are deemed inoperative to that extent.

**00170.65(b-1) Minimum Wage Rates** – Replace the last two paragraphs in this subsection with the following:

The applicable prevailing wage rates for this project are the most recent version published by the Oregon Labor and Industries at the time the Project was initially advertised (January 5, 2023 Prevailing Wage Rates for Public Works Contracts with January 11, 2023 Amendments). The wage rates can be found at the following website:

[https://www.oregon.gov/boli/WHD/PWR/Pages/pwr\\_state.aspx](https://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx)

**00170.70(a) Insurance Coverages** - Add the following to the end of this subsection:

The following insurance coverages and dollar amounts are required pursuant to this subsection:

<b>Insurance Coverages</b>	<b>Combined Single Limit per Occurrence</b>	<b>Annual Aggregate Limit</b>
Commercial General Liability	\$2,000,000	\$5,000,000
Commercial Automobile Liability	\$1,000,000	(aggregate limit not required)

**(d) Additional Insured** – Replace this subsection except for the subsection number and title with the following:

The liability insurance coverages of 00170.70(a) shall include an Additional Insured Endorsement specifying the “Deschutes County, and its respective officers, agents, employees, and volunteers and the Deschutes County Board of Commissioners” as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance. The liability coverages of 00170.70(a) that are permitted by the Agency to be obtained by an appropriate Subcontractor shall include all of the foregoing as Additional Insureds and shall also include the Contractor and its officers and employees as Additional Insureds.

Additional Insured Endorsements on the Commercial General Liability shall be written on ISO Form CG 20 10 07 04, or equivalent, with respect to liability arising out of ongoing operations and ISO Form CG 20 37 07 04, or equivalent, with respect to liability arising out of completed operations. Additional Insured Endorsements shall be submitted with the Certificate(s) of Insurance and must be acceptable to the Agency.

Add the following as Additional Insureds under the Contract:

- Deschutes County and its officers, agents, employees, and volunteers
- Deschutes County Board of Commissioners

**(g) Certificate(s) of Insurance** - Replace this subsection, except for the subsection number and title, with the following:

As evidence of the insurance coverages required by the Contract, the Contractor shall furnish Certificate(s) of Insurance to the Agency at the time(s) provided in 00130.50(a). As evidence of insurance coverages required by the Contract but permitted by the Agency under 00170.70(a) to be obtained by an appropriate Subcontractor, the Contractor shall furnish Certificate(s) of Insurance to the Agency for such coverages together with the Contractor's request under 00180.21 for approval of the subcontract with that Subcontractor. The Certificate(s) shall:

- List "Deschutes County and its officers, agents, employees, and volunteers and the Deschutes County Board of Commissioners" as a Certificate holder and as an endorsed Additional Insured;
- Include all required endorsements or copies of the applicable policy language effecting coverage required by the Contract;
- Specify that all liability insurance coverages shall be primary and non-contributory with any other insurance and self-insurance, with exception of Workers' Compensation;
- Include a list of all policies that fall under the Excess/Umbrella Insurance if Excess or Umbrella Insurance is used to meet the minimum insurance requirement.

**00170.72 Indemnity/Hold Harmless** - Add the following paragraph and bullets to the end of this subsection:

Extend indemnity and hold harmless to the Agency and the following:

- Deschutes County and its officers, agents, and employees
- Deschutes County Board of Commissioners

**SECTION 00180 – PROSECUTION AND PROGRESS**

Comply with Section 00180 of the Standard Specifications modified as follows:

**00180.40(c) Specific Limitations** - Limitations of operations specified in these Special Provisions include, but are not limited to, the following:

<b>Limitations</b>	<b>Subsection</b>
Cooperation with Utilities .....	00150.50
On-Site Work .....	00180.40(b)
Closed Lanes .....	00220.40(e)(1)
Noise Control .....	00290.32
Opening Sections to Traffic .....	00744.51

The Contractor shall be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this subsection.

**00180.41 Project Work Schedules** - After the paragraph that begins "One of the following Type..." add the following paragraph:

In addition to the "look ahead" Project Work schedule, a Type A schedule as detailed in the Standard Specifications is required on this Contract.

**00180.50(h) Contract Time** - The Contractor shall complete all Work to be done under the Contract not later than July 31, 2023.

**SECTION 00190 – MEASUREMENT OF PAY QUANTITIES**

Comply with Section 00190 of the Standard Specifications.

**SECTION 00195 - PAYMENT**

Comply with Section 00195 of the Standard Specifications modified as follows:

**00195.12(d) Steel Materials Pay Item Selection** - Add the following to this subsection:

No Pay Items under this Contract qualify for the steel escalation/de-escalation program for this Project.

**00195.50(b) Retainage** – Replace the first paragraph of this subsection with the following:

The amount to be retained from progress payments will be 5% of the value of Work accomplished, and will be retained in one of the forms specified in Subsection (c) below. No retainage will be withheld from Work performed as Force Account Work, escalation/de-escalation, bonuses, or other items decided by the Agency.

**00195.50(c-2) Cash, Alternate B (Retainage Surety Bond)** - Delete this subsection.

**00195.50(c-3) Bonds and Securities** – Delete this subsection.

**00195.50(d) Release of Retainage** – Replace this subsection with the following:

As the Work progresses, release of the amounts retained under (b) above will only be considered for Pay Items that have been satisfactorily completed. For purposes of this Subsection, a Pay Item will be considered satisfactorily completed only if all of the Work for the Pay Item is complete and all contractual requirements pertaining to the Pay Item and Work have been satisfied. Work not included in a Pay Item, or which constitutes part of an uncompleted Pay Item, will not be regarded as satisfactorily completed Work for the purposes of this Subsection.

A determination of satisfactory completion of Pay Items or Work or release of retainage shall not be construed as acceptance or approval of the Work and shall not relieve the Contractor of responsibility for defective Materials or workmanship or for latent defects and warranty obligations.

The Contractor shall comply with all applicable legal requirements for withholding and releasing retainage and for prompt payments, including but not limited to those in ORS Chapters 279C and 701, and 49 CFR 26.29.

**SECTION 00196 – PAYMENT FOR EXTRA WORK**

Comply with Section 00196 of the Standard Specifications.

**SECTION 00197 – PAYMENT FOR FORCE ACCOUNT WORK**

Comply with Section 00197 of the Standard Specifications.

**SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS**

Comply with Section 00199 of the Standard Specifications modified as follows:

**00199.40 Claim Decision; Review; Exhaustion of Administrative Remedies** – Replace the second and third paragraphs with the following:

If the Engineer denies the claim for additional compensation or a combination of additional compensation and Contract Time, in full or in part, according to 00199.40(a), the Contractor may request review of the denial. The disputed claim may then be resolved, in full or in part, at any of the three progressive steps of claim review procedure as set forth in (b) through (d) of this Subsection.

If the Engineer has denied a claim, in full or in part, for Contract Time only according to 00180.80, or has denied a claim, in full or in part, for correction of final compensation according to 00195.95, those disputed claims may then be resolved, in full or in part, at any of the three progressive steps of claim review procedure as specified in (b) through (d) of this Subsection.

Delete the fifth paragraph.



**00199.40(b-e)** - Replace these subsections in their entirety with the following:

**00199.40(b) Step 1: Board of Commissioners Review** – The Contractor shall request that the Engineer arrange for a hearing during a regularly scheduled Board of Commissioners Meeting in order to present the denied or partially denied claim for formal review and discussion. The meeting will take place within 21 Calendar Days of the Agency’s receipt of the request, or as otherwise agreed by the parties.

If the Board of Commissioners determines that the Contractor must furnish additional information or documentation to allow proper analysis of the claim, the Engineer will prepare a Board meeting agenda item for a second hearing within 14 Calendar Days, or as otherwise agreed by the parties, at which the Contractor shall present the requested information or documentation.

If the Contractor does not accept the Step 1 decision, the Contractor may, within 10 Calendar Days of receipt of the written decision, request in writing through the Engineer that the claim be advanced to Step 3 or 4 (see (c) and (d) below).

**00199(c) Step 2: Arbitration** - At this step, the claim will be resolved by binding arbitration before a single arbitrator according to the Construction Industry Arbitration Rules of the American Arbitration Association or such other arbitration service and rules as agreed by the parties.

Arbitration filing costs and any arbitrator's fees will be divided equally between the Agency and the Contractor.

**00199(d) Step 3: Litigation** – This step applies to appeals of arbitration awards issued in Step 2 at 00199.40(c) above, according to ORS 36.600 through ORS 36.740.

The Contractor must follow each step in order, and exhaust all available administrative remedies before resorting to litigation. Lawsuits must be properly filed in a court of competent jurisdiction within 6 months from the date of the final decision that exhausted the Contractor's available administrative remedies under this Section 00199.

The Contractor shall comply with 00170.00.

### **SECTION 00210 - MOBILIZATION**

Comply with Section 00210 of the Standard Specifications.

### **SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC**

Comply with Section 00220 of the Standard Specifications modified as follows:

**00220.02(a) General Requirements** - Add the following bullets to the end of the bullet list:

- When performing trench excavation or other excavation across or adjacent to a Traffic Lane on a roadway having a pre-construction posted speed greater than 35 mph, backfill the excavation, install surfacing, and open the roadway to traffic by the end of each work shift. Install a "BUMP" (W8-1-48) sign approximately 100 feet before the backfilled area and a "ROUGH ROAD" (W8-8-48) sign approximately 500 feet ahead of the "BUMP" sign. If this requirement is not met, maintain all necessary lane or shoulder closures and provide additional TCM, including flagging, at no additional cost to the Agency. Do not use temporary steel plating to reopen the roadway.
- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings.

**00220.40(c) Driveways** – Add the following to the end of the bulleted list:

- When work is expected to disrupt the ingress or egress to a residential or commercial driveway or approach, the Contractor shall provide a minimum 7-days notice to the affected property or business owner(s).

**00220.40(e)(1) Closed Lanes** - Replace this subsection, except for the subsection number and title, with the following:

One Traffic Lane on Rosland Rd may be closed, non-concurrently, in each direction for a continuous duration Monday through Friday as shown below, except as indicated in 00220.40(e)(2):

- Westbound Lane between US97 and Wendy Rd – 5 days
- Eastbound Lane between US97 and Wendy Rd – 5 days
- Westbound Lane between Tracy Rd and Drafter Rd – 3 Days
- Eastbound Lane between Tracy Rd and Drafter Rd – 2 Days

One Traffic Lane may be closed on all other adjacent Roadways within the Project Site not listed above, when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2):

- Daily, Monday through Friday between 7:00 a.m. and 6:00 p.m.

Add the following subsection:

**00220.40(f) Limited Duration Road Closure** - The Contractor will be permitted to close all Traffic Lanes, non-concurrently, for a continuous duration Monday through Friday as shown below, except as indicated in 00220.40(e)(2):

- Rosland Rd - Both Lanes between Wendy Rd and Tracy Rd – 4 Days
- Tracy Rd – Both Lanes between Wendy Rd and Rosland Rd – 4 Days
- Wendy Rd – Both Lanes between Rosland Rd and Tracy Rd – 2 Days

**SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL**

Comply with Section 00221 of the Standard Specifications modified as follows:

**00221.03 Traffic Safety and Operations** - Replace the bullet that begins "When paving operations create..." with the following bullet:

- When paving operations create an abrupt or sloped edge drop off greater than 1 inch, protect traffic by installing signing according to the "2 Lane, 2 Way Roadway Overlay Area" detail shown on the Standard Drawings. Protect longitudinal and transverse Pavement joints by placing and maintaining an asphalt concrete wedge according to 00221.07(c)(1).

**00221.07(c)(1) Paving** - Replace this subsection, except subsection number and title, with the following:

When the longitudinal joint is greater than 1 inch in height, install additional TCD according to 00221.03. Complete the placing of ACP and construction of paving joints according to 00735.48, 00735.49, 00743.45, 00744.44, 00744.45, 00745.47, and 00745.48, as applicable.

**00221.90(b) Temporary Protection and Direction of Traffic** - Delete the bullet that begins "Moving temporary barrier to and from Contractor's stockpile areas".

Replace the bullet that begins "When the Schedule of Items does not include ..." with the following bullet:

- Preparing and signing the daily "Traffic Control Inspection Report", when a TCS is not included in the Schedule of Items or when a TCS is not onsite for a work shift.

**SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS**

Comply with Section 00222 of the Standard Specifications modified as follows:

**00222.40(e) Temporary Sign Placement** - Add the following to the end of the bullet list:

- Install two sign flag boards, as shown on the Standard Drawings, above the following detour and road closed advance warning signs, where applicable:
  - "DETOUR AHEAD", "DETOUR XXXX FT", "DETOUR X/X MILE" (W20-2) signs.
  - "ROAD CLOSED AHEAD", "ROAD CLOSED XXXX FT", "ROAD CLOSED X/X MILE" (W20-3) signs.
- For paving operations on non-freeways, place "ABRUPT EDGE" (CW21-9) and "ROAD WORK XX MPH" (CW20-1a) signs as shown. Use an "XX" value equal to 10 mph below the current posted regulatory speed. If a speed is posted for a temporary regulatory speed reduction, that speed is the current posted regulatory speed.
- For all other moving operations that do not create an abrupt edge adjacent to traffic, omit the "ABRUPT EDGE" signs.

- At least 14 Calendar Days before closure of Rosland Road, place PCMS as shown in the Traffic Control Plan, or as directed.

**00222.80(a) Area Basis -**

Add the following sentence to the end of the paragraph that begins "Temporary signs will...":

No measurement of quantities will be made for "CONSTRUCTION VEHICLE DO NOT FOLLOW" (CW23-14) signs.

**00222.90 Payment -**

Add the following to the end of this subsection:

No separate or additional payment will be made for furnishing, installing, and maintaining 72 by 24-inch "CONSTRUCTION VEHICLE DO NOT FOLLOW" (CW23-14) signs. Payment will be included in 00221.90(b).

**SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES**

Comply with Section 00223 of the Standard Specifications modified as follows:

**00223.31(b) Traffic Control Inspection Without TCS** - Replace the bullet that begins "Prepares and signs a daily "Traffic Control Inspection Report"..." with the following bullet:

- Prepares and signs a "Traffic Control Inspection Report" (Form No. 734-2474) upon the initial installation of TCM and each working day when any modification, removal, or reinstallation of TCM are made, or as directed by the Engineer. Submit completed reports to the Engineer no later than the end of the next working day.

**SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES**

Comply with Section 00224 of the Standard Specifications modified as follows:

**00224.46 Pavement Edge Delineation** - Replace the paragraph that begins "Place tubular or conical markers..." with the following paragraph:

Place tubular or conical markers to delineate the edge of Pavement immediately after construction Work or paving operations create an abrupt or sloped edge drop-off greater than 1 inch in height along the right hand or left hand Shoulder.

**00224.80 Measurement** – Replace this section, except for the subsection number and title, with the following:

No measurement will be made for work performed under this section.

**00224.90 Payment** – Replace this subsection, except for the subsection number and title, with the following:

Work performed under this section will be paid for according to 00221.90(b).

**SECTION 00225 - TEMPORARY PAVEMENT MARKINGS**

Comply with Section 00225 of the Standard Specifications modified as follows:

**00225.40 Temporary Pavement Markers** - Replace the paragraph that begins "Unless otherwise shown..." and the three bullets with the following paragraphs and bullets:

Install temporary flexible overlay pavement markers for temporary centerline marking as follows:

- Place and maintain one temporary flexible overlay pavement marker on 40 foot spacing in tangent and curve sections except as below.
- Place and maintain one temporary flexible overlay pavement marker on 20 foot spacing in curved alignment sections identified by a speed rider displaying less than the posted speed and channelization areas.

Establish alignment for placing the temporary flexible overlay pavement markers as follows:

- Control markers at:
  - 200 foot intervals on tangents
  - 50 foot intervals on curves
  - 40 foot intervals on curves with speed rider
- Use string line or other appropriate means to maintain proper alignment of the markers. Adjust placement to avoid straddling a longitudinal joint, while maintaining a suitable alignment of markers.
- Remove and replace misaligned markers at no additional cost to the Agency.

**00225.40(b) Flexible Oiling Pavement Markers** - Add the following paragraph to the end of this subsection:

Remove the markers on underlying surfaces before placing the next full Lift of paving that would obliterate the marker.

**00225.42(b) Wearing Course** - Replace the bullet that begins "For left hand solid lines..." with the following bullet:

- For left hand solid lines and skip lines striping, use temporary removable tape or pavement markers.

**00225.80 Measurement** – Replace this section, except for the subsection number and title, with the following:

No measurement will be made for work performed under this section.

**00225.90 Payment** – Replace this subsection, except for the subsection number and title, with the following:

Work performed under this section will be paid for according to 00221.90(b).

**SECTION 00230 – TEMPORARY ROADBED AND SURFACING**

Section 00230, which is not a Standard Specification, is included in this Project by Special Provision.

**Description**

**00230.00 Scope** - This Work consists of constructing, maintaining, and removing temporary Roadbeds and Surfacing, as shown or directed.

**Materials**

**00230.10 Materials** - Furnish Materials meeting the following requirements:

Aggregate Base.....00640.10

**00230.11 Earthwork** - Furnish Materials required to construct the Roadbed according to Section 00330 and as shown.

**Construction**

**00230.40 Earthwork** - Construct temporary embankments and excavation outside the permanent Roadbed according to the applicable parts of Section 00330, except density testing to verify compaction will not be required. Compact the embankment material according to 00330.43(c). Ensure that Earthwork that remains in place as permanent Roadbed meets all requirements of Section 00330.

**00230.43 Aggregate Base** - Place and compact Aggregate Base according to the applicable parts of Section 00640.

**Maintenance**

**00230.60 Surface Maintenance** - Maintain temporary surfaces according to 00220.60.

**Finishing and Cleaning Up**

**00230.70 General** - When temporary surfaces are no longer needed, do the following:

- Remove all related materials.
- Restore the area on which the temporary Surfacing and associated Roadbed occupied to the original ground contours, or as directed.
- Dispose of excess materials according to 00330.41(a)(4).

**Measurement**

**00230.80 Measurement** - No measurement of quantities will be made for Work performed under this Section. It is estimated that the following approximate quantities of Materials will be required:

<b>Material</b>	<b>Amount</b>
Construct Temporary Roadbed and Surfacing:	
Aggregate Base.....	224.0 ton
Remove Temporary Roadbed and Surfacing:	
Excavation.....	118.6 cu.yd.

Quantities include only those quantities placed or removed outside the permanent Roadbed Neat Line.

**Payment**

**00230.90 Payment** - The accepted quantities of Work performed under this Section, except for permanent seeding Work, will be paid for at the Contract lump sum amount for the item "Construct and Remove Temporary Roadbed and Surfacing".

Payment will be payment in full for constructing, maintaining, and removing Roadbeds and Surfacing, and for furnishing and placing all Materials, and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified.

**SECTION 00290 - ENVIRONMENTAL PROTECTION**

Comply with Section 00290 of the Standard Specifications modified as follows:

**00290.20(c)(3)(a) Burnable Materials** – Delete this subsection.

**00290.20(c)(3)(b) Woody Matter** – Replace this subsection, except for the subsection number and title, with the following:

Woody matter may be chipped to a size of no more than 3 inches in any direction then uniformly spread over selected landscape areas, as directed, in loose layers not more than 3 inches thick. Burying or burning wood, stumps, or other woody material is not allowed.

**00290.30(c)(3) Burn Restrictions** – Delete this subsection.

**SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

Comply with Section 00310 of the Standard Specifications modified as follows:

**00310.90 Payment** - Add the following to the end of this subsection:

No separate or additional payment will be made for removal or disposal Work included in Section 00330 according to 00310.02.

### **SECTION 00330 - EARTHWORK**

Comply with Section 00330 of the Standard Specifications modified as follows:

**00330.03 Basis of Performance** - Add the following paragraph to the end of this subsection:

Perform all earthwork under this Section on the excavation basis.

**00330.14 Selected Granular Backfill** - Delete the sentence that begins "Reclaimed glass meeting the requirements of Section 02695..."

**00330.15 Selected Stone Backfill** - Delete the sentence that begins "Reclaimed glass meeting the requirements of Section 02695..."

**00330.41(a)(4) Excess Materials** - Replace this subsection, except for the subsection number and title, with the following:

If the quantities of excavated materials are greater than required to construct embankments and to perform all filling and backfilling, the Contractor may use the remaining materials to uniformly widen embankments or to flatten slopes in a manner satisfactory to the Engineer.

**00330.41(a)(5) Waste Materials** - Replace this subsection, except for the subsection number and title, with the following:

Unless otherwise specifically allowed and subject to the requirements of Section 00280, dispose of materials, classed as waste materials in 00330.41(a)(3), outside and beyond the limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on Wetlands, either public or private, or within 300 feet of rivers or streams.

**00330.92 Kinds of Incidental Earthwork** - Add the following bullets to the end of the bullet list:

- Excess material used to widen embankments or flatten slopes according to 00330.41(a)(4).
- Earthwork required for driveways and road approaches. Earthwork for driveways and road approaches will be that which is outside the Neat Line limits shown on the typical sections.

### **SECTION 00340 - WATERING**

Comply with Section 00340 of the Standard Specifications modified as follows:



**00340.80 Measurement** – Replace this subsection, except for the subsection number and title, with the following:

There will be no measurement of watering.

**00340.90 Payment** – Replace this subsection, except for the subsection number and title, with the following:

There will be no separate or additional payment for watering. Watering is incidental to Section 00330.90.

### **SECTION 00350 - GEOSYNTHETIC INSTALLATION**

Comply with Section 00350 of the Standard Specifications modified as follows:

**00350.01 Definitions** - Replace the sentence that begins “**Embankment Geotextile** - For installation...” with the following sentence:

**Embankment Geotextile** - Embankment geotextile is used as a reinforcement within embankments and as a separation and reinforcement under embankments.

Replace the bullet that begins “**Nonwoven Geotextile** - A textile...” with the following bullet:

- **Nonwoven Geotextile** - A textile produced by bonding or interlocking of fibers by mechanical, heat or chemical means.

Replace the sentence that begins “**Riprap Geotextile** - For installation...” with the following sentence:

**Riprap Geotextile** - Riprap geotextile is used as a filter and separator behind or beneath riprap, Buttresses, inlays, shear keys and erosion control applications.

Replace the sentence that begins “**Subgrade Geotextile** - For installation...” with the following sentence:

**Subgrade Geotextile** - Subgrade geotextile is used as a separator and reinforcement on Subgrades and in other material separation applications.

**00350.41(f)(5) Geotextile Placement** - Replace the paragraph that begins “Slit wrinkles or folds ...” with the following paragraph:

Slit wrinkles or folds exceeding 1 inch and lay flat. Shingle-lap not more than 6 inches in the direction of the paving. Broom or squeegee to smooth the geotextile and pneumatic roll to maximize geotextile contact with the Pavement surface. Additional hand-placed sealant material may be required at laps as determined.

**SECTION 00610 - RECONDITIONING EXISTING ROADWAY**

Comply with Section 00610 of the Standard Specifications modified as follows:

**00610.80 Measurement** – Replace this subsection, except for the subsection number and title, with the following:

The quantities of Work performed under this Section will be measured on the area basis.

Materials used in the replacement of Unsuitable Materials according to 00610.40 will be measured in the manner applicable to the Pay Item under which the Materials are furnished.

**00610.90 Payment** – Replace the paragraph that begins with “Payment for reconditioning...” with the following:

The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

<b>Pay Item</b>	<b>Unit of Measurement</b>
(a) Reconditioning Existing Bases .....	Square Yard

Payment for reconditioning and preparation work will be made at the Contract lump sum amount for the item “Reconditioning Existing Bases”.

**SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS**

Comply with Section 00641 of the Standard Specifications modified as follows:

**00641.10(a) Base and Shoulder Aggregate** - In the paragraph that begins "Aggregate for bases...", add the following sentence after the first sentence:

Base aggregate shall be 3/4"-0 size.

**SECTION 00730 - EMULSIFIED ASPHALT TACK COAT**

Comply with Section 00730 of the Standard Specifications modified as follows:

**00730.11 Emulsified Asphalt** - In the paragraph that begins "Obtain samples according to AASHTO T 40..." replace the words “AASHTO T 40” with the words “AASHTO R 66”.

**00730.42 Preparation of Underlying Surfaces** – Add the following to the end of this subsection:

Immediately before applying the tack coat, the surface to be tacked shall be clean and dry. Clean all loose material by brooming, flushing with water or other approved methods. Pavement surface shall be cleaned to the apparent existing edge of pavement. Application of tack coat shall not commence until surface cleanliness has been verified and approved by the Engineer.

**00730.44 Applying Tack Coat** - Apply the Emulsified Asphalt with a pressure distributor conforming to 00730.22, unless otherwise allowed. Apply the Emulsified Asphalt to the prepared surface at a rate between 0.05 and 0.20 gallons per square yard as directed and with the Emulsified Asphalt temperature between 140 °F and 185 °F as recommended by the manufacturer. Refer to the manufacturer's recommendations for tack coat application rates for the underlying surface type and type of emulsion used. Application rates for tack coat diluted according to 00730.11 will be increased as necessary to provide the same amount of residual asphalt as the application rates specified above.

Do not place hot mixed asphalt concrete Pavement or Emulsified Asphalt Concrete Pavement on the tack coat until the Emulsified Asphalt separates from the water (breaks), but before it loses its tackiness. Refer to manufacturer recommendations regarding break/set time. Minimize truck traffic on the tacked surface.

**00730.90 Payment** - Replace this subsection, except for the subsection number and title, with the following:

No separate or additional payment will be made for Emulsified Asphalt tack coat. Approximately 1 Ton of Emulsified Asphalt in tack coat will be required on this Project.

#### **SECTION 00744 - ASPHALT CONCRETE PAVEMENT**

Comply with Section 00744 of the Standard Specifications modified as follows:

**00744.10(a) New Coarse and Fine Aggregates** – Replace the last paragraph in this subsection with the following:

Test Aggregates for soundness, durability, and harmful substances at no additional cost to the Agency.

**00744.11(a) Asphalt Cement** - Add the following to the end of this subsection:

Provide PG 64-28 grade asphalt cement for this Project.

**00744.23 Pavers** – Replace the bullet that begins with “Provides the specified...” with the following:

- Provides the specified results through mechanical sensors and sensor-directed devices actuated from independent line and grade control references over an array with a minimum length of 35 feet when performing top lift paving or when directed by the Engineer.

**00744.43(b) Depositing** – Add the following to this subsection:

When performing top lift paving or when directed by the Engineer, ACP shall be windrowed. Pick-up equipment shall be used that is:

- Capable of picking up substantially all of the ACP deposited on the roadway.

- Self-supporting, not exerting any vertical load on the paving machine, or causing vibrations or other motions which could have a harmful effect on the riding quality of the completed pavement.

**00744.44(b) Drop-Offs** - Replace the bullet that begins “Provide warning signs and markings...” with the following bullet:

- Provide warning signs and markings according to Sections 00221, 00222, 00224 and 00225 where abrupt or sloped edge drop-offs greater than 1 inch in height occur.

Add the following subsection:

**00744.51 Opening Sections to Traffic** - Schedule work so that the surfaces being paved are paved full width and length through the wearing Course before opening to traffic.

### **SECTION 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES**

Comply with Section 00749 of the Standard Specifications modified as follows:

Add the following subsection:

**00749.48 Joint Sealing** – Sand seal joints between abutting asphalt surfaces according to the Plans and as directed.

**00749.90 Payment** – Add the following paragraph to the end of this subsection:

No separate or additional payment will be made for joint sealing.

### **SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS**

Comply with Section 00850 of the Standard Specifications modified as follows:

**00850.45 Installation** – Add the following to the end of this subsection:

Do not place liquid thermoplastic striping materials within one week of a rainfall event without prior written approval from the Engineer.

### **SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE**

Comply with Section 0865 of the Standard Specifications.

### **SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS**

Comply with Section 00867 of the Standard Specifications.

**SECTION 02320 - GEOSYNTHETICS**

Comply with Section 02320 of the Standard Specifications modified as follows:

**02320.10(a)(1) Geotextiles** - Add the following bullet to the beginning of the bullet list:

- QPL approved for the intended application.

**02320.10(b) Acceptance Requirements** - Replace this subsection with the following subsection:

**02320.10(b) Identification** - Identify geotextiles by the product name printed directly on the geotextile by the Manufacturer. For all other geosynthetics and when geotextiles are not marked with a product name, identify geosynthetics by the product label attached to the original packaging or the geosynthetic itself by the Manufacturer.

Allow the Engineer to visually verify geosynthetic products before installation. Open packaged geosynthetics before use in the presence of the Engineer to confirm the correct product. Geotextile rolls without the product name printed on the geotextile or the product label affixed to the geotextile or roll core by the Manufacturer will be rejected. Any other geosynthetics that are unwrapped, missing original packaging or previously opened may not be used unless approved by the Engineer.

**02320.10(c)(1) Geotextiles** - Replace this subsection, except for the subsection number and title, with the following:

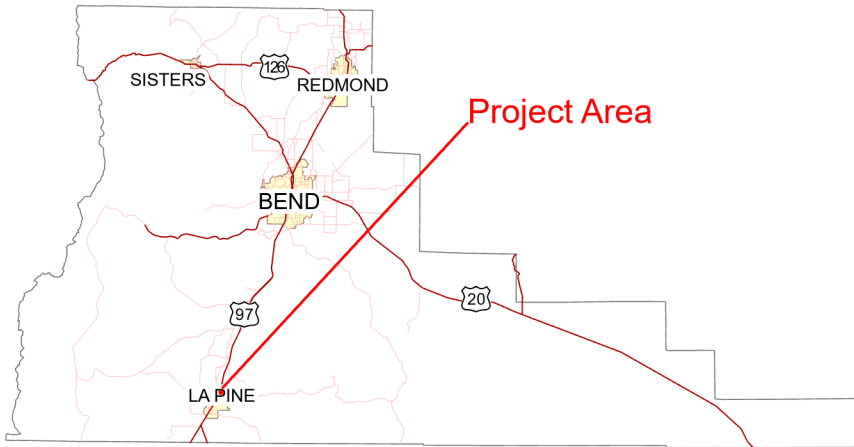
Geotextile products listed in the QPL that are identified as "NTPEP listed" in the remarks column have been approved based on participation in the AASHTO National Transportation Product Evaluation Program (NTPEP) and test data from the program. Manufacturer's test certification is not required for NTPEP listed geotextiles from the QPL. For other geotextiles, include the following unless directed otherwise:

- QPL product category and proposed project application.
- Product name printed directly on the geotextile by the Manufacturer. For geotextiles that are not marked with a product name, provide geotextile with product label attached to the geotextile or original packaging by the Manufacturer.
- Manufacturer's name, lot number, roll number, production facility address, and full product information (style, brand, name, etc.).
- Chemical composition of filaments and yarns, including polymer(s) used.
- Minimum average roll values for each of the specified properties from the same lot of geotextiles as the delivered material.

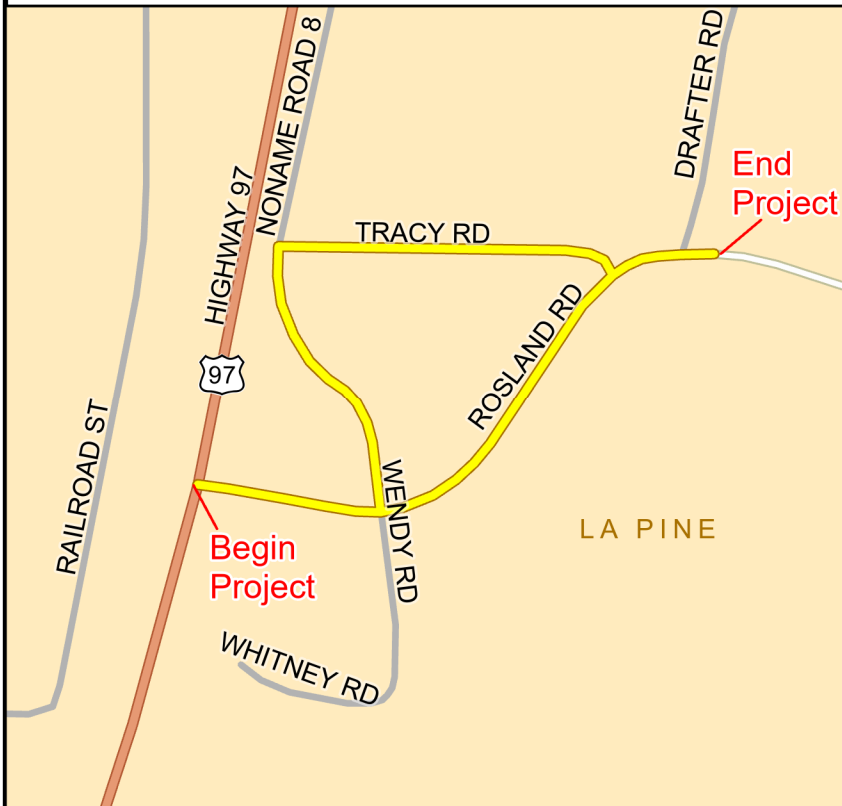
**SECTION 02630 – BASE AGGREGATE**

Comply with Section 02630 of the Standard Specifications.

DESCHUTES COUNTY ROAD DEPARTMENT  
 PLANS FOR  
**PAVING OF ROSLAND RD: US 97 TO DRAFTER RD**  
 March 2023



INDEX OF SHEETS	
Sheet #	Description
1	COVER SHEET
2-3	TYPICAL SECTION
4	DETAILS
5	PLAN---Sta R 10+00 To R 13+00
6	PLAN---Sta R 13+00 To R 17+00
7	PLAN---Sta R 17+00 To R 20+00
8	PLAN---Sta T 10+00 To T 13+00
9	PLAN---Sta T 13+00 To T 15+00
10	PLAN---Sta W 10+00 To W 12+00
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OREGON STANDARD DRAWING NO.	
RD615	SURFACE EDGE DETAILS
TM500	PAVEMENT MARKINGS STANDARD DETAIL BLOCKS
TM501	PAVEMENT MARKING STANDARD DETAIL BLOCKS
TM503	PAVEMENT MARKING STANDARD DETAIL BLOCKS
TM530	INTERSECTION PAVEMENT MARKINGS
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TM560	ALIGNMENT LAYOUT - GENERAL
TM800	TABLES, ABRUPT EDGE AND PCMS DETAILS
TM821	TEMPORARY SIGN SUPPORTS
TM822	TEMPORARY SIGN SUPPORTS
TM855	2-LANE, 2-WAY ROADWAYS

LOCATION MAP

NOT TO SCALE

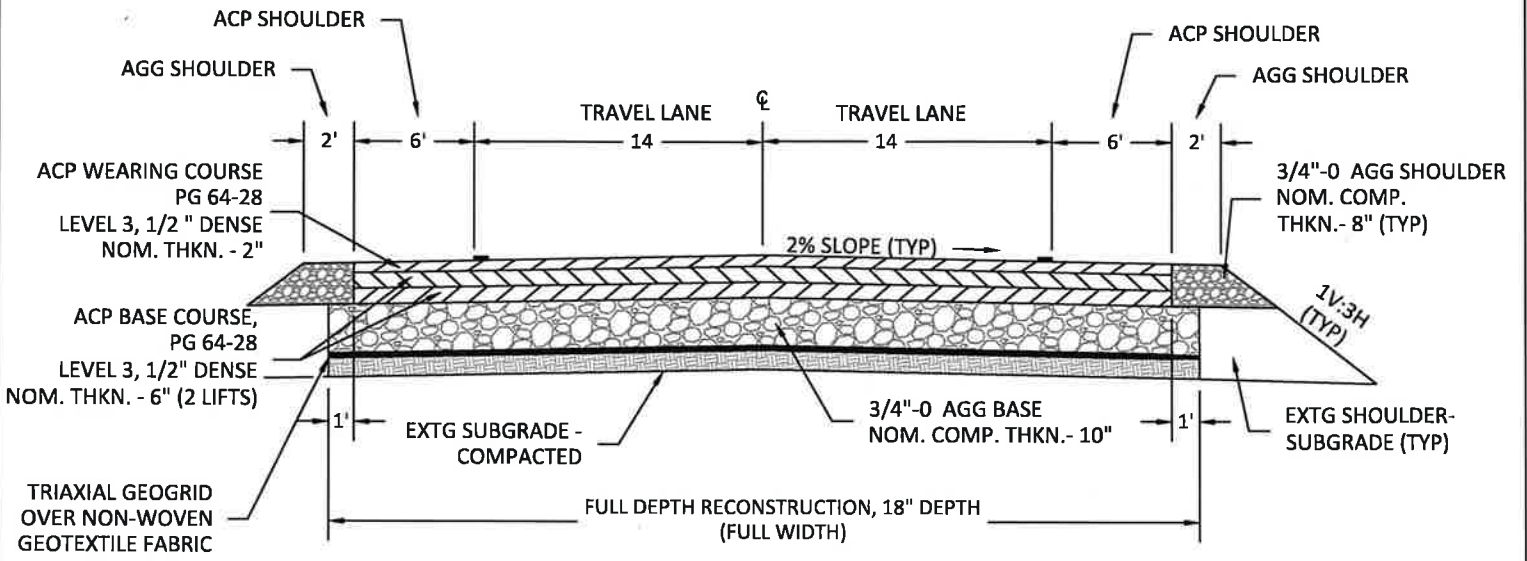


- Project Centerline
- State Highway
- County Routes
- City Limits
- Road Centerlines

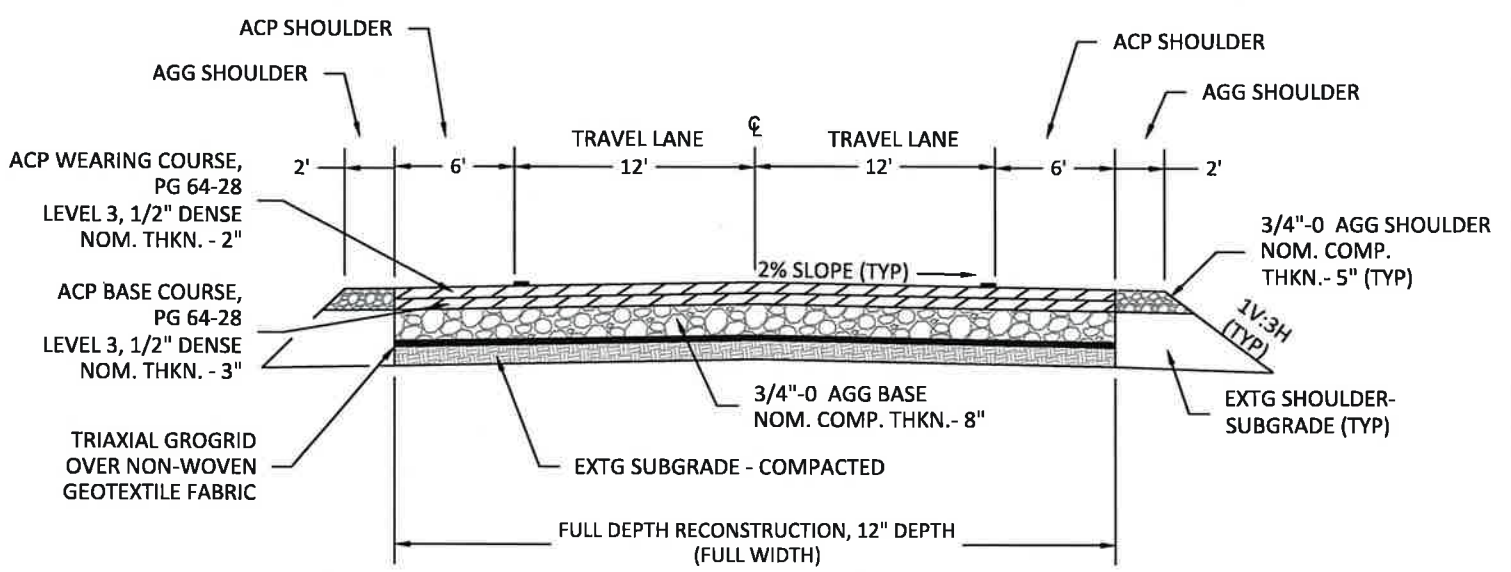


ROAD  
DEPARTMENT

TITLE: COVER SHEET		SHEET NO: 1 of 11
DATE: 3/20/23	SCALE: N.T.S.	DRAFTER: R. PINKSTON REVIEWED BY: C. SMITH



**ROSLAND RD**  
STA "R" 10+50 - STA "R" 13+05



**ROSLAND RD**  
STA "R" 13+05 - STA "R" 20+50

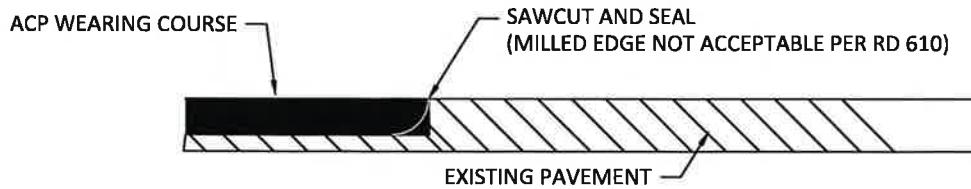


**ROAD  
DEPARTMENT**

TITLE: TYPICAL SECTIONS		PAGE NO: 2 OF 11
DATE: 1/12/23	SCALE: N.T.S.	APPROVED BY: C. SMITH

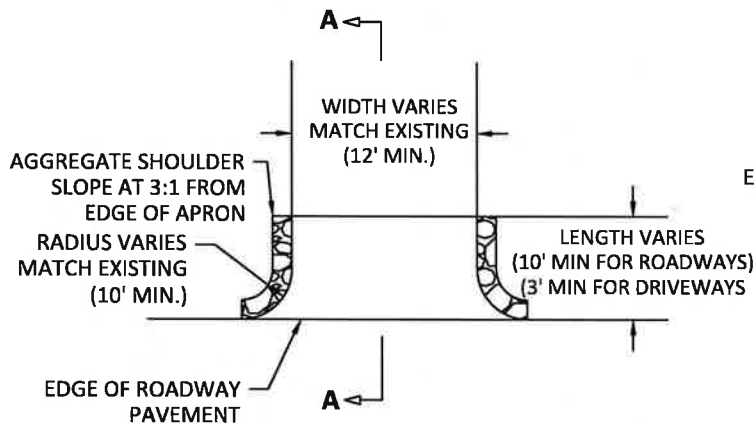




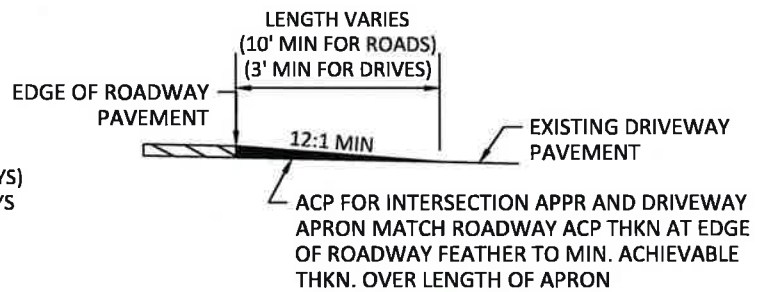


**COLD PLANE REMOVAL END DETAIL**

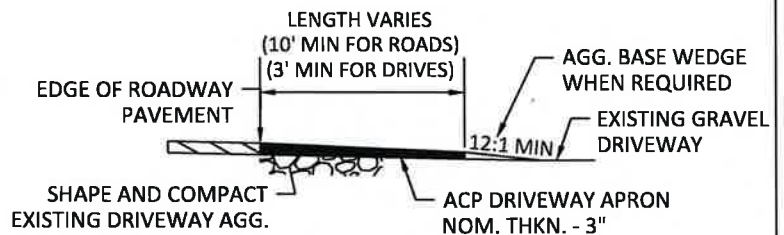
PROFILE VIEW



**INTERSECTION APPROACH AND DRIVEWAY APRON DETAIL**



**SECTION A-A (EXISTING PAVED APPROACH)**



**SECTION A-A (EXISTING GRAVEL APPROACH)**



RENEWS: JUNE 30, 2024



**ROAD DEPARTMENT**

TITLE: DETAILS		PAGE NO: 4 OF 11
DATE: 1/12/23	SCALE: N.T.S.	APPROVED BY: C. SMITH



Aerial Imagery Data:  
 Overlay-Deschutes County Road Department (High-Resolution), Captured March 2022  
 Underlay-Oregon Statewide Imagery Program (OSIP), Captured 2018

**LEGEND**

 18" RECONSTRUCTION  
 (SEE DETAILS, SHEET 4)

 ASPHALT APPROACH

**NOTES:**

8" AC/ 10" AB

MATCH ADJACENT  
 PAVEMENT SECTION



**ROAD DEPARTMENT**

PLAN: ROSLAND ROAD  
 STA R 10+00 to R 13+00

SHEET NO:  
 5 of 11

DATE:  
 3/20/23

SCALE:  
 N.T.S.




DRAFTER: R. PINKSTON  
 REVIEWED BY: C. SMITH





Aerial Imagery Data:  
 Overlay-Deschutes County Road Department (High-Resolution), Captured March 2022  
 Underlay-Oregon Statewide Imagery Program (OSIP), Captured 2018

**LEGEND**

-  18" RECONSTRUCTION  
(SEE DETAILS, SHEET 4)
-  12" RECONSTRUCTION  
(SEE DETAILS, SHEET 4)
-  ASPHALT APPROACH

**NOTES:**

- 8" AC/ 10" AB
- 4" AB/ 8" AB
- MATCH ADJACENT PAVEMENT SECTION



**ROAD DEPARTMENT**

PLAN: ROSLAND ROAD  
 STA R 13+00 to R 17+00

SHEET NO:  
 6 of 11

DATE:  
 3/20/23

SCALE:  
 N.T.S.

DRAFTER: R. PINKSTON  
 REVIEWED BY: C. SMITH





Aerial Imagery Data:  
 Overlay-Deschutes County Road Department (High-Resolution), Captured March 2022  
 Underlay-Oregon Statewide Imagery Program (OSIP), Captured 2018

**LEGEND**

 12" RECONSTRUCTION  
 (SEE DETAILS, SHEET 4)

 ASPHALT APPROACH

**NOTES:**

4" AB/ 8" AB

MATCH ADJACENT  
 PAVEMENT SECTION



**ROAD  
 DEPARTMENT**

PLAN: ROSLAND ROAD  
 STA R 17+00 to R 20+00

SHEET NO:  
 7 of 11

DATE:  
 3/20/23

SCALE:  
 N.T.S.

DRAFTER: R. PINKSTON  
 REVIEWED BY: C. SMITH





Aerial Imagery Data:  
 Overlay-Deschutes County Road Department (High-Resolution), Captured March 2022  
 Underlay-Oregon Statewide Imagery Program (OSIP), Captured 2018

**LEGEND**

 12" RECONSTRUCTION  
 (SEE DETAILS, SHEET 4)

 ASPHALT APPROACH

**NOTES:**

4" AC/ 8" AB

MATCH ADJACENT  
 PAVEMENT SECTION



**ROAD  
 DEPARTMENT**

PLAN: TRACY ROAD  
 STA T 10+00 to T 13+00

SHEET NO:  
 8 of 11

DATE:  
 3/20/23

SCALE:  
 N.T.S.

DRAFTER: R. PINKSTON  
 REVIEWED BY: C. SMITH





Aerial Imagery Data:  
 Overlay-Deschutes County Road Department (High-Resolution), Captured March 2022  
 Underlay-Oregon Statewide Imagery Program (OSIP), Captured 2018

**LEGEND**

 12" RECONSTRUCTION  
 (SEE DETAILS, SHEET 4)

 ASPHALT APPROACH

**NOTES:**

4" AC/ 8" AB

MATCH ADJACENT  
 PAVEMENT SECTION



**ROAD  
 DEPARTMENT**

PLAN: TRACY ROAD  
 STA T 13+00 to T 15+00

SHEET NO:  
 9 of 11

DATE:  
 3/20/23

SCALE:  
 N.T.S.

DRAFTER: R. PINKSTON  
 REVIEWED BY: C. SMITH





Aerial Imagery Data:  
 Overlay-Deschutes County Road Department (High-Resolution), Captured March 2022  
 Underlay-Oregon Statewide Imagery Program (OSIP), Captured 2018

**LEGEND**

 REMOVE & REPLACE AC  
 (SEE DETAILS, SHEET 4)

**NOTES:**

2" DEPTH



**ROAD  
 DEPARTMENT**

PLAN: WENDY ROAD  
 STA W 10+00 to W 12+00

SHEET NO:  
 10 of 11

DATE:  
 3/20/23

SCALE:  
 N.T.S.

DRAFTER: R. PINKSTON  
 REVIEWED BY: C. SMITH





Aerial Imagery Data:  
 Overlay-Deschutes County Road Department (High-Resolution), Captured March 2022  
 Underlay-Oregon Statewide Imagery Program (OSIP), Captured 2018

**LEGEND**

 REMOVE & REPLACE AC  
 (SEE DETAILS, SHEET 4)

**NOTES:**

2" DEPTH



**ROAD DEPARTMENT**

PLAN: WENDY ROAD  
 STA W 12+00 to W 14+00

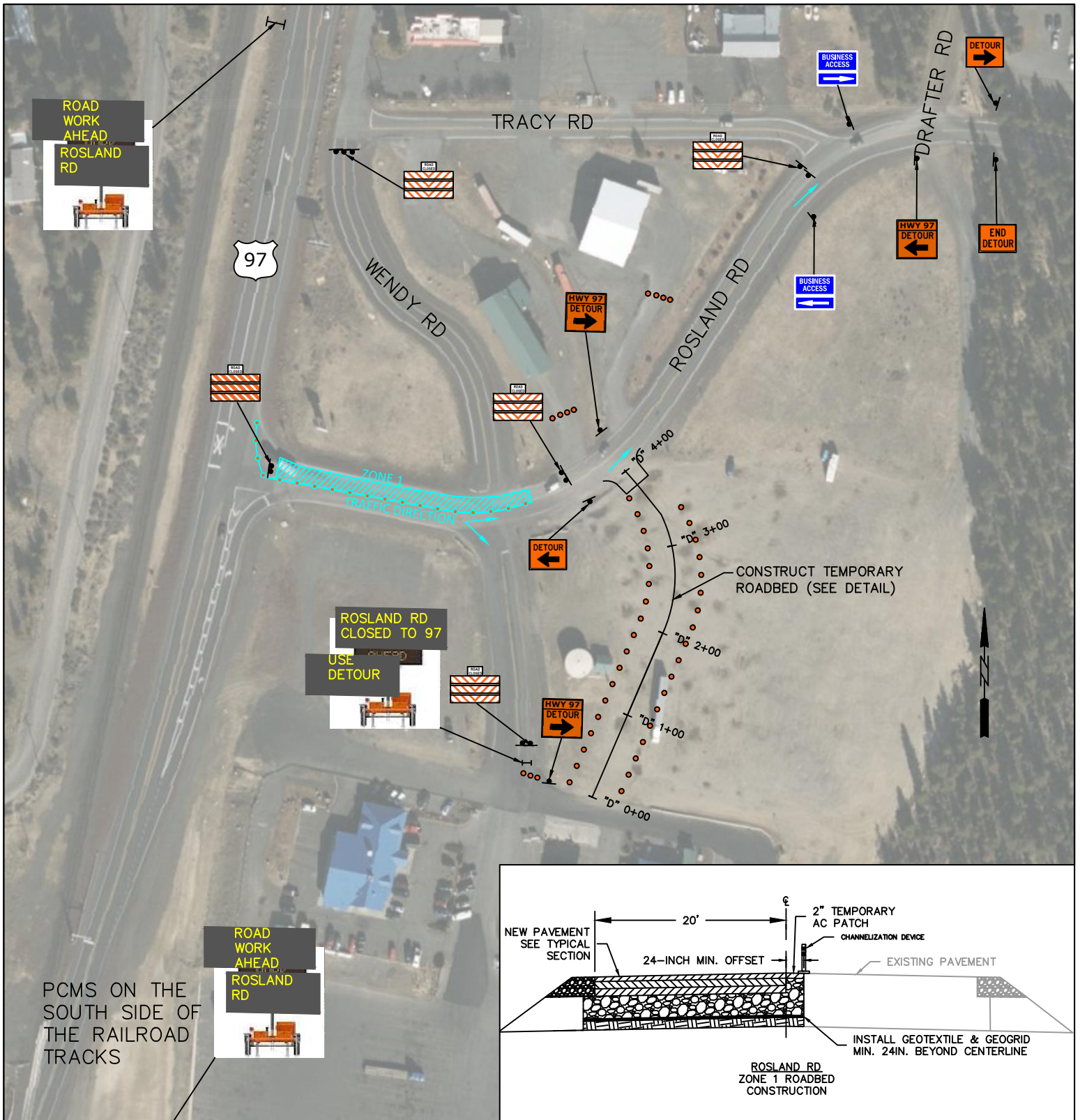
SHEET NO:  
 11 of 11

DATE:  
 3/20/23






SCALE:  
 N.T.S.

DRAFTER: R. PINKSTON  
 REVIEWED BY: C. SMITH





ZONE 1 – NORTH SIDE OF ROSLAND RD FROM HWY 97 TO WENDY RD

-  FLAGGER STATION
-  SIGN LOCATION
-  TYPE 3 BARRICADE
-  CHANNELIZATION DEVICE
-  PORTABLE CHANGABLE MESSAGE SIGN

NOTE:  
FLAGGING AS REQ'D



# ROAD DEPARTMENT

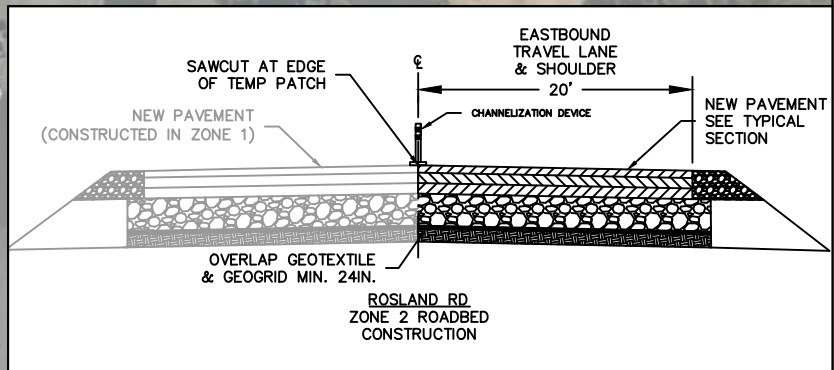
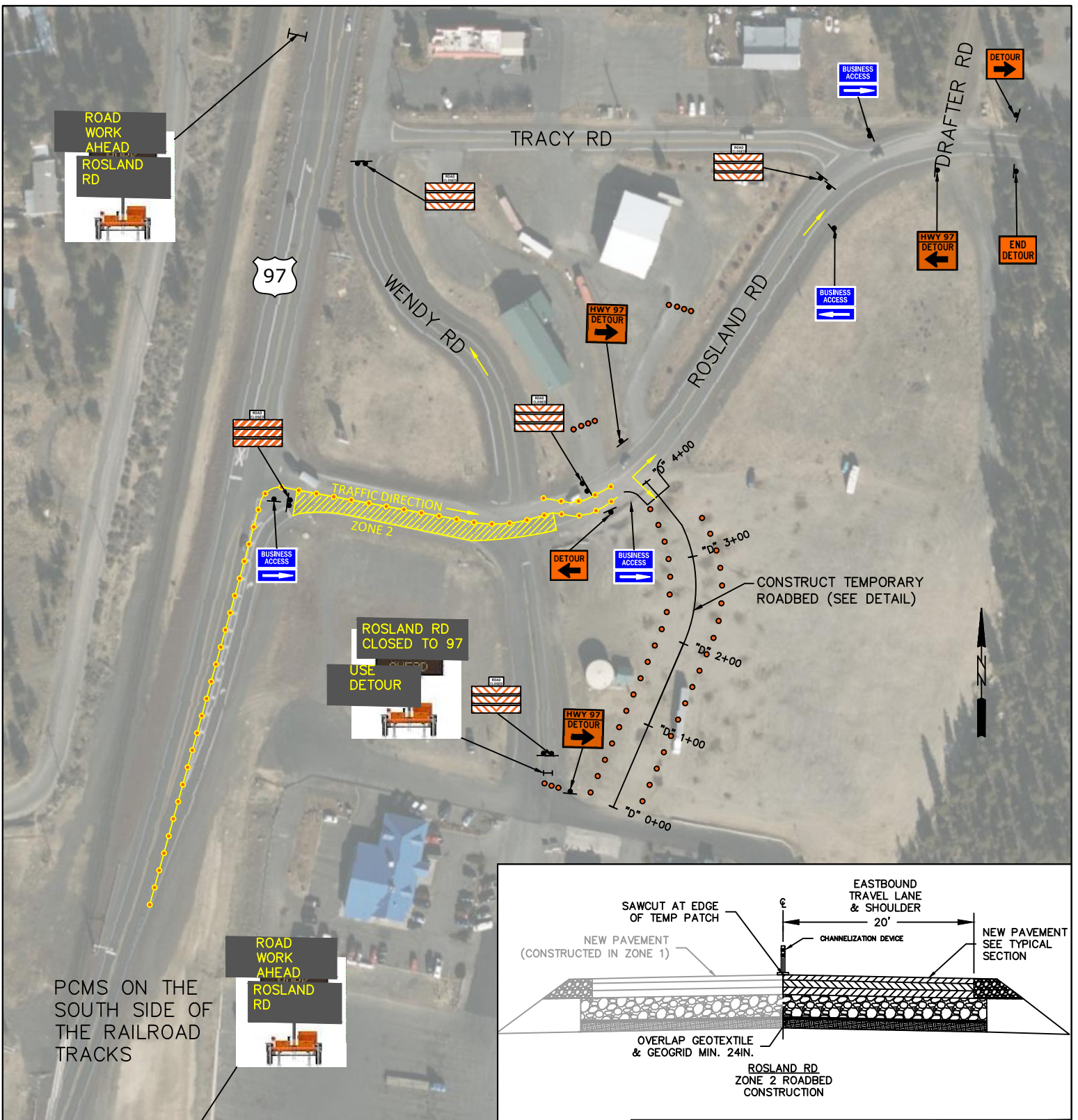
TITLE:  
PAVING OF ROSLAND RD:  
US 97 TO DRAFTER RD

PAGE NO:  
1 OF 9






DATE:  
1/12/23

SCALE:  
1"=150'

APPROVED BY:  
C. SMITH



ZONE 2 – SOUTH SIDE OF ROSLAND RD FROM HWY 97 TO WENDY RD

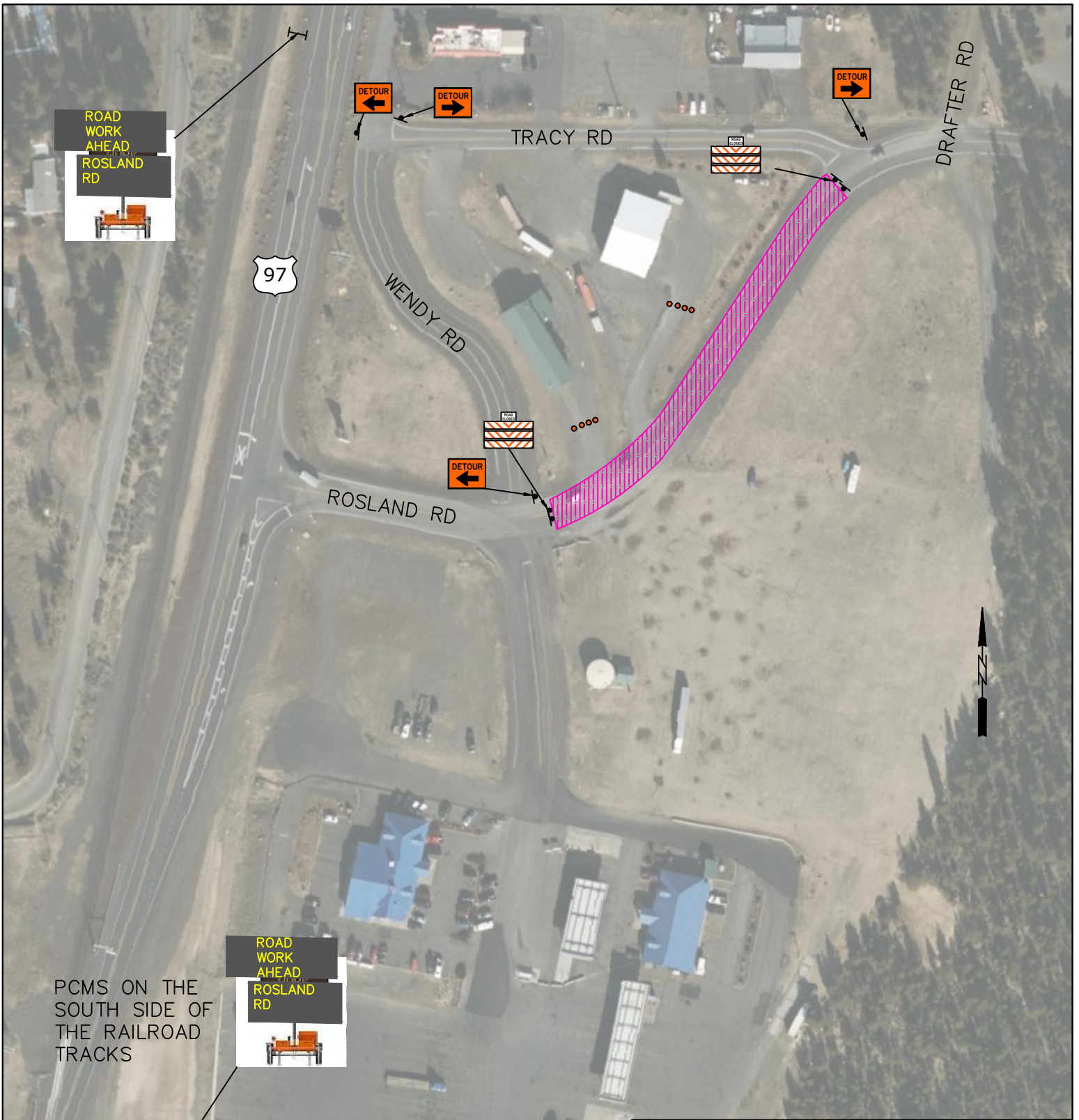
-  FLAGGER STATION
-  SIGN LOCATION
-  TYPE 3 BARRICADE
-  CHANNELIZATION DEVICE
-  PORTABLE CHANGABLE MESSAGE SIGN

NOTE:  
FLAGGING AS REQ'D






## ROAD DEPARTMENT

TITLE: PAVING OF ROSLAND RD: US 97 TO DRAFTER RD		PAGE NO: 2 OF 9
DATE: 1/12/23	SCALE: 1"=150'	APPROVED BY: C. SMITH





ZONE 3A — ROSLAND RD  
FROM WENDY RD TO TRACY RD

-  FLAGGER STATION
-  SIGN LOCATION
-  TYPE 3 BARRICADE
-  CHANNELIZATION DEVICE
-  PORTABLE CHANGABLE MESSAGE SIGN

NOTE:  
FLAGGING AS REQ'D



**ROAD  
DEPARTMENT**

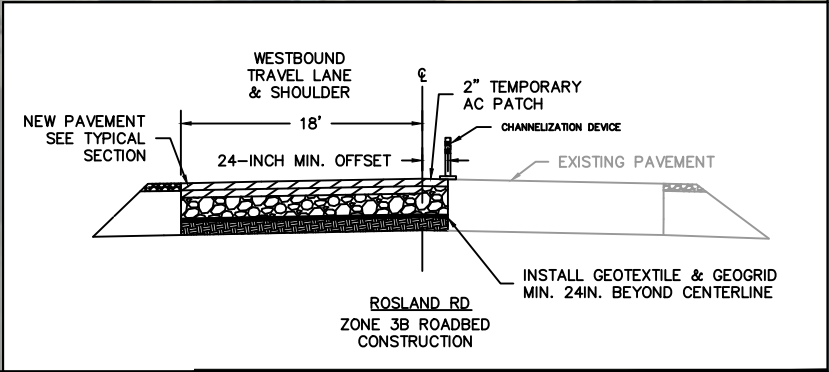
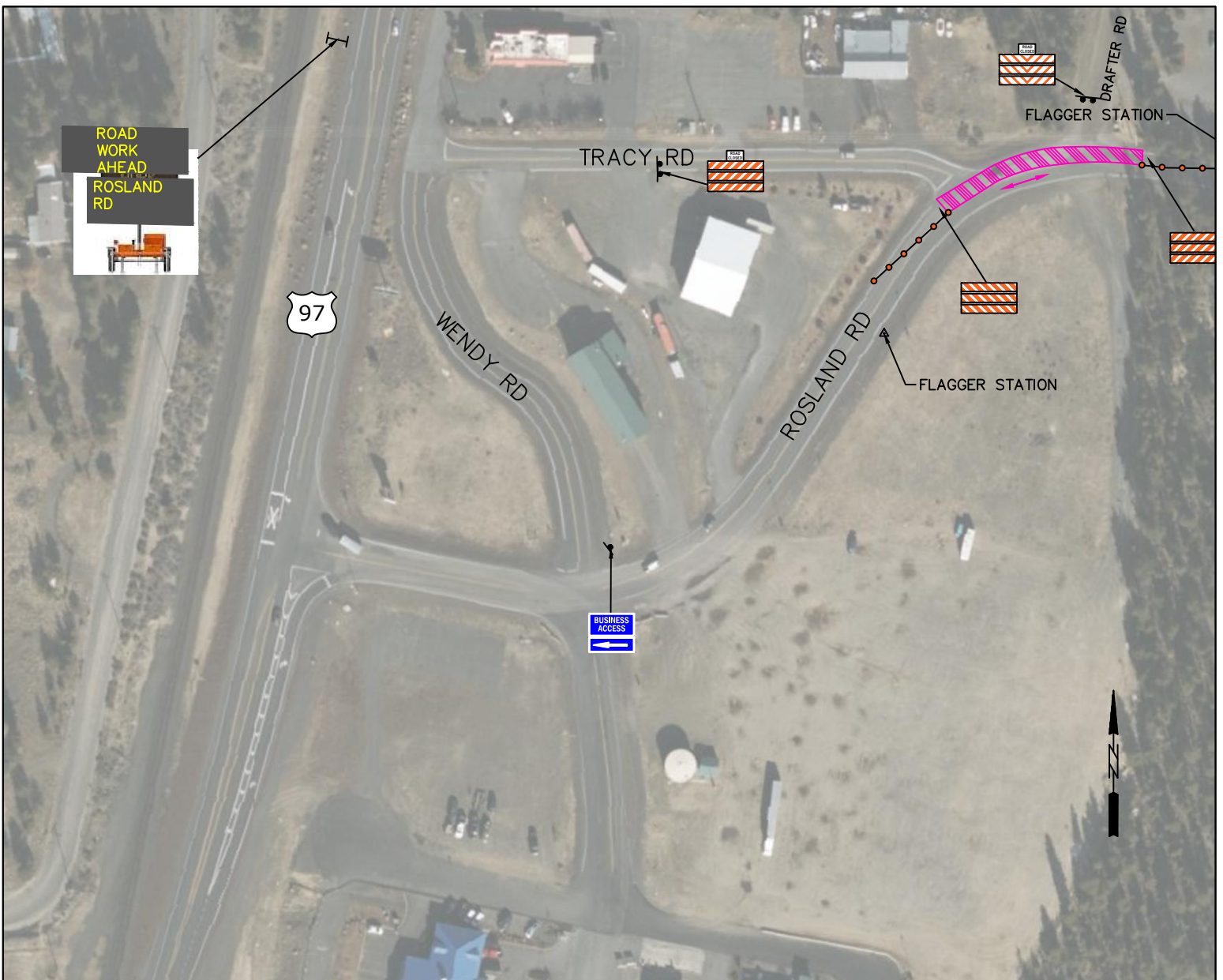
TITLE:  
PAVING OF ROSLAND RD:  
US 97 TO DRAFTER RD

PAGE NO:  
3 OF 9






DATE:  
1/12/23

SCALE:  
1"=150'

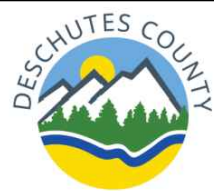
APPROVED BY:  
C. SMITH



ZONE 3B – NORTH SIDE OF ROSLAND RD FROM TRACY RD TO DRAFTER RD

-  FLAGGER STATION
-  SIGN LOCATION
-  TYPE 3 BARRICADE
-  CHANNELIZATION DEVICE
-  PORTABLE CHANGABLE MESSAGE SIGN

NOTE:  
FLAGGING AS REQ'D



ROAD DEPARTMENT

TITLE:  
PAVING OF ROSLAND RD:  
US 97 TO DRAFTER RD

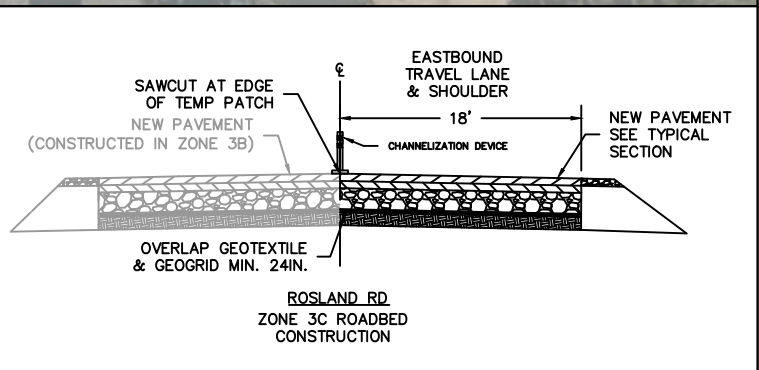
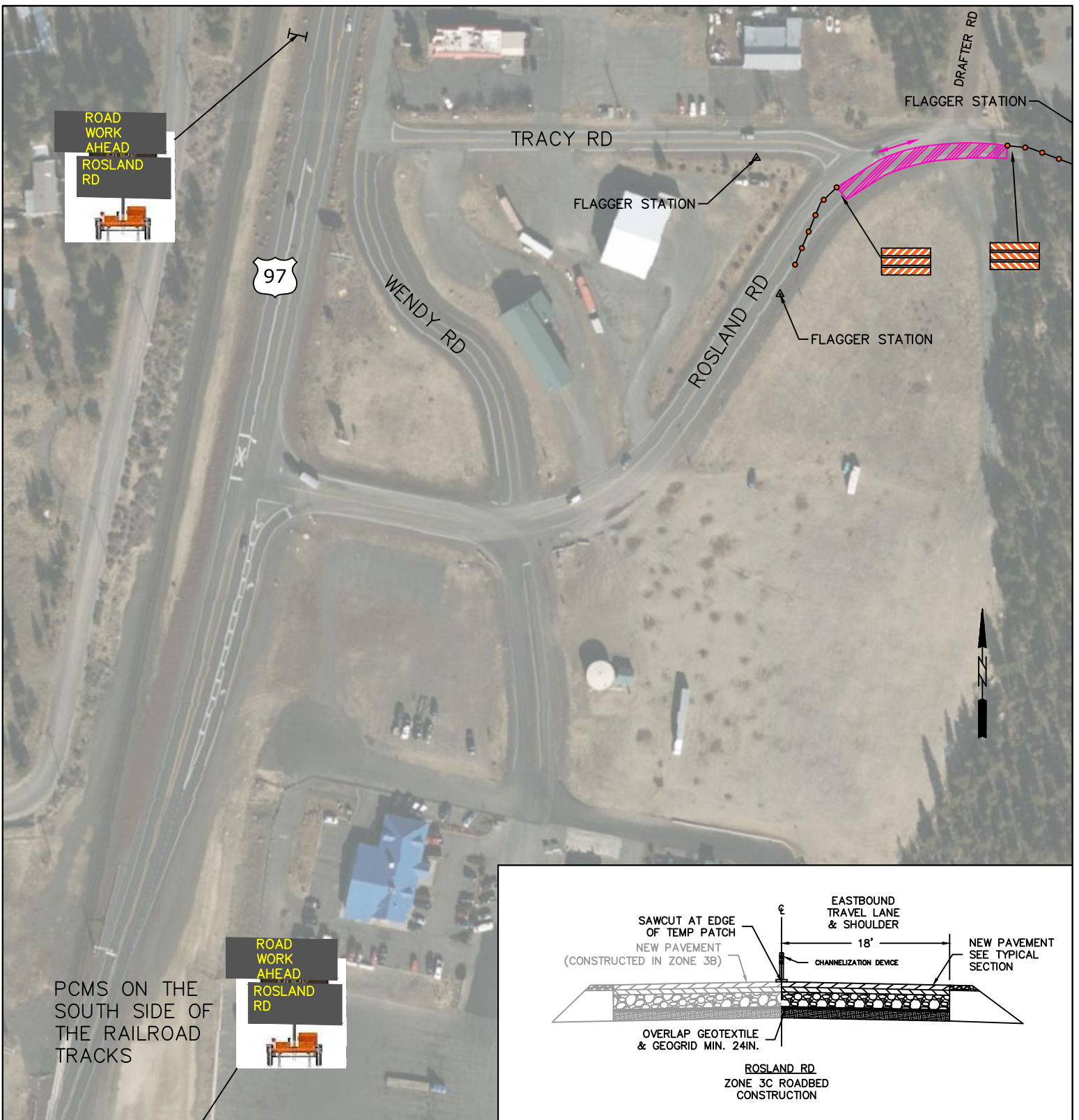
PAGE NO:  
4 OF 9

DATE:  
1/12/23






SCALE:  
1"=150'

APPROVED BY:  
C. SMITH




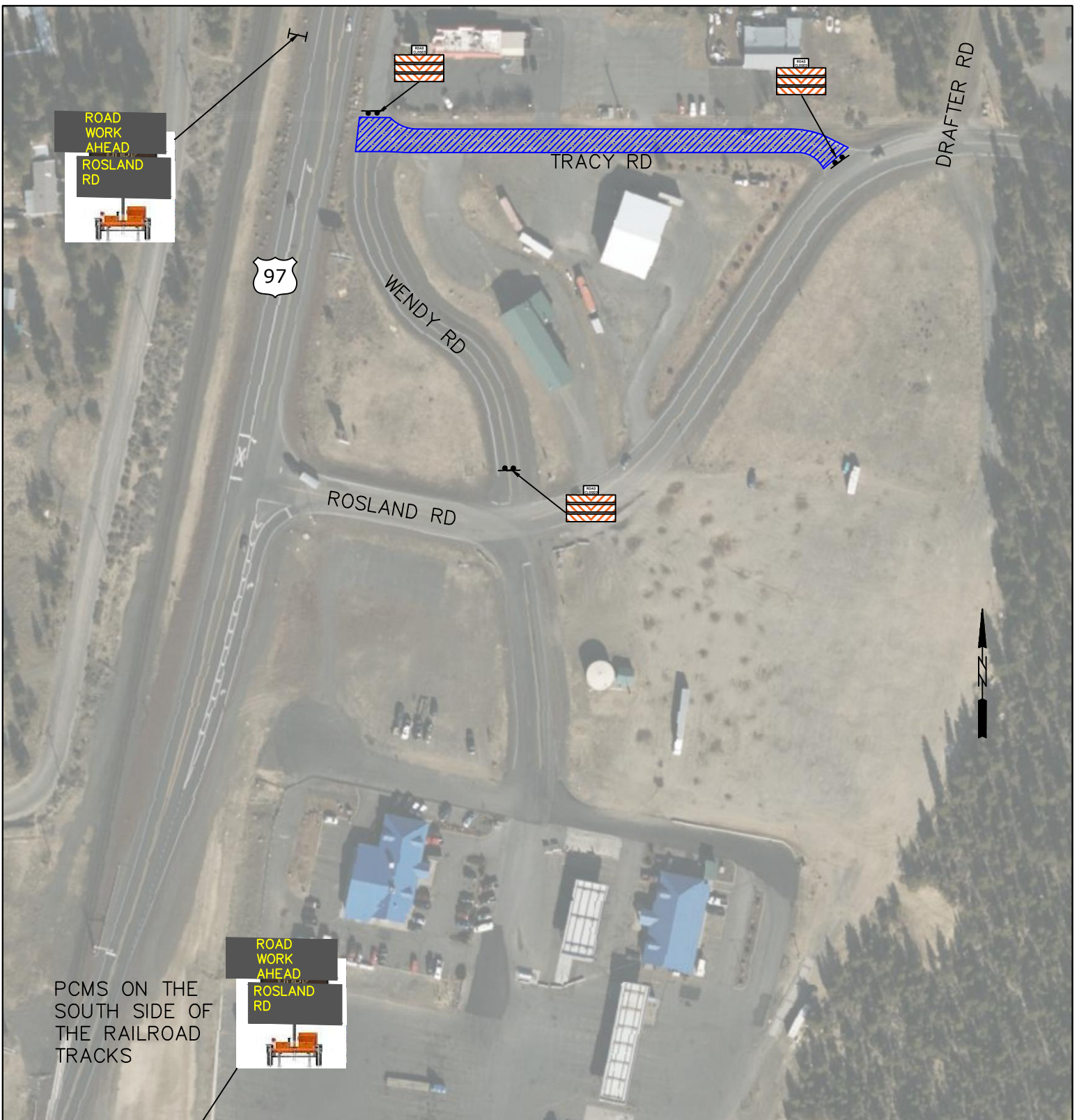


**ZONE 3C – SOUTH SIDE OF ROSLAND RD FROM TRACY RD TO DRAFTER RD**






-  FLAGGER STATION
-  SIGN LOCATION
-  TYPE 3 BARRICADE
-  CHANNELIZATION DEVICE
-  PORTABLE CHANGABLE MESSAGE SIGN

NOTE:  
FLAGGING AS REQ'D

 <b>ROAD DEPARTMENT</b>		<b>TITLE:</b> PAVING OF ROSLAND RD: US 97 TO DRAFTER RD		<b>PAGE NO:</b> 5 OF 9	
		<b>DATE:</b> 1/12/23	<b>SCALE:</b> 1"=150'	<b>APPROVED BY:</b> C. SMITH	



**ZONE 4 -- TRACY RD  
FROM WENDY RD TO ROSLAND RD**

-  FLAGGER STATION
-  SIGN LOCATION
-  TYPE 3 BARRICADE
-  CHANNELIZATION DEVICE
-  PORTABLE CHANGABLE MESSAGE SIGN

NOTE:  
FLAGGING AS REQ'D



**ROAD  
DEPARTMENT**

TITLE:  
PAVING OF ROSLAND RD:  
US 97 TO DRAFTER RD

PAGE NO:  
3 OF 9

DATE:  
1/12/23

SCALE:  
1"=150'

APPROVED BY:  
C. SMITH










PCMS ON THE SOUTH SIDE OF THE RAILROAD TRACKS



**ZONE 5 – WENDY RD  
FROM ROSLAND RD TO TRACY RD**

-  FLAGGER STATION
-  SIGN LOCATION
-  TYPE 3 BARRICADE
-  CHANNELIZATION DEVICE
-  PORTABLE CHANGABLE MESSAGE SIGN

NOTE:  
FLAGGING AS REQ'D



**ROAD DEPARTMENT**

TITLE: PAVING OF ROSLAND RD: US 97 TO DRAFTER RD		PAGE NO: 7 OF 9
DATE: 1/12/23	SCALE: 1"=150'	APPROVED BY: C. SMITH






EAST OF PROJECT AREA

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 SIGN LOCATION

 TYPE 3 BARRICADE

 CHANNELIZATION DEVICE

 PORTABLE CHANGABLE MESSAGE SIGN



**ROAD  
DEPARTMENT**

TITLE:  
PAVING OF ROSLAND RD:  
US 97 TO DRAFTER RD

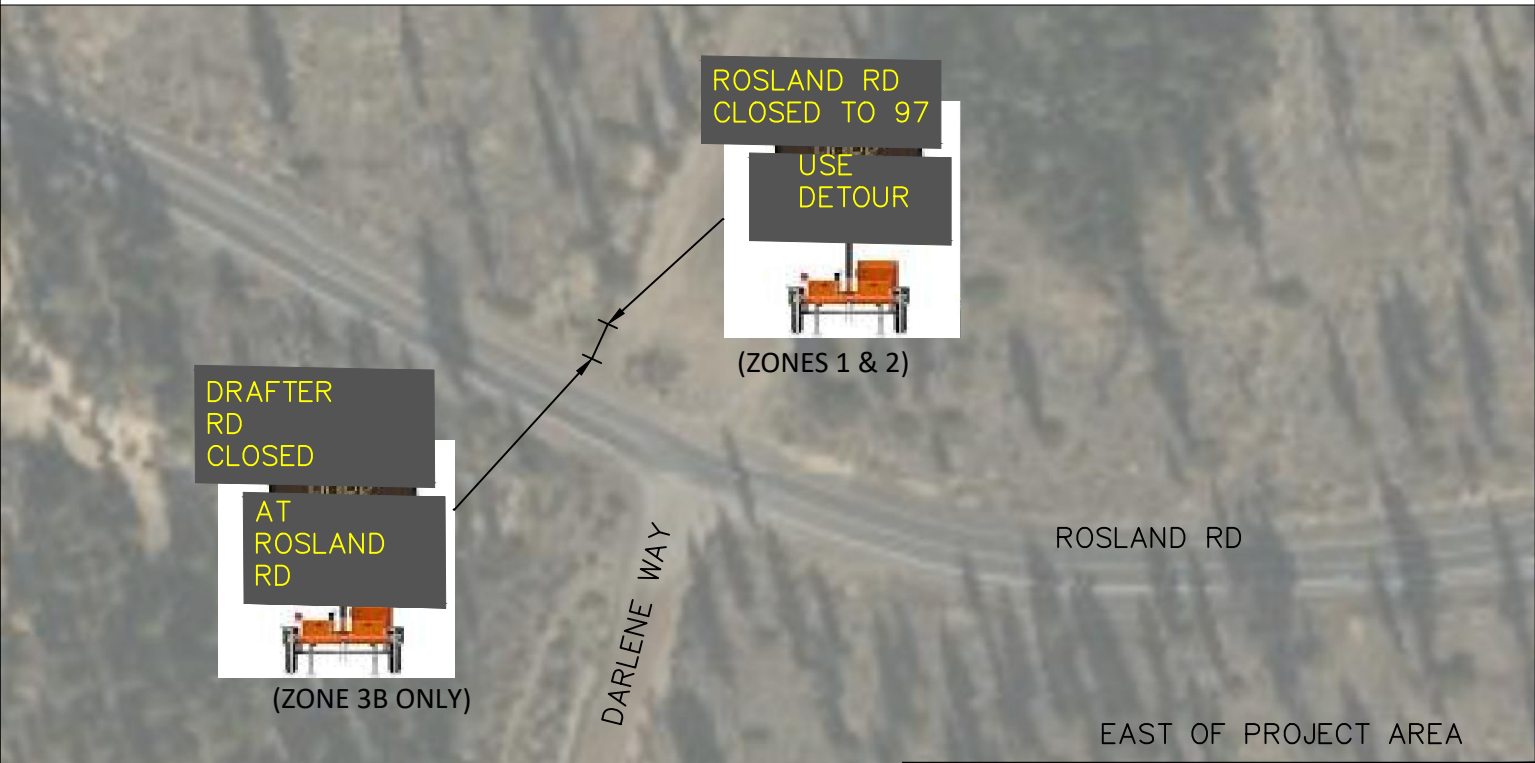
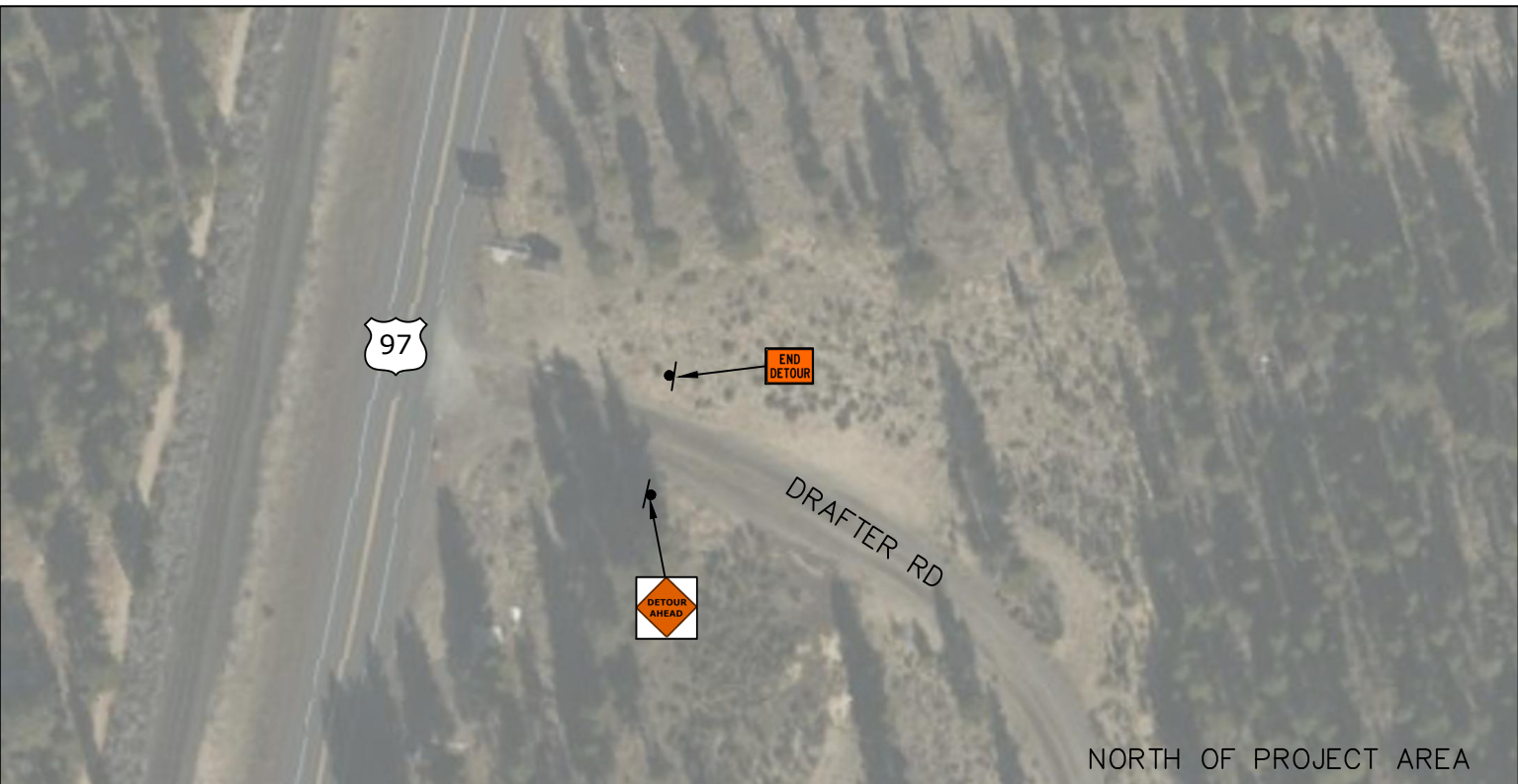
PAGE NO:  
8 OF 9





DATE:  
1/12/23

SCALE:  
1"=150'

APPROVED BY:  
C. SMITH





-  SIGN LOCATION
-  TYPE 3 BARRICADE
-  CHANNELIZATION DEVICE
-  PORTABLE CHANGABLE MESSAGE SIGN



**ROAD DEPARTMENT**

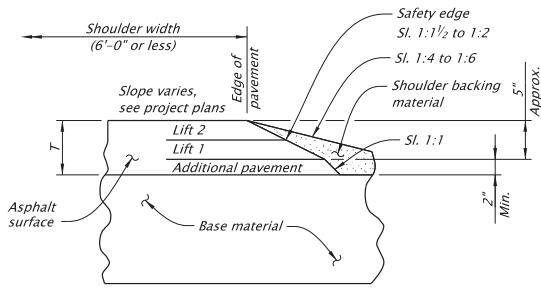
TITLE:  
PAVING OF ROSLAND RD:  
US 97 TO DRAFTER RD

PAGE NO:  
9 OF 9

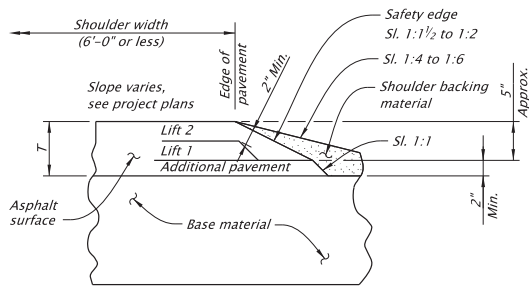
DATE:  
1/12/23

SCALE:  
1"=100'

APPROVED BY:  
C. SMITH

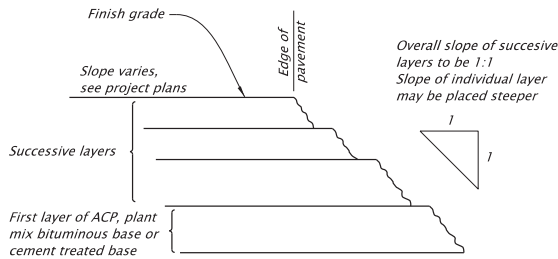


**SAFETY EDGE PLACED WITH LIFTS**

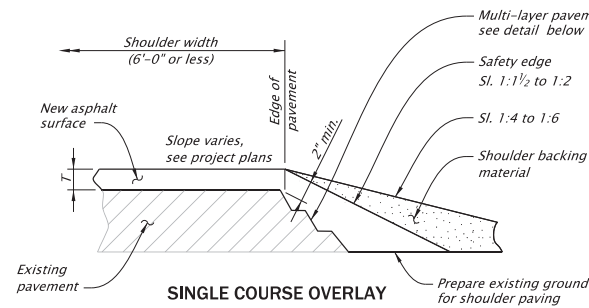


**SAFETY EDGE PLACED ONLY WITH FINAL LIFT**

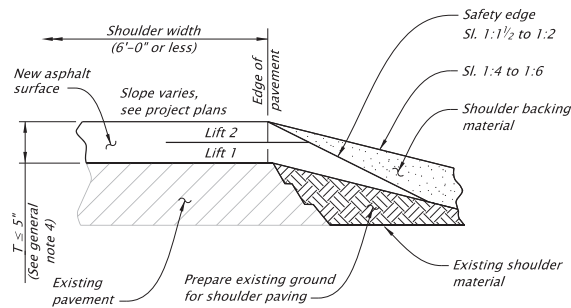
**SAFETY EDGE FOR ASPHALT CONCRETE (NEW CONSTRUCTION)**



**MULTI-LAYER PAVEMENT CONSTRUCTION**

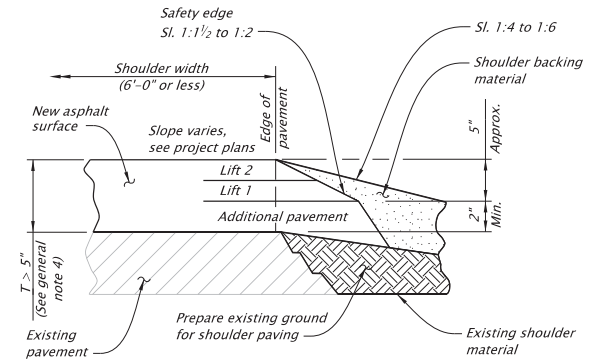


**SINGLE COURSE OVERLAY**



**PAVEMENT THICKNESS (T) 5" OR LESS**

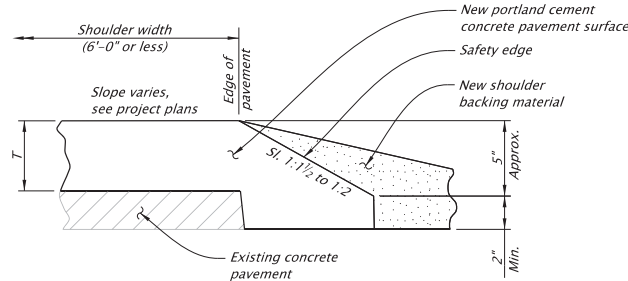
**SAFETY EDGE FOR ASPHALT CONCRETE RECONSTRUCTION (INCLUDING MILL, INLAY AND OVERLAY)**



**PAVEMENT THICKNESS (T) GREATER THAN 5"**

**GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**



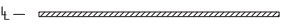
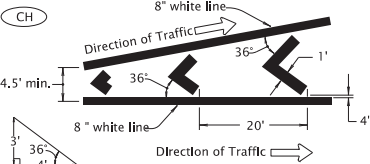
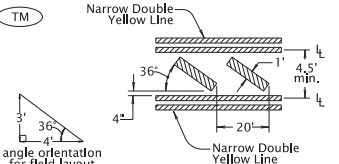
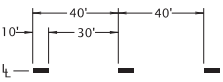
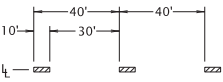
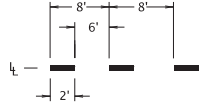
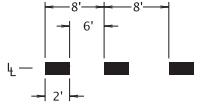
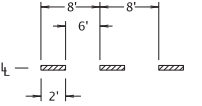
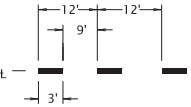
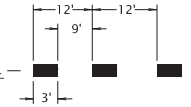
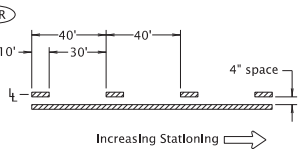
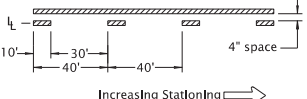

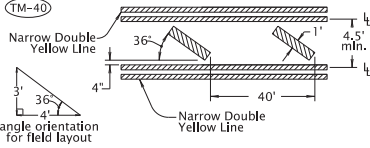
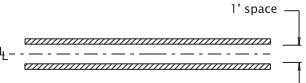
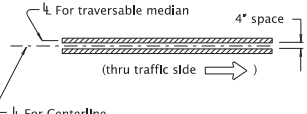

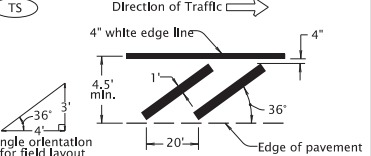
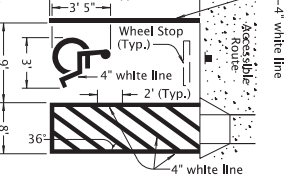


1. Safety edges are required at the outside edges of the paved roadway (edge of travel lane or edge of paved shoulders), where the wearing surface thickness is 2" or greater, except where indicated in the plans.
2. Construct the safety edge at a slope of 1:1 1/2 to 1:2 measured from the pavement surface.
3. Do not construct safety edge at intersections, paved drives, or other obstructions.
4. For total new asphalt depth of "T" ≤ 5", construct the safety edge to the full thickness of the surface and intermediate courses. For total new asphalt depth of "T" > 5", construct the safety edge to a depth of 5" approximately with a 1:1 sloped face below the safety edge.



**SAFETY EDGE FOR PORTLAND CEMENT CONCRETE PAVEMENT OVERLAY**

CALC. BOOK NO. <u>N/A</u>	SDR DATE <u>19-JUL-2021</u>
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>SURFACE EDGE DETAILS</b>	
2021	
DATE	REVISION DESCRIPTION
07-2021	TITLE CHANGED, REVISED DETAILS & NOTES

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

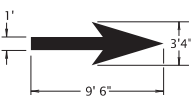
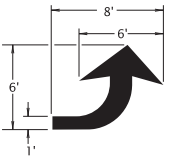
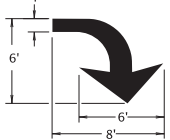
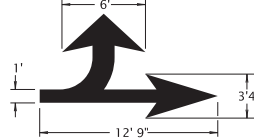
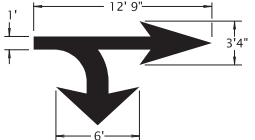
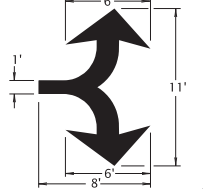
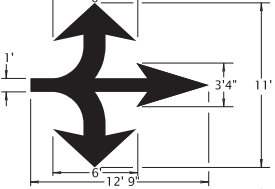
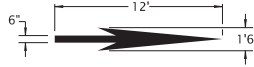
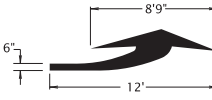

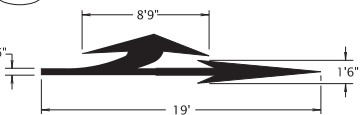
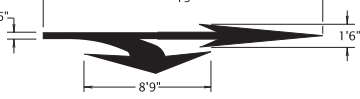
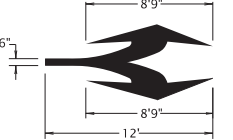
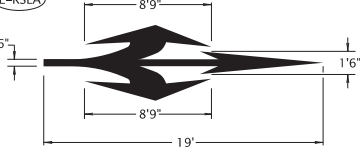
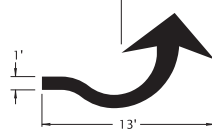
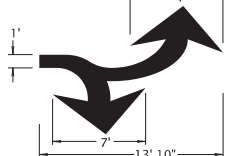

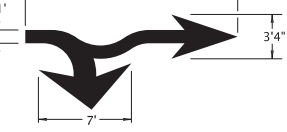
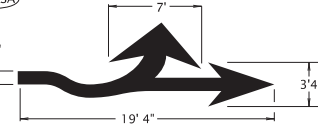
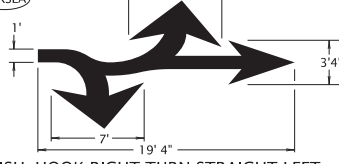
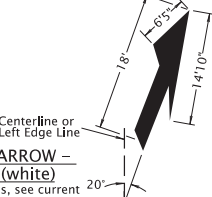
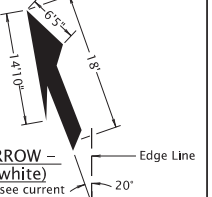
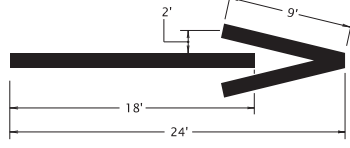
<p>(W)</p>  <p><b>4" WHITE LINE</b></p>	<p>(W-2)</p>  <p><b>8" WHITE LINE</b></p>	<p>(Y)</p>  <p><b>4" YELLOW LINE</b></p>	<p>(CH)</p>  <p><b>CHEVRON BARS</b> <b>1" WHITE BARS AT 20' SPACING</b></p>	<p>(TM)</p>  <p><b>TRANSVERSE MEDIAN BARS</b> <b>1" YELLOW BARS AT 20' SPACING</b></p>																																								
<p>(WB)</p>  <p><b>4" WHITE BROKEN LINE</b></p>	<p>(YB)</p>  <p><b>4" YELLOW BROKEN LINE</b></p>	<p>(WD)</p>  <p><b>4" WHITE DOTTED LINE</b> For lane extensions</p>	<p>(WD-2)</p>  <p><b>8" WHITE DOTTED LINE</b> For lane extensions and bike lane extensions</p>	<p>(YD)</p>  <p><b>4" YELLOW DOTTED LINE</b> For lane extensions</p>																																								
<p>(DLL)</p>  <p><b>4" WHITE DOTTED LANE LINE</b> For lane lines in acceleration/deceleration lanes</p>	<p>(DLL-2)</p>  <p><b>8" WHITE DOTTED LANE LINE</b> For lane lines in drop lanes</p>	<p>(NPR)</p>  <p><b>NO-PASS RIGHT</b> <b>4" YELLOW LINES</b></p>	<p>(NPL)</p>  <p><b>NO-PASS LEFT</b> <b>4" YELLOW LINES</b></p>	<p>(TWL)</p>  <p><b>TWO-WAY LEFT TURN</b> <b>4" YELLOW LINES</b></p>																																								
<p>(TM-40)</p>  <p><b>TRANSVERSE MEDIAN BARS</b> <b>1" YELLOW BARS AT 40' SPACING</b> For use at painted medians where distance between left turn refuges exceeds 200'</p>	<p>(D)</p>  <p><b>DOUBLE NO-PASS</b> <b>TWO 4" YELLOW LINES</b></p>	<p>(ND)</p>  <p><b>NARROW DOUBLE NO-PASS</b> <b>TWO 4" YELLOW LINES</b></p>	<p>(NDW)</p>  <p><b>NARROW DOUBLE NO-LANE CHANGE</b> <b>TWO 4" WHITE LINES</b></p>	<p>(TS)</p>  <p><b>TRANSVERSE SHOULDER BARS</b> <b>1" WHITE BARS AT 20' SPACING</b></p>																																								
<p>(HC)</p>  <p><b>DISABLED PARKING DETAIL (white)</b></p>	<p>(YLD)</p>  <p><b>YIELD LINE (white)</b></p>	<p>(BYLD)</p>  <p><b>BICYCLE YIELD LINE (white)</b></p>	<table border="1"> <tr> <td colspan="2">CALC. BOOK NO. ____ N/A ____</td> <td colspan="2">SDR DATE ____ 02/01/2020 ____</td> </tr> <tr> <td colspan="4">NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.</td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>OREGON STANDARD DRAWINGS</b></td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>PAVEMENT MARKING</b></td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>STANDARD DETAIL BLOCKS</b></td> </tr> <tr> <td colspan="4" style="text-align: center;">2021</td> </tr> <tr> <td>DATE</td> <td colspan="3">REVISION DESCRIPTION</td> </tr> <tr> <td>07/2020</td> <td colspan="3">Changed Min. widths for CH, TM, TM-40, and TS</td> </tr> <tr> <td> </td> <td colspan="3"> </td> </tr> <tr> <td> </td> <td colspan="3"> </td> </tr> </table>		CALC. BOOK NO. ____ N/A ____		SDR DATE ____ 02/01/2020 ____		NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.				<b>OREGON STANDARD DRAWINGS</b>				<b>PAVEMENT MARKING</b>				<b>STANDARD DETAIL BLOCKS</b>				2021				DATE	REVISION DESCRIPTION			07/2020	Changed Min. widths for CH, TM, TM-40, and TS										
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← Direction Of Traffic, Increasing Stationing Or Thru Traffic Side

ℓ — Lane line dimensions are shown on the striping plans

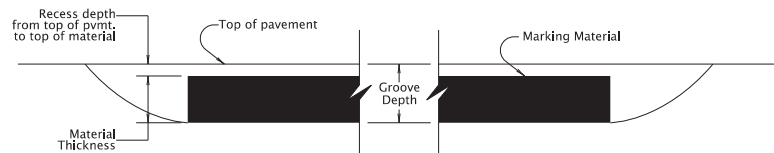
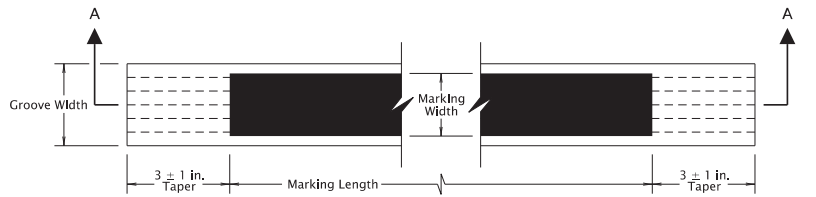
**LEGEND**

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

<p>(SA)</p>  <p><b>STRAIGHT ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(LA)</p>  <p><b>LEFT TURN ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(RA)</p>  <p><b>RIGHT TURN ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(LSA)</p>  <p><b>LEFT TURN STRAIGHT ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(RSA)</p>  <p><b>RIGHT TURN STRAIGHT ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>								
<p>(RALA)</p>  <p><b>RIGHT TURN LEFT TURN ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(RSLA)</p>  <p><b>RIGHT TURN STRAIGHT LEFT TURN ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(E-SA)</p>  <p><b>ELONGATED STRAIGHT ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(E-LA)</p>  <p><b>ELONGATED LEFT TURN ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(E-RA)</p>  <p><b>ELONGATED RIGHT TURN ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>								
<p>(E-LSA)</p>  <p><b>ELONGATED LEFT TURN STRAIGHT ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(E-RSA)</p>  <p><b>ELONGATED RIGHT TURN STRAIGHT ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(E-RALA)</p>  <p><b>ELONGATED RIGHT TURN LEFT TURN ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(E-RSLA)</p>  <p><b>ELONGATED RIGHT TURN STRAIGHT LEFT TURN ARROW (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(F-LA)</p>  <p><b>FISH-HOOK LEFT TURN ARROW (white)</b> For arrow proportion details, see the current ODOT Traffic Line Manual</p>								
<p>(F-RALA)</p>  <p><b>FISH-HOOK RIGHT TURN LEFT TURN ARROW (white)</b> For arrow proportion details, see the current ODOT Traffic Line Manual</p>	<p>(F-SA)</p>  <p><b>FISH-HOOK STRAIGHT ARROW (white)</b> For arrow proportion details, see the current ODOT Traffic Line Manual</p>	<p>(F-RSA)</p>  <p><b>FISH-HOOK RIGHT TURN STRAIGHT ARROW (white)</b> For arrow proportion details, see the current ODOT Traffic Line Manual</p>	<p>(F-LSA)</p>  <p><b>FISH-HOOK LEFT TURN STRAIGHT ARROW (white)</b> For arrow proportion details, see the current ODOT Traffic Line Manual</p>	<p>(F-RSLA)</p>  <p><b>FISH-HOOK RIGHT TURN STRAIGHT LEFT TURN ARROW (white)</b> For arrow proportion details, see the current ODOT Traffic Line Manual</p>								
<p>(LRA-L)</p>  <p><b>LANE REDUCTION ARROW - LEFT LANE ENDS (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(LRA-R)</p>  <p><b>LANE REDUCTION ARROW - RIGHT LANE ENDS (white)</b> For arrow proportion details, see current version of Standard Highway Signs</p>	<p>(WWA)</p>  <p><b>WRONG-WAY ARROW (white)</b></p>	<p>CALC. BOOK NO. ____ N/A ____</p> <p>SDR DATE ____ 01/03/2022 ____</p> <p>NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.</p> <p><b>OREGON STANDARD DRAWINGS</b></p> <p><b>PAVEMENT MARKING STANDARD DETAIL BLOCKS</b></p> <p>2021</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>REVISION DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>07/2020</td> <td>Some Detail Blocks moved to new Std. Drawing TM504</td> </tr> <tr> <td>01/2022</td> <td>Fish-hook Arrows added, LRA split into LRA-L and LRA-R</td> </tr> <tr> <td>01/2022</td> <td>Corrected bubble callout of LRA-L and typo in LRA-R</td> </tr> </tbody> </table> <p><i>The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.</i></p>		DATE	REVISION DESCRIPTION	07/2020	Some Detail Blocks moved to new Std. Drawing TM504	01/2022	Fish-hook Arrows added, LRA split into LRA-L and LRA-R	01/2022	Corrected bubble callout of LRA-L and typo in LRA-R
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<p>General Note: 1. Center pavement markings within the lane width. 2. Arrow and letter dimensions nominal, excluding WWA.</p>												

<p><b>CW</b></p> <p>10' measured from inside of marking to inside of marking</p> <p><b>STANDARD CROSSWALK</b> TWO 1' WHITE BARS</p> <p>Install per Standard Drawing TM530</p>	<p><b>CW-SC</b></p> <p>3' min. to 5' max. (adjust spacing to miss wheel tracks)</p> <p>Varies</p> <p>2'</p> <p>9'</p> <p>Varies</p> <p><b>STAGGERED CONTINENTAL CROSSWALK</b> 2' WHITE BARS</p> <p>Install per Standard Drawing TM530</p>	<p><b>S</b></p> <p>1'</p> <p><b>STOP BAR</b> 1' WHITE BAR</p> <p>Install per Standard Drawing TM530</p>	<p><b>S-2</b></p> <p>2'</p> <p><b>STOP BAR - LARGE</b> 2' WHITE BAR</p> <p>Install per Standard Drawing TM530</p>	<p><b>S-RM</b></p> <p>Extend to EP if <math>X &lt; 20'</math></p> <p>Edge of Pavement (EP)</p> <p>White edge line</p> <p>8" white bar (center within EP) verify loop detector placement</p> <p>15'</p> <p>1'</p> <p>Yellow edge line</p> <p><b>RAMP METER STOP BAR</b> 1' &amp; 8" WHITE BARS</p> <p>For multi-lane ramp meter applications</p>					
<p><b>BR</b></p> <p>3' 4"</p> <p>6"</p> <p>3'</p> <p>6"</p> <p>6"</p> <p>4"</p> <p><b>BIKE RIGHT TURN STENCIL (white)</b></p> <p>Center marking within lane width For proportion details, see current version of Standard Highway Signs</p>	<p><b>BS</b></p> <p>3' 4"</p> <p>6"</p> <p>6"</p> <p>6"</p> <p>2'</p> <p><b>BIKE LANE STANDARD STENCIL (white)</b></p> <p>Center marking within lane width For proportion details, see current version of Standard Highway Signs</p>	<p><b>BL</b></p> <p>3' 4"</p> <p>6"</p> <p>6"</p> <p>4"</p> <p>3'</p> <p><b>BIKE LEFT TURN STENCIL (white)</b></p> <p>Center marking within lane width For proportion details, see current version of Standard Highway Signs</p>	<p><b>BRS</b></p> <p>3' 4"</p> <p>6"</p> <p>6"</p> <p>6" 6"</p> <p>3' 9"</p> <p><b>BIKE RIGHT TURN STRAIGHT STENCIL (white)</b></p> <p>Center marking within lane width For proportion details, see current version of Standard Highway Signs</p>	<p><b>BLS</b></p> <p>3' 4"</p> <p>6"</p> <p>6"</p> <p>6" 6"</p> <p>3' 9"</p> <p><b>BIKE LEFT TURN STRAIGHT STENCIL (white)</b></p> <p>Center marking within lane width For proportion details, see current version of Standard Highway Signs</p>					
<p><b>SLM</b></p> <p>9' 4"</p> <p>3' 4"</p> <p>6"</p> <p>3' 6"</p> <p>3' 4"</p> <p><b>SHARED LANE MARKING (white)</b></p> <p>Center marking within lane width or as shown For proportion details, see current version of Standard Highway Signs</p>	<p><b>B</b></p> <p>3' 4"</p> <p>6"</p> <p><b>BIKE STENCIL (white)</b></p> <p>Used for Intersection Bicycle Box applications Place marking within bicycle box, centered with motor vehicle lane width</p>	<p><b>BD</b></p> <p>6"</p> <p>2"</p> <p>2"</p> <p>5"</p> <p>6"</p> <p><b>BICYCLE DETECTOR MARKING (white)</b></p> <p>Place Bicycle Detector Pavement Marking in optimum location where bicycle acuates the traffic signal</p>	<p><b>GRN</b></p> <p>Color full width of lane</p> <p>8" white</p> <p>Varies</p> <p>8" white</p> <p><b>GREEN SUPPLEMENTAL BICYCLE LANE</b> SOLID LINE (green)</p>	<p><b>BLE-G</b></p> <p>Color full width of lane between dotted lines</p> <p>8" white</p> <p>Varies</p> <p>8" white</p> <p><b>GREEN SUPPLEMENTAL BICYCLE LANE</b> DOTTED LINE EXTENSION (green)</p>					
<p><b>BUS</b></p> <p>8"</p> <p>4' 6"</p> <p><b>BUS (white)</b></p> <p>Center marking within lane width For letter proportion details, see current version of Standard Highway Signs</p>	<p><b>ONLY</b></p> <p>8"</p> <p>6"</p> <p><b>ONLY (white)</b></p> <p>Center marking within lane width For letter proportion details, see current version of Standard Highway Signs</p>	<p><b>SCHOOL</b></p> <p>8"</p> <p>9' 8"</p> <p><b>SCHOOL (white)</b></p> <p>Center marking within lane width For letter proportion details, see current version of Standard Highway Signs</p>	<p><b>SCHOOL</b></p> <p>10"</p> <p>19' 8"</p> <p><b>SCHOOL - LARGE (white)</b></p> <p>Center marking within width of two lanes For letter proportion details, see current version of Standard Highway Signs</p>	<p><b>CROSSING</b></p> <p>10"</p> <p>19' 8"</p> <p><b>CROSSING - LARGE (white)</b></p> <p>Center marking within width of two lanes For letter proportion details, see current version of Standard Highway Signs</p>					
<p><b>X-ING</b></p> <p>8"</p> <p>7"</p> <p><b>X-ING (white)</b></p> <p>Center marking within lane width For letter proportion details, see current version of Standard Highway Signs</p>	<p><b>P</b></p> <p>12"</p> <p>12"</p> <p>24"</p> <p>4" white lines</p> <p>End Marking</p> <p><b>ON-STREET PARKING DETAIL (white)</b></p>	<p><b>LEGEND</b></p> <p>← Direction of Travel</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>General Note: 1. Arrow, letter, and bike symbol dimensions nominal.</p> </div> <p><i>The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.</i></p>							
<p>TM503</p>		<p>General Note: 1. Arrow, letter, and bike symbol dimensions nominal.</p>	<p><b>LEGEND</b></p> <p>← Direction of Travel</p>	<p><i>The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.</i></p>	<p>CALC. BOOK NO. ___N/A___</p> <p>SDR DATE: ___02/08/2022___</p> <p>NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.</p> <p><b>OREGON STANDARD DRAWINGS</b></p> <p><b>PAVEMENT MARKING</b> <b>STANDARD DETAIL BLOCKS</b></p> <p>2021</p> <table border="1"> <thead> <tr> <th>DATE</th> <th>REVISION DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>07/2022</td> <td>Added note for measurement of Standard Crosswalk</td> </tr> </tbody> </table>	DATE	REVISION DESCRIPTION	07/2022	Added note for measurement of Standard Crosswalk
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SECTION A - A

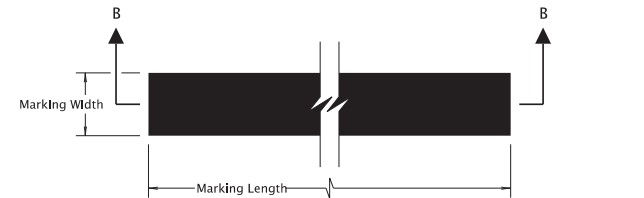
GROOVE INSTALLED GROOVE AND MATERIAL DIMENSIONS

Pavement Marking Material Type	Groove Depth	Recess Depth	Material Thickness
Durable Method 'A' & Method 'D'	220 ± 20 mlls	45 ± 5 mlls	Var.
High Performance	60 ± 10 mlls	Var.	25 mlls

GROOVE INSTALLED GROOVE WIDTH

Pavement Marking Width	Groove Width
4 In. Markings	7 ± 0.125 In.
Non 4 In. Markings	Marking width + 1 ± 0.125 In.

GROOVE INSTALLED MARKINGS



SECTION B - B

SURFACE INSTALLED MATERIAL THICKNESS

Pavement Marking Material Type	Thickness
Durable Method 'A' & Method 'B' & Method 'D'	120 mlls
High Performance	25 mlls

SURFACE INSTALLED MARKINGS

**General Notes:**

- 1) See Standard Drawing TM500 and/or project plans for marking length and width dimensions.
- 2) See Standard Specification 00850.46 for marking installation tolerances.

CALC. BOOK NO. \_\_\_ N/A \_\_\_

SDR DATE: \_\_\_ 02/06/2021 \_\_\_

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

**OREGON STANDARD DRAWINGS**  
**DURABLE & HIGH PERFORMANCE**  
**PAVEMENT MARKINGS**  
**SURFACE & GROOVE INSTALLED**  
**NON-PROFILED**

2021

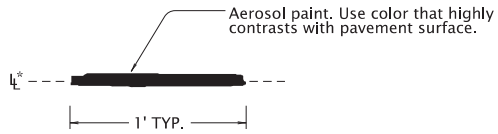
DATE	REVISION DESCRIPTION
07/2021	Changed groove width for 4 in. markings

*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

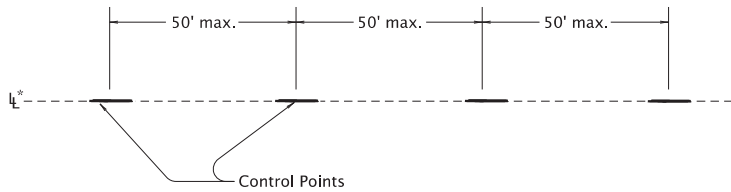
Effective Date: December 01, 2022 - May 31, 2023

TM521

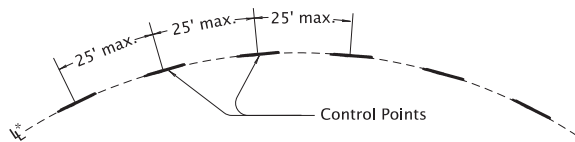
TM521



**CONTROL POINT**



**CONTROL POINT LAYOUT - TANGENT SECTIONS**



**CONTROL POINT LAYOUT - CURVE SECTIONS**

**General note:**

1.) Use control points to make continuous narrow guideline as specified.

\* Control points are placed along the lane line for all longitudinal lines except the following:



For center lines only

A control point layout 4" offset from the lane line is required for a ND line when used as a center line.

TM560

**LEGEND**

ℓ — Lane line dimensions are shown on the striping plans.

To be accompanied by Standard Dwg. Nos. TM500 thru TM504

CALC. BOOK NO. — N/A —		SDR DATE — 02/01/2020 —	
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.			
<b>OREGON STANDARD DRAWINGS</b>			
<b>ALIGNMENT LAYOUT: GENERAL</b>			
2021			
DATE	REVISION	DESCRIPTION	
07/2020	Extended	accompanied by drawings to include TM504	

*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

TAPER TYPES & FORMULAS	
TAPER	FORMULA
Merging (Lane Closure)	"L"
Shifting	"L"/2 or 1/2"L"
Shoulder Closure	"L"/3 or 1/3"L"
Flagging (See Drg. TM850)	50' - 100'
Downstream (Termination)	Varies (See Drawings)

★ Use Pre-Construction Posted Speed to select the Speed from the Tables below:

TEMPORARY BARRIER FLARE RATE TABLE	
★ SPEED (mph)	MINIMUM FLARE RATE
≤ 30	8:1
35	9:1
40	10:1
45	12:1
50	14:1
55	16:1
60	18:1
65	19:1
70	20:1

MINIMUM LENGTHS TABLE					
"L" VALUE FOR TAPERS (ft)					
★ SPEED (mph)	W = Lane or Shoulder Width being closed or shifted				BUFFER "B" (ft)
	W ≤ 10	W = 12	W = 14	W = 16	
25	105	125	145	165	75
30	150	180	210	240	100
35	205	245	285	325	125
40	265	320	375	430	150
45	450	540	630	720	180
50	500	600	700	800	210
55	550	660	770	880	250
60	600	720	840	960	285
65	650	780	910	1000	325
70	700	840	980	1000	365
FREEWAYS					
55	1000	1000	1000	1000	250
60	1000	1000	1000	1000	285
65	1000	1000	1000	1000	325
70	1000	1000	1000	1000	365

NOTES:

- For Lane closures where W < 10', use "L" value for W = 10'.
- For Shoulder closures where W < 10', use "L" value for W = 10' or calculate "L" using formula, for Speeds ≥ 45: L = WS, Speeds < 45: L = S<sup>2</sup>W/60, S = Speed, W=Width

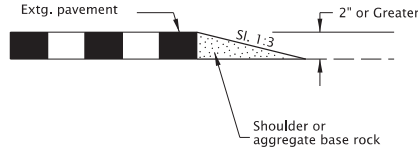
TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE				
★ SPEED (mph)	Sign Spacing (ft)			Max. Channelizing Device Spacing (ft)
	A	B	C	
20 - 30	100	100	100	20
35 - 40	350	350	350	20
45 - 55	500	500	500	40
60 - 70	700	700	700	40
Freeway	1000	1500	2640	40

NOTES:

- Place traffic control devices on 10 ft. spacing for intersection and access radii.
- When necessary, sign spacing may be adjusted to fit site conditions.
- Limit spacing adjustments to 30% of the "A" dimension for all speeds.

NOTES:

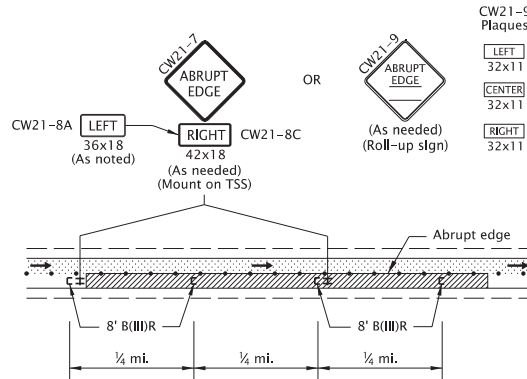
- When paved shoulders adjacent to excavations are less than four feet wide protect longitudinal abrupt edge as shown.
- Use aggregate wedge when abrupt edge is 2 inches or greater.



EXCAVATION ABRUPT EDGE

NOTES:

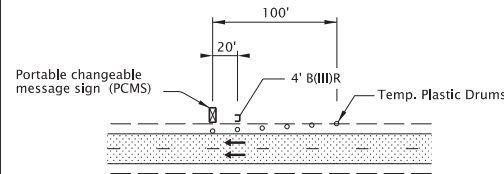
- Abrupt edges may be created by paving, operations, excavations or other roadway work. Use abrupt edge signing for longitudinal abrupt edges of 1 inch or greater.
- If the excavation is located on left side of traffic, replace the 8' B(III)R barricades with 8' B(III)L barricades and replace the "RIGHT" (CW21-8C) riders with "LEFT" (CW21-8A) riders.
- Continue signing and other traffic control devices throughout excavation area at spacings shown.
- If roll-up signs are used, attach the correct (CW21-9) plaques to the sign face using hook and loop fasteners. Place roll-up signs in advance of barricades.



TYPICAL ABRUPT EDGE DELINEATION

NOTES:

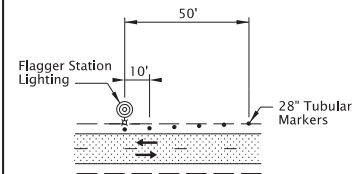
- Install PCMS beyond the outside shoulder, when possible.
- Use the appropriate type of barricade panels for PCMS location. Right shoulder, use Type B(III)R. Left shoulder, use Type B(III)L.
- Use six drums in shoulder taper on 20' spacing. The drums and barricade may be omitted when PCMS is placed behind a roadside barrier.
- Detail as shown is used for trailered and non-crashworthy components of:
  - Portable Traffic Signals
  - Smart Work Zone Systems



PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) INSTALLATION

NOTES:

- Install Flagger Station Lighting beyond the outside shoulder, where practical.
- Use six tubular markers in shoulder taper on 10' spacing.
- Place cart / generator / power supply off of the shoulder, as far as practical.



FLAGGER STATION LIGHTING DELINEATION

GENERAL NOTES FOR ALL TCP DRAWINGS:

- Signs and other Traffic Control Devices (TCD) shown are the minimum required.
  - Temp. Plastic Drums See TCD Spacing Table for max. spacing.
- Place a barricade approx. 20' ahead of all sequential arrow boards.
  - 28" Tubular Markers See TCD Spacing Table for max. spacing.
- Arrows shown in roadway are directional arrows to indicate traffic movements.
- All signs are 48" x 48" unless otherwise shown. Use fluorescent orange sheeting for the background of all temporary warning signs.
  - UNDER TRAFFIC
  - UNDER CONSTRUCTION
- All diamond shaped warning signs mounted on barrier sign supports shall be 36" by 36". All other signs mounted on barrier sign supports shall not exceed 12 sq. ft. in total sign area.
- Low speed highways have a pre-construction posted speed of 40 mph or less. High speed highways have a pre-construction posted speed of 45 mph or higher.
- Do not locate sign supports in locations designated for bicycle or pedestrian traffic.
- Combine drawing details to complete temporary traffic control for each work activity.
- Coordinate and control pedestrian movements through a Temporary Accessible Route using flaggers, Traffic Control Measures, or as directed.
- To be accompanied by Dwg. Nos. TM820 & TM821.

CALC. BOOK NO. -- TM09-01 --

SDR DATE 01-JUL-2022

NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

OREGON STANDARD DRAWINGS

TABLES, ABRUPT EDGE AND PCMS DETAILS

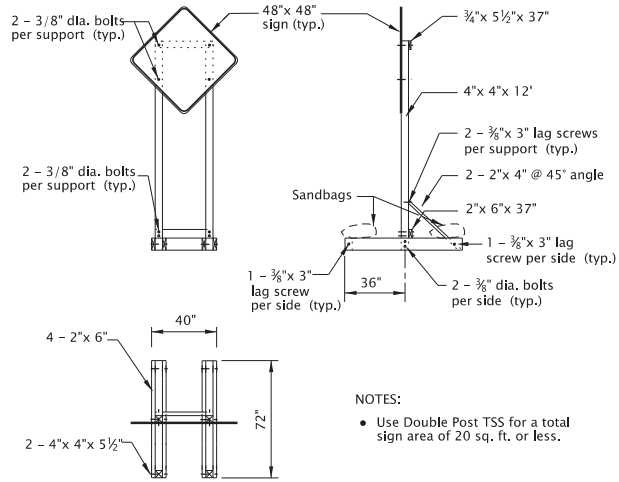
2021

DATE REVISION DESCRIPTION

07/01/22 Added a note for TPAS.

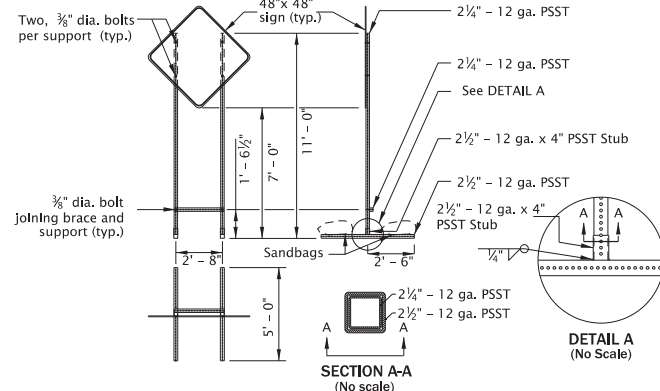
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.





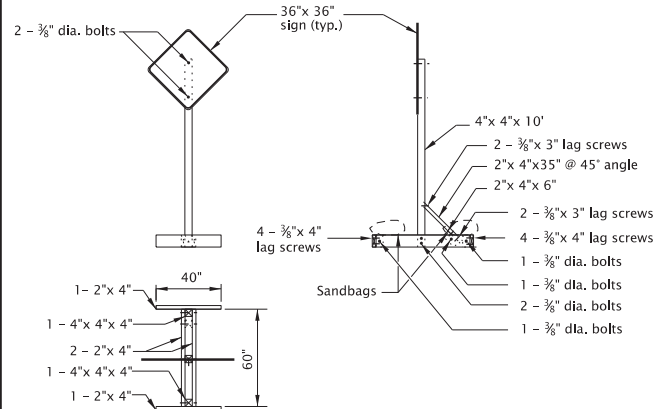
- NOTES:
- Use Double Post TSS for a total sign area of 20 sq. ft. or less.

DOUBLE POST DETAIL



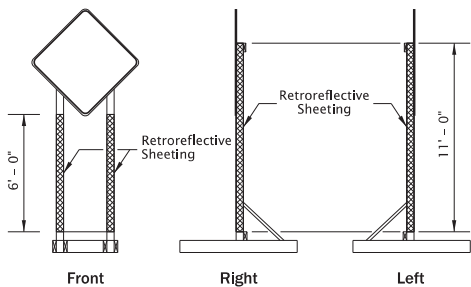
- NOTES:
- Use PSST TSS's for a total sign area of 16 sq. ft. or less.
  - All members shall have a minimum yield stress of 50 ksi.
  - Galvanize steel according to ASTM A653 with coating designation G90. Remove Galvanizing from steel before welding. Repair Galvanizing according to ASTM A780.
  - Use A325 Bolts or equivalent.
  - 2 1/4" - 12 ga. PSST to extend entire length inside of the 2 1/2" - 12 ga. x 4" PSST Stub.
  - Do not use bolt to secure 2 1/4" PSST inside of the 2 1/2" - 12 ga. x 4" PSST Stub.
  - Weld steel according to American Welding Society (AWS) D.1.1.

PERFORATED STEEL SQUARE TUBE (PSST) DETAIL

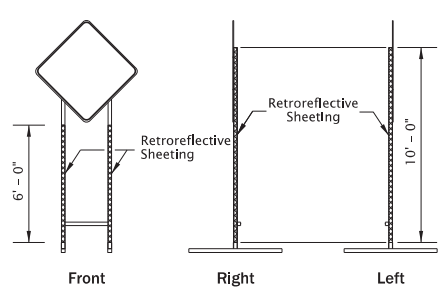


- NOTES:
- Use Single Post TSS for a total sign area of 12 sq. ft. or less.
  - Use Single Post TSS for mounting "Business Access" (CG20-11) signs. Do not mount signs on Type II or III Barricades.

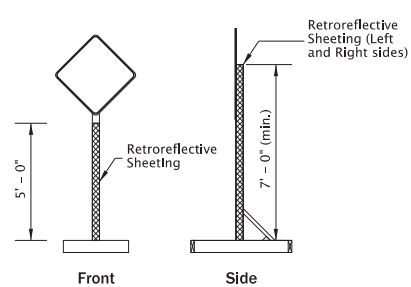
SINGLE POST DETAIL



Double Post



Perforated Steel Square Tube (PSST)



Single Post

- NOTES:
- Apply fluorescent orange, ANSI Type VIII or IX retroreflective sheeting to TSS posts, as shown, for all temporary signs, except "STOP" and "DO NOT ENTER". For "STOP" and "DO NOT ENTER" signs, used red ANSI Type III or IV retroreflective sheeting on the TSS posts.
  - Apply sign post retroreflectivity to each TSS post facing front; and to the left and right sides of the TSS, as shown. Use 3" wide sheeting for wood post TSS's. Use 2" wide sheeting for PSST TSS's.
  - Sheeting may be applied directly to post material; or applied to a rigid, lightweight substrate, then securely attached to the posts.

SIGN POST REFLECTIVE SHEETING PLACEMENT

TEMPORARY SIGN SUPPORT GENERAL NOTES:

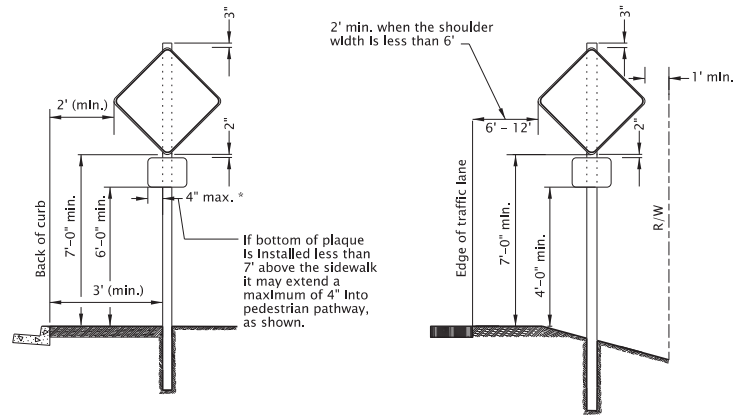
- Do not tip over TSS at any time.
- Do not locate TSS's in locations that block pedestrian or bicycle traffic.
- For wooden TSS's, use either Douglas Fir or Hem Fir, which is surfaced four sides (S4S) and free of heart center (FOHC).
- See "Temporary Sign Placement" detail on TM822 for sign installation heights.
- Do not place or stack ballast more than 24" above the ground.
- When sign is inconsistent with current work zone conditions, cover sign; or turn sign 90 degrees away from approaching traffic. Remove TSS from roadway when signing is not needed for more than 3 days.
- Place a minimum of 50 lbs of sandbags on each of the four TSS supports legs. (25 lb. max per bag) (min. 100 lbs per side of each TSS).
- See Dwg. No. TM204 for flag board mounting detail.

CALC. BOOK NO. _____ N/A _____	SDR DATE _____ 01-JUL-2020 _____
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>TEMPORARY SIGN SUPPORTS</b>	
2021	
DATE	REVISION DESCRIPTION

*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

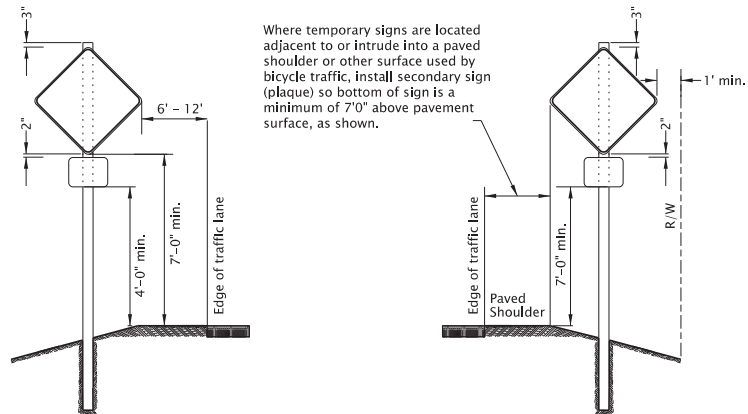
NOTES:

- Do not block bicycle lanes, sidewalks, or TPAR's with sign supports. Maintain minimum widths for these facilities according TCP Design Manual, MUTCD, ADA, or as directed.
- To be accompanied by Dwg. Nos. TM670, TM671, TM687, TM688 & TM689.



Urban Areas With Curb/Sidewalk

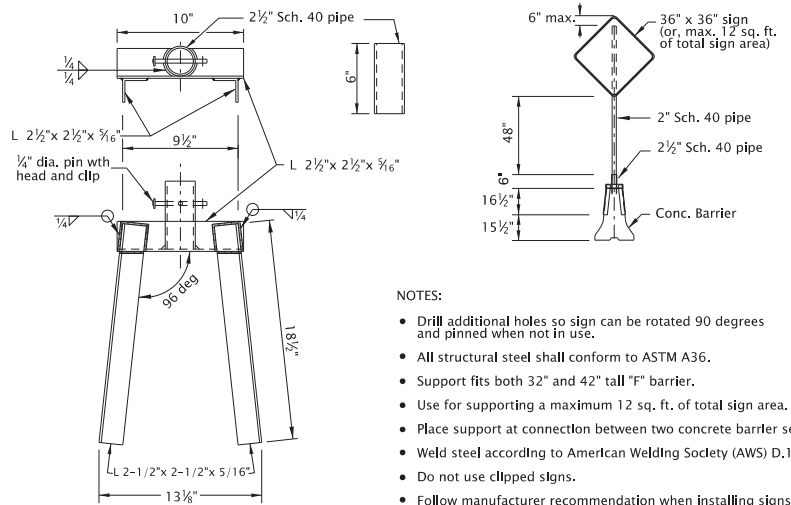
Rural Areas



Divided Highway/Freeway Medians  
No Curb/Sidewalk

Rural or Urban Areas - Curb or No Curb  
Bicycles On Shoulder

TEMPORARY SIGN PLACEMENT



NOTES:

- Drill additional holes so sign can be rotated 90 degrees and pinned when not in use.
- All structural steel shall conform to ASTM A36.
- Support fits both 32" and 42" tall "F" barrier.
- Use for supporting a maximum 12 sq. ft. of total sign area.
- Place support at connection between two concrete barrier sections.
- Weld steel according to American Welding Society (AWS) D.1.1.
- Do not use clipped signs.
- Follow manufacturer recommendation when installing signs on barrier other than concrete.

CONCRETE BARRIER SIGN SUPPORT

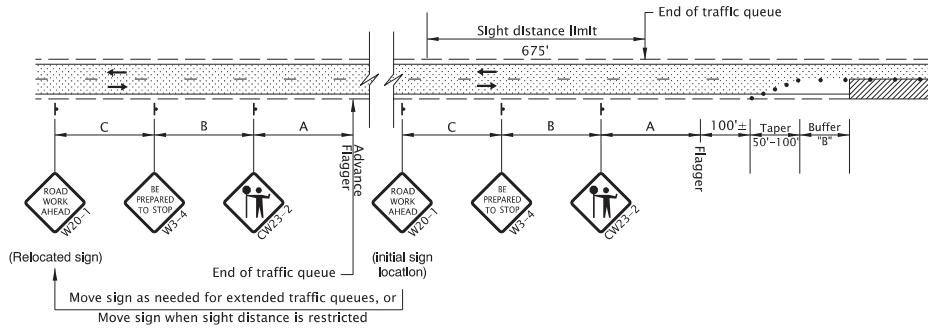
CALC. BOOK NO. --- N/A ---	SDR DATE --- 01-JUL-2020 ---
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>TEMPORARY SIGN SUPPORTS</b>	
2021	
DATE	REVISION DESCRIPTION

*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

13-JAN-2023  
TM855.dgn

**NOTES:**

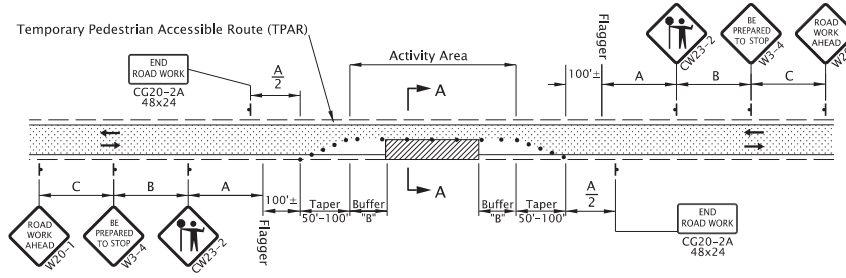
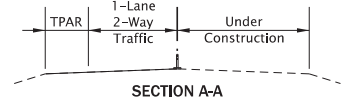
- Place Advance Flagger and additional signing when traffic queues extend beyond initial warning signing OR when sight distance is restricted.
- Place additional Tubular Markers for Flagger and Advance Flagger Stations according to FLAGGER STATION DELINEATION detail.
- Relocate initial "ROAD WORK AHEAD" (W20-1) sign in advance of additional "BE PREPARED TO STOP" (W3-4) and Flagger Ahead (CW23-2) signs, as shown.



**ADVANCE FLAGGER FOR EXTENDED TRAFFIC QUEUES**

**NOTE:**

- When using pilot cars with flaggers to control traffic during paving operations, the Tubular Marker spacing along centerline may be increased to 200' within the Activity Area, as shown or as directed.
- Include "WAIT FOR FLAGGER" (CR4-23) signs mounted on Type II Barricade located approx. 50' before each Flagger.
- Coordinate and control pedestrians movements through the TPAR using Flaggers, other TCM, or as directed. When the existing shoulder is greater than or equal to 4' wide, provide a minimum of 4' of width for the TPAR.



**2-Lane, 2-Way Roadway  
ONE LANE CLOSURE**

**GENERAL NOTES FOR ALL DETAILS:**

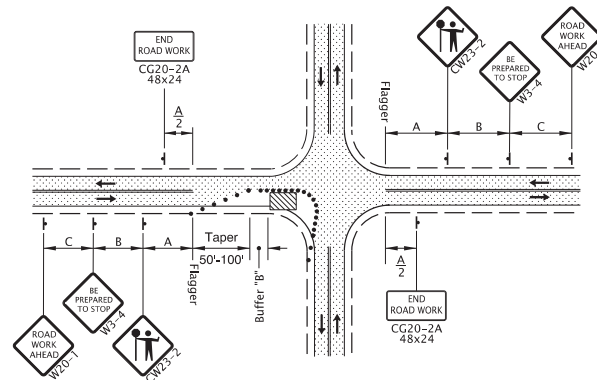
- This drawing is only intended to be used where an Automated Flagger Assistance Device (AFAD) cannot be utilized.
- The "FLAGGER" (CW23-2) symbol sign shall be used only in conjunction with the "BE PREPARED TO STOP" (W3-4) sign.
- Cover existing passing zone signing, as directed.
- Install temporary striping as required.
- To determine Taper Length ("L") and Buffer Length ("B"), use the "MINIMUM LENGTHS TABLE" shown on Dwg. No. TM800.
- To determine sign spacing A, B, and C, use "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Dwg. No. TM800.
- Install a "BICYCLES ON ROADWAY" (CW11-1) sign in advance of the closure when a bike lane is closed, or when the shoulder is closed and bikes are expected.
- At night, flagger stations shall be illuminated according to the FLAGGER STATION LIGHTING DELINEATION detail on Dwg No. TM800.
- To be accompanied by Dwg. Nos. TM820 & TM821.

- ..... 28" Tubular Markers on 10' max. spacing around intersection radii.
- ..... 28" Tubular Markers on 20' max. spacing for flagger tapers and stations
- • • 28" Tubular Markers See TCD Spacing Table on TM800 for max. spacing.

UNDER TRAFFIC  
 UNDER CONSTRUCTION

**NOTE:**

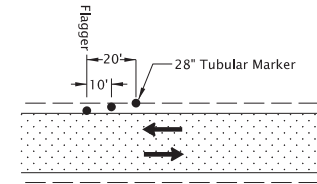
- Additional Traffic Control Measures (TCM) may be required for all legs of the intersection



**2-Lane, 2-Way Roadway  
ONE LANE CLOSURE, INTERSECTION**

**NOTE:**

- Use a minimum of 3 tubular markers in shoulder taper on 10' spacing for flagger station delineation.



**FLAGGER STATION DELINEATION**

*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.*

All materials shall be in accordance with the current Oregon Standard Specifications.

**OREGON STANDARD DRAWINGS**

**2-LANE, 2-WAY ROADWAYS**

2021

DATE	REVISION	DESCRIPTION

CALC. BOOK NO. --- N/A --- SDR DATE: 13-JAN-2023 --- **TM855**

Effective Date: June 1, 2023 - November 30, 2023