

# BIDDING DOCUMENTS

**PROJECT:** PAVING OF SOUTH CENTURY DR:  
US 97 TO VENTURE LN

**PROJECT #:** W66101

**BID OPENING:** APRIL 29, 2020

**COMPLETION DATE:** JULY 31, 2020

**CONTRACTING AGENCY:**



**ROAD  
DEPARTMENT**

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



ROAD DEPARTMENT

**BIDDING DOCUMENTS**

**PAVING OF SOUTH CENTURY DR: US 97 TO VENTURE LN**

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

OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2018

The Specification that is applicable to the Work on this Project is the 2018 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 SOUTH CENTURY DR: US 97 TO VENTURE LN**

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 29, 2020**, 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 \$550,000. The Work will consist of, but not be limited to, the following:

1. Install and maintain temporary traffic control.
2. Perform cold-plane pavement removal.
3. Construct asphalt concrete pavement.
4. Place aggregate shoulders.
5. Construct curb ramps.
6. 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 <http://www.deschutes.org/rfps>. Inquiries pertaining to these specifications shall be directed to Cody Smith, County Engineer, in writing at [Cody.Smith@deschutes.org](mailto:Cody.Smith@deschutes.org) 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 SOUTH CENTURY DR: US 97 TO VENTURE LN" 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 29, 2020 or in a separate sealed envelope marked "SUBCONTRACTOR DISCLOSURE STATEMENT - PAVING OF SOUTH CENTURY DR: US 97 TO VENTURE LN" prior to 4:00 p.m. on April 29, 2020 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.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 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: April 8, 2020  
THE BEND BULLETIN: April 8, 2020

## 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 Contract documents.
2. **Contract Documents.** The Contract documents under which it is proposed to execute the work consist of the material bound herewith. These Contract documents are intended to be mutually complementary and to provide all details reasonably required for the execution of the proposed work.

Any person contemplating the submission of a proposal and being in doubt as to the meaning or intent of said contract document shall at once notify, in writing, the Road Department Director of Deschutes County, Oregon. Any interpretation of change will be mailed or delivered to each person receiving a set of documents.

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 must submit a subcontractor disclosure statement where the value, estimated by the contracting Agency exceeds \$100,000. The subcontractor disclosure statement may be submitted in the sealed bid prior to the bid closing OR it may be submitted in a separate sealed envelope marked "**SUBCONTRACTOR DISCLOSURE STATEMENT**" and the name of the project, within two (2) working hours after the bid closing. Bidder must submit a statement on the form provided in these contract documents identifying all first-tier subcontractors that will furnish labor or labor and materials and whose contract value is equal to or greater than:

- 5% of the total project bid, but at least \$15,000, or
- \$350,000 regardless of the percentage of the total project bid.

For each subcontractor listed, include:

- The name, address and telephone number of the subcontractor:
- The category of work that the subcontractor would be performing.

If no subcontracts subject to the above disclosure requirements are anticipated, a bidder is required to indicate “**NONE**” on the accompanying form.

To determine disclosure requirements, it is required that bidders disclose subcontract information for any subcontractor as follows:

- 1) Use the forms bound herewith for the required disclosure.

Notice – Bidder’s Requirements: Bidders are required to disclose information about certain first-tier subcontractors when the contract value estimated by the contracting Agency for a Public Improvement is greater than \$100,000 (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 working hours after bid closing:

- (a) The subcontractor’s name, and
- (b) The category of work that the subcontractor would be performing.

- 2) 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.
- 3) Bidder shall submit the disclosure form required by OAR 137-049-0360 either in its bid submission or separately within two working hours after Bid Closing in the manner specified by the invitation to bid.
- 4) Compliance with the disclosure and submittal requirements of ORS 279C.370 and OAR 137-049-0360 is a matter of Responsiveness. Bids which 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.
- 5) County shall obtain, and make available for public inspection, the disclosure forms required by ORS 279C.370 and OAR 137-049-0360. County shall also provide copies of disclosure forms to the Bureau of Labor and Industries as required by ORS 279C.835. County is not required to determine the accuracy or completeness of the information provided on disclosure forms.
- 6) Substitution of affected first-tier subcontractors shall be made only in accordance with ORS 279C.585. County shall accept written submissions filed under the statute as public records. Aside from issues involving inadvertent clerical error under ORS 279.585(5), County does not have a statutory role or duty to review, approve, or resolve disputes

concerning such substitutions. See ORS 279C.590 regarding complaints to the Construction Contractors Board on improper substitution.

**THE COUNTY 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).**

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.

County may request a copy of Contractor's surety bond(s). Contractor must supply County with copy of surety bond(s) within ten (10) calendar days from the date of the request.

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 ten (10) calendar days from the date Notice of Award is made, 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, and include a complete set of contract documents.
  - 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, but with a sufficient number of the pages of the bid documents to allow the evaluation of the bid, shall be deemed to have been submitted with the missing pages for purposes of bid evaluation. 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 Road Department Director 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 Cody Smith, County Engineer, in writing at [cody.smith@deschutes.org](mailto:cody.smith@deschutes.org) or 61150 SE 27<sup>th</sup> Street, Bend, Oregon 97702.
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. This contract is subject to ORS 279C.800 to 279C.870. The prequalification classification required for this project is "(ACP) Asphalt Concrete Paving and Oiling". 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 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.** Submission of a bid for the project shall constitute a statement by the bidder that the provisions of ORS 279C.840 are to be complied with.

# BID PROPOSAL FORM

## PAVING OF SOUTH CENTURY DR: US 97 TO VENTURE LN

\_\_\_\_\_  
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. Bidder hereby states that Bidder will comply with ORS 279C.840.

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 \_\_\_\_\_.

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 ten (10) calendar days after notification of acceptance, 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.

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. 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 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.

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 ten (10) calendar days after receipt of notification of acceptance of Bidder's proposal, 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.

(IF SOLE PROPRIETOR OR PARTNERSHIP)

IN WITNESS HERETO, the undersigned has set hand this \_\_\_\_\_ day of \_\_\_\_\_, 2020.

\_\_\_\_\_  
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 \_\_\_\_\_, 2020.

\_\_\_\_\_  
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	00225	Temporary Protection And Direction Of Traffic	LS	1	\$ _____	\$ _____
003	00225	Temporary Signs	SQFT	340	\$ _____	\$ _____
004	00225	Flagger Station Lighting	EACH	5	\$ _____	\$ _____
005	00225	Portable Changeable Message Signs	EACH	3	\$ _____	\$ _____
006	00225	Flaggers	HOUR	380	\$ _____	\$ _____
007	00225	Pilot Cars	HOUR	70	\$ _____	\$ _____
<u>Part 00300 - Roadwork</u>						
008	00310	Removal Of Surfacing	SQYD	110	\$ _____	\$ _____
009	00330	General Excavation	LS	1	\$ _____	\$ _____
010	00490	Adjusting Boxes	EACH	1	\$ _____	\$ _____
<u>Part 00600 - Bases</u>						
011	00620	Cold Plane Pavement Removal, 2 Inches Deep	SQYD	29400	\$ _____	\$ _____
012	00640	Aggregate Base	TON	120	\$ _____	\$ _____
<u>Part 00700 - Wearing Surfaces</u>						
013	00744	Level 3, 1/2 Inch ACP Mixture	TON	3400	\$ _____	\$ _____
014	00748	Root Removal and Repair	SQYD	8	\$ _____	\$ _____
015	00749	Asphalt Walks	SQFT	4200	\$ _____	\$ _____
016	00759	Concrete Walks	SQFT	130	\$ _____	\$ _____
017	00759	Extra for Curb Ramps	EACH	2	\$ _____	\$ _____
018	00759	Truncated Domes on New Surfaces	SQFT	58	\$ _____	\$ _____
<u>Part 00800 - Permanent Traffic Safety and Guidance Devices</u>						
019	00855	Bi-Directional Yellow Type 1Ar Markers, Recessed	EACH	270	\$ _____	\$ _____
020	00866	Plural Component, Sprayed, Surface	FOOT	43000	\$ _____	\$ _____
021	00867	Pavement Legend, Type AB: Yield Line Triangle	EACH	18	\$ _____	\$ _____
022	00867	Pavement Bar: Type AB	SQFT	542	\$ _____	\$ _____

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

<b>FOR DESCHUTES COUNTY USE ONLY</b>	
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 SOUTH CENTURY DR: US 97 TO VENTURE LN

Bid #: W66101      Bid Closing Date: April 29, 2020      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 will 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 SOUTH CENTURY DR: US 97 TO VENTURE LN 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 \_\_\_\_\_, 2020.

SURETY:

CONTRACTOR:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

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

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

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

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

**CONTRACT**  
**FOR**  
**PAVING OF SOUTH CENTURY DR: US 97 TO VENTURE LN**

THIS CONTRACT is made and entered into, in duplicate, by and between DESCHUTES COUNTY, a political subdivision of the State of Oregon, hereinafter called "County" and \_\_\_\_\_, 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 times 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 things in accordance with the applicable contract documents, bound herewith, and in accordance with such alterations or modifications of the same as may be made by the County, and according to 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 Contract Documents, consisting of Invitation to Bid, Information for Bidders, Special Provisions, Schedule of Items, Award, Subcontractor Disclosure, Contract, Performance Bond, Payment Bond, Certificate of Insurance, Prevailing Wage Rates, Oregon Standard Specifications, Project Plans and Standard Drawings bound or referenced 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 this Contract in all things shall be governed by the laws of the State of Oregon, and the Ordinances of the County.

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 of the Road Department Director and the Director's satisfaction, the County agrees to pay to the said Contractor the amount earned, as determined from the 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, and schedule of contract prices.

**(SIGNATURE PAGE TO FOLLOW)**



IN WITNESS WHEREOF, DESCHUTES COUNTY has caused this agreement to be signed in its name, by its Board of County Commissioners, duly attested by its Recording Secretary; and the said Contractor has caused this Agreement to be signed and sealed the same as of the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

**CONTRACTOR**

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

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

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

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

\_\_\_\_\_  
ANTHONY DEBONE, VICE CHAIR

\_\_\_\_\_  
PHILIP G. HENDERSON,  
COMMISSIONER

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

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 \_\_\_\_\_, 2020, a copy of which is hereto attached and made a part hereof for the construction of:

**PAVING OF SOUTH CENTURY DR: US 97 TO VENTURE LN**

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 \_\_\_\_\_ 2020.

(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 \_\_\_\_\_, 2020, a copy of which is hereto attached and made a part hereof for the construction of:

**PAVING OF SOUTH CENTURY DR: US 97 TO VENTURE LN**

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 \_\_\_\_\_, 2020.

(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 SOUTH CENTURY DR: US 97 TO VENTURE LN**

**PROJECT #: W66101**


**CONTRACTING AGENCY:**



**ROAD  
DEPARTMENT**

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

**PROFESSIONAL OF RECORD CERTIFICATION:**

<p>Seal w/signature</p>  <p>EXPIRATION DATE: 6-30-2020</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 02640</u></p>
<p>Date Signed: <u>4-3-2020</u></p>	

**SPECIAL PROVISIONS**

**WORK TO BE DONE**

The work to be done under this contract consists of the following on the Paving of South Century Dr: US 97 to Venture Ln project:

1. Install and maintain temporary traffic control.
2. Perform cold-plane pavement removal.
3. Construct asphalt concrete pavement.
4. Place aggregate shoulders.
5. Install recessed pavement markers and permanent pavement markings.
6. Construct curb ramps.
7. 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 2018 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, 2020.

**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 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 Solicitation Documents** – Replace this subsection with the following:

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

<https://www.deschutes.org/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 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 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.deschutes.org/rfps>

**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 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 either,” 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 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.deschutes.org/rfps>

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

**00130.15 Right to Protest Award** – Replace this subsection 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 is not obligated to 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” and replace “15 Calendar Days” with “the requested amount of time”.

**(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 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:

- Lay out and set construction stakes and marks to establish the lines for shared-use paths.

**00150.15(c) Contractor Responsibilities** – Add the following bullets to the list of bullets:

- Establish the grades, Slopes, and curve super-elevations of shared-use paths and curb ramps by means approved by the Engineer.

**00150.50(f) Utility Information (No Anticipated Relocations)** - Within the Project limits, there are no anticipated relocations with the Utilities listed below. The Contractor shall contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

Utility	Contact Person's Name, Email, and Phone Number
Bend Broadband	Jack Bowles <a href="mailto:jbowles@bendbroadband.net">jbowles@bendbroadband.net</a> 541-693-5983
Cascade Natural Gas	Donna Herman <a href="mailto:Donna.herman@cngc.com">Donna.herman@cngc.com</a> 541-429-2848
CenturyLink	Trevor Gilbert <a href="mailto:Trevor.w.gilbert@centurylink.com">Trevor.w.gilbert@centurylink.com</a> 541-385-0296
Mid State Electric	<a href="mailto:Mhibbs@mse.coop">Mhibbs@mse.coop</a> 541-408-0836
Oregon Department of Transportation	Brad Stevens <a href="mailto:Brad.t.stevens@odot.state.or.us">Brad.t.stevens@odot.state.or.us</a> 541-388-6180
Sunriver Resort	<a href="mailto:bkotaniemi@sunriver-resort.com">bkotaniemi@sunriver-resort.com</a> 541-593-4602
Sunriver Utilities	Gary Hutter <a href="mailto:vbouett@sunriverutilities.com">vbouett@sunriverutilities.com</a> 541-593-4197

The Contractor shall notify, in writing, Brad Stevens (Oregon Department of Transportation), with a copy to the Engineer, at least 14 Calendar Days before beginning curb ramp or shared-use path Work at the intersection of South Century Dr and Venture Ln.

**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(a) General:** Replace the paragraph that begins " As required by ORS 279C.520, compliance by the ..." with the following paragraphs:

As required by ORS 279C.520, the Contractor shall comply with ORS 652.220 and shall not unlawfully discriminate against any of Contractor's employees in the payment of wages or other compensation for work of comparable character on the basis of an employee's membership in a protected class. "Protected class" means a group of persons distinguished by race, color, religion, sex, sexual orientation, national origin, marital status, veteran status, disability, or age. Contractor's compliance with this provision constitutes a material element of the Contract and failure to comply constitutes a material breach that entitles the Agency to exercise any remedies available under the Contract, including, but not limited to, termination for default.

As required by ORS 279C.520, the Contractor shall not prohibit any of the Contractor's employees from discussing the employee's rate of wage, salary, benefits or other compensation with another employee or another person .and shall not retaliate against an employee who discusses the employee's rate of wage, salary, benefits or other compensation with another employee or another person.

**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. The wage rates and 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 Insurance** - Replace this subsection with the following:

**00170.70(a) Insurance Coverages** -

**Contractor** - The Contractor shall obtain the insurance specified below prior to the execution of the Contract. The Contractor shall maintain the insurance in full force at the Contractor's expense throughout the duration of the Contract and all warranty periods that apply.

**Subcontracting** - If the Contractor specifies prior to the execution of the Contract that a Subcontractor will satisfy an insurance requirement, that is permitted to be satisfied by a Subcontractor, the Contractor shall obtain Agency approval of Subcontractor and Subcontractor's insurance coverage(s), as required by 00180.21, prior to commencement of Subcontracted work. After the Contractor receives Agency approval of the Subcontractor, the Contractor may contractually obligate the Subcontractor to obtain and maintain, at the Subcontractor's expense or at the Contractor's expense, the insurance permitted.

The Contractor shall require that all Subcontractors carry insurance coverage that the Contractor deems appropriate based on the risks of the subcontracted work. The Contractor shall obtain proof of the required insurance coverages, as applicable, from any Subcontractor providing Services related to the Contract.

Neither the insurance provided by Subcontractor(s) nor any agreements Contractor or Subcontractor(s) may enter into shall place any limitation on the liability or indemnification obligations of the Contractor under applicable law or the Contract.

**Insurance Provisions** - The Contractor and Subcontractor(s), if any, shall obtain insurance from insurance companies or entities that are authorized to transact the business of insurance and issue coverage in the State and that are acceptable to the Agency. Insurance coverage shall be primary and noncontributory with any other insurance and self-insurance, with the exception of Workers' Compensation. The Contractor, or appropriate Subcontractor, but not the Agency, shall pay for all deductibles, self-insurance retentions and self-insurance, if any.

- **Commercial General Liability** - The Contractor shall provide Commercial General Liability Insurance written on an occurrence basis and covering the Contractor's liability for bodily injury and property damage. This insurance shall include personal and advertising injury liability, products and completed operations coverage, and contractual liability coverage. Coverage may be written in combination with Commercial Automobile Liability Insurance with separate limits for Commercial General Liability and Commercial Automobile Liability. Combined single limit per occurrence shall not be less than the dollar amount specified in the Contract. The annual aggregate limit shall not be less than the

dollar amount specified in the Contract. The policy shall be endorsed to state that the annual aggregate limit of liability shall apply separately to the Contract.

When Work to be performed includes operations or activity within 50 feet of any railroad property, bridge, trestle, track, roadbed, tunnel, underpass or crossing, the Contractor shall provide the Contractual Liability – Railroads CG 24 17 endorsement, or equivalent, on the Commercial General Liability policy.

- **Commercial Automobile Liability** - The Contractor shall provide, Commercial Automobile Liability Insurance covering all owned, non-owned, and hired vehicles for bodily injury and property damage. This coverage may be written in combination with the Commercial General Liability Insurance with separate limits for Commercial Automobile Liability and Commercial General Liability. Combined single limit per occurrence shall not be less than the dollar amount specified in the Contract. If this coverage is written in combination with the Commercial General Liability, the policy shall be endorsed to state that the Commercial General Liability annual aggregate limit shall apply separately to the Contract.

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	\$1,000,000	\$2,000,000
Commercial Automobile Liability	\$1,000,000	(aggregate limit not required)

**(b) Extended Reporting** - If any of the required insurance is permitted to be and is on a “claims made” basis, the Contractor or Subcontractor who provided the insurance coverage, shall obtain an extended reporting period on the claims made policy or maintain the claims made policy, for a duration of at least 24 months from the date the applicable work has been completed and accepted by the Agency or the date of Final Acceptance. This extended reporting requirement shall be satisfied with documentation of one of the following:

- Extended Reporting Endorsement;
- Tail Coverage; or
- Maintaining the applicable continuous claims made policy with liability coverage.

The Contractor or Subcontractor shall furnish certification of this extended reporting requirement as a condition to receive Third Notice under 00150.90(b) and 00180.50(g).

**(c) Excess/Umbrella Liability** - A combination of primary and Excess/Umbrella Insurance may be used to meet the required limits of insurance. Excess/Umbrella coverage must be at least as broad as that provided by the underlying primary insurance policies. In addition, the limits of the underlying primary insurance must be sufficient to prevent any gap between such minimum limits and the attachment point of the coverage provided by the Excess/Umbrella Liability policy.

**(d) Additional Insured** - The liability insurance coverages of 00170.70(a) shall include an Additional Insured Endorsement specifying the “State of Oregon, the Oregon



Transportation Commission and the Department of Transportation, and their respective officers, members, agents, and employees” 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

**(e) Workers' Compensation** - All employers, including the Contractor and Subcontractor(s), if any, that employ subject workers, as defined in ORS 656.027, shall comply with ORS 656.017 and shall provide Workers' Compensation Insurance coverage, unless such employers meet the requirement for an exemption under ORS 656.126(2). The coverage shall include Employer's Liability Insurance with limits not less than \$500,000 each accident.

The Contractor shall certify in the Contract that the Contractor is registered by the Oregon Workers' Compensation Division either as a carrier-insured employer, a self-insured employer, an exempt employer, or is an independent contractor who will perform the Work without the assistance of others.

The Contractor shall require and verify that its insurance carrier files a guaranty contract with the Oregon Workers' Compensation Division before performing any Work.

All employers, including the Contractor and Subcontractor(s), if any, exempt under ORS 656.126(2) and subject to any other state's Workers' Compensation law, shall provide Workers' Compensation Insurance coverage as required by applicable Workers' Compensation laws. The coverage shall also include Employer's Liability Insurance with limits not less than \$500,000 each accident.

If the Contractor's and Subcontractor's, if any, operations include use of watercraft on navigable waters and employ persons in applicable positions, a Maritime Coverage Endorsement must be added to the Workers' Compensation policy, unless coverage for captain and crew is provided in a Protection and Indemnity policy.

If the Contractor and Subcontractor, if any, conducts its operations in proximity to navigable waters and employ persons in applicable positions, United States Longshore and Harbor Workers' Compensation Act coverage must be endorsed onto the Workers' Compensation policy.

The Contractor shall require compliance with these requirements in all Subcontractor contracts.

**(f) Notice of Cancellation or Change** - The Contractor shall provide at least 30 Days' written notice to the Agency before cancellation of, material change to, potential exhaustion of aggregate limits, or non-renewal of the required insurance coverages. If a Subcontractor is providing insurance to meet the contract requirements, the Contractor shall provide at least 30 Days' written notice to the Agency before cancellation of, material change to, potential exhaustion of aggregate limits, or non-renewal of the required insurance coverage(s). Any failure to comply with the reporting provisions of this insurance shall not affect the coverage(s) provided to the State, Agency, County, City, or other applicable political jurisdiction or to the Agency's governing body, board, or Commission and its members, and the Agency's officers, agents, and employees.

**(g) Certificate(s) of Insurance** - 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.

**(h) Agency Acceptance** - All insurance and insurance providers are subject to Agency acceptance. If requested by Agency, the Contractor shall provide complete copies of insurance policies, endorsements, self-insurance documents and related insurance documents to Agency's representatives responsible for verification of the insurance coverages required by the Contract.

**(i) Insurance Requirement Review** - The Contractor agrees to periodic review of insurance requirements by Agency under the Contract and to provide updated requirements as mutually agreed upon by the Contractor and Agency.

**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
Contract Time .....	00180.50(h)
Closed Lanes .....	00220.40(e)(1)
Opening Sections to Traffic .....	00744.51

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, 2020.

**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.

**00195.50(e) Withholding Payments** - Replace the bullet that begins "Complied with all orders issued..." with the following two bullets:

- Complied with all orders and directives issued by the Engineer under or pursuant to the Contract;
- Corrected or cured its failure to comply with the Contract; and

**00195.50(f) Prompt Payment Policy** - Replace the paragraph that begins "Payments shall be made promptly ..." with the following paragraph:

Payments shall be made promptly according to ORS 279C.570, ORS 279C.580 and other applicable legal requirements.

### **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:

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

One Traffic Lane may be closed when allowed, shown, or directed during the following periods of time except as indicated in 00220.40(e)(2):

- Nightly, Sunday night through Friday morning, between 8:00 p.m. and 7:00 a.m.

**00220.40(e)(2)(b) Special Events** - Add the following to the end of this subsection:

The following special events will occur during this Project:

- Pacific Crest Endurance Sports Festival – June 19<sup>th</sup> to June 21<sup>st</sup>
- Cascade Lakes Relay – July 31<sup>st</sup> to August 1<sup>st</sup>

### **SECTION 00225 - WORK ZONE TRAFFIC CONTROL**

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

**00225.81 Temporary Signing** - Add the following sentence to the end of the paragraph that begins "The quantities of temporary signs will...":

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

**00225.82(a) Barricades and Attenuators** – Replace this subsection except for the subsection number and title, with the following:

No measurement will be made for barricades.

**00225.83(a) Surface Mounted Tubular Markers, Plastic Drums, Delineators, and Pavement Markers** – Replace this subsection except for the subsection number and title, with the following:

No measurement will be made for surface mounted tubular markers, replacing surface mounted tubular markers, plastic drums, temporary delineators, reflective pavement markers and flexible pavement markers.

Flexible pavement markers include flexible oiling markers and flexible overlay markers.

**00225.90(a)(2) Temporary Protection and Direction of Traffic** – Add the following to the end of the bullet list:

- Furnishing, installing, maintaining and removing temporary flexible pavement markers to delineate lane lines prior to permanent pavement marking installation.
- Furnishing, placing, replacing, maintaining, moving and removing temporary plastic drums and temporary barricades, except those required for portable changeable message signs shall be included under 00225.96.

**00225.92 Temporary Barricades, Guardrail, Attenuators and Channelizing Devices** – Delete Pay Item (a).

Delete the paragraph that begins “In item (a)...”

**00225.93 Temporary Traffic Delineation** – Delete Pay Items (a) through (f) from the pay item list.

Delete the paragraph that begins “Item (a) includes...”

Delete the paragraph that begins “Item (b) includes...”

Delete the paragraph that begins “Item (e) includes...”

Delete the paragraph that begins “Item (f) includes...”

**00225.95 Temporary Electrical Signs** - Add the following paragraph to the end of this subsection:

Item (b) includes furnishing, placing, replacing, maintaining, moving and removing temporary plastic drums and temporary barricades as shown for portable changeable message sign installation.

## **SECTION 00290 - ENVIRONMENTAL PROTECTION**

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

**00290.32 Noise Control** – Add the following bullet:

- Night work will be required. Night work will be subject to Noise Variance Permit File Number 247-20-000090-V issued by the Board of County Commissioners of Deschutes County.

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

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

**00310.92 Separate Item Basis** – Replace the paragraph that begins “Item (d) includes...” with the following:

Item (d) includes the removal of all Surfacing as defined in 00110.20 under “Existing Surfacing”. Item (d) includes saw cutting at connections to abutting Structures to be left in place.

**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.

**00330.80 Measurement** – Replace this subsection, except the subsection number and title, with the following:

No measurement of quantities will be made for earthwork. The estimated quantity of excavation required for the project is 120 cubic yards.

**00330.93 Excavation Basis Payment** – Replace item (d) with the following:

(d) General Excavation ..... Lump Sum

**SECTION 00440 - COMMERCIAL GRADE CONCRETE**

Comply with Section 00440 of the Standard Specifications modified as follows:

Add the following subsection:

**00440.01 Terminology** - According to 00110.05(a), for the purposes of this Contract, the terms "sidewalk ramp" and "sidewalk ramps" shall respectively refer to and shall be read to mean "curb ramp" and "curb ramps".

Add the following subsection:

**00440.02 Abbreviations and Definitions:**

**ASTV – Actual Strength Test Value** – See 02001.02 for definition.

**00440.12 Properties of Commercial Grade Concrete** - Replace the bullet that begins "Compressive strength..." with the following bullet:

- **Compressive Strength** - ASTV minimum of 3,000 psi at 28 days

**00440.14(d) Hardened CGC** - Add the following to the end of this subsection:



The ASTV at 28 Days is the average compressive strength of the three cylinders tested. Discard all specimens that show definite evidence, other than low strength, of improper sampling, molding, handling, curing, or testing. The average strength of the remaining cylinders shall then be considered the test result.

**SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES**

Comply with Section 00490 of the Standard Specifications modified as follows:

**00490.10 Materials** - Replace the "Precast Concrete Sections" line with the following line:

Precast Concrete Sections..... 02450

Replace the "Metal Frames, Covers, Grates, and Ladders" line with the following line:

Metal Frames, Covers, Grates, and Steps..... 02450.30

**SECTION 00620 - COLD PLANE PAVEMENT REMOVAL**

Comply with Section 00620 of the Standard Specifications modified as follows:

**00620.43 Maintenance Under Traffic** - Replace this subsection, except for the subsection number and title, with the following:

Traffic is not allowed on the cold planed surface. Before opening the area to traffic, pave the surface according to 00744.51.

**SECTION 00640 - AGGREGATE BASE AND SHOULDERS**

Comply with Section 00640 of the Standard Specifications.

**SECTION 00730 - EMULSIFIED ASPHALT TACK COAT**

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

**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 9 tons 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 58-34 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.

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

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(a)(2) Wearing Course** – Add the following paragraph to the end of this subsection:

From STA 0+00 to 76+55 and STA 77+85 to 80+80, construct the longitudinal joint between wearing course panels 12 inches from the roadway centerline.

**00744.45(b) Abutting Bridge Ends** – Add the following to the end of this subsection:

Saw cut the wearing course of Pavement in a straight line over the bridge end joints as soon as practical but within 48 hours of paving the wearing Course. Saw cut 3/8 inch wide, ±1/8 inch, by ½ inch less than the thickness of the Panel of Pavement depth or 1 ½ inches deep, whichever is less.

Flush the saw cut thoroughly with a high-pressure water stream after the cut has been made. Before the cut dries out, blow it free of water and debris with compressed air. Fill the joint with a poured filler from the QPL.

Add the following subsection:

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

**00744.90 Payment** – in the paragraph that begins, “No separate or additional...”, replace the second bullet with the following:

- Saw cutting, cleaning, and filling joints on bridge deck overlays or at bridge ends when wearing course paving abuts the bridge deck.

### **SECTION 00748 - ASPHALT CONCRETE PAVEMENT REPAIR**

Comply with Section 00748 of the Standard Specifications modified as follows:

**00748.90 Payment** – Replace this subsection, except for the subsection number and title, with the following:

The accepted quantities of asphalt concrete Pavement repair will be paid for at the Contract unit price, per square yard, for the item “Root Removal and Repair”.

Payment will be payment in full for furnishing and placing all Materials, and for furnishing all Equipment, labor, and incidentals necessary to complete the Work as specified.

Aggregate base and subbase will be paid for according to 00640.90.

No separate or additional payment will be made for asphalt concrete or asphalt tack coat. Payment for asphalt concrete and asphalt tack coat will be included in payment for Asphalt Walks.

No separate or additional payment will be made for saw cutting, excavation, sawing, cold plane Pavement removal, geosynthetics, stone embankment and water.

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

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

00749.90

### **SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES**

Comply with Section 00759 of the Standard Specifications modified as follows:

Add the following subsection:

**00759.02(c) ADA Certification for Contractors** - For all supervisory personnel who will directly supervise the curb ramp Work, submit the names, telephone numbers, and copies of the ODOT ADA Certification for Contractors 10 Calendar Days before the preconstruction conference.

**00759.03 Preplacement Conference** - Add the following to the end of this subsection:

All supervisory personnel who have an active ODOT ADA Certification for Contractors and will directly supervise the curb ramp Work must attend the preplacement conference.

**00759.12 Sidewalk Ramp Treatment** – Replace the title of this subsection with “**Curb Ramp Treatment**”

Replace the paragraph that begins “Furnish truncated dome detectable warning...” with the following paragraph:

Furnish truncated dome detectable warning surfaces for curb ramps and accessible route islands from the QPL. Furnish truncated dome detectable warning surfaces that are safety yellow in color on or along County roads and highways.

Add the following subsection:

**00759.22 Smart Level** - Slopes will be verified with the use of a 24-inch SmartTool level model 92379 or model 92500, and a 6-inch SmartTool level model 92346. The 6-inch level will only be used to measure counter slope and curb running slope. All other locations will use a 24-inch level to measure slopes.

Add the following subsection:

**00759.31 Qualifications** - Use supervisory personnel who have an active ODOT ADA Certification for Contractors to directly supervise the curb ramp Work.

**00759.80 Measurement** - Replace this subsection, except for the subsection number and title, with the following:

The quantities of Structures constructed under this Section will be measured according to the following:

- **Area Basis** - Measurement will be the finished surface, limited to the Neat Lines shown or directed.

Measurement of concrete walks will include the total area of concrete walk, including the area of concrete curb ramps within the footprint of the concrete walk.

When monolithic curb and sidewalks are measured on the area basis, measurement will include the total area of monolithic curb and sidewalk, including the area of concrete curb ramps within the footprint of the monolithic curb and sidewalk.

When concrete curb ramp construction is not adjacent to concrete walk, monolithic curb and sidewalk, or concrete island Work, the area of the concrete curb ramp Work will be included in the measurement of concrete walks.

- **Length Basis** - Measurement of concrete items will be along the face of the Structure, from end to end including curb tapers or depressed lengths at driveways and ramps. Measurement of metal handrail will be along the top rail member, from center of end post to center of end post.
- **Each Basis** - Measurement will be by actual count. Extra for Curb Ramps will be counted for each instance of where a curb ramp crosses a curb at the transition between a pedestrian facility and a roadway.

**00759.90 Payment -**

Replace pay items (m) and (n) with the following pay item:

(n) Extra for Curb Ramps .....Each

Replace pay items (o) and (p) with the following pay items:

(o) Truncated Domes on New Surfaces ..... Square Foot

(p) Truncated Domes on Existing Surfaces ..... Square Foot

Add the following after the sentence that begins "In item (a)";

Item (a) includes the curb runs constructed adjacent to the curb ramps.

Delete the paragraph that begins "Item (m) includes...".

Replace the paragraph that begins "Item (n) includes the..." with the following paragraph:

Item (n) includes the additional Work required to construct a curb ramp or replace an existing curb ramp. When replacing an existing curb ramp or retrofitting a curb ramp into an existing concrete pedestrian facility, Item (n) also includes saw cutting and removal.

Add the following to the end of this subsection:

No separate or additional payment will be made for providing supervisory personnel who have an active ODOT ADA Certification for Contr (m)actors to directly supervise the curb ramp Work.

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

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

**00850.40(c) Projects Without Striping Plans** – Replace the first paragraph of this subsection with the following:

Install striping to match the original striping configuration with the appropriate striping items listed in the Contract Schedule of Items, except in areas with existing narrow double no-pass centerline striping install double no-pass centerline striping.

**00850.45 Installation** - Add the following bullet before the bullet that begins "Place material according to...":

- Place material between May 1 and October 15.

Replace the bullet that begins "Place material according to..." with the following bullet:

- Place material according to the manufacturer's installation instructions.

**SECTION 00855 - PAVEMENT MARKERS**

Comply with Section 00855 of the Standard Specifications.

**SECTION 00866 - LONGITUDINAL PAVEMENT MARKINGS - HIGH PERFORMANCE**

Comply with Section 00866 of the Standard Specifications.

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

Comply with Section 00867 of the Standard Specifications.

**SECTION 02040 – CHEMICAL ADMIXTURES**

Comply with Section 02040 of the Standard Specifications modified as follows:

**02040.10 Materials** - Replace this subsection, except for the subsection number and title, with the following:

Furnish admixtures from the QPL.

**SECTION 02050 – CURING MATERIALS**

Comply with Section 02050 of the Standard Specifications modified as follows:

**02050.10 Liquid Compounds** - Replace the paragraph that begins “Furnish liquid membrane-forming curing...” with the following paragraph:

Furnish liquid membrane-forming curing compounds from the QPL and meeting the requirements of ASTM C309.

Delete the paragraph that begins “Before using liquid compounds, submit...”.

**02050.20 Polyethylene Films** - Replace the paragraph that begins “Furnish clear or white...” with the following paragraph:

Furnish clear or white polyethylene films for curing concrete meeting the requirements of ASTM C171.

**SECTION 02630 – BASE AGGREGATE**

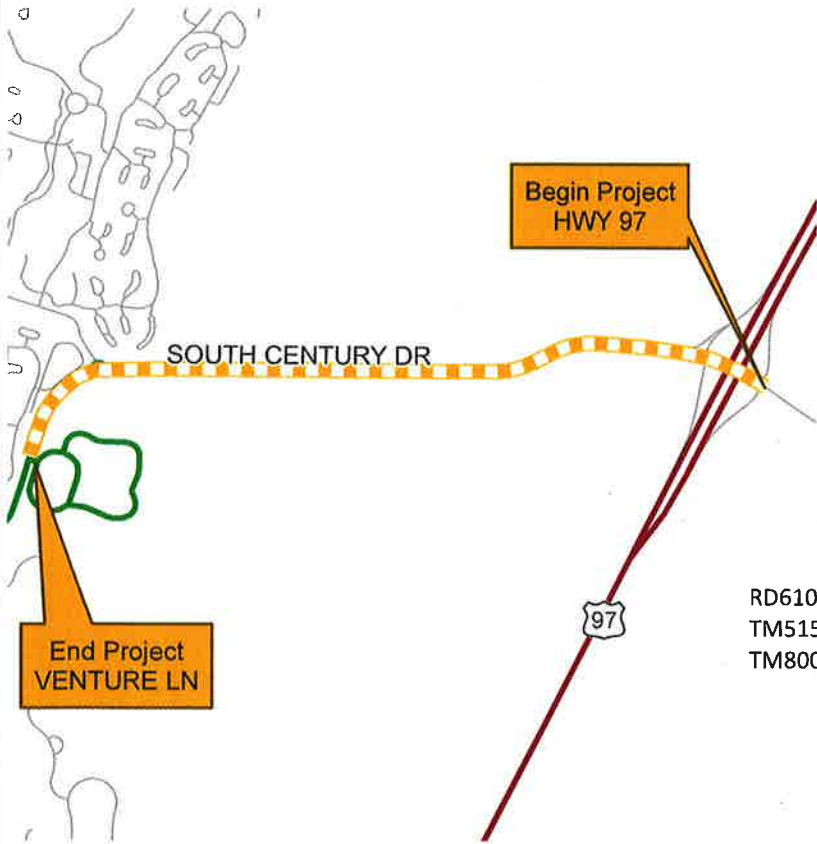
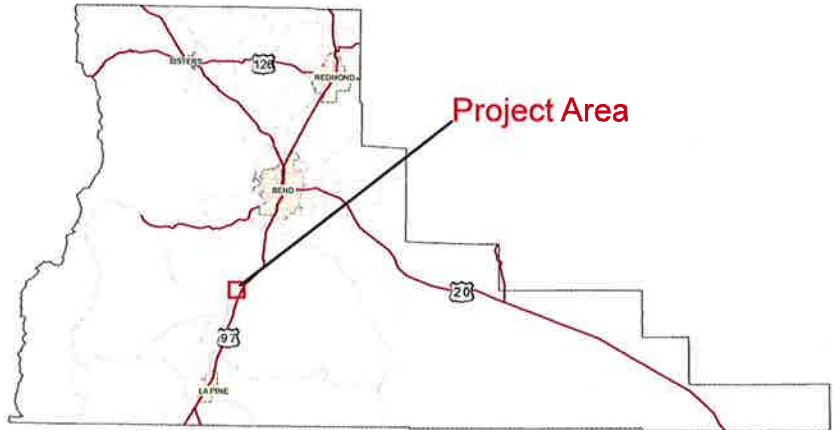
Comply with Section 02630 of the Standard Specifications modified as follows:

**SECTION 02640 – SHOULDER AGGREGATE**

Comply with Section 02640 of the Standard Specifications.

# DESCHUTES COUNTY ROAD DEPARTMENT PLANS FOR PAVING OF SOUTH CENTURY DRIVE: US97 to VENTURE LN

APRIL 2020



**LOCATION MAP**  
NOT TO SCALE

**LEGEND**

- Project Area
- County Routes
- Road Centerlines
- State Highway
- Streams
- Canals
- Rivers
- City Limits



**INDEX OF SHEETS**

Sheet #	Description
1	COVER SHEET
2-3	TYPICAL SECTION
4-5	DETAILS
6	PLAN---SHARED-USE PATHS
7	PLAN---Sta 0+00 To 10+00
8	PLAN---Sta 10+00 To 20+00
9	PLAN---Sta 20+00 To 30+00
10	PLAN---Sta 30+00 To 40+00
11	PLAN---Sta 40+00 To 50+00
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14	PLAN---Sta 70+00 To 80+00
15	PLAN---Sta 80+00 To 90+00
16	PLAN---Sta 90+00 To 95+00
17	PLAN---Sta 95+00 To End
18	PLAN---Sta 0+00 To End

DET STANDARD ROOT REMOVAL & REPAIR SECTION  
OREGON STANDARD DRAWING NO. \_\_\_\_\_

RD610, RD755, RD756, RD758, RD759, TM500, TM502, TM503,  
TM515, TM517, TM521, TM560, TM561, TM670, TM671, TM687,  
TM800, TM810, TM821, TM822, TM842, TM844, TM850

**DESCHUTES COUNTY ROAD DEPARTMENT**  
61150 S.E. 27TH STREET  
BEND, OR, 97702

PHONE: 541-388-6581      FAX: 541-388-2719

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**PAVING OF S. CENTURY DR: US97 to VENTURE LN**

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*[Signature]*  
COUNTY ENGINEER

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*[Signature]*  
ROAD DEPT DIRECTOR

**4-3-2020**  
DATE

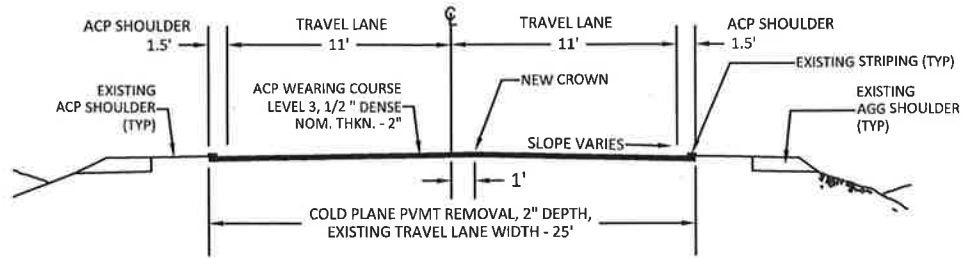
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**04.07.2020**  
DATE

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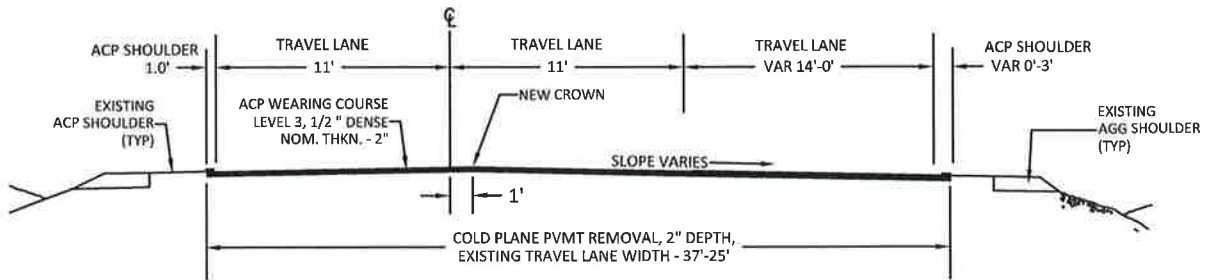
**COVER SHEET**

SHEET NO.  
**1 OF 18**



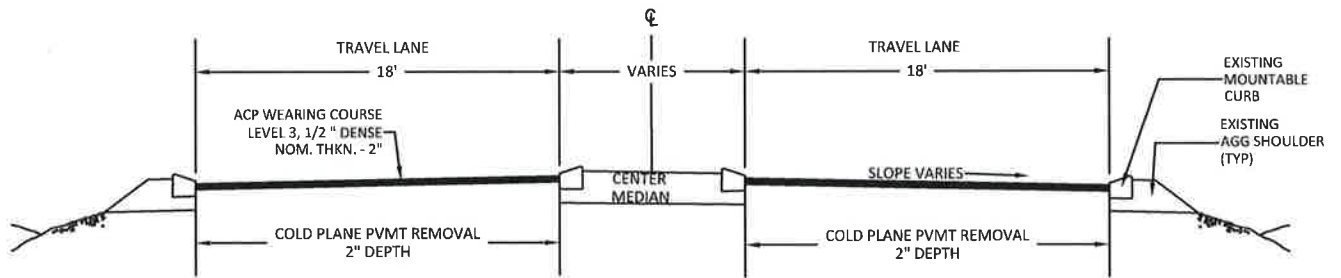
**SOUTH CENTURY DR**

STA. 0+00 - STA. 12+95  
 STA. 19+50 - STA. 76+55  
 STA. 77+85 - STA. 79+11



**SOUTH CENTURY DR**

STA. 12+95 - STA. 19+50



**SOUTH CENTURY DR**

STA. 79+11 - STA. 85+54  
 STA. 87+38 - STA. 89+11

**ABBOT DR**

STA. 0+00 - STA. 2+12

**NOTES:**

1. COLD PLANE PVMT REMOVAL SHALL EXTEND FROM CURB-TO-CURB OR OUTSIDE-TO-OUTSIDE OF EXISTING STRIPING AS SHOWN.
2. CURB REVEAL AT CURB RAMPS SHALL BE ZERO. ALL OTHERS = 1"



RENEWS: JUNE 30, 2020



**DESCHUTES COUNTY ROAD DEPARTMENT**

61150 S.E. 27TH STREET  
 BEND, OR. 97702

PHONE: 541-388-6581 FAX: 541-388-2719

**PAVING OF S. CENTURY DR: US 97 TO VENTURE LN**

DRAFTER: T.WILSON DATE: 2/14/20

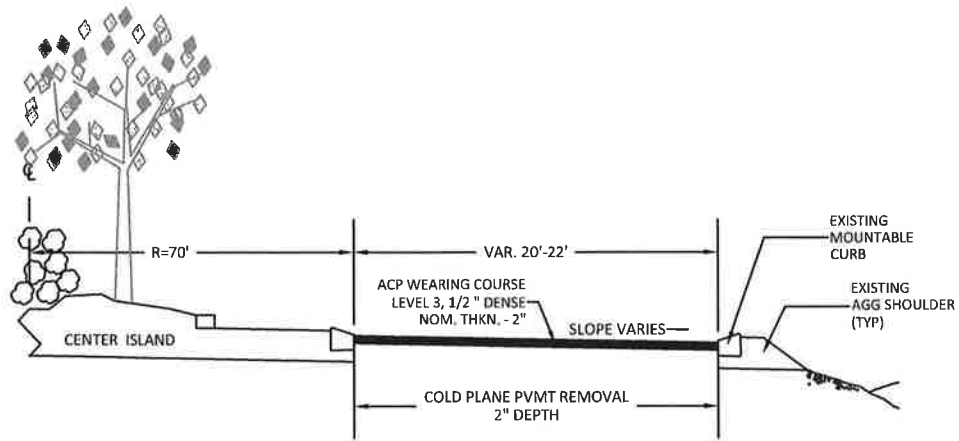
REVIEWED BY: C.SMITH DATE: 2/14/20

**TYPICAL SECTIONS**

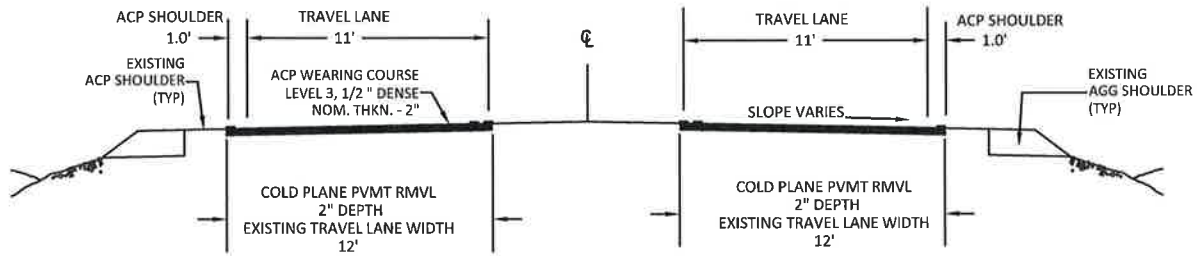
SHEET NO.

2 OF 17

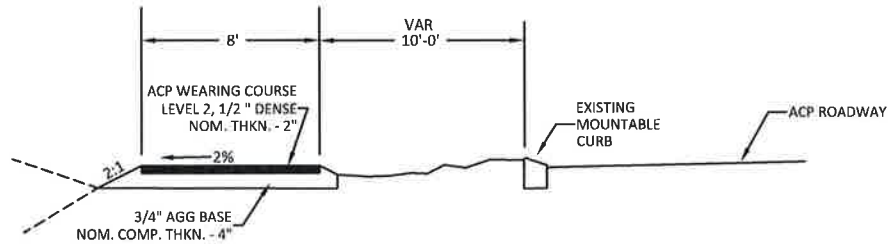




SOUTH CENTURY DR  
 ROUNDABOUT



SOUTH CENTURY DR  
 STA 89+11 - STA 99+50  
 STA 99+50 - STA 101+30 (FULL WIDTH)



SHARED-USE PATH

NOTES:

1. COLD PLANE PVMT REMOVAL SHALL EXTEND FROM CURB-TO-CURB OR OUTSIDE-TO-OUTSIDE OF EXISTING STRIPING AS SHOWN.
2. CURB REVEAL AT CURB RAMPS SHALL BE ZERO. ALL OTHERS = 1"
3. SHARED-USE PATH SHALL HAVE A MAXIMUM FINISHED SURFACE RUNNING SLOPE OF 5% AND A MAXIMUM FINISHED SURFACE CROSS SLOPE OF 2%.



RENEWS: JUNE 30, 2020



**DESCHUTES COUNTY ROAD DEPARTMENT**

61150 S.E. 27TH STREET  
 BEND, OR. 97702

PHONE: 541-388-6581 FAX: 541-388-2719

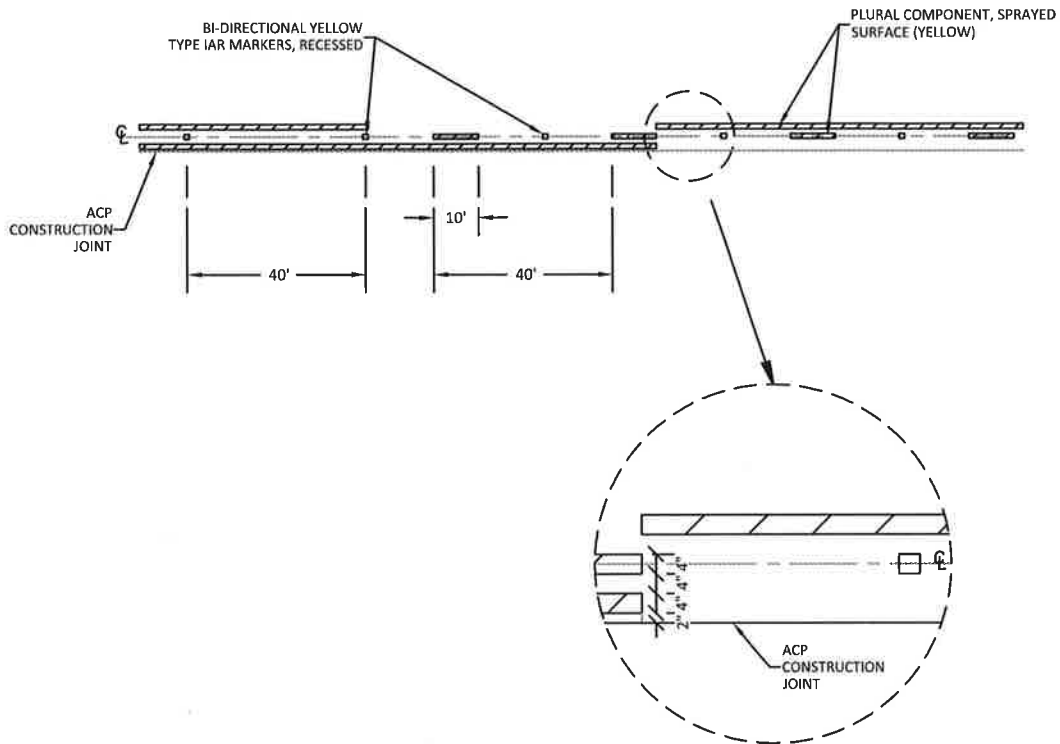
**PAVING OF S. CENTURY DR: US 97 TO VENTURE LN**

DRAFTER: T.WILSON DATE: 2/14/20

REVIEWED BY: C.SMITH DATE: 2/14/20

**TYPICAL SECTIONS**

SHEET NO.  
 3 OF 17

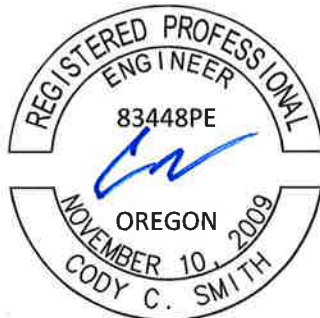


**CENTERLINE RECESSED PAVEMENT MARKERS**

STA. 0+00 - STA. 76+55  
 STA. 77+85 - STA. 80+80

NOTE: IN THE AREAS WITH EXISTING NARROW DOUBLE NO-PASS (ND) CENTERLINE STRIPING, REPLACE WITH DOUBLE NO-PASS (D) CENTERLINE STRIPING.

(FOR DETAILS SEE ODOT DWG. TM500, TM502, TM515, TM517, TM521, TM560 AND TM561)



RENEWS: JUNE 30, 2020



**DESCHUTES COUNTY ROAD DEPARTMENT**

61150 S.E. 27TH STREET  
 BEND, OR. 97702

PHONE: 541-388-6581 FAX: 541-388-2719

**PAVING OF S. CENTURY DR: US 97 TO VENTURE LN**

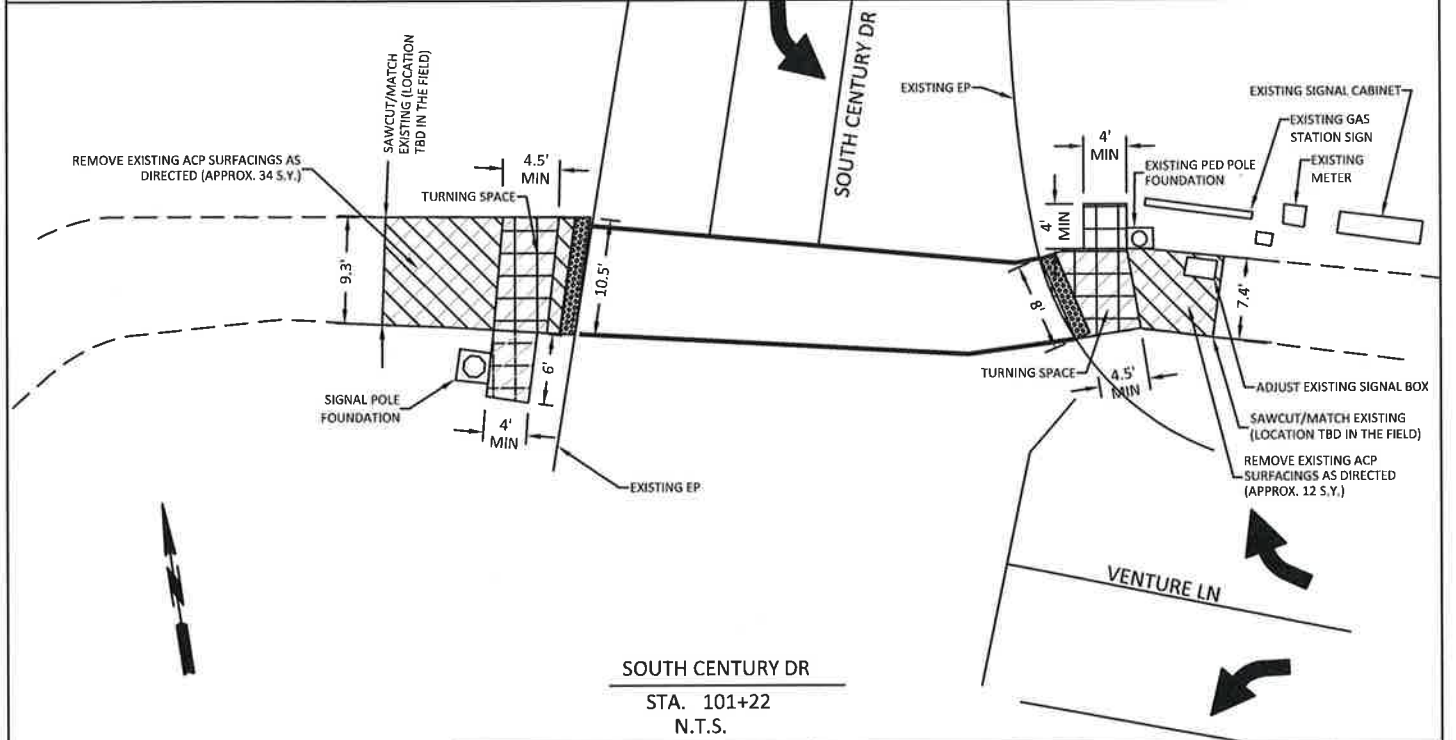
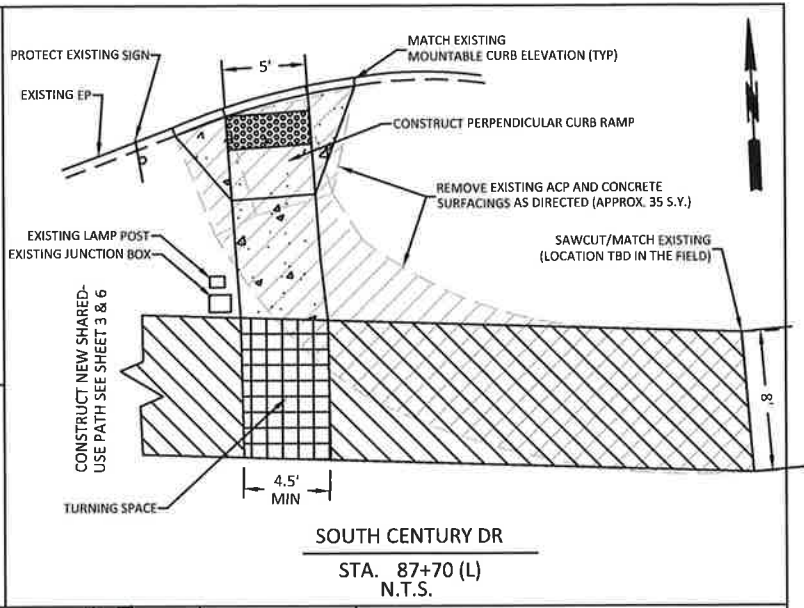
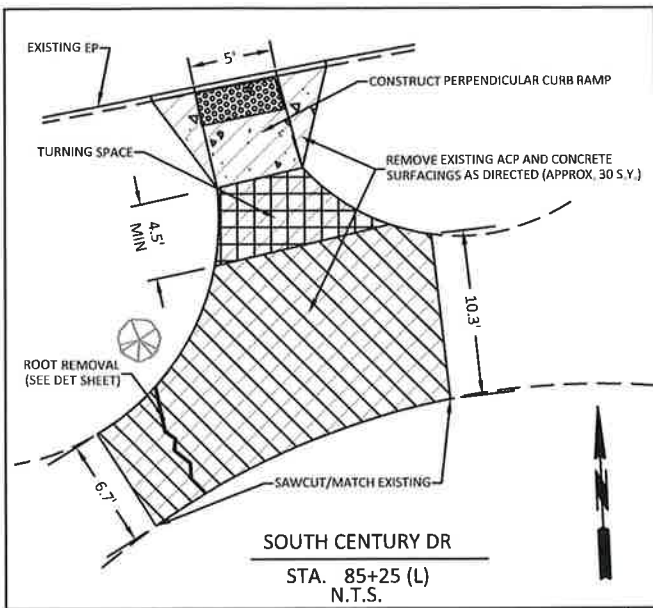
DRAFTER: T.WILSON DATE: 02/14/20

REVIEWED BY: C.SMITH DATE: 02/14/20

**DETAIL SHEET**

SHEET NO.

4 OF 17



-  CONSTRUCT CONCRETE CURB RAMP (SEE ODOT DWG RD755 FOR DETAILS)
-  CONSTRUCT ACP OR CONCRETE TURNING SPACE (SEE ODOT DWG RD755 FOR DETAILS)
-  CONSTRUCT ACP SHARED USE PATH (SEE SHEET 3 FOR SECTION DEPTHS. MAX 5% RUNNING SLOPE. MAX 2% FINISHED SURFACE CROSS SLOPE.)
-  INSTALL DETECTABLE WARNING SURFACE (SEE ODOT DWG RD755, RD758, AND RD759 FOR DETAILS)
-  REMOVAL OF EXISTING SURFACINGS



RENEWS: JUNE 30, 2020

**DESCHUTES COUNTY ROAD DEPARTMENT**  
61150 S.E. 27TH STREET  
BEND, OR. 97702  
PHONE: 541-388-6581 FAX: 541-388-2719

**PAVING OF S. CENTURY DR: US 97 TO VENTURE LN**

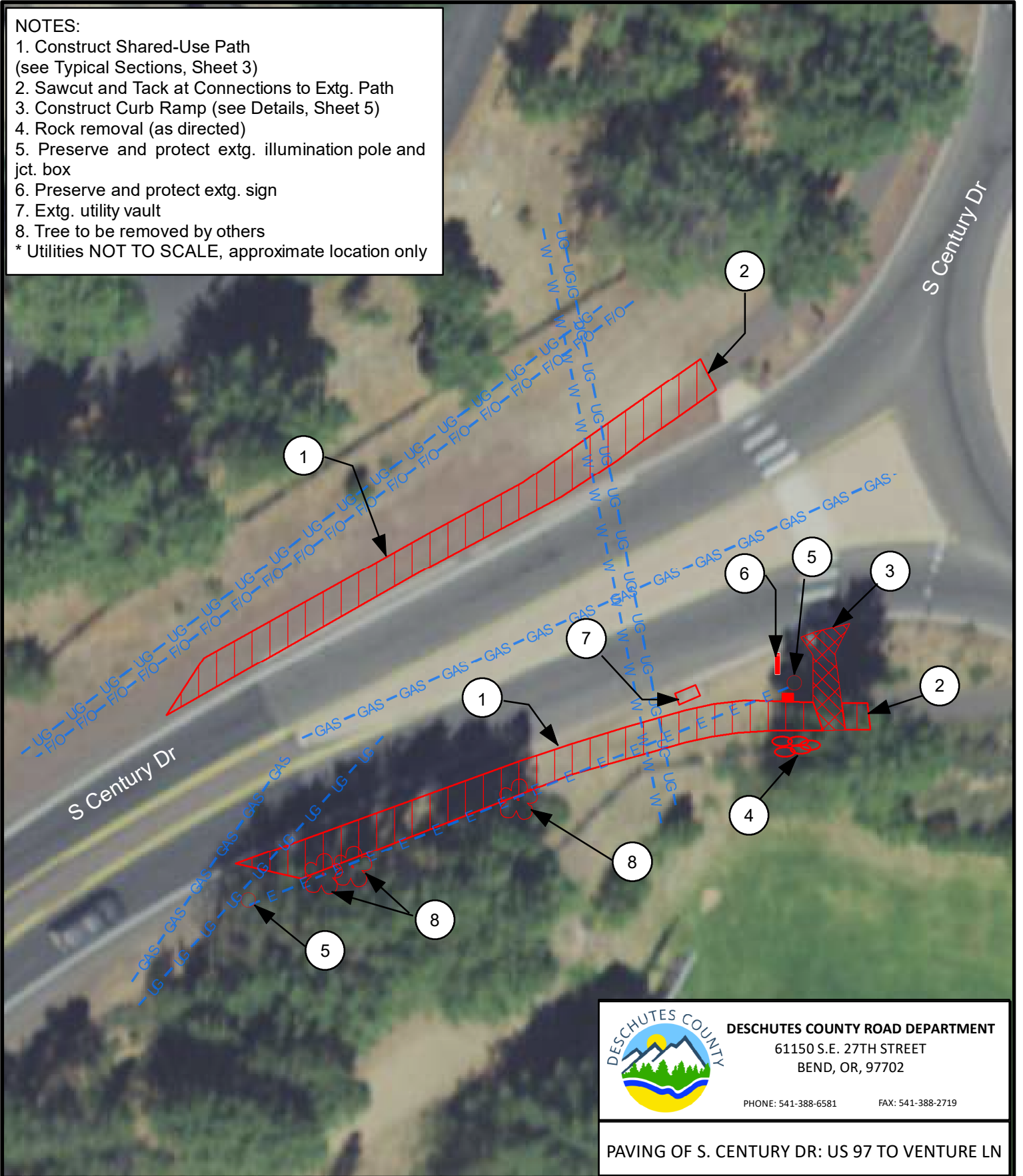
DRAFTER: T.WILSON DATE: 2/14/20  
REVIEWED BY: C.SMITH DATE: 2/14/20

**CURB RAMP DETAILS**



SHEET NO.  
5 OF 17

**NOTES:**

1. Construct Shared-Use Path  
(see Typical Sections, Sheet 3)
  2. Sawcut and Tack at Connections to Extg. Path
  3. Construct Curb Ramp (see Details, Sheet 5)
  4. Rock removal (as directed)
  5. Preserve and protect extg. illumination pole and jct. box
  6. Preserve and protect extg. sign
  7. Extg. utility vault
  8. Tree to be removed by others
- \* Utilities NOT TO SCALE, approximate location only



**LEGEND**

-  SHARED-USE PATH
-  CURB RAMP

**PLAN**  
NOT TO SCALE



**DESCHUTES COUNTY ROAD DEPARTMENT**

61150 S.E. 27TH STREET  
BEND, OR, 97702

PHONE: 541-388-6581

FAX: 541-388-2719

PAVING OF S. CENTURY DR: US 97 TO VENTURE LN

DRAFTER: R. PINKSTON

DATE: 03/30/20

REVIEWED BY: C. SMITH

DATE: 03/30/20

PLAN---SHARED-USE PATHS

SHEET NO.

6 OF 18




	<b>DESCHUTES COUNTY ROAD DEPARTMENT</b> 61150 S.E. 27TH STREET BEND, OR, 97702 PHONE: 541-388-6581      FAX: 541-388-2719
	PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON      DATE: 03/30/20  
 REVIEWED BY: C. SMITH      DATE: 03/30/20

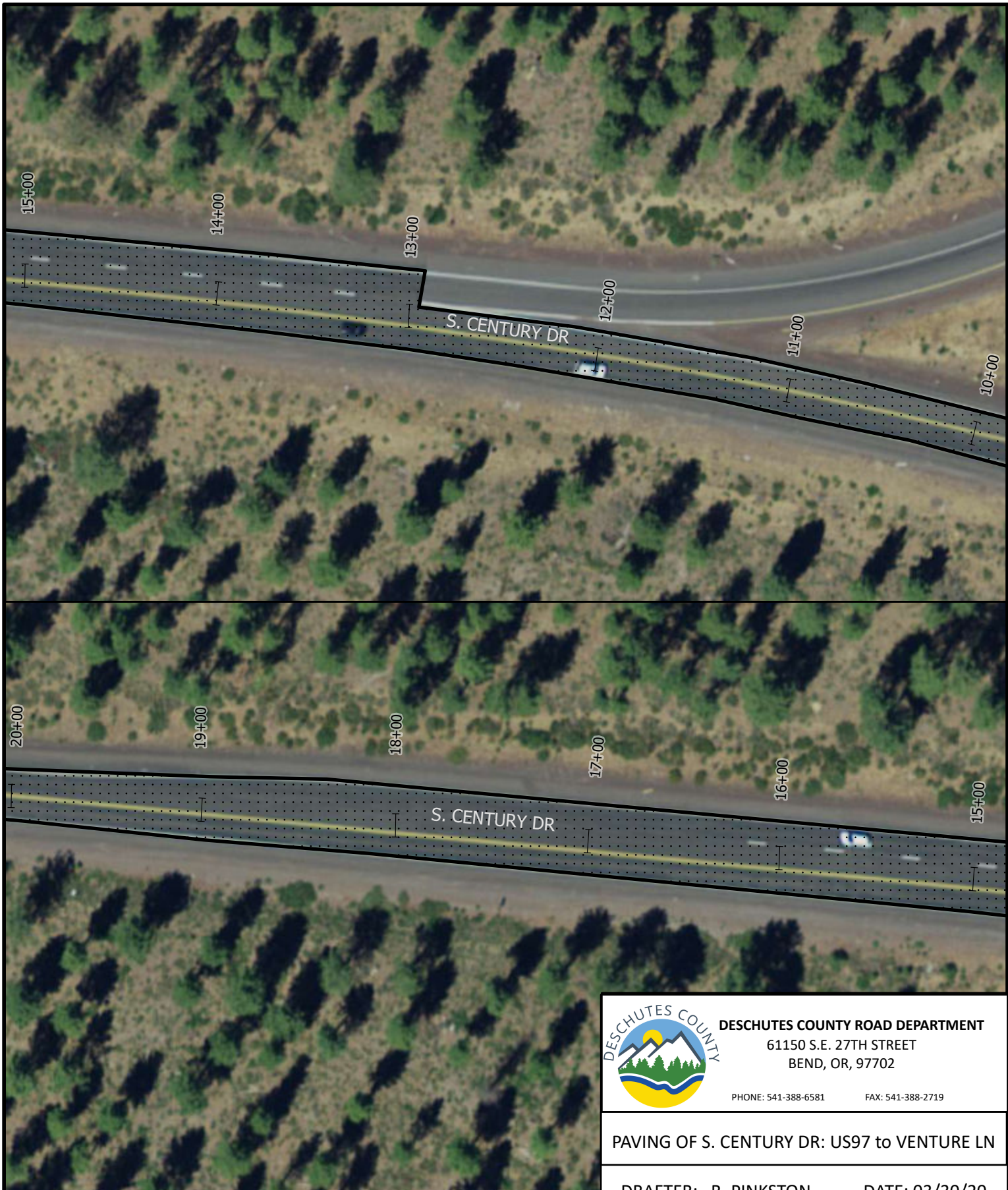
PLAN---STA 0+00 TO 10+00      SHEET NO. 7 OF 18

**LEGEND**

 2" GRIND AND INLAY  
 (SEE TYPICAL SECTION, SHEET 2)

**PLAN**  
 NOT TO SCALE





**LEGEND**



2" GRIND AND INLAY  
(SEE TYPICAL SECTION, SHEET 2 & 3)

**PLAN**

NOT TO SCALE



**DESCHUTES COUNTY ROAD DEPARTMENT**

61150 S.E. 27TH STREET  
BEND, OR, 97702

PHONE: 541-388-6581

FAX: 541-388-2719

PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON

DATE: 03/30/20

REVIEWED BY: C. SMITH


DATE: 03/30/20

PLAN--STA 10+00 TO 20+00

SHEET NO.

8 OF 18




	<b>DESCHUTES COUNTY ROAD DEPARTMENT</b> 61150 S.E. 27TH STREET BEND, OR, 97702
	PHONE: 541-388-6581      FAX: 541-388-2719

PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON	DATE: 03/30/20
REVIEWED BY: C. SMITH	DATE: 03/30/20

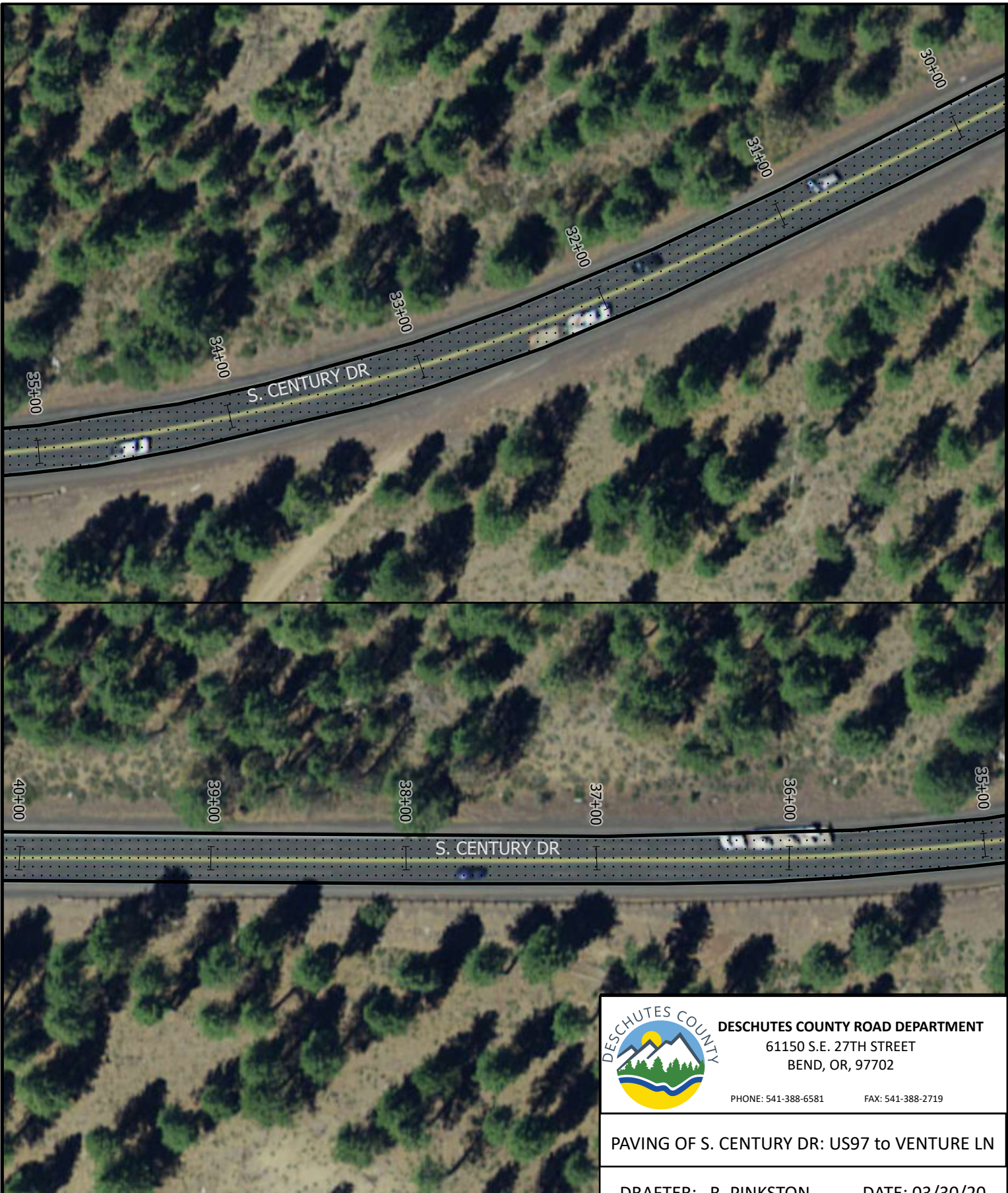
PLAN--STA 20+00 TO 30+00	SHEET NO. 9 OF 18
--------------------------	----------------------

**LEGEND**

 2" GRIND AND INLAY  
(SEE TYPICAL SECTION, SHEET 2)

**PLAN**  
NOT TO SCALE





**DESCHUTES COUNTY ROAD DEPARTMENT**  
 61150 S.E. 27TH STREET  
 BEND, OR, 97702

PHONE: 541-388-6581 FAX: 541-388-2719

PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON DATE: 03/30/20

REVIEWED BY: C. SMITH DATE: 03/30/20

PLAN--STA 30+00 TO 40+00

SHEET NO.  
 10 OF 18

LEGEND




2" GRIND AND INLAY  
 (SEE TYPICAL SECTION, SHEET 2)

PLAN

NOT TO SCALE





**DESCHUTES COUNTY ROAD DEPARTMENT**  
 61150 S.E. 27TH STREET  
 BEND, OR, 97702  
 PHONE: 541-388-6581 FAX: 541-388-2719


PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON      DATE: 03/30/20  
 REVIEWED BY: C. SMITH      DATE: 03/30/20

PLAN--STA 40+00 TO 50+00

SHEET NO.  
 11 OF 18

LEGEND

 2" GRIND AND INLAY  
 (SEE TYPICAL SECTION, SHEET 2)

PLAN  
 NOT TO SCALE






S. CENTURY DR



S. CENTURY DR

**DESCHUTES COUNTY ROAD DEPARTMENT**  
 61150 S.E. 27TH STREET  
 BEND, OR, 97702  
 PHONE: 541-388-6581 FAX: 541-388-2719

PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON      DATE: 03/30/20  
 REVIEWED BY: C. SMITH      DATE: 03/30/20

PLAN--STA 50+00 TO 60+00

SHEET NO.  
12 OF 18

LEGEND



2" GRIND AND INLAY  
(SEE TYPICAL SECTION, SHEET 2)

PLAN

NOT TO SCALE






S. CENTURY DR



S. CENTURY DR


**DESCHUTES COUNTY ROAD DEPARTMENT**  
 61150 S.E. 27TH STREET  
 BEND, OR, 97702  
 PHONE: 541-388-6581 FAX: 541-388-2719

PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON DATE: 03/30/20  
 REVIEWED BY: C. SMITH DATE: 03/30/20


PLAN--STA 60+00 TO 70+00 SHEET NO. 13 OF 18

**LEGEND**

 2" GRIND AND INLAY  
 (SEE TYPICAL SECTION, SHEET 2)

**PLAN**  
 NOT TO SCALE





**DESCHUTES COUNTY ROAD DEPARTMENT**  
 61150 S.E. 27TH STREET  
 BEND, OR, 97702  
 PHONE: 541-388-6581 FAX: 541-388-2719

PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON      DATE: 03/30/20  
 REVIEWED BY: C. SMITH      DATE: 03/30/20

PLAN--STA 70+00 TO 80+00	SHEET NO. 14 OF 18
--------------------------	-----------------------

**LEGEND**

-  2" GRIND AND INLAY  
(SEE TYPICAL SECTION, SHEET 3)
-  BRIDGE DECK (NO WORK)  
(SAW CUT AND SEAL AT BRIDGE ENDS)

**PLAN**  
NOT TO SCALE





**LEGEND**



2" GRIND AND INLAY  
(SEE TYPICAL SECTION, SHEET 3)



CURB RAMP AND SHARED- USE PATHS  
(SEE TYPICAL SECTION, SHEET 3 AND DETAILS SHEET 5)

**PLAN**

NOT TO SCALE



**DESCHUTES COUNTY ROAD DEPARTMENT**  
61150 S.E. 27TH STREET  
BEND, OR, 97702

PHONE: 541-388-6581

FAX: 541-388-2719

PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON

DATE: 03/30/20


REVIEWED BY: C. SMITH

DATE: 03/30/20

PLAN--STA 80+00 TO 90+00

SHEET NO.  
15 OF 18



	<b>DESCHUTES COUNTY ROAD DEPARTMENT</b> 61150 S.E. 27TH STREET BEND, OR, 97702 PHONE: 541-388-6581      FAX: 541-388-2719
	PAVING OF S. CENTURY DR: US97 to VENTURE LN


PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON	DATE: 03/30/20
REVIEWED BY: C. SMITH	DATE: 03/30/20

PLAN---STA 90+00 TO 95+00

SHEET NO.  
16 OF 18

**LEGEND**

 2" GRIND AND INLAY  
(SEE TYPICAL SECTION, SHEET 3)

**PLAN**  
NOT TO SCALE





**LEGEND**



2" GRIND AND INLAY  
(SEE TYPICAL SECTION, SHEET 3)




CURB RAMP AND SHARED- USE PATHS  
(SEE TYPICAL SECTION, SHEET 3 AND DETAILS SHEET 5)

**PLAN**

NOT TO SCALE



	<b>DESCHUTES COUNTY ROAD DEPARTMENT</b> 61150 S.E. 27TH STREET BEND, OR, 97702
	PHONE: 541-388-6581      FAX: 541-388-2719

PAVING OF S. CENTURY DR: US97 to VENTURE LN

DRAFTER: R. PINKSTON	DATE: 03/30/20
REVIEWED BY: C. SMITH	DATE: 03/30/20

PLAN--STA 95+00 TO END	SHEET NO. 17 OF 18
------------------------	-----------------------



**DESCHUTES COUNTY ROAD DEPARTMENT**  
 61150 S.E. 27TH STREET  
 BEND, OR, 97702

PHONE: 541-388-6581 FAX: 541-388-2719

PAVING OF S. CENTURY DR: US97 to VENTURE LN


DRAFTER: R. PINKSTON DATE: 03/30/20

REVIEWED BY: C. SMITH DATE: 03/30/20

ABBOT DRIVE  
 PLAN---STA 00+00 TO END

SHEET NO.  
 18 OF 18

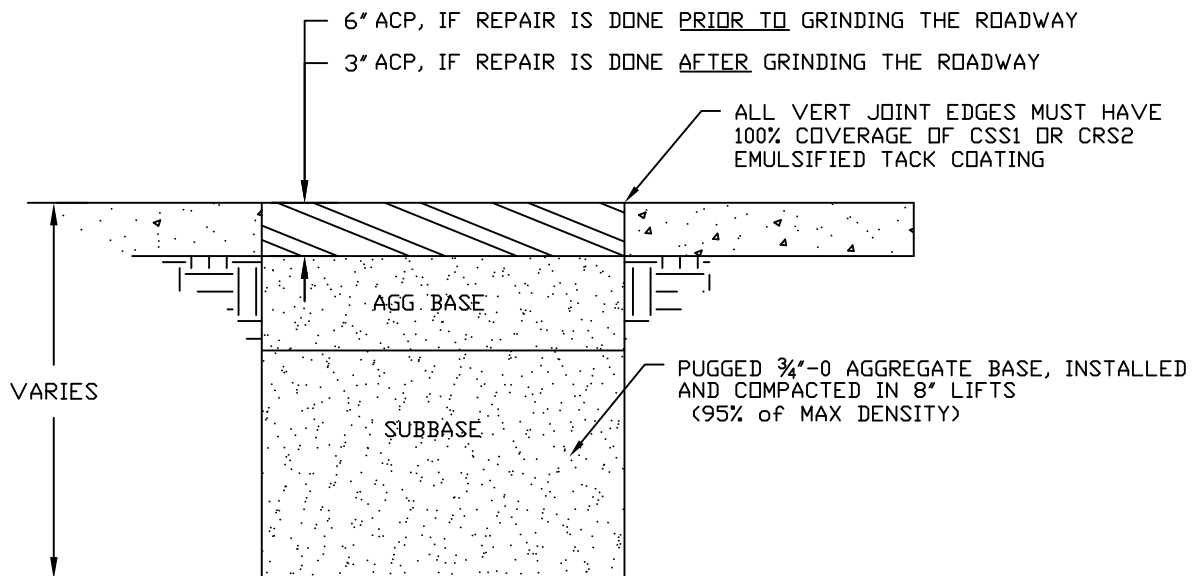
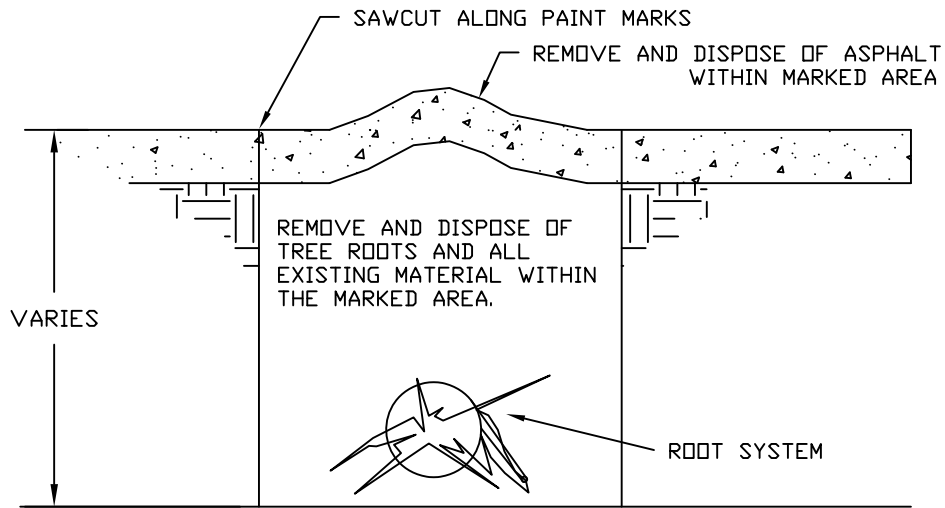
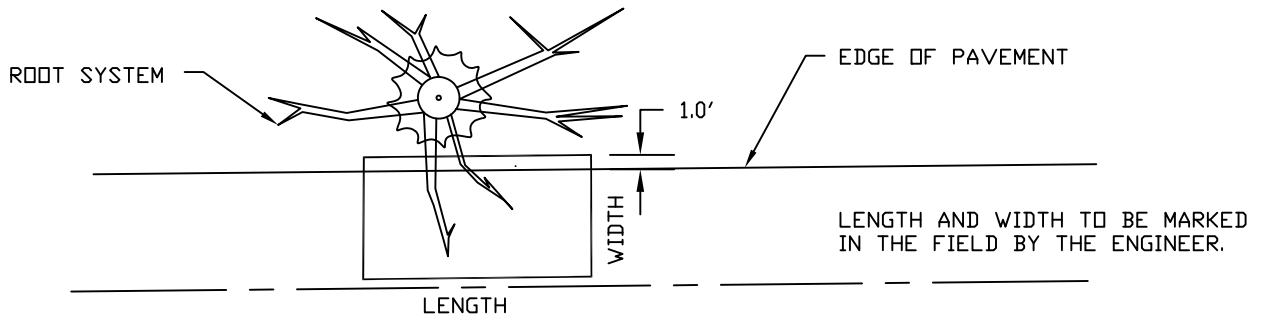
**LEGEND**

 2" GRIND AND INLAY  
 (SEE TYPICAL SECTION, SHEET 2)


**PLAN**  
 NOT TO SCALE



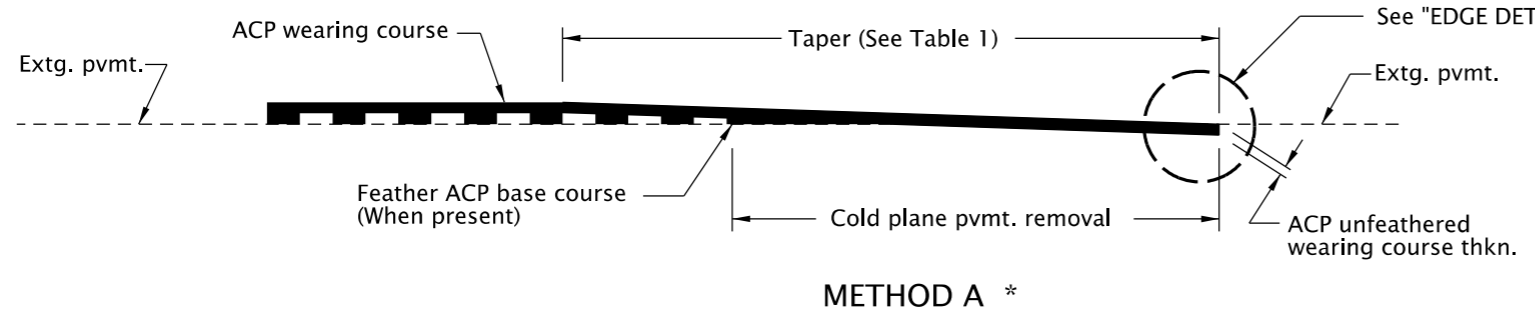




J:\CAD\Projects\DC Standards\dwg\Root Removal Detail.dwg

DATE : 5/7/15	SCALE : NONE	STANDARD ROOT REMOVAL AND REPAIR SECTION	<b>DESCHUTES COUNTY</b> ROAD DEPARTMENT 
DRAWING NO. DET	APPROVED BY : G.KOLB		

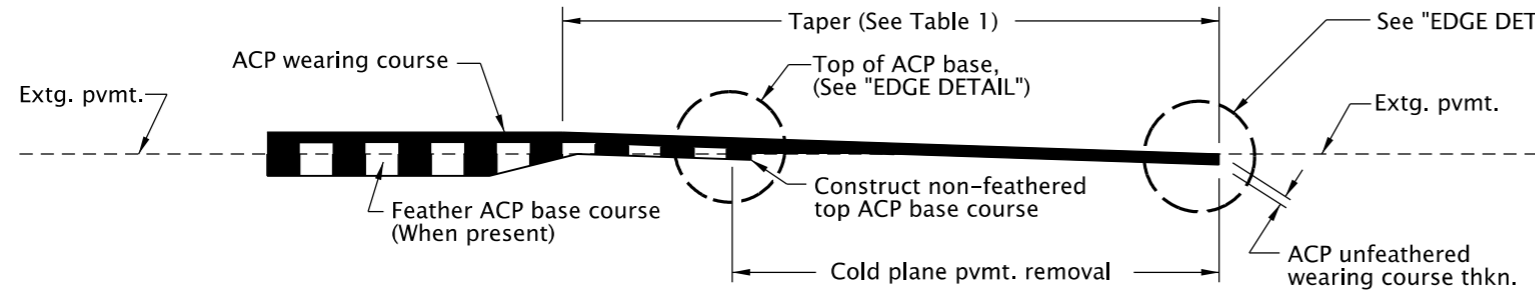
rd610.dgn 25-JUL-2017



**METHOD A \***

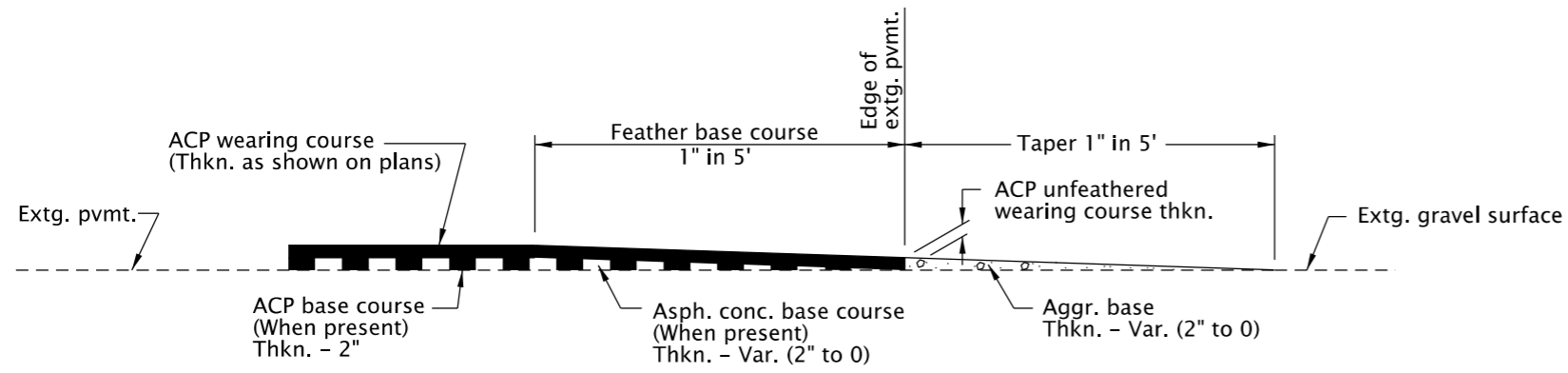
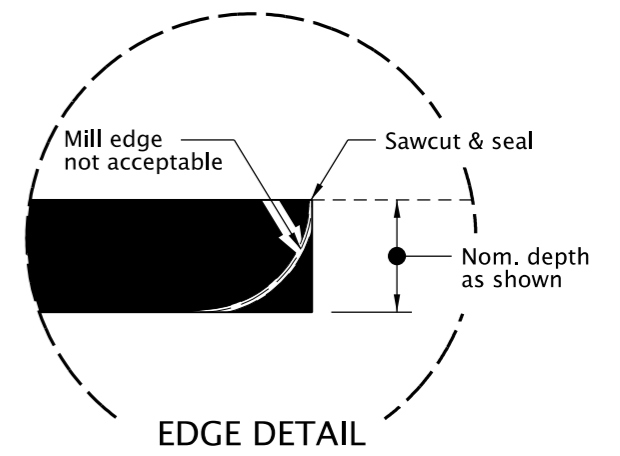
\* See project plans for method.

TABLE 1 TAPER LENGTHS	
Posted Speed	Taper Length
< 45 mph	1" per 50'
≥ 45 mph	1" per 100'

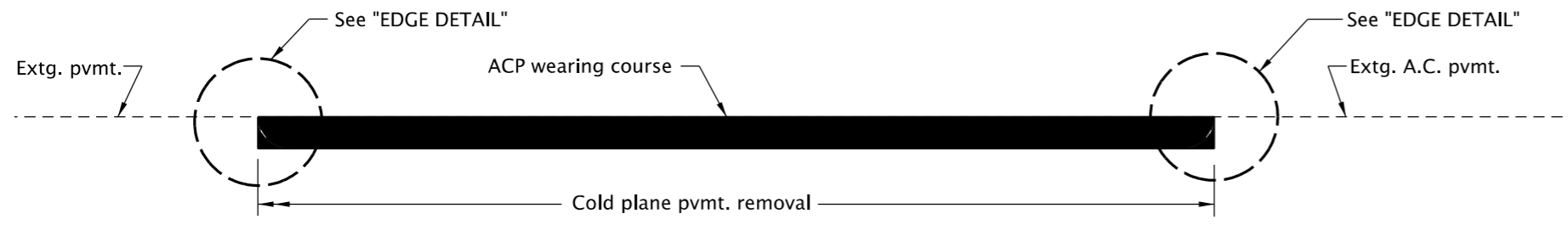


**METHOD B \***

**ACP PAVEMENT MATCH AT PROJECT ENDS  
OR BRIDGE ENDS WHEN NOT OVERLAYING THE BRIDGE**



**METHOD OF FEATHERING ACP PAVEMENT  
AT GRAVEL APPROACHES**



**METHOD OF MATCHING EXTG. ACP INLAY SURFACING  
(Inlay to extg. asphalt conc. pvmt.)**

CALC. BOOK NO. N/A BASELINE REPORT DATE 25-JUL-2017

*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.*

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

**OREGON STANDARD DRAWINGS  
ASPHALT CONCRETE  
PAVEMENT (ACP)  
DETAILS**

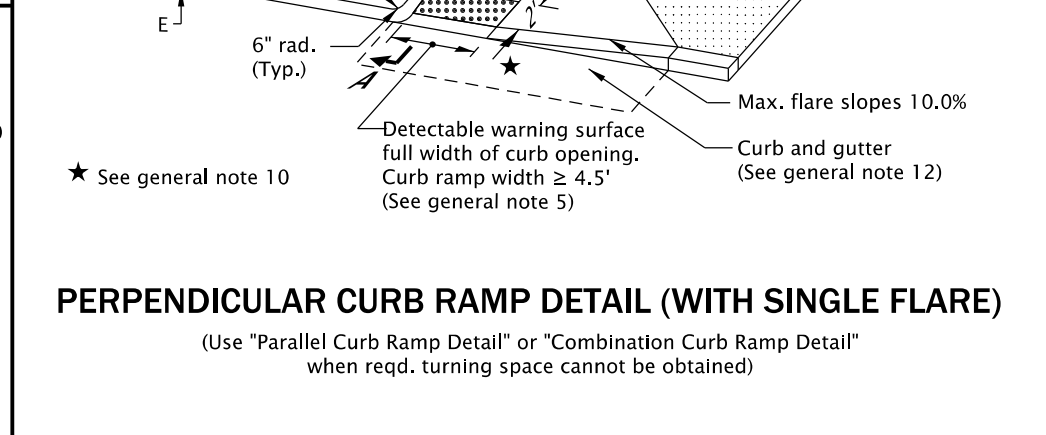
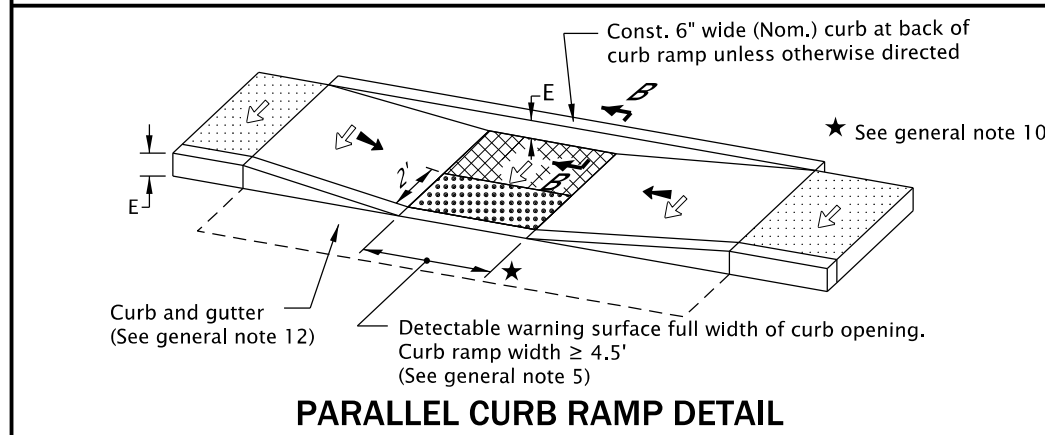
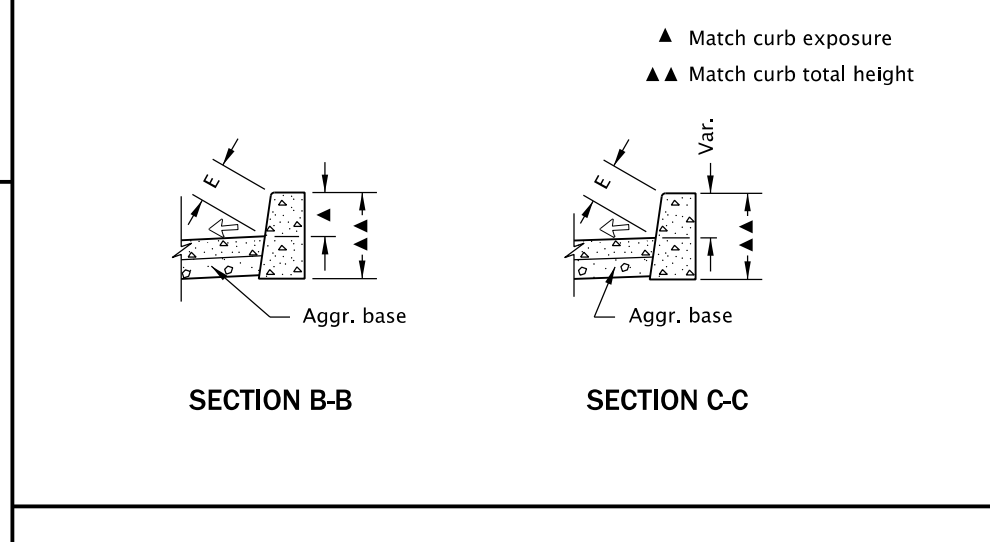
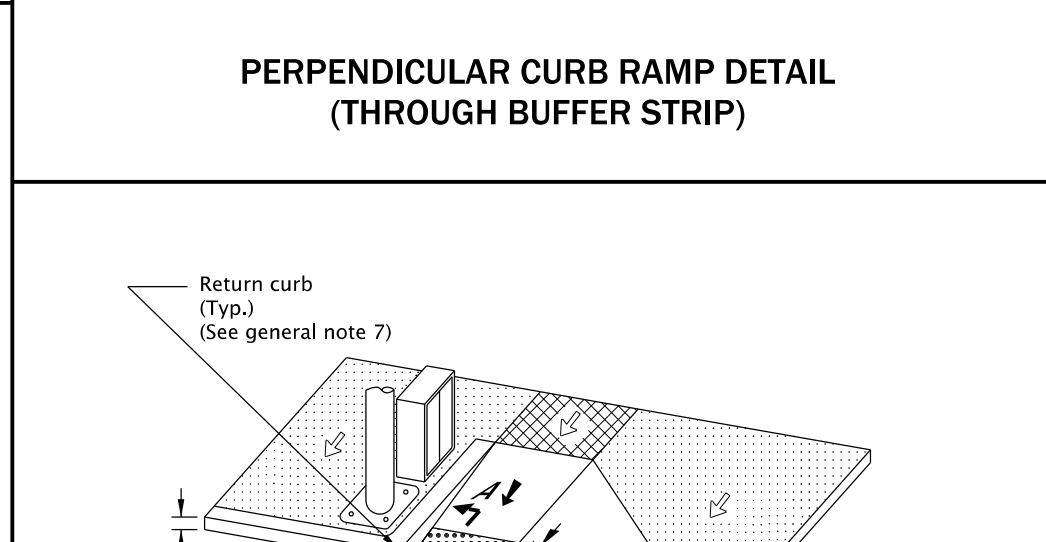
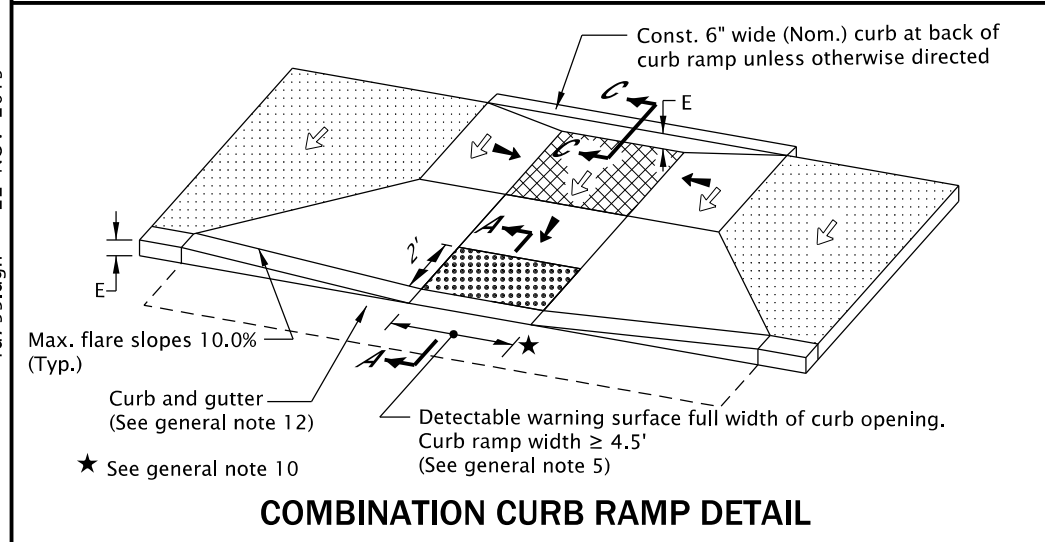
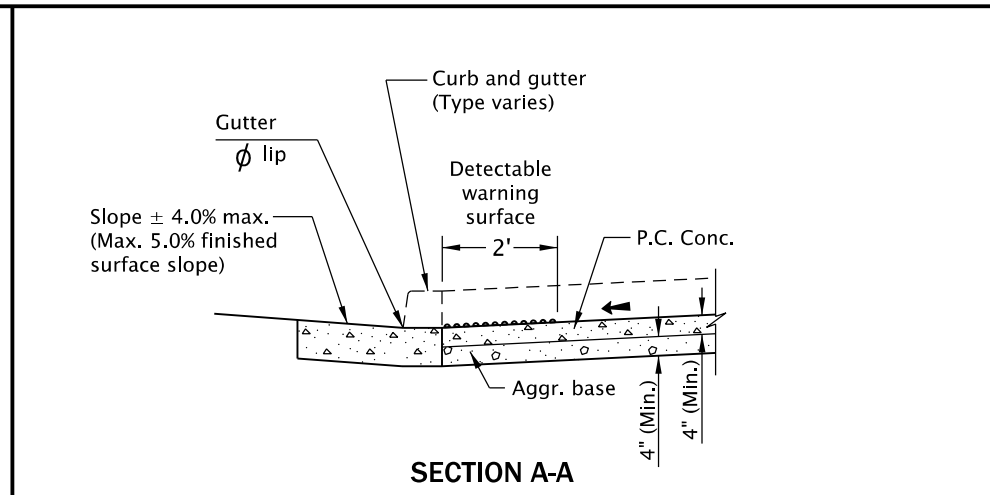
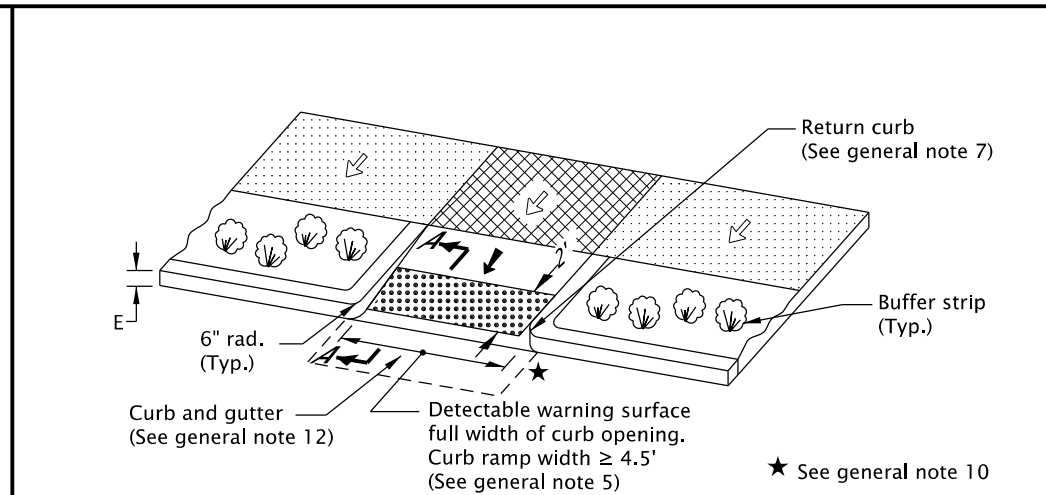
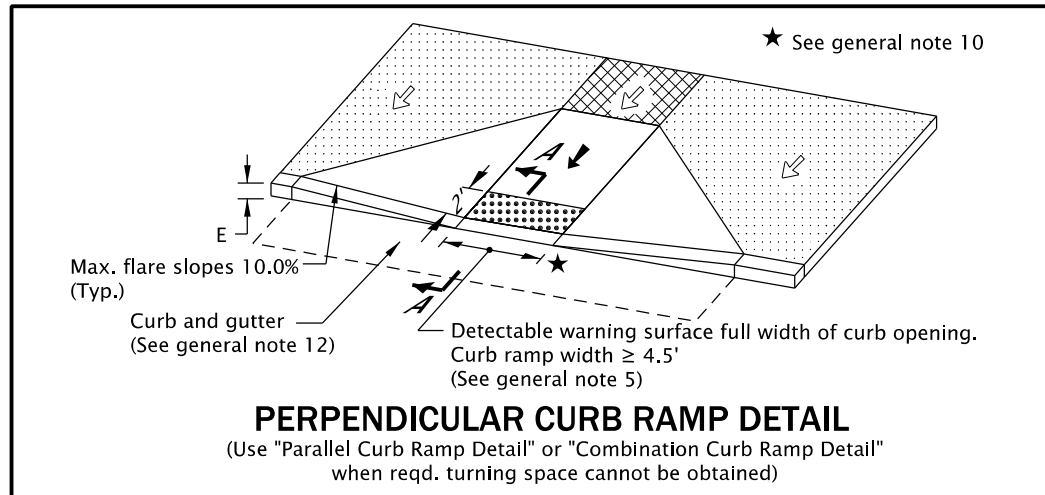
2018

DATE	REVISION	DESCRIPTION

RD610

rd755.dgn 22-NOV-2019

RD755



**LEGEND:**

- Sidewalk
- Turning space  
When not constrained 4.5' x 4.5' (4' x 4' min. finished surface).  
When constrained 4.5' x 5.5' (4' x 5' min. finished surface with longer dimension in direction of pedestrian street crossing).  
For the purposes of this application, a max. 2.0% finished surface slope (for drainage) is considered level.
- Detectable warning surface
- Slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
- Slope 7.5% max. (Max. 8.3% finished surface slope)

- GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:**
1. Curb ramp details are based on ODOT applicable standards.
  2. See Std. Dwgs. RD700 & RD701 for curbs. See Std. Dwgs. RD720 & RD721 for sidewalks. See Std. Dwgs. TM503 & TM530 for crosswalk markings, widths, etc.
  3. Tooled dummy joints are required at all curb ramp grade break lines.
  4. Curb ramp slopes shown are relative to the true level horizon (Zero bubble).
  5. Place detectable warning surface at the back of curb for a minimum depth of 2' at curb ramp that is adjacent to traffic. For details not shown, see Std. Dwgs. RD758 & RD759.
  6. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
  7. Return curb may be provided in lieu of flared slope only if protected from traverse travel by landscaping. Return curb shall not reduce width of approaching sidewalk.

8. Curb ramps for paths intersecting a roadway should be full width of path, excluding flares. When a curb ramp is used to provide bicycle access from a roadway to a sidewalk, the curb ramp should be 8' wide.
9. For curb ramp placement options, see Std. Dwgs. RD756 & RD757.
10. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk at curb ramp. Place an inlet at upstream side of curb ramp or perform other approved design mitigation.
11. Site conditions normally require a project specific design. See project plans for details not shown.
12. On or along state highways, curb and gutter is required at curb ramps.

CALC. BOOK NO. \_\_\_\_\_

BASELINE REPORT DATE \_\_\_\_\_

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

**OREGON STANDARD DRAWINGS**

**CURB RAMP DETAILS**

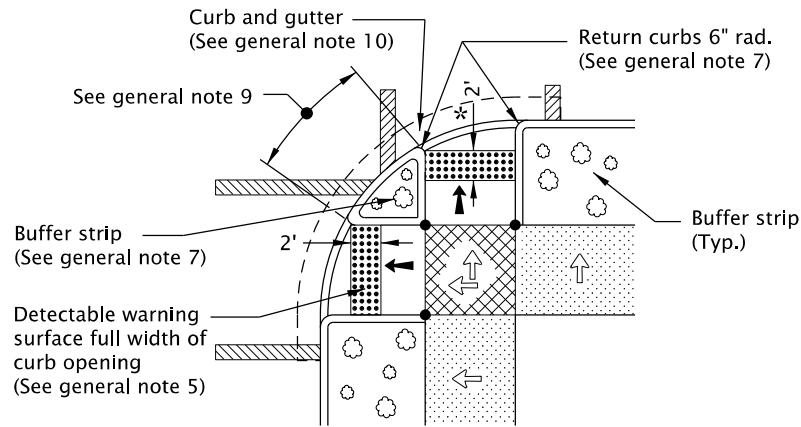
2018

DATE	REVISION DESCRIPTION
01-2018	REVISED DETAILS, REVISED & ADDED NOTES
07-2018	REVISED DETAILS, REVISED & ADDED NOTES
01-2019	REVISED DETAIL & ADDED DIAGRAM
06-2019	REVISED DETAILS & NOTES
11-2019	REVISED NOTES

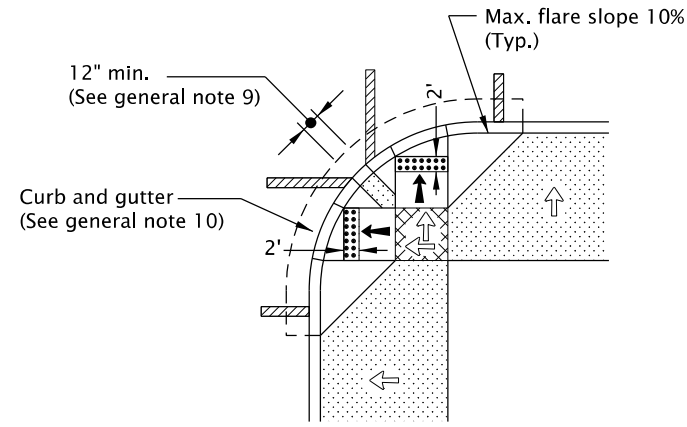
*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

rd756.dgn 21-JUN-2019

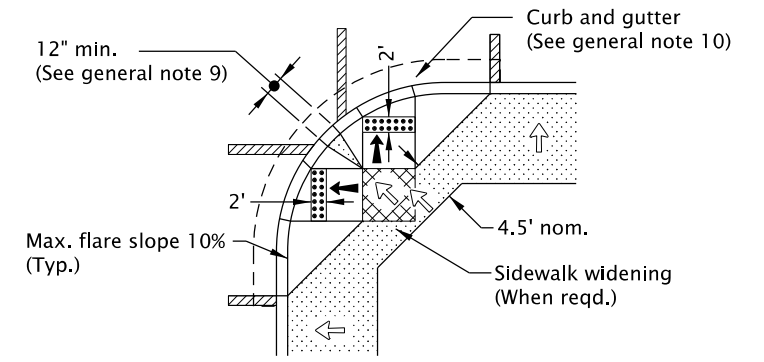
RD756



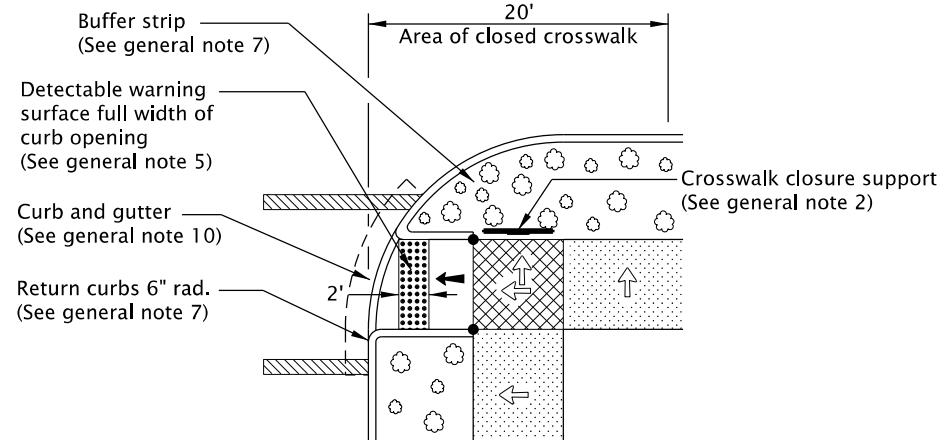
**CURB RAMPS WITH LANDSCAPED BUFFER STRIP**



**CURB RAMPS FOR WIDE SIDEWALKS**

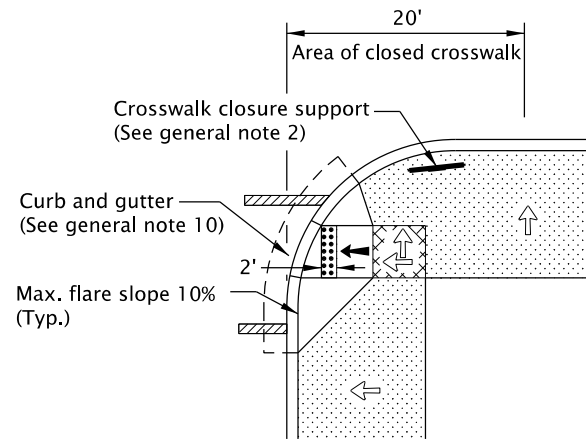


**CURB RAMPS FOR NARROW SIDEWALKS**



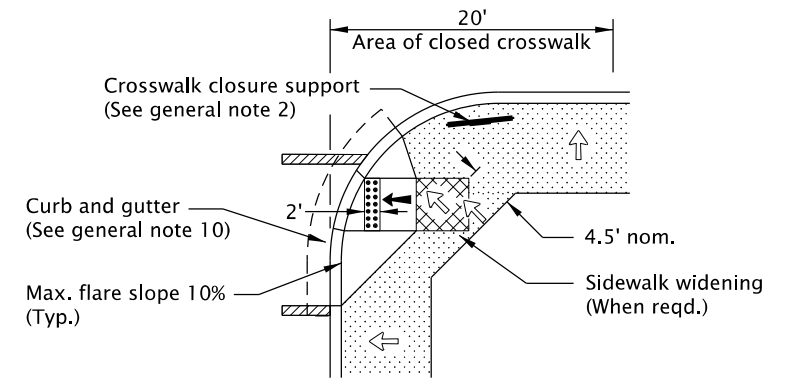
**CURB RAMPS WITH CROSSWALK CLOSURE**

**OPTION "A"**



**CURB RAMPS WITH CROSSWALK CLOSURE**

**OPTION "B"**



**CURB RAMPS WITH CROSSWALK CLOSURE**

**OPTION "C"**

<b>LEGEND:</b>			
	Marked or intended crossing location		Turning space When not constrained 4.5' x 4.5' (4' x 4' min. finished surface). When constrained 4.5' x 5.5' (4' x 5' min. finished surface with longer dimension in direction of pedestrian street crossing). For the purposes of this application, a max. 2.0% finished surface slope (for drainage) is considered level.
	Sidewalk		Slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
	Detectable warning surface		Slope 7.5% max. (Max. 8.3% finished surface slope)
			Zero curb exposure

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

1. Curb ramp details are based on ODOT applicable standards.
2. See project plans for details not shown.  
See Std. Dwgs. RD700 & RD701 for curbs.  
See Std. Dwgs. RD720 & RD721 for sidewalks.  
See Std. Dwgs. TM503 & TM530 for crosswalk marking, widths, etc.  
See Std. Dwg. RD755 for curb ramp details.  
See Std. Dwg. TM240 for crosswalk closure detail.  
See Traffic Standard Drawings for signal pole and pedestrian pedestal details.
3. Tooled joints are required at all curb ramp grade break lines.
4. Curb ramp slopes shown are relative to the true level horizon (Zero bubble).
5. Place detectable warning surface at the back of curb for a minimum depth of 2' at curb ramp that is adjacent to traffic. For details not shown, see Std. Dwgs. RD758 & RD759.
6. Check the gutter flow depth to assure that the design flood does not overtop the back of sidewalk. Place an inlet at upstream side or perform other approved design mitigation.
7. Return curb may be provided in lieu of flared slope only if protected from traverse travel by landscaping. Return curb shall not reduce width of approaching sidewalk.
8. Curb ramps for paths intersecting a roadway should be full width of path, excluding flares. When a curb ramp is used to provide bicycle access from a roadway to a sidewalk, the curb ramp should be 8' wide.
9. When 2 curb ramps are immediately adjacent as in Options B & C, the curb exposure (E) between the adjacent side flares may range between 3" and full design exposure.
10. On or along state highways, curb and gutter is required at curb ramps.
11. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.

CALC. BOOK NO.   N/A  

BASELINE REPORT DATE   21-JUN-2019  

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

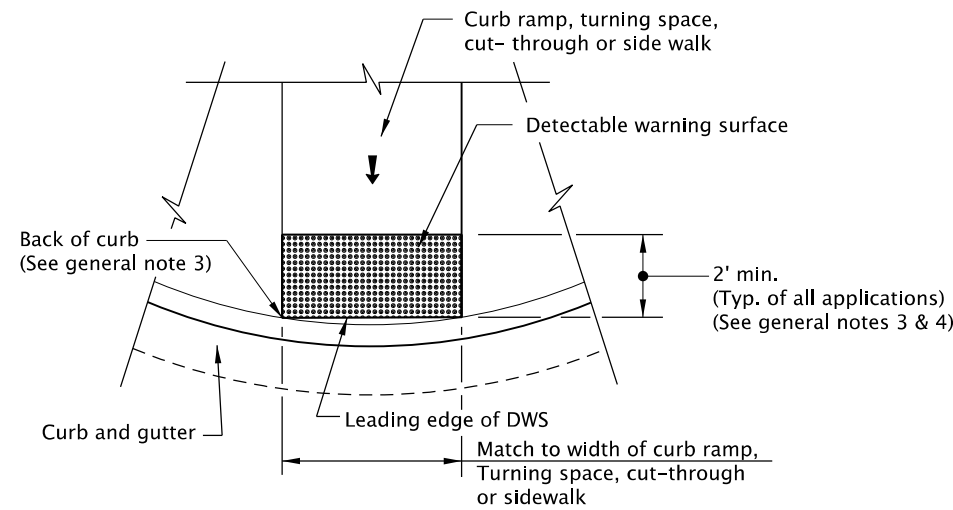
*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

**OREGON STANDARD DRAWINGS**  
**CURB RAMP LAYOUT OPTIONS**  
**SMALL RADII**

2018

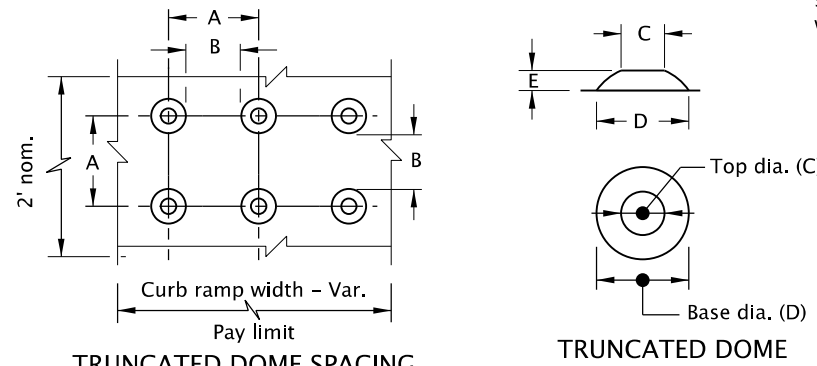
DATE	REVISION DESCRIPTION
01-2018	REVISED DETAILS, REVISED & ADDED NOTES
07-2018	REVISED DETAIL & NOTES
01-2019	ADDED DIAGRAM DETAIL, REVISED DETAILS & NOTES
06-2019	REVISED DETAIL & NOTES

rd758.dgn 21-JUN-2019



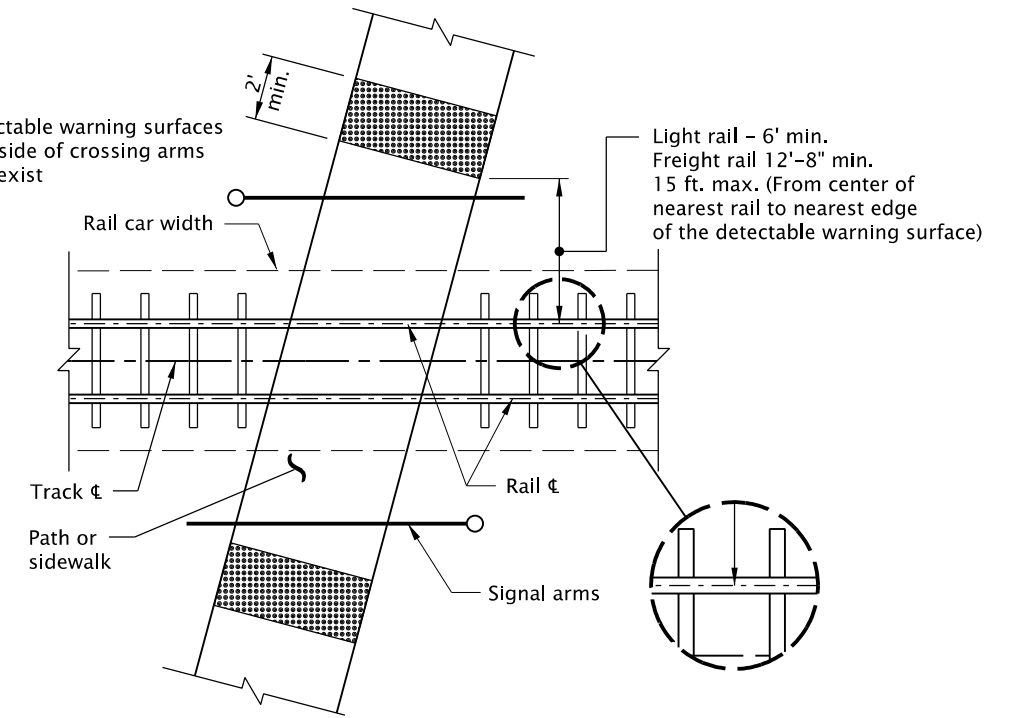
**DETECTABLE WARNING SURFACE DETAIL**

	A	B	C	D	E
MIN.	1.60"	0.65"	0.45"	0.90"	0.20"
MAX.	2.40"	--	0.91"	1.40"	0.20"

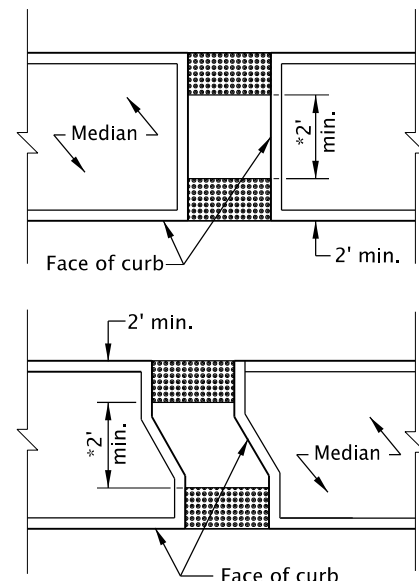


**TRUNCATED DOME DETAILS**

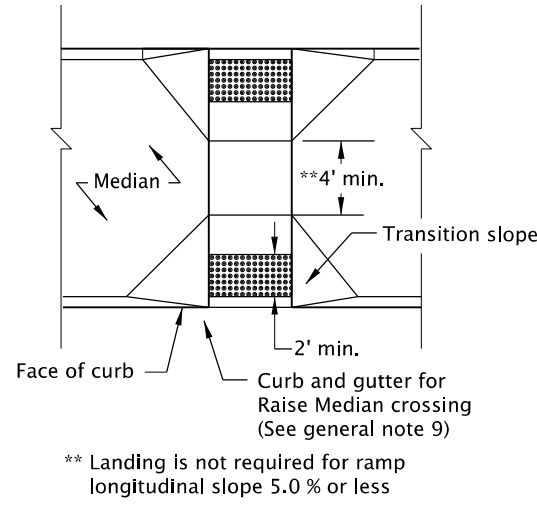
NOTE: Detectable warning surfaces shall be outside of crossing arms where they exist



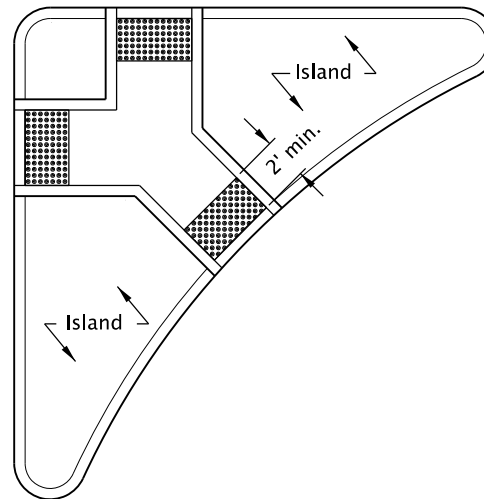
**AT-GRADE RAIL CROSSING**



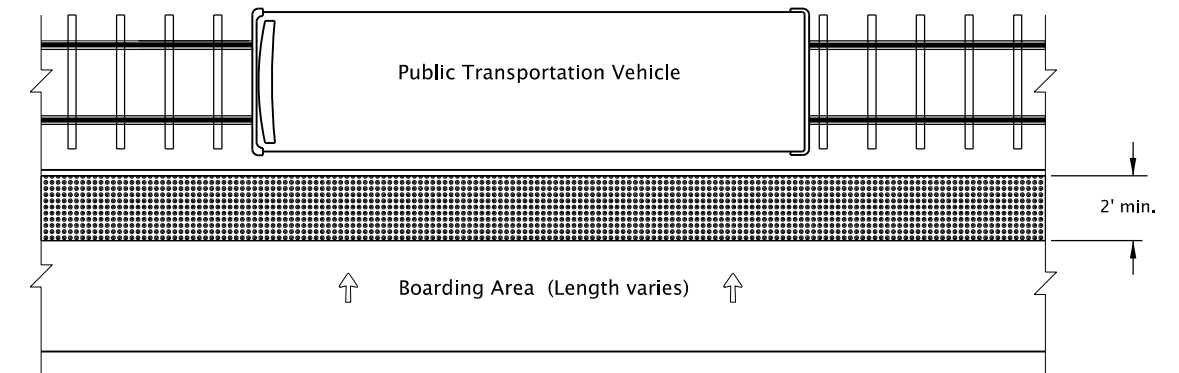
**RAISED MEDIAN ISLAND**



**RAISED MEDIAN**  
(P.C. Conc. surface shown)



**RAISED RIGHT TURN CHANNELIZATION ISLAND**



**PUBLIC TRANSPORTATION PLATFORM**  
(See general note 6)

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

- Detectable warning surface details & locations are based on ODOT applicable Standards.
- See project plans for details not shown. See Std. Dwgs. RD700 & RD701 for curbs. See Std. Dwgs. RD720 & RD721 for sidewalks. See Std. Dwgs. TM503 & TM530 for crosswalk markings, widths, etc. See Std. Dwgs. RD705 & RD710 for islands.
- The detectable warning surface shall extend the full width of the curb ramp, or other roadway entrance as applicable. A gap of up to 2 inches on each side of the detectable warning surface is permitted (Measured at the leading corners of the detectable warning surface panel).
- Detectable warning surface shall be placed at the back of curb for a minimum depth of 2 ft. at curb ramps that adjacent to traffic. Detectable warning surface may be radial or rectangular, but must comply with the truncated dome size and spacing standards. Detectable warning surface may be cut to meet necessary shape as shown in plans. Color to be safety yellow if no color specified in construction note. For detectable warning surface on or along state highway, alternative colors must be approved.

- Detectable warning surface shall be used in the following locations:
  - Curb ramps at street crossings (See Std. Dwgs. RD755, RD756, & RD757).
  - Crossing islands (Accessible Route Islands), (See Std. Dwg. RD710).
  - Rail crossings (See detail).
- Where public transportation stations (rail, bus, etc.) use platform boarding, detectable warning surface shall be placed along the full edge length of the station, when not protected by platform screens or guards.
- Detectable warning surface shall not be used on the following locations:
  - End of sidewalk transitions that are not at a crosswalk (See Std. Dwg. RD754).
  - Driveways, unless constructed with curb return. (See Std. Dwgs. RD725, RD730, RD735, RD740, RD745, & RD750).
  - Parking lots.
- Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
- Detectable warning surfaces shall be separated by a 2.0 ft minimum length of walkway without detectable warnings. Where the island has no curb, the detectable warning surface shall be placed at the edge of roadway.

	Detectable warning surface		Slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)
	Slope 7.5% max. (Max. 8.3% finished surface slope)		

CALC. BOOK NO. <u>N/A</u>	BASILINE REPORT DATE <u>21-JUN-2019</u>
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NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

**OREGON STANDARD DRAWINGS  
DETECTABLE WARNING SURFACE  
DETAILS & PLACEMENT  
LOCATIONS**

2018

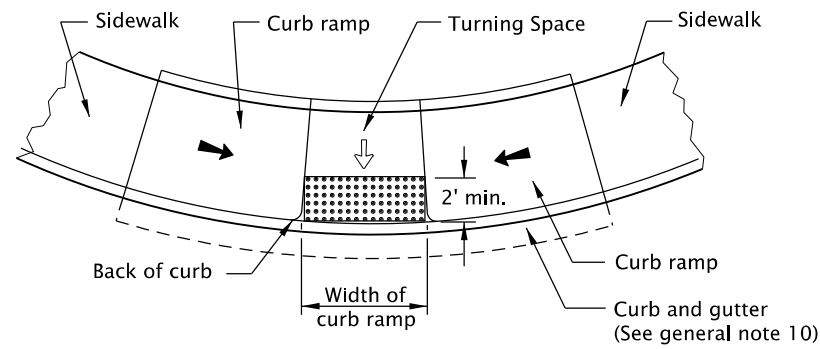
DATE	REVISION	DESCRIPTION
09-2018	REVISED DETAILS & NOTES	
01-2019	REVISED DETAILS & NOTES	
06-2019	REVISED NOTE	

*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.*

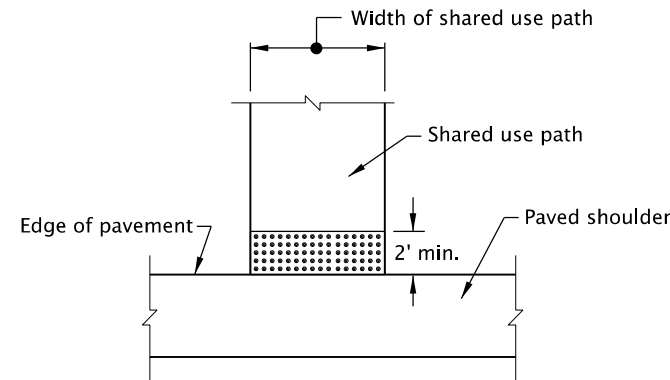
RD758

rd759.dgn 21-JUN-2019

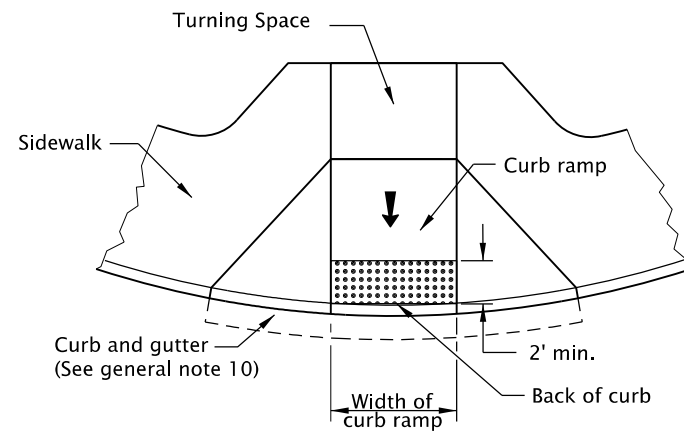
RD759



**PARALLEL CURB RAMP**

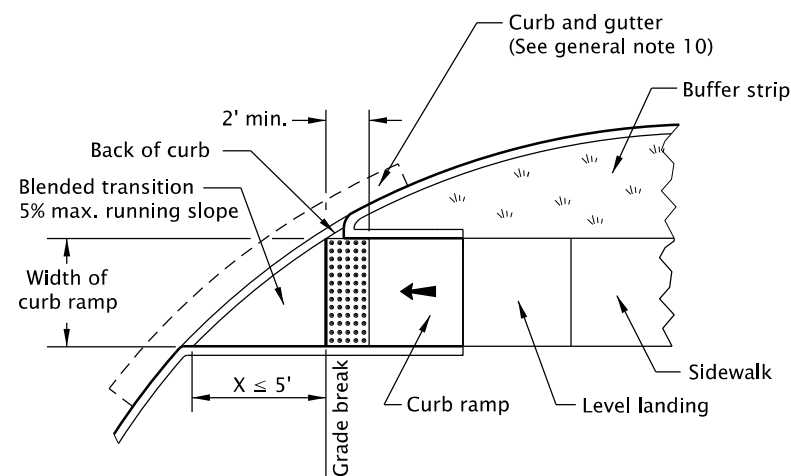


**SHARED-USE PATH CONNECTION**



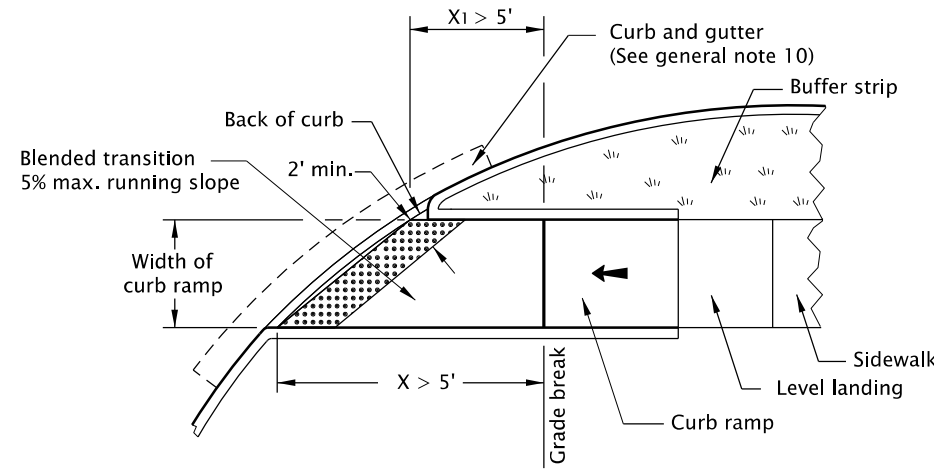
**PERPENDICULAR CURB RAMP  
GRADE BREAK IN FRONT OF CURB**

(Detectable warning surface shall be placed in the lower 2' at the back of curb ramp that is adjacent to traffic)



**CURB RAMP CROSSING  
GRADE BREAK ≤ 5 FT. FROM BACK OF CURB**

(Detectable warning surface shall be placed on the bottom of the curb ramp directly above the grade break)






**CURB RAMP CROSSING  
GRADE BREAK (X or X1) > 5 FT. FROM BACK OF CURB**

(Detectable warning surface shall be placed in the lower 2' at the back of curb ramp that is adjacent to traffic)

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

- Detectable warning surface details & locations are based on ODOT applicable Standards.
- See project plans for details not shown.  
See Std. Dwgs. RD700 & RD701 for curbs.  
See Std. Dwg. RD720 for sidewalks.  
See Std. Dwgs. TM503 & TM530 for crosswalk markings, widths, etc.  
See Std. Dwgs. RD705 & RD710 for islands.
- The Detectable Warning Surface shall extend the full width of the curb ramp, or other roadway entrance as applicable. A gap of up to 2 inches on each side of the Detectable warning surface is permitted (Measured at the leading corners of the detectable warning surface panel).
- Detectable warning surface shall be placed at the back of curb for a minimum depth of 2 ft. at curb ramps that adjacent to traffic. Detectable warning surface may be radial or rectangular, but must comply with the truncated dome size and spacing standards. Detectable warning surface may be cut to meet necessary shape as shown in plans. Color to be safety yellow if no color specified in construction note. For detectable warning surface on or along state highway, alternative colors must be approved.
- Detectable warning surface shall be used in the following locations:
  - Curb ramps (See Std. Dwgs. RD755, RD756, & RD757).
  - Crossing islands (Accessible Route Islands), (See Std. Dwg. RD710).
  - Rail crossings (See Std. Dwg. RD758).
- Where public transportation stations (rail, bus, etc.) use platform boarding, detectable warning surface shall be placed along the full edge length of the station, when not protected by platform screens or guards (See Std. Dwg. RD758).
- Detectable warning surface shall not be used on the following locations:
  - End of sidewalk transitions that are not at a crosswalk, (See Std. Dwg. RD754).
  - Driveways, unless constructed with curb return, (See Std. Dwgs. RD725, RD730, RD735, RD740, RD745, & RD750).
  - Parking lots.
- Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
- Where no curb is present, the detectable warning surface shall be placed at the edge of the roadway.
- On or along state highways, curb and gutter is required at curb ramps.
- Detectable warning surface placement for perpendicular ramps vary as shown.

-  Detectable warning surface
-  Slope 1.5% max.  
(Max. 2.0% finished surface slope)
-  Slope 7.5% max.  
(Max. 8.3% finished surface slope)

CALC. BOOK NO. N/A BASELINE REPORT DATE 21-JUN-2019

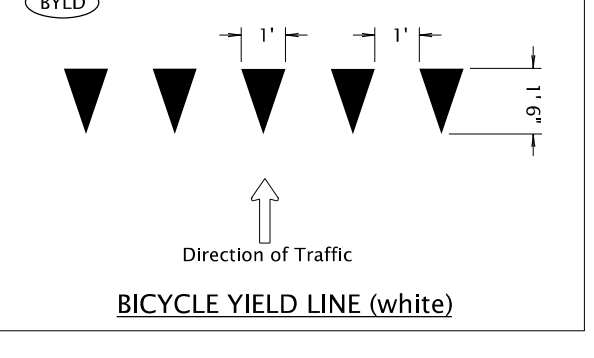
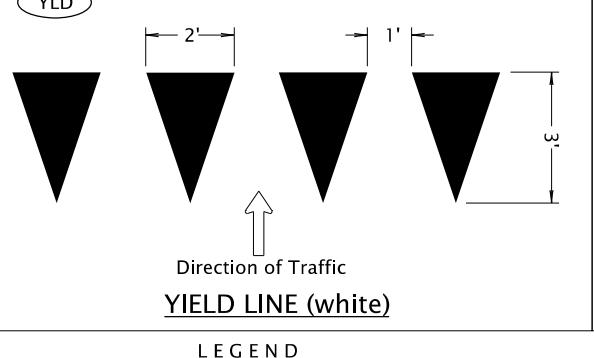
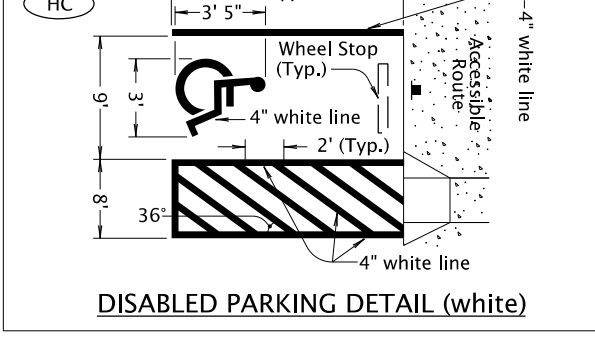
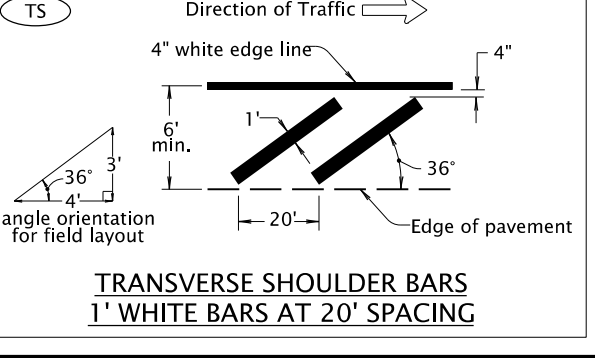
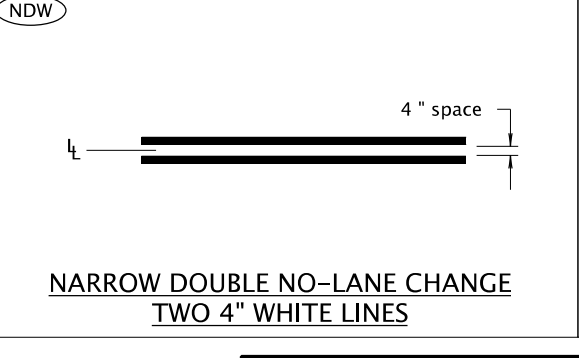
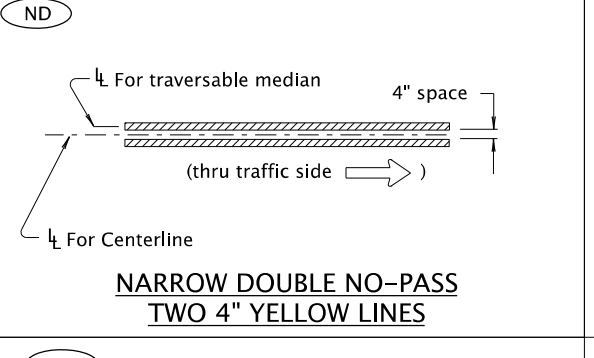
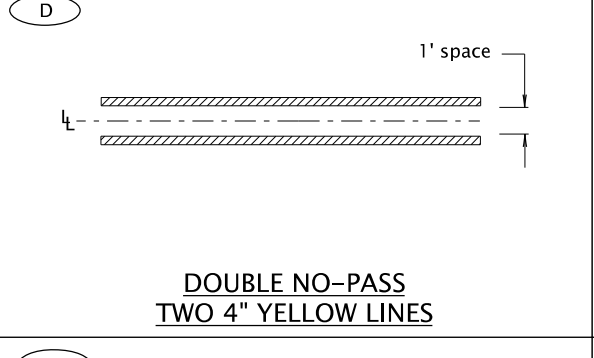
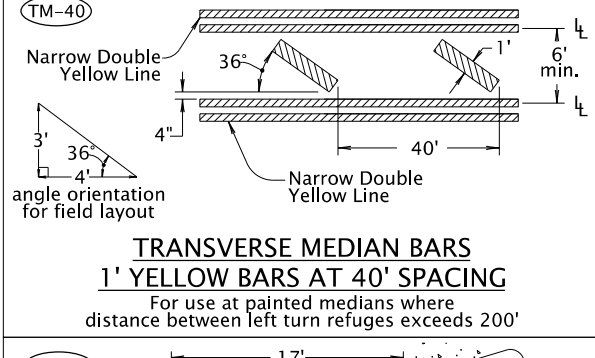
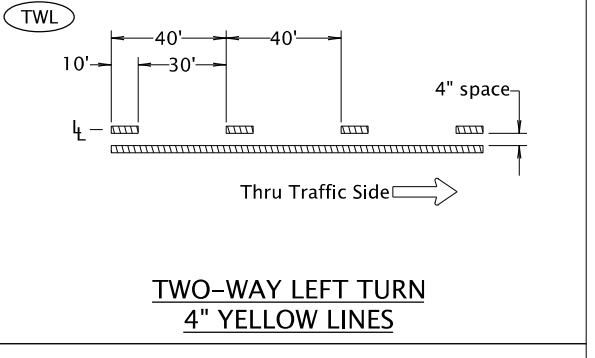
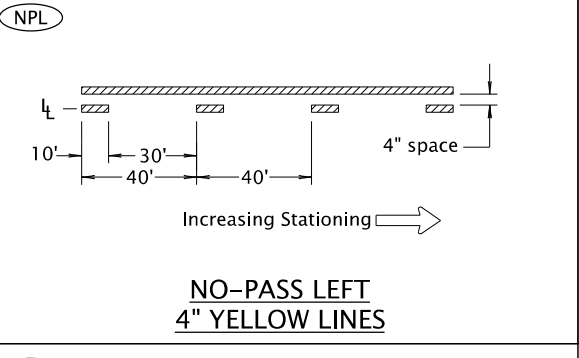
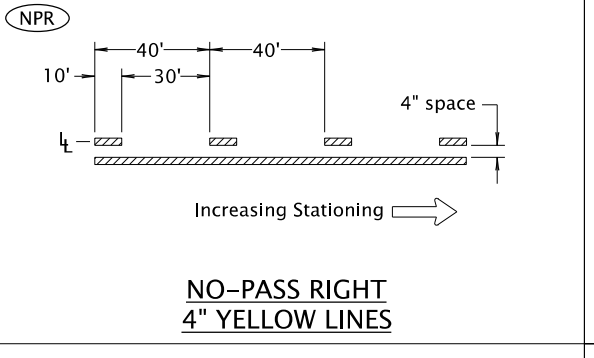
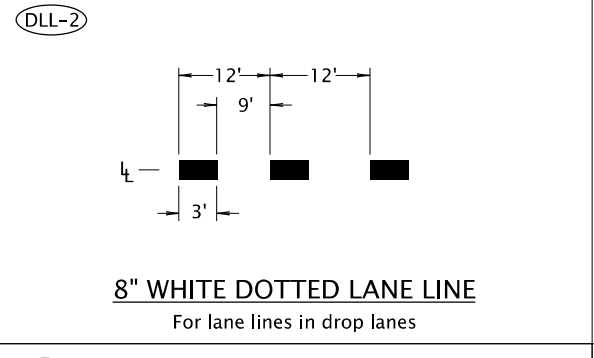
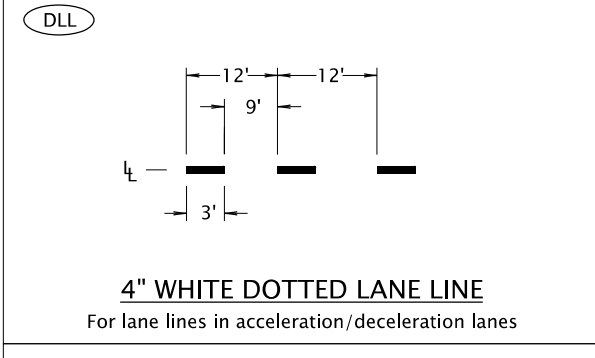
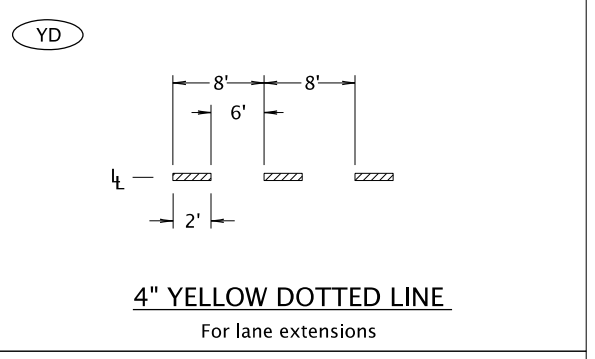
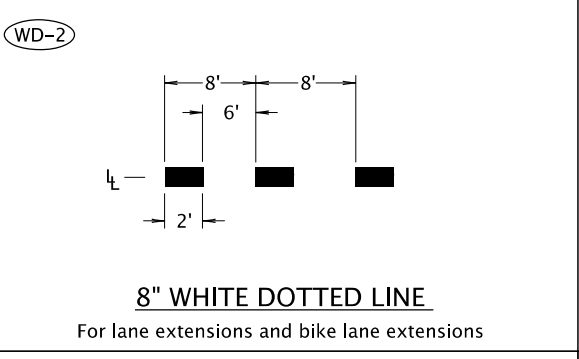
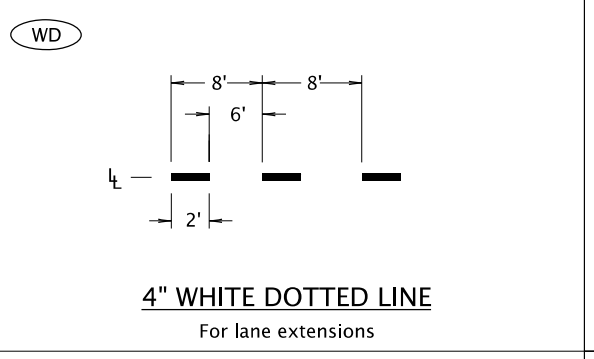
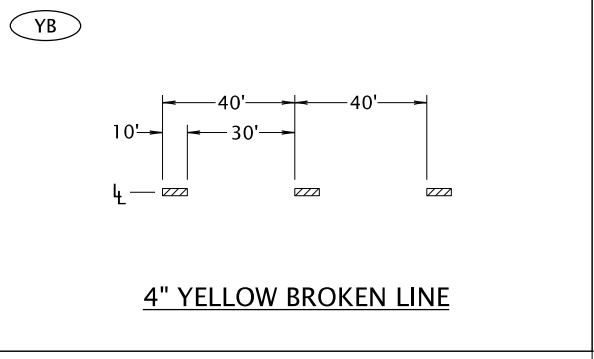
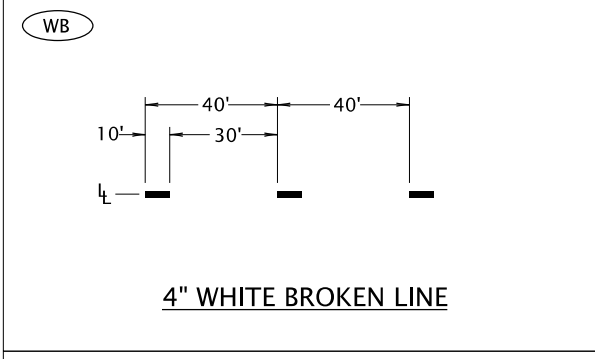
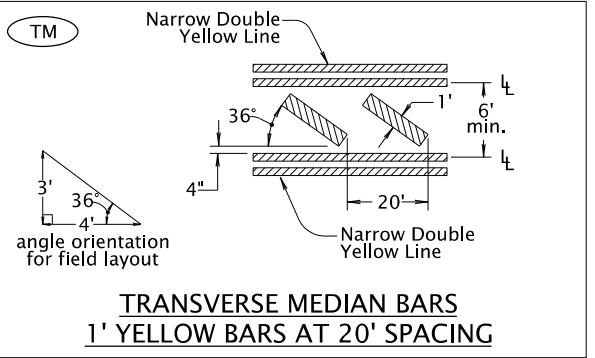
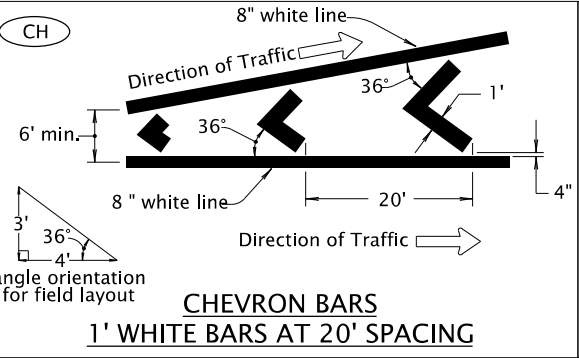
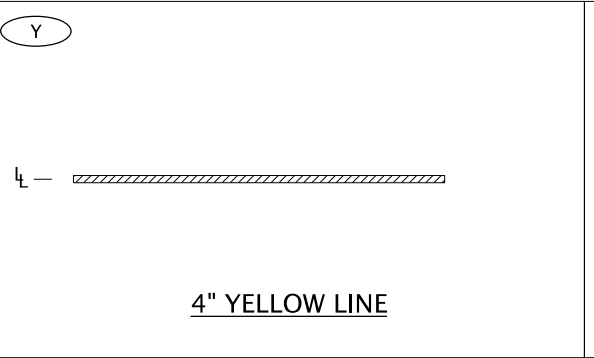
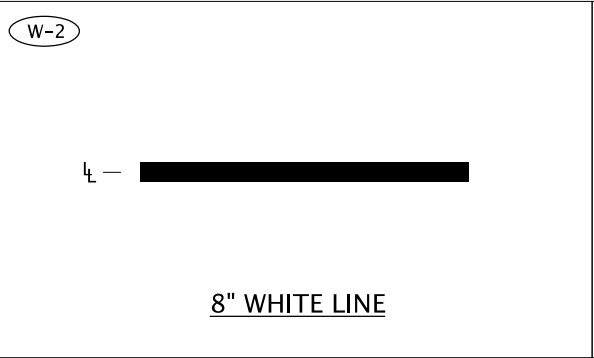
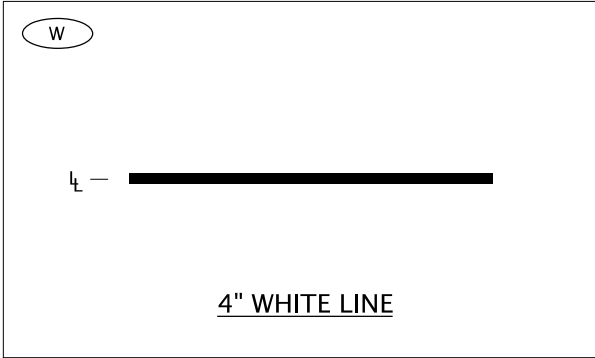
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

**OREGON STANDARD DRAWINGS  
DETECTABLE WARNING SURFACE  
DETAILS & PLACEMENT  
LOCATIONS**

2018

DATE	REVISION DESCRIPTION
07-2018	REPLACED DRAWING TITLE, REVISED DETAILS & NOTES
09-2018	REVISED DETAIL & NOTES
01-2019	REVISED DETAIL & NOTES
06-2019	REVISED DETAIL & 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.*



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

BASELINE REPORT DATE \_\_\_ 07/01/2015 \_\_\_

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

**OREGON STANDARD DRAWINGS**

**PAVEMENT MARKING STANDARD DETAIL BLOCKS**

2018

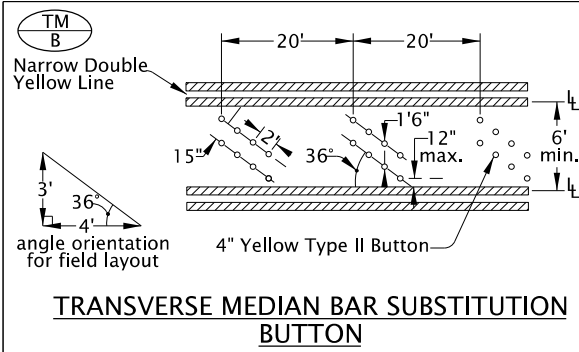
DATE	REVISION	DESCRIPTION

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.

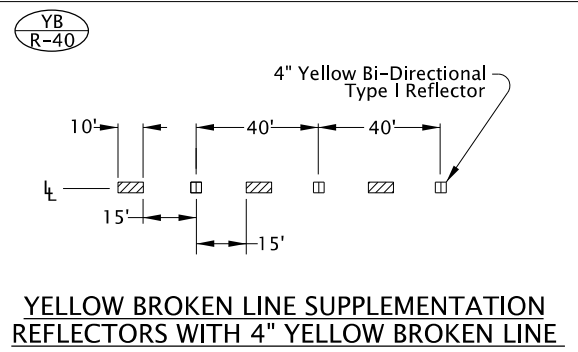
← Direction Of Traffic, Increasing Stationing Or Thru Traffic Side

⊥ Lane line dimensions are shown on the striping plans

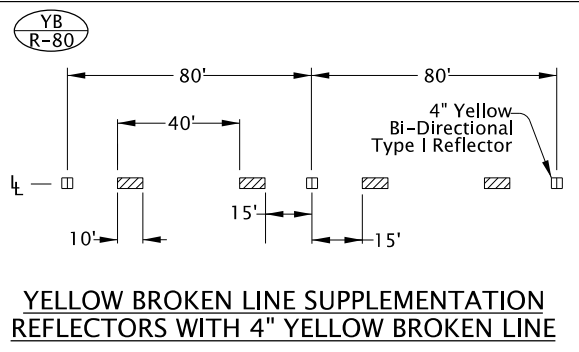
LEGEND



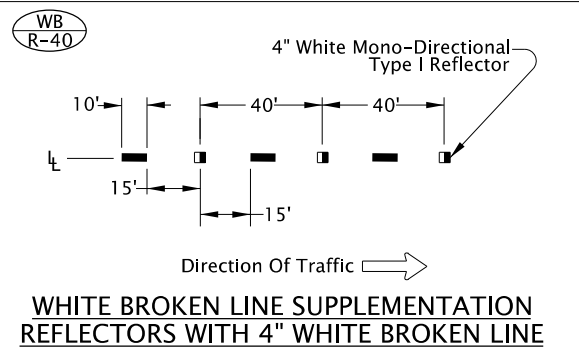
**TRANSVERSE MEDIAN BAR SUBSTITUTION BUTTON**



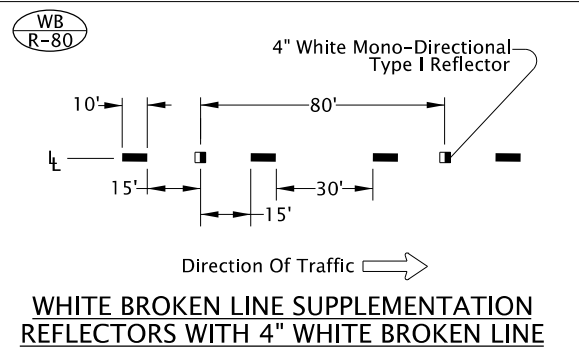
**YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE**



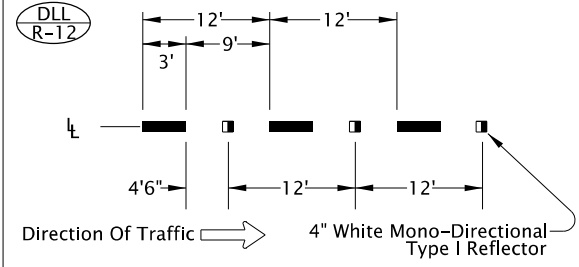
**YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE**



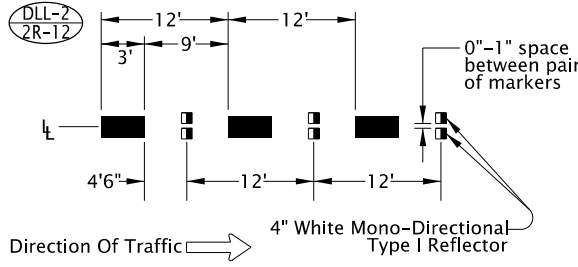
**WHITE BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE**



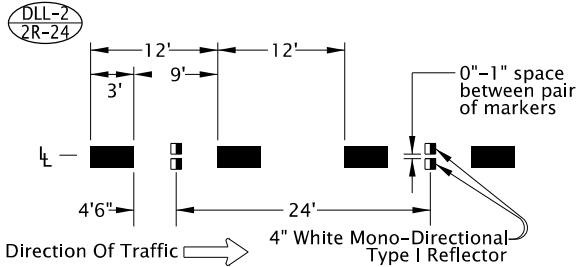
**WHITE BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE**



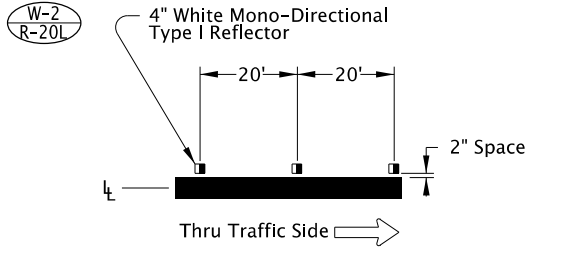
**WHITE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE DOTTED LANE LINE**



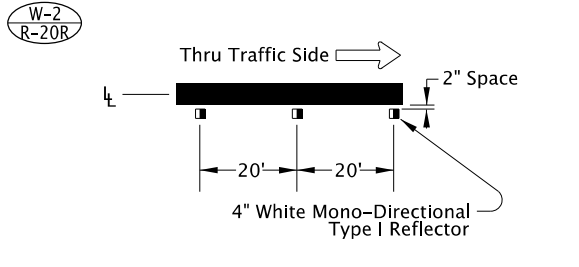
**WIDE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE DOTTED LANE LINE**



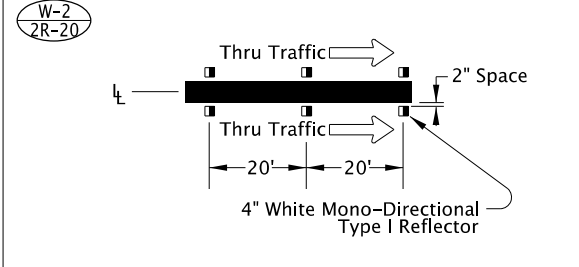
**WIDE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE DOTTED LANE LINE**



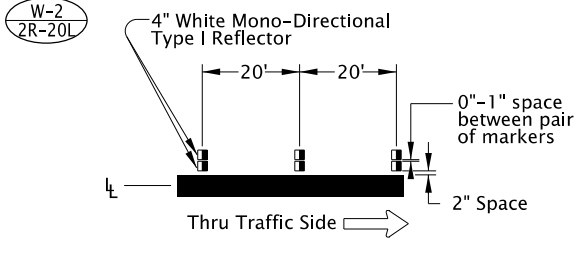
**CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE**



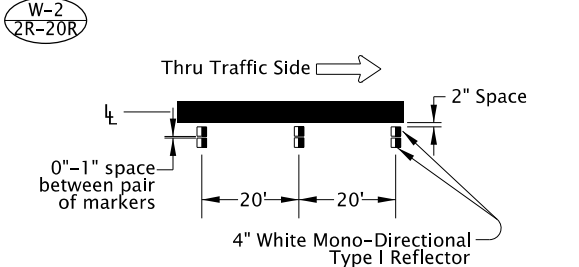
**CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE**



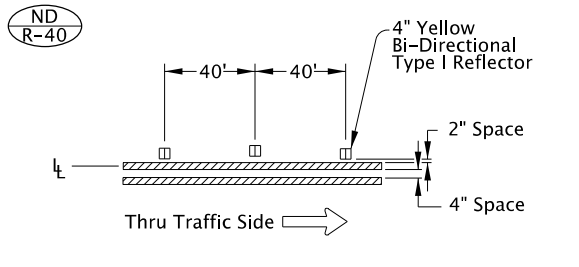
**CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE**



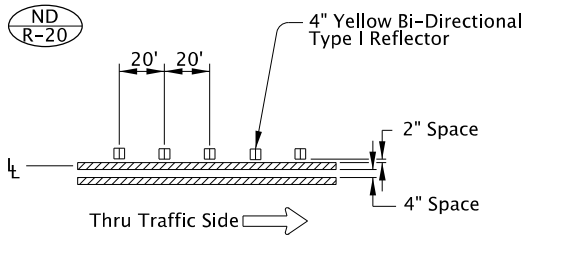
**CHANNELIZING LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE LINE**



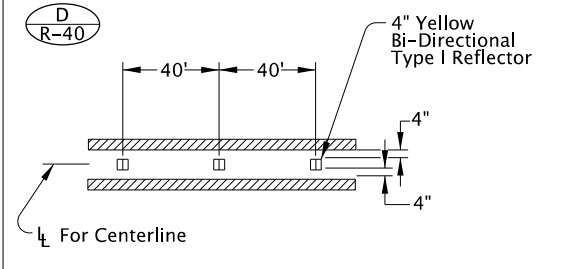
**CHANNELIZING LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE LINE**



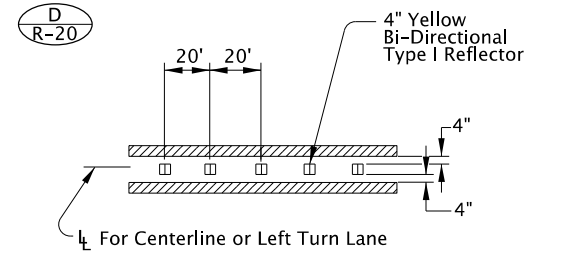
**NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES**



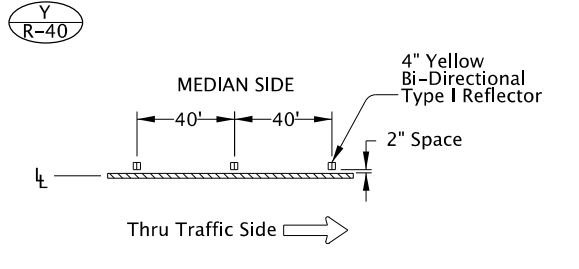
**NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES**



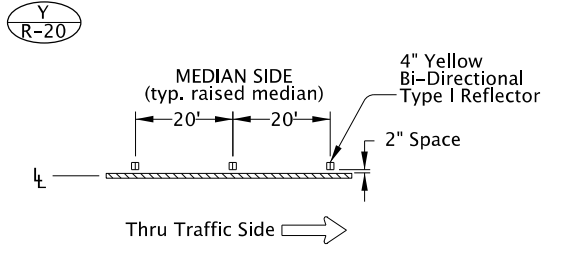
**DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES**



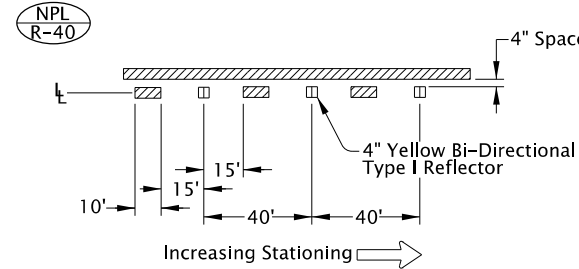
**DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES**



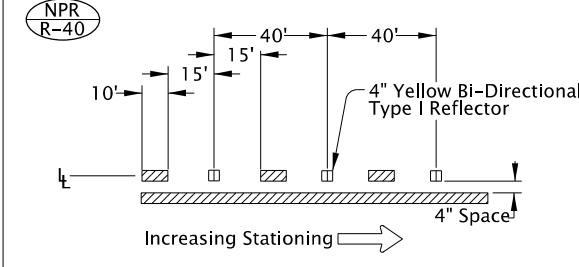
**YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE**



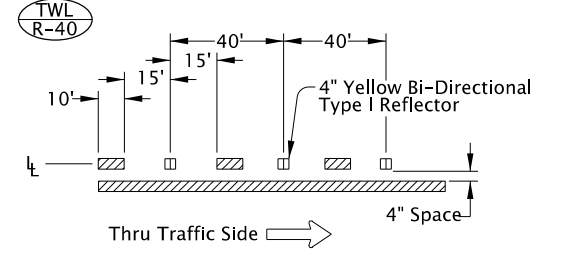
**YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE**



**NO-PASS LEFT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES**



**NO-PASS RIGHT POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES**



**TWO WAY LEFT TURN POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINES**

General note:  
1) Surface mount Raised Pavement Markers (RPMs) unless otherwise specified.

- LEGEND**
- ← Direction Of Travel, Increasing Stationing or Thru Traffic Side
  - ⊥ Lane line dimensions are shown on the striping plans
  - Mono-directional crystal white marker reflects white to the left in this symbol
  - Bi-directional yellow marker reflects yellow both left and right in this symbol

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

*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.*

BASELINE REPORT DATE \_\_\_ 07/01/2015 \_\_\_

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

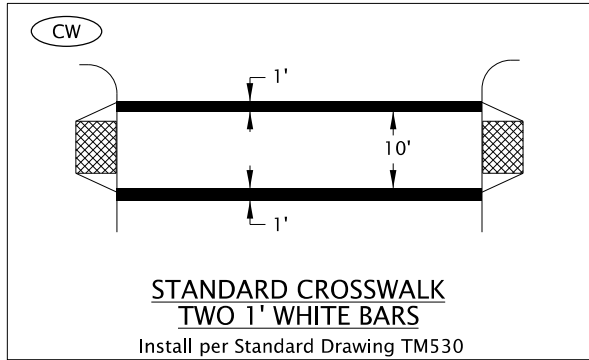
**OREGON STANDARD DRAWINGS**

**PAVEMENT MARKING STANDARD DETAIL BLOCKS**

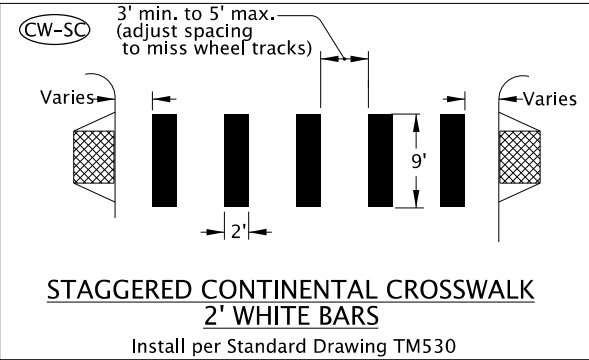
2018

DATE	REVISION DESCRIPTION

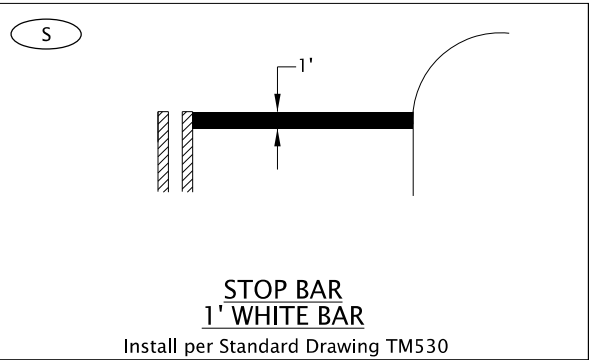




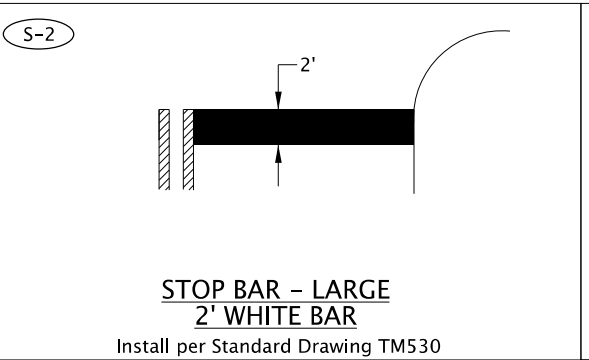
**STANDARD CROSSWALK  
TWO 1' WHITE BARS**  
Install per Standard Drawing TM530



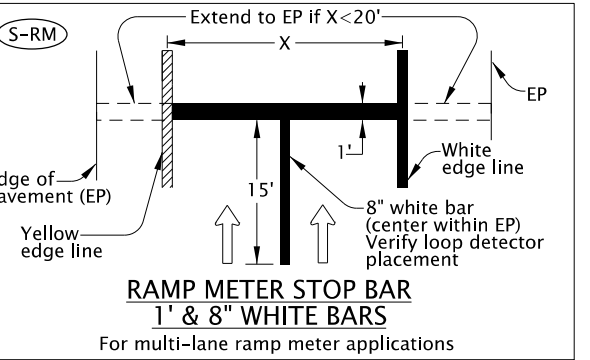
**STAGGERED CONTINENTAL CROSSWALK  
2' WHITE BARS**  
Install per Standard Drawing TM530



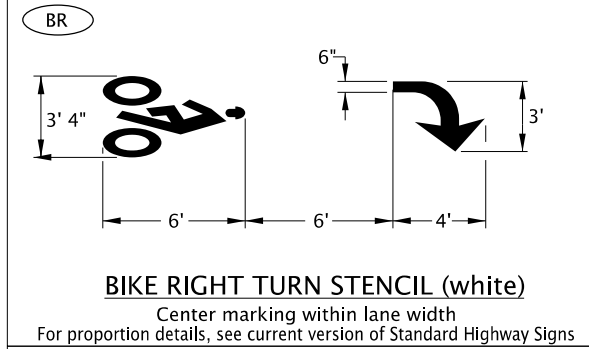
**STOP BAR  
1' WHITE BAR**  
Install per Standard Drawing TM530



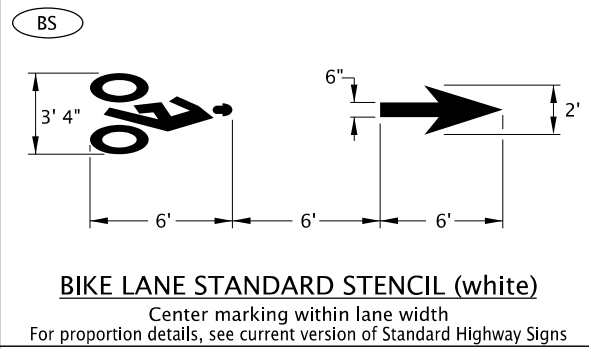
**STOP BAR - LARGE  
2' WHITE BAR**  
Install per Standard Drawing TM530



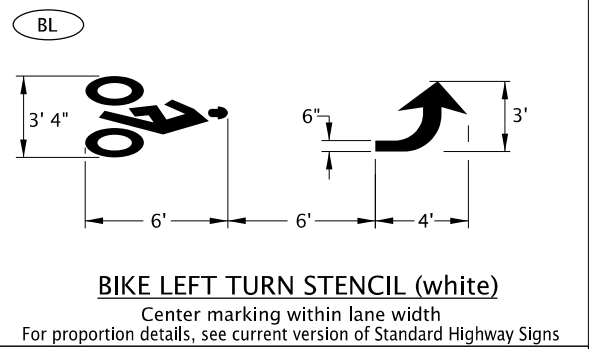
**RAMP METER STOP BAR  
1' & 8" WHITE BARS**  
For multi-lane ramp meter applications



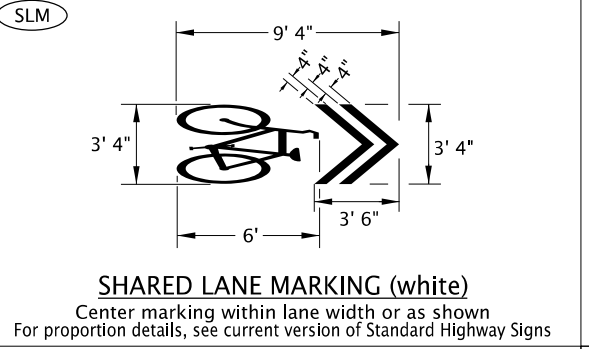
**BIKE RIGHT TURN STENCIL (white)**  
Center marking within lane width  
For proportion details, see current version of Standard Highway Signs



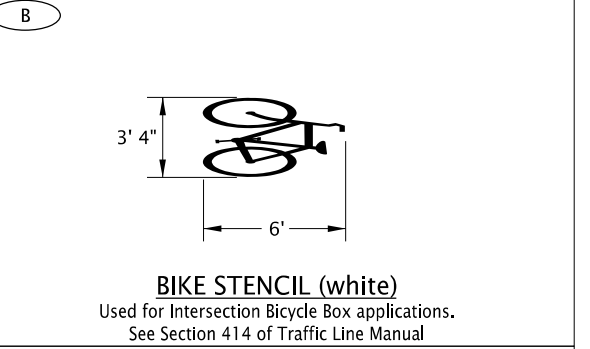
**BIKE LANE STANDARD STENCIL (white)**  
Center marking within lane width  
For proportion details, see current version of Standard Highway Signs



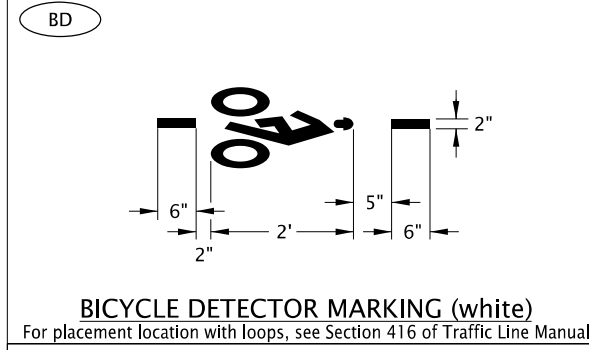
**BIKE LEFT TURN STENCIL (white)**  
Center marking within lane width  
For proportion details, see current version of Standard Highway Signs



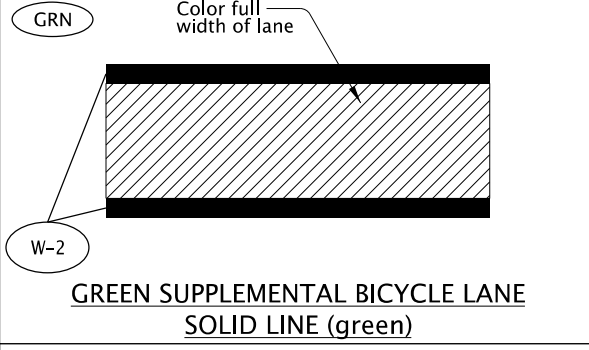
**SHARED LANE MARKING (white)**  
Center marking within lane width or as shown  
For proportion details, see current version of Standard Highway Signs



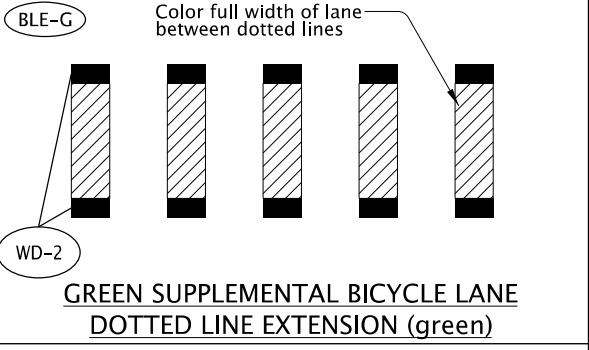
**BIKE STENCIL (white)**  
Used for Intersection Bicycle Box applications.  
See Section 414 of Traffic Line Manual



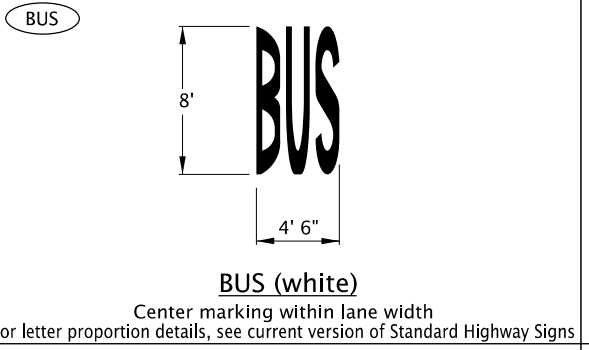
**BICYCLE DETECTOR MARKING (white)**  
For placement location with loops, see Section 416 of Traffic Line Manual



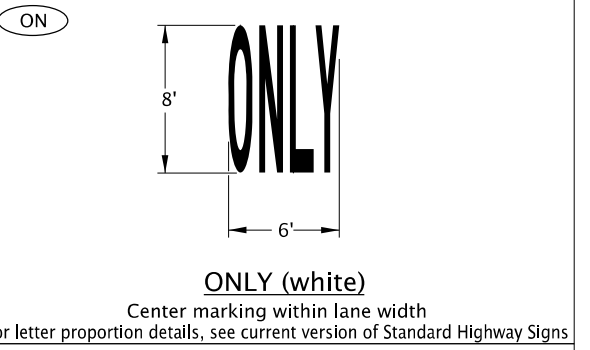
**GREEN SUPPLEMENTAL BICYCLE LANE  
SOLID LINE (green)**



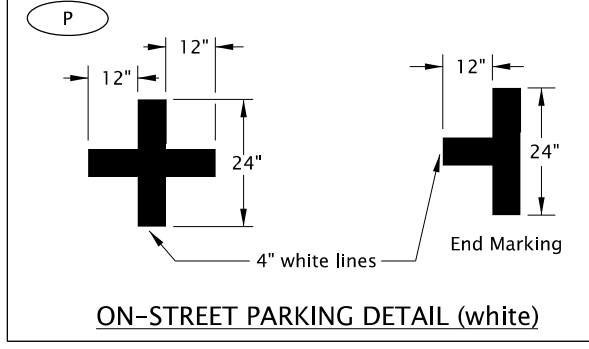
**GREEN SUPPLEMENTAL BICYCLE LANE  
DOTTED LINE EXTENSION (green)**



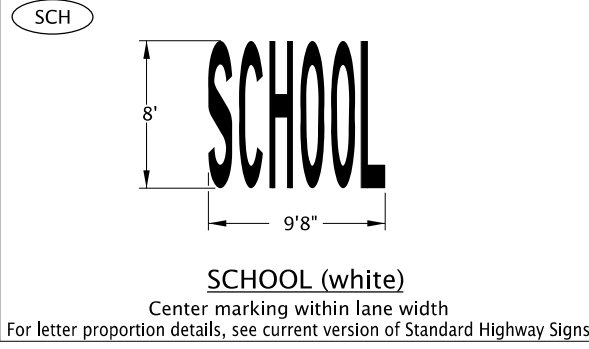
**BUS (white)**  
Center marking within lane width  
For letter proportion details, see current version of Standard Highway Signs



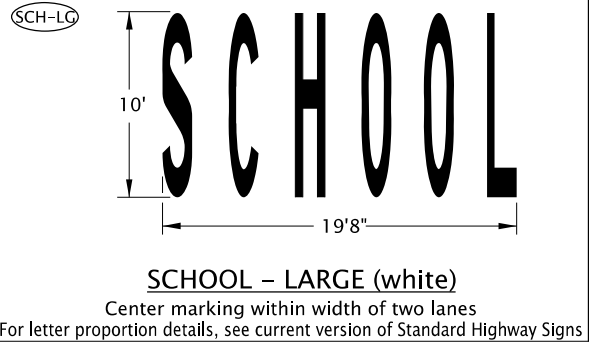
**ONLY (white)**  
Center marking within lane width  
For letter proportion details, see current version of Standard Highway Signs



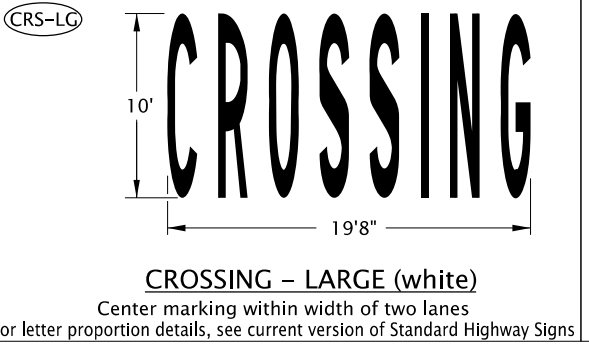
**ON-STREET PARKING DETAIL (white)**



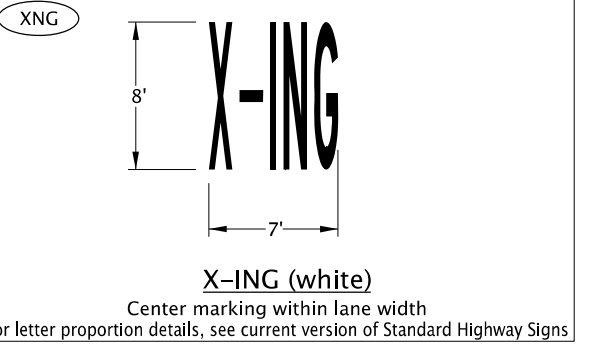
**SCHOOL (white)**  
Center marking within lane width  
For letter proportion details, see current version of Standard Highway Signs



**SCHOOL - LARGE (white)**  
Center marking within width of two lanes  
For letter proportion details, see current version of Standard Highway Signs



**CROSSING - LARGE (white)**  
Center marking within width of two lanes  
For letter proportion details, see current version of Standard Highway Signs



**X-ING (white)**  
Center marking within lane width  
For letter proportion details, see current version of Standard Highway Signs

General Note:  
1. Arrow, letter, and bike symbol dimensions nominal.



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

BASELINE REPORT DATE \_\_\_ 07/01/2015 \_\_\_

*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.*

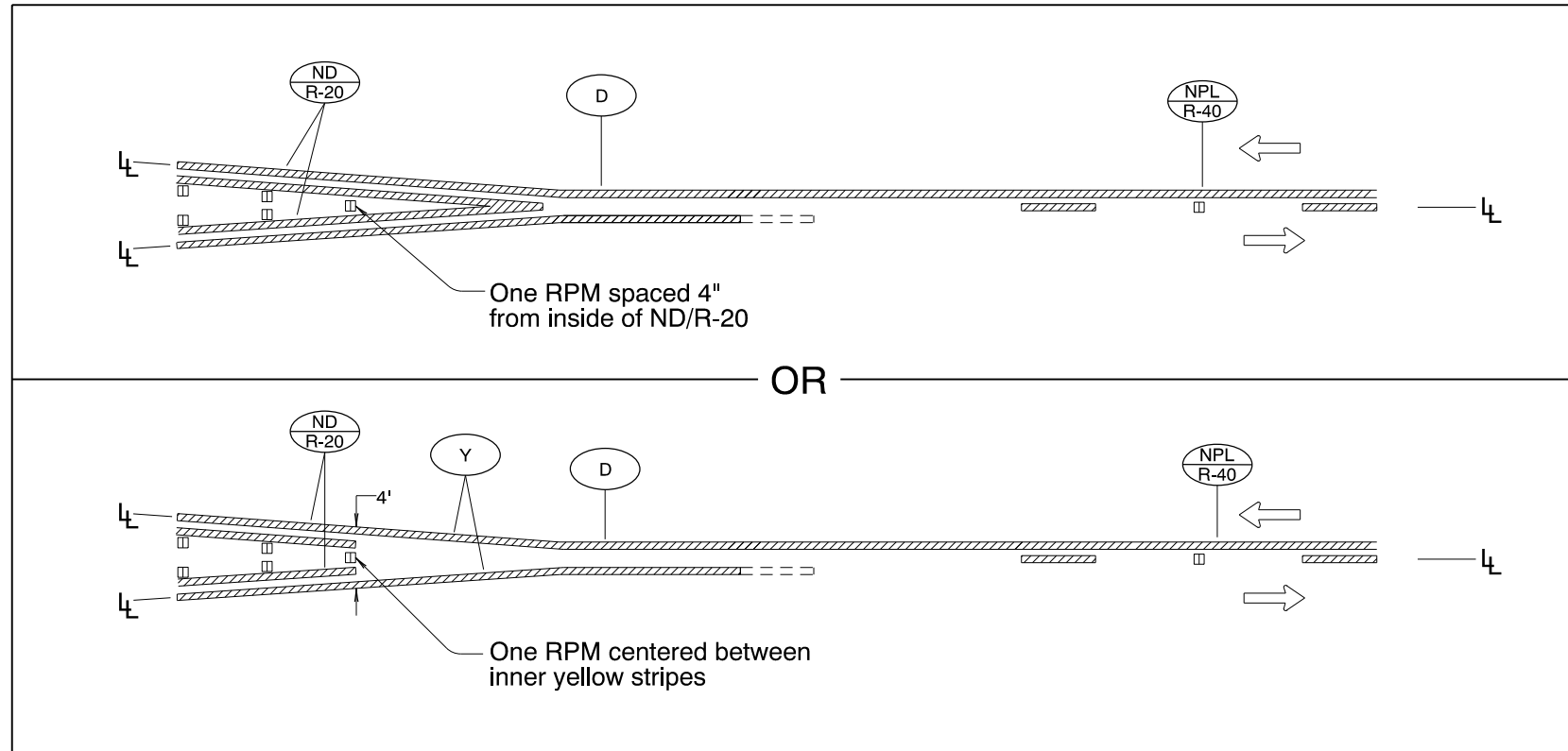
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

**OREGON STANDARD DRAWINGS**  
**PAVEMENT MARKING**  
**STANDARD DETAIL BLOCKS**

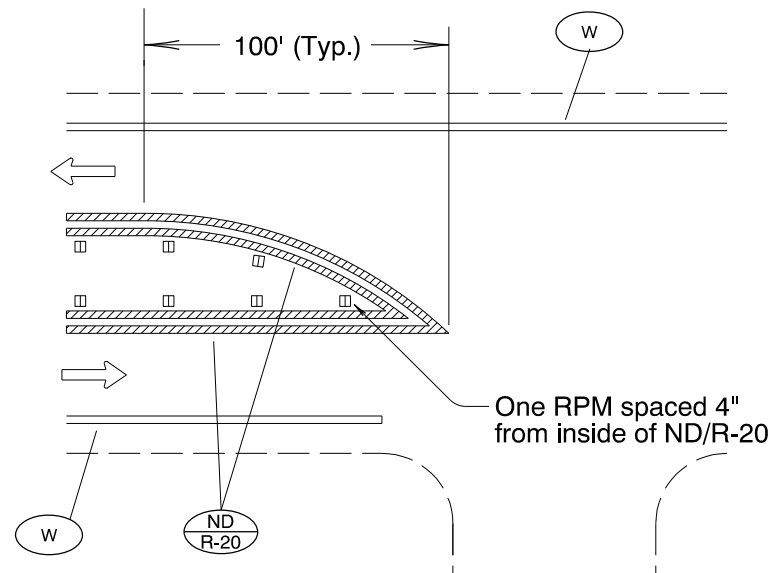
2018

DATE	REVISION DESCRIPTION

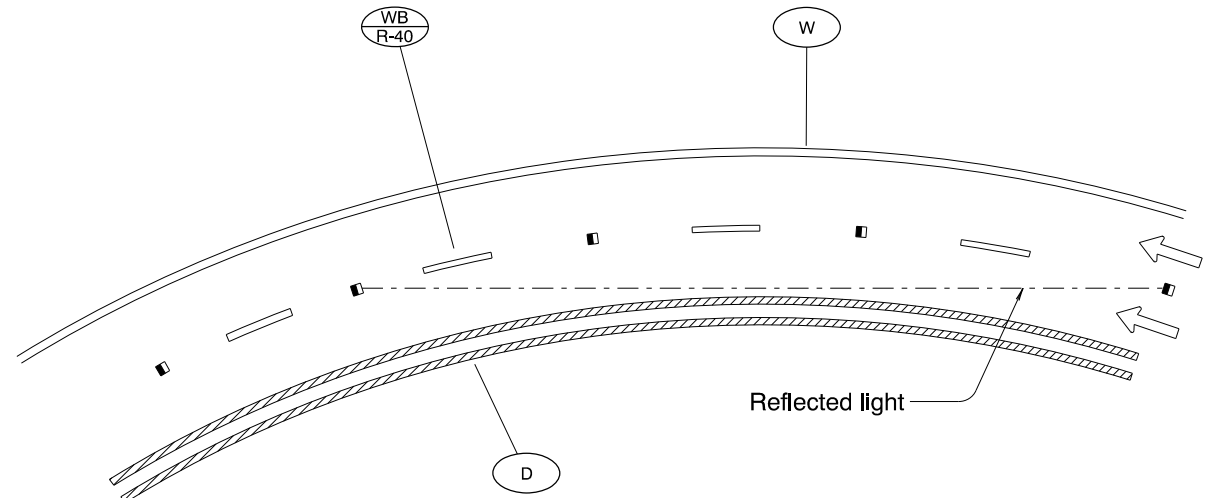
TM515.dgn 1-3-2017



**MEDIAN WIDTH TRANSITION**  
 (TWO NARROW DOUBLE YELLOW LINES TO ONE-DIRECTION NO-PASSING LINE)  
 (Refer to TM539 for additional details)

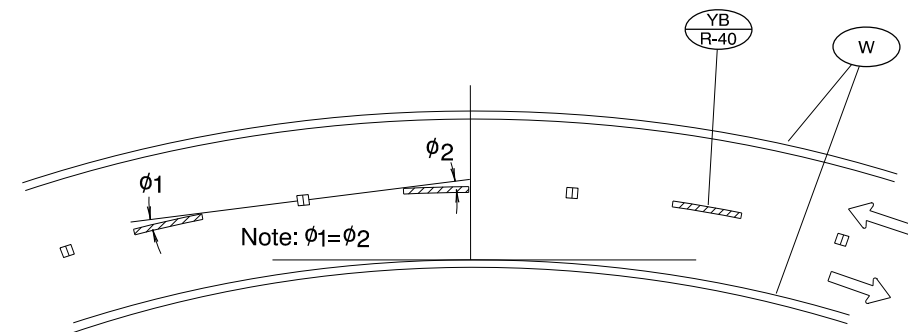


**MEDIAN BULLNOSE DETAIL**



**NOTE:**  
 On one way sections the marker shall be installed with the reflective surface aimed to direct the reflected light back three markers.

(a) PAVEMENT MARKER INSTALLATION FOR MONO-DIRECTIONAL RAISED PAVEMENT MARKERS



(b) PAVEMENT MARKER INSTALLATION FOR BI-DIRECTIONAL RAISED PAVEMENT MARKERS

**PAVEMENT MARKER INSTALLATION ON HORIZONTAL CURVES**

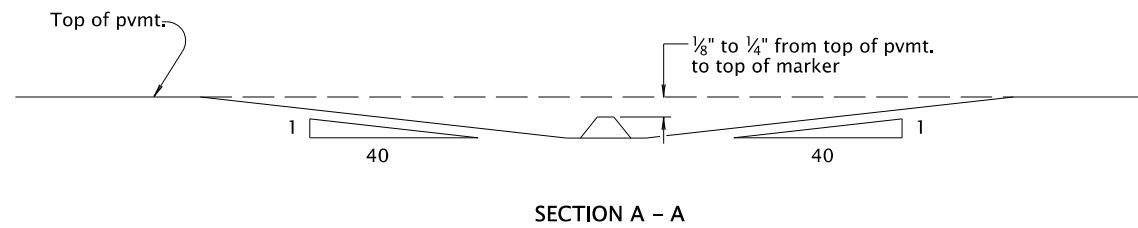
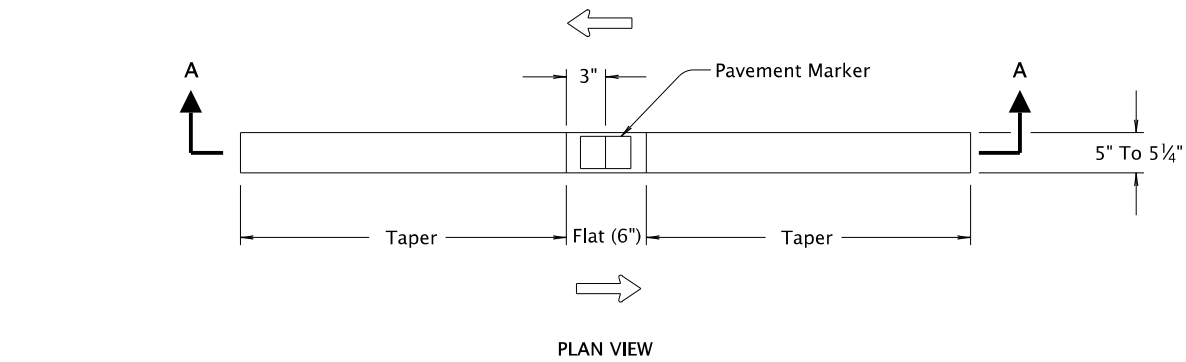
- LEGEND**
- Mono-Directional White (marker reflects white to left in this symbol)
  - Bi-Directional Yellow (marker reflects yellow to both the left and right in this symbol)
- Increasing stationing from left to right
- ← Direction of Travel
- ⊥ Lane line dimensions are shown on the striping plans.

To be accompanied by Standard Dwg. Nos. TM500 thru TM503

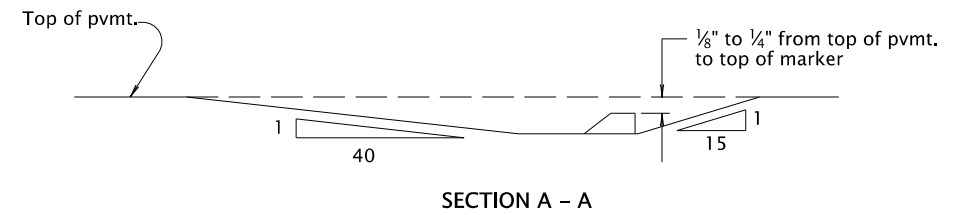
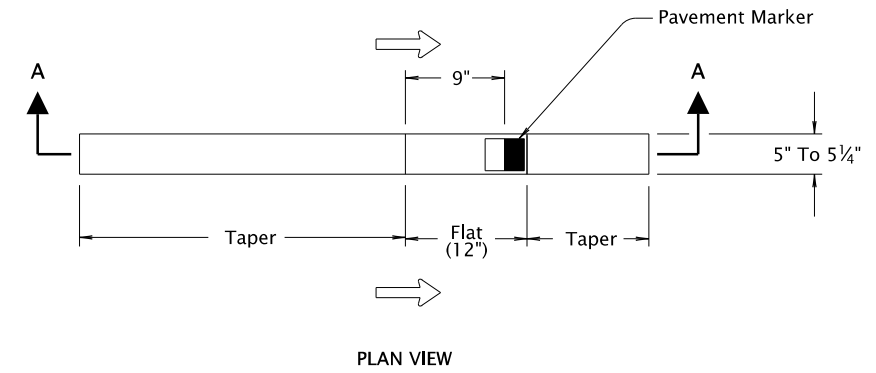
CALC. BOOK NO. N/A	BASELINE REPORT DATE July 1, 2015
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>PAVEMENT MARKERS</b>	
2018	
DATE	REVISION DESCRIPTION

*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.*

TM515



BI-DIRECTIONAL RECESSED PAVEMENT MARKER DETAIL



MONO-DIRECTIONAL RECESSED PAVEMENT MARKER DETAIL

LEGEND

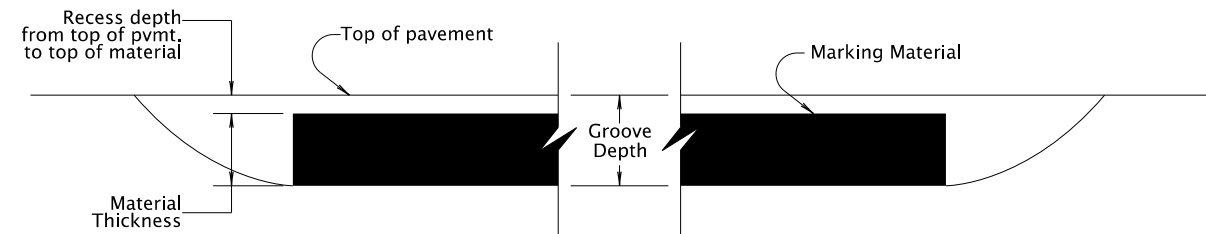
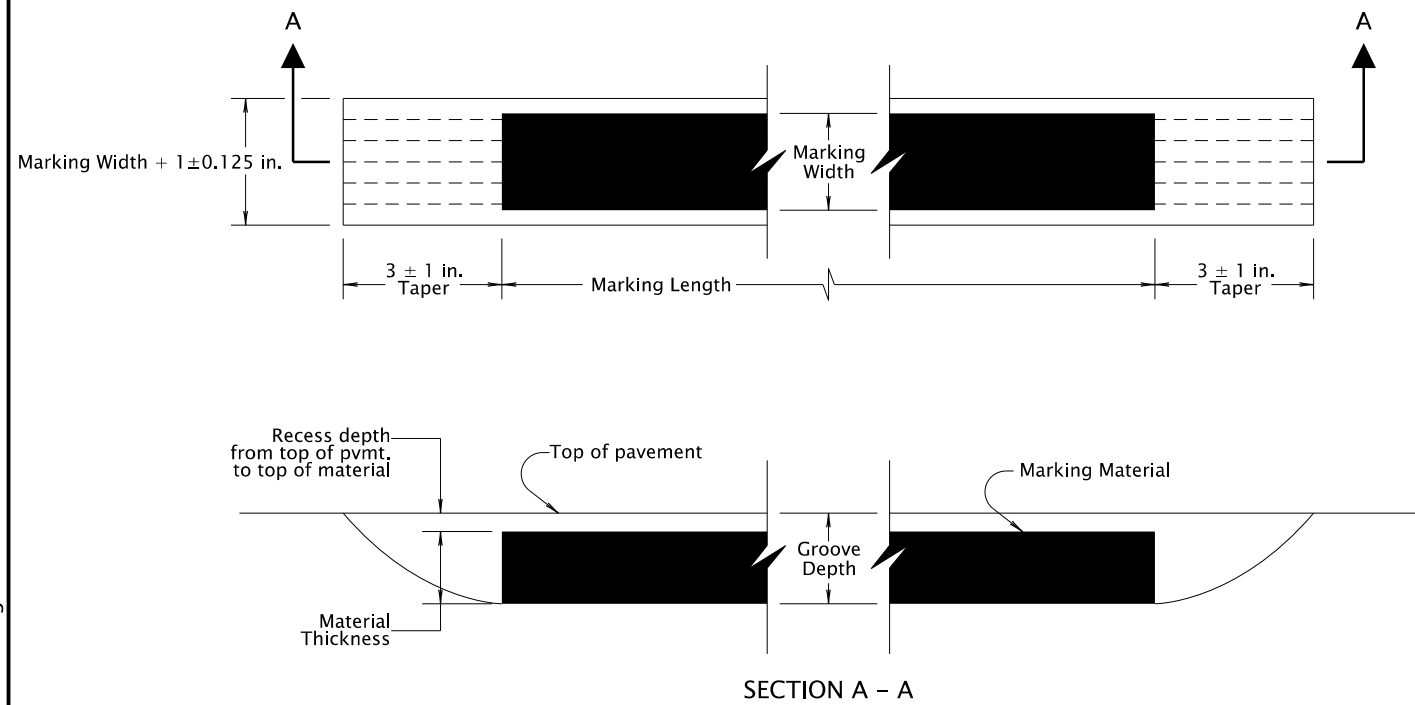
- ← Direction of Travel
- Bi-directional yellow marker reflects yellow both left and right in this symbol
- Mono-directional crystal white marker reflects white to the left in this symbol

To be accompanied by Standard Dwg. Nos. TM502 and TM515

CALC. BOOK NO. ___ N/A ___	BASELINE REPORT DATE ___ 07/01/2015 ___
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.	
<b>OREGON STANDARD DRAWINGS</b>	
<b>RECESSED PAVEMENT MARKERS</b>	
2018	
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.*

tm521.dgn 07-10-2019

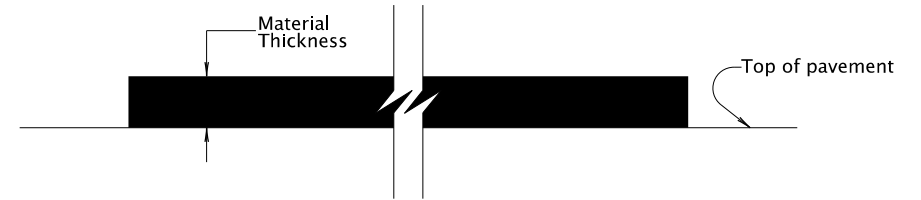
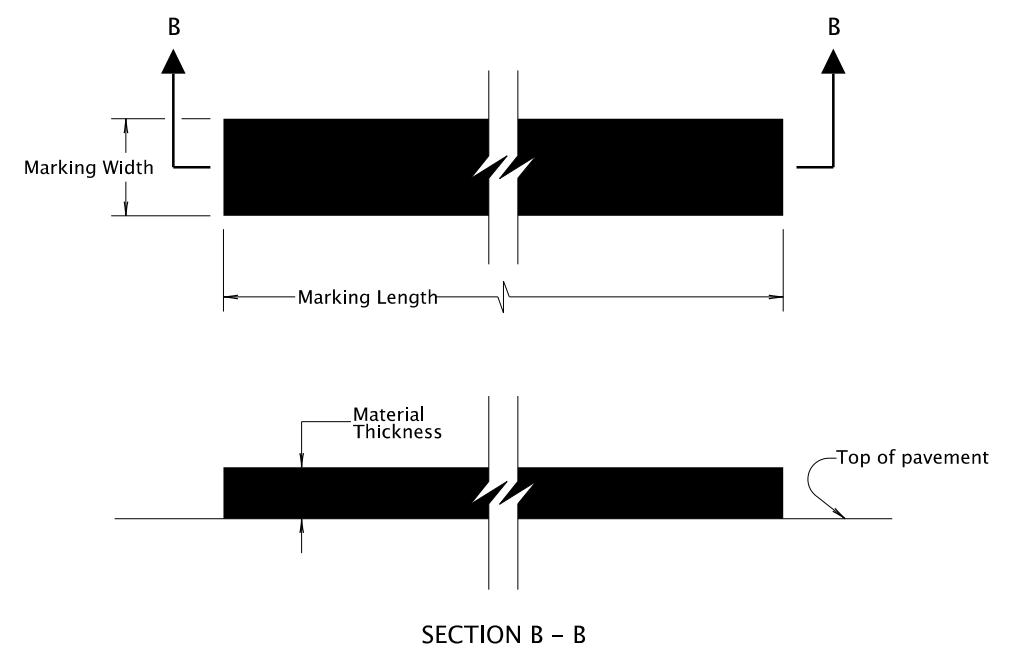


SECTION A - A

GROOVE INSTALLED GROOVE AND MATERIAL DIMENSIONS

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

GROOVE INSTALLED MARKINGS



SECTION B - B

SURFACE INSTALLED MATERIAL THICKNESS

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

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 \_\_\_

BASELINE REPORT DATE \_\_\_ 07/05/2013 \_\_\_

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**

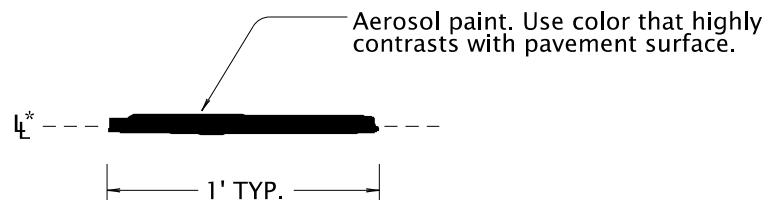
2018

DATE	REVISION	DESCRIPTION

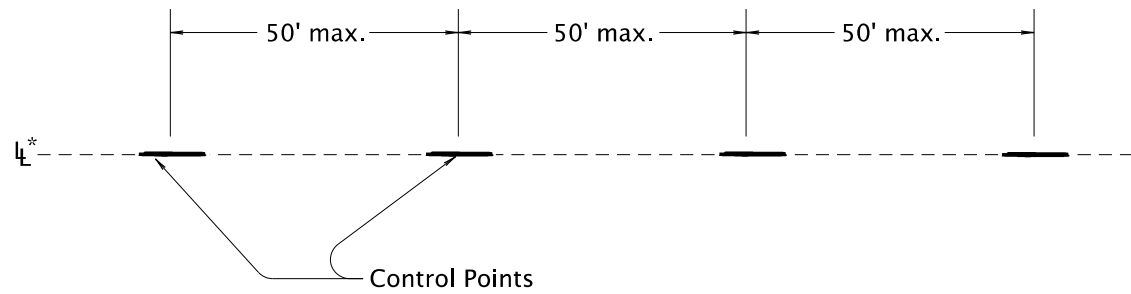
*The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.*

TM521

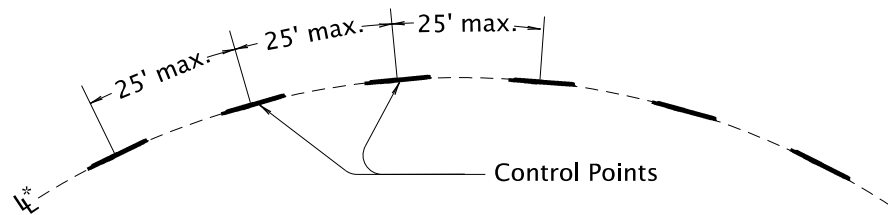
tm560.dgn 07-10-2019



**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

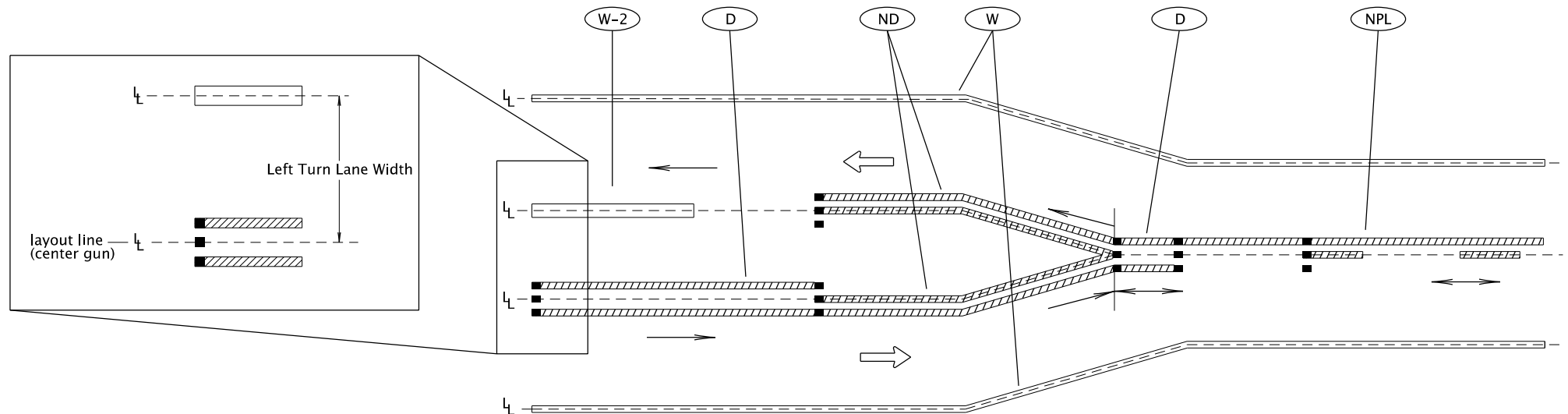
**LEGEND**

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

To be accompanied by Standard Dwg. Nos. TM500 thru TM503

CALC. BOOK NO. _ _ _ N/A _ _ _ _ _	BASELINE REPORT DATE _ _ 07/01/2015 _ _ _ _ _									
<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>	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>									
	2018									
	<table border="1"> <thead> <tr> <th>DATE</th> <th>REVISION DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	DATE	REVISION DESCRIPTION							
DATE	REVISION DESCRIPTION									

tm561.dgn 07-10-2019

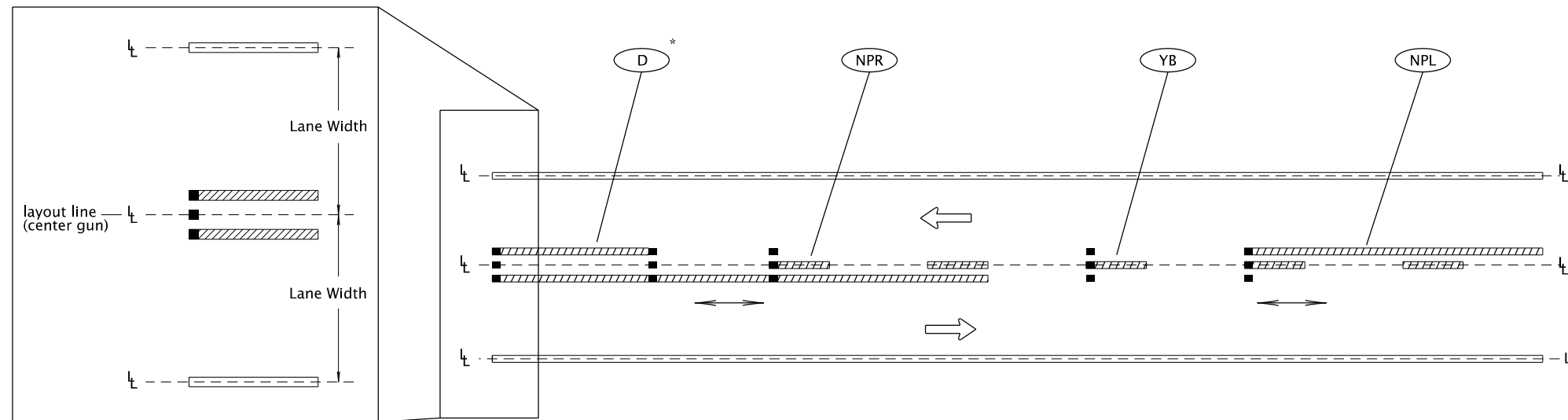


LEFT TURN LANE ALIGNMENT LAYOUT

- General note:
- 1) Install control points for pavement marking alignment layout along the center gun location.
  - 2) Increasing stationing from left to right

LEGEND

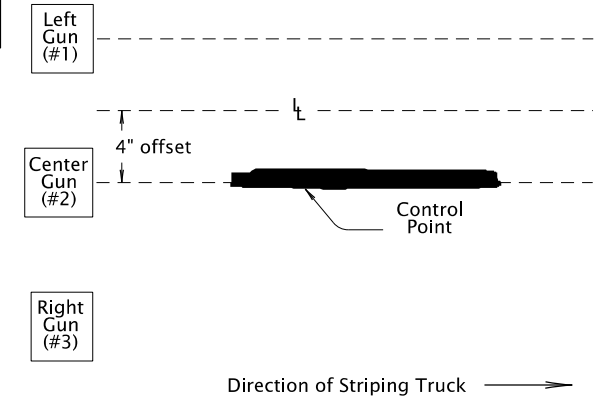
- ← Direction Of Travel and Thru Traffic Side.
- └ Lane line dimensions are shown on the striping plans.
- ↔ Direction of striping truck (may go either direction)
- Direction of striping truck (may go one direction only)
- Three gun installation system (center dot represents center gun)



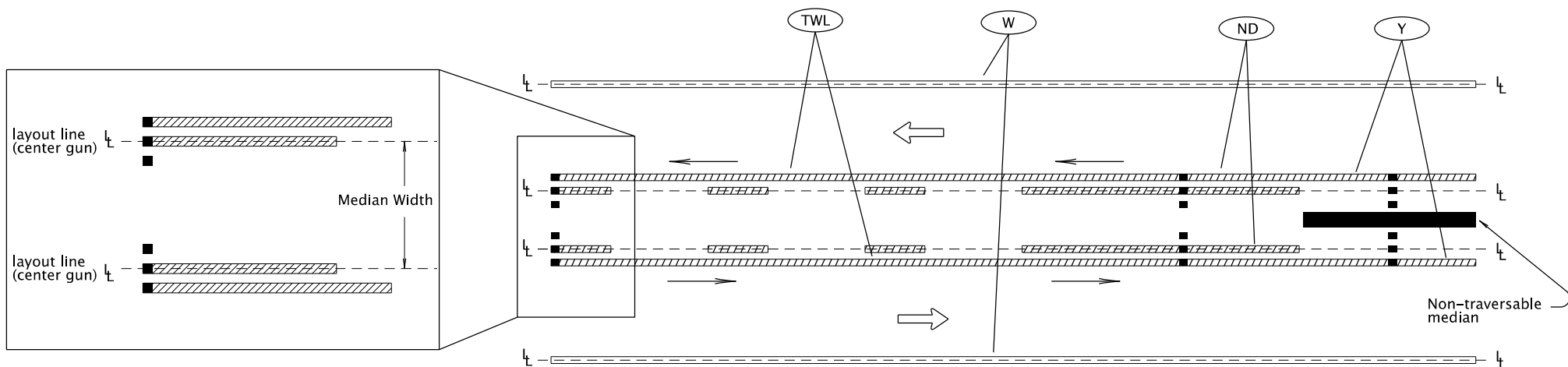
CENTERLINE ALIGNMENT LAYOUT

\*When ND is used as centerline markings, a control point layout 4" offset from the lane line is required.

Line Types requiring control points to be 4" offset from lane line:  
 ND  
 For centerlines only



4" Offset of Lane Line and Center Gun



MEDIAN ALIGNMENT LAYOUT

To be accompanied by Standard Dwg. Nos. TM500 thru TM503

CALC. BOOK NO. \_\_\_ N/A \_\_\_ BASELINE REPORT DATE \_\_\_ 07/01/2015 \_\_\_

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

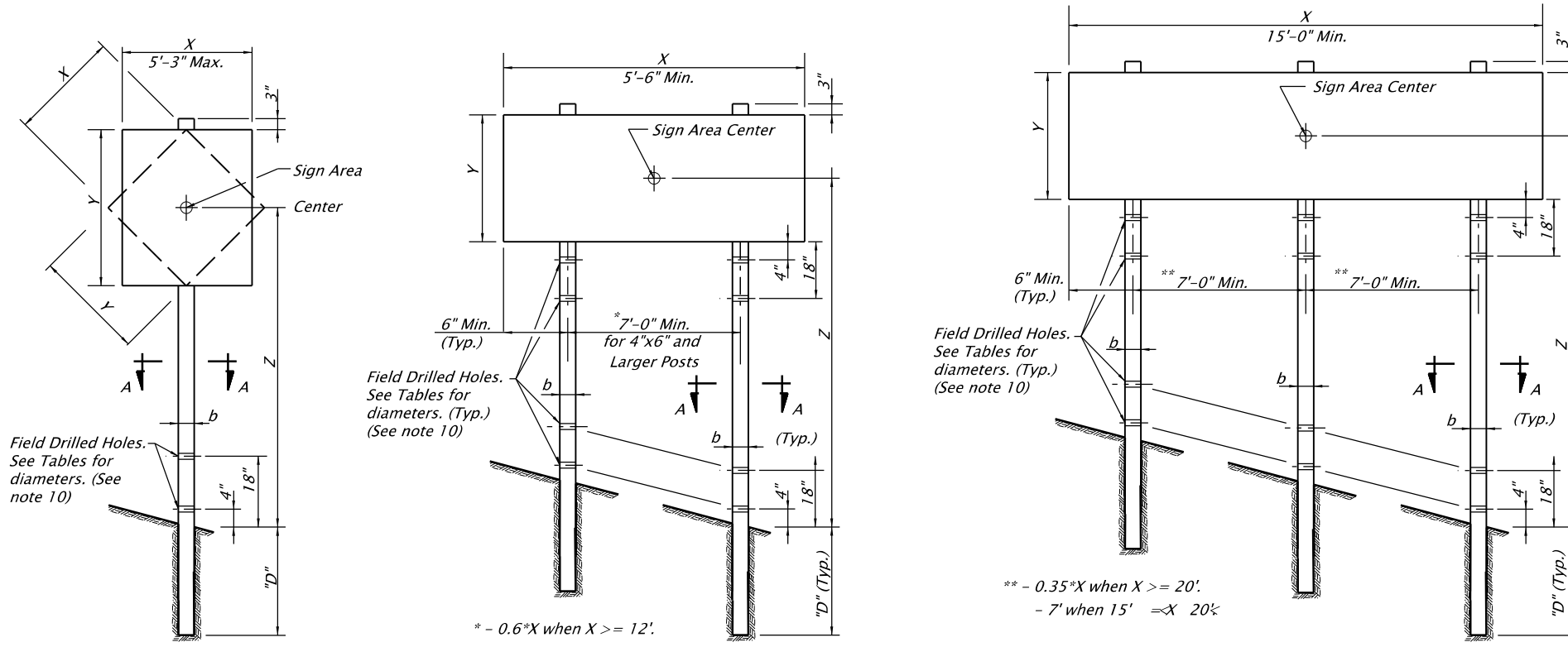
**OREGON STANDARD DRAWINGS**  
**ALIGNMENT LAYOUT:**  
**LEFT TURN LANE,**  
**CENTERLINE & MEDIANS**

2018

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.*

TM561



**ELEVATION**  
No scale

**General Notes:**

1. Wood posts are available in the following commercial lengths: 12', 14', 16', 18', 20', 22', 24', 26'.
2. Material shall be Douglas Fir No. 1 and according to Section 02110.40.
3. For horizontal and vertical clearances of permanent signs refer to TM200 and of temporary signs refer to TM822.
4. Wood post design in accordance with the 5th Edition 2009 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals.
5. Use the 3 second gust wind speeds shown on TM671 for the site specific sign location.
6. General design parameters are  $K_z = 0.87$ , SIF (duration factor) = 1.6,  $C_d$  (sign) = 1.20, and  $G = 1.14$ .
7. The sign width to sign height or sign height to sign width ratio shall not exceed 5.0.
8. Permanent signing uses an  $I_r = 0.71$  for a recurrence interval of 10 years.
9. Temporary signing uses an  $I_r = 0.45$  for a recurrence interval of 1.5 years.
10. Posts protected by barrier or guardrail do not require field drilled holes.
11. 4" x 4" posts should not be used in snow plow areas.

**Post Embedment Installation:**

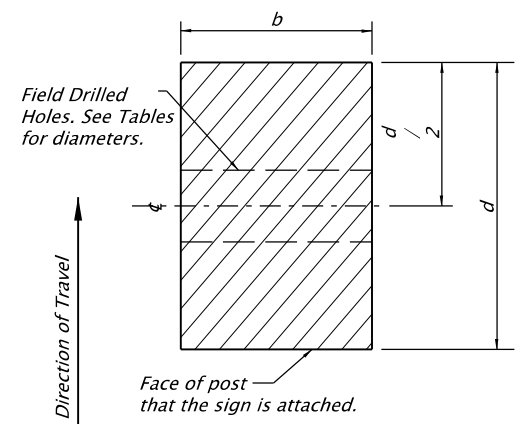
1. Excavate the hole at least 12" larger in diameter than the diagonal dimension of the post. Maintain at least 6" of space around the edges of the post to accommodate compaction equipment.
2. Align the post in the hole to a vertical position.
3. The space around the wood post shall be backfilled to finished ground surface.
4. Backfill with selected general backfill meeting the requirements of 00330.13.
5. Place in layers not greater than 6 inches.
6. Solidly ram and tamp the layers into the excavation area around the post.
7. Dampen during placement if too dry to compact properly.
8. Replace and finish the surface around the post to match the surrounding surface.

$(X * Y * Z)$ in $ft^3$ - Maximum														Field Drilled Hole Diameters	Post Embedment Depth "D"
3 Second Gust Wind Speed (TM671)															
85 MPH				95 MPH				105 and 110 MPH							
Number of Posts				Number of Posts				Number of Posts							
POST SIZE $b \times d$	1	2	3*	3*	1	2	3*	3*	1	2	3*	3*	Not Req'd	4' - 0"	
	1	2	X=15'	X≥20'	1	2	X=15'	X≥20'	1	2	X=15'	X≥20'			
4" x 4"	77	154	165	231	62	124	132	186	56	112	120	168	Not Req'd	4' - 0"	
4" x 6"	162	324	347	486	130	260	278	390	117	234	250	351	1 1/2"	5' - 0"	
6" x 6"	270	540	578	810	216	432	462	648	195	390	417	585	2"	5' - 0"	
6" x 8"	494	988	1058	1482	395	790	846	1185	356	712	762	1068	3"	7' - 0"	

**PERMANENT WOOD POST TABLE**  
\* - Linear Interpolate  $X^*Y^*Z$  3 post values for signs greater than 15' and less than 20'.  
\*\* - See note 8

$(X * Y * Z)$ in $ft^3$ - Maximum														Field Drilled Hole Diameters	Post Embedment Depth "D"
3 Second Gust Wind Speed (TM671)															
85 MPH				95 MPH				105 and 110 MPH							
Number of Posts				Number of Posts				Number of Posts							
POST SIZE $b \times d$	1	2	3*	3*	1	2	3*	3*	1	2	3*	3*	Not Req'd	4' - 0"	
	1	2	X=15'	X≥20'	1	2	X=15'	X≥20'	1	2	X=15'	X≥20'			
4" x 4"	122	244	261	366	98	196	210	294	88	176	188	264	Not Req'd	4' - 0"	
4" x 6"	257	514	550	771	205	410	439	615	185	370	396	555	1 1/2"	5' - 0"	
6" x 6"	426	852	912	1278	341	682	730	1023	308	616	660	924	2"	5' - 0"	
6" x 8"	779	1558	1669	2337	624	1248	1337	1872	563	1126	1206	1689	3"	7' - 0"	

**TEMPORARY WOOD POST TABLE**  
\* - Linear Interpolate  $X^*Y^*Z$  3 post values for signs greater than 15' and less than 20'.  
\*\* - See note 9



**SECTION A-A**  
No scale

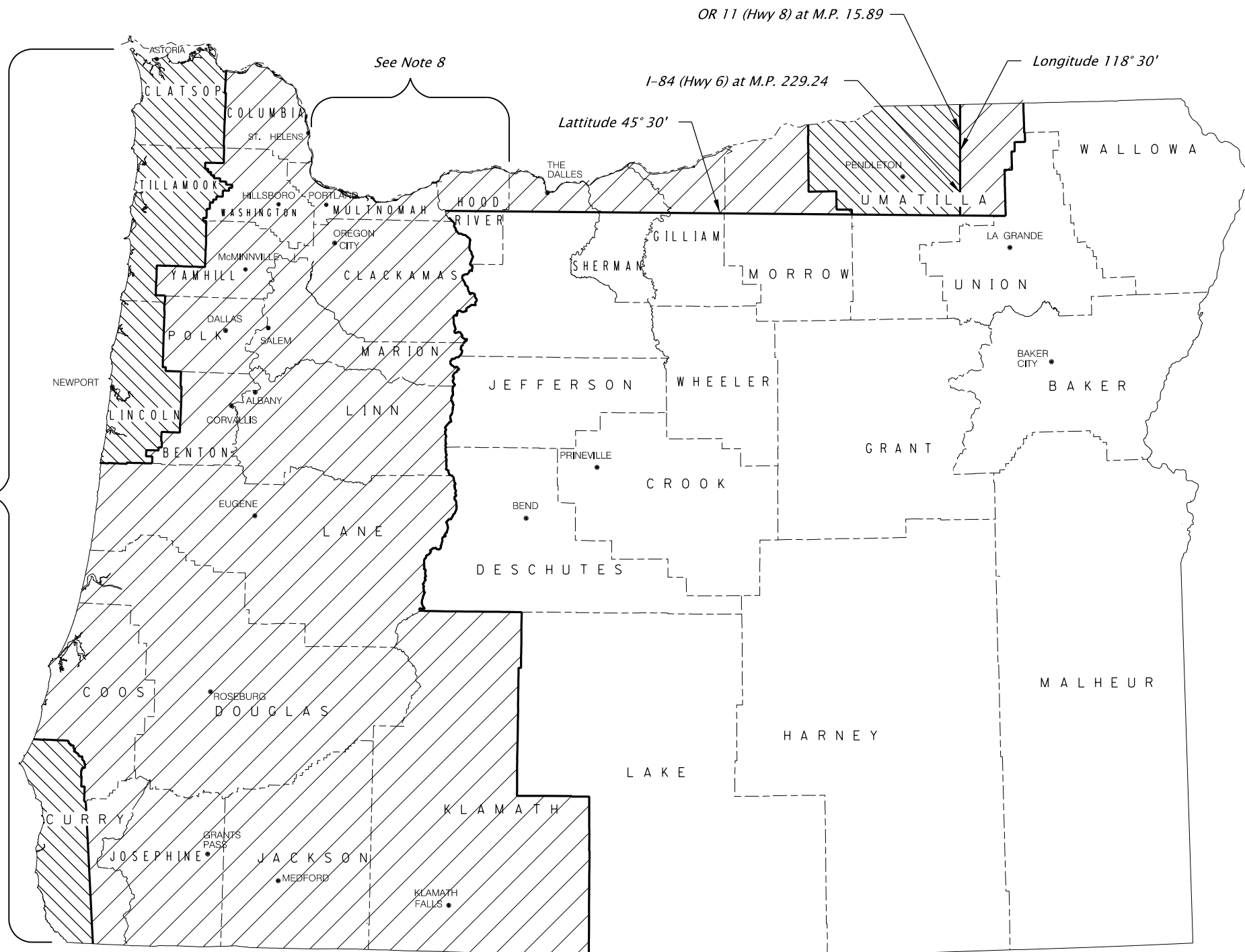
Accompanied by dwgs. TM200, TM671, TM822

CALC. BOOK NO. <u>5850</u>	BASLINE REPORT DATE <u>06-JAN-2017</u>
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>WOOD POST SIGN SUPPORTS</b>	
2018	
DATE	REVISION DESCRIPTION

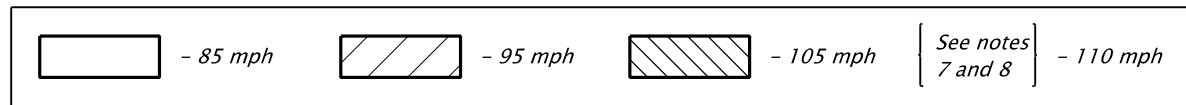
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

TM671.dgn 10-JUL-2017

TM671



See Note 7



**NOTES:**

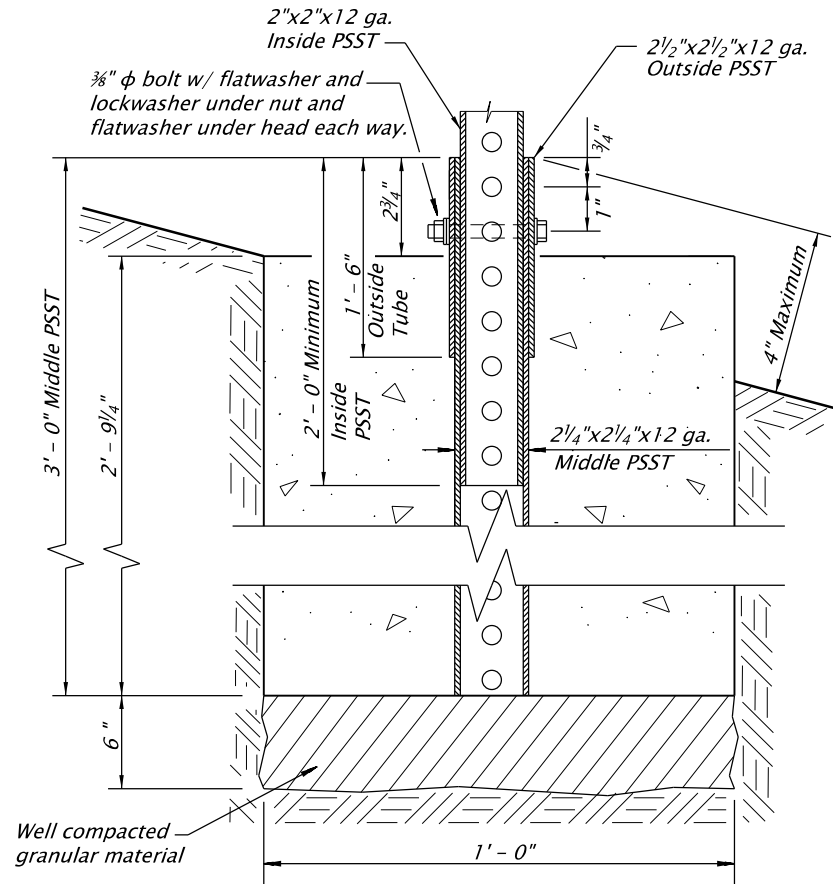
1. The wind velocity map as shown is adapted from AASHTO 2001 4th Edition - "Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals", Appendix C, Figure C-3 and Section 3, Figure 3-2. It uses the wind speed map shown in Figure 1609 of the 2007 Oregon Structural Code to account for locations in the State with special wind regions.
2. The wind velocities shown above are 3-Second Gust wind velocities.
3. The Exposure Category is C.
4. The mean recurrence interval is 50-Years.
5. Mountainous terrain, gorges, and ocean promontories are classified as special wind regions and shall be examined for unusual wind conditions.
6. The Interval Height (Kz) is 30 ft.
7. All areas with full exposure to ocean winds shall be designated 110 mph areas.
8. Areas in Multnomah and Hood River counties with full exposure to Columbia River Gorge winds shall be designated 110 mph areas.
9. Localities may have adopted wind speed higher than shown on this map. Those higher wind speed shall be used.

CALC. BOOK NO. _____	BASELINE REPORT DATE <u>06-JAN-2012</u>
<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>	NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications
	<b>OREGON STANDARD DRAWINGS</b>
	<b>3 SECOND GUST WIND SPEED MAP</b>
	2018
DATE	REVISION DESCRIPTION

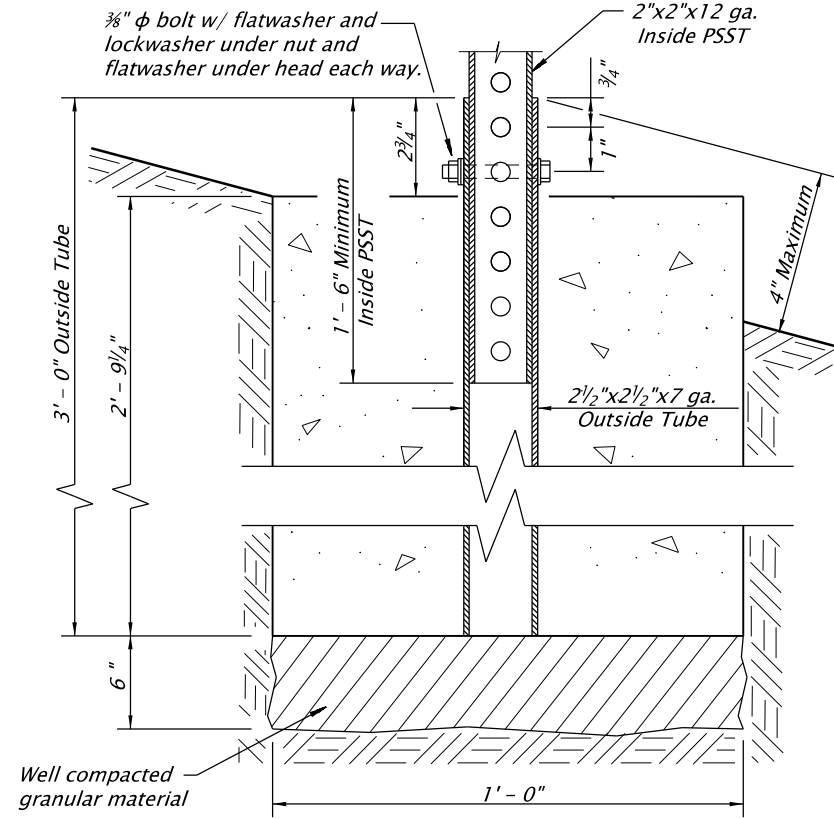


tm687.dgn 10-JUL-2017

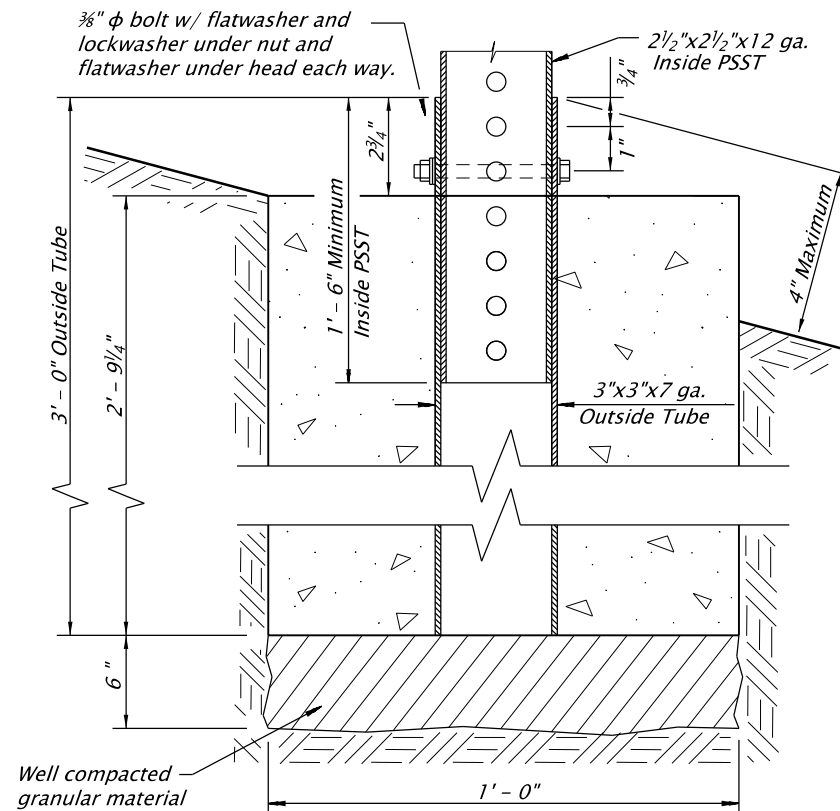
TM687



**2" ANCHOR DETAIL**  
No scale



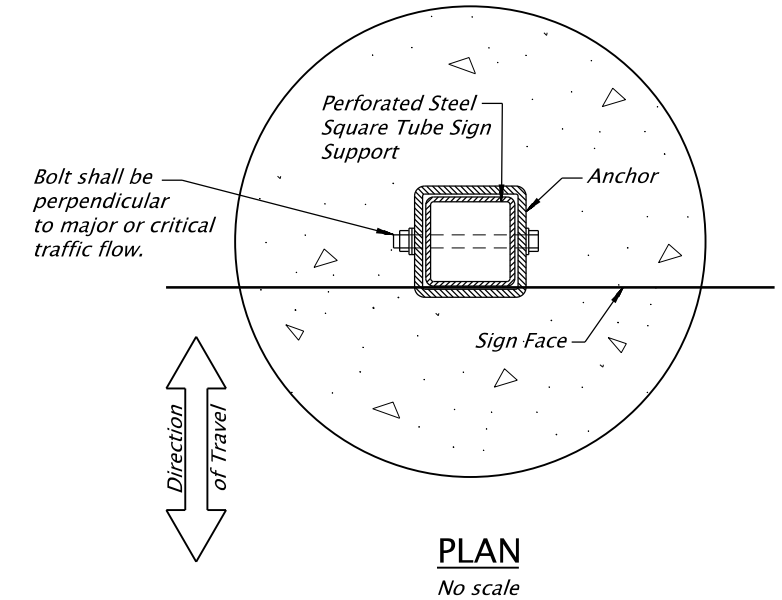
**2" OPTIONAL ANCHOR DETAIL**  
No scale



**2 1/2" ANCHOR DETAIL**  
No scale

**General Notes:**

1. Material grade for base hardware connection shall be according to the manufacturer's recommendation and based on crash testing.
2. Anchor steel shall be hot dipped galvanized or approved equal.
3. Footing concrete shall be Commercial Grade Concrete ( $f_c = 3000$  psi) per Specification 00440. The CGC mixture may be accepted at the site of placement according to 00440.14.
4. The estimated concrete volume is .09 cubic yards.



**PLAN**  
No scale

Accompanied by dwgs. TM681, TM688

CALC. BOOK NO. <u>5752</u>	BASILINE REPORT DATE <u>06-JAN-2012</u>
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
<b>OREGON STANDARD DRAWINGS</b>	
<b>PERFORATED STEEL SQUARE TUBE (PSST) ANCHOR FOUNDATION</b>	
2018	
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.*

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:

CONCRETE 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

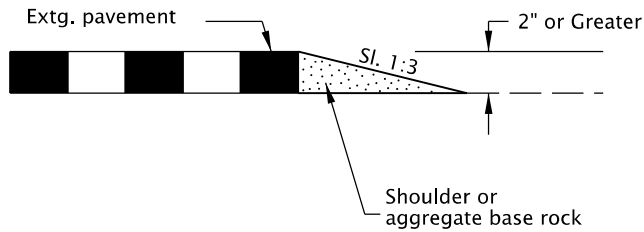
MINIMUM LENGTHS TABLE					
"L" VALUE FOR TAPERS (ft)					BUFFER "B" (ft)
★ SPEED (mph)	W = Lane or Shoulder Width being closed or shifted				
	W ≤ 10	W = 12	W = 14	W = 16	
25	105	125	145	165	75
30	150	180	210	240	100
35	205	245	285	325	125
40	265	320	375	430	150
45	450	540	630	720	180
50	500	600	700	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

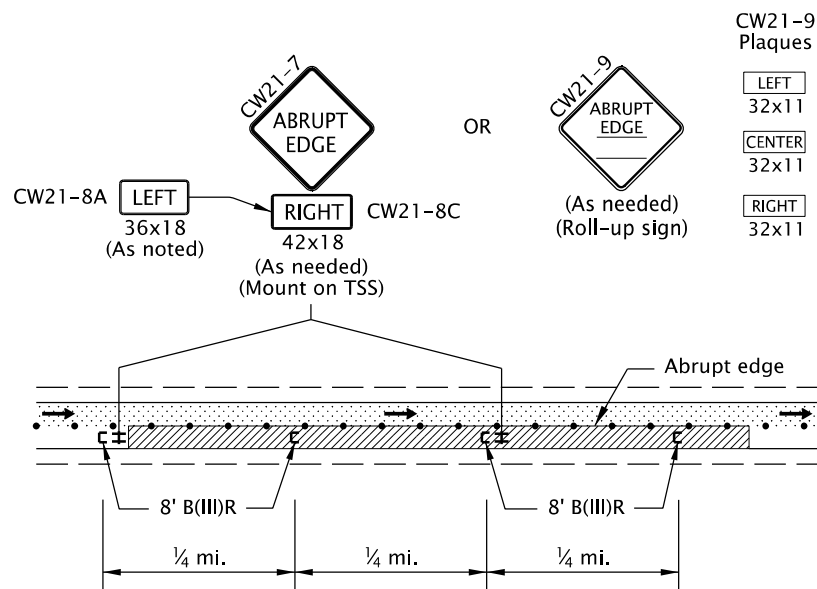
- NOTES:
- Place traffic control devices on 10 ft. spacing for intersection and access radii.
  - When necessary, sign spacing may be adjusted to fit site conditions. Limit spacing adjustments to 30% of the "A" dimension for all speeds.

- 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.



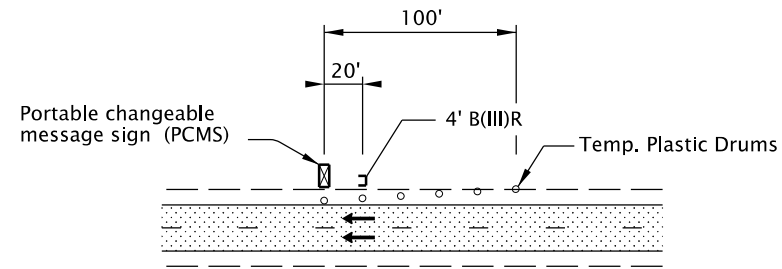
EXCAVATION ABRUPT EDGE

- 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.



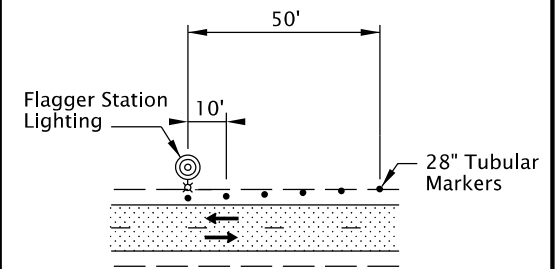
TYPICAL ABRUPT EDGE DELINEATION

- 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.
  - Place a barricade approx. 20' ahead of all sequential arrow boards.
  - 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.
  - 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 > 40 mph.
  - 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.
  - To be accompanied by Drg. Nos. TM820 & TM821.
- Temp. Plastic Drums See TCD Spacing Table for max. spacing.  
 28" Tubular Markers See TCD Spacing Table for max. spacing.  
 UNDER TRAFFIC  
 UNDER CONSTRUCTION

CALC. BOOK NO. TM09-01 BASELINE REPORT DATE 01-JAN-2019

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

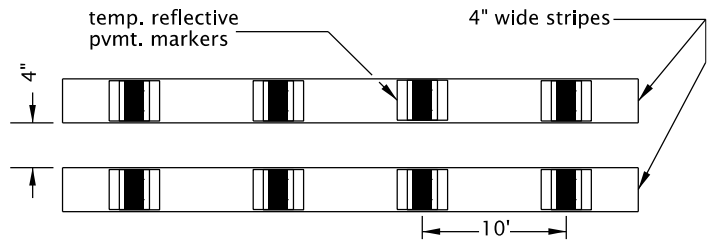
**OREGON STANDARD DRAWINGS**  
**TABLES, ABRUPT EDGE AND PCMS DETAILS**

2018

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.*

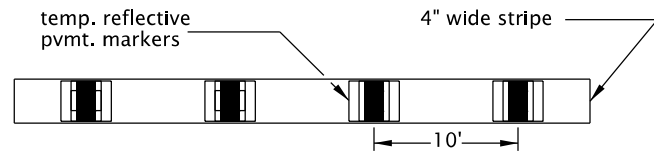
tm810.dgn 01-JAN-2019



**LAYOUT "A"**  
(Supplemented double solid lines)

**TYPICAL APPLICATIONS:**

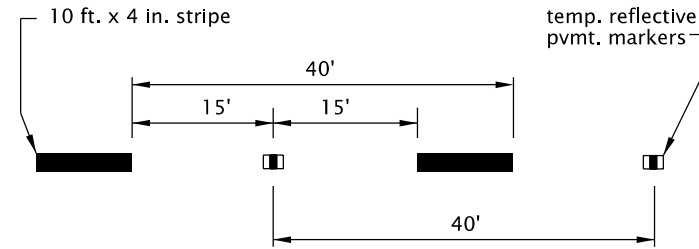
- To prohibit lane changes or passing (include appropriate regulatory signs).
- Freeway or multilane shifts and crossovers.
- For projects in place through winter months.
- Two-lane, two-way centerlines.



**LAYOUT "B"**  
(Supplemented solid line)

**TYPICAL APPLICATIONS:**

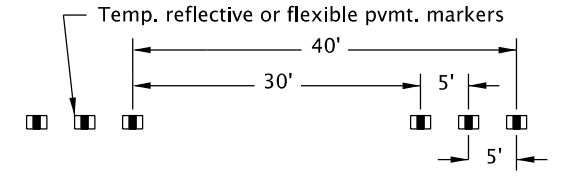
- Alignment shifts or crossovers.
- To discourage lane changes in multilane sections.
- For projects in place through winter months.



**LAYOUT "C"**  
(Supplemented broken lines)

**TYPICAL APPLICATIONS:**

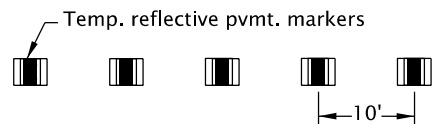
- Freeway and multilane broken lines.
- High ADT 2 lane roads (greater than 10,000).
- For projects in place through winter months.



**LAYOUT "D"**  
(Simulated broken lines)

**TYPICAL APPLICATIONS:**

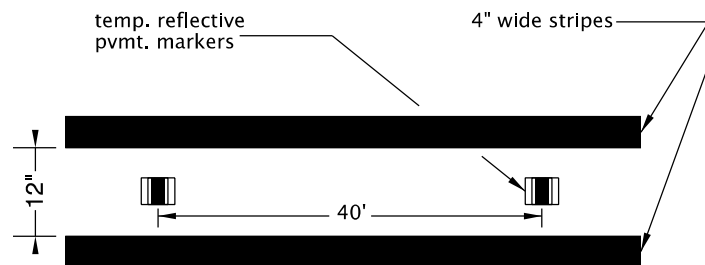
- During staging on finished/existing surfaces.
- HMAC intermediate surfaces.
- Emulsified asphalt surface treatments (chip seals) where permanent pavement markings cannot be placed within two weeks.



**LAYOUT "E"**  
(Simulated solid lines)

**TYPICAL APPLICATIONS:**

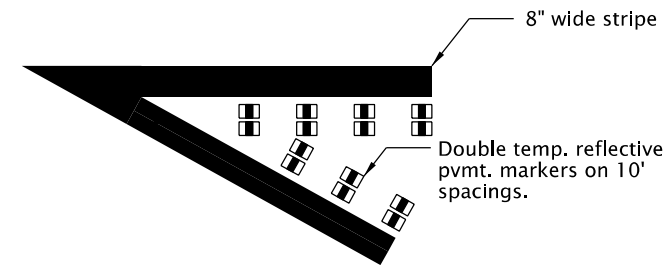
- Alignment shifts or crossovers.
- To discourage lane changes in multilane sections.
- Edge lines for short durations, less than 14 days.



**LAYOUT "F"**  
(Supplemented wide double solid lines)

**TYPICAL APPLICATIONS:**

- To prohibit lane changes or passing (include appropriate regulatory signs).
- 2 lane, 2 way centerlines.
- 2 lane, 1 way alignments on freeways or multi-lane highways.



**LAYOUT "G"**  
(Supplemented solid 8" line)

**TYPICAL APPLICATIONS:**

- Gore areas
- Alignment splits (bifurcations)

**GENERAL NOTES FOR ALL DETAILS:**

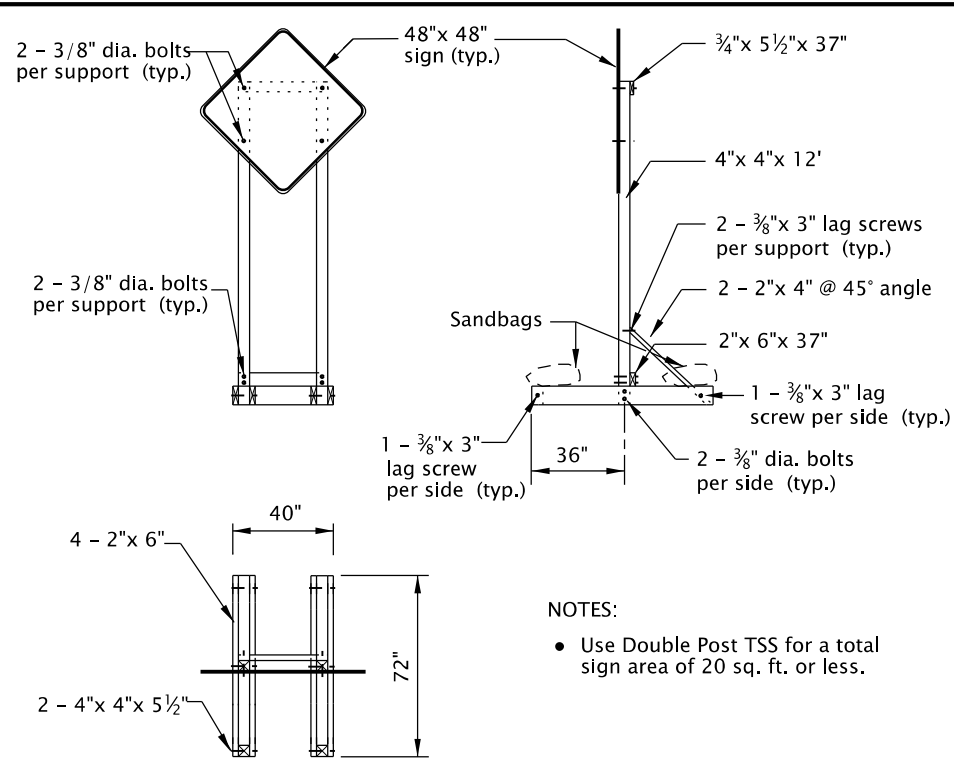
- When using Supplemented or Simulated lines:
  1. Yellow Bi-Directional Pavement Markers are required for Two-Way Traffic.
  2. White Mono-Directional Pavement Markers are required for one-way traffic or edge lines.
- Supplemented lines are painted lines enhanced with Reflective Pavement Markers.
- Simulated lines are Reflective Pavement Markers placed in a pattern to substitute for a painted line.
- Pavement marking colors shall conform to the MUTCD.

CALC. BOOK NO. _____	N/A	BASELINE REPORT DATE _____	01-JAN-2019
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<b>OREGON STANDARD DRAWINGS</b>			
<b>TEMPORARY PAVEMENT MARKINGS</b>			
2018			
DATE	REVISION	DESCRIPTION	

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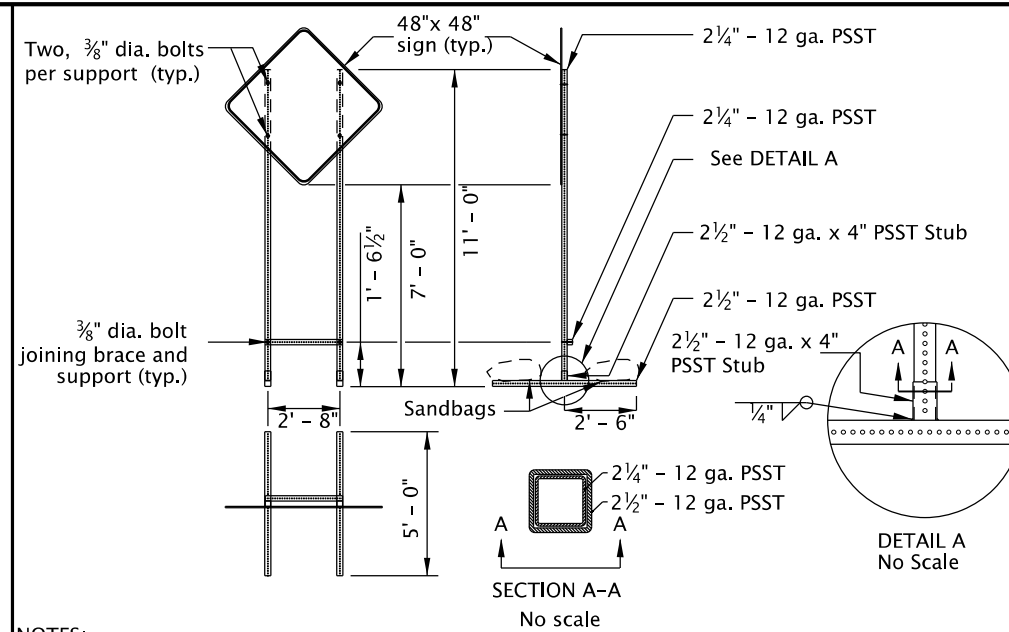
TM810

tm821.dgn 01-JAN-2019



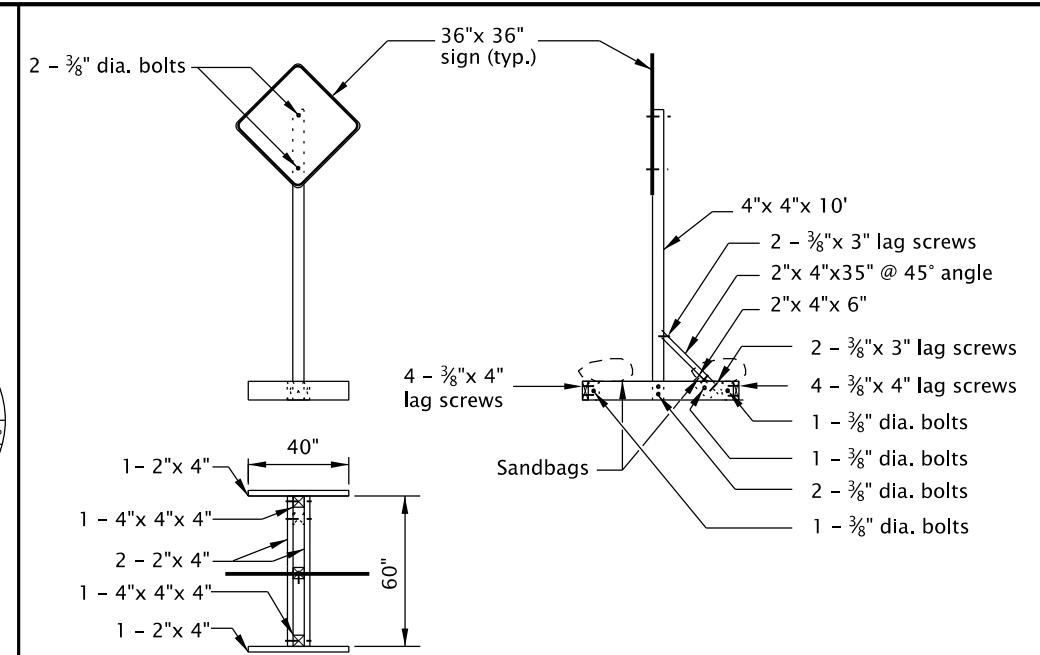
DOUBLE POST  
TEMPORARY SIGN SUPPORT (TSS)

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



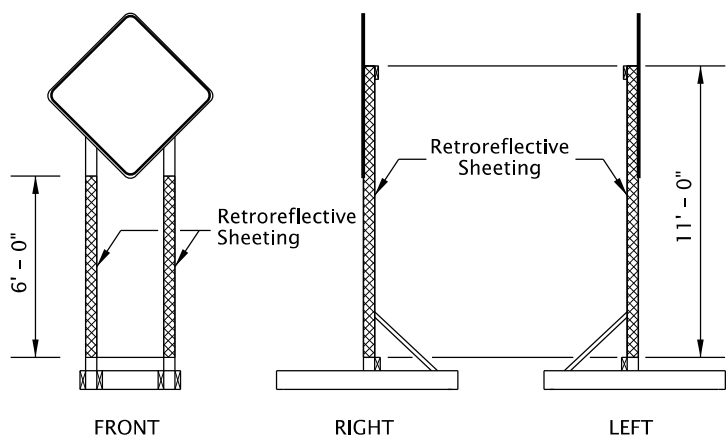
PERFORATED STEEL SQUARE TUBE (PSST)  
TEMPORARY SIGN SUPPORT (TSS)

- 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 inch - 12 ga. PSST to extend entire length inside of the 2 1/2 inch - 12 ga. x 4 inch PSST Stub.
  - Do not use bolt to secure 2 1/4 inch PSST inside of the 2 1/2 inch - 12 ga. x 4 inch PSST Stub.
  - Weld steel according to AWS D.1.1.

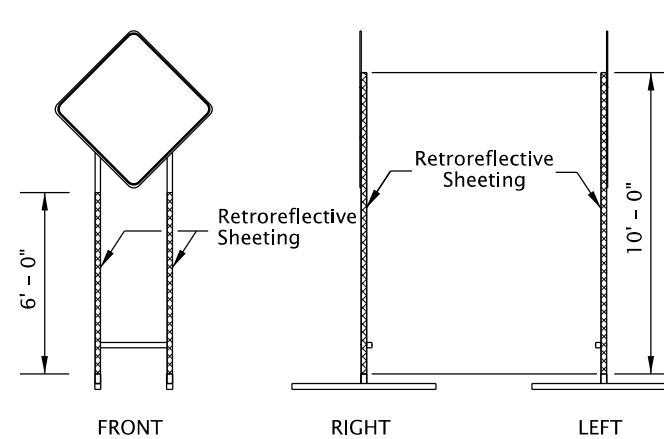


SINGLE POST  
TEMPORARY SIGN SUPPORT (TSS)

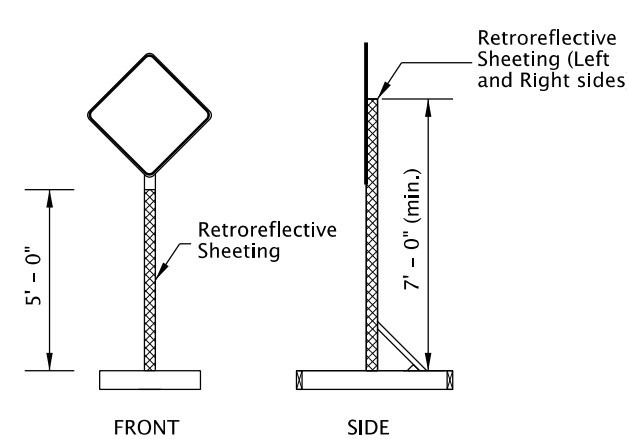
- NOTES:
- Use Single Post TSS for a total sign area of 12 sq. ft. or less.
  - Use Single Post TSS for mounting "Business Access" (CG20-11) signs. Do not mount signs on Type II or III Barricades.



DOUBLE POST  
TEMPORARY SIGN SUPPORT (TSS)



PERFORATED STEEL SQUARE TUBE (PSST)  
TEMPORARY SIGN SUPPORT (TSS)



SINGLE POST  
TEMPORARY SIGN SUPPORT (TSS)

Retroreflective  
Sheeting (Left  
and Right sides)

TEMPORARY SIGN SUPPORT GENERAL NOTES:

- DO NOT TIP OVER TSS AT ANY TIME.
- Do not locate TSS's in locations that block pedestrian/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).

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

CALC. BOOK NO. N/A

BASELINE REPORT DATE 01-JAN-2019

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

OREGON STANDARD DRAWINGS  
TEMPORARY SIGN SUPPORTS

2018

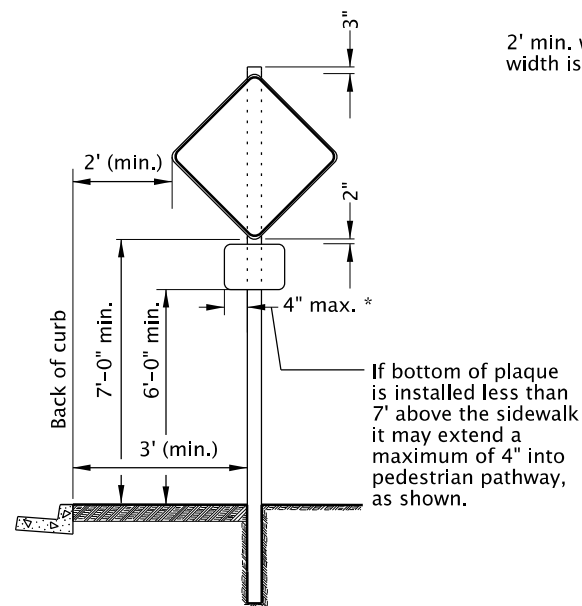
DATE	REVISION	DESCRIPTION
01-2019	REVISED NOTES	

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.

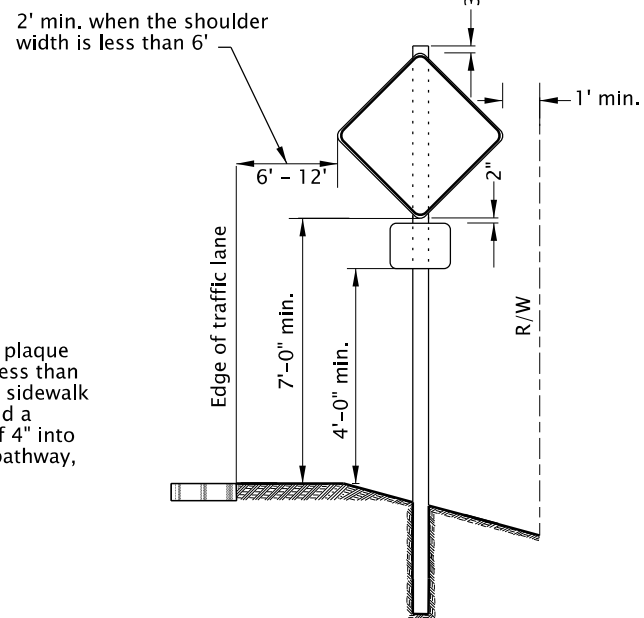
TM821

NOTES:

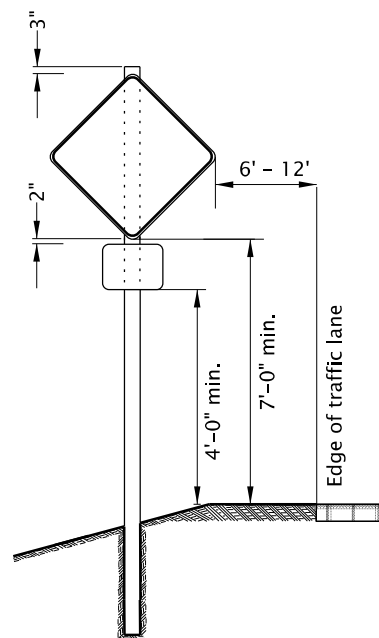
- Do not block bicycle lanes, sidewalks, or TPAR's with sign supports. Maintain minimum widths for these facilities according to TCP Design Manual, MUTCD, ADA, or as directed.
- To be accompanied by Drg. Nos. TM670, TM671, TM687, TM688 & TM689.



URBAN AREAS WITH CURB/SIDEWALK

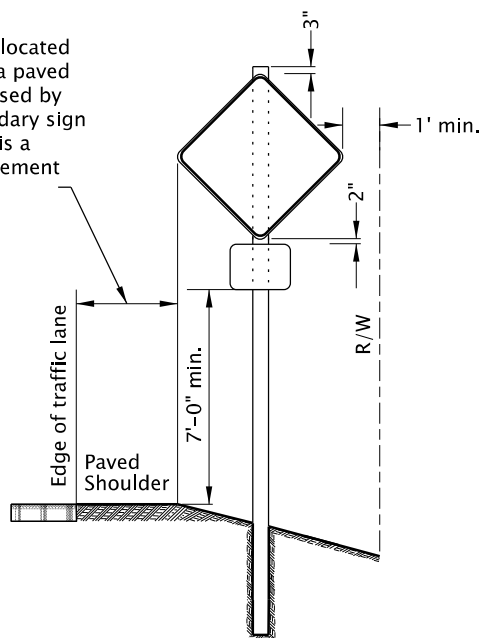


RURAL AREAS



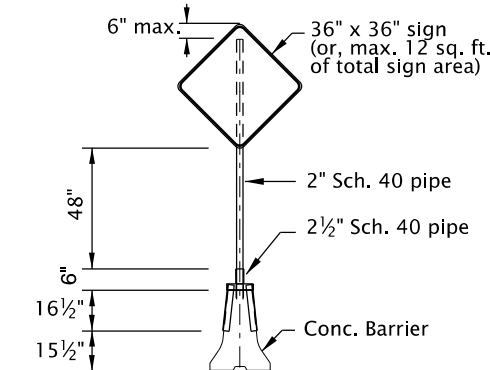
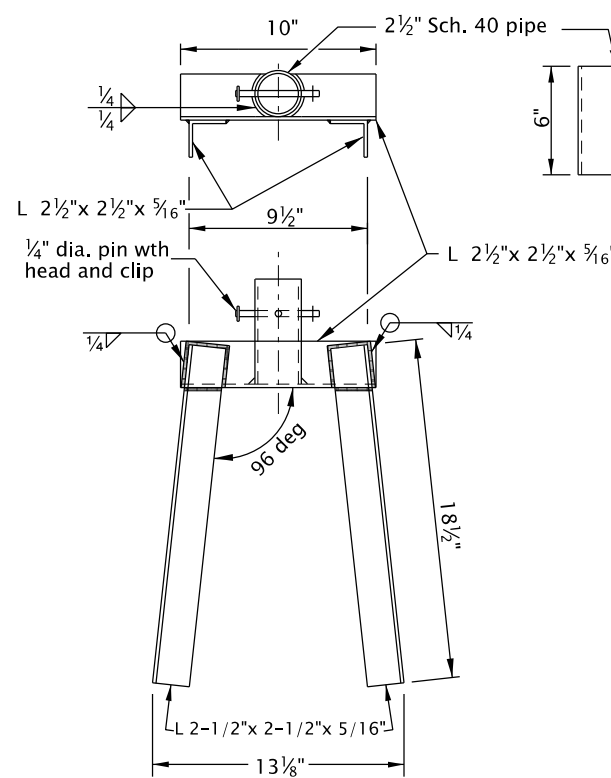
DIVIDED HIGHWAY/FREEWAY MEDIANS  
NO CURB/SIDEWALK

Where temporary signs are located adjacent to or intrude into a paved shoulder or other surface used by bicycle traffic, install secondary sign (plaque) so bottom of sign is a minimum of 7'-0" above pavement surface, as shown.



RURAL OR URBAN AREAS - CURB OR NO CURB  
BICYCLES ON SHOULDER

TEMPORARY SIGN PLACEMENT

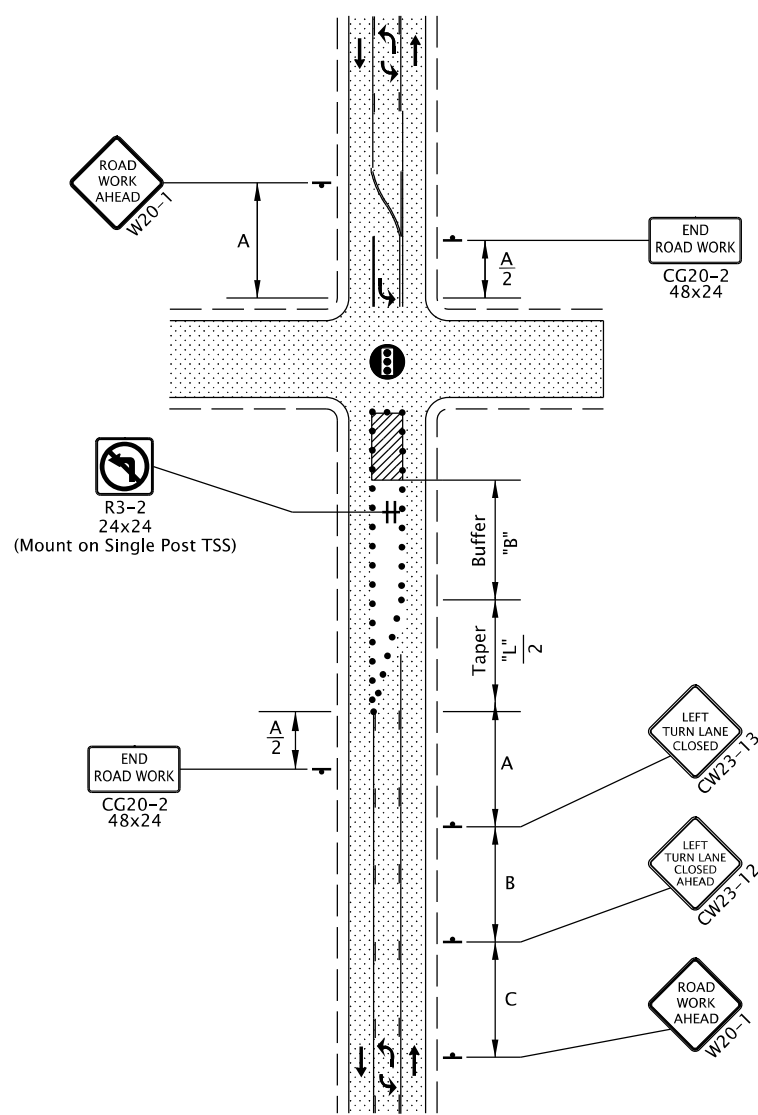


NOTES:

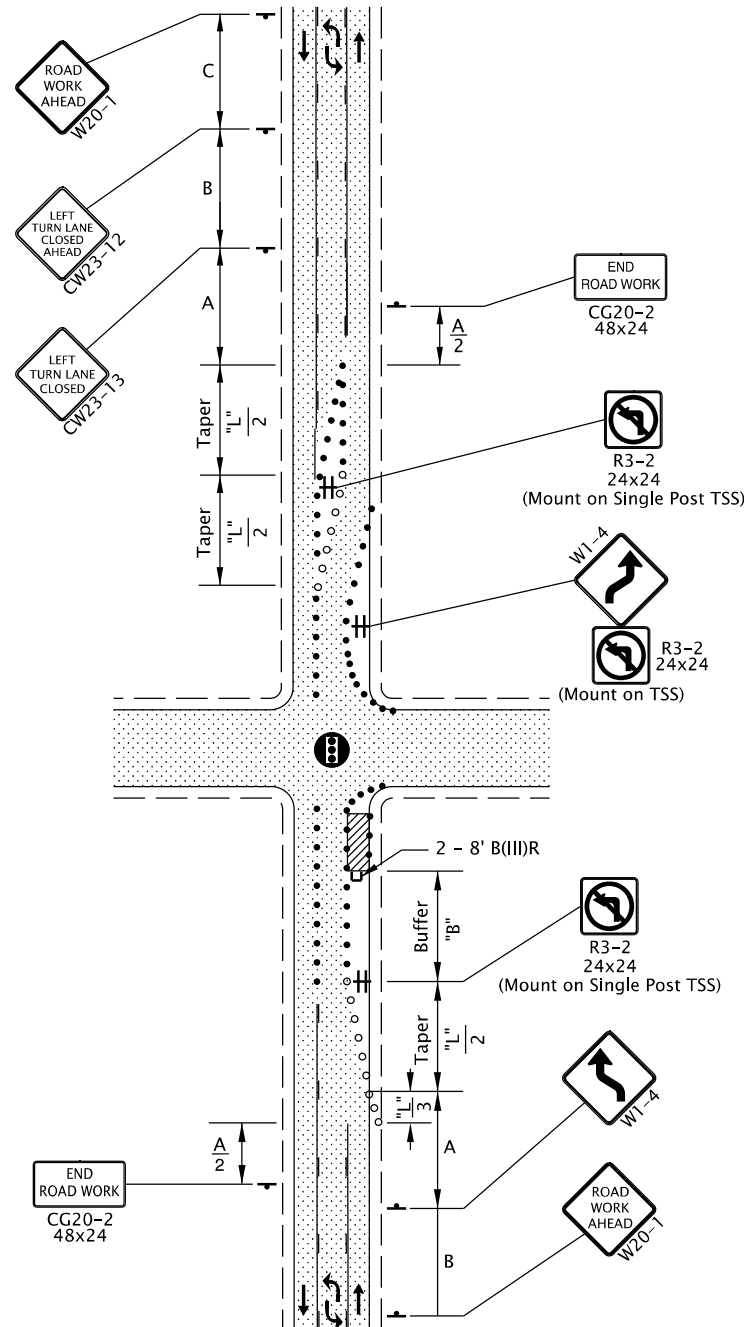
- Drill additional holes so sign can be rotated 90 degrees and pinned when not in use.
- All structural steel shall conform to ASTM A36.
- Support fits both 32" and 42" tall "F" barrier.
- Use for supporting a maximum 12 sq. ft. of total sign area.
- Place support at connection between two concrete barrier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

CONCRETE BARRIER SIGN SUPPORT

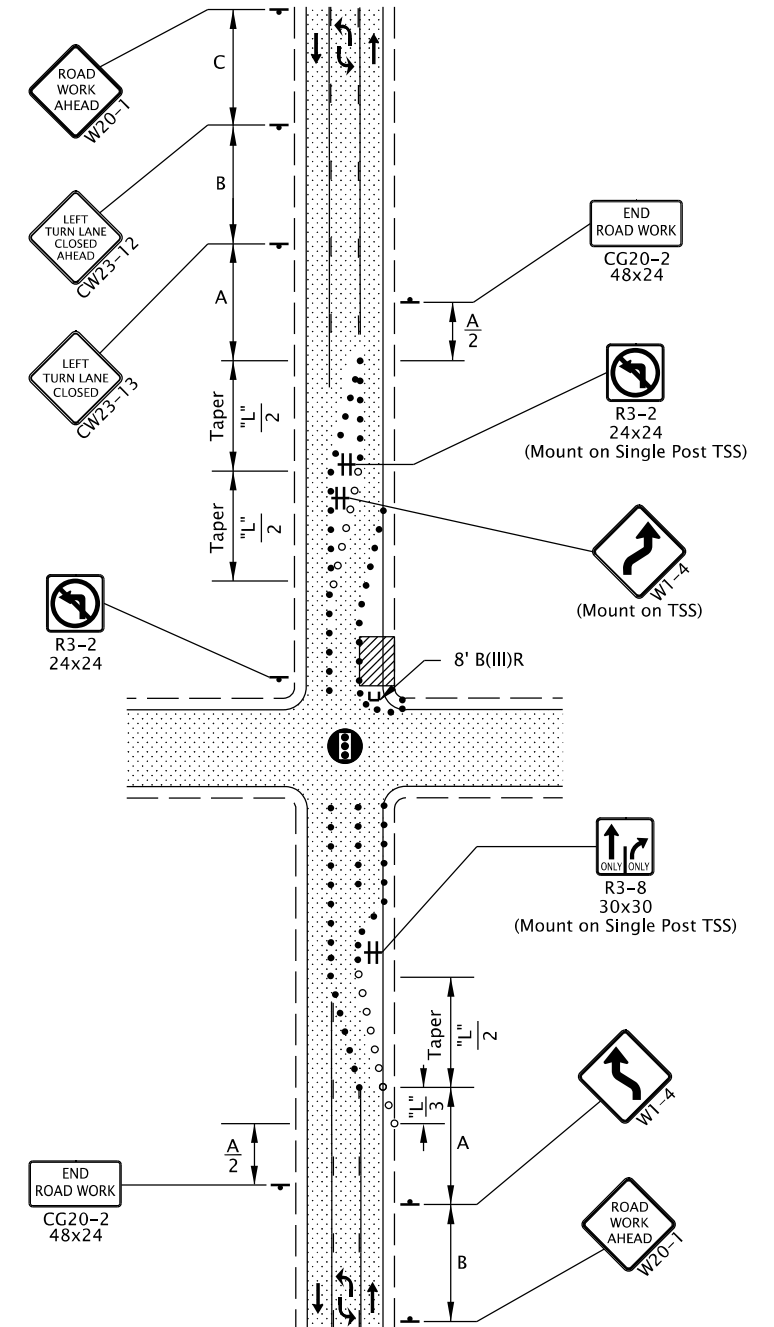
CALC. BOOK NO. _____	N/A	BASELINE REPORT DATE _____	01-JAN-2019
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
<p><i>The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.</i></p>		<b>OREGON STANDARD DRAWINGS</b>	
		<b>TEMPORARY SIGN SUPPORTS</b>	
		2018	
DATE	REVISION	DESCRIPTION	
01-2018	REVISED DRAWING		
01-2019	REVISED NOTES		



2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN  
LEFT TURN MEDIAN CLOSURE



2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN  
RIGHT LANE CLOSURE, NEAR SIDE



2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN  
RIGHT LANE CLOSURE, FAR SIDE

GENERAL NOTES FOR ALL DETAILS:

- Additional Traffic Control Measures (TCM) may be required for all legs of the intersection.
- To determine Taper Length ("L") and Buffer Length ("B") shown on this sheet, use the "MINIMUM LENGTHS TABLE" on Drg. TM800.
- Taper length of "L" for through lane shifting tapers may be used for higher speed roads.
- Taper length of "L"/2 for center turn lane closure may be used in areas with a high number of accesses within the work zone.
- When a through road intersects within the work zone, place a "ROAD WORK AHEAD" (W20-1) sign in advance of the intersection at sign spacing A.
- To determine sign spacing A, B, and C, use "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Drg. TM800.
- Tubular markers may be used in lane closure tapers where the posted speed is less than 45 mph.
- 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.
- Signal timing adjustments determined by Engineer.
- To be accompanied by Drg. Nos. TM820 & TM821.

- Signal
- 28" Tubular Markers  
See TCD Spacing Table on TM800 for max. spacing
- Temp. Plastic Drums  
See TCD Spacing Table on TM800 for max. spacing
- UNDER TRAFFIC
- UNDER CONSTRUCTION

CALC. BOOK NO. N/A

BASELINE REPORT DATE 01-JAN-2019

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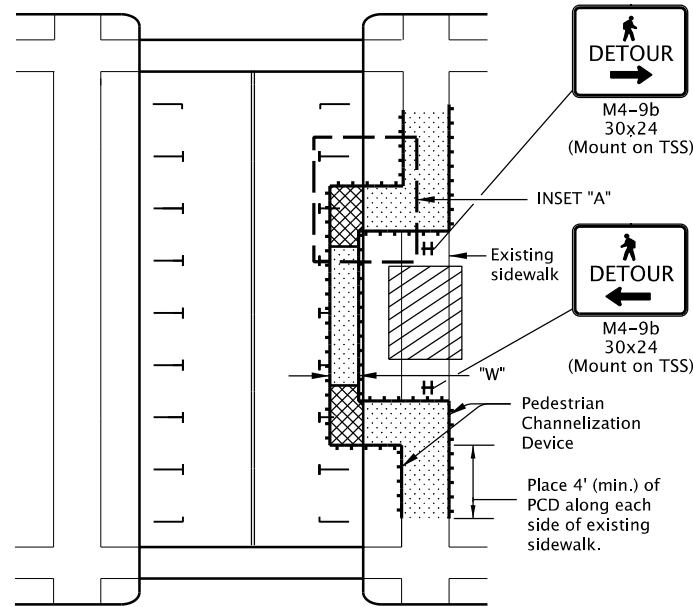
OREGON STANDARD DRAWINGS  
SIGNALIZED INTERSECTION DETAILS

2018

DATE	REVISION DESCRIPTION
01-2018	REVISED DRAWING AND NOTES
01-2019	REVISED NOTES

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tm844.dgn 01-JAN-2019



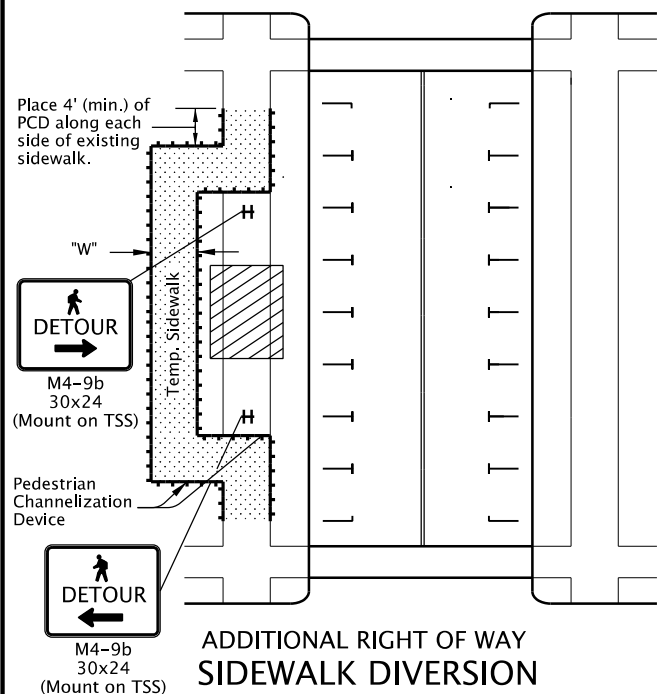
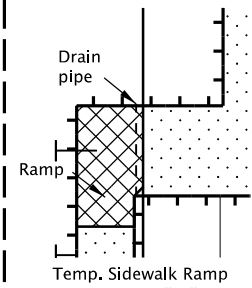
**WITHIN ROADWAY SIDEWALK DIVERSION**

**NOTES:**

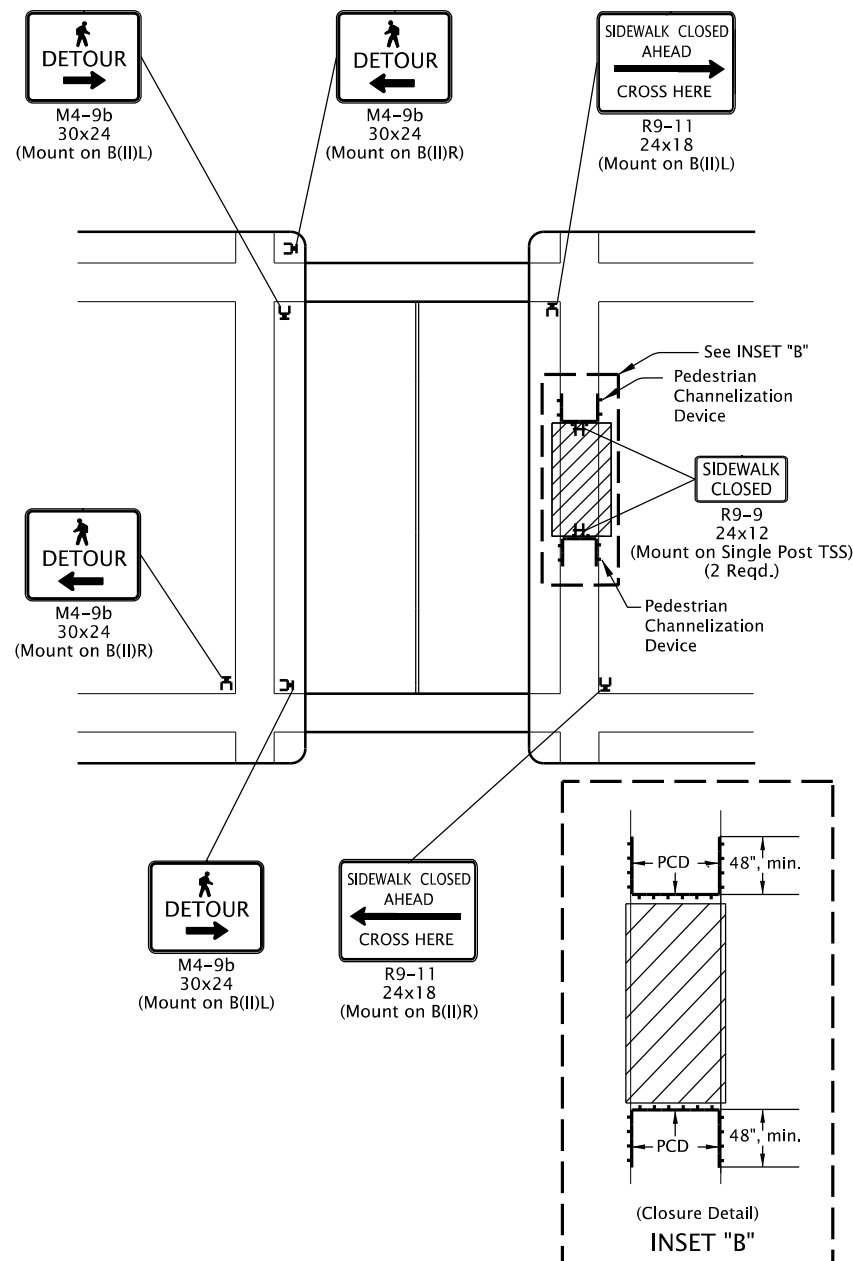
- Place or construct temp. sidewalk ramp, as needed.
- For roadways with a pre-construction posted speed of 40 mph or less.
- See inset "A" for Temp. Sidewalk Ramp details.
- "W" = 60", or, where 60" width cannot be maintained through the entire route, provide 48" min. width with 60" x 60" passing spaces every 200 ft.
- Use temporary ADA compliant surfaces to cross planter strips or other non-traversable surfaces.

**NOTES:**

- Ramp size will vary. Ramp must meet ADA requirements incl. max design grade of 7.5% and max design cross slope of 1.5%.



**ADDITIONAL RIGHT OF WAY SIDEWALK DIVERSION**

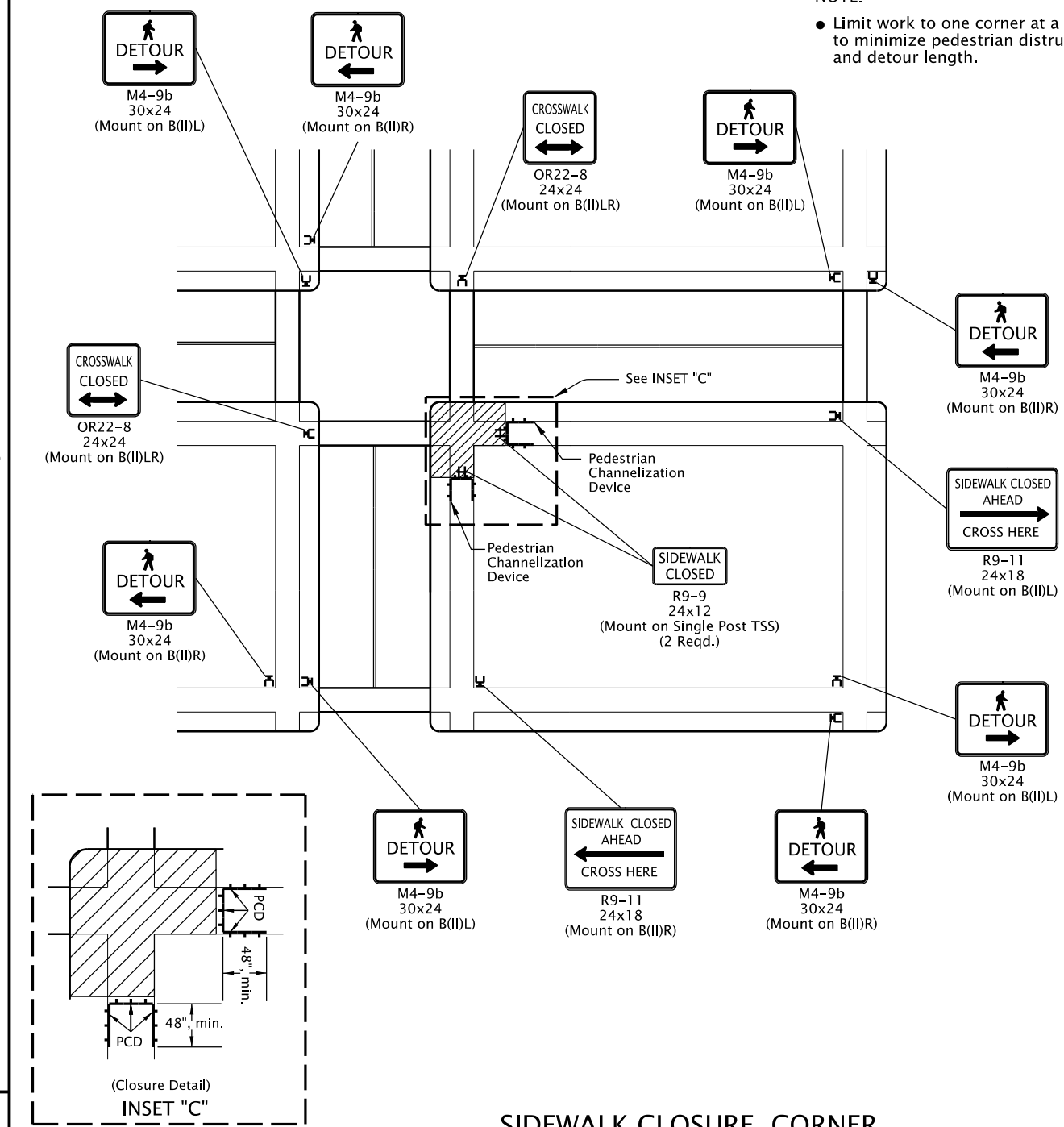


**SIDEWALK CLOSURE, MIDBLOCK**

**GENERAL NOTES FOR ALL DETAILS:**

- When closing or relocating crosswalks or other pedestrian facilities provide ADA compliant facilities. Include accessibility features consistent with existing pedestrian facilities by providing adequate slope transitions and surfacing.
- Provide non-slip, 60 inch minimum wide surface through entire pedestrian route. If not possible, provide 48" min. width with 60" x 60" passing spaces every 200 feet along the route.
- Only TCD for pedestrians are shown. Other devices may be necessary to control vehicular traffic.
- Stage work, as necessary, to provide a temporary pedestrian access route at all times. For roadways with no available detours, maintain one open sidewalk at all times.
- Minimize pedestrian out-of-direction travel.
- To be accompanied by Drg. Nos. TM820 & TM821.

- UNDER PEDESTRIAN TRAFFIC
- UNDER CONSTRUCTION
- PEDESTRIAN CHANNELIZATION DEVICE



**SIDEWALK CLOSURE, CORNER**

**NOTE:**  
 • Limit work to one corner at a time to minimize pedestrian disruption and detour length.

CALC. BOOK NO. N/A

BASELINE REPORT DATE 01-JAN-2019

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**OREGON STANDARD DRAWINGS**  
**TEMPORARY PEDESTRIAN ACCESS ROUTING**

2018

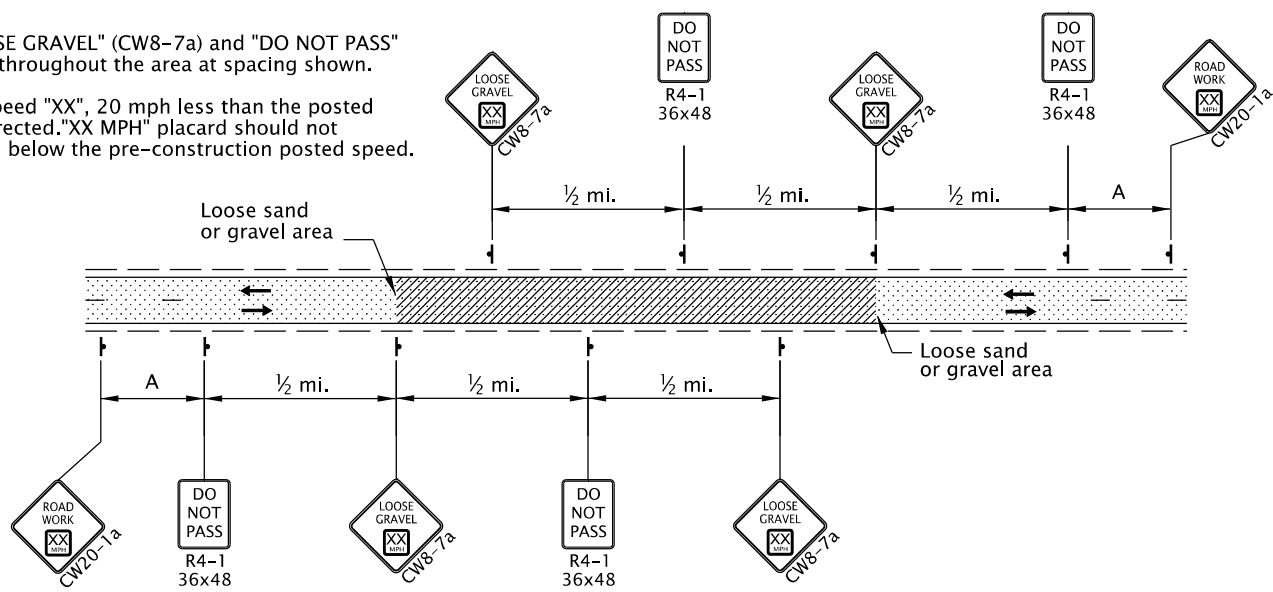
DATE	REVISION	DESCRIPTION
01-2019	REVIS	NOTES

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TM844

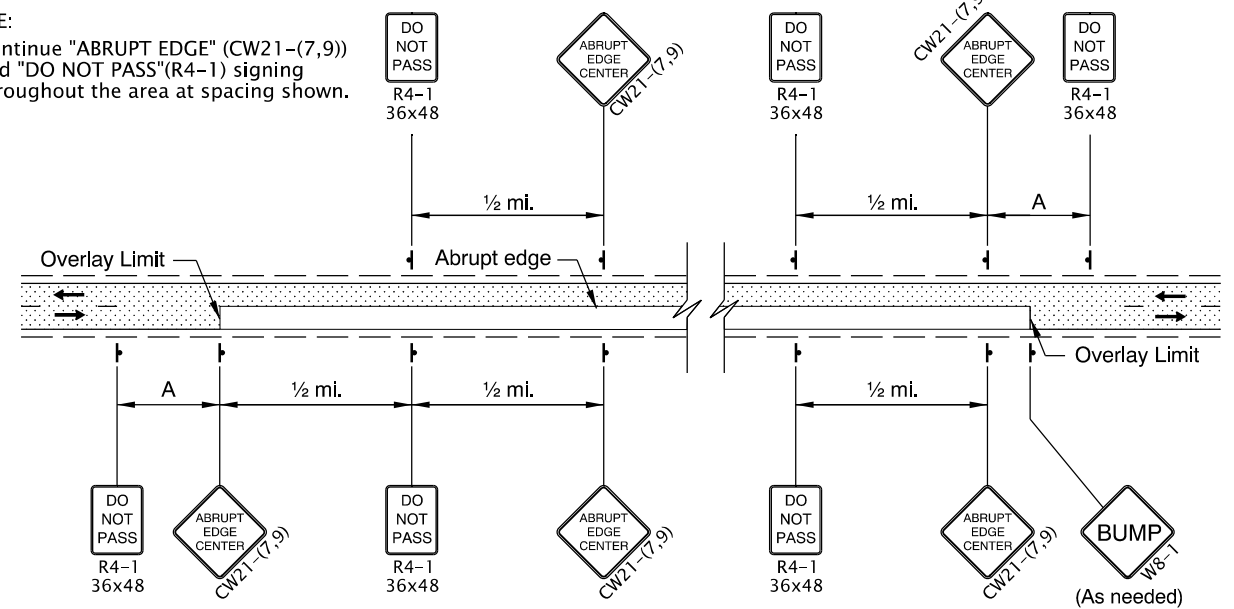
tm850.dgn 01-JAN-2019

- NOTE:
- Continue "LOOSE GRAVEL" (CW8-7a) and "DO NOT PASS" (R4-1) signing throughout the area at spacing shown.
  - Use advisory speed "XX", 20 mph less than the posted speed, or as directed. "XX MPH" placard should not exceed 20 mph below the pre-construction posted speed.



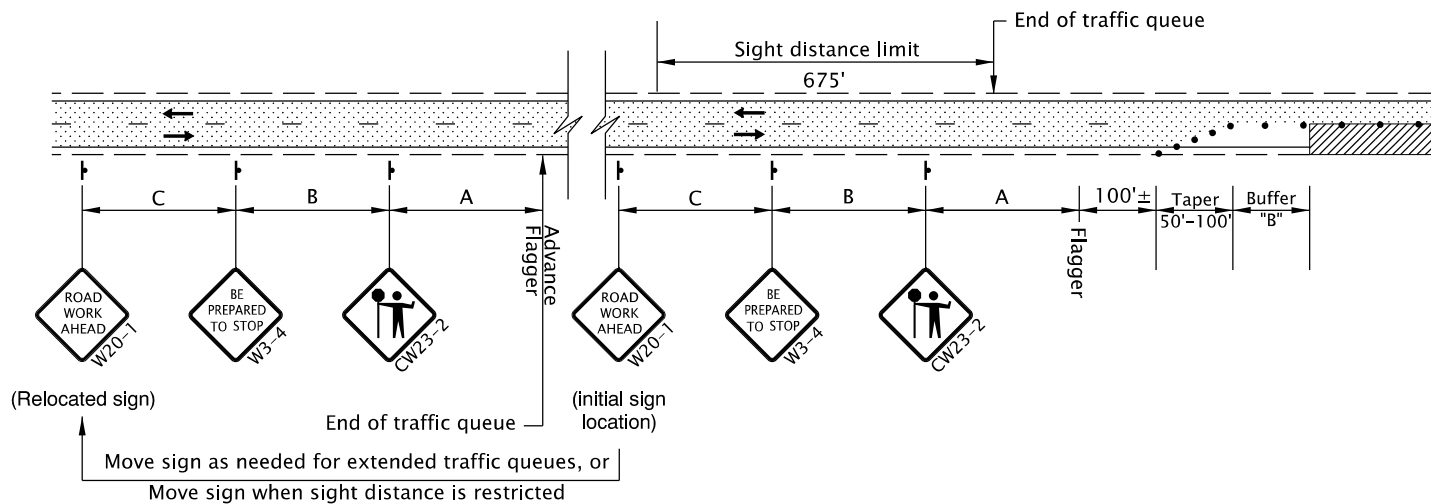
2-LANE, 2-WAY ROADWAY  
LOOSE GRAVEL IN ROADWAY SIGNING

- NOTE:
- Continue "ABRUPT EDGE" (CW21-(7,9)) and "DO NOT PASS" (R4-1) signing throughout the area at spacing shown.

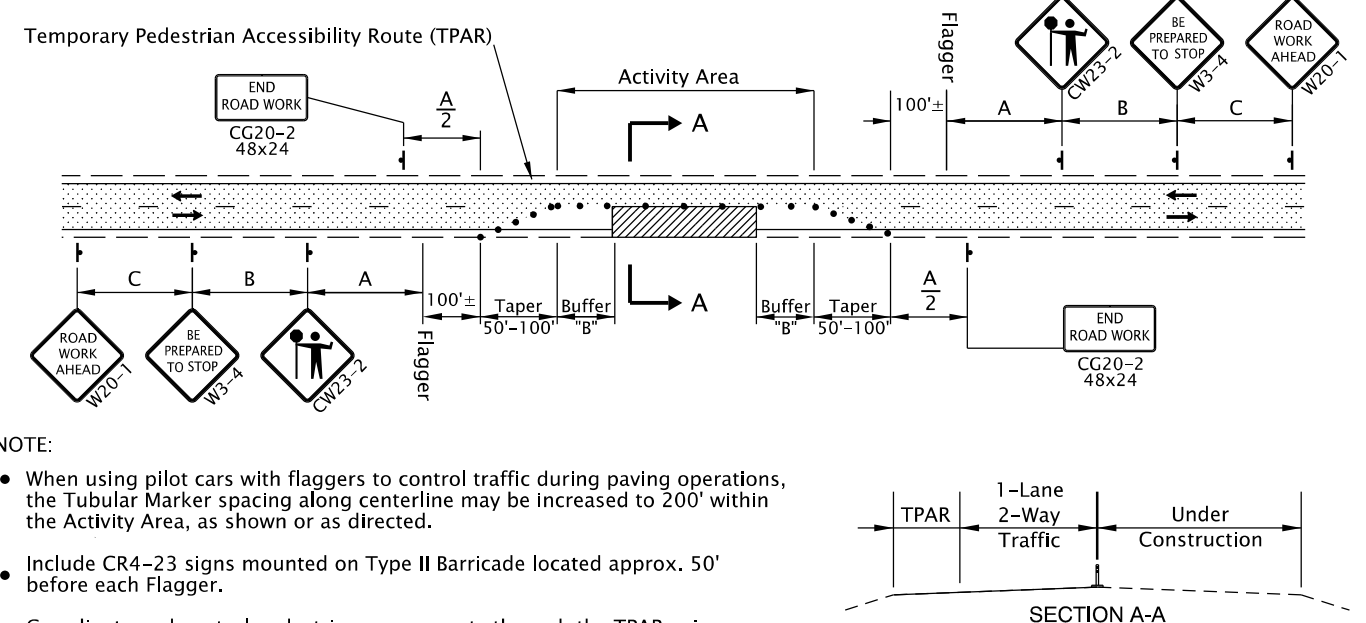


2-LANE, 2-WAY ROADWAY  
OVERLAY AREA SIGNING

- NOTES:
- Place Advance Flagger and additional signing when traffic queues extend beyond initial warning signing OR when sight distance is restricted.
  - 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.
  - Place additional Tubular Markers for Flagger and Advance Flagger Stations according to FLAGGER STATION DELINEATION detail.



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 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.

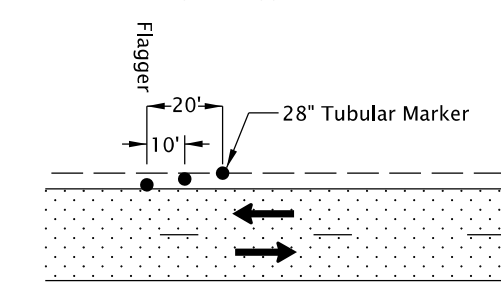
2-LANE, 2-WAY ROADWAY  
ONE LANE CLOSURE

GENERAL NOTES FOR ALL DETAILS:

- 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 Drg. No. TM800.
- To determine sign spacing A, B, and C, use "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Drg. 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.
- To be accompanied by Drg. Nos. TM821.

- • • • • 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  
 CONSTRUCTION UNDER TRAFFIC

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



FLAGGER STATION DELINEATION

CALC. BOOK NO. N/A

BASELINE REPORT DATE 01-JAN-2019

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OREGON STANDARD DRAWINGS

2-LANE, 2-WAY ROADWAYS

2018

DATE	REVISION DESCRIPTION
01-2018	REVISED DRAWING AND NOTES

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TM850