



DAN JOHNSON
DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

June 15, 2023

BCC Agenda Date/Item: _____

Board of County Commissioners
Clackamas County

Approval of a Construction contract with Eagle-Elsner, Inc. for 242nd & Borges Realignment Project. Total Value is \$254,025.50. Funding through the Damascus Roads Fund. No County General Funds are involved.

Previous Board Action/Review	06/13/23: Discussion item at request for consent		
Performance Clackamas	The project will build a strong infrastructure		
Counsel Review	Yes	Procurement Review	Yes
Contact Person	Mike Ward	Contact Phone	503-742-4688

EXECUTIVE SUMMARY: The intersection of 242nd Ave and Borges has been the scene of a number of crashes. This is believed to correlate with the skewed degree of the intersection and the inverted superelevation experienced by vehicles traveling south along Borges proceeding to 242nd Ave. To increase the intersection's safety, the County hired a consultant to design improvements to the road to correct the inverted superelevation and allow vehicles to move safely and navigate the intersection.

This contract will advance construction of the aforementioned safety improvements.

PROCUREMENT PROCESS:

This project was advertised in accordance with ORS and LCRB Rules on April 6, 2023, through RFP 2023-24. Proposals were publicly opened on May 2, 2023. The County received four (4) bids in response by Eagle-Elsner, Inc., Brix Paving Northwest, Inc., Colton Homes, and Western Construction LLC. Eagle-Elsner, Inc. submitted the lowest bid with a total value of \$254,025.50. Contracting with Eagle-Elsner, Inc. was determined to be in the county's best interest based on an evaluation of the bids.

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RECOMMENDATION: Staff respectfully recommends the Board approve and sign this construction contract with Eagle-Elsner, Inc., for the 242nd & Borges Realignment Project.

Respectfully submitted,

Dan Johnson

Dan Johnson
Director of Transportation & Development



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
Contract #8006

This Public Improvement Contract (the "Contract"), is made by and between the Clackamas County, a political subdivision of the State of Oregon, hereinafter called "Owner," and **Eagle-Elsner, Inc**, hereinafter called the "Contractor" (collectively the "Parties"), shall become effective on the date this Contract has been signed by all the Parties and all County approvals have been obtained, whichever is later.

Project Name: # 2023-24 242nd Ave / Borges Realignment Project

1. Contract Price, Contract Documents and Work.

The Contractor, in consideration of the sum of **Two Hundred Fifty-Four Thousand Twenty-Five Dollars and Fifty Cents (\$254,025.50)** (the "Contract Price"), to be paid to the Contractor by Owner in the manner and at the time hereinafter provided, and subject to the terms and conditions provided for in the Instructions to Bidders and other Contract Documents (as defined in the project specifications) referenced within the Instructions to Bidders), all of which are incorporated herein by reference, hereby agrees to perform all Work described and reasonably inferred from the Contract Documents. The Contract Price is the amount contemplated by the Base Bid adjusted for Alternates, as indicated in the accepted Bid.

The following documents are incorporated by reference in this Contract and made a part hereof:

- Notice of Contract Opportunity
- Supplemental Instructions to Bidders
- Bid Form
- Prevailing Wage Rates
- Plans, Specifications and Drawings
- Instructions to Bidders
- Bid Bond
- Performance Bond and Payment Bond
- Payroll and Certified Statement Form
- Addenda 1

The Plans, Specifications and Drawings expressly incorporated by reference into this Contract includes, but is not limited to, the Special Provisions for 242nd/Borges Realignment (the "Specifications"), together with the provisions of the Oregon Standard Specifications for Construction (2018) referenced therein.

The Contractor shall comply with the prohibitions set forth in ORS 652.220, compliance of which is a material element of this Contract and failure to comply is a material breach that entitles County to exercise any rights and remedies available under this Contract including, but not limited to, termination for default.

2. Representatives.

Contractor has named Dave Elsner as its Authorized Representative to act on its behalf. Owner designates, or shall designate, its Authorized Representative as indicted below (check one):

Unless otherwise specified in the Contract Documents, the Owner designates Mike Ward as its Authorized Representative in the administration of this Contract. The above-named individual shall be the initial point of contact for matters related to Contract performance, payment, authorization, and to carry out the responsibilities of the Owner.

Name of Owner's Authorized Representative shall be submitted by Owner in a separate writing.

3. Key Persons.

The Contractor's personnel identified below shall be considered Key Persons and shall not be replaced during the project without the written permission of Owner, which shall not be unreasonably withheld. If the

Contractor intends to substitute personnel, a request must be given to Owner at least 30 days prior to the intended time of substitution. When replacements have been approved by Owner, the Contractor shall provide a transition period of at least 10 working days during which the original and replacement personnel shall be working on the project concurrently. Once a replacement for any of these staff members is authorized, further replacement shall not occur without the written permission of Owner. The Contractor's project staff shall consist of the following personnel:

Project Executive: Jay Campuzano shall be the Contractor's project executive, and will provide oversight and guidance throughout the project term.

Project Manager: Dave Elsner shall be the Contractor's project manager and will participate in all meetings throughout the project term.

Job Superintendent: Dave Elsner shall be the Contractor's on-site job superintendent throughout the project term.

Project Engineer: Jay Campuzano shall be the Contractor's project engineer, providing assistance to the project manager, and subcontractor and supplier coordination throughout the project term.

4. Contract Dates.

COMMENCEMENT DATE: Upon Issuance of Notice to Proceed ("NTP")

SUBSTANTIAL COMPLETION DATE: October 13, 2023

FINAL COMPLETION DATE: June 30, 2024

Time is of the essence for this Contract. It is imperative that the Work in this Contract reach Substantial Completion and Final Completion by the above specified dates.

5. Insurance Certificates and Required Performance and Payment Bonds.

5.1 In accordance with Section 00170.70 of the Specifications, Contractor shall furnish proof of the required insurance naming Clackamas County as an additional insured. Insurance certificates may be returned with the signed Contract or may be emailed to the County Contract Analyst.

5.2 Primary Coverage: Insurance carried by Contractor under the Contract shall be the primary coverage. The coverages indicated are minimums unless otherwise specified in the Contract Documents.

5.2.1 Workers' Compensation: All employers, including Contractor, that employ subject workers who work under the Contract in the State of Oregon shall comply with ORS 656.017 and provide the required Workers' Compensation coverage, unless such employers are exempt under ORS 656.126. This shall include Employer's Liability Insurance with coverage limits of not less than the minimum amount required by statute for each accident. Contractors who perform the Work without the assistance or labor of any employee need not obtain such coverage if the Contractor certifies so in writing. Contractor shall ensure that each of its Subcontractors complies with these requirements. The Contractor shall require proof of such Workers' Compensation coverage by receiving and keeping on file a certificate of insurance from each Subcontractor or anyone else directly employed by either the Contractor or its Subcontractors.

5.3 Builder's Risk Insurance: During the term of the Contract, for new construction the Contractor shall obtain and keep in effect Builder's Risk insurance on an all risk forms, including earthquake and flood, for an amount equal to the full amount of the Contract, plus any changes in values due to modifications, Change Orders and loss of materials added. Such Builder's Risk shall include, in

addition to earthquake and flood, theft, vandalism, mischief, collapse, transit, debris removal, and architect's fees "soft costs" associated with delay of Project due to insured peril. Any deductible shall not exceed \$50,000 for each loss, except the earthquake and flood deductible which shall not exceed 2 percent of each loss or \$50,000, whichever is greater. The deductible shall be paid by Contractor. The policy will include as loss payees Owner, the Contractor and its Subcontractors as their interests may appear.

5.4 Builder's Risk Installation Floater: For Work other than new construction, Contractor shall obtain and keep in effect during the term of the Contract, a Builder's Risk Installation Floater for coverage of the Contractor's labor, materials and equipment to be used for completion of the Work performed under the Contract. The minimum amount of coverage to be carried shall be equal to the full amount of the Contract. The policy will include as loss payees Owner, the Contractor and its Subcontractors as their interests may appear. Owner may waive this requirement at its sole and absolute discretion.

5.4.1 Such insurance shall be maintained until Owner has occupied the facility.

5.4.2 A loss insured under the Builder's Risk insurance shall be adjusted by the Owner and made payable to the Owner as loss payee. The Contractor shall pay Subcontractors their just shares of insurance proceeds received by the Contractor, and by appropriate agreements, written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner. The Owner shall have power to adjust and settle a loss with insurers.

5.5 "Tail" Coverage: If any of the required liability insurance is arranged on a "claims made" basis, "tail" coverage will be required at the completion of the Contract for a duration of 36 months or the maximum time period available in the marketplace if less than 36 months. Contractor shall furnish certification of "tail" coverage as described or continuous "claims made" liability coverage for 36 months following Final Completion. Continuous "claims made" coverage will be acceptable in lieu of "tail" coverage, provided its retroactive date is on or before the effective date of the Contract. Owner's receipt of the policy endorsement evidencing such coverage shall be a condition precedent to Owner's obligation to make final payment and to Owner's final acceptance of Work or services and related warranty (if any).

5.6 Notice of Cancellation or Change: If the Contractor receives a non-renewal or cancellation notice from an insurance carrier affording coverage required herein, or receives notice that coverage no longer complies with the insurance requirements herein, Contractor agrees to notify Owner by fax within five (5) business days with a copy of the non-renewal or cancellation notice, or written specifics as to which coverage is no longer in compliance. When notified by Owner, the Contractor agrees to stop Work pursuant to the Contract at Contractor's expense, unless all required insurance remain in effect. Any failure to comply with the reporting provisions of this insurance, except for the potential exhaustion of aggregate limits, shall not affect the coverages provided to the Owner and its institutions, divisions, officers, and employees.

Owner shall have the right, but not the obligation, of prohibiting Contractor from entering the Project Site until a new certificate(s) of insurance is provided to Owner evidencing the replacement coverage. The Contractor agrees that Owner reserves the right to withhold payment to Contractor until evidence of reinstated or replacement coverage is provided to Owner.

5.7 Before execution of the Contract, the Contractor shall file with the Construction Contractors Board, and maintain in full force and effect, the separate public works bond required by Oregon Revised Statutes, Chapter 279C.830 and 279C.836, unless otherwise exempt under those provisions. The Contractor shall also include in every subcontract a provision requiring the Subcontractor to have

a public works bond filed with the Construction Contractors Board before starting Work, unless otherwise exempt, and shall verify that the Subcontractor has filed a public works bond before permitting any Subcontractor to start Work.

5.8 When the Contract Price is \$50,000 or more, the Contractor shall furnish and maintain in effect at all times during the Contract Period a performance bond in a sum equal to the Contract Price and a separate payment bond also in a sum equal to the Contract Price. Contractor shall furnish such bonds even if the Contract Price is less than the above thresholds if otherwise required by the Contract Documents.

5.9 Bond forms furnished by the Owner and notarized by Contractor's surety company authorized to do business in Oregon are the only acceptable forms of performance and payment security, unless otherwise specified in the Contract Documents.

6. Responsibility for Damages/Indemnity.

6.1 Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay that may be caused by, or result from, the carrying out of the Work to be done under the Contract, or from any act, omission or neglect of the Contractor, its Subcontractors, employees, guests, visitors, invitees and agents.

6.2 To the fullest extent permitted by law, Contractor shall indemnify, defend (with counsel approved by Owner) and hold harmless the Owner and its elected officials, officers, directors, agents, and employees (collectively "Indemnitees") from and against all liabilities, damages, losses, claims, expenses, demands and actions of any nature whatsoever which arise out of, result from or are related to: (a) any damage, injury, loss, expense, inconvenience or delay described in this Section 6.1; (b) any accident or occurrence which happens or is alleged to have happened in or about the Project Site or any place where the Work is being performed, or in the vicinity of either, at any time prior to the time the Work is fully completed in all respects; (c) any failure of the Contractor to observe or perform any duty or obligation under the Contract Documents which is to be observed or performed by the Contractor, or any breach of any agreement, representation or warranty of the Contractor contained in the Contract Documents or in any subcontract; (d) the negligent acts or omissions of the Contractor, a Subcontractor or anyone directly or indirectly employed by them or any one of them or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss or expense is caused in part by a party indemnified hereunder (except to the extent otherwise void under ORS 30.140); and (e) any lien filed upon the Project or bond claim in connection with the Work. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 6.2.

6.3 In claims against any person or entity indemnified under Section 6.2 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 6.2 shall not be limited on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

7. Tax Compliance.

Contractor must, throughout the duration of this Contract and any extensions, comply with all tax laws of this state and all applicable tax laws of any political subdivision of this state. Any violation of this section shall constitute a material breach of this Contract. Further, any violation of Contractor's warranty in this Contract that Contractor has complied with the tax laws of this state and the applicable tax laws of any political subdivision of this state also shall constitute a material breach of this Contract. Any violation shall entitle County to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract, at law, or in

equity, including but not limited to: (A) Termination of this Contract, in whole or in part; (B) Exercise of the right of setoff, and withholding of amounts otherwise due and owing to Contractor, in an amount equal to County's setoff right, without penalty; and (C) Initiation of an action or proceeding for damages, specific performance, declaratory or injunctive relief. County shall be entitled to recover any and all damages suffered as the result of Contractor's breach of this Contract, including but not limited to direct, indirect, incidental and consequential damages, costs of cure, and costs incurred in securing replacement performance. These remedies are cumulative to the extent the remedies are not inconsistent, and County may pursue any remedy or remedies singly, collectively, successively, or in any order whatsoever.

The Contractor represents and warrants that, for a period of no fewer than six calendar years preceding the effective date of this Contract, has faithfully complied with: (A) All tax laws of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318; (B) Any tax provisions imposed by a political subdivision of this state that applied to Contractor, to Contractor's property, operations, receipts, or income, or to Contractor's performance of or compensation for any work performed by Contractor; (C) Any tax provisions imposed by a political subdivision of this state that applied to Contractor, or to goods, services, or property, whether tangible or intangible, provided by Contractor; and (D) Any rules, regulations, charter provisions, or ordinances that implemented or enforced any of the foregoing tax laws or provisions.

8. Confidential Information.

Contractor acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Contract, be exposed to or acquire information that is confidential to Owner. Any and all information of any form obtained by Contractor or its employees or agents in the performance of this Contract shall be deemed confidential information of Owner ("Confidential Information"). Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purpose unless specifically authorized in writing under this Contract.

9. Counterparts.

This Contract may be executed in several counterparts, all of which when taken together shall constitute an agreement binding on all Parties, notwithstanding that all Parties are not signatories to the same counterpart. Each copy of the Contract so executed shall constitute an original.

10. Integration.

All provisions of state law required to be part of this Contract, whether listed in the General or Special Conditions or otherwise, are hereby integrated and adopted herein. Contractor acknowledges the obligations thereunder and that failure to comply with such terms is a material breach of this Contract.

The Contract Documents constitute the entire agreement between the parties. There are no other understandings, agreements or representations, oral or written, not specified herein regarding this Contract. Contractor, by the signature below of its authorized representative, hereby acknowledges that it has read this Contract, understands it, and agrees to be bound by its terms and conditions.

11. Liquidated Damages

The Contractor acknowledges that the Owner will sustain damages as a result of the Contractor's failure to substantially complete the Project in accordance with the Contract Documents. These damages may include, but are not limited to delays in completion, use of the Project, and costs associated with Contract administration and use of temporary facilities.

- 11.1 Liquidated Damages shall be as follows if the actual Substantial Completion exceeds the required date of Substantial Completion:
- 11.1.1. Lane closure and road closure liquidated damages, as set forth in the Specifications.
 - 11.1.2. Traffic delay liquidated damages, as set forth in the Specifications.
 - 11.1.3. \$ 1000 per Calendar day past the Substantial Completion date as identified in section 00180.85 (b) and 00180.85 (c).
 - 11.1.4. Any other liquidated damages provided for in the Specifications.

12. Compliance with Applicable Law. Contractor shall comply with all federal, state, county, and local laws, ordinances, and regulations applicable to the Work to be done under this Contract including, but not limited to, compliance with the prohibitions set forth in ORS 652.220, compliance of which is a material element of this Contract and failure to comply is a material breach that entitles County to exercise any rights and remedies available under this Contract including, but not limited to, termination for default.

13. Responsibility for Taxes. Contractor is solely responsible for payment of any federal, state, or local taxes required as a result of the Contract or the Work including, but not limited, to payment of the corporate activity tax imposed under enrolled HB 3427 (2019 Oregon regular legislative session). Contractor may not include its federal, state, or local tax obligations as part of the cost to perform the Work.

14. No Attorney Fees. In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Contract, each party shall be responsible for its own attorneys' fees and expenses.

Signature page to follow.



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY**

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CLACKAMAS COUNTY
NOTICE OF PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

INVITATION TO BID #2023-24
242nd Ave / Borges Realignment Project
April 6, 2023, 2023

Clackamas County ("County") through its Board of County Commissioners is accepting sealed bids for the **242nd Ave / Borges Realignment Project** until **May 2, 2023, 2:00 PM**, Pacific Time, ("Bid Closing") at the following location:

Bidding Documents can be downloaded from the state of Oregon procurement website ("OregonBuys") at the following address: <https://oregonbuys.gov/bsv/view/login/login.xhtml>, Document No.S-C01010-00006442.

Prospective Bidders will need to sign in to download the information and that information will be accumulated for a Plan Holder's List. Prospective Bidders are responsible for obtaining any Addenda from Website listed above.

Submitting Proposals: Bid Locker

Proposals will only be accepted electronically thru a secure online bid submission service, **Bid Locker**. *Email submissions to Clackamas County email addresses will no longer be accepted.*

- A. Completed proposal documents must arrive electronically via Bid Locker located at <https://bidlocker.us/a/clackamascounty/BidLocker>.
- B. Bid Locker will electronically document the date and time of all submissions. Completed documents must arrive by the deadline indicated in Section 1 or as modified by Addendum. **LATE PROPOSALS WILL NOT BE ACCEPTED.**
- C. Proposers must register and create a profile for their business with Bid Locker in order to submit for this project. It is free to register for Bid Locker.
- D. Proposers with further questions concerning Bid Locker may review the Vendor's Guide located at <https://www.clackamas.us/how-to-bid-on-county-projects>.

Engineers Estimate: \$350,000.00 - \$400,000.00

Contact Information

Procurement Process and Technical Questions: Tralee Whitley at TWhitley@clackamas.us

Bids will be opened and publicly read aloud at the above Delivery address after the Bid Closing. Bid results will also be posted to the OregonBuys listing shortly after the opening.

To be eligible for award under this Invitation to Bid, bidders (prime contractors) must submit a prequalification application (either ODOT or County) to the County at least two business days prior to the Bid Closing. County will reject bids from bidders who are not prequalified for the class of work indicated prior to the Bid Closing. **Bidders must be prequalified in Asphalt Concrete Paving and Oiling.**

State Prevailing Wage

Prevailing Wage Rates requirements apply to this Project because the maximum compensation for all Owner-contracted Work is more than \$50,000. Contractor and all subcontractors shall comply with the provisions of ORS 279C.800 through 279C.870, relative to Prevailing Wage Rates. The Bureau of Labor and Industries (BOLI) wage rates and requirements set forth in the following BOLI booklet (and any

listed amendments to that booklet), which are incorporated herein by reference, apply to the Work authorized under this Agreement:

PREVAILING WAGE RATES for Public Works Contracts in Oregon, January 1, 2023 and amended on January 11, 2023, which can be downloaded at the following web address:

http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx The Work will take place in Clackamas County, Oregon.

Clackamas County encourages bids from Minority, Women, and Emerging Small Businesses.



CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

INSTRUCTIONS TO BIDDERS

Clackamas County Local Contract Review Board Rules (“LCRB Rules”) govern this procurement process. LCRB Rules may be found at: <http://www.clackamas.us/code/documents/appendixc.pdf>. The Instructions to Bidders is applicable to the procurement process for Clackamas County, or any component unit thereof identified on the Notice of Public Improvement Contract Opportunity, herein after referred to as the “Owner.”

Article 1. Scope of Work

The work contemplated under this contract with the Owner, includes all labor, materials, transportation, equipment and services necessary for, and reasonably incidental to, the completion of all construction work in connection with the project described in the Project Manual which includes, but is not necessarily limited to, the Notice of Public Improvement Contract Opportunity, Instructions to Bidders, Supplemental Instructions to Bidders, Bid Form, Bid Bond, Public Improvement Contract Form, Performance Bond, Payment Bond, and Plans, Specifications and Drawings.

Article 2. Examination of Site and Conditions

Before making a Bid, the Bidder shall examine the site of the work and ascertain all the physical conditions in relation thereto. The Bidder shall also make a careful examination of the Project Manual including the plans, specifications, and drawings and other contract documents, and shall be fully informed as to the quality and quantity of materials and the sources of supply of the materials. Failure to take these steps will not release the successful Bidder from entering into the contract nor excuse the Bidder from performing the work in strict accordance with the terms of the contract at the price established by the Bid.

The Owner will not be responsible for any loss or for any unanticipated costs, which may be suffered by the successful Bidder, as a result of such

Bidder's failure to be fully informed in advance with regard to all conditions pertaining to the work and the character of the work required, including site conditions. No statement made by an elected official, officer, agent, or employee of the Owner in relation to the physical or other conditions pertaining to the site of the work will be binding on the Owner, unless covered by the Project Manual or an Addendum.

Article 3. Interpretation of Project Manual and Approval of Materials Equal to Those Provided in the Specifications

If any Bidder contemplating submitting a Bid for the proposed contract is in doubt as to the true meaning of any part of the plans, specifications or forms of contract documents, or detects discrepancies or omissions, such Bidder may submit to the Architect (read "Engineer" throughout in lieu of Architect as appropriate) a written request for an interpretation thereof at least ten (10) calendar days prior to the date set for the Bid Closing.

When a prospective Bidder seeks approval of a particular manufacturer's material, process or item of equal value, utility or merit other than that designated by the Architect in the Project Manual, the Bidder may submit to the Architect a written request for approval of such substitute at least ten (10) calendar days prior to the date set for the Bid Closing. The prospective Bidder submitting the request will be responsible for its prompt delivery.

Requests of approval for a substitution from that specified shall be accompanied by samples, records of performance, certified copies of tests by impartial and recognized laboratories, and such other information as the Architect may request.

To establish a basis of quality, certain processes, types of machinery and equipment or kinds of materials may be specified in the Project Manual either by description of process or by designating a

manufacturer by name and referring to a brand or product designation or by specifying a kind of material. Whenever a process is designated or a manufacturer's name, brand or item designation is given, or whenever a process or material covered by patent is designated or described, it shall be understood that the words "or approved equal" follow such name, designation or description, whether in fact they do so or not.

Any interpretation of the Project Manual or approval of manufacturer's material will be made only by an Addendum duly issued. All Addenda will be posted to the OregonBuys listing and will become a part of the Project Manual. The Owner will not be responsible for any other explanation or interpretation of the Project Manual nor for any other approval of a particular manufacturer's process or item for any Bidder.

When the Architect approves a substitution by Addendum, it is with the understanding that the Contractor guarantees the substituted article or material to be equal or better than the one specified.

Article 4. Security to Be Furnished by Each Bidder

Each Bid must be accompanied by either 1) a cashier's check or a certified check drawn on a bank authorized to do business in the State of Oregon, or 2) a Bid bond described hereinafter, executed in favor of the Owner, for an amount equal to ten percent (10%) of the total amount Bid as a guarantee that, if awarded the contract, the Bidder will execute the contract and provide a performance bond and payment bond as required. The successful Bidder's check or Bid bond will be retained until the Bidder has entered into a contract satisfactory to Owner and furnished a one hundred percent (100%) performance bond and one hundred percent (100%) payment bond. The Owner reserves the right to hold the Bid security as described in Article 10 hereof. Should the successful Bidder fail to execute and deliver the contract as provided for in Article 12 hereof, including a satisfactory performance bond and payment bond within twenty (20) calendar days after the Bid has been accepted by the Owner, then the contract award made to such Bidder may be considered canceled and the Bid security may be

forfeited as liquidated damages at the option of the Owner. The date of the acceptance of the Bid and the award of the contract as contemplated by the Project Manual shall mean the date of acceptance specified in the Notice of Intent to Award.

Article 5. Execution of Bid Bond

Should the Bidder elect to utilize a Bid bond as described in Article 4 in order to satisfy the Bid security requirements, such form must be completed in the following manner:

- A. Bid bonds must be executed on the County forms, which will be provided to all prospective Bidders by the Owner.
- B. The Bid bond shall be executed on behalf of a bonding company licensed to do business in the State of Oregon.
- C. In the case of a sole individual, the bond need only be executed as principal by the sole individual. In the case of a partnership, the bond must be executed by at least one of the partners. In the case of a corporation, the bond must be executed by stating the official name of the corporation under which is placed the signature of an officer authorized to sign on behalf of the corporation followed by such person's official capacity, such as president, etc. The corporation seal should then be affixed to the bond.
- D. The name of the surety must be stated in the execution over the signature of its duly authorized attorney-in-fact and accompanied by the seal of the surety corporation.

Article 6. Execution of the Bid Form

Each Bid shall be made in accordance with: (i) the sample Bid Form accompanying these instructions; (ii) the appropriate signatures for a sole individual, partnership, corporation or limited liability corporation shall be added as noted in Article 5C above; (iii) numbers pertaining to base Bids shall be stated both in writing and in figures; and (iv) the Bidder's address shall be typed or printed.

The Bid Form relates to Bids on a specific Project

Manual. Only the amounts and information asked for on the Bid Form furnished will be considered as the Bid. Each Bidder shall Bid upon the work exactly as specified and provided in the Bid Form. The Bidder shall include in the Bid a sum to cover the cost of all items contemplated by the Contract. The Bidder shall Bid upon all alternates that may be indicated on the Bid Form. When Bidding on an alternate for which there is no charge, the Bidder shall write the words "No Charge" in the space provided on the Bid Form. If one or more alternates are shown on the Bid Form, the Bidder shall indicate whether each is "add" or "deduct."

Article 7. Prohibition of Alterations to Bid

Bids that are incomplete, or contain ambiguities or have differing conditions required by the Bidder, including requested changes or exceptions to the Public Improvement Contract form or other portions of the Project Manual, may be rejected in Owner's sole and absolute discretion.

Article 8. Submission of Bid

Each Bid shall be sealed in an envelope, properly addressed to the Owner, showing on the outside of the envelope the name of the Bidder and the name of the project. Bids will be received at the time and place stated in the Notice of Public Improvement Contract Opportunity.

Article 9. Bid Closing and Opening of Bids

All Bids must be received by the Owner at the place and time set for the Bid Closing. Any Bids received after the scheduled Bid Closing time for receipt of Bids will be rejected.

At the time of opening and reading of Bids, each Bid received will be publicly opened and read aloud, irrespective of any irregularities or informalities in such Bids.

Generally, Bid results will be posted to the Oregonbuys Website within a couple hours of the opening.

Article 10. Acceptance or Rejection of Bids by Owner

Unless all Bids are rejected, the Owner will award a contract based on the lowest responsive Bid from a responsible Bidder. If that Bidder does not execute the contract, it will be awarded to the next lowest responsible Bidder or Bidders in succession.

The Owner reserves the right to reject all Bids and to waive minor informalities. The procedures for contract awards shall be in compliance with the provisions of the LCRB Rules in effect at that time.

The Owner reserves the right to hold the Bid and Bid security of the three lowest Bidders for a period of thirty (30) calendar days from and after the time of Bid opening pending award of the contract. Following award of the contract the Bid security of the three lowest Bidders may be held twenty (20) calendar days pending execution of the contract. All other Bids will be rejected and Bid security will be returned.

In determining the lowest Bidder, the Owner reserves the right to take into consideration any or all authorized base Bids as well as alternates or combinations indicated in the Bid Form.

If no Bid has been accepted within thirty (30) calendar days after the opening of the Bids, each of the three lowest Bidders may withdraw the Bid submitted and request the return of the Bid security.

Article 11. Withdrawal of Bid

At any time prior to the Bid Closing, a Bidder may withdraw its Bid. This will not preclude the submission of another Bid by such Bidder prior to the time set for the Bid Closing.

After the time set for the Bid Closing, no Bidder will be permitted to withdraw its Bid within the time frames specified in Article 10 for award and execution, except as provided for in that Article.

Article 12. Execution of Contract, Performance Bond and Payment Bond

The Owner will provide the successful Bidder with contract forms within seven (7) calendar days after

the completion of the award protest period. The Bidder is required to execute the contract forms as provided, including a performance bond and a payment bond from a surety company licensed to do surety business in the State of Oregon, within seven (7) calendar days after receipt of the contract forms. The contract forms shall be delivered to the Owner in the number called for and to the location as instructed by the Owner.

Article 13. Recyclable Products

Contractors will use recyclable products to the maximum extent economically feasible in the performance of the Contract.

Article 14. Clarification or Protest of the Solicitation Document or Specifications

Any request for clarification or protest of the solicitation document or specifications must be submitted in the manner provided for in the applicable section of the LCRB Rules to the Procurement Representative referenced in the Notice of Public Improvement Contract Opportunity.

A protest of the Solicitation Document must be received within seven (7) business days of the issuance of the Bid or within three (3) business days of issuance of an addendum.

Requests for clarification may be submitted no less than five (5) business days prior to the Bid Closing Date.

Article 15. Protest of Intent to Award

Owner will name the apparent successful Bidder in a "Notice of Intent to Award" letter. Identification of the apparent successful Bidder is procedural only and creates no right in the named Bidder to the award of the contract. Competing Bidders will be notified by publication of the Notice of Intent to Award on the OregonBuys Website of the selection of the apparent successful Bidder(s) and Bidders shall be given seven (7) calendar days from the date on the "Notice of Intent to Award" letter to review the file at the Procurement Division office and file a written protest of award, pursuant to C-049-0450. Any

award protest must be in writing and must be delivered by email, hand delivery, or mail to the Procurement Division Director at: Procurement Division, 2051 Kaen Road, Oregon City, OR 97045.

Article 16. Disclosure of First-Tier Subcontractors

Within two (2) working hours after the Bid Closing, all Bidders shall submit to the County a disclosure form identifying any first-tier subcontractors (those entities that would be contracting directly with the prime contractor) that will be furnishing labor and materials on the contract, if awarded, whose subcontract value would be equal to or greater than: (a) Five percent (5%) of the total contract price, but at least \$15,000; or (b) \$350,000, regardless of the percentage of the total contract price.

Disclosures may be submitted with the Bid or may be hand delivered to the Bid Closing address or emailed to the Contract Information Analyst listed on the Notice of Contract Opportunity.



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT**

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

Project Name: # 2023-24 242nd Ave / Borges Realignment Project

The following modify the Clackamas County “Instructions to Bidders” for this Project. Where a portion of the Instructions to Bidders has been modified by these Supplemental Instructions to Bidders, the unaltered portions shall remain in effect.

1. To be eligible for award under this Invitation to Bid, bidders (prime contractors) must submit a prequalification application (either ODOT or County) to the County at least two business days prior to the Bid Closing. County will reject bids from bidders who are not prequalified for the class of work indicated prior to the Bid Closing. **Bidders must be prequalified in Asphalt Concrete Paving and Oiling.**
1. **Electronic Submissions: The County is requiring all bids for this project be electronically submitted. Complete Bids (including all attachments) will only be accepted electronically thru a secure online bid submission service, Bid Locker. Email submissions to Clackamas County email addresses will no longer be accepted. <https://bidlocker.us/a/clackamascounty/BidLocker>.**

Bids will be publicly read aloud via the computer application, Zoom. Bidders will be allowed to video conference or listen by phone to the bid results. The projects Zoom meeting can be accessed via the information below:

ZOOM LINKS.

Join Zoom Meeting

<https://clackamascounty.zoom.us/j/82678972904>

Meeting ID: 826 7897 2904

One tap mobile

+16694449171,,82678972904# US

+16699006833,,82678972904# US (San Jose)

Dial by your location

+1 669 444 9171 US

+1 669 900 6833 US (San Jose)

+1 719 359 4580 US

+1 253 205 0468 US

+1 253 215 8782 US (Tacoma)

+1 346 248 7799 US (Houston)

+1 408 638 0968 US (San Jose)
+1 301 715 8592 US (Washington DC)
+1 305 224 1968 US
+1 309 205 3325 US
+1 312 626 6799 US (Chicago)
+1 360 209 5623 US
+1 386 347 5053 US
+1 507 473 4847 US
+1 564 217 2000 US
+1 646 876 9923 US (New York)
+1 646 931 3860 US
+1 689 278 1000 US

Meeting ID: 826 7897 2904

Find your local number: <https://clackamascounty.zoom.us/j/82678972904>

**The Apparent Low bid results will be posted to the projects OregonBuys listing as soon as possible following the bid opening.

- 2. Good Faith Effort:** Clackamas County encourages participation in contracts by Historically Underrepresented Businesses. “Historically Underrepresented Businesses” are State of Oregon-certified and self-identified minority, women and emerging small business as well as firms that are certified federally or by another state or entity with substantially similar requirements as the State of Oregon.

Bidders must perform Good Faith Effort (defined below) and submit **Form 1 and Form 2** for the Bidders Bid to be considered responsive. **Form 1 and Form 2** must be submitted within **two (2) hours** after the Closing Date and Time. Form 1 and Form 2 may be submitted to either the Contact Information Analyst listed on Notice of Contract Opportunity or via the <https://bidlocker.us/a/clackamascounty/BidLocker> listing.

“Good Faith Effort” is a requirement of a prime contractor to reach out to at least three Historically Underrepresented Business Subcontractors for each division of work that will be subcontracted out and to complete the required forms. If fewer than three Historically Underrepresented Business Subcontractors are reasonably available for a particular division of work, the Bidder must specifically note the reason for there being fewer than three contacts. The outreach should be performed with sufficient time to give the subcontractors at least 5 calendar days to respond to the opportunity. Form 3, which documents the actual amount of subcontractors on the project, must be submitted with the project final pay application. Compliance with the Good Faith Effort and submission of Forms 1, 2 and 3 is a contractual requirement for final payment.

The sufficiency of the documentation or the performance of Good Faith Effort shall be in the sole and absolute determination of Clackamas County. Only those Bidders that Clackamas County has determined have not sufficiently performed Good Faith Effort shall have protest rights of the determination for such Bidder.

No Bidder shall have protest rights of the sufficiency of any other Bidder completing Good Faith Effort.

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
SUBCONTRACTOR AND SELF-PERFORMED WORK LIST
(FORM 1)**

Prime Contractor Name: **EAGLE-ELSNER, INC.**
Project Name: # 2023-24 242nd Ave / Borges Realignment Project

Total Contract Amount: **254,025.50**

PRIME SELF-PERFORMING: Identify below ALL GFE Divisions of Work (DOW) to be self-performed. Good Faith Efforts are otherwise required.

DOW BIDDER WILL SELF-PERFORM (GFE not required)	
<p style="font-size: 1.2em; margin: 0;">ALL WORK EXCEPT FLAGGING + STRIPING + SURVEY</p>	

PRIME CONTRACTOR SHALL DISCLOSE AND LIST ALL SUBCONTRACTORS, including those Minority-owned, Woman-owned, and Emerging Small Businesses ("M/W/ESB") that you intend to use on the project. Delivery via bid locker <https://bidlocker.us/a/clackamascounty/BidLocker> within 2 hours of the BID/Quote Closing Date/Time.

LIST ALL SUBCONTRACTORS BELOW Use <u>correct legal name</u> of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reporting MBE/WBE/ESB Subcontractor Check box <input checked="" type="checkbox"/>		
			MBE	WBE	ESB
Name HIGH QUALITY TRAFFIC Address 15400 LIBBY LN SE City/St/Zip JEFFERSON, OR 97352 Phone# (503) 949-8656 OCCB# 233615	FLAGGING	\$60/HR TBD.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Name SFM Address 11095 SW INDUSTRIAL WAY City/St/Zip TUALATIN, OR 97062 Phone# (503) 885-0420 OCCB# 238621	STRIPING	14,000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name COMPASS LAND Address 4107 SE INTERNATIONAL WAY City/St/Zip MILWAUKIE, OR 97222 Phone# (503) 653-9093 OCCB# N/A	SURVEY	15,990-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CLACKAMAS COUNTY
GOOD FAITH EFFORT
M/WESB CONTACT / BIDS RECEIVED LOG
(FORM 2)

Prime Contractor: **EAGLE-ELSNER, INC**
Project: # 2023-24 242nd Ave / Borges Realignment Project

Prime Contractor must contact or endeavor to contact at least 3 M/WESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/WESB Subcontractors through use of this log (or equivalent) entering all required information. All columns shall be completed where applicable. Additional forms may be copied if needed.

NAME OF M/WESB SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
A+ FLAGGING	TRAFFIC CONTROL FLAGGING		4.26.23	MEADOW	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			EMAILED PLANS ON 4.26.23
D & H FLAGGING	TRAFFIC CONTROL FLAGGING		4.26.23	MANDY	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		PRICE TOO HIGH	EMAILED PLANS ON 4.26.23
HIGH QUALITY TRAFFIC CONTROL	FLAGGING		4.26.23	LEFT VOICEMAIL FOR SHELLY	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	60.00/hr	N/A	EMAILED PLANS ON 4.26.23
CHAMPION PARKING LOT MAIN.	STRIPING		4.26.23	LEFT VOICEMAIL	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
DT STRIPING LLC	STRIPING		4.26.23	LEFT VOICEMAIL FOR DONNIE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			EMAILED PLANS ON 4.26.23
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID BOND

Project Name: # 2023-24 242nd Ave / Borges Realignment Project

We, Eagle Elsner, Inc., as "Principal,"
(Name of Principal)

and Western Surety Company, an South Dakota Corporation,
(Name of Surety)

authorized to transact Surety business in Oregon, as "Surety," hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns to pay unto Clackamas County ("Obligee") the sum of (\$ 10% of Bid---

Ten Percent of Total Amount Bid-- dollars.

WHEREAS, the condition of the obligation of this bond is that Principal has submitted its proposal or bid to an agency of the Obligee in response to Obligee's procurement document (No2023-24) for the project identified above which proposal or bid is made a part of this bond by reference, and Principal is required to furnish bid security in an amount equal to ten (10%) percent of the total amount of the bid pursuant to the procurement document.

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

IN WITNESS WHEREOF, we have caused this instrument to be executed and sealed by our duly authorized legal representatives this 18th day of April, 2023.

Principal: Eagle Elsner, Inc.

Surety: Western Surety Company

By: [Signature]
Signature

By: Attorney-In-Fact

PRESIDENT
Official Capacity

Gloria Bruning
Name

Attest: [Signature]
Corporation Secretary

PO Box 2808
Address

Portland, OR 97208

City State Zip

503-224-2500 503-224-9830

Phone Fax

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Philip O Forker, Vicki Mather, Gloria Bruning, J Patrick Dooney, Richard W Kowalski, Brent Olson, Leticia Romano, Joel Dietzman, Christopher A Reburn, Gail A Price, Justin Cumnock, Andrew Choruby, Casey J Geske, Sterling Drew Roddan, Amanda J Lee, Individually

of Lake Oswego, OR, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 14th day of December, 2021.



WESTERN SURETY COMPANY

Paul T. Bruflat

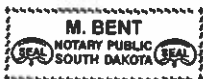
Paul T. Bruflat, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 14th day of December, 2021, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota, that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

March 2, 2026



M. Bent

M. Bent, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 18th day of April, 2023



WESTERN SURETY COMPANY

L. Nelson

L. Nelson, Assistant Secretary



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID FORM

PROJECT: # 2023-24 242nd Ave / Borges Realignment Project
BID CLOSING: May 2, 2023, 2:00 PM, Pacific Time
BID OPENING: May 2, 2023, 2:05 PM, Pacific Time

FROM: EAGLE-ELSNER, INC.
Bidder's Name (must be full legal name, not ABN/DBA)

TO: https://bidlocker.us/a/clackamascountry/BidLocker

1. Bidder is (check one of the following and insert information requested):

- a. An individual; or
b. A partnership registered under the laws of the State of _____; or
X c. A corporation organized under the laws of the State of OREGON; or
d. A limited liability corporation organized under the laws of the State of _____;

and authorized to do business in the State of Oregon hereby proposes to furnish all material and labor and perform all work hereinafter indicated for the above project in strict accordance with the Contract Documents for the Basic Bid as follows:

Two Hundred Forty-Nine Thousand, RE 254,025.50
Four Hundred Twenty-Five Dollars and Fifty Cents Dollars (\$ 249,225.50) (50 RE)

and the Undersigned agrees to be bound by the following documents:

- Notice of Public Improvement Contract Opportunity
• Instructions to Bidders
• Bid Bond
• Public Improvement Contract Form
• Prevailing Wage Rates
• Plans, Specifications and Drawings
• Supplemental Instructions to Bidders
• Bid Form
• Performance Bond and Payment Bond
• Payroll and Certified Statement Form

• ADDENDA numbered 1 through 1, inclusive (fill in blanks)

2. The Undersigned proposes to add to or deduct from the Base Bid indicated above the items of work relating to the following Alternate(s) as designated in the Specifications: N/A

3. The Undersigned proposes to add to or deduct from the Base Bid indicated above the items or work relating to the following Unit Price(s) as designated in the Specifications, for which any adjustments in the Contract amount will be made in accordance with the project specifications: Provide the attached Bid Schedules with Bid.

4. The work shall be completed within the time stipulated and specified in 00180.50(h) of the Special Provisions for **242nd/ Borges Realignment for Clackamas County**.

5. Accompanying herewith is Bid Security which is equal to ten percent (10%) of the total amount of the Basic Bid, plus the total sum of Alternatives (if any).

6. The Undersigned agrees, if awarded the Contract, to execute and deliver to Clackamas County, within twenty (20) calendar days after receiving the Contract forms, a Contract Form, and a satisfactory Performance Bond and Payment Bond each in an amount equal to one hundred percent (100%) of the Contract sum, using forms provided by the Owner. The surety requested to issue the Performance Bond and Payment Bond will be:

WESTERN SURETY
(name of surety company - not insurance agency)

The Undersigned hereby authorizes said surety company to disclose any information to the Owner concerning the Undersigned's ability to supply a Performance Bond and Payment Bond each in the amount of the Contract.

7. The Undersigned further agrees that the Bid Security accompanying the Bid is left in escrow with Clackamas County; that the amount thereof is the measure of liquidated damages which the Owner will sustain by the failure of the Undersigned to execute and deliver the above-named Contract Form, Performance Bond and Payment Bond, each as published, and that if the Undersigned defaults in either executing the Contract Form or providing the Performance Bond and Payment Bond within twenty (20) calendar days after receiving the Contract forms, then the Bid Security shall become the property of the Owner at the Owner's option; but if the Bid is not accepted within thirty (30) calendar days of the time set for the opening of the Bids, or if the Undersigned executes and timely delivers said Contract Form, Performance Bond and Payment Bond, the Bid Security shall be returned.

8. The Undersigned certifies that: (i) This Bid has been arrived at independently and is being submitted without collusion with and without any agreement, understanding, or planned common course of action with any other vendor of materials, supplies, equipment or services described in the invitation to bid designed to limit independent bidding or competition; and (ii) the contents of the Bid have not been communicated by the Undersigned or its employees or agents to any person not an employee or agent of the Undersigned or its surety on any Bond furnished with the Bid and will not be communicated to such person prior to the official opening of the Bid.

9. The undersigned HAS, HAS NOT (check one) paid unemployment or income taxes in Oregon within the past 12 months and DOES, DOES NOT (check one) a business address in Oregon. The undersigned acknowledges that, if the selected bidder, that the undersigned will have to pay all applicable taxes and register to do business in the State of Oregon before executing the Contract Form.

10. The Undersigned agrees, if awarded a contract, to comply with the provisions of ORS 279C.800 through 279C.870 pertaining to the payment of the prevailing rates of wage.

11. Contractor's CCB registration number is 27112. As a condition to submitting a bid, a Contractor must be registered with the Oregon Construction Contractors Board in accordance with ORS 701.035 to 701.055, and disclose the registration number. Failure to register and disclose the number will make the bid unresponsive and it will be rejected, unless contrary to federal law.

12. The successful Bidder hereby certifies that all subcontractors who will perform construction work as described in ORS 701.005(2) were registered with the Construction Contractors Board in accordance with ORS 701.035 to 701.055 at the time the subcontractor(s) made a bid to work under the contract.

Project Name:		242nd Ave & Borges Rd Realignment		Entered By: MW			
Description:		Bid Schedule		Checked By: JH			
Date:		2/13/2023					
ITEM NO.	BID ITEM CODE	ITEM	QUANTITY	UNITS	UNIT COST	TOTAL	
100 - EXTRA WORK							
1	00180	WORKPLACE HARASSMENT PREVENTION PLAN	1	LS	1,500.00	1,500.00	
2	00196	EXTRA WORK AS AUTHORIZED	1	LS	50,000.00	50,000.00	
200 - TEMPORARY FEATURES AND APPURTENANCES							
3	00210	MOBILIZATION	1	LS	27,925.00	27,925.00	
4	00225	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	1	LS	32,800.00	32,800.00	
4	00280	EROSION CONTROL	1	LS	1,500.00	1,500.00	
5	00280	CHECK DAMS, TYPE 6	2	EACH	155.00	310.00	
6	00280	SEDIMENT FENCE	160	FT	9.00	1,440.00	
7	00280	INLET PROTECTION, TYPE 3	2	EACH	97.00	194.00	
8	00290	POLLUTION CONTROL PLAN	1	LS	1,000.00	1,000.00	
300 - ROADWORK							
9	00310	REMOVAL OF SURFACINGS	230	SY	16.00	3,680.00	
10	00320	CLEARING AND GRUBBING	1	LS	1240.00	1,240.00	
11	00331	12 INCH SUBGRADE STABILIZATION	450	SY	25.00	11,250.00	
--	----	DELETED ITEM	----	----	----	----	
13	00350	SUBGRADE GEOTEXTILE	1,230	SY	2.00	2,460.00	
400 - DRAINAGE AND SEWERS							
14	00490	ADJUSTING BOXES	1	EACH	194.00	194.00	
15	00490	MINOR ADJUSTMENT OF MANHOLES	3	EACH	1,350.00	4,050.00	
600 - BASES							
16	00620	COLD PLANE PAVEMENT REMOVAL, 2 INCHES DEEP	330	SY	17.00	5,610.00	
17	00620	COLD PLANE PAVEMENT REMOVAL, 4 INCHES DEEP	1310	SY	12.00	15,720.00	
18	00641	AGGREGATE BASE	45	CY	93.00	4,185.00	
19	00641	AGGREGATE SHOULDERS	20	CY	155.00	3,100.00	
700 - WEARING SURFACES							
20	00744	LEVEL 3, 1/2 INCH ACP MIXTURE	475	TON	115.00	54,625.00	
21	00749	EXTRA FOR ASPHALT APPROACHES	1,210	SF	2.50	3,025.00	
800 - PERMANENT TRAFFIC SAFETY AND GUIDANCE DEVICES							
22	00840	DELINEATORS, TYPE 2	15	EACH	60.50	907.50	
23	00855	BI-DIRECTIONAL YELLOW TYPE 1AR MARKERS, RECESSED	15	EACH	275.00	4,125.00	
24	00855	WHITE TYPE II MARKERS	30	EACH	60.50	1,815.00	
25	00865	THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED	1,300	FT	7.00	9,100.00	
26	00867	PAVEMENT BAR, TYPE B-HS	50	SF	33.00	1,650.00	
900 - PERMANENT TRAFFIC CONTROL AND ILLUMINATION SYSTEMS							
27	00905	REMOVE EXISTING SIGNS	1	LS	685.00	685.00	
28	00905	REMOVE AND REINSTALL EXISTING SIGNS	1	LS	725.00	725.00	
29	00930	PERFORATED STEEL SQUARE TUBE ANCHOR SIGN SUPPORTS	1	LS	2,830.00	2,830.00	
30	00940	SIGNS, STANDARD SHEETING, SHEET ALUMINUM	90	SF	32.00	2,880.00	
1000 - RIGHT OF WAY DEVELOPMENT AND CONTROL							
31	01030	PERMANENT SEEDING	0.05	AC	30,000.00	1,500.00	
32	01040	TOPSOIL	25	CUYD	80.00	2,000.00	

RE
15,720.00

PROPOSED COST BID SCHEDULE 249,225.50 254,025.50 ^{RE}
(Numerically) **FIFTY-FOUR**

PROPOSED COST BID SCHEDULE Two Hundred Forty-Nine Thousand, Two Hundred Twenty-Five and Fifty Cents
(Written in Words)

COMPANY NAME EAGLE-ELSNER, INC.

AUTHORIZED SIGNATURE Richard Eagle, Pres

13. The successful Bidder hereby certifies that, in compliance with the Worker's Compensation Law of the State of Oregon, its Worker's Compensation Insurance provider is SAIF CORP., Policy No. 810540, and that Contractor shall submit Certificates of Insurance as required.

14. Contractor's Key Individuals for this project (supply information as applicable):

Project Executive:	<u>JAY CAMPUZANO</u>	Cell Phone:	<u>(971) 235-7189</u>
Project Manager:	<u>DAVE ELSNER</u>	Cell Phone:	<u>(971) 235-4571</u>
Job Superintendent:	<u>DAVE ELSNER</u>	Cell Phone:	<u>(971) 235-4571</u>
Project Engineer:	<u>JAY CAMPUZANO</u>	Cell Phone:	<u>(971) 235-7189</u>

15. The Undersigned certifies that it has not discriminated against minority, women, or emerging small businesses in obtaining any subcontracts for this project.

16. The Undersigned certifies that it has a drug testing program in accordance with ORS 279C.505.

REMINDER: Bidder must submit the below First-Tier Subcontractor Disclosure Form.

By signature below, Contractor agrees to be bound by this Bid.

NAME OF FIRM EAGLE- ELSNER, INC.
ADDRESS P.O. BOX 23294
TIGARD, OR 97281
TELEPHONE NO (503) 628-1137
EMAIL DICK@EAGLE- ELSNER.COM
SIGNATURE 1) _____
Sole Individual
or 2) _____
Partner
or 3) Richard Eagle, Pres
Authorized Officer or Employee of Corporation

***** END OF BID *****

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM
PROJECT: #2023-24 242nd Ave / Borges Realignment Project

BID OPENING: May 2, 2023, 2:00 PM, Pacific Time

Failure to submit this Form by the disclosure deadline will result in a nonresponsive bid.

INSTRUCTIONS:

This First-Tier Subcontractor Disclosure Form ("Form") must be submitted and received at the location specified in the Notice of Public Improvement Contract Opportunity on the advertised Bid Closing, and within two working hours after the advertised Bid Closing Time.

- A. Completed proposal documents must arrive electronically via Bid Locker located at <https://bidlocker.us/a/clackamascounty/BidLocker>.
- B. Bid Locker will electronically document the date and time of all submissions. Completed documents must arrive by the deadline indicated in Section I or as modified by Addendum. **LATE PROPOSALS WILL NOT BE ACCEPTED.**
- C. Proposers must register and create a profile for their business with Bid Locker in order to submit for this project. It is free to register for Bid Locker.
- D. Proposers with further questions concerning Bid Locker may review the Vendor's Guide located at <https://www.clackamas.us/how-to-bid-on-county-projects>.

Subcontractor lists may be submitted with the bid in the same envelope or email at the Bid Closing date and time. Subcontractor lists **MUST** be submitted within **two (2) hours** of the Bid Closing date and time.

List below the name of each subcontractor that will be furnishing labor, or labor and materials, for which disclosure is required, the category of work that the subcontractor will be performing, and the dollar value of the subcontract. Enter **"NONE"** if the value of the project bid is less than \$100,000 or there are no subcontractors that need to be disclosed. **ATTACH ADDITIONAL SHEETS IF NECESSARY.**

	SUBCONTRACTOR NAME	DOLLAR VALUE	CATEGORY OF WORK
1.	<u>COMPASS LAND</u>	<u>15,990-</u>	<u>SURVEY</u>
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

The above listed first-tier subcontractor(s) are providing labor, or labor and material, with a Dollar Value equal to or greater than:

- a) 5% of the total Contract Price, but at least \$15,000. If the Dollar Value is less than \$15,000 do not list the subcontractor above; or
- b) \$350,000 regardless of the percentage of the total Contract Price.

Firm Name: EAGLE-ELSNER, INC.

Bidder Signature: Richard Eagle Pres Phone # (503) 628-1137



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PERFORMANCE BOND

Bond No.: 30189326
Solicitation: #2023-24
Project Name: 242nd Ave / Borges Realignment Project

Table with 3 columns: Surety Name, Bond Amount No. 1, Bond Amount No. 2, Total Penal Sum of Bond. Values include \$254,025.50.

We, Western Surety Company as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves...

WHEREAS, the Principal has entered into a contract with Clackamas County, along with the plans, specifications, terms and conditions of which are contained in the above-referenced Solicitation; and

WHEREAS, the terms and conditions of the contract, together with applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Performance Bond by reference, whether or not attached to the contract (all hereafter called "Contract"); and

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and all authorized modifications of the Contract which increase the amount of the work, the amount of the Contract, or constitute an authorized extension of the time for performance, notice of any such modifications hereby being waived by the Surety:

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal herein shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things undertaken by Contractor to be performed under the Contract, upon the terms set forth therein, and within the time prescribed therein, or as extended as provided in the Contract, with or without notice to the Sureties, and shall defend, indemnify, and save harmless Clackamas County and its elected officials, officers, employees and agents, against any direct or indirect damages or claim of every kind and description that shall be suffered or claimed to be suffered in connection with or arising out of the performance of the Contract by the Principal or its subcontractors, and shall in

all respects perform said contract according to law, then this obligation is to be void; otherwise, it shall remain in full force and effect for so long as any term of the Contract remains in effect.

Nonpayment of the bond premium will not invalidate this bond nor shall Clackamas County, be obligated for the payment of any premiums.

This bond is given and received under authority of Oregon Revised Statutes Chapter 279C and the Clackamas County Local Contractor Review Board Rules, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES.

Dated this 30th day of May, 2023.

PRINCIPAL: Eagle Elsner, Inc.

By: Richard Eagle, Pres
Signature

Attest: Maryo Newson
Official Capacity
Corporation Secretary

SURETY: Western Surety Company
[Add signatures for each if using multiple bonds]

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

Gloria Bruning
Name
Gloria Bruning
Signature

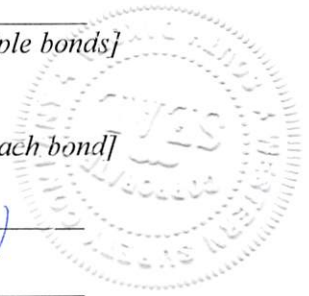
PO Box 2808
Address

Portland, OR 97208

City State Zip

503-224-2500 503-224-9830

Phone Fax



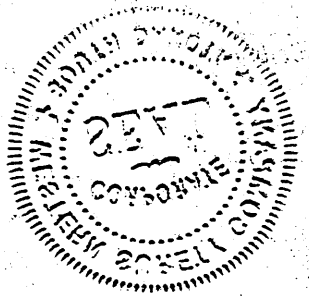
... ..

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[Handwritten signature]



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Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Philip O Forker, Vicki Mather, Gloria Bruning, J Patrick Dooney, Richard W Kowalski, Brent Olson, Leticia Romano, Joel Dietzman, Christopher A Reburn, Gail A Price, Justin Cumnock, Andrew Choruby, Casey J Geske, Sterling Drew Roddan, Amanda J Lee, Individually

of Lake Oswego, OR, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 14th day of December, 2021.



WESTERN SURETY COMPANY

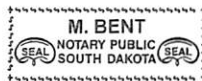
Paul T. Bruflat

Paul T. Bruflat, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 14th day of December, 2021, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires
March 2, 2026



M. Bent

M. Bent, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 30th day of May, 2023



WESTERN SURETY COMPANY

L. Nelson

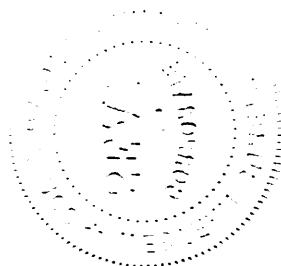
L. Nelson, Assistant Secretary

Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.





CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PAYMENT BOND

Bond No.: 30189326
Solicitation: #2023-24
Project Name: 242nd Ave / Borges Realignment Project

Table with 3 columns: Surety Name, Bond Amount No., and Amount. Includes entries for Western Surety Company and Total Penal Sum of Bond.

We, Eagle Elsner, Inc., as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves...

WHEREAS, the Principal has entered into a contract with Clackamas County, along with the plans, specifications, terms and conditions of which are contained in above-referenced Solicitation; and

WHEREAS, the terms and conditions of the contract, together with applicable plans, standard specifications, special provisions, schedule of performance, and schedule of contract prices, are made a part of this Payment Bond by reference...

WHEREAS, the Principal has agreed to perform the Contract in accordance with the terms, conditions, requirements, plans and specifications, and schedule of contract prices which are set forth in the Contract and any attachments...

NOW, THEREFORE, THE CONDITION OF THIS BOND IS SUCH that if the Principal shall faithfully and truly observe and comply with the terms, conditions and provisions of the Contract, in all respects, and shall well and truly and fully do and perform all matters and things by it undertaken to be performed under said Contract...

shall permit no lien nor claim to be filed or prosecuted against Clackamas County on account of any labor or materials furnished; and shall do all things required of the Principal by the laws of this State, then this obligation shall be void; otherwise, it shall remain in full force and effect for so long as any term of the Contract remains in effect.

Nonpayment of the bond premium will not invalidate this bond nor shall Clackamas County be obligated for the payment of any premiums.

This bond is given and received under authority of Oregon Revised Statutes Chapter 279C and the Clackamas County Local Contractor Review Board Rules, the provisions of which hereby are incorporated into this bond and made a part hereof.

IN WITNESS WHEREOF, WE HAVE CAUSED THIS INSTRUMENT TO BE EXECUTED AND SEALED BY OUR DULY AUTHORIZED LEGAL REPRESENTATIVES:

Dated this 30th day of May, 2023.

PRINCIPAL: Eagle Elsner, Inc.

By: Richard Eagle, Pres
Signature

Attest: Maryjo Newton
Official Capacity
Corporation Secretary

SURETY: Western Surety Company

[Add signatures for each if using multiple bonds]

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

Gloria Bruning
Gloria Bruning
Name
Signature

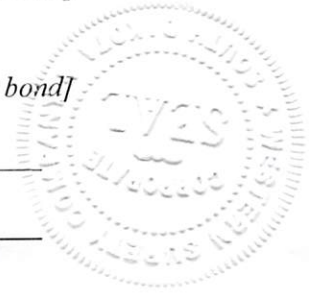
PO Box 2808
Address

Portland, OR 97208

City State Zip

503-224-2500 503-224-9830

Phone Fax



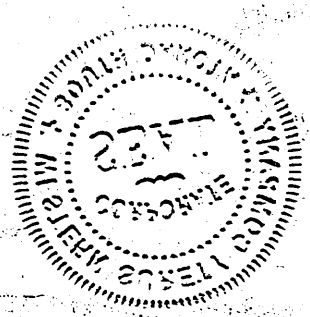
Faint, illegible text at the top of the page, possibly a header or introductory paragraph.

Second line of faint, illegible text.

Third line of faint, illegible text.

Fourth line of faint, illegible text.

Handwritten signature or name in the center of the page, appearing to be written in ink.



Faint, illegible text located below the signature, possibly a date or a reference number.

Small, faint text at the bottom center of the page, possibly a footer or a page number.

Western Surety Company

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That WESTERN SURETY COMPANY, a South Dakota corporation, is a duly organized and existing corporation having its principal office in the City of Sioux Falls, and State of South Dakota, and that it does by virtue of the signature and seal herein affixed hereby make, constitute and appoint

Philip O Forker, Vicki Mather, Gloria Bruning, J Patrick Dooney, Richard W Kowalski, Brent Olson, Leticia Romano, Joel Dietzman, Christopher A Reburn, Gail A Price, Justin Cumnock, Andrew Choruby, Casey J Geske, Sterling Drew Roddan, Amanda J Lee, Individually

of Lake Oswego, OR, its true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on its behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind it thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of the corporation and all the acts of said Attorney, pursuant to the authority hereby given, are hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law printed on the reverse hereof, duly adopted, as indicated, by the shareholders of the corporation.

In Witness Whereof, WESTERN SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereto affixed on this 14th day of December, 2021.



WESTERN SURETY COMPANY

Paul T. Bruflat

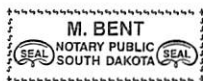
Paul T. Bruflat, Vice President

State of South Dakota }
County of Minnehaha } ss

On this 14th day of December, 2021, before me personally came Paul T. Bruflat, to me known, who, being by me duly sworn, did depose and say: that he resides in the City of Sioux Falls, State of South Dakota; that he is the Vice President of WESTERN SURETY COMPANY described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporation and that he signed his name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporation.

My commission expires

March 2, 2026



M. Bent

M. Bent, Notary Public

CERTIFICATE

I, L. Nelson, Assistant Secretary of WESTERN SURETY COMPANY do hereby certify that the Power of Attorney hereinabove set forth is still in force, and further certify that the By-Law of the corporation printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said corporation this 30th day of May, 2023



WESTERN SURETY COMPANY

L. Nelson

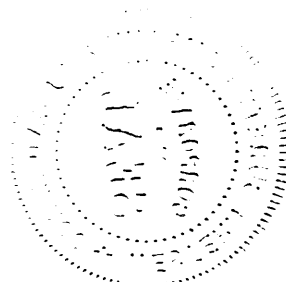
L. Nelson, Assistant Secretary

Authorizing By-Law

ADOPTED BY THE SHAREHOLDERS OF WESTERN SURETY COMPANY

This Power of Attorney is made and executed pursuant to and by authority of the following By-Law duly adopted by the shareholders of the Company.

Section 7. All bonds, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, and Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.





CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
PROJECT INFORMATION, PLANS, SPECIFICATIONS AND DRAWINGS

PROJECT: #2023-24 242nd Ave / Borges Realignment Project

Project Background:

The intersection of 242nd Ave and Borges has been the scene of a number of crashes. This is believed to be correlated with the skewed degree of the intersection and the inverted super-elevation experienced by vehicles traveling south along Borges proceeding on to 242nd Ave. To increase the safety of the intersection, the County hired a consultant to design improvements to the road to reduce the negative super-elevation and to allow vehicles to more safely navigate the intersection.

The planned project will remove the slip lane for those traveling southbound on Borges, while realigning the intersection. This is expected to make it easier for vehicles traveling northbound along Borges to turn in either direction, while also slowing vehicles southbound to make the right turn. A slight regrading of the intersection will help drivers remain in their lane.

Road improvements will also include mobilization, temporary traffic control, construction survey, drainage work, permanent traffic control, base work, shoulder construction, grading, permanent seeding, and asphalt wearing surfaces

Engineers Estimate: \$350,000.00 - \$400,000.00

Key Dates:

All Basic Bid Work may begin as soon as the Notice to Proceed (“NTP”) is issued

Substantial Completion: October 13, 2023

Final Completion: June 30, 2023

Time is of the essence for this Project. Note the Liquidated Damages requirements as described in the project Specifications.

The Scope further includes the following Plans, Specifications and Drawings:

SPECIAL PROVISIONS FOR 242nd/BORGES REALIGNMENT- CLACKAMAS COUNTY
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT, dated SUMMER 2023

CLACKAMAS COUNTY, SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT
PROJECT NO.22279 Drawing Set, Dated February 2021 Drawing Set; G1-G2; T1; T2; C1, S1-S4; P1
(10 pages)

OREGON STANDARD DRAWINGS Drawing Set,; RD360; RD615; RD1006; RD1010; RD1040;
TM200-TM201; TM500; TM502-TM503; TM570;TM635; TM688 (13 PAGES)

SPECIAL PROVISIONS

FOR

242nd / Borges Realignment

**CLACKAMAS COUNTY DEPARTMENT OF
TRANSPORTATION AND DEVELOPMENT**

CLACKAMAS COUNTY, OREGON

Asphalt Paving & Oiling, Miscellaneous Highway Appurtenances, Temporary Traffic Control, and
Pavement Markings

Summer 2023



SE 242nd Drive at SE Borges Rd


CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SPECIAL PROVISIONS

FOR

242nd / BORGES REALIGNMENT PROJECT

PROFESSIONAL OF RECORD CERTIFICATION(s):

 <p>REGISTERED PROFESSIONAL ENGINEER 85714PE</p> <p>OREGON SEPTEMBER 13, 2011 MICHAEL WARD</p> <p>RENEWS 06-30-2024</p>	<p>I certify the Special Provision Sections listed below are applicable to the design for the 242nd Ave / Borges Realignment Project.</p> <p>Sections: 00210, 00220 00225, 00280, 00290, 00310, 00320, 00330, 00331, 00344, 00350, 00370, 00445, 00490, 00641, 00730, 00738, 00744, 00850, 00905, 00930, 00940, 01030, 01040, 02040, 02050, 02110, 02190, 02450, 02530, 02560, 02640, 02690, and 02910.</p>
<p>Date Signed: <u>2/13/2023</u></p>	

SPECIAL PROVISIONS

WORK TO BE DONE

242nd AVE / BORGES REALIGNMENT PROJECT, CLACKAMAS COUNTY, OREGON

The 242nd Ave / Borges Realignment Project is an asphalt paving contract. This contract will resurface the intersection of 242nd Avenue with Borges Road, approximately 1200 square yards, with asphalt. 242nd is classified as a major arterial and has an average daily traffic count of 10,500 vehicles per day.

This contract will include, but not be limited to: placing approximately, 215 tons of asphalt; grinding 1240 square yards of asphalt; placing pavement markings and striping; removing and installing or reinstalling signs; installing, maintaining, and removing temporary work zone traffic control measures; and performing additional incidental work as called for by the specifications and plans. The project estimate for this contract is between \$200,000 and \$300,000.

APPLICABLE SPECIFICATIONS

The Specification that is applicable to the Work on this Project is the 2018 edition of the "Oregon Standard Specifications for Construction" produced by the Oregon Department of Transportation and the Oregon Chapter or the APWA.

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.

CLASS OF PROJECT

This is a Clackamas County Project and it is not federally funded.

CLASS OF WORK

Asphalt Concrete Paving (ACP)
Temporary Traffic Control (TTC)
Miscellaneous Highway Appurtenances (MHA)
Pavement Markings (PAVE)

Section 00110 – Organization, Conventions, Abbreviations and Definitions

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

00110.05(a) Grammar - Add the following bullet to the bullet list:

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".

Replace the bullet that begins "Certain Subsections labeled "Payment" contain..." with the following bullet:

Certain Subsections labeled "Payment" contain statements to the effect that the accepted quantities "will be paid for at the Contract unit price, per unit of measurement, for the following items" (followed by a list of items). In such cases, the Agency will pay for only those Pay Items listed in the Schedule of Items.

00110.05(d) References to Laws, Acts, Regulations, Rules, Ordinances, Statutes, Orders, and Permits

Add the following to the first bullet (Statutes and Rules):

- Clackamas County's Local Contract Review Board (LCRB) Rules are accessible online on the County's website <https://dochub.clackamas.us/documents/drupal/ef976bc9-14f4-495b-9bd8-c69ee7334685>.

00110.05(e) Reference to Websites - Add the following bullet list to the end of this subsection:

American Traffic Safety Services Association (ATSSA)
www.atssa.com

ODOT Construction Section
www.oregon.gov/odot/construction/pages/index.aspx

ODOT Construction Section - Qualified Products List (QPL)
www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx

Oregon Legislative Counsel
www.oregonlegislature.gov/lc

Oregon Secretary of State: State Archives
sos.oregon.gov/archives/Pages/default.aspx

ODOT Traffic Control Plans Unit
www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx

00110.10 **Abbreviations**

Add the following:

CCDA -	Clackamas County Development Agency
DTD -	Clackamas County Department of Transportation and Development
LCRB -	Local Contract Review Board
ODFW -	Oregon Department of Fish and Wildlife
UNS -	Utility Notification System
WES -	Water Environment Services of Clackamas County

00110.20 **Definitions**-Add the following to this subsection:

Agreement Form – The written agreement between the Owner and Contractor covering the work to be performed under the contract.

Amendment – A contract modification for Additional Work, Changed Work, Extra Work, Field Directives, or other changes. An Amendment changes the contract value, scope, and/or time. Amendments require formal approval by the Board of County Commissioners, pursuant to LCRB Rule Division C-049-160, prior to approval of such work.

Approved Equal - Materials or services proposed by the contractor and approved by the County as equal substitutes for those materials or services specified.

Award – Same as “Notice to Intent to Award”.

BCC – The Clackamas County Board of County Commissioners

Bid - A written offer by a bidder on forms furnished by the County to do work stated in the bid documents at the prices quoted. "Bid" is synonymous with "proposal" in these bid documents.

Bid Closing - The date and time for Bid Closing is the same as the date and time for Bid Opening.

Bid Documents- The following documents together comprise the Bid Documents:

- Invitation to Bid, Instructions to Bidders, Bid Form, Bid Proposal, Schedule of Prices, Bid
- Bond, Performance Bond
- Certificate of Insurance, Prevailing Wage Rates
- The "Oregon Standard Specifications for Construction" by ODOT and APWA, 2018 edition.
- Plans and drawings

- Other bid documents included or referenced in the bid documents
- Addenda, if any
- The Agreement Form and Special Provisions

Bonds -The bond or surety bond is a written document given by the surety and principal to the obligee to guarantee a specific obligation.

Change Order - A price agreement for Extra Work, Changed Work, field directives or other changes. A Change Order does not change the contract value, scope, or time until it is incorporated into an Amendment. Change Orders will be agreed upon, in writing, by the County Project Manager and the Contractor's designated representative.

Contract - The written contract agreement, including amendments, signed by the Contractor and Clackamas County, which describes the work to be done, the contract amount, and defines the relationships and obligations of the Contractor and the County.

Contract Documents - The Invitation to Bid, the Instructions to Bidders, the accepted Bid Proposal and Schedule of Prices, the Subcontractor List, the Bid Bond, the Performance and Payment Bond, the Certificate of Insurance, the Prevailing Wage Rates, the Standard Specifications and Special Provisions, Amendments, the Plans and Drawings, the Agreement, as well as all documents incorporated by reference therein, and any and all addenda prepared by or at the direction of and adopted by the County and further identified by the signature of the parties and all modifications thereof incorporated in the documents before their execution.

County - The term "County" shall mean Clackamas County, including the Board of County Commissioners, employees and agents of the County authorized to administer the conditions of these contract documents.

Department – A subdivision of the Agency.

Engineer - The County's Project Manager either acting directly or through an authorized representative(s). When referring to approval of extra work or other Contract modifications, "Engineer" also refers to the County's legal authority according to the LCRB rules.

Invitation to Bid - The public announcement (Notice to Contractors) inviting bids for work to be performed or materials to be furnished.

Legal Holiday - As defined in ORS 279C.540.

Lump Sum - A method of payment providing for one all-inclusive cost for the work or for a particular portion of the work.

Notice of Intent to Award - A written notice from the County notifying bidders that the County intends to award to the responsible bidder submitting lowest responsive bid.

ODOT Procurement Office – Clackamas County Procurement Division.

Owner – Synonymous with Agency.

Plan Holder's List – A list of contractor's names, contact names, phone and fax numbers that the County's Purchasing Department creates during bidding of the Project.

Project Manager – The Owner's representative who directly supervises the engineering and administration of the contract.

Shop Drawings – Synonymous with Working Drawings.

Solicitation Document – Synonymous with Bid Documents.

Standard Drawings – The Agency-prepared detailed drawings for Work or methods of construction that normally do not change from project to project. The Standard Drawings include the ODOT Standard Drawings.

Standard Specifications - "Oregon Standard Specifications for Construction", current edition, published by the Oregon Department of Transportation and as amended by **the Agency**.

State - Where the term "State" or "State of Oregon" or "ODOT" appears in the contract documents it shall mean "Clackamas County", "State of Oregon", or "ODOT" as applicable because of context.

Replace the sentence that begins "**Surfacing** – The Course or Courses..." with the following sentence:

Surfacing – The Course or Courses of material on the Traveled Way, auxiliary lanes, Shoulder, or parking areas for pedestrian, bicycle or vehicle use.

Work Day - Any and every calendar day from January 1 to December 31 of every year, excluding Saturdays, Sundays and Legal Holidays.

Add the following to the end of this subsection:

See Clackamas County General Conditions for Public Improvement Contracts for additional definitions.

END OF SECTION

Section 00120 – Bidding Requirements and Procedures

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

00120.00 Prequalification of Bidders - Replace with the following:

00120.00 Prequalification of Bidders - See Clackamas County Public Improvement Contract: Instructions to Bidders.

00120.01 General Bidding Requirements – Replace with the following:

00120.01 General Bidding Requirements – See Clackamas County Public Improvement Contract: Instructions to Bidders.

00120.05 Request for Plans, Special Provisions, and Bid Booklets: – Replace with the following:

00120.05 Request for Plans, Special Provisions, and Bid Booklets: – Bid documents may be obtained from the Clackamas County Procurement Division as indicated in Notice of Public Improvement Contract Opportunity.

Copies of the 2018 Oregon Standard Specifications for Construction and Supplements might be found on the Oregon Department of Transportation website at:

http://www.oregon.gov/ODOT/Business/Pages/Standard_Specifications.aspx

00120.10 Bid Booklet - In the paragraph that begins "The Bid Section includes all pages after...", add the following bullet to the bullet list:

Certificate of nondiscrimination regarding ORS 279A.110 and certificate regarding policy and practice against sexual harassment, sexual assault and discrimination against employees who are members of a protected class as required by ORS 279A.112 (House Bill 3060, 2017)

00120.15 Examination of Work Site and Solicitation Documents; Consideration of Conditions to be Encountered – Delete the third paragraph.

00120.30 Changes to Plans, Specifications, or Quantities before Opening of Bids - Replace with the following:

00120.30 Changes to Plans, Specifications, or Quantities before Opening of Bids - See Clackamas County Public Improvement Contract: Instructions to Bidders.

00120.40 Preparation of Bids – Replace with the following:

00120.40 Preparation of Bids – See Clackamas County Public Improvement Contract: Instructions to Bidders.

00120.45 Submittal of Bids - Replace with the following:

- 00120.45 Submittal of Bids** - See Clackamas County Public Improvement Contract: Instructions to Bidders.
- 00120.50 Submitting Bids for More than One Contract** – Delete this subsection.
- 00120.60 Revision or Withdrawal of Bids** - Replace with the following:
- 00120.60 Revision or Withdrawal of Bids** - See Clackamas County Public Improvement Contract: Instructions to Bidders.
- 00120.68 Mistakes in Bids** – Replace with the following:
- 00120.68 Mistakes in Bids** – See Clackamas County Public Improvement Contract: Instructions to Bidders.
- 00120.70 Rejection of Nonresponsive Bids** – Replace with the following:
- 00120.70 Rejection of Nonresponsive Bids** – See Clackamas County Public Improvement Contract: Instructions to Bidders.
- 00120.95 Opportunity for Cooperative Arrangement** – Delete this subsection.

END OF SECTION

Section 00130 – Award and Execution of Contract

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

- 00130.00 Consideration of Bids** - Delete third paragraph.
- 00130.10 Award of Contract** - Replace with the following:
- 00130.10 Award of Contract** - See Clackamas County Public Improvement Contract: Instructions to Bidders.
- 00130.15 Right to Protest Award** – Replace with the following:
- 00130.15 Right to Protest Award** – See Clackamas County Public Improvement Contract: Instructions to Bidders.
- 00130.30 Contract Booklet** – Add the following:

Other documents are part of the contract documents by reference. These include, but are not limited to:

- The "Oregon Standard Specifications for Construction", 2018 Edition, as published by the Oregon Department of Transportation (ODOT).

- “Oregon Standard Drawings” latest edition, as published by ODOT.
- Clackamas County Service District No. 1 "Surface Water Standard Specifications", latest edition.

00130.40 Contract Submittals - Replace with the following:

00130.40 Contract Submittals - See Clackamas County Public Improvement Contract: Instructions to Bidders.

00130.70 Release of Bid Guaranties – Replace with the following:

00130.70 Release of Bid Guaranties – See Clackamas County Public Improvement Contract: Instructions to Bidders.

00130.80 Project Site Restriction- Replace the paragraph that begins "Until the Agency sends...", with the following paragraph:

Until the Agency sends the Contractor written Notice to Proceed with the Work, and the Contractor has filed the public works bonds required in 00170.20, the Contractor shall not go onto the Project Site on which the Work is to be done, nor move Materials, Equipment or workers onto the Project Site.

END OF SECTION

Section 00140 – Scope of Work

Comply with Section 00140 of the Standard Specifications supplemented modified as follows:

00140.30 Agency-Required Changes in the Work – Replace the last paragraph with the following:

Upon receipt of an Engineer’s written order modifying the Work, the Contractor shall perform the Work as modified via Change Order, which may be subject to approval as an Amendment.

If an Amendment incorporating changes to the Work increases the Contract amount, the Contractor shall notify its Surety of the increase and shall provide the Agency with a copy of any resulting modification to bond documents. The Contractor’s performance of Work pursuant to Amendments shall neither invalidate the Contract nor release the Surety. Payment for changes in the Work shall be made in accordance with 00195.20. Contract Time adjustments shall be made in accordance with 00180.80.

00140.31 "As-Built" Records - Add the following:

Maintain a current and accurate record of the work completed during the course of this contract. This may be in the form of "as-built" drawings kept by accurately marking a designated set of the contract plans with the specified information as the Work proceeds. Accurate, complete and

current "as-built" drawings are a specified requirement for full partial payment of the work completed. At project completion and as a condition of final payment, the Contractor shall deliver to the Project Manager a complete and legible set of "as-built" drawings.

The "as-built" drawings must show the information listed below. Where the term "locate" or "location" is used, it shall mean record of position with respect to both the construction vertical datum and either construction horizontal datum or a nearby permanent improvement.

- 1) Record location of underground services and utilities as installed.
- 2) Record location of existing underground utilities and services that are to remain and that are encountered during the course of the work.
- 3) Record changes in dimension, location, grade or detail to that shown on the plans.
- 4) Record changes made by change order.
- 5) Record details not in the original plans.
- 6) Provide fully completed shop drawings reflecting all revisions.

END OF SECTION

Section 00150 – Control of Work

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

00150.00 Authority of the Engineer – Replace the first sentence with the following:

Except as indicated elsewhere in the Contract (e.g. Amendment approval by the BCC), the Engineer has full authority over the Work and its suspension.

00150.05 Cooperative Arrangements – Delete this subsection.

00150.10 Coordination of Contract Documents

(a) Order of Precedence – Replace with the following:

The Engineer will resolve any discrepancies between these documents in the following order of precedence:

- Approved Amendments;
- Approved Change Orders
- Bid Schedule with Schedule of Prices;
- Permits from governmental agencies
- Special Provisions;

- Agency-prepared drawings specifically applicable to the Project and bearing the Project title;
- Reviewed and accepted, stamped Working Drawings;
- Agreement Form;
- Standard Drawings;
- Approved Unstamped Working Drawings;
- Standard Specifications;
- All other Contract Documents not listed above.

Notes on a drawing shall take precedence over drawing details.

Dimensions shown on the drawings, or that can be computed, shall take precedence over scaled dimensions.

00150.50 Cooperation with Utilities: Add the following to the end of Paragraph (a):

There may be other utility servers who are not specifically listed in these Special Provisions or on the Plans that may be adjusting or inspecting their facilities within the project limits.

00150.50(c) Contractor Responsibilities – Add the following to the bulleted list:

- Follow applicable rules adopted by the Oregon Utility Notification Center;
- Contact Utility owners during Bid preparation and after Contract is awarded to verify all Utilities involvement on the Project Site;
- Hold a utility scheduling meeting and monthly utility coordination meetings (see also 00180.42);
- Coordinate Project construction with Utilities' planned adjustments, take all precautions necessary to prevent disruption of Utility service, and perform its Work in the manner that results in the least inconvenience to the Utility owners;
- Include all Utility adjustment work, whether to be performed by the Contractor or the Utilities, on the Contractor's Project Work schedule submitted under 00180.41;
- Protect from damage or disturbance any Utility that remains within the area in which Work is being performed. Maintain and re-establish utility location marks according to OAR 952-001-0090(2)(a). Coordinate re-establishment of the location marks with the associated Utility;
- Not disturb an existing Utility if it requires an unanticipated adjustment, but shall protect the Utility from damage or disturbance and promptly notify the Engineer;
- Determine the exact location before excavating within the reasonable accuracy zone according to OAR 952-001-0090(2)(c);
- Backfill any exposed utilities as recommended and approved by the Utility representative. Obtain utility locate warning tape from the Utility and replace damaged or removed warning tape. Utility locate warning tape may not be present at all existing utilities;
- Stake, place warning tape, and maintain no work limits around critical Utility facilities as shown or directed by the Engineer and the Utility;
- In addition to the notification required in OAR 952-001-0090(5), notify the Engineer and the Utility as soon as the Contractor discovers any previously unknown Utility conflicts or issues. Contrary to the OAR, stop excavating until directed by the

Engineer and allow the Utility a minimum of two weeks to relocate or resolve the previously unknown utility issues;

- Report to the Engineer any Utility owner who fails to cooperate or fails to follow the planned Utility adjustment.

Subject to the Engineer's approval, the Contractor may adjust the Utilities by asking the Utility owners to move, remove, or alter their facilities in ways other than as shown on the Plans or in the Special Provisions. The Contractor shall conduct all negotiations, make all arrangements, and assume all costs that arise from such changes.

The existing underground utilities shown on the Plans have been determined by as-built records and field surveys, but are not guaranteed to be complete or accurate. The Contractor shall be responsible for contacting the individual utility companies to mark locations, and arranging with them for any relocation work that should be required.

The Contractor shall make excavations and borings ahead of the work where necessary to determine the exact location of underground pipes or other features, which might interfere with construction. The Contractor shall support and protect pipes or other services where they cross the trench and shall be responsible for all damages incidental in interruptions of service that may be caused by Contractor operations. Where a new utility line crosses an existing pipeline or other conduit, the trench backfill shall be well compacted in a manner that provides for the required backfill and compaction standards while protecting the utility in question.

00150.50 Cooperation with Utilities - Add the following subsection:

(f) Utility Information:

There are no anticipated conflicts with the Utilities listed below. 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 and Phone Number
1. Portland General Electric	Ryan Williams Ryan.Williams@pgn.com 503-669-5259
2. Northwest Natural Gas	Jeremy Lorence jeremy.lorence@nwnatural.com
3. Williams	Kat Rich Katy.Rich@williams.com (405) 250-7894
4. Comcast	Brent Christiansen Brent_Christiansen@comcast.com 503-813-0483
5. CenturyLink	Carton Hester Carlton.Hester@centurylink.com 503-421-8735

00150.70 Detrimental Operations – Add the following:

Portions of this project will be constructed in close proximity to existing private improvements. All private improvements disturbed by the Contractor's operations shall be repaired or replaced to equal or better condition at the Contractor's expense. The Engineer may withhold from future payments to the Contractor, an amount equal to the costs reasonably estimated by the Engineer to repair or replace, as the case may be, those private improvements disturbed by the Contractor's operations. Engineer shall release the retained amount once Engineer has determined that the Contractor has completed the repair consistent with the requirements of this provision. In addition, prior to construction, the Contractor shall provide to the Engineer video showing private property, which may be disturbed during construction.

END OF SECTION

Section 00160 – Source of Materials

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

00160.05 Qualified Products List (QPL) - Replace this subsection, except for the subsection number and title, with the following:

The QPL is a listing of manufactured products available on the market (shelf items) that ODOT has evaluated and found suitable for a specified use in highway construction. The QPL is available from ODOT's Construction Section website at:

<http://www.oregon.gov/ODOT/HWY/CONSTRUCTION/pages/index.aspx>

The most current published PDF version of the QPL on ODOT's Construction Section website at the time of Advertisement is the version in effect for the Project. The Engineer may approve for use a conditionally qualified product, or a product qualified for inclusion in a later edition of the QPL, if the Engineer finds the product acceptable for use on the Project.

Use of listed products shall be restricted to the category of use for which they are listed. The Contractor shall install all products as recommended by the manufacturer. The Contractor shall replace qualified products not conforming to Specifications or not properly handled or installed at no additional cost to the Agency.

00160.20(a) Buy America – Replace with the following: Federal highway funds are NOT involved on this Project.

END OF SECTION

Section 00165 – Quality of Materials

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

00165.04 Costs of Testing – Replace this section with the following sentence: All testing required to be performed by the Contractor will be at the Contractor's expense.

00165.10(a) Field-Tested Materials – Add the following sentence: The County follows the most current version of the MFTP on its projects:

00165.10(b) Nonfield-Tested Materials - Add the following sentence:

The County follows the most current version of the NTMAG on its projects.

00165.91 Fabrication Inspection Expense - In the paragraph that begins "Fabrication of certain items...", replace the sentence that begins "Therefore, each time that..." with the following sentence:

Therefore, each time that inspection by or on behalf of the Agency is necessary, payment to the Contractor will be reduced by an amount computed at the following rates:

In the paragraph that begins "This Subsection applies to all...", replace the first sentence, but not the bullet list, with the following sentence:

This Subsection applies to all fabricated items or manufactured Materials that are inspected by or on behalf of the Agency, which include, but are not limited to:

END OF SECTION

Section 00170 – Legal Relations and Responsibilities

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

00170.04 Patents, Copyrights, and Trademarks - Replace the paragraph that begins " Prior to use of designs, devices, materials, or processes..." with the following paragraph:

Prior to use of designs, devices, materials, or processes protected by patent, copyright, or trademark, the Contractor shall obtain from the Entity entitled to enforce the patent, copyright, or trademark all necessary evidence of Contractor's legal right to use such design, device, material, or process.

00170.05 Assignment of Antitrust Rights - Replace the bullet that reads "ORS 646.725; and" with the following bullet:

ORS 646.725; or

00170.07 Record Requirements - In the paragraph that begins "For purposes of this Subsection, the term...", replace the words "OAR 731-005-0780" with the words "OAR 734-010-0400".

00170.07(a) Records Required - In the paragraph that begins "These records shall include...", replace the bullet that begins "Contracts or documents of other...", with the following bullet:

Contracts or documents of other arrangements with any Related Entity as defined in OAR 734-010-0400.

In the paragraph that begins "The Contractor shall include...", replace the words "OAR 731-005-0780" with the words "OAR 734-010-0400".

00170.07(b) Access to Records - In the paragraph that begins "The Contractor shall provide...", replace the words "OAR 731-005-0780(9)" with the words "OAR 734-010-0400(9)".

00170.61(a) Workers' Compensation - In the paragraph, replace "00170.70(d)" with "the Agreement".

00170.62 Labor Nondiscrimination - Add the following sentence to the end of this subsection:

It is a material term of this Contract that the Contractor certifies by entering into this Contract that the Contractor has a written policy and practice that meets the requirements described in ORS 279A.112 (House Bill 3060, 2017) for preventing sexual harassment, sexual assault and discrimination against employees who are members of a protected class and that the Contractor shall maintain the policy and practice in force during the entire term of this Contract.

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.

Add the following subsection:

00170.67 Fees - The fee required by ORS 279C.825(1) will be paid by the Agency to the Commissioner of the Oregon Bureau of Labor and Industries under the administrative rules of the Commissioner.

00170.70 Insurance - Replace with the following:

00170.70 Insurance - See Clackamas County Public Improvement Contract.

00170.70(c) Additional Insured - Add the following paragraph and bullets to the end of this subsection:

Add the following as Additional Insureds under the Contract:

Clackamas County and its officers, agents, and employees
Clackamas County Board of Commissioners

00170.72 Indemnity/Hold Harmless – Replace with the following:

00170.72 Indemnity/Hold Harmless – See Clackamas County Public Improvement Contract.

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

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

00170.79 Third Party Beneficiary – Replace the text of this section with the following:

- Third-party beneficiaries to the Contract include the Oregon Department of Transportation and its officers, agents, and employees.

END OF SECTION

Section 00180 – Prosecution and Progress

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

00180.05 Assignment/Delegation of Contract – Replace this subsection, except for the subsection number and title, with the following:

Unless the Agency gives prior written consent, which will not be unreasonably withheld, the Contractor shall not assign, delegate, sell, or otherwise transfer or dispose of any rights or obligations under the Contract, whether voluntarily or involuntarily, and whether by merger, consolidation, dissolution, operation of law, or any other manner, including, without limitation:

The power to execute or duty to perform the Contract; or

- Any of its right, title or interest in the Contract.

Any purported or attempted assignment, delegation, sale, transfer or disposition without prior Agency consent shall be voidable.

If written Agency consent is given to assign, delegate, sell, or otherwise transfer or dispose of any rights or obligations under the Contract, such consent shall not relieve the Contractor or its

Surety of any part of their duties, obligations, responsibilities, or liabilities under or pursuant to the Contract.

00180.06 Assignment of Funds Due under the Contract – Replace this subsection, except for the subsection number and title, with the following:

Assignment of funds due or to become due under the Contract to the Contractor will not be permitted unless:

The assignment request is made on the form provided by the Agency;

- The Contractor secures the written consent of the Contractor's Surety to the assignment; and

The Engineer gives prior written consent to the assignment, which will not be unreasonably withheld.

00180.20(b) Own Organization - Replace this subsection, except for the subsection number and title, with the following:

The term "own organization", as used in Section 00180, includes only employees of the Contractor, Equipment owned or rented by the Contractor, Incidental rental of operated Equipment, truck hauling of Materials not included in or requiring a subcontract, and Materials and Equipment to be incorporated into the Work purchased or produced by the Contractor.

00180.20(c)(2) Limitations - Replace this subsection, except for the subsection number and title, with the following:

The use of Equipment rented with operators is limited to performing minor, Incidental, short-duration work or services under the direct supervision of the Contractor or Subcontractor, with Equipment not customarily owned, rented, leased, or operated by a Contractor, or with Equipment that is temporarily unavailable to the Contractor.

00180.20(c)(3) Submittals - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall provide the Engineer with a copy of the rental agreement or purchase order covering the work or service to be provided. The Contractor shall make certain that the provider of approved work or services submits payrolls required under Section 00170 and complies with applicable Contract provisions, including, without limitation, 00170.07. The work or service provider will not be considered a Subcontractor under the Contract, but the work or services will be considered to have been performed by the Contractor's own organization for the purposes of determining compliance with 00180.20(a).

00180.20(e) Trucking - Replace the paragraph that begins " This Section does not apply to delivery ..." with the following paragraph:

This Section does not apply to delivery of Materials by or for or from a Supplier. This subsection applies to all truck hauling of Materials not performed with trucks owned (or rented) and operated by the Contractor:

00180.20(e)(2) Limitations - Replace this subsection, except for the subsection number and title, with the following:

The approved trucking services agreements shall be used for all trucking services for hauling Materials not provided by trucks owned (or rented) and operated by the Contractor except for trucking services provided by committed DBEs that require a subcontract under 00180.21. The Contractor shall execute a trucking services agreement with every trucking services provider for hauling Materials prior to the trucking services provider doing any Work on the Project Site.

00180.20(e)(3) Submittals - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall provide the Engineer with an executed copy of the trucking services agreement not later than 2 Days after the trucking services provider for hauling Materials has started work. The Contractor shall make certain that the provider of approved trucking services submits payrolls required under Section 00170, complies with applicable Contract provisions, including, without limitation, 00170.07, and complies with applicable trucking services agreement provisions. The work or service provider will not be considered a Subcontractor under the Contract, but the work or services will be considered to have been performed by the Contractor's own organization for the purposes of determining compliance with 00180.20(a). If the trucking services are provided by an owner/operator:

Attach a copy of the data required under 00170.65(b)(4) to the trucking services agreement; and

- Each truck shall have the name of the owner/operator clearly displayed on the side of the truck.

00180.21(a) Subcontracting - Add the following to the end of this subsection:

All contracts with subcontractors or suppliers shall have provisions making the contract assignable to the County, at the option of the County, if the Contractor terminates, goes out of business, declares bankruptcy, or otherwise is unable to perform provided that the County gives the subcontractor notice of assignment within fourteen (14) days of learning of the inability of the Contractor to perform.

The Engineer may revoke consent to subcontract. If the Engineer revokes consent to subcontract, the subcontractor shall be immediately removed from the Project Site.

00180.21(d) Terms of Subcontracts - Replace the paragraph that begins " Subcontracts shall provide that work performed under ..." with the following paragraph:

- All subcontracts shall provide that work performed under the subcontract shall be conducted and performed according to, and shall include, the pertinent requirements, provisions, terms, and conditions of the Contract. Compliance with 00170.07 is required. All subcontracts, including Contractor's with the first-tier Subcontractors and those of the first-tier Subcontractors with their Subcontractors, and any other lower-tier subcontracts shall contain a clause or condition that if the Contractor or a Subcontractor fails, neglects, or refuses to make payment to an Entity furnishing labor or Materials in connection with the Contract, the Entity may file a complaint with the Construction Contractors Board,

unless payment is subject to a good-faith dispute as defined in ORS 279C.580.
Additionally, according to the provisions of ORS 279C.580, subcontracts shall include:

00180.22 Payments to Subcontractors and Agents of the Contractor - Replace the paragraph that begins "To the extent practicable..." with the following paragraph:

To the extent practicable, the Contractor shall pay in the same units and on the same basis of measurement as listed in the Schedule of Items for subcontracted Work or other Work not done by the Contractor's own organization. The Agency will not be responsible for any overpayment or losses resulting from overpayment by the Contractor to subcontractors and to its other agents, work providers, service providers, and trucking services providers.

00180.40 Limitation of Operations - Add the following to subsection (a):

The Contractor must provide, at a minimum, a 48-hour notice to the Clackamas County Project Manager in order to perform any work on Saturdays.

Add the following subsection:

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

Limitations	Subsection
Cooperation with Utilities	00150.50
Cooperation with Other Contractors	00150.55
Railway Work	00170.01(e)
On-Site Work	00180.40(b)
Contract Completion Time	00180.50(h)
Right-of-Way and Access Delays	00180.65
Traffic Lane Restrictions	00220.40(e)
Special Events	00220.40(e)
In-water Work Restrictions	00290.34(a)
Noise Control	00290.32
Maintenance Under Traffic	00620.43
Opening Sections to Traffic.....	00744.51
Opening Sections to Traffic	00745.51

Be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this Subsection.

00180.41 Project Work Schedules – Add the following:

A Type B schedule as detailed in the Supplemental Specifications is required on this Contract. In addition, a three-week look ahead schedule shall be prepared by the Contractor on a weekly basis and submitted to the Engineer. It shall include all construction activities planned for the following three-week period. The three-week look ahead schedule can be hand-written and shall be in a format agreed upon by the Contractor and the Engineer.

The Contractor shall notify the County 2 weeks before the first substantial work activity commences on the project site. Portable Changeable Message Signs shall be in place 2 weeks before the first substantial work activity commences on the project site.

00180.42 Preconstruction Conference - Add the following:

Before beginning On-Site Work and before meeting with the Engineer for the preconstruction conference, hold a group utilities scheduling meeting with representatives from the utility companies involved with this project. Incorporate the utilities time needs into the Contractor's schedule submitted prior to the preconstruction conference.

Submit the following during the preconstruction conference unless otherwise directed:

- The names, addresses, and telephone numbers of two or more persons employed by the Contractor who can be reached day or night to handle emergency matters.
- Subcontractor's list including contact list for each subcontractor with phone numbers and addresses and work to be performed.
- List of personnel authorized to sign change orders and receive progress payment warrants.
- Video recording of private properties affected by construction per 00150.70.
A representative of each subcontractor shall be required to attend the pre-construction conference.

00180.43 Commencement and Performance of Work - Add the following bullet item:

- Conduct the work at all times in a manner and sequence that will insure minimal interference with traffic. The Contractor shall not begin work that will interfere with work already started. If it is in the County's best interest to do so, the County may require the Contractor to finish a portion or unit of the project on which work is in progress or to finish a construction operation before work is started on an additional portion or unit of the project.
- **The Contractor shall notify the County 2 weeks before the first substantial work activity commences on the project site.**
- **Portable Changeable Message Signs shall be in place 2 weeks before the first substantial work activity commences on the project site.**
- Conduct the work at all times in a manner and sequence that will insure minimal interference with traffic. The Contractor shall not begin work that will interfere with work already started. If it is in the County's best interest to do so, the County may require the Contractor to finish a portion or unit of the project on which work is in progress or to finish a construction operation before work is started on an additional portion or unit of the project.

- The Contractor will be notified in writing of the specified date to commence work and will not begin work until receipt of this Notice to Proceed. Upon the commencement of grinding, tilling, grading or paving operations on any one respective work site, all necessary work including paving of driveways and road approaches shall be vigorously pursued to reach substantial completion within a 14 calendar day duration. **If at any time a work site is left prior to substantial completion (completed paving of driveways, road approaches, etc.) without written consent from the owner's project manager, this will be considered abandonment by the Contractor.** Failure to meet these time constraints or abandonment shall subject the contractor to the full amount of Liquidated Damages as detailed in Section 00180.50 of these Special Provisions.
- At the time Substantial Completion is reached, the Contractor shall submit a Notice of Substantial Completion.

Add the following subsection:

00180.50(h) Contract Time - Complete all Work to be done under the Contract not later than October 13, 2023.

00180.70 Suspension of Work - Add the following to the first bullet item:

If the Inspector has reason to believe that any safety provisions are not being adhered to, the Inspector will immediately notify the Contractor's site foreman and/or the appropriate person and the County Project Manager. The purpose of this discussion is to determine the validity of the alleged violation. This will also allow the Contractor a reasonable amount of time to correct or improve any of the provisions for the safety on this project. If the County Project Manager finds the problem still unresolved or uncorrected, they will notify the Contractor's Project Manager and the County's Risk Management Safety Analyst. If the County's Risk Management Safety Analyst finds that the job site contains any unresolved safety issues they will take appropriate action up to and including suspension of the Contractor's operations on all or part of the Work.

00180.85(b) Liquidated Damages - Add the following paragraphs:

The liquidated damages for failure to complete the Work on time required by 00180.50(h) will be \$1000 per Calendar Day*.

* Calendar Day amounts are applicable when the Contract time is expressed on the Calendar Day or fixed date basis.

Add the following subsection:

00180.85(c) Lane Closures and Road Closures - Lane closures and road closures beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

(1) Lane Closures - It is impractical to determine the actual damages the Agency will sustain in the event traffic lanes are closed beyond the limits listed in 00220.40(e). Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per 15 minutes, or for a portion of 15 minutes, per lane, for any lane closure beyond the limits listed in 00220.40(e). In addition to the liquidated damages, all added cost for traffic control

measures, including flagging, required to maintain the lane closures beyond the allowed time limits, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

The Engineer will determine when it is safe to reopen lanes to traffic. Assessment of liquidated damages will stop when all lanes have been safely reopened. Any liquidated damages assessed under these provisions will be in addition to those listed in 00180.85(b).

00180.85(e) Traffic Delays Beyond 20 Minutes - Stopping or holding vehicles beyond the limits specified will inconvenience the traveling public and will be a cost to the Agency.

It is impractical to determine the actual damages the Agency will sustain in the event traffic is stopped or held longer than the 20-minute limit listed in 00220.02. Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per 20 minutes, or for a portion of 20 minutes, for stopping or holding traffic longer than 20 minutes. In addition to the liquidated damages, any added cost for traffic control measures, including flagging, required to stop or hold traffic beyond the 20-minute time limit, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

Assessment of liquidated damages will stop when the Engineer determines that traffic is no longer stopped or held beyond the 20-minute limit. Any liquidated damages assessed under these provisions will be in addition to those listed in 00180.85(b).

Add the following subsection:

00180.88 Workplace Harassment Prevention Plan – Submit a workplace harassment prevention plan for review 10 days before the preconstruction conference. The plan shall ensure all workers are guaranteed a safe and respectful work environment regardless of their identity or status. The plan applies to, but is not limited to, a worker's race, gender, creed, or any protected characteristic under state or federal law.

At a minimum, the plan shall include:

- A Statement that the Contractor shall provide a safe and respectful workplace on the jobsite for all workers, subcontractors, suppliers, and other persons performing work.
- A description of how the plan will be implemented and monitored during the project duration.
- A list of the in-person trainings that will be conducted for workers of all ranks working on the project to support, promote, and grow a positive jobsite culture.
- A list of meaningful policies including procedures for aggrieved workers in need of recourse.
- How incidents involving bullying or harassment will be investigated and resolved in a prompt, thorough, and impartial manner.

Contractor shall post on the jobsite and make available copies of policies about hate, intimidation, or harassment including how to report incidents and how to receive support. Materials will be provided in all languages necessary to be inclusive of the workforce.

00180.89 Measurement – Add the following:

No measurement of quantities will be made for workplace harassment prevention plan.

00180.90(a) Termination for Default - In the paragraph that begins "Termination of the Contract for default...", add the following bullet to the end of the bullet list:

Has liquidated and delinquent debt owed to the State or any department or Agency of the County,

Add the following subsection:

00180.95 Payment – Payment for workplace harassment prevention plan will be for developing and implementing the plan during construction of the project, in-person training, developing meaningful policies, and investigating incidents.

END OF SECTION

Section 00190 – Measurement of Pay Quantities

Comply with Section 00190 of the Standard Specifications modified as follows:

00190.20(g) Agency-Provided Weigh Technician: Replace subsection (g) with the following:

The Contractor must provide a weigh technician. The Agency will not provide one for the Contractor.

END OF SECTION

Section 00195 – Payment

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

00195.10 Payment For Changes in Materials Costs - Replace this subsection with the following subsection:

00195.10 Asphalt Cement Material Price Escalation/De-escalation - An asphalt cement escalation/de-escalation clause will be in effect during the life of the Contract.

The Agency reserves all of its rights under the Contract, including, but not limited to, its rights for suspension of the Work under 00180.70 and its rights for termination of the Contract under 00180.90, and this escalation/de-escalation provision shall not limit those rights.

(a) Monthly Asphalt Cement Material Price (MACMP) - The Monthly Asphalt Cement Material Price (MACMP) will be established by the Agency each month and will be based on the published prices of PG 64-22 asphalt cement furnished by Poten & Partners, Inc. If any portion of the Project Site is located within the boundaries of ODOT Maintenance District 13 or 14, the MACMP will be based on the average prices for the Boise, Idaho area. If no portion of

the Project Site is within the boundaries of ODOT Maintenance District 13 or 14, the Contractor may elect to have the MACMP based on the average prices of either the Portland, Oregon area or the Boise, Idaho area. If electing to use Boise, Idaho average prices for determination of the MACMP, the Contractor shall notify the Engineer in writing of the Contractor's election before or within 7 Calendar Days after the date of the preconstruction conference. This election, once acknowledged by the Engineer, will be binding for the entire duration of the Contract. If no such written notification is made, the Portland, Oregon area prices will be used as the basis of the MACMP. The area selected as the basis of the MACMP, once chosen, will become the sole area to be used as the basis for all asphalt cement used on the Project. Each MACMP for a given month will be the average of the published prices for that MACMP for each Friday in that month.

For information regarding the calculation of the MACMP, and for the actual MACMP, go to the Agency website at:

<https://www.oregon.gov/ODOT/Business/Pages/Asphalt-Fuel-Price.aspx>

If the Agency-selected index ceases to be available for any reason, the Agency in its discretion will select and begin using a substitute price source or index to establish the MACMP each month. The MACMP will apply to all asphalt cement including but not limited to paving grade, polymer modified, and emulsified asphalts, and recycling agents. The Agency does not guarantee that asphalt cement will be available at the MACMP.

(b) Base Asphalt Cement Material Price (Base) - The base asphalt cement material price for this Project is the MACMP published on the Agency website for the month immediately preceding the Bid Opening date.

(c) Monthly Asphalt Cement Adjustment Factor - The monthly asphalt cement adjustment factor will be determined each month as follows:

- If the MACMP is within $\pm 5\%$ of the Base, there will be no adjustment.
- If the MACMP is more than 105% of the Base, then:

$$\text{Adjustment Factor} = (\text{MACMP}) - (1.05 \times \text{Base})$$

- If the MACMP is less than 95% of the Base, then:

$$\text{Adjustment Factor} = (\text{MACMP}) - (0.95 \times \text{Base})$$

(d) Asphalt Cement Price Adjustment - A price adjustment will be made for the items containing asphalt cement listed below. The price adjustment as calculated in (c) above will use the MACMP for the month the asphalt is incorporated into the Project. The price adjustment will be determined by multiplying the asphalt incorporated during the month for subject Pay Items by the Adjustment Factor.

The Pay Items for which price adjustments will be made are:

Level 3, ½ INCH ACP MIXTURE

00195.12 Steel Material Price Escalation/De-Escalation Clause – Add the following sentence:

No steel material price escalation/de-escalations shall be used on this project. There is no option for Contractor participation.

00195.20(b) Significant Changed Work - Replace the paragraph that begins “Any such adjustments...” with the following paragraph:

Any adjustments may be less than, but will not be more than the amount justified by the Engineer on the basis of the established procedures set out in Section 00197 for determining rates. This does not limit the application of Section 00199.

Significant is defined as:

- a) An increase or decrease of more than 25 percent of the total cost of the Work calculated from the original proposal quantities and the unit contract prices; or,
- b) An increase or decrease of more than 25 percent in the quantity of any one major contract item.

For condition b) above, a major item is defined as any item that amounts to 10 percent or more of the original total contract price.

00195.50 Progress Payments and Retained Amounts - Modify as follows:

00195.50(a) Progress Payments - Modify as follows:

(1) Progress Estimates - Delete the first sentence and replace with the following:

At a regular period each month to be determined at the Preconstruction Conference, the Contractor will make an estimate of the amount and value of pay item work completed and in place. This estimate will be submitted to the Project Manager for review and approval.

(2) Value of Material on Hand - Replace with the following:

(2) Value of Material on Hand – No payment will be made for materials on hand.

(4) Limitations on Value of Work Accomplished - In the first sentence, change "Engineer's estimate" to “Contractor’s reviewed estimate”.

00195.50 (b) Retainage - Replace the first paragraph with the following:

The amount to be retained from progress payments will be 5.0% of the value of payments made, and will be retained in one of the forms specified in Subsection (c) below. The County will withhold Retainage from all force account and change order work.

00195.50(c) Forms of Retainage – Replace the first paragraph with the following:

Forms of acceptable retainage are set forth below in Subsections (1) through (3). “Cash, Alternate A” or “Cash, Alternate B” (Retainage Surety Bond) are the Agency-preferred forms of retainage. Unless the Contractor notifies the County otherwise in writing, the County will

automatically hold retainage per paragraph (2) “Cash, Alternate B (No Interest Earned). If the Agency incurs additional costs as a result of the Contractor’s election to use “Bonds and Securities”, the Agency may recover such costs from the Contractor by a reduction of the final payment.

Replace paragraph (2) with the following:

(2) Cash, Alternate B (No Interest Earned) – Retainage will be deducted from progress payments and held by the Agency until final payment is made in accordance with 00195.90, unless otherwise specified in the Contract.

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

(d) Release of Retainage - As the Work progresses, release of the amounts to be retained under (b) of this Subsection 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.

When the Work is 50% completed and upon written application of the Contractor and written approval of the Surety, the Engineer or Project Manager may reduce or eliminate retainage on remaining progress payments if the Work is progressing satisfactorily.

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.

END OF SECTION

Section 00196 – Payment for Extra Work

Comply with Section 00196 of the Standard Specifications modified as follows:

00196.91 Extra Work Allowance – Add the following section:

The Bid schedule of prices contains a bid item for a pre-determined amount of Engineer ordered extra work. All Bidders shall reflect this same amount in their total Bid. No Bidder shall presume in the preparation of the bid or in the course of contract work that there will be a certain payment under that item or a certain order for extra work.

END OF SECTION

Section 00197 – Payment for Force Account Work

Comply with Section 00197 of the Standard Specifications modified as follows:

00197.20(a) General - Replace the paragraph that begins "Except as modified by these..." with the following paragraph:

Except as modified by these provisions, Equipment use approved by the Engineer will be paid at the rental rates given in the most current edition of the EquipmentWatch Cost Recovery (Blue Book) published by EquipmentWatch, a division of Penton Business Media, Inc., and available from EquipmentWatch (phone 1-800-669-3282) (<http://equipmentwatch.com>).

END OF SECTION

Section 00199 – Disagreements, Protests and Claims

Comply with Section 00199 of the Standard Specifications supplemented and/or modified as follows:

00199.40 Claim Decision; Review; Exhaustion of Administrative Remedies - Replace the entire section with the following:

The Contractor must properly submit a claim as detailed in 00199.30.

(a) Engineer Claim Review - The Engineer or Project Manager will, as soon as practicable, consider and investigate a Contractor's properly submitted claim for additional compensation, Contract Time, or for a combination of additional compensation and Contract Time. Once the Engineer or Project Manager determines the Agency is in receipt of a properly submitted claim, the Engineer or Project Manager will arrange a meeting, within 28 Calendar Days, or as otherwise agreed by the parties, with the Contractor in order to present the claim for formal review and discussion. A person authorized by the Contractor to execute Change Orders on behalf of the Contractor must be present and attend all claim meetings.

If the Engineer or Project Manager determines that the Contractor must furnish additional information, records, or documentation to allow proper evaluation of the claim, the Engineer will schedule a second meeting, to be held within 14 calendar days, or as otherwise agreed by the parties, at which the Contractor shall present the requested information, records and documentation.

The Engineer or Project Manager will advise the Contractor of the decision to accept or reject the claim. If the Engineer or Project Manager finds the claim has merit, an equitable adjustment will be offered. If the Engineer or Project Manager finds the claim has no merit, no offer of adjustment will be made and the claim will be denied. The County intends to resolve claims at the lowest possible level.

If, at any step in the claim decision or review process, the Contractor fails to promptly submit requested information or documentation that the Agency deems necessary to analyze the claim, the Contractor is deemed to have waived its right to further review, and the claim will not be considered properly filed and preserved.

If the Engineer or Project Manager 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 either of the two progressive steps of claim review procedure as specified in this Subsection. For all claims, all of the actions and review under each step of the review process shall occur before the review can be advanced to the next higher step.

(b) Director Claim Review - Upon request by the Contractor, the Department Director will review the Engineer or Project Manager's decision on the claim and advise the Contractor of the decision in writing. If the Director finds the claim has merit, and equitable adjustment will be offered. If the Director finds the claim has no merit, no offer of adjustment will be made and the claim will be denied.

Once the Engineer determines the Agency is in receipt of a properly submitted claim, the Engineer will arrange a meeting, within 21 Calendar Days or as otherwise agreed by the parties, with the Contractor in order to present the claim for formal review and discussion.

If the Engineer determines that the Contractor must furnish additional information, records or documentation to allow proper evaluation of the claim, the Engineer will schedule a second meeting, to be held within 14 Calendar Days or as otherwise agreed by the parties, at which the Contractor shall present the requested information, records and documentation.

The Director shall evaluate the claim based on the information provided by the Contractor to the Engineer or Project Manager. However, if the Department Director (or designee) determines that the Contractor must furnish additional information, records or documentation to allow proper evaluation of the claim, the Department Director (or designee) will schedule a meeting, to be held within 14 Calendar Days, or as otherwise agreed by the parties, at which the Contractor shall present the requested information, records and documentation.

The claim is subject to records review, if not all of the records requested by the Department Director (or designee) were furnished. If applicable, advancement of the claim is subject to the provisions regarding waiver and dismissal of the claim or portions of the claim.

The decision of the Department Director shall be the final decision of the Agency.

(c) Commencement of Litigation - If the Contractor does not accept the Director's decision, then the Contractor shall commence any suit or action to collect or enforce any claim filed in accordance with 00199.30 within a period of one (1) year following the mailing of the decision or within one (1) year following the date of "Second Notification", whichever is later. If said suit or action is not commenced in said one (1) year period, the Contractor expressly waives any **and** all claims for additional compensation and any and all causes of suit or action for the enforcement thereof that he might have had.

The Contractor must follow each step in order, and exhaust all available administrative remedies before resorting to litigation. Litigation of a claim that cannot be resolved through

the process described above shall be initiated by filing a complaint in the Clackamas County Circuit Court for the State of Oregon.

In any litigation, the entire text of any order or permit issued by the County or any other governmental or regulatory authority, as well as any documents referenced or incorporated therein by reference, shall be admissible for purposes of Contract interpretation.

The Contract shall not be construed against either party regardless of which party drafted it. Other than as modified by the Contract, the applicable rules of contract construction and evidence shall apply. This Contract shall be governed by and construed according to the laws of the State of Oregon without regard to principles of conflict of laws.

The Contractor shall comply with 00170.00.

00199.50 Mediation - Delete the entire section.

00199.60 Review of Determination Regarding Records - Delete the entire section.

END OF SECTION

SECTION 00210 - MOBILIZATION

Comply with Section 00210 of the Standard Specifications.

END SECTION

SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

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

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

- Before activating a modified traffic signal, revising lane usage, implementing new roadway geometry, or removing a "STOP" sign, protect traffic by installing "NEW TRAFFIC PATTERN AHEAD" (W23-2) signing according to 00225.02. Keep the signs in place for 30 Calendar Days after completing the modifications.
- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings.
- When paving operations create an abrupt edge, protect traffic by installing a "DO NOT PASS" (R4-1) sign before the work area at sign spacing "A" from the TCD Spacing Table" shown on the standard drawings. Alternate "ABRUPT EDGE" (CW21-7) signs with appropriate (CW21-8) rider and "DO NOT PASS" (R4-1) signs at 1/2 mile spacings. Install a "BUMP" (W8-1) sign 100 feet prior to the transverse paving edge.

00220.02(b) Temporary Pedestrian Accessible Route Plan - Add the following bullet to the end of the bullet list:

- For an active work area controlled at each end by flaggers and pilot car, provide transportation for pedestrians and bicyclists through the active work area according to Section 00225.

END SECTION

SECTION 00225 - WORK ZONE TRAFFIC CONTROL

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

00225.01(b) Definitions – Add the following to the end of the subsection:

Temporary Walk – Temporary Surfacing for a sidewalk or Multi-Use Path designated to be used by pedestrians, bicyclists, or other non-motorized users.

00225.02(a) Temporary Signs - Add the following to the end of the bullet list:

During pilot car operations, install a 15 by 24-inch "WAIT FOR PILOT CAR" (CR4-20) sign at stop-controlled side roads and accesses intersecting the Highway within the limits of the pilot car operation, as shown.

00225.32(b) Traffic Control Inspection Without TCS - Add the following bullet(s) to the end of the bullet list:

Shall report to the Project Site within 1 hour after being notified in the event of a Work Zone incident during non-work periods.

00225.43(e) Pavement Markers - Replace the paragraph that begins "Unless otherwise shown..." and the three bullets with the following paragraphs and bullets:

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

Place and maintain two temporary flexible overlay pavement markers, side-by-side on 20 foot spacings in tangent and curve sections, to simulate double yellow lines.

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

Control markers at:

200 foot intervals on tangents

50 foot intervals on curves

40 foot intervals on curves with speed rider

- Use string line or other appropriate means to maintain proper alignment of the markers. Adjust placement to avoid straddling a longitudinal joint, while maintaining a suitable alignment of markers.
- Remove and replace misaligned markers at no additional cost to the Agency.

00225.46(b) Portable Changeable Message Signs (PCMS) - Add the following bullets to the end of the bullet list:

Type B, Mini PCMS use is limited to locations where the preconstruction posted speed is 40 mph or less.

00225.88(a) Flaggers - Replace this subsection, except for the subsection number and title, with the following:

No measurement will be made for flaggers.

00225.94 Work Zone Lighting - Delete Pay Item (a) from the pay item list.

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

No separate or additional payment will be made for flagger station lighting.

00225.98 Flaggers and Traffic Control Supervisors - Replace this subsection, except for the subsection number and title, with the following:

No separate or additional payment will be made for flaggers or Traffic Control Supervisor.

END SECTION

SECTION 00280 - EROSION AND SEDIMENT CONTROL

Comply with Section 00280 of the Standard Specifications modified as follows:

00280.00 Scope - Add the following paragraph to the end of this subsection:

The Agency's NPDES 1200-CA Permit is applicable to the Project.

00280.06 Erosion and Sediment Control Manager - Delete this subsection.

END SECTION

SECTION 00290 - ENVIRONMENTAL PROTECTION

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

00290.10 Staging and Disposal Sites –

Replace the paragraph that begins "Locate staging areas and disposal..." with the following paragraphs:

Locate staging areas and disposal sites in previously improved or disturbed sites, including existing Roadways, pullouts, turnouts, parking lots, and storage yards that have been compacted, and graveled or paved unless otherwise specified in Section 00236 or Section 00237 or approved, in writing, by the Engineer,

Do not stage Equipment, park Equipment or store Materials in any City, County, State, or Federal park, wayside or recreational facility.

00290.20(c)(1) General - Replace the paragraph that begins “Segregate all demolition debris according to...” with the following paragraph:

Segregate all demolition and construction debris according to its intended end use (reuse, recycle, or dispose). If required, store in designated areas in a manner that prevents contamination to Soil and water and prevents fugitive dust emissions. Remove all waste materials recovered from the site unless otherwise approved, in writing. Retain disposal and recycling facility receipts for wastes generated on site for at least 1 year after completion of the Project. Provide copies of the receipts to the Engineer within 7 Calendar Days of the disposal or recycling.

00290.30(b) Pollution Control Plan - Replace the paragraph that begins “Develop and submit a PCP...” with the following:

Develop a PCP using ODOT Form 734-2445 and submit it for approval at least 10 Calendar Days before the preconstruction conference. Maintain a copy of the PCP on-site at all times during construction activities, readily available to employees and Inspectors. Ensure that all employees comply with the provisions of the PCP.

Delete the paragraph that begins “A Pollution Control Plan...”.

00290.36(a) Migratory Birds - Replace this subsection, except for the subsection number and title, with the following:

00290.36(a) Migratory Birds - Comply with the Migratory Bird Treaty Act (16 U.S.C. 703-712) which protects most species of birds in Oregon and prohibits the removal of nests containing eggs or dependent young (i.e., active nest) without a permit. Migratory birds include most birds in Oregon; the few exceptions include rock pigeons, house sparrows, and European starlings.

Except where allowed by the Contract and by permit, do not disturb an active migratory bird nest, do not inhibit the ability of adult birds to care for eggs or dependent young, and do not impact the supporting structure on which an active nest is built.

If active migratory bird nests are encountered stop all actions that may disrupt the nest and its occupants (including visual and auditory impacts) and contact the Engineer. Do not resume Work that may disrupt nesting until approved by the Engineer.

00290.41 Protection of Wetlands – Replace the title of this subsection with “**Protection of Waters of the U.S. or State**”

Delete the paragraph that begins with “For the purposes of this Section...”.

00290.41(a) Identifying Wetlands – Replace the title of this subsection with “**Identifying Waters of the U.S. or State, Including Wetlands**”

END SECTION

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications.

END SECTION

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.

00330.41(a)(9) Excavation Below Grade - Delete subsection 00330.41(a)(9)(c).

00330.91(d) General Excavation - Delete the bullet that begins "Includes Unsuitable Material...".

00330.94 Embankment Basis Payment - Delete the paragraph that begins "Excavation of unstable...".

END SECTION

SECTION 00331 - SUBGRADE STABILIZATION

Comply with Section 00331 of the Standard Specifications.

END SECTION

SECTION 00344 - TREATED SUBGRADE

Comply with Section 00344 of the Standard Specifications modified as follows:

00344.40 Preparation - Add the following sentence to the end of this subsection:

Work will be performed in 3 foot widths in two locations identified by the Agency's field inspector.

00344.41 Addition of Stabilizing Material - Add the following sentence to the end of this subsection:

Add four percent cement to the subgrade, calculated as a percentage of the in-place dry soil unit weight, unless otherwise directed.

END SECTION

SECTION 00350 - GEOSYNTHETIC INSTALLATION

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

00350.00 Scope - In the sentence, replace the word "geotextile" with the word "geosynthetics".

Add the following subsection:

00350.42 Subgrade Reinforcement Geogrid Installation Requirements:

(a) Placement - Prepare the surface receiving geogrid to a smooth condition to the depth shown and as follows:

- Orient the geogrid rolls parallel to the roadway centerline.
- Unroll the geogrid in the same direction the cover material will be placed. If the geogrid shifts or becomes misaligned, realign it and anchor it according to the manufacturer's recommendations.

(b) Overlaps - Overlap the geogrid a minimum of 2 feet. Overlap the geogrid in the same direction the cover material is placed with the preceding layer lapped on top of the following layer.

(c) Protection of Geogrid - Drive rubber tired equipment on the geogrid at no more than 5 mph. Drive tracked equipment on the geogrid only after placing a minimum of 6 inches of cover material on top of the geogrid. Do not turn or make sudden stops or starts on the geogrid or cover material.

During installation cover the geogrid with cover material as soon as possible. Do not leave uncovered for more than 5 Calendar Days.

(d) Repair - Repair or replace damaged or torn geogrid according to manufacturer's recommendations at no cost to the Agency.

00350.90 Payment - Delete the sentence that begins "If the Engineer orders geosynthetics..."

Add the following pay item to the end of the pay item list:

- (f) Subgrade Reinforcement Geogrid Square Yard

END SECTION

SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

Comply with Section 00405 of the Standard Specifications modified as follows:

00405.12 Bedding - Replace the bullet that begins "3/8" - 0 PCC Fine Aggregate..." with the following bullet:

- 3/8" - 0 PCC fine Aggregate conforming to 02690.30(g).

Delete the bullet that begins "A continuous cradle..."

Add the following bullet to the end of the bullet list:

- CLSM conforming to Section 00442.

END SECTION

SECTION 00440 - COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications.

END SECTION

SECTION 00445 - SANITARY, STORM, CULVERT, SIPHON, AND IRRIGATION PIPE

Comply with Section 00445 of the Standard Specifications modified as follows:

00445.01 Definitions and Descriptive Terms – Delete the definitions for **Plain** and **Steel**.

00445.43(b) Concrete Pipe - Replace the paragraph that begins "Lay elliptical reinforced pipe so ..." with the following paragraph:

Lay elliptical reinforced pipe so that the top or bottom marks are not more than 5 degrees from vertical. Provide all rigid pipe entering or leaving manholes with flexible joints within 18 inches of the manhole Structure and placed on firmly compacted bedding.

00445.43(f) Polypropylene Pipe - Replace the paragraph that begins "Provide joints made with..." with the following paragraph:

Provide joints made with bell-and-spigot coupling.

END SECTION

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

END SECTION

SECTION 00620 - COLD PLANE PAVEMENT REMOVAL

Comply with Section 00620 of the Standard Specifications.

END SECTION

SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS

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

00641.10(a) Base and Shoulder Aggregate – Replace the last sentence in the first paragraph with the following:

Shoulder aggregate shall be $\frac{3}{4}$ " -0.

Replace "Shoulder Aggregate.....2640" With the following:

Shoulder Aggregate.....2630.10

00641.22 Spreading Equipment – Add the following to the end of this subsection:

All shoulder rock shall be placed using a heavy-duty self-propelled road widener capable of widening from 1' to 14' in a single pass. Discharge of the speed of the aggregate is controlled from a conveyor speed lever on the operator's console.

END SECTION

SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

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

00730.44 Applying Tack Coat - Add the following before the first paragraph of this subsection:

A tack coat shall be applied between the existing pavement and the overlay and between all overlay pavement courses.

Tack coat shall be applied only so far in advance as is appropriate to insure a tacky condition of the asphalt at the time of placing the next course of pavement material. Application shall be scheduled so as to offer the least interference to traffic and to permit one-way traffic without pickup or tracking. The tack coat shall be covered the same day as applied.

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. Tack coat shall be considered incidental to the asphalt concrete paving work, and no separate payment will be made.

END SECTION

SECTION 00738 - SAFETY EDGE

Comply with Section 00738 of the Standard Specifications modified as follows:

00738.20 Safety Edge Device - Add the following paragraph to the end of this subsection:

Use a safety edge device manufactured by Transtech Systems, Inc; Advant-Edge Paving Equipment, LLC; Carlson Paving Products; Troxler Electronic Laboratories, Inc; or a similar device that produces the same wedge consolidation results. If a similar device is used, provide proof the device has been used on previous projects with acceptable results or construct a test section meeting the requirements of 00738.47.

END SECTION

SECTION 00744 - ASPHALT CONCRETE PAVEMENT

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

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

Provide PG 64-22 grade asphalt cement for this Project.

END SECTION

SECTION 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES

Comply with Section 00749 of the Standard Specifications.

END SECTION

SECTION 00840 - DELINEATORS AND MILEPOST MARKER POSTS

Comply with Section 00840 of the Standard Specifications.

END SECTION

SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

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

Add the following subsection:

00850.12 Reflective Elements – Swarco 3130 blend or approved equal from the ODOT QPL shall be used with Hi-Build Paint.

00850.30 Manufacturer's Representative - Replace this subsection, except for the subsection number and title, with the following:

For Sections referencing 00850.30, the services of a manufacturer's representative are not required. Place pavement markings only when the pavement is ready for the pavement marking material according to the manufacturer's installation instructions.

END SECTION

SECTION 00855 - PAVEMENT MARKERS

Comply with Section 00855 of the Standard Specifications.

END SECTION

SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS

Comply with Section 00867 of the Standard Specifications.

END SECTION

SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS

Comply with Section 00905 of the Standard Specifications.

END SECTION

SECTION 00930 - METAL SIGN SUPPORTS

Comply with Section 00930 of the Standard Specifications modified as follows:

00930.10 Materials - Replace the paragraph that begins "Furnish structural steel materials..." with the following paragraph:

Furnish perforated steel square tube slip base sign supports and perforated steel square tube anchor sign supports from the QPL. Furnish other structural steel materials meeting the applicable portions of Section 02530, with weights and sizes as shown or specified.

00930.40(e)(1) General – Add the following sentence to the end of the paragraph:

The installation will be rejected if the geometry does not satisfy the requirements of 02560.05.

END SECTION

SECTION 00940 - SIGNS

Comply with Section 00940 of the Standard Specifications.

END SECTION

SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications.

END SECTION

SECTION 01040 - PLANTING

Comply with Section 01040 of the Standard Specifications modified as follows:

01040.80(b) Topsoil and Wetland Topsoil - Replace the paragraph that begins "Topsoil and wetland Topsoil will be measured..." with the following paragraph:

Topsoil and wetland Topsoil will be measured on the volume basis at the time of placement. Trucking invoices may be used to determine volumes if the quantities are verifiable to the satisfaction of the Engineer.

END SECTION

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.

END SECTION

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.

END SECTION

SECTION 02110 – POSTS, BLOCKS, AND BRACES

Comply with Section 02110 of the Standard Specifications.

END SECTION

SECTION 02190 – PRESERVATIVE TREATMENT OF TIMBER

Comply with Section 02190 of the Standard Specifications modified as follows:

02190.20 Drying After Treatment – Replace the sentence that begins “When using waterborne preservatives...” with the following sentence:

When using waterborne preservatives, dry items according to AWPA T1, Section 7.

02190.30 Field Treatment – Replace this subsection, except for the subsection number and title, with the following:

Field-treat cuts, abrasions, bolt holes, drilled surfaces or any other damaged wood surfaces according to AWPA M4, Section 6 with a preservative from the QPL.

END SECTION

SECTION 02450 - MANHOLE AND INLET MATERIALS

Comply with Section 02450 of the Standard Specifications modified as follows:

02450.00 Scope – Replace this subsection, except for the subsection number and title, with the following:

This Section includes the requirements for precast manhole sump sections, metal frames, covers, grates, and manhole steps.

02450.30 Metal Frames, Covers, Grates, and Ladders - Replace this subsection with the following subsection:

02450.30 Metal Frames, Covers, Grates, and Steps – Comply with the following:

Projects on State Highways		
Item	AASHTO (ASTM) Designation	Grade
Manhole frames and covers	M 306	Class 35 B
Inlet frames and grates	M 306	Class 35 B
	M 227 (A663)	65
	M 270 (A709) (A36)	36
	M 103 (A27)	65 - 35
All Other Projects		
Item	AASHTO (ASTM) Designation	Grade
Manhole frames and covers	M 105	Class 30 B
Inlet frames and grates	M 227 (A663)	65
	M 270 (A709) (A36)	36
	M 103 (A27)	65 - 35

Steps for manholes shall be steel-reinforced plastic conforming to AASHTO M 199 (ASTM C478) and AASHTO T 280 (ASTM C497). The steel shall be deformed reinforcing bar conforming to AASHTO M 31 (ASTM A615) Grade 60, No. 4 minimum. The plastic material surrounding the reinforcing steel bar shall be injection molded, with a textured, non-slip surface and a minimum thickness over the steel of 1/16 inch. Voids in the plastic will be cause for rejection of the step.

Welding shall conform to AWS D1.1. Frames, covers and grates for use one with another shall have even and uniform bearings. Miscellaneous metal items and hardware shall conform to the appropriate requirements of Section 00560.

Inlet frames and grates that are fabricated out of steel shall be galvanized according to the appropriate requirements of Section 02530.

END SECTION

SECTION 02530 - STRUCTURAL STEEL

Comply with Section 02530 of the Standard Specifications modified as follows:

02530.70 Galvanizing - Replace the paragraph that begins "Steel that will be finished by hot-dip galvanizing..." with the following paragraph:

Steel that will be finished by hot-dip galvanizing for use as sign bridges, illumination poles, traffic signal poles, sign supports, bridge rail and items designated on the Plans as "Galvanize - Control Silicon" shall have controlled silicon content. The silicon content shall be in either of the ranges 0 - 0.06 percent or 0.13 - 0.25 percent. Before galvanizing, submit mill test certificates verifying silicon content to the Engineer and the galvanizer.

END SECTION

SECTION 02560 - FASTENERS

Comply with Section 02560 of the Standard Specifications modified as follows:

Add the following subsection:

02560.05 Geometry - Bolt or rod length used shall be such that the end of the bolt or rod extends beyond or is at least flush with the outer face of the nut when properly installed.

02560.10(b) Nuts - Replace this subsection, except for the subsection number and title, with following:

Nuts for carbon steel bolts shall conform to the requirements of the following, or equivalent:

Plain (Noncoated) Bolts:

- 1/4" - 1 1/2" - ASTM A563, Grade A, hex
- Over 1 1/2" - 4" - ASTM A563, Grade A, heavy hex

Galvanized Bolts:

- All - ASTM A563, Grade A, C, D, or DH, heavy hex

02560.20(a) Bolts - Replace this subsection, except for the subsection number and title, with following:

High-strength bolts used in noncoated weathering steel connections shall be Type 3. High-strength bolts shall conform to the requirements of the following:

Heavy Hex Head:

- ASTM F3125, Grade A325

Twist-Off:

- ASTM F3125, Grade F1852

02560.20(b) Nuts – Replace this subsection, except for the subsection number and title, with following:

Nuts for high-strength bolts shall conform to the requirements of the following, or equivalent:

Type 1 Plain (Noncoated) Bolts:

- All - Heavy hex ASTM A563, Grade C, D, or DH

Type 1 Galvanized Bolts:

- All - Heavy hex ASTM A563, Grade DH

Type 3 Bolts:

- All - Heavy hex ASTM A563, Grade C3 or DH3

02560.20(f) Lock-Pin and Collar Fasteners - Delete this subsection.

02560.30(c) Nuts – Replace this subsection, except for the subsection number and title, with following:

Nuts for tie rods, anchor bolts, and anchor rods shall conform to the requirements of the following, or equivalent:

Plain Steel Tie Rods, Anchor Bolts, and Anchor Rods:

- All - Heavy hex ASTM A563, Grade A

Galvanized Steel Tie Rods, Anchor Bolts, and Anchor Rods:

- All - Heavy hex ASTM A563, Grade A, C, D, or DH

Plain Or Galvanized High-Strength Tie Rods, Anchor Bolts, or Anchor Rods:

- All - Heavy hex ASTM A563, Grade DH

02560.40 Galvanizing and Coating - Replace this subsection with the following subsection:

02560.40 Galvanizing and Coating:

(a) High Strength Fasteners - When specified, hot-dip galvanize Grade A325 fasteners or mechanically deposit zinc to Grade F1852 fasteners according to ASTM F3125.

(b) Tie Rods, Anchor Bolts, Anchor Rods and Carbon Fasteners - Hot-dip galvanize, tie rods, anchor bolts, anchor rods, nuts, washers and carbon fasteners according to ASTM F2329 as appropriate to the product.

Overtap nuts for galvanized fasteners, galvanized tie rods, galvanized anchor bolts, and galvanized anchor rods according to ASTM A563.

Measure the zinc thickness on the wrench flats or top of bolt head of galvanized bolts and on the wrench flats of galvanized nuts.

(c) Direct Tension Indicators – When specified, apply mechanically deposited zinc according to ASTM F959.

(d) Repair of Hot-Dip Galvanizing - Repair damaged hot-dip galvanizing according to ASTM A780. Minimum zinc content for Method A2 is 94 percent on the dry film.

02560.60(b) Other Test Requirements - In the paragraph that begins "Wedge test all bolts according..." replace the words "AASHTO M 164 (ASTM A325)" with the words "ASTM F3125, Grade A325 or Grade F1852".

02560.70 Lubricating Fasteners - Replace this subsection, except for the subsection number and title, with following:

Furnish all galvanized and coated fasteners with a factory applied commercial water-soluble wax that contains a visible dye of a color that contrasts with the color of galvanizing or coating. Black fasteners shall be "oily" to the touch when installed.

Field lubricate galvanized bolts in tapped holes, galvanized anchor rods, and galvanized tie rods with a lubricant from the QPL. Apply lubricant to threads and to bearing surfaces that will turn during installation.

Protect fasteners from dirt and moisture at the Project site.

Retest heavy hex head fasteners that do not pass the field rotational capacity test. Clean and relubricate heavy hex head fasteners with a lubricant from the QPL prior to retesting.

Relubrication of Twist-Off fasteners is not permitted.

END SECTION

SECTION 02640 - SHOULDER AGGREGATE

Comply with Section 02640 of the Standard Specifications modified as follows:

Replace this section with subsection 02630.10.

Use $\frac{3}{4}$ " – 0 column in Table 02630-1 for the specified gradation.

END SECTION

SECTION 02690 - PCC AGGREGATES

Replace Section 02690 of the Standard Specifications with the following Section 02690:

SECTION 02690 - PCC AGGREGATES

02690.00 Scope - This Section includes the requirements for coarse and fine aggregates for portland cement concrete.

02690.01 Definitions:

Coating - Foreign or deleterious substances found adhering to the aggregate particles.

Detrimental Materials - Materials that adversely affect concrete, including but not limited to clay, shale, mica, silt, bark, alkali, sticks, organic matter, soft and flaky particles.

Nominal Maximum Size Of Aggregate - One sieve larger than the first sieve that retains more than 10 percent of the material using an agency specified set of sieves based on cumulative percent retained. Where large gaps in specification sieves exist, intermediate sieves may be inserted to determine nominal maximum size.

02690.10 Materials - PCC Aggregates shall consist of natural or crushed rock that is hard, strong, durable and free from adherent coatings or other detrimental materials.

Produce, handle and store the aggregates in a way that will maintain passing material properties and avoid introducing deleterious materials or segregation prior to its use in portland cement concrete.

02690.11 Alternate Grading - The Contractor may request approval to produce coarse and fine aggregates in sizes other than those stated in 02690.20 and 02690.30. The request shall be in writing, and shall state the proposed target value and specified tolerances for each of the individual sieve sizes of the materials the Contractor proposes to produce.

02690.12 Acceptance of Aggregate - Acceptance of aggregate will be according to Section 00165 and based on the Contractor's quality control testing, if verified, according to Section 00165.

(a) Aggregate Gradation - A stockpile contains specification aggregate gradation when the quality level for each sieve size calculated according to 00165.40 is equal to or greater than the quality level indicated in Table 00165-2 for a PF of 1.00. Each required sample represents a subplot. When the quality level indicated in Table 00165-2 yields a PF of less than 1.00 for any constituent, the material is non-specification.

(b) Non-specification Aggregate Gradation - Stockpiled aggregates that contain non-specification aggregate gradation will be rejected by the Engineer unless non specification material is removed from the stockpile. Do not add additional material to the stockpile until enough non-specification material is removed so that the quality level for each constituent is equal to or greater than the quality level in Table 00165-2 for a 1.00 PF.

Reprocessing of non-conforming material and the testing required for acceptance will be at no additional cost to the Agency. Acceptance of reprocessed material will be based on passing test results or accepted visually by the Engineer.

02690.20 Coarse Aggregate:

(a) **Harmful Substances** - Harmful substances shall not exceed the following limits:

Test	Test Method		Percent (by Weight)
	ODOT	AASHTO	
Lightweight Pieces	–	T 113	1.0
Material passing No. 200 sieve	–	T 11	1.0
Wood Particles	TM 225	–	0.05

(b) **Soundness** - Coarse aggregates for concrete shall be tested for soundness using sodium sulfate salt, according to AASHTO T 104. The weighted percentage loss shall not exceed 12 percent by weight.

(c) **Durability** - Coarse aggregates shall meet the following durability requirements:

Test	Test Method		Requirements
	ODOT	AASHTO	
Abrasion	–	T 96	30.0% Max.
Oregon Air Aggregate Degradation:			
Passing No. 20 sieve	TM 208	–	30.0% Max.
Sediment Height	TM 208	–	3.0" Max.

(d) **PCC Paving Aggregate** - In addition to requirements above, comply with the following:

(1) **Fracture** - Provide aggregate with at least two fractured faces on at least 50 percent of the particles retained on the 3/8 inch, 1/2 inch, 3/4 inch, 1 inch, and 1 1/2 inch sieves, as determined by AASHTO T 335.

(2) **Elongated Pieces** - Provide aggregate with elongated pieces not exceeding 10 percent by weight of the material retained on the No. 4 sieve when tested according to ODOT TM 229 with the proportional caliper device set at a ratio of 5:1.

(e) **Grading and Separation by Sizes for Prestressed Concrete** - Sampling shall be according to AASHTO R 90 and sieve analysis shall be determined according to AASHTO T 27 and AASHTO T 11. PCC coarse aggregate shall conform to grading and separated sizes as follows:

(1) Where indicated in Table 02690-1, the coarse aggregate shall be separated into two sizes and each separated size shall be measured into the batch in the quantity determined by the mix design.

For each of the indicated maximum sizes of coarse aggregates, the separated sizes shall be as indicated in Table 02690-2:

Table 02690-1

Maximum Nominal Size of Aggregates	Separated Sizes
1"	1" - No. 4
3/4"	3/4" - No. 4
3/4"	3/4" - 1/2" and 1/2" - No. 4
3/4"	3/4" - 3/8" and 3/8" - No. 4

(2) The grading of each of the specified separated sizes of coarse aggregate shall conform to the following:

Table 02690-2

Separated Sizes						
Sieve Size	1" - No. 4	3/4"- No. 4	3/4"- 1/2"	3/4"- 3/8"	1/2"- No. 4	3/8"- No. 4
Percent Passing (by Weight)						

1 1/2"	100	-	-	-	-	-
1"	90 - 100	100	100	100	-	-
3/4"	50 - 80	90 - 100	85 - 100	85 - 100	100	100
1/2"	-	-	0 - 15	-	85 - 100	-
3/8"	15 - 40	20 - 50	-	0 - 15	35 - 65	85 - 100
No. 4	0 - 10	0 - 10	-	-	0 - 15	0 - 15
No. 200	*	*	*	*	*	*

* See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

(f) **Grading and Separation by Sizes for Other Concrete** - Sampling shall be according to AASHTO T 2. Sieve analysis shall be according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation requirements of Tables 02690-3 and 02690-4 for structural concrete. Provide a CAgT to perform sampling and testing when required.

Table 02690-3

Gradation of Coarse Aggregates				
Sieve Size	Combined* Sizes	Separated Sizes	Separated Sizes	Separated Sizes
	1 1/2" - No. 4	1 1/2" - 3/4"	1" - No. 4	3/4" - 1/2"
Percent Passing (by Weight)				
2"	100	100	-	-
1 1/2"	90 - 100	90 - 100	100	-
1"	70 - 89	20 - 55	90 - 100	100
3/4"	35 - 70	0 - 15	-	85 - 100
1/2"	-	-	25 - 60	0 - 15
3/8"	10 - 30	0 - 5	-	-
No. 4	0 - 5	-	0 - 10	-
No. 8	-	-	0 - 5	-

No. 200 ** ** ** **

* For 1 1/2 inch coarse aggregate use two or more separated sizes which when combined shall meet the gradation limits for 1 1/2" - No. 4

** See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

**Table 02690-4
Gradation of Coarse Aggregates**

Sieve Size	Separated or Combined Sizes			
	Separated Sizes 3/4" - 3/8"	Combined Sizes 3/4" - No. 4	Separated Sizes 1/2" - No. 4	Separated Sizes 3/8" - No. 8
	Percent Passing (by Weight)			
1"	100	100	—	—
3/4"	90 - 100	90 - 100	100	—
1/2"	20 - 55	—	90 - 100	100
3/8"	0 - 15	20 - 55	40 - 70	85 - 100
No. 4	0 - 5	0 - 10	0 - 15	10 - 30
No. 8	—	0 - 5	0 - 5	0 - 10
No. 16	—	—	—	0 - 5
No. 200	*	*	*	*

* See 02690.20(a). Do not evaluate material passing the No. 200 sieve according to 00165.40.

02690.30 Fine Aggregates:

(a) Different Sources - Do not mix fine aggregates from different sources of supply, or store in the same pile. Do not use alternately in the same class of mix, without prior approval.

(b) Harmful Substances - The amount of harmful substances shall not exceed the following limits:

Test	Test Method (AASHTO)	Percent (by Weight)
Lightweight Pieces	T 113	2.0%
Material passing No. 200 sieve	T 11	3.0%

(c) Soundness - Fine aggregate shall be tested for soundness using sodium sulfate salt, according to AASHTO T 104. The weighted percentage loss shall not exceed 10 percent by weight.

(d) Organic Impurities - All fine aggregate shall meet the requirements of AASHTO M 6 for organic impurities.

(e) Sand Equivalent - Fine aggregate shall be tested according to AASHTO T 176 and shall have a sand equivalent of not less than 75.

(f) **Sand for Mortar** - Sand for mortar shall conform to the requirements of this Section.

(g) **Grading** - Sampling shall be according to AASHTO T 2. Sieve analysis shall be determined according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation requirements of Table 02690-5 for structural concrete. Provide a CAgT to perform sampling and testing when required.

Table 02690-5
Gradation of Fine Aggregate*

Sieve Size	Percent Passing (by Weight)
3/8"	100
No. 4	90 - 100
No. 8	70 - 100
No. 16	50 - 85
No. 30	25 - 60
No. 50	5 - 30
No. 100	0 - 10
No. 200	**

* Determine the fineness modulus according to AASHTO T 27 and AASHTO T 11. Maintain the fine aggregate fineness modulus within plus or minus 0.20 from the fineness modulus used in the Contractor's mix design. Fine aggregates in which the fineness modulus varies by more than 0.20 from the mix design target shall not be incorporated until an assessment is done to determine whether an adjustment in the aggregate proportions is necessary. Proportion changes must be performed by a CCT according to the provisions of ACI 211. Submit analysis of FM and mix design adjustments to the Engineer for approval.

** See 02690.30(b). Do not evaluate material passing No. 200 sieve according to 0165.40.

END SECTION

SECTION 02910 - SIGN MATERIALS

Comply with Section 02910 of the Standard Specifications modified as follows:

02910.20 Reflective and Retroreflective Sheeting - Replace the title of this subsection with "Retroreflective Sheeting"

02910.20(a) General - Replace the paragraph that begins "Use retroreflective sheeting Type..." with the following paragraph:

Use retroreflective sheeting from the QPL and the following:

02910.32(b) Retroreflective Sheeting Legend – Replace the paragraph that begins "The Silver-white or white letters..." with the following paragraph:

Removable legend shall be fabricated with sheeting conforming to 02910.20 that is permanently adhered to a flat aluminum frame.

02910.40 Hardware - Replace the paragraph that begins "The bolts, nuts, and washers..." with the following paragraph:

The bolts, nuts, and washers used to fabricate and erect signs shall be aluminum alloy, stainless steel, or hot-dip galvanized steel. Aluminum for bolts and nuts shall conform to ASTM B211, alloys 2024-T4 or 6061-T6 as the Contractor elects. Aluminum washers shall conform to ASTM B209, alloy Alclad 2024-T4. Stainless steel for bolts, nuts, and washers shall be Type 304 or Type 316. Galvanized steel bolts, nuts and washers shall be medium carbon steel. Galvanize steel hardware according to AASHTO M 232 (ASTM A153).

02910.75(a) Warranty Period – Replace the bullet that begins “For retroreflective Type III and Type IV ...” with the following paragraph:

For retroreflective ASTM Type III and Type IV sheeting used for permanent signs, the warranty period shall be for 10 years.

Replace the bullet that begins “For retroreflective Type IX sheeting used ...” with the following paragraph:

For retroreflective ASTM Type IX and Type XI sheeting used for permanent signs, the warranty period shall be for 12 years.

02910.75(b) Failure – Replace the bullet that begins “70 percent of minimum coefficient...” with the following paragraph:

70 percent of minimum coefficient of retroreflection for designated sheeting or cuttable film according to ASTM D4956 for the remaining 3 years of the warranty period for Type III and Type IV sheeting and remaining 5 years of the warranty period for Type IX and Type XI sheeting.

02910.75(c) Remedy – Replace the bullet that begins “For the remaining 3 years ...” with the following paragraph:

For the remaining 3 years (5 years for ASTM Type IX and Type XI sheeting), furnish replacement sheeting required to restore the sign panel to a condition that meets the Specifications.

END SECTION

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CLACKAMAS COUNTY, OREGON

SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT

PROJECT NO. 22279

FEBRUARY 2021

BID DOCUMENTS

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OREGON STD DWG

DRAINAGE
RD360 - MANHOLE FRAME ADJUSTMENT

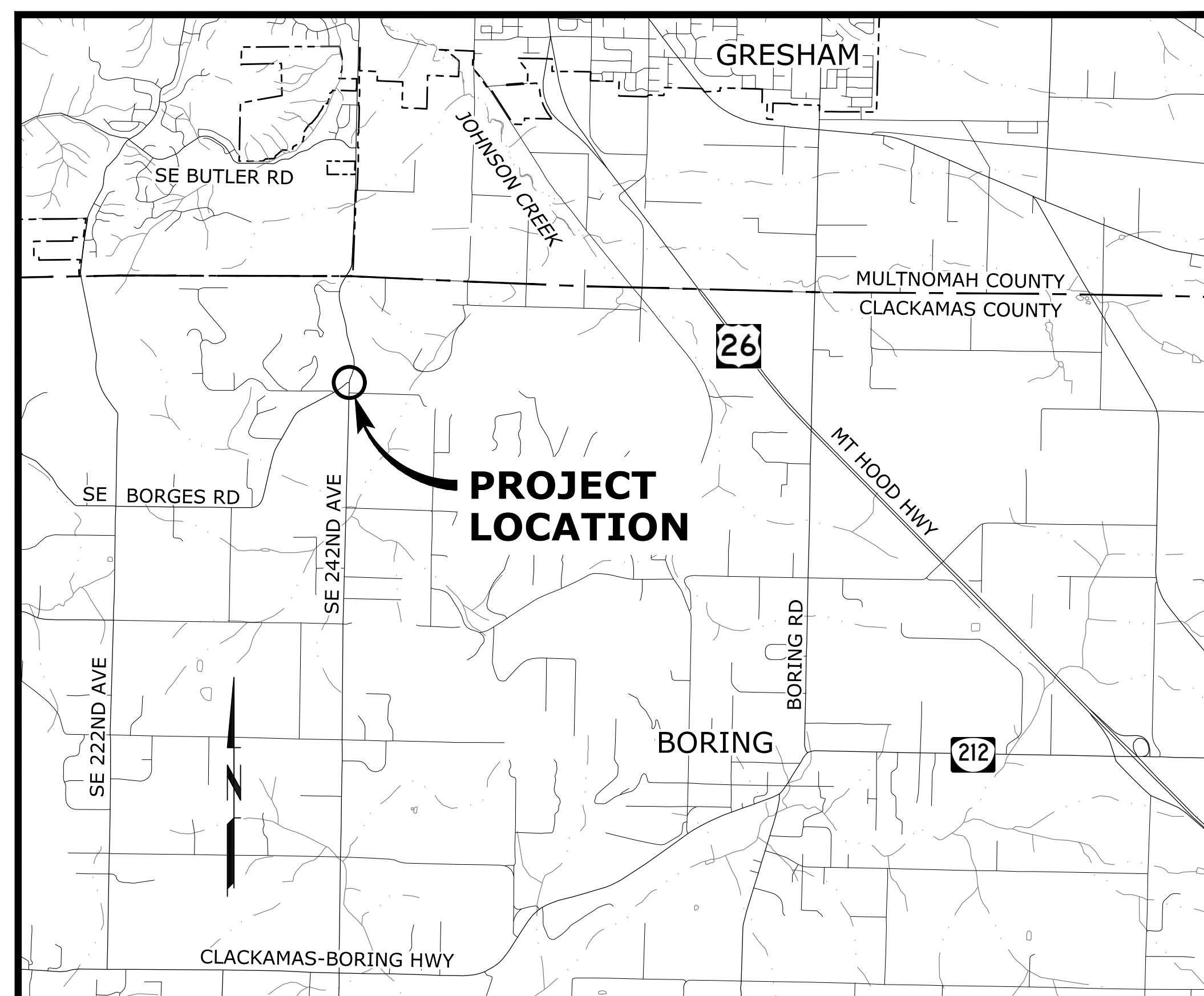
PAVEMENT
RD615 - ASPHALT CONCRETE PAVEMENT (ACP) DETAILS

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PAVEMENT MARKINGS
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TM570 - TRAFFIC DELINEATORS

SIGN, ILLUMINATION AND SIGNAL SUPPORT STRUCTURES
TM635 - BREAKAWAY SIGN AND LUMINAIRE SUPPORTS - SUPPORT LOCATION GUIDELINES
TM688 - PERFORATED STEEL SQUARE TUBE (PSST) SLIP BASE FOUNDATION



VICINITY MAP
SCALE: 1"=2,500'

ATTENTION: OREGON LAW REQUIRES THE CONTRACTOR TO FOLLOW THE RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0090. THE CONTRACTOR MAY OBTAIN COPIES OF THE RULES BY CALLING THE UTILITY NOTIFICATION CENTER. (NOTE: THE TELEPHONE NUMBER FOR THE OREGON UTILITY NOTIFICATION CENTER IS 503-246-6699.)

	REVISION NO. DATE	BY	SHEET G-1	1 of 10
VERT: AS SHOWN HORIZ: AS SHOWN SCALE	NOTICE IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT PROJECT NO. 22279		
COVER SHEET				
PROJECT:			DATE: FEBRUARY 2021	

\\ad.msa-ep.com\Portland\PD\Projects\19\2714 - Clackamas County - 242nd Ave & Borges Rd Realignment\CAD\Sheets\1 - 19-2714-OR-GENERAL.dwg G-2 3/29/2021 3:12 PM AARON.ROBERTS 23.0s (LMS Tech)

ABBREVIATIONS

AC ASPHALTIC CONCRETE	PL PROPERTY LINE
APPROX APPROXIMATE	PGE PORTLAND GENERAL ELECTRIC
APPVD APPROVED	PVC POLYVINYL CHLORIDE
ASTM AMERICAN SOCIETY FOR TESTING & MATERIALS	PVMT PAVEMENT
AVE AVENUE	
AVG AVERAGE	
	QTY QUANTITY
BFILL BACK FILL	RD ROAD
BLDG BUILDING	R/W RIGHT OF WAY
	SAN SANITARY
CB CATCH BASIN	SD STORM DRAIN
CI CAST IRON	SDL SADDLE
CL CENTERLINE	SHT SHEET
CO CLEANOUT	SLP SLOPE
CONC CONCRETE	SPEC (S) SPECIFICATION (S)
CONN CONNECTION	SS SANITARY SEWER
CONST CONSTRUCT / CONSTRUCTION	SST STAINLESS STEEL
CTL FO CENTURYLINK FIBER OPTIC	ST STREET
CY CUBIC YARDS	STA STATION
	STD STANDARD
	STL STEEL
	T or TEL TELEPHONE
DI DUCTILE IRON	TCE TEMPORARY CONSTRUCTION EASEMENT
DIA DIAMETER	THK THICK / THICKNESS
DWG DRAWING	TYP TYPICAL
DWY DRIVEWAY	
	VAR VARIES
EA EACH	VERT VERTICAL
EL ELEVATION	
EOP EDGE OF PAVEMENT	
ESMT EASEMENT	
EXIST EXISTING	W WATER
EXIST GR EXISTING GRADE	WM WATER METER
	WS WATER SERVICE
FH FIRE HYDRANT	
FIN FINISHED	
FT FEET / FOOT	
G GAS	
GR GRADE	
HDPE HIGH DENSITY POLYETHYLENE	
HORIZ HORIZONTAL	
HYD HYDRANT	
ID INSIDE DIAMETER	
IE INVERT ELEVATION	
IN INCH	
INV INVERT	
LAT LATERAL	
LF LINEAR FOOT	
MAX MAXIMUM	
MH MANHOLE	
MIN MINIMUM	
NO NUMBER	
NOM NOMINAL	
NTS NOT TO SCALE	
OD OUTSIDE DIAMETER	
ODOT OREGON DEPARTMENT OF TRANSPORTATION	

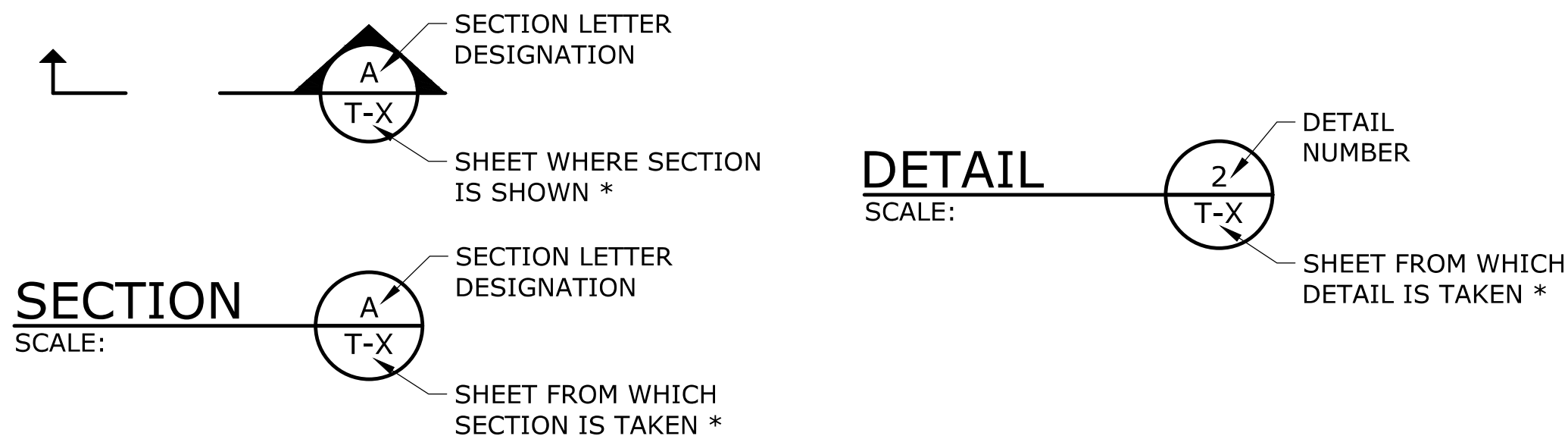
TOPOGRAPHIC LEGEND

	EXISTING	PROPOSED	EXISTING	PROPOSED
WATERLINE	W		MANHOLE	○
ELECTRICITY	E		CLEAN-OUT	○
GAS	G		CATCH BASIN/FIELD INLET	■
TELEPHONE/TELEMETRY	T		THRUST BLOCK	△
CABLE TELEVISION	CATV		VALVE	⊗
SANITARY SEWER LINE	SS		AIR INJECTION ASSEMBLY	⊥
SANITARY SEWER FORCE MAIN	FM		BLOW-OFF ASSEMBLY	⊥
STORM DRAIN	SD	---	AIR RELEASE ASSEMBLY	⊥
CULVERT	---	---	FIRE HYDRANT ASSEMBLY	⊥
ABANDON PIPE	/////////		WATER METER	■
DRAINAGE DITCH	----		PULL BOX/JUNCTION BOX	⊥
SEDIMENT FENCE		—X—X—X—	UTILITY POLE	⊥
COMPOST FILTER SOCK CHECK DAM		~~~~~	GUY WIRE	⊥
WOOD FENCE	□-□-□-□	□-□-□-□	LIGHT POST	⊥
WOOD FENCE TO BE REMOVED		-X-X-X-X-X-X-X-	MAIL BOX	⊥
GUARDRAIL	○-○-○-○		SIGN	⊥
ROCK WALL	-----		BENCHMARK	⊕
TREE/BUSH LINE	~~~~~		MONUMENT	△
CENTERLINE	----	----	TREE DECIDUOUS	☼
EASEMENT	-----		TREE CONIFEROUS	☼
PROPERTY LINE	-----		TREE TO BE REMOVED	X
RIGHT-OF-WAY	-----		SHRUB TO BE REMOVED	X
EDGE OF PAVEMENT/AC	-----	-----	SURFACE ELEVATION	+ 176.63
SAW CUT	-----	-----		+ 176.63
EDGE OF GRAVEL	-----			
CURB	=====			
SIDEWALK	=====	S/W		
CONCRETE	=====	=====		
STRUCTURE OR FACILITY	=====	=====		
CONTOUR MINOR	-----			
CONTOUR MAJOR	-----	200		

SECTION AND DETAIL DESIGNATIONS

SECTION DESIGNATIONS

DETAIL DESIGNATIONS



* NOTE: IF PLAN AND SECTION FOR DETAIL CALL-OUT AND DETAIL ARE SHOWN ON THE SAME DRAWING, DRAWING NUMBER IS REPLACED WITH A DASH.

PROJECT CONTACTS

OWNER:
CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
150 BEAVERCREEK ROAD, ROOM 320
OREGON CITY, OREGON 97045
TEL: (503)742-4688
CONTACT: MIKE WARD, PE

GAS:
NW NATURAL (NWN)
220 NW 2ND AVENUE
PORTLAND, OR 97209
TEL: 503-226-4211
CONTACT: JEREMY LORENCE
TEL: 503-226-4211 EXT 6772

COMMUNICATIONS:
COMCAST
7900 NE KILLINGSWORTH STREET
PORTLAND, OR 97218
TEL: (503)813-0485
CONTACT: ROBERT BAILEY
TEL: (503)348-5610

POWER:
PORTLAND GENERAL ELECTRIC (PGE)
1705 E BURNSIDE ROAD
GRESHAM, OR 97030
TEL: (800) 542-8818
CONTACT: ROBBY CURTIS
TEL: (503)669-3302
WORK ORDER NO. M2857310

CIVIL ENGINEER:
MURRAYSMITH
101 SW MAIN STREET, SUITE 1000
PORTLAND, OREGON 97204
TEL: (503)225-9010
CONTACT: NICK MCMURTREY, PE

WILLIAMS NW PIPELINE:
89861 N GAME FARM ROAD
EUGENE, OR 97408
TEL: (541) 342-4434
CONTACT: JEAN BRADY
TEL: (360)666-2106

FRONTIER COMMUNICATIONS:
4155 SW CEDAR HILLS BOULEVARD
BEAVERTON, OR 97005
TEL: (503)626-2386
CONTACT: JOHN BIELEC
TEL: (503)367-5106

WATER, SEWER, STORM:
CLACKAMAS COUNTY
SEE CONTACT INFORMATION ABOVE

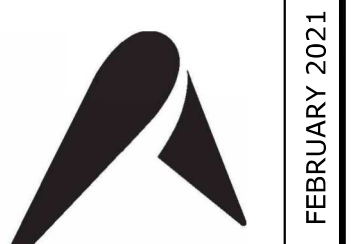
ZAYO GROUP:
18110 SE 34TH STREET, BUILDING ONE, SUITE 100
VANCOUVER, WA 98683
TEL: (360)524-7928
CONTACT: JOSEPH KLEINSASSER
TEL: (541)979-8039

BY		REVISION		NO.	DATE	DESIGNED: RPW	DRAWN: MWE	CHECKED: WFA	APPROVED: NJM



SCALE	VERT: AS SHOWN	HORIZ: AS SHOWN	NOTICE
			IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

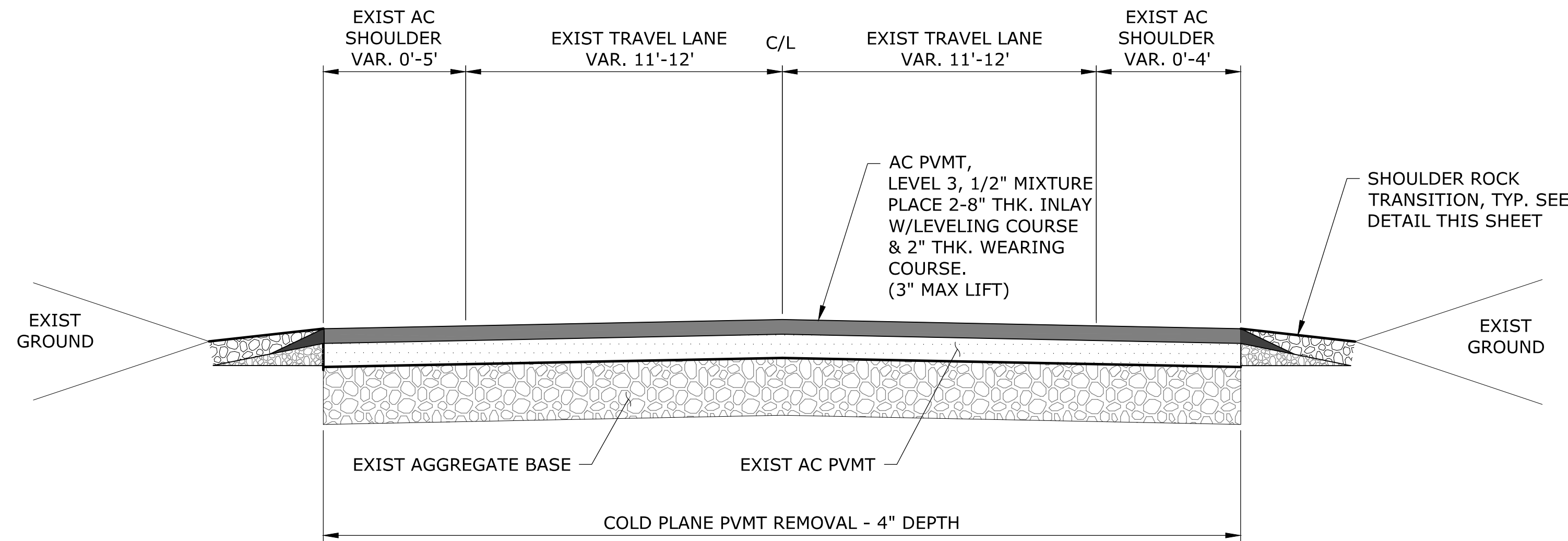
SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT PROJECT NO. 22279
GENERAL NOTES, LEGEND AND ABBREVIATIONS



PROJECT: 19-2714 DATE: FEBRUARY 2021
murraysmith

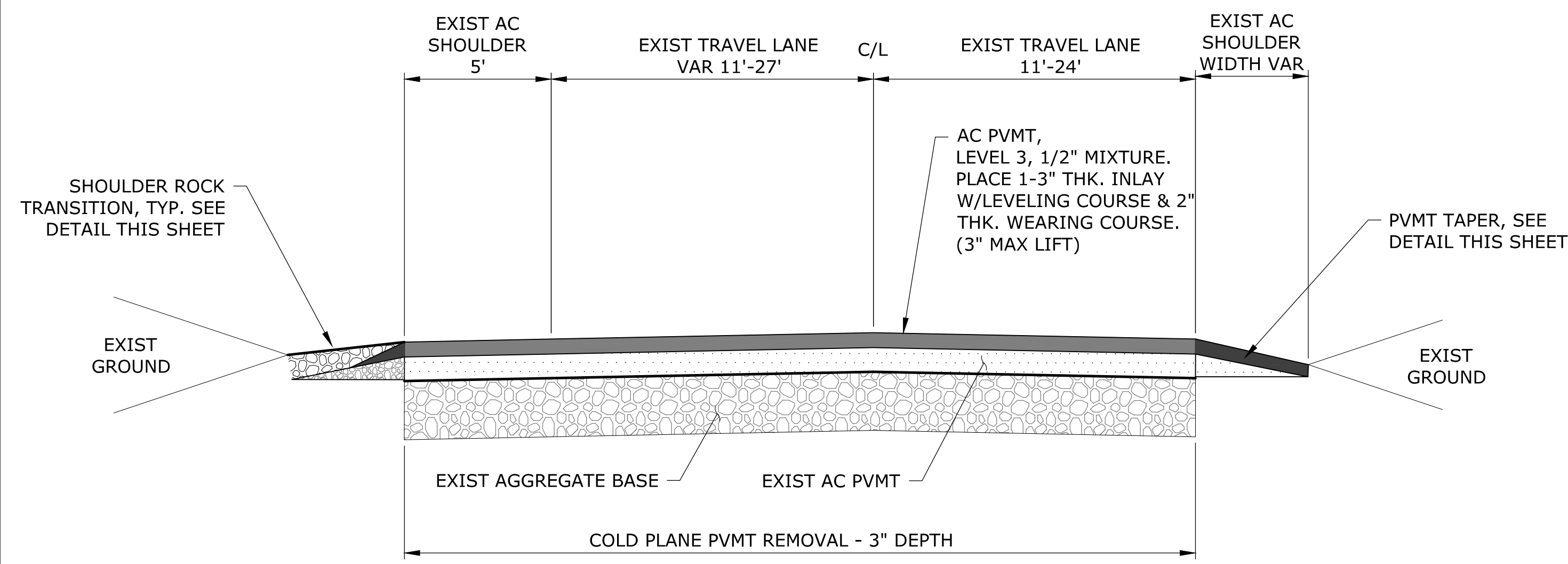


\\ad.msa-ep.com\Portland\PD\Projects\19\2714 - Clackamas County - 242nd Ave & Borges Rd Realignment\CAD\Sheets\2-19-2714-OR-T-TYPICAL SECTIONS & ACP SECTION DETAILS.dwg T-1 3/2/2021 4:44 PM AARON.ROBERTS 23.0s (LMS



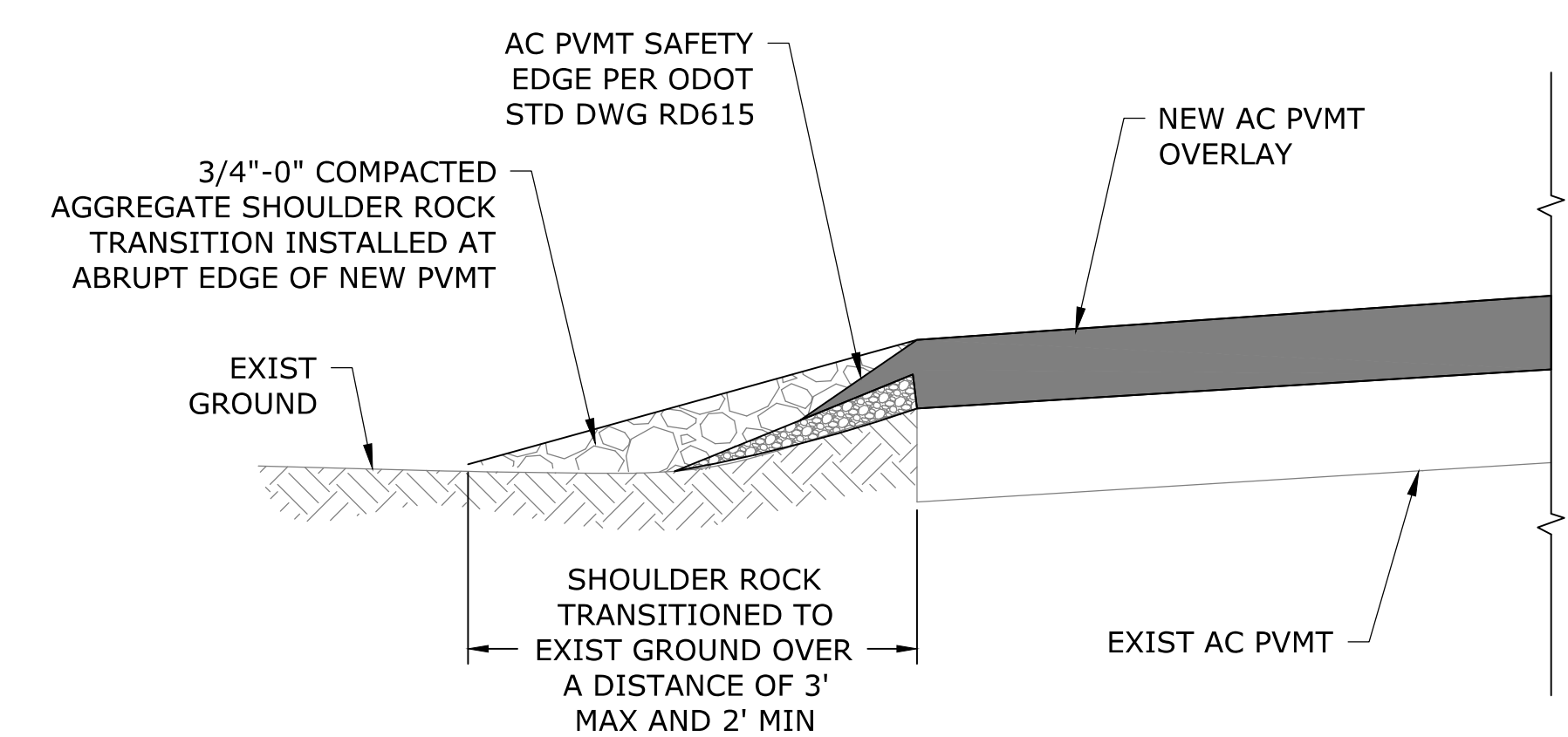
SE 242ND AVENUE TYPICAL SECTION: STA. 18+50 TO STA. 21+50
SCALE: NTS

1
T-1



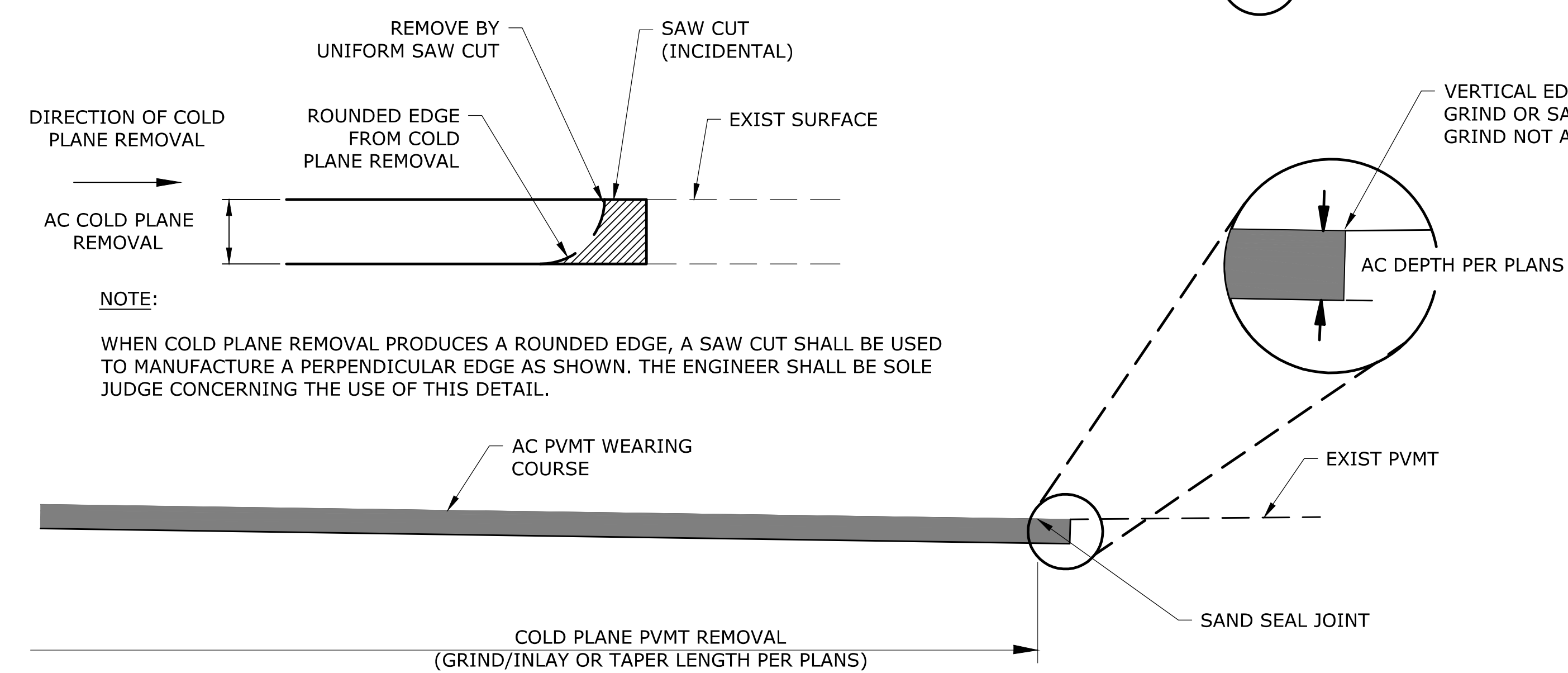
SE BORGES ROAD TYPICAL SECTION: STA. 110+33 TO STA. 110+89
SCALE: NTS

2
T-1



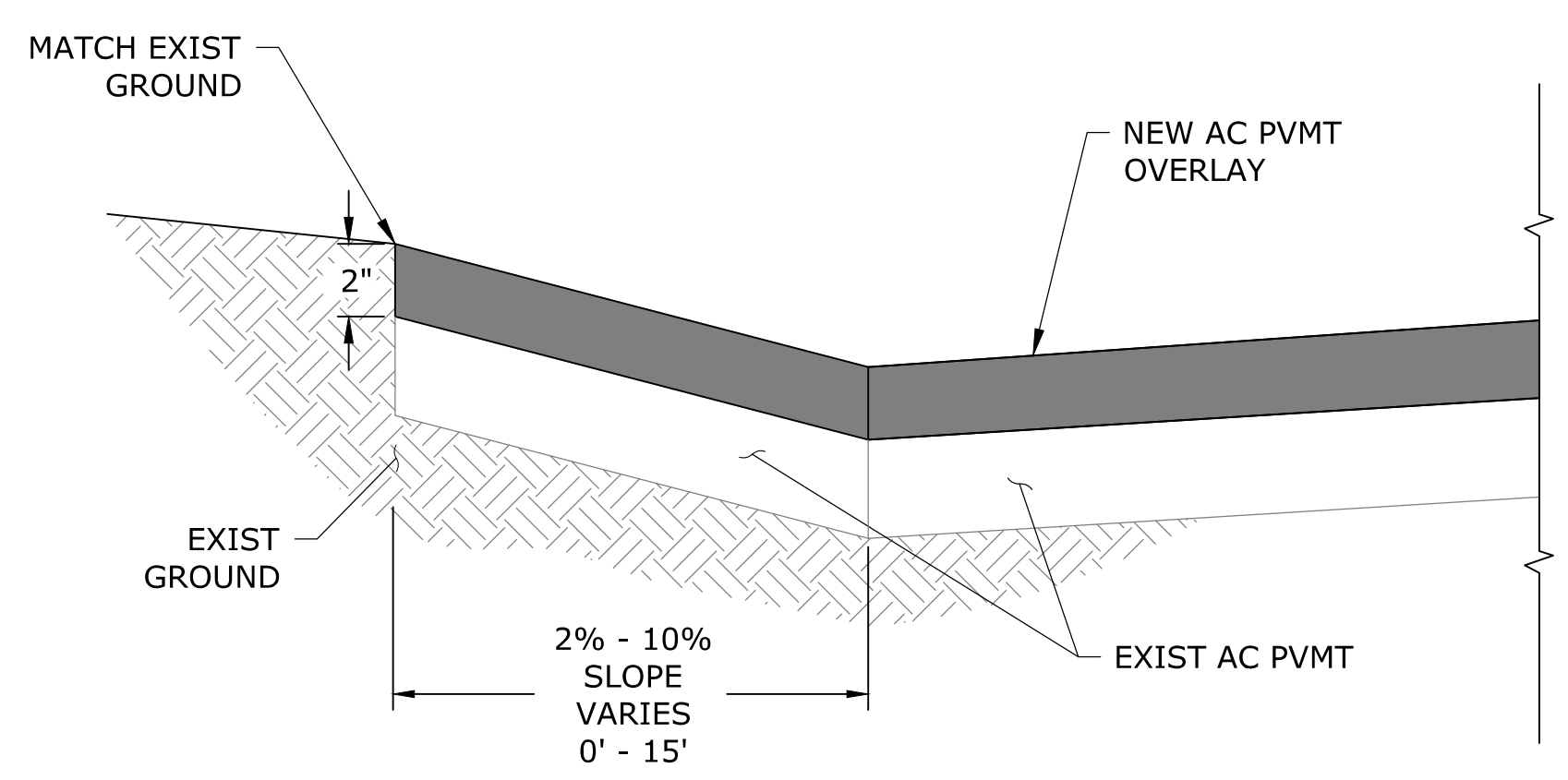
SHOULDER ROCK TRANSITION
SCALE: NTS

3
T-1



AC MATCH AT PROJECT ENDS
SCALE: NTS

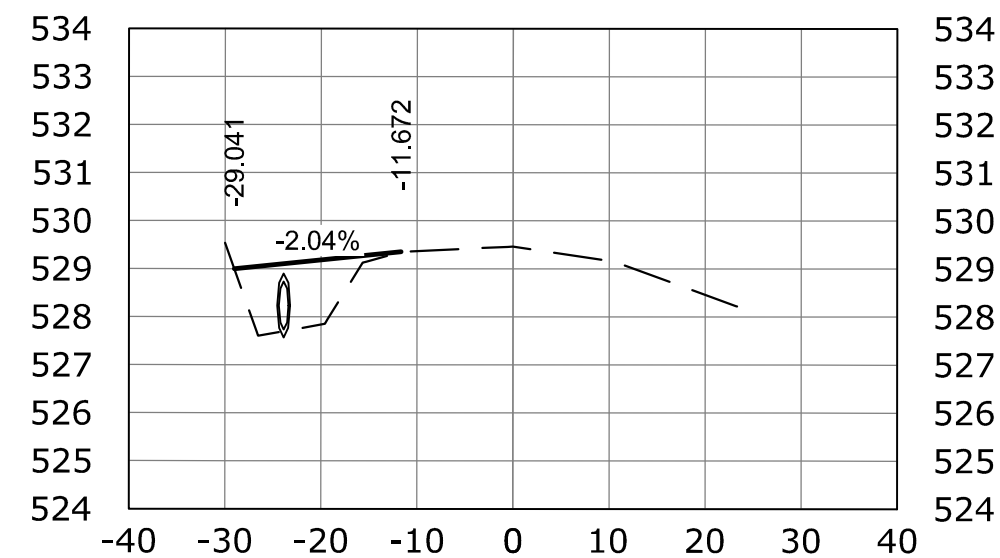
4
T-1



PAVEMENT TAPER DETAIL
SCALE: NTS

5
T-1

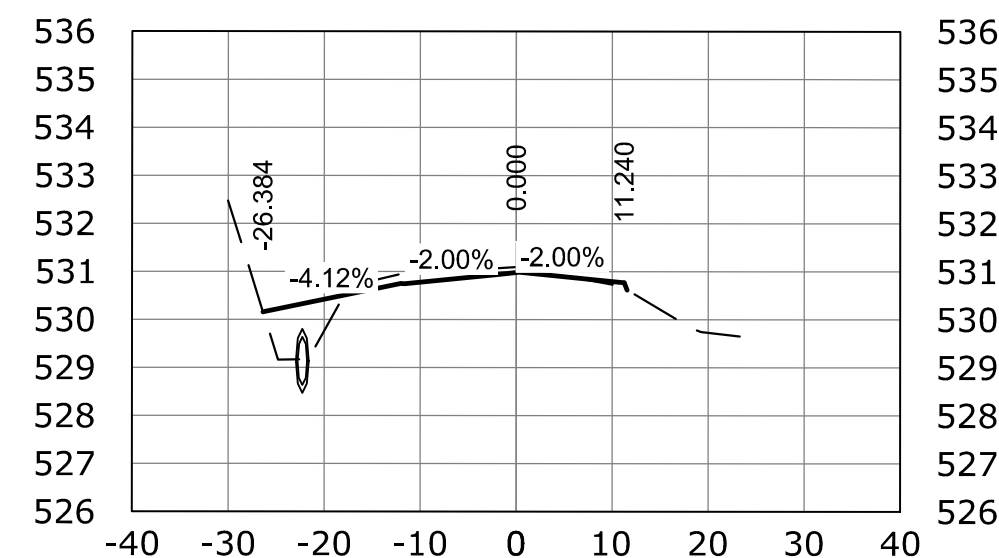
BY		REVISION		SHEET	T-1	3 of 10
NO.	DATE	DESIGNED: RPW	DRAWN: MWE	CHECKED: WFA	APPROVED: NJM	
VERT. AS SHOWN	SCALE	HORIZ. AS SHOWN	NOTICE IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE			
SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT PROJECT NO. 22279 PAVEMENT DETAILS						
PROJECT: 19-2714 DATE: FEBRUARY 2021						



SECTION: STA 18+50

SCALE: 1"=20'

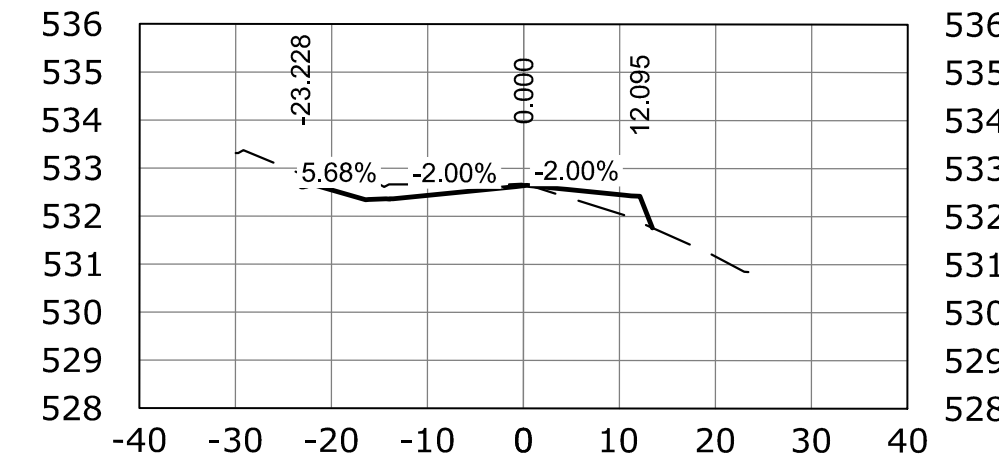
A
T-2



SECTION: STA 18+75

SCALE: 1"=20'

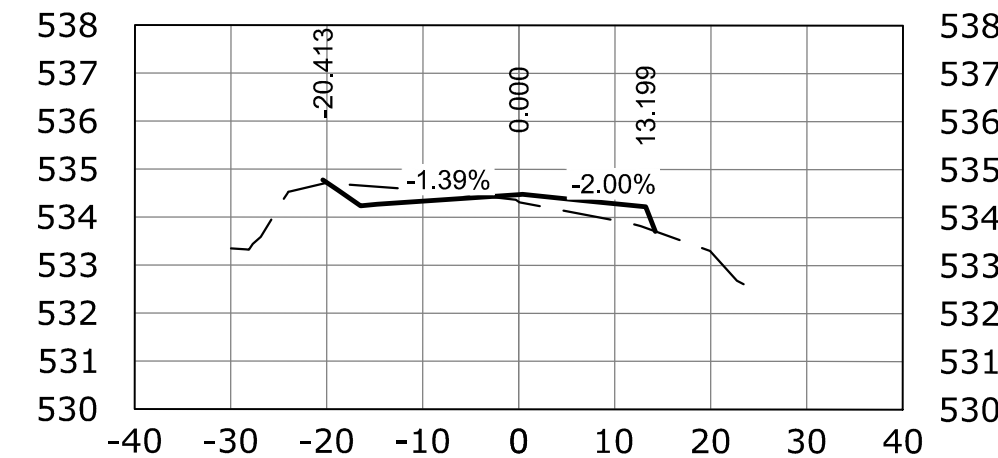
B
T-2



SECTION: STA 19+00

SCALE: 1"=20'

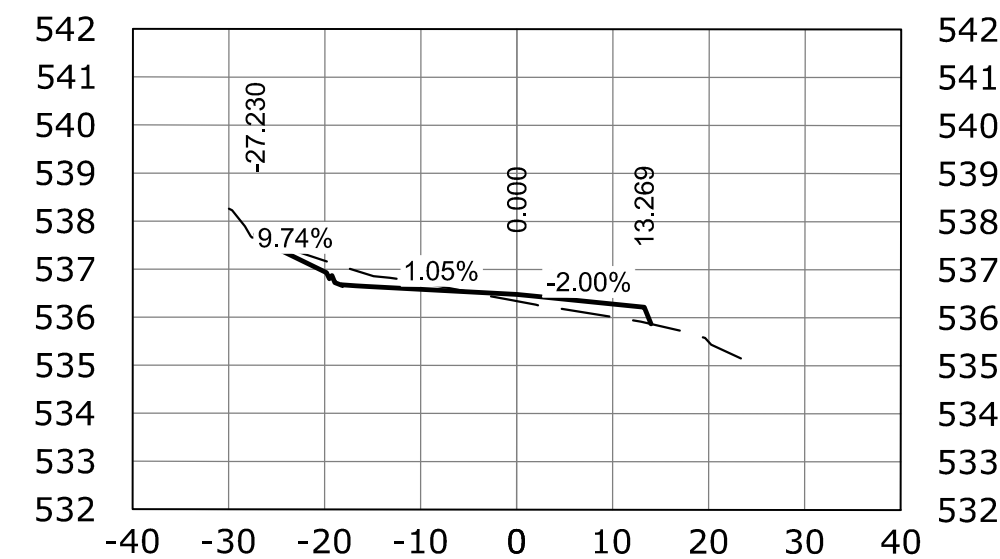
C
T-2



SECTION: STA 19+25

SCALE: 1"=20'

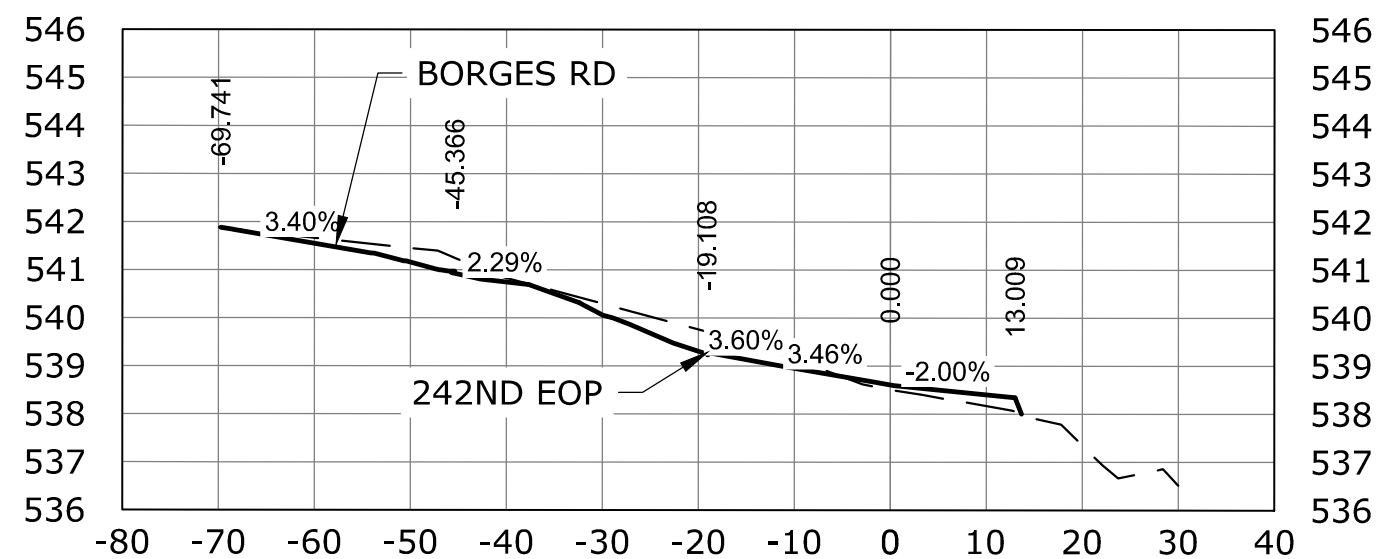
D
T-2



SECTION: STA 19+50

SCALE: 1"=20'

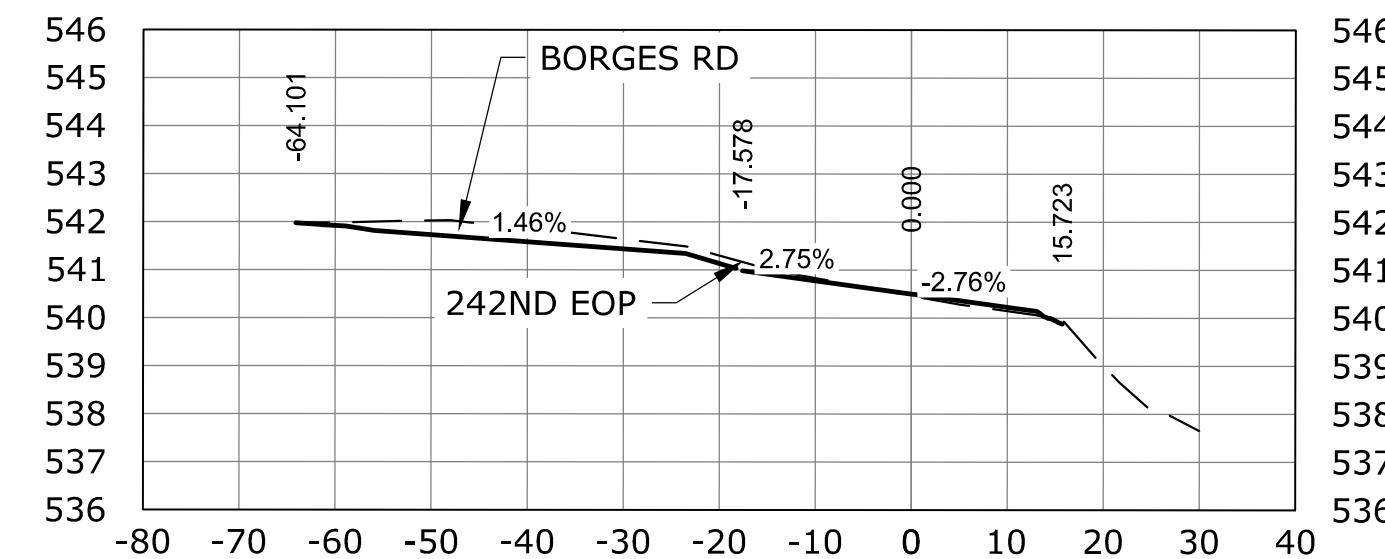
E
T-2



SECTION: STA 19+75

SCALE: 1"=20'

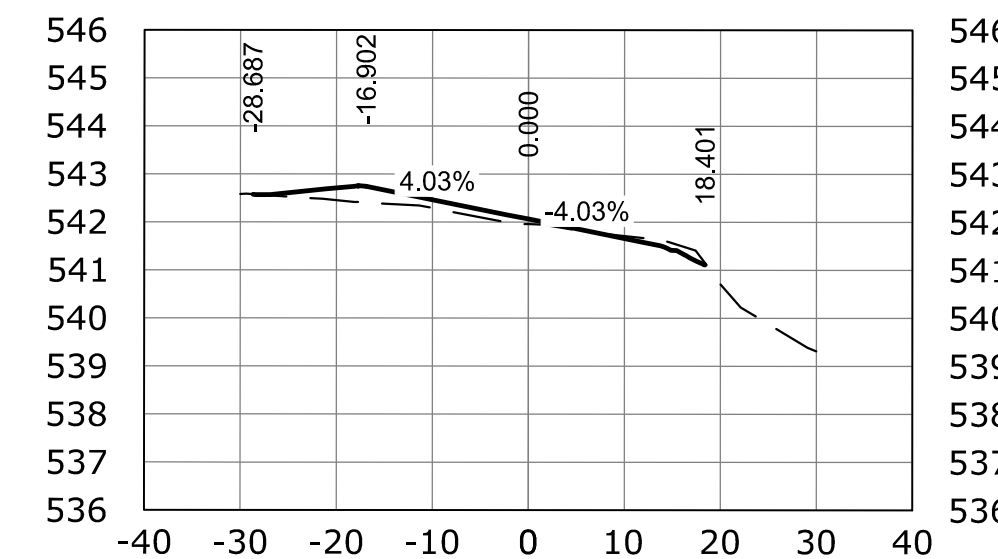
F
T-2



SECTION: STA 20+00

SCALE: 1"=20'

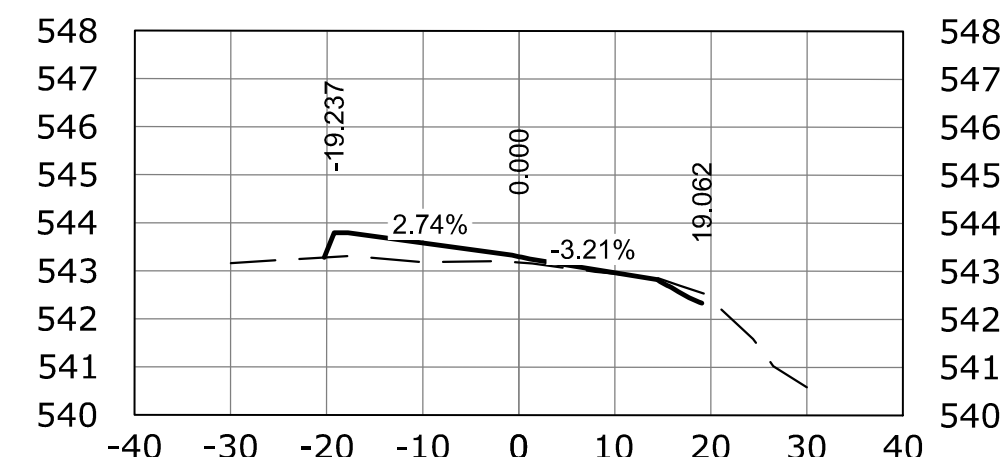
G
T-2



SECTION: STA 20+25

SCALE: 1"=20'

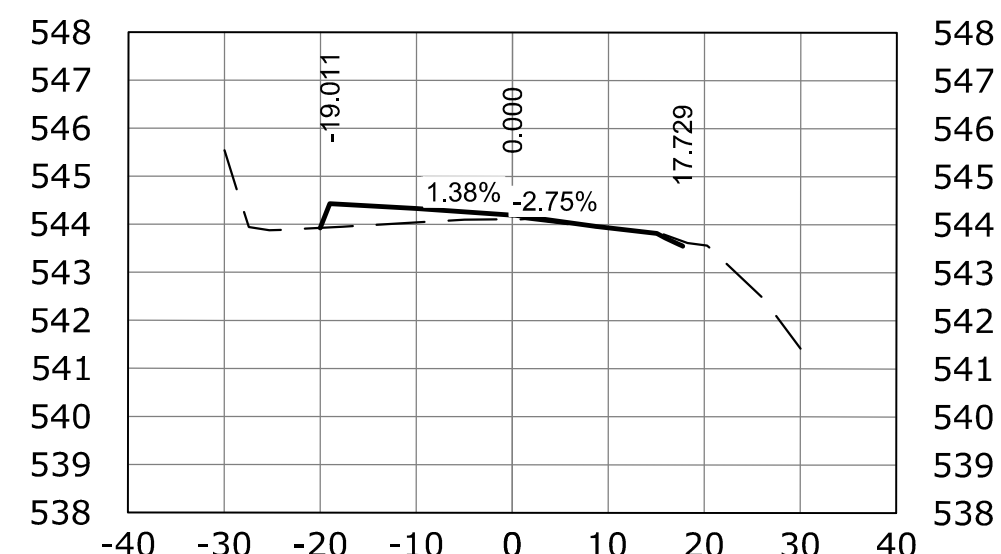
H
T-2



SECTION: STA 20+50

SCALE: 1"=20'

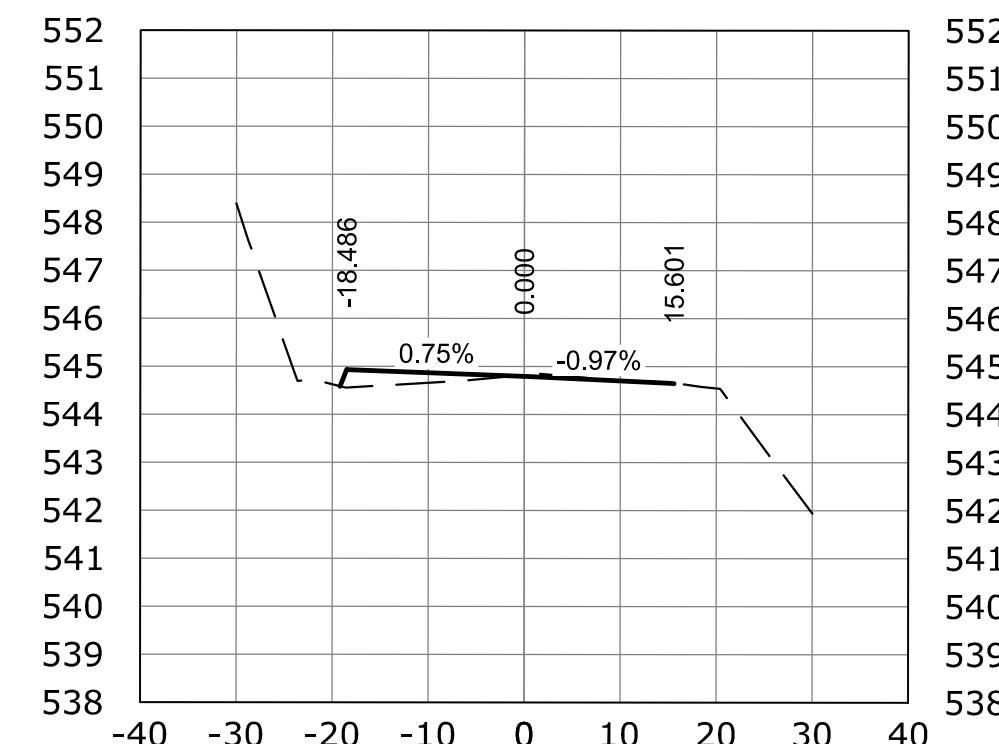
I
T-2



SECTION: STA 20+75

SCALE: 1"=20'

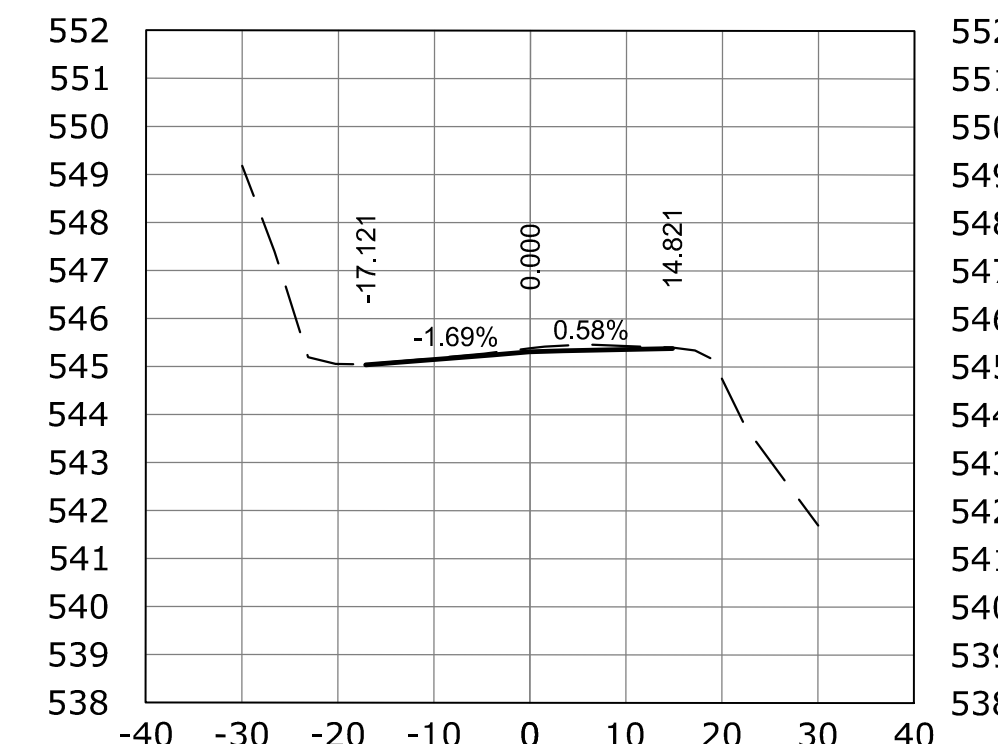
J
T-2



SECTION: STA 21+00

SCALE: 1"=20'

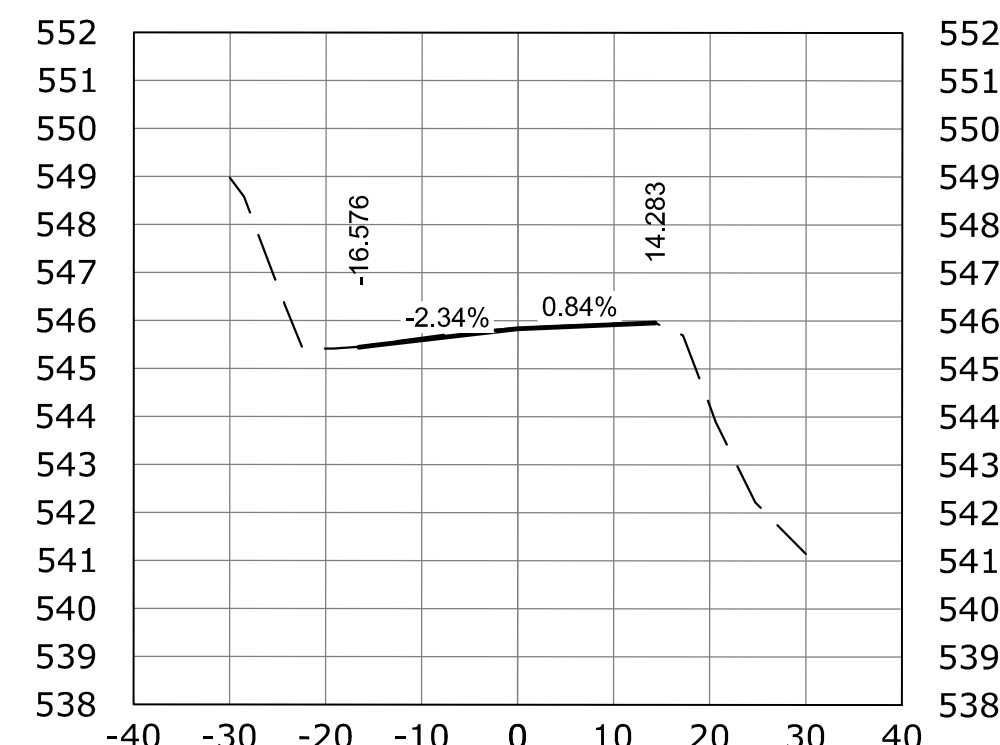
K
T-2



SECTION: STA 21+25

SCALE: 1"=20'

L
T-2



SECTION: STA 21+50

SCALE: 1"=20'

M
T-2

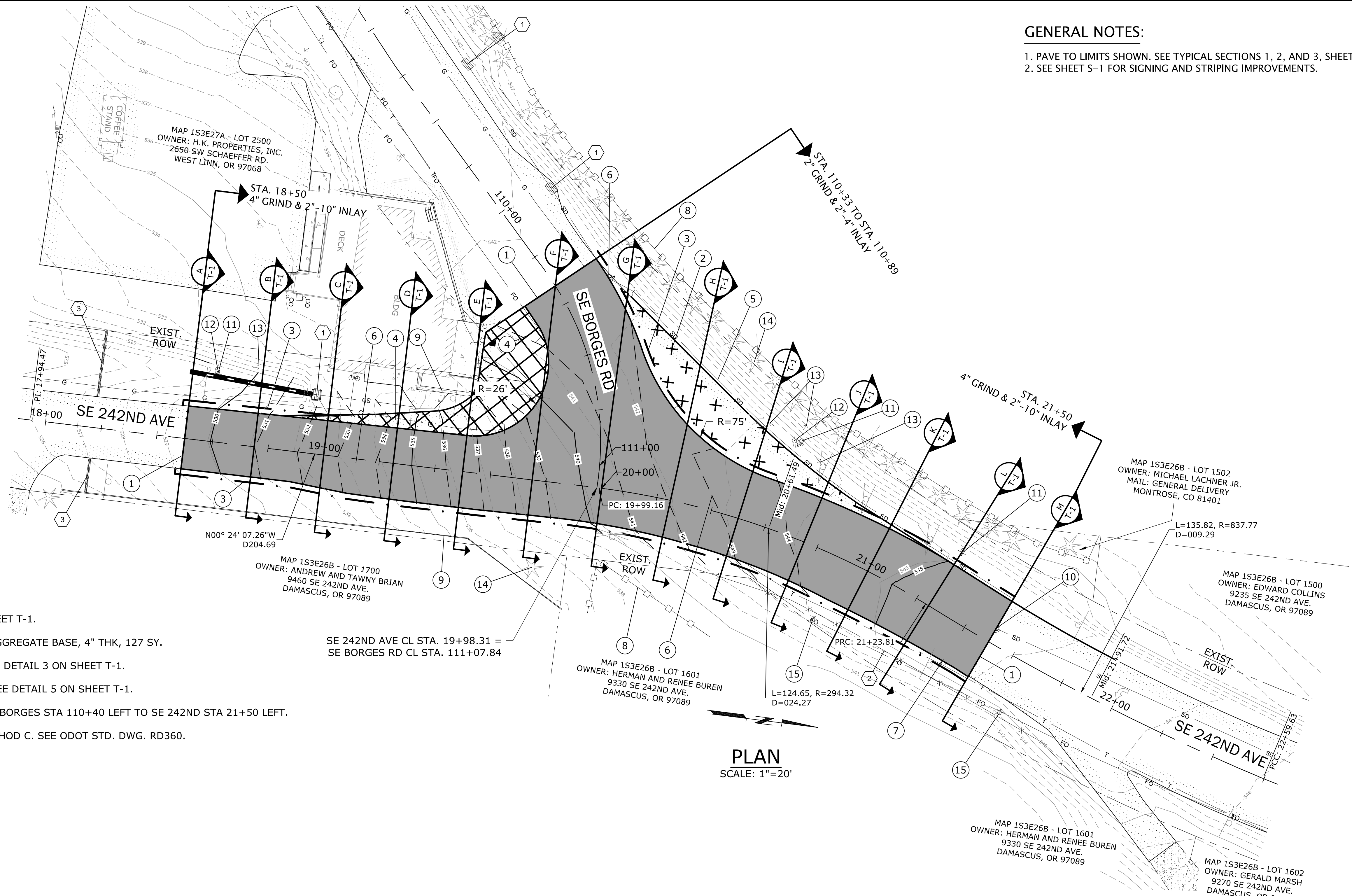
GENERAL NOTES:

1. FINISHED GRADE OF TRAVEL LANE AND SHOULDER SHOWN. CONNECT FINISHED GRADE TO EXISTING GRADE PER DETAILS REFERENCED ON PLANS.

BY		DESIGNED: RPW	DRAWN: MWE	CHECKED: WFA	APPROVED: NJM
NO.	DATE				
SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT PROJECT NO. 22279					
CROSS-SECTIONS - 242ND AVENUE STA 18+50 TO STA 21+50					
PROJECT:	19-2714	DATE:	FEBRUARY 2021		
SHEET:	T-2	4 of 10			

GENERAL NOTES:

1. PAVE TO LIMITS SHOWN. SEE TYPICAL SECTIONS 1, 2, AND 3, SHEET T-1.
2. SEE SHEET S-1 FOR SIGNING AND STRIPING IMPROVEMENTS.

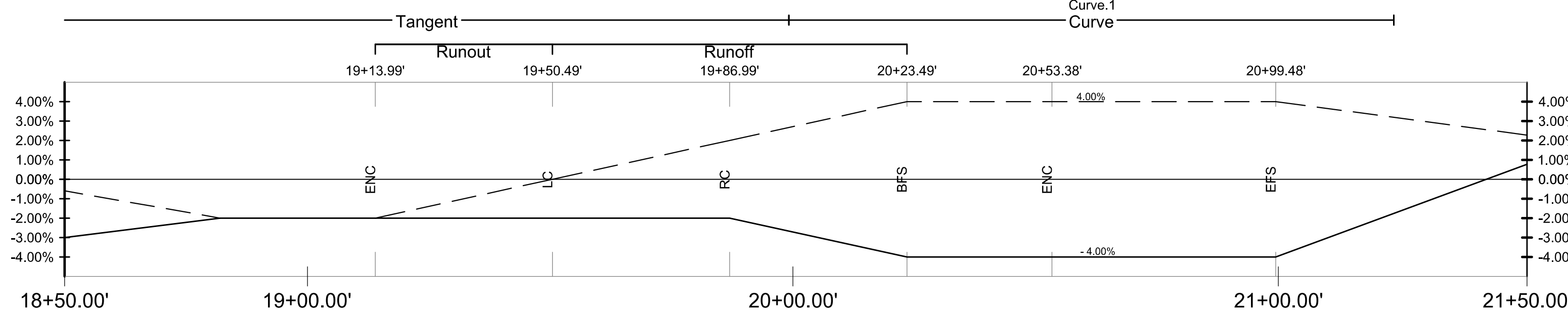


CONSTRUCTION KEYNOTES:

- 1 MATCH INTO EXIST. SEE DETAIL 4 ON SHEET T-1.
- 2 REMOVE EXIST AC AND RESTORE WITH AGGREGATE BASE, 4" THK, 127 SY.
- 3 PLACE ROCK SHOULDER TRANSITION. SEE DETAIL 3 ON SHEET T-1.
- 4 TAPER NEW AC TO MATCH EXIST PVMT. SEE DETAIL 5 ON SHEET T-1.
- 5 PROTECT EXISTING FRENCH DRAIN FROM BORGES STA 110+40 LEFT TO SE 242ND STA 21+50 LEFT.
- 6 MINOR ADJUST MANHOLE TO GRADE, METHOD C. SEE ODOT STD. DWG. RD360.
- 7 ADJUST BOX.
- 8 PROTECT EXIST FENCE.
- 9 PROTECT EXIST WALL.
- 10 PROTECT EXIST MANHOLE.
- 11 PROTECT EXIST GAS STAND PIPE.
- 12 PROTECT EXIST UTILITY POLE.
- 13 PROTECT EXIST GUY WIRE.
- 14 PROTECT EXIST TREE, TYP.
- 15 PROTECT EXIST FIBER OPTIC STAND PIPE.

EROSION CONTROL KEYNOTES

- 1 INSTALL TYPE 3 INLET PROTECTION. SEE ODOT STD. DWG. RD1010.
- 2 INSTALL SEDIMENT FENCE. SEE ODOT STD. DWG. RD1040.
- 3 INSTALL TYPE 6 COMPOST FILTER SOCK CHECK DAM. SEE ODOT STD. DWG. RD1006.



SE 242ND AVENUE SUPERELEVATION
SCALE: 1"=20' HORIZ

LEGEND

- LEFT EOP
- RIGHT EOP
- EXIST. ROADWAY CENTERLINE

BY	
NO.	DATE
REVISION	
DESIGNED: RPW	
DRAWN: WIE	
CHECKED: WFA	
APPROVED: NJM	
SHEET	C-1
	5 of 10



VERT. AS SHOWN	SCALE
HORIZ. AS SHOWN	
NOTICE	
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	

SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT PROJECT NO. 22279




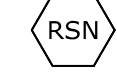
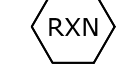
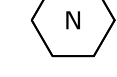
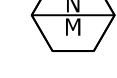
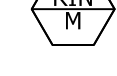
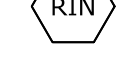
ROADWAY PLAN STA 18+50 TO STA 21+50

PROJECT: 19-2714 DATE: FEBRUARY 2021

- Notes:
1. See Clackamas County std. dwg. T150 for sign details.
 2. All longitudinal striping is paint.


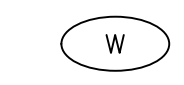
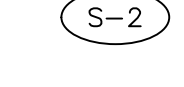


To Be Accompanied by ODOT std. dwg.: TM200, TM201, TM500, TMS02, TMS03, TMS70.

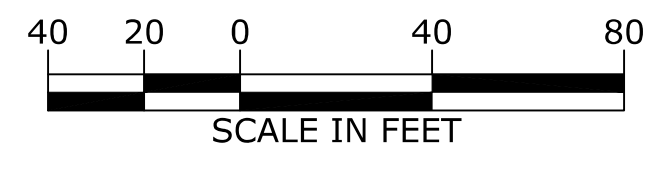
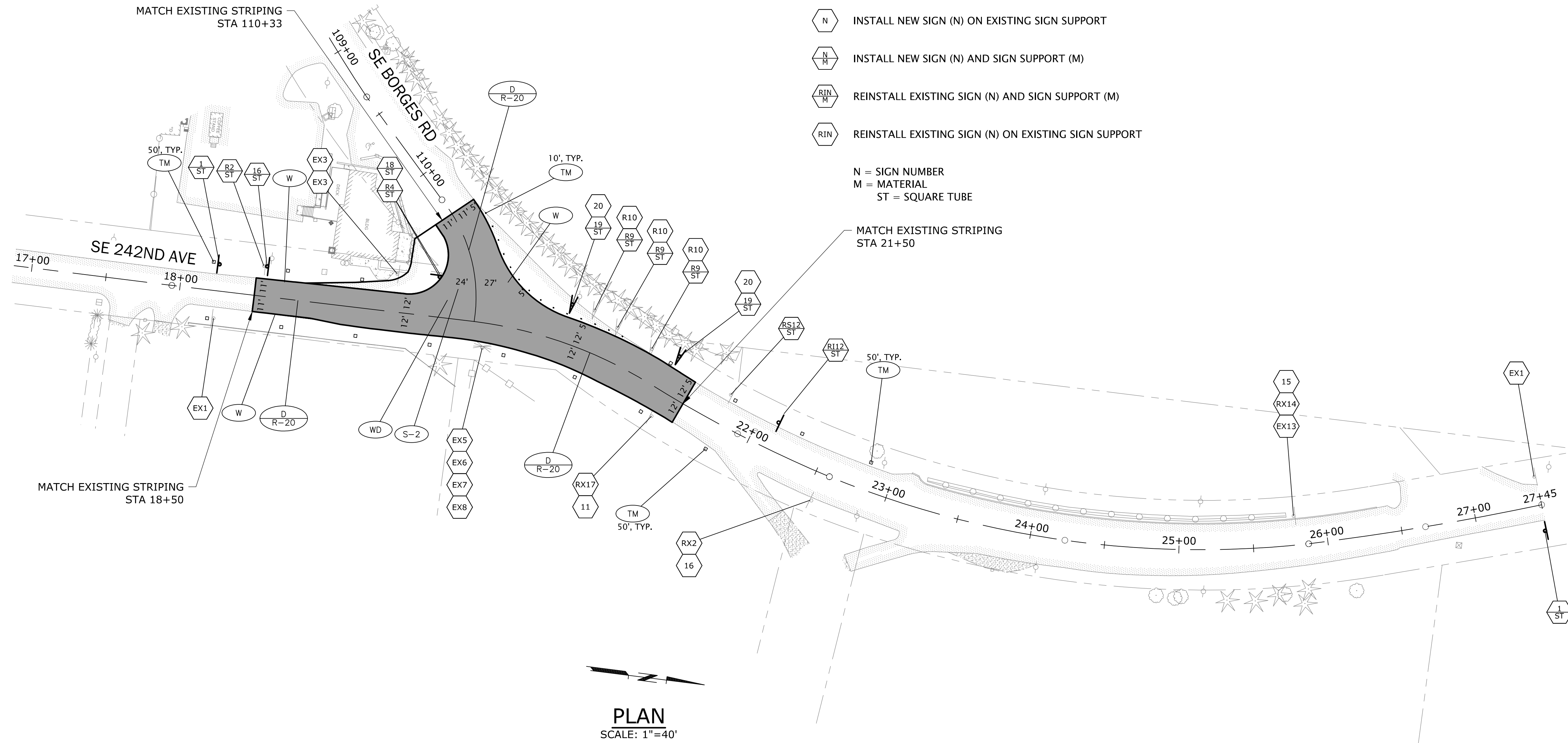
SIGNING LEGEND:



-  MAINTAIN AND PROTECT EXISTING SIGN (N) AND SIGN SUPPORT
-  REMOVE EXISTING SIGN (N) AND SIGN SUPPORT (M)
-  REMOVE AND SAVE EXISTING SIGN (N) AND SIGN SUPPORT (M)
-  REMOVE AND SAVE EXISTING SIGN (N) ON EXISTING SIGN SUPPORT
-  REMOVE EXISTING SIGN (N) ON EXISTING SIGN SUPPORT
-  INSTALL NEW SIGN (N) ON EXISTING SIGN SUPPORT
-  INSTALL NEW SIGN (N) AND SIGN SUPPORT (M)
-  REINSTALL EXISTING SIGN (N) AND SIGN SUPPORT (M)
-  REINSTALL EXISTING SIGN (N) ON EXISTING SIGN SUPPORT

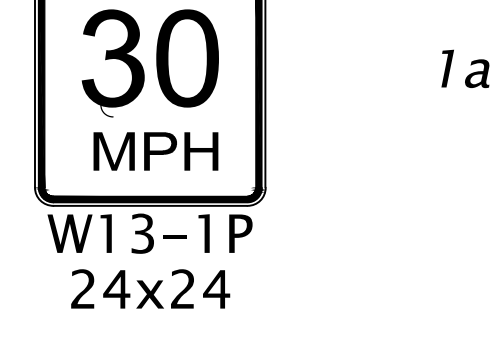
N = SIGN NUMBER
M = MATERIAL
ST = SQUARE TUBE

STRIPING LEGEND:

-  INSTALL DOUBLE NO-PASS, 4" YELLOW LINES WITH BI-DIRECTIONAL TYPE 1 REFLECTORS ON 20' SPACING
-  INSTALL 4" WHITE LINE
-  INSTALL 2' WHITE STOP BAR
-  FLEXIBLE PLASTIC POSTS, TYPE-2
-  4" WHITE DOTTED LINE



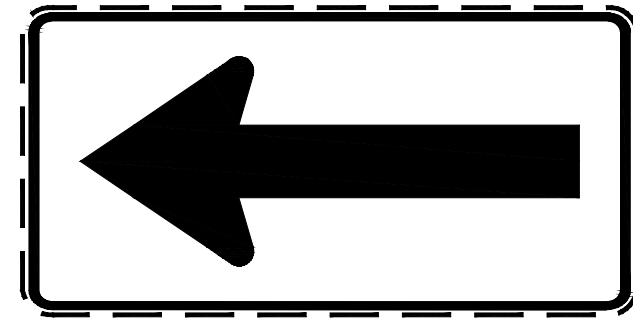
NO. DATE REVISION	BY DESIGNED: MME DRAWN: MME CHECKED: WFA APPROVED: NJM	SHEET S-1 7 of 10
		
SCALE: AS SHOWN VERT: AS SHOWN HORIZ: AS SHOWN NOTICE IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE	SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT PROJECT NO. 22279 SIGNING AND STRIPING PLAN	
		
PROJECT: 19-2714	DATE: FEBRUARY 2021	



Sign No. 1



Sign No. 2



Sign No. 3



Sign No. 4



Sign No. 5



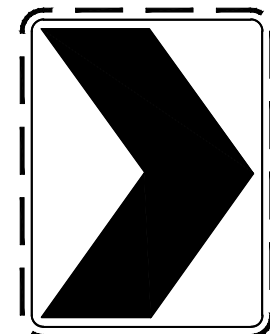
Sign No. 6



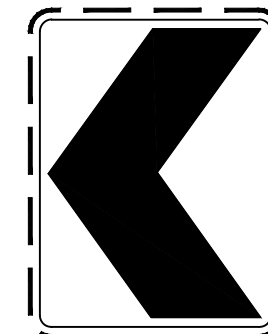
Sign No. 7



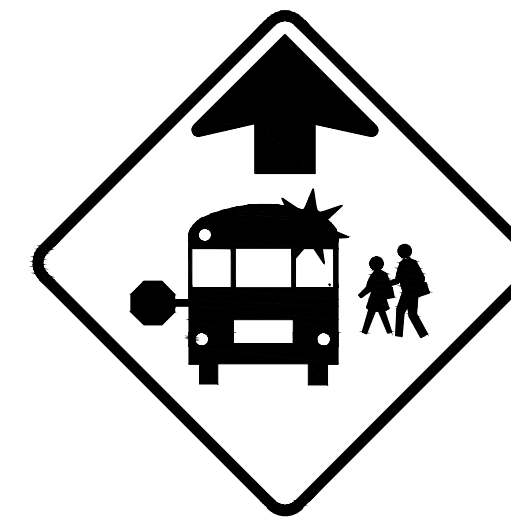
Sign No. 8



Sign No. 9



Sign No. 10



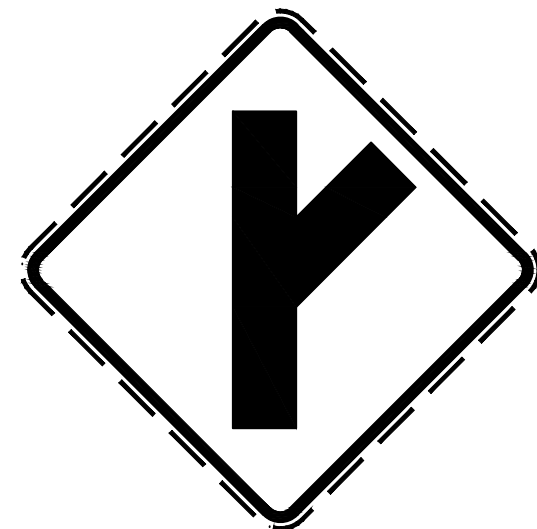
Sign No. 11



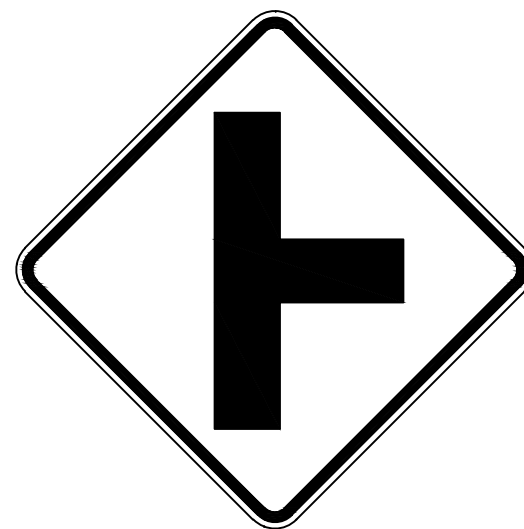
Sign No. 12



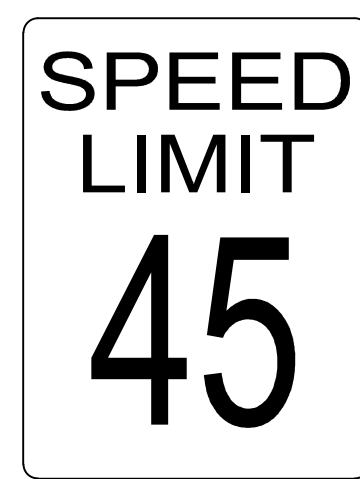
Sign No. 13



Sign No. 14



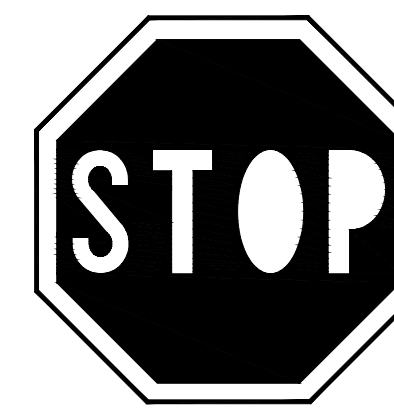
Sign No. 15



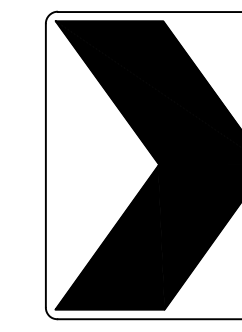
Sign No. 16



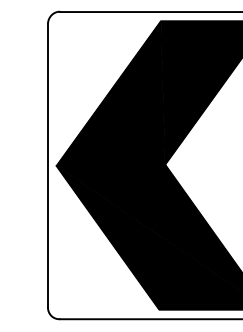
Sign No. 17



Sign No. 18



Sign No. 19



Sign No. 20

Notes:
1. Existing signs shown with dashed borders.

SCALE: VERT. AS SHOWN HORIZ. AS SHOWN NOTICE: IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.	REVISION: _____ NO. DATE _____ BY: _____ DESIGNED: MME DRAWN: MME CHECKED: WFA APPROVED: NJM SHEET S-2 8 of 10
SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT PROJECT NO. 22279 SIGN DETAILS	
PROJECT: 19-2714 DATE: FEBRUARY 2021	

SIGN NO.	SIGN LOCATION 4/ (TM200-TM201, TM635)	SIGN DIMENSIONS		SUB-STRATE			COLOR 1 /		LEGEND	SIGN NO. 2 /	TYPE OF SUPPORT																			POST		FOOTING		REMARKS					
							BACK GROUND	LEGEND			WOOD POST (TM670-TM671, TM676)	SO. TUBE SIGN SUPPORT (TM671, TM676, TM681, TM687-TM688)	TRIANGULAR BASE BREAKAWAY (TM602)	H - FRAME (TM602)	MULTI-POST BREAKAWAY (TM220, TM600-TM601)	STAINLESS STEEL CLAMP (SSC) (TM677)	SIGNAL POLE MOUNT (TM680)	MAST ARM SIGN MOUNT (TM679)	BRIDGE STRUCTURE MOUNT (Refer to Bridge Drawing)	CANTILEVER / BUTTERFLY (Refer to Bridge Drawing)	SIGN BRIDGE (Refer to Bridge Drawing)	EXIT NUMBER SIGN SUPPORT (TM220, TM225)	ROUTE MARKER FRAME (TM678)	MILE POST MARKER POST (TM221-TM222)	CROSSWALK CLOSURE BARRICADE (TM490)	VERTICAL SIGN MOUNTS ON EXISTING STRUCTURES	CUSTOM VARIABLE SUPPORT	SECONDARY SIGN (TM676 & TM678)	SIZE	LENGTH	LOCATION 3 /	MIN. DEPTH 5 /							
		WIDTH	HEIGHT	PLYWOOD	SHEET ALUMINUM	EXTRUDED ALUMINUM (TM675)	ASTM TYPE III OR TYPE IV	ASTM TYPE IX			ASTM TYPE III OR TYPE IV	ASTM TYPE IX	NON-REFLECTIVE	PERMANENT	REMOVABLE (TM230 - TM233)	C 4X5.4	C 4X7.25	LENGTH	(BASED ON ESTIMATED LENGTH)	(MUST BE FIELD VERIFIED)																			
1	18+24 L	36"	36"	✓		Y		BK	✓	1	✓																							2" X 2" 12 GA.	13' - 0"	3'-0"	Install new sign and support.		
1	18+24 R	EXST								1																										Maintain and protect existing sign and support.			
1	27+44 R	36"	36"	✓		Y		BK	✓	1	✓																									2" X 2" 12 GA.	13' - 0"	3'-0"	Install new sign and support.
1	27+44 L	EXST								1																											Maintain and protect existing sign and support.		
1a	18+24 L	24"	24"	✓		Y		BK	✓	1a																											Install below sign no. 1		
1a	18+24 R	EXST								1a																											Maintain and protect existing sign and support.		
1a	27+44 R	24"	24"	✓		Y		BK	✓	1a																											Install below sign no. 1		
1a	27+44 L	EXST								1a																											Maintain and protect existing sign and support.		
2	18+54 L	EXST								2																											Remove existing sign and support.		
2	22+55 R	EXST								2																											Remove existing sign and maintain support.		
3	19+44 L	EXST								3																											Maintain and protect existing sign and support.		
3	19+44 L	EXST								3																											Maintain and protect existing sign and support.		
4	19+72 L	EXST								4																											Remove existing sign and support.		
5	20+06 R	EXST								5																											Maintain and protect existing sign and support.		
6	20+06 R	EXST								6																											Maintain and protect existing sign and support.		
7	20+06 R	EXST								7																											Maintain and protect existing sign and support.		
8	20+06 R	EXST								8																											Maintain and protect existing sign and support.		
9	20+71 L	EXST								9																											Remove existing sign and support.		
9	20+89 L	EXST								9																											Remove existing sign and support.		
9	21+14 L	EXST								9																											Remove existing sign and support.		
10	20+71 L	EXST								10																											Remove existing sign.		
10	20+89 L	EXST								10																											Remove existing sign.		
10	21+14 L	EXST								10																											Remove existing sign.		
11	21+36 R	36"	36"	✓		FYG		BK	✓	11	✓																										Install sign on existing support.		
12	21+75 L	EXST								12																											Remove existing sign and support.		
12	22+14 L	EXST								12																											Reinstall existing sign and support.		
13	25+79 L	EXST								13																											Maintain and protect existing sign and support.		
14	25+79 L	EXST								14																											Remove sign from existing support.		
15	25+79 L	36"	36"	✓		Y		BK	✓	15	✓																										Install sign on existing support.		

LEGEND:
BK = BLACK
Y = YELLOW
FYG = FLUORESCENT YELLOW-GREEN


BID DOCUMENTS

NO. DATE REVISION	BY 		DESIGNED: MME DRAWN: MME CHECKED: WFA APPROVED: NJM	SHEET S-3 9 of 10
VERT: AS SHOWN HORIZ: AS SHOWN SCALE:				
NOTICE IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE				
SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT PROJECT NO. 22279				
SIGN AND POST DATA TABLE				
		PROJECT: 19-2714 DATE: FEBRUARY 2021		

SIGN NO.	SIGN LOCATION 4/ (TM200-TM201, TM635)	SIGN DIMENSIONS		SUB-STRATE			COLOR 1 /						SIGN NO. 2/	TYPE OF SUPPORT												POST		FOOTING		REMARKS					
							BACK GROUND	LEGEND						LEGEND	WOOD POST (TM670-TM671, TM676)	SQ. TUBE SIGN SUPPORT (TM671, TM676, TM681, TM687-TM688)	TRIANGULAR BASE BREAKAWAY (TM602)	H - FRAME (TM602)	MULTI-POST BREAKAWAY (TM220, TM600-TM601)	STAINLESS STEEL CLAMP (SSC) (TM677)	SIGNAL POLE MOUNT (TM680)	MAST ARM SIGN MOUNT (TM679)	BRIDGE STRUCTURE MOUNT (Refer to Bridge Drawing)	CANTILEVER / BUTTERFLY (Refer to Bridge Drawing)	SIGN BRIDGE (Refer to Bridge Drawing)	EXIT NUMBER SIGN SUPPORT (TM220, TM225)	ROUTE MARKER FRAME (TM678)	MILE POST MARKER POST (TM221-TM222)	CROSSWALK CLOSURE BARRICADE (TM490)		VERTICAL SIGN MOUNTS ON EXISTING STRUCTURES	CUSTOM VARIABLE SUPPORT	SECONDARY SIGN (TM676 & TM678)		SIZE
		WIDTH	HEIGHT	PLYWOOD	SHEET ALUMINUM	EXTRUDED ALUMINUM (TM675)		ASTM TYPE III OR TYPE IV	ASTM TYPE IX	ASTM TYPE III OR TYPE IV	ASTM TYPE IX	NON-REFLECTIVE																					PERMANENT	REMOVABLE (TM230 - TM233)	
16	18+54 L	36"	48"	✓			W					✓	16	✓																					Install sign on existing support.
16	22+55 R	36"	48"	✓			W					✓	16	✓																				Install sign on existing support.	
17	21+36 R	EXST											17																					Remove existing sign and maintain support.	
18	19+72 L	36"	36"	✓			R					✓	18	✓													2" X 2" 12 GA.	13' - 0"		3'-0"			Install new sign and support.		
19	20+57 L	24"	30"	✓			Y					✓	19	✓													2" X 2" 12 GA.	13' - 0"		3'-0"			Install new sign and support.		
19	21+32 L	24"	30"	✓			Y					✓	19	✓													2" X 2" 12 GA.	13' - 0"		3'-0"			Install new sign and support.		
20	20+57 L	24"	30"	✓			Y					✓	20	✓																			Install 90 degrees and below sign no. 19.		
20	21+32 L	24"	30"	✓			Y					✓	20	✓																			Install 90 degrees and below sign no. 19.		

LEGEND:
 BK = BLACK
 W = WHITE
 R = RED
 Y = YELLOW

BID DOCUMENTS



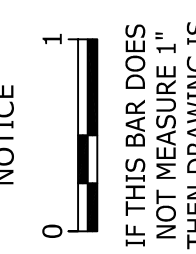
PROJECT: 19-2714 DATE: FEBRUARY 2021

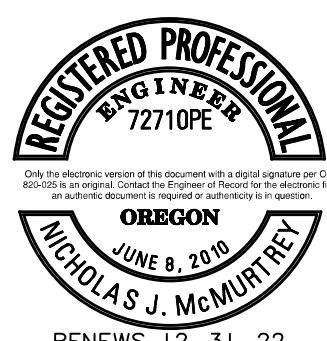
SE 242ND AVENUE AND SE BORGES ROAD
 REALIGNMENT
 PROJECT NO. 22279

SIGN AND POST DATA TABLE

SCALE: VERT: AS SHOWN HORIZ: AS SHOWN

NOTICE: IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE





RENEWS: 12-31-22

NO. DATE

REVISION

BY

DESIGNED: MME

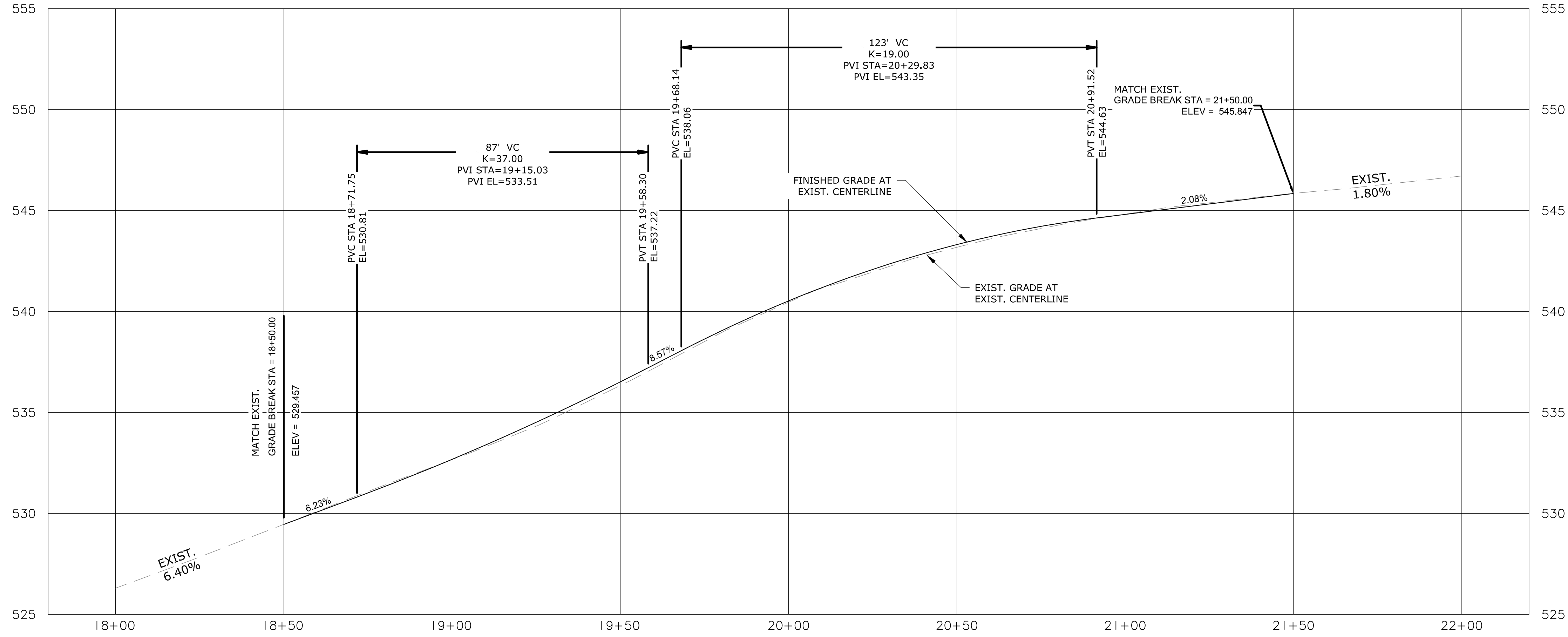
DRAWN: MME

CHECKED: WFA

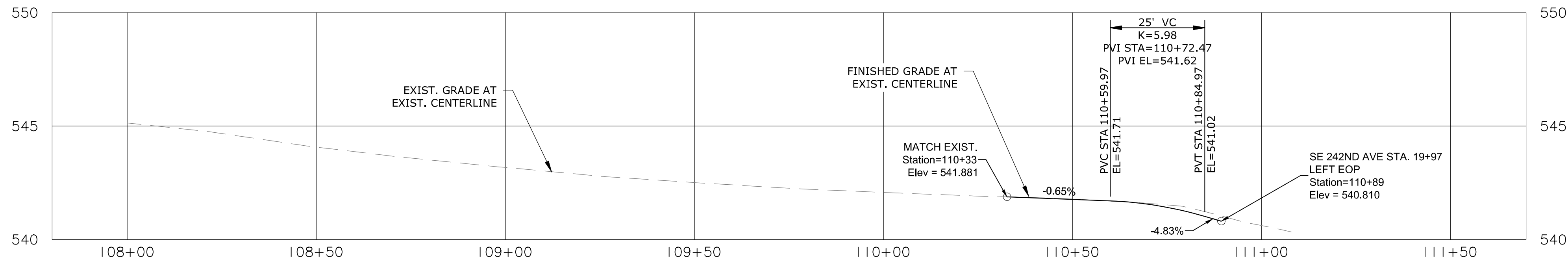
APPROVED: NJM

SHEET S-4

10 of 10



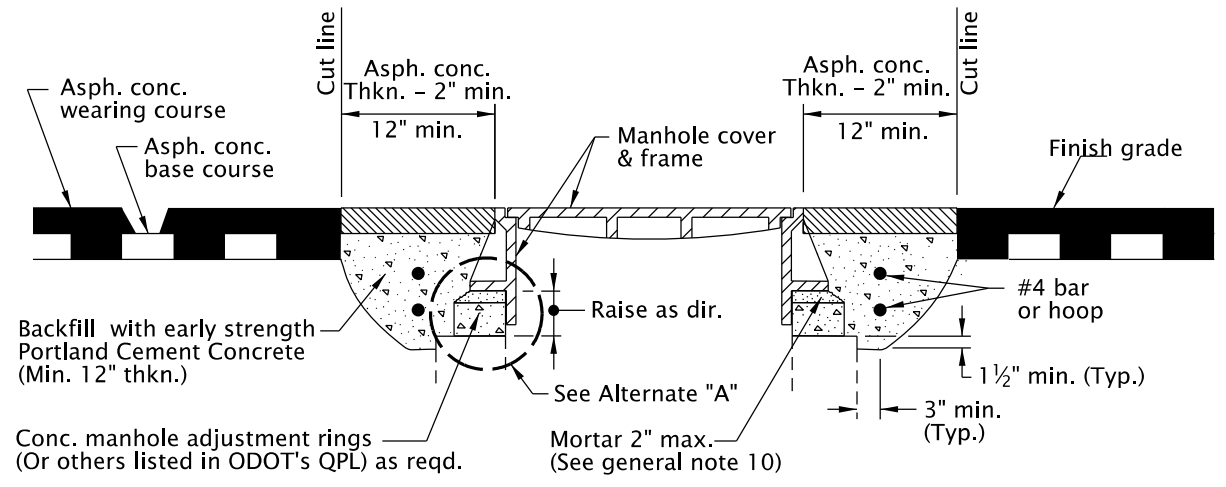
PROFILE: SE 242ND AVENUE
SCALE: 1"=20' HORIZ, 1"=5' VERT



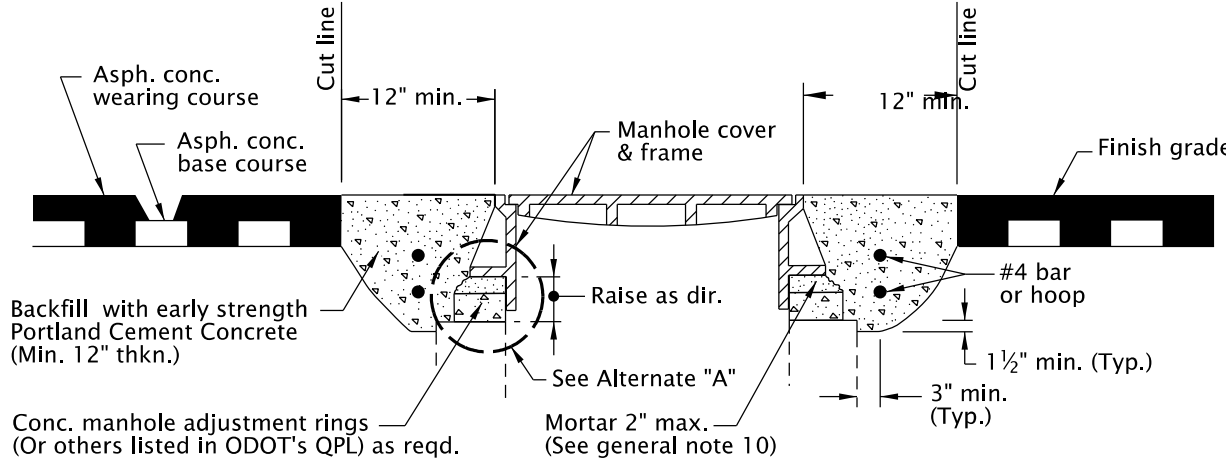
PROFILE: SE BORGES ROAD
SCALE: 1"=20' HORIZ, 1"=5' VERT

BY		REVISION		NO.	DATE	
DESIGNED: RPW	DRAWN: MWE	CHECKED: WFA	APPROVED: NJM	SHEET	P-1	6 of 10
SCALE	VERT: AS SHOWN HORIZ: AS SHOWN	NOTICE IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE				
SE 242ND AVENUE AND SE BORGES ROAD REALIGNMENT PROJECT NO. 22279 ROADWAY PROFILE						
			PROJECT:	DATE:	FEBRUARY 2021	

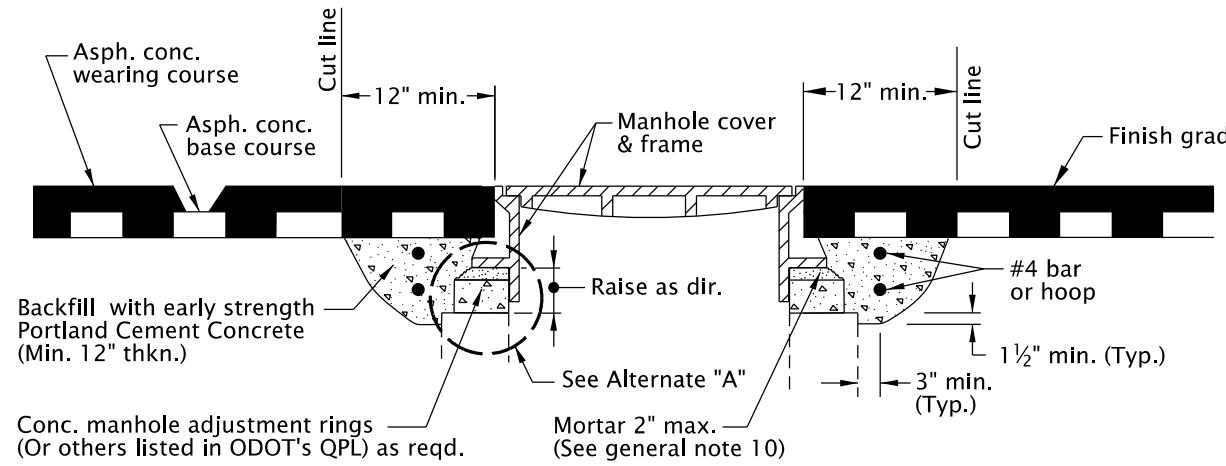
rd360.dgn 25-JUL-2017



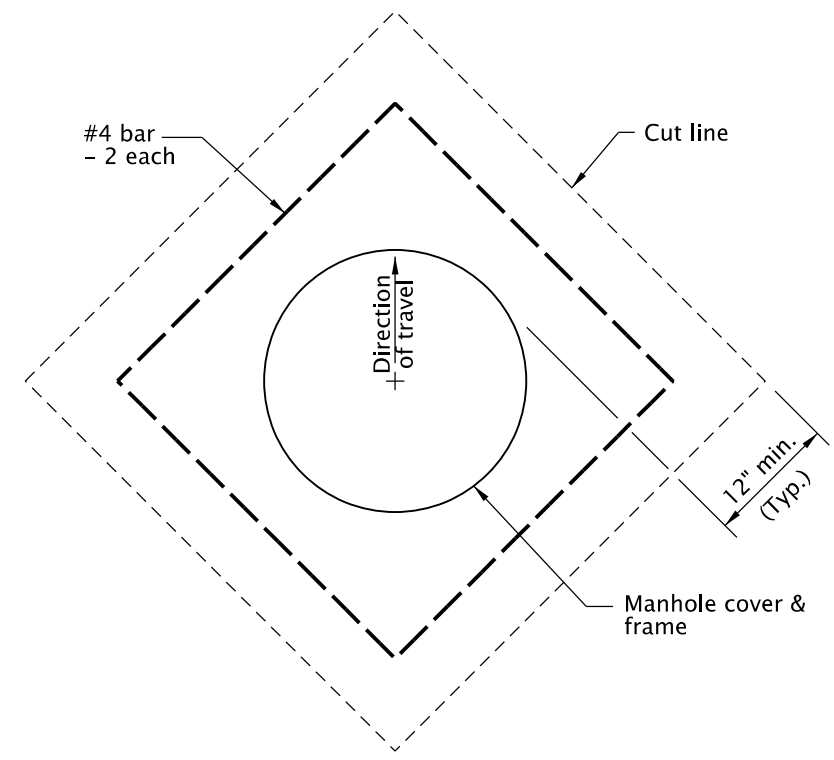
METHOD "A"



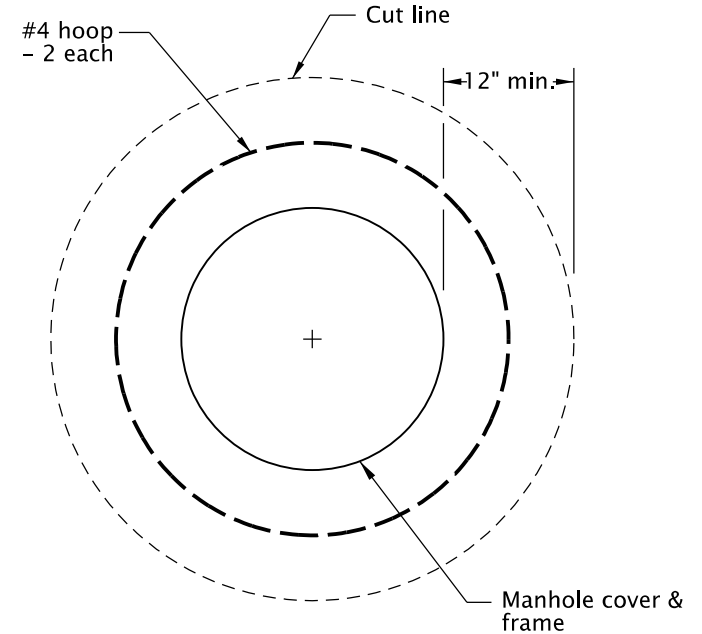
METHOD "B"



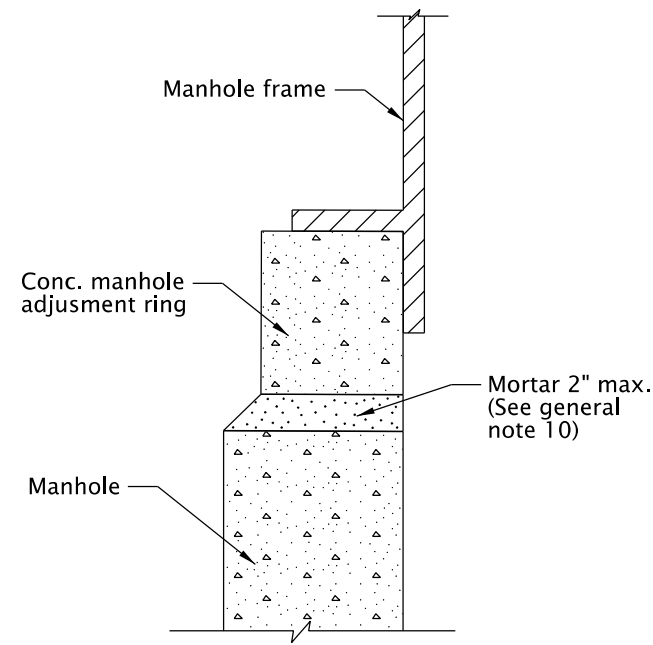
METHOD "C"



PLAN SQUARE CUT



PLAN CIRCULAR CUT



ALTERNATE "A"

- GENERAL NOTES FOR ALL DETAILS:
1. Cover manhole with building paper and const. asph. conc. base course and wearing courses.
 2. Saw cut square or circular excavation around manhole 12" min. from manhole frame.
 3. Raise manhole cover and frame to finish grade by installing conc. manhole adjustment rings and leveling mortar, as shown.
 4. Backfill with early strength Portland Cement Concrete. All concrete shall be commercial grade concrete.
 5. Protect from traffic loading until conc. has cured to 3000 psi.
 6. Apply tack coat to edges of existing pavement before installing patch.
 7. Finish joint with asphalt seal and sand.
 8. See Std. Dwg. RD336 for manhole steps details.
 9. See appropriate manhole standard drawings for details not shown.
 10. Use epoxy for synthetic grade rings.
 11. See Std. Dwg. RD336 for tracer wire details.
 12. See Std. Dwg. RD356 for manhole covers and frames.

CALC. BOOK NO. N/A BASELINE REPORT DATE 21-JUL-2015

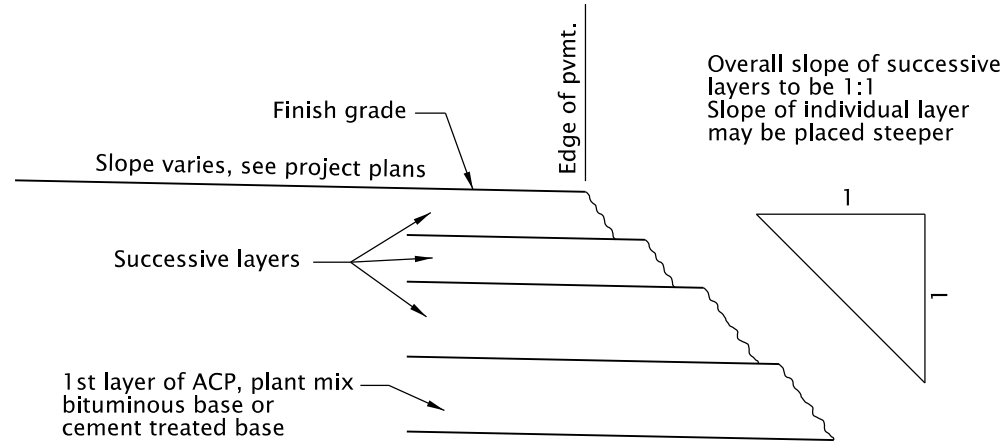
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications

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.

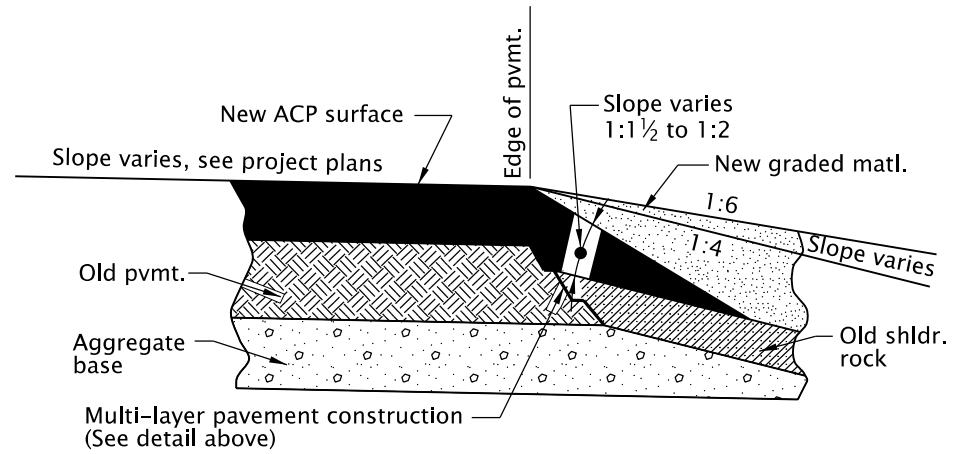
OREGON STANDARD DRAWINGS	
MANHOLE FRAME ADJUSTMENT	
2018	
DATE	REVISION DESCRIPTION

RD360

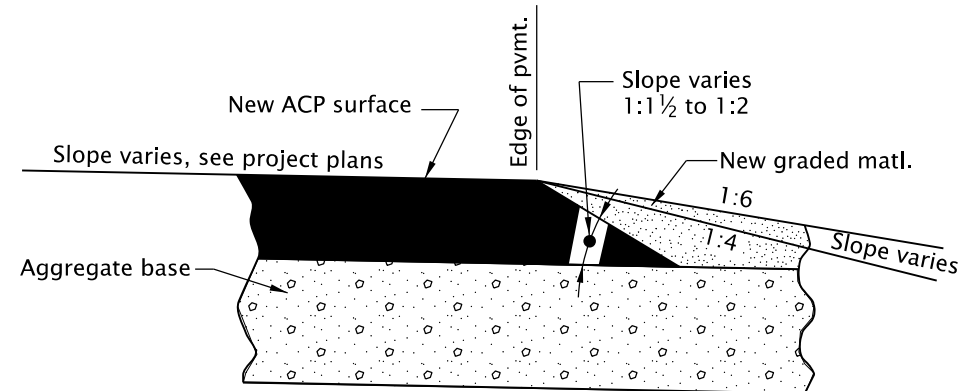
rd615.dgn 25-JUL-2017



MULTI-LAYER PAVEMENT CONSTRUCTION



**SAFETY EDGE
(RECONSTRUCTION INCLUDING MILL & INLAY)**

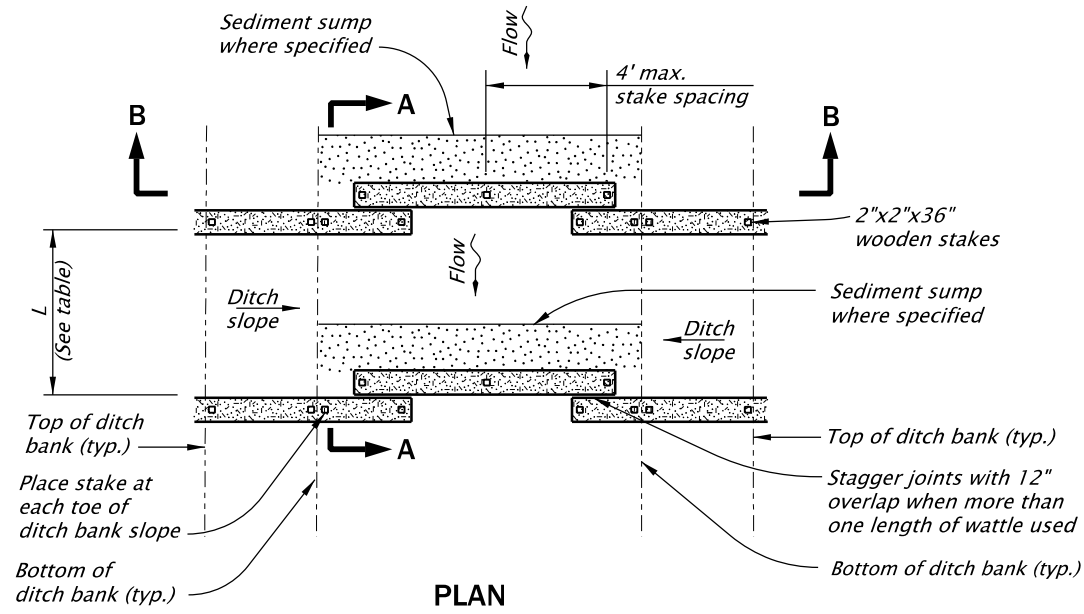


SAFETY EDGE (NEW CONSTRUCTION)

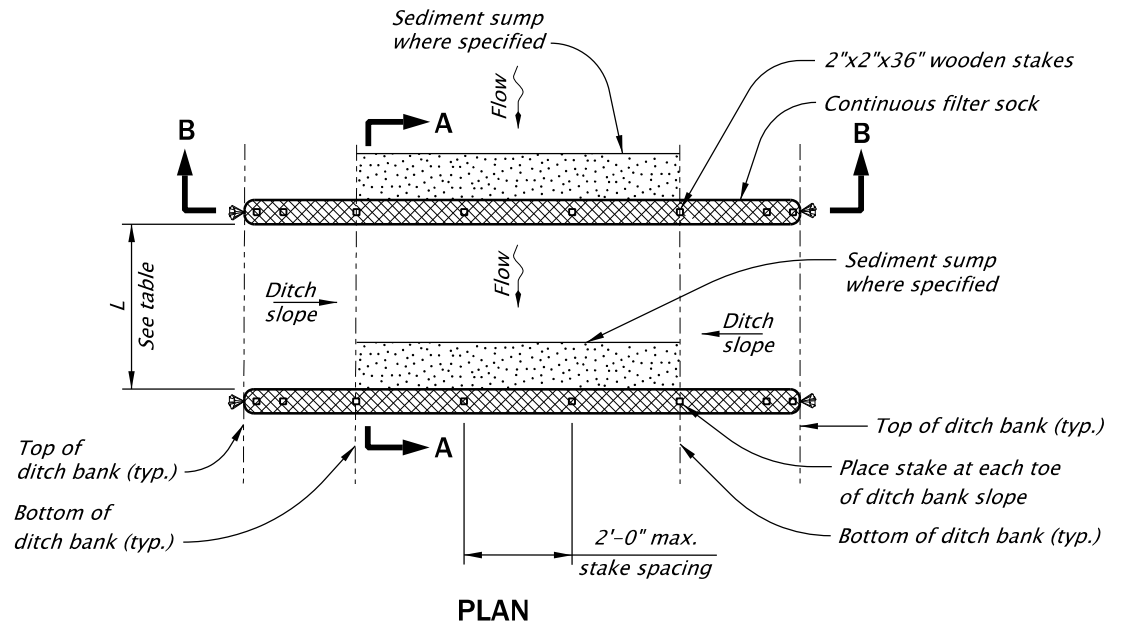
RD615

CALC. BOOK NO. <u> N/A </u>	BASLINE REPORT DATE <u> 25-JUL-2017 </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										
	OREGON STANDARD DRAWINGS ASPHALT CONCRETE PAVEMENT (ACP) DETAILS 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									

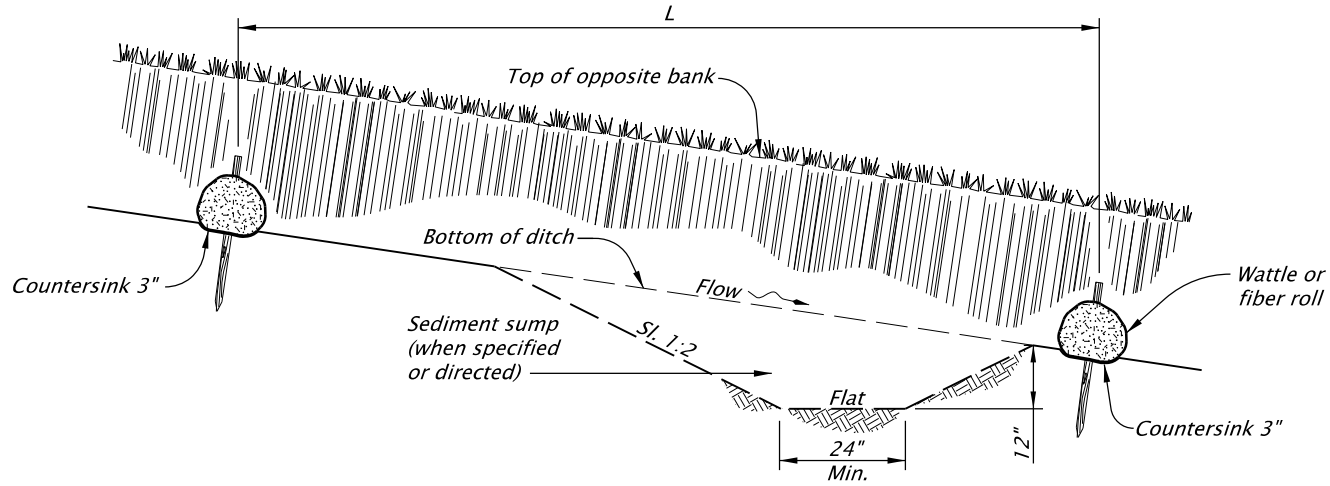
rd1006.dgn 07-01-2020



PLAN

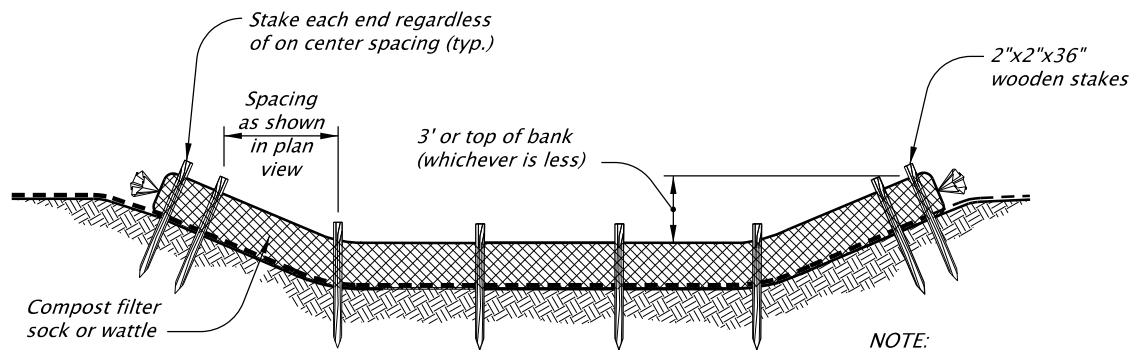


PLAN



SECTION A-A

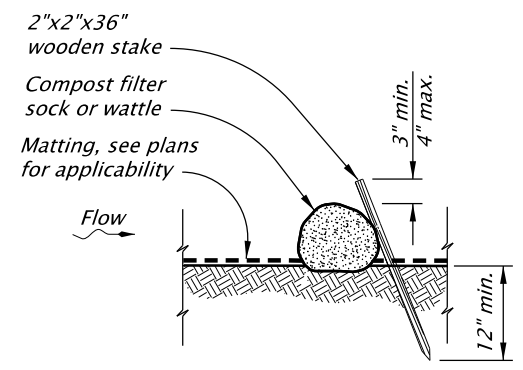
WATTLE / FIBER ROLL CHECK DAM - TYPE 2
NOT TO SCALE



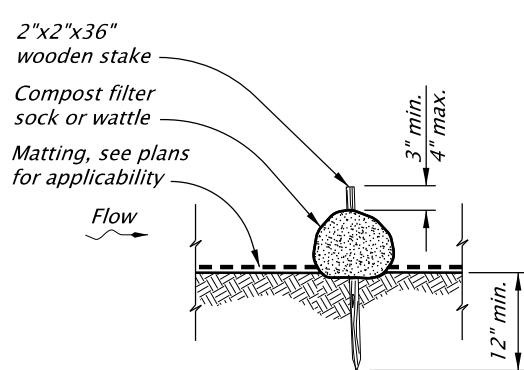
SECTION B-B

COMPOST FILTER SOCK CHECK DAM - TYPE 6
NOT TO SCALE

NOTE:
Fully biodegradable compost socks are suitable for permanent installation only. Product becomes too fragile to be moved or removed intact.



ALTERNATIVE 1



ALTERNATIVE 2

FIBER ROLL AND COMPOST SOCK STAKING ALTERNATIVES
NOT TO SCALE

MAXIMUM CHECK DAM SPACING "L"				
Ditch Grade	H=8"	H=12"	H=18"	H=24"
10%	**	**	15'	20'
9%	**	**	16'	22'
8%	**	**	18'	25'
7%	**	**	21'	28'
6%	**	16'	25'	33'
5%	**	20'	30'	40'
4%	16'	25'	37'	50'
3%	22'	33'	50'	66'
2%	33'	50'	75'	100'

** Not allowed H = Min. dam height

CALC. BOOK NO. 6402, 6406, 6407

SDR DATE July, 2020

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

OREGON STANDARD DRAWINGS

CHECK DAMS
TYPE 2 AND 6

2021

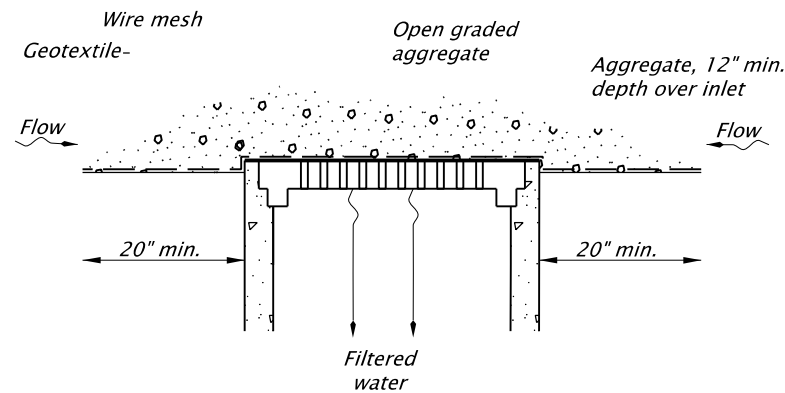
DATE	REVISION DESCRIPTION

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

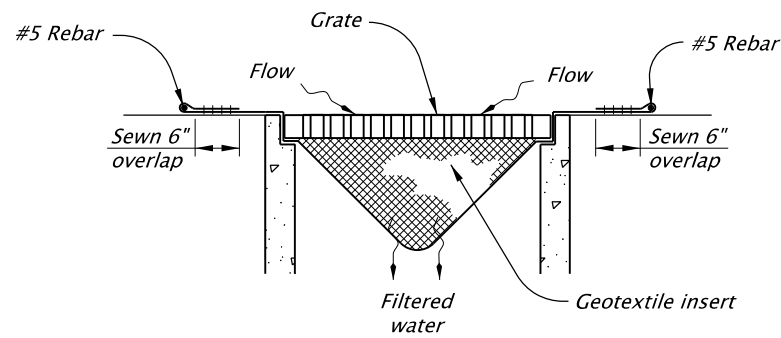
Effective Date: December 1, 2020 - May 31, 2021

RD1006

RD1006

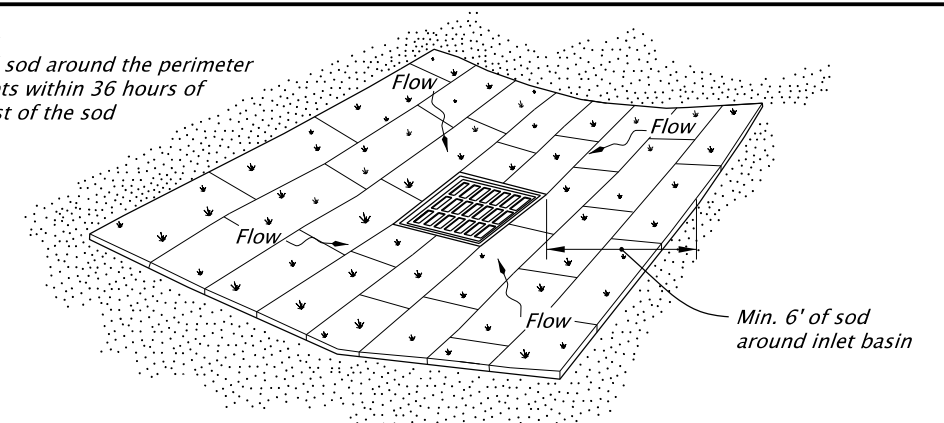


GEOTEXTILE/WIRE MESH/AGGREGATE - TYPE 2
NOT TO SCALE

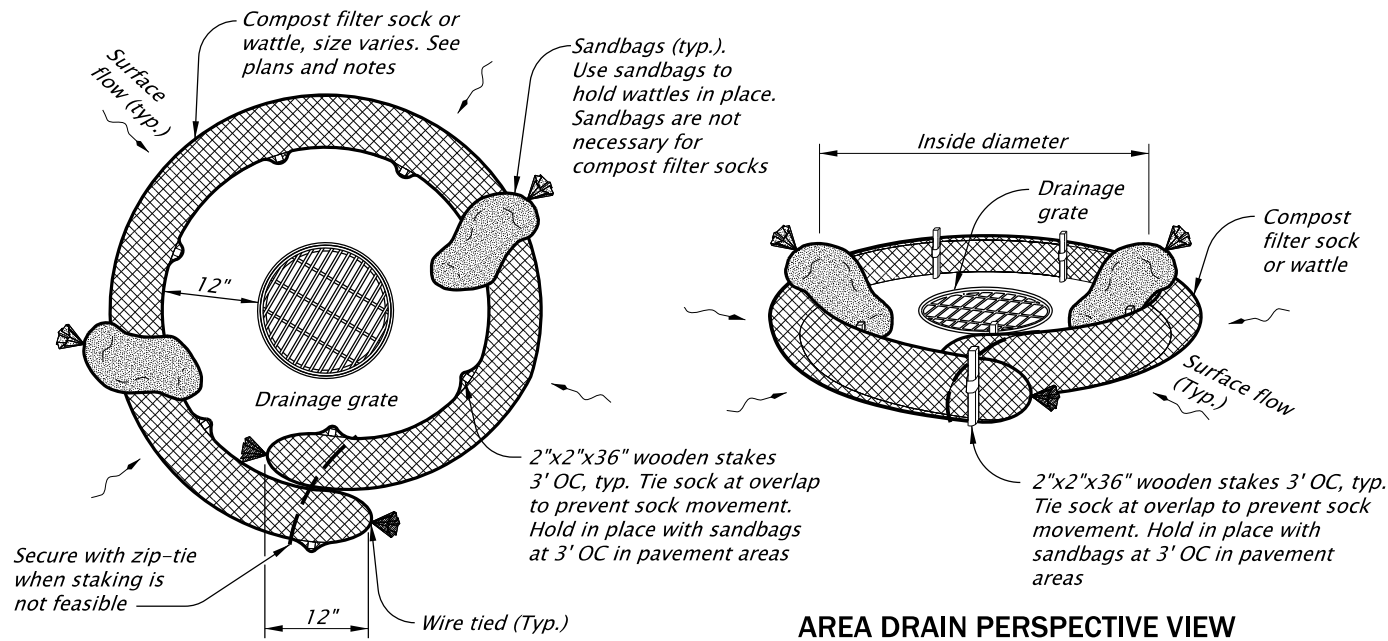


PREFABRICATED FILTER INSERT - TYPE 3
NOT TO SCALE

NOTE:
Install sod around the perimeter
of inlets within 36 hours of
harvest of the sod

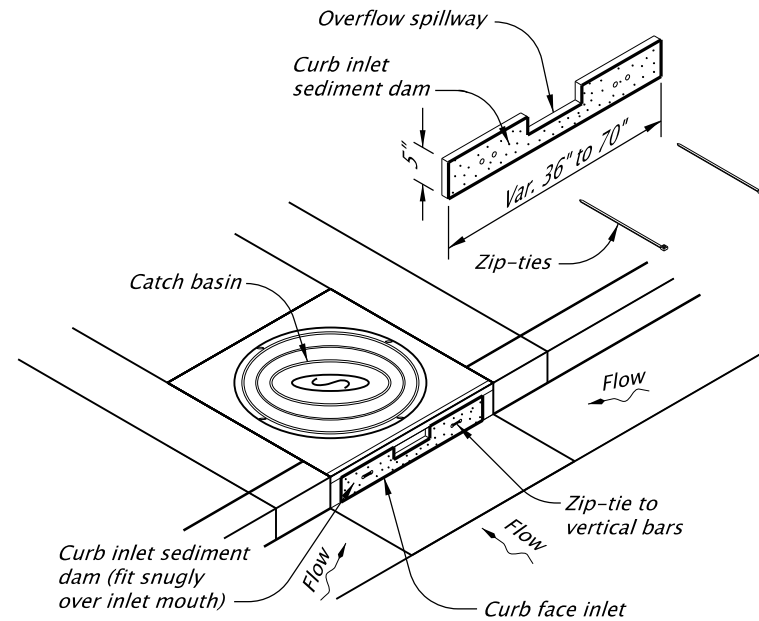


SOD PROTECTION - TYPE 6
NOT TO SCALE

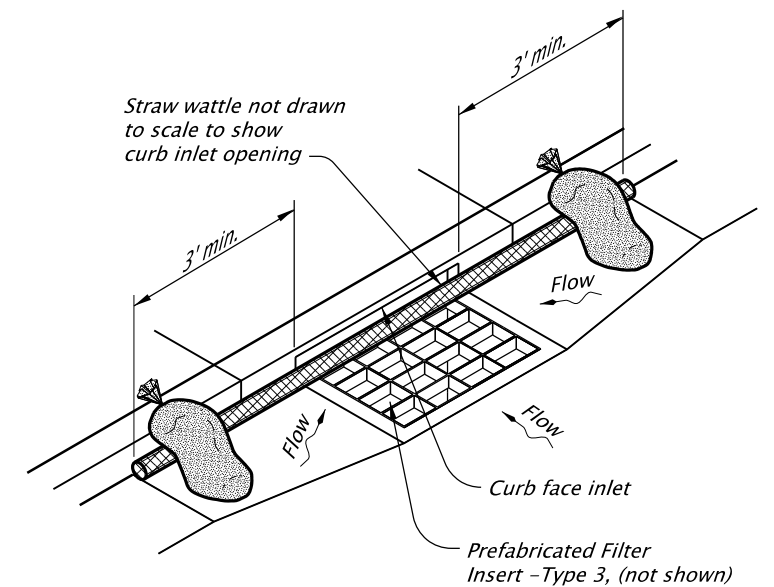


AREA DRAIN PLAN

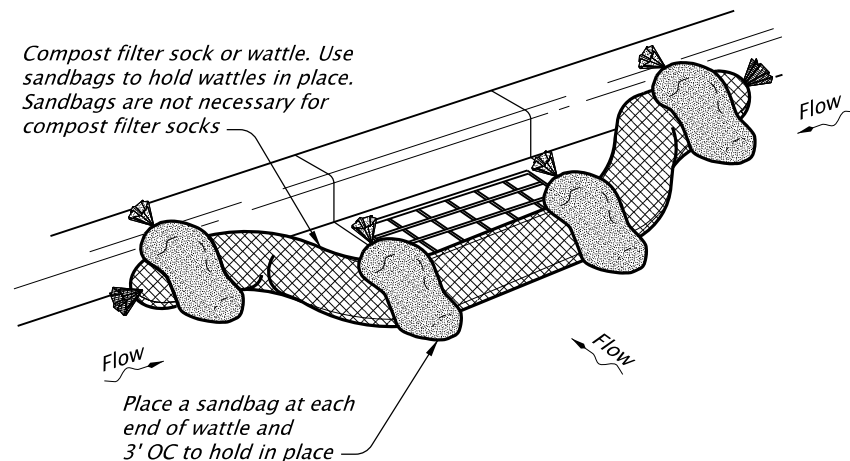
AREA DRAIN PERSPECTIVE VIEW



CURB INLET SEDIMENT DAM - TYPE 10
NOT TO SCALE



WATTLE BARRIER WITH FILTER INSERT - TYPE 11
NOT TO SCALE



COMPOST FILTER SOCK OR WATTLE - TYPE 7
NOT TO SCALE

CURB INLET PERSPECTIVE VIEW

NOTES:
Type 2 - Geotextile/wire mesh/aggregate
Place the wire mesh over the grate.
Place sediment fence geotextile over the
wire mesh and perimeter area around
structure.
Install aggregate over the geotextile fabric.

Type 3 - Prefabricated filter inserts
Install prefabricated filter inserts according
to the plans, special provisions, and
manufacturer recommendations.
Prefabricated inserts with provisions for
overflow are allowed only when
accompanied by additional BMP's to
prevent the potential of sediments
entering project storm systems.
Field fabricated inserts are not allowed.

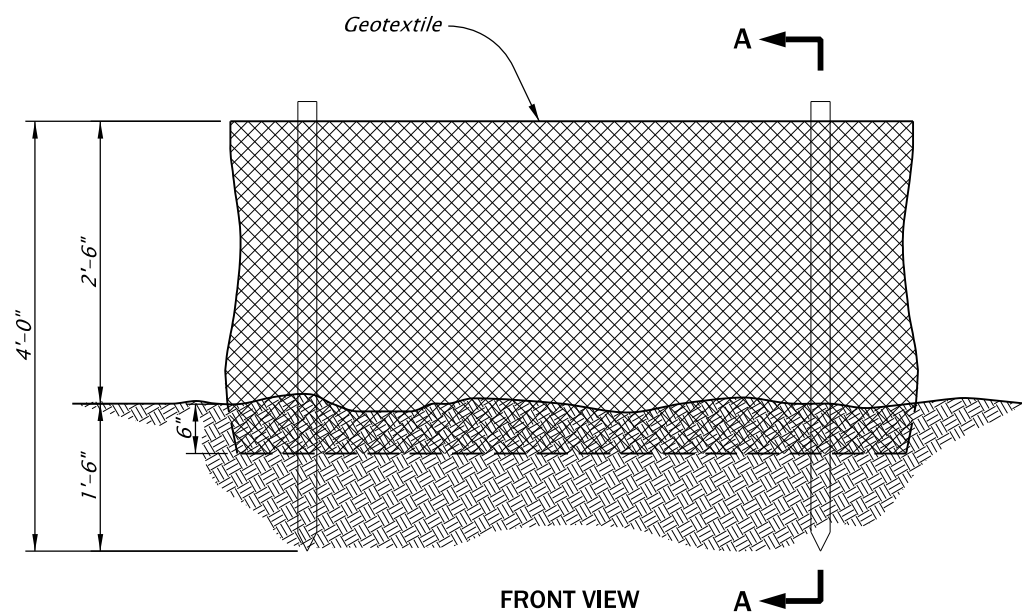
Type 7 - Compost filter sock
Drive 2"x2" wood stakes a minimum of
6" into ground and flush with the top
of the sock.
Overlap ends of sock per manufacturers
recommendations (12" min., 36" max.).
Use 8" to 12" dia sock on curbside in traffic
areas.

(Type 7 cont.)
Use 12" to 18" dia sock in non-traffic areas
or areas where the larger socks can be
used safely.
use synthetic mesh socks for temporary
installations.

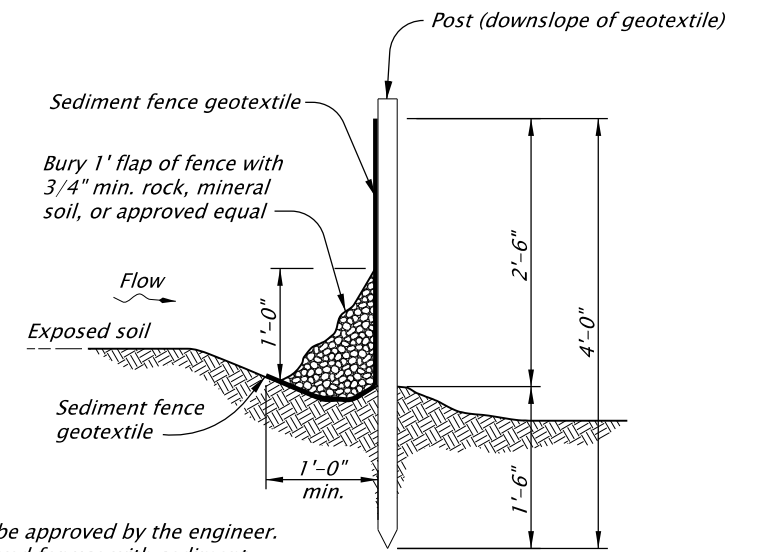
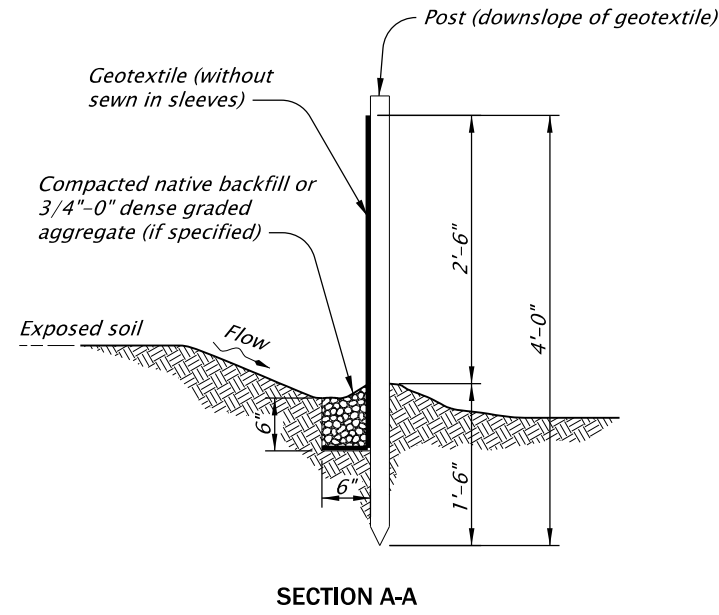
Type 10 - Curb inlet sediment dam
Fit curb inlet sediment dam snugly into inlet
mouth. Curb inlet sediment dam is
required for use with inlet filter insert
where at-grade inlet grate and curb inlet
are combined at a catch basin.

Type 11 - Wattle barrier with filter insert
Install prefabricated filter insert per Type 3
detail.
Install wattles over opening and 36" to each
side of opening tight against curb. Adjust
wattle to force storm water to flow through
filter insert or wattle prior to leaving the
site.
Adjust, replace or modify the inlet protection
as needed to prevent sediment laden water
from entering the catch basin.

CALC. BOOK NO. <u>6402, 6406, 6407</u>	SDR DATE <u>July, 2020</u>							
<p>The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.</p>	NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications							
	<p>OREGON STANDARD DRAWINGS</p> <p>INLET PROTECTION</p> <p>TYPE 2, 3, 6, 7, 10 AND 11</p>							
	<p>2021</p>							
	<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> </tbody> </table>	DATE	REVISION DESCRIPTION					
DATE	REVISION DESCRIPTION							

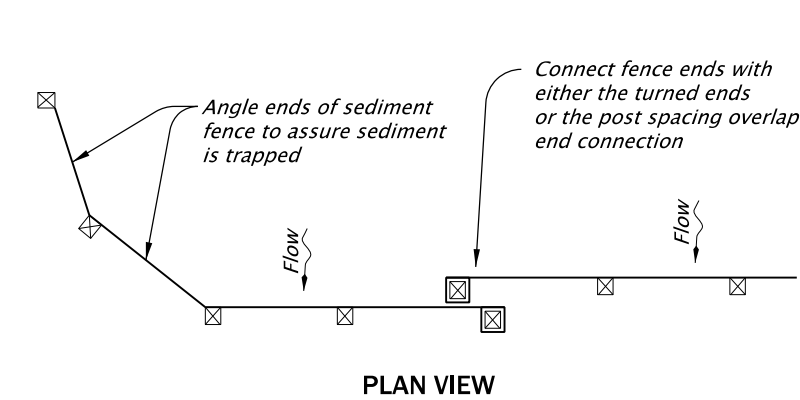


SEDIMENT FENCE AND GEOTEXTILE BURY DETAIL - TYPE 1
NOT TO SCALE

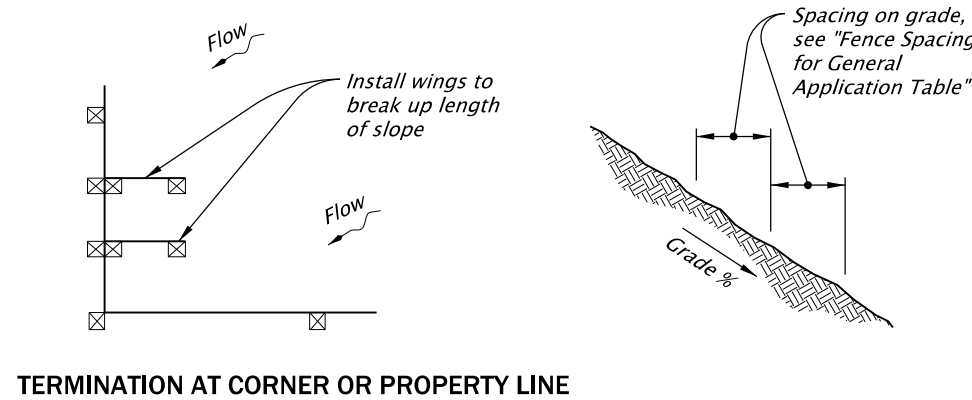


ALTERNATE SEDIMENT FENCE WITHOUT TRENCHING - TYPE 2
NOT TO SCALE

NOTES:
1. Use must be approved by the engineer.
2. Not approved for use with sediment fencing with sewn-in post sleeves.



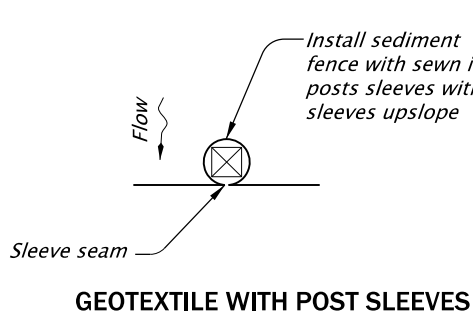
PLAN VIEW



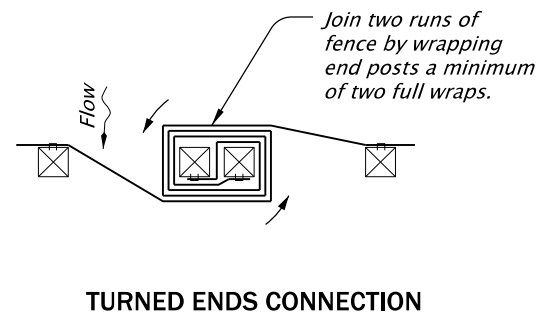
TERMINATION AT CORNER OR PROPERTY LINE

- GENERAL NOTES:
1. Use 2"x2" wood fence posts.
 2. Posts to be installed on downhill side of sediment fence geotextile. Position posts to prevent separation from geotextile.
 3. Compact filter fabric trench backfill and soil on uphill side of fence.
 4. Locate fence no closer than three feet to the toe of a slope.
 5. Wing spacing shall comply with "Fence Spacing for General Application Table".

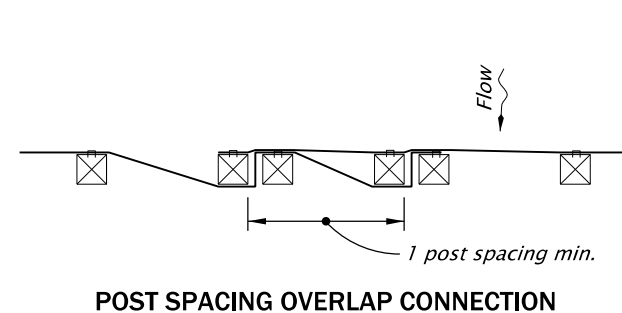
FENCE SPACING FOR GENERAL APPLICATION TABLE	
INSTALL PARALLEL ALONG CONTOURS AS FOLLOWS	
GRADE	MAXIMUM SPACING ON GRADE
Grade < 10%	300'
10% ≤ Grade < 15%	150'
15% ≤ Grade < 20%	100'
20% ≤ Grade < 30%	50'
30% ≤ Grade	25'



GEOTEXTILE WITH POST SLEEVES



TURNED ENDS CONNECTION

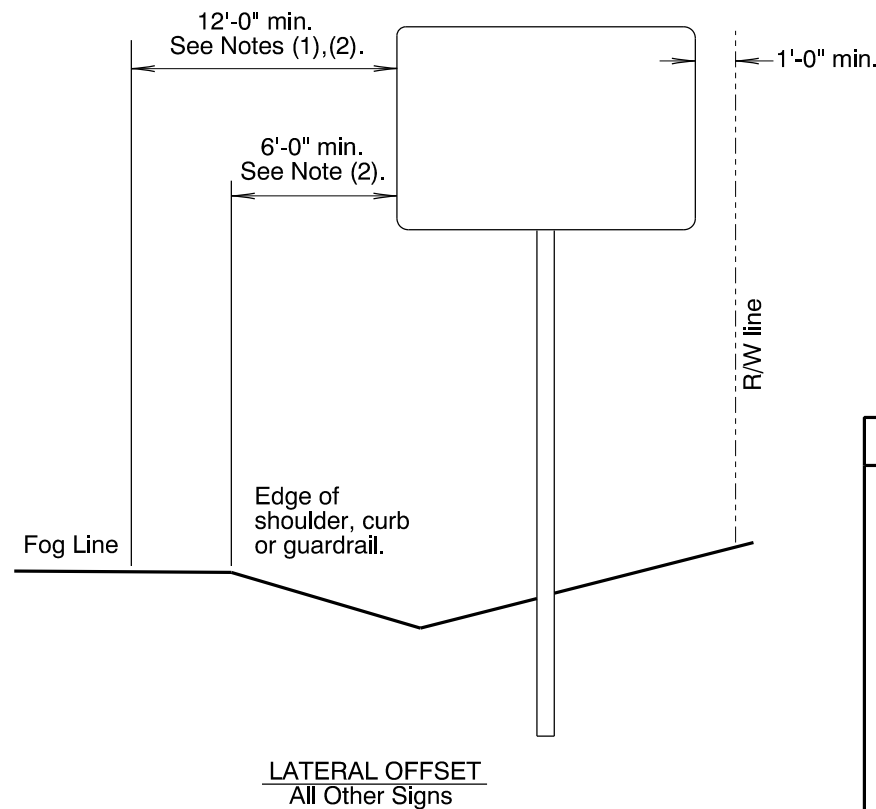
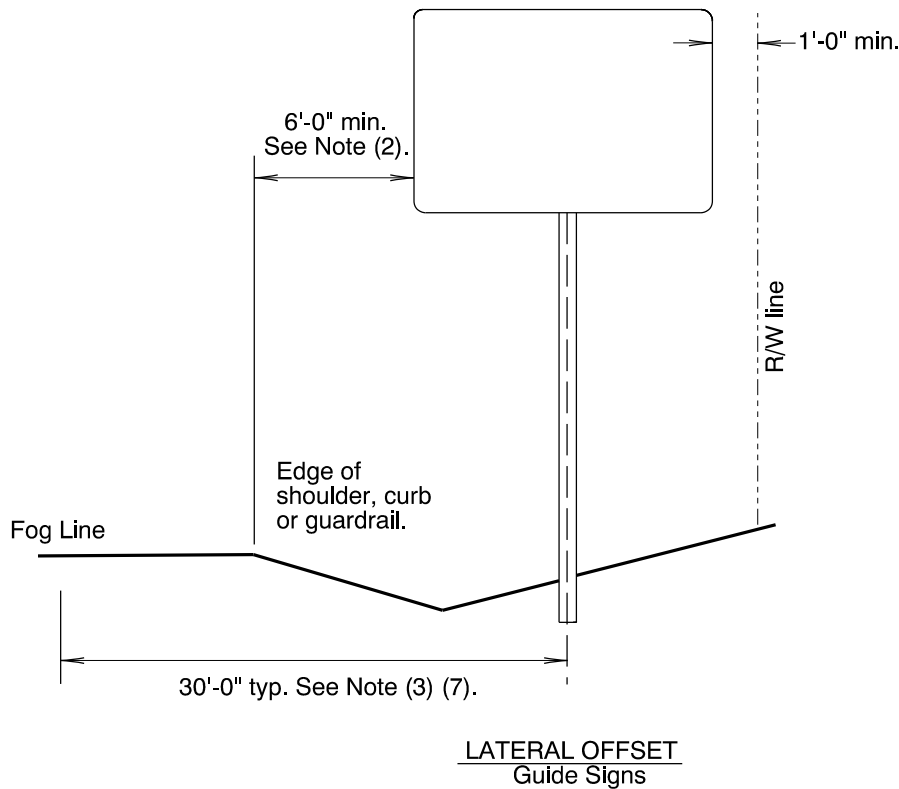
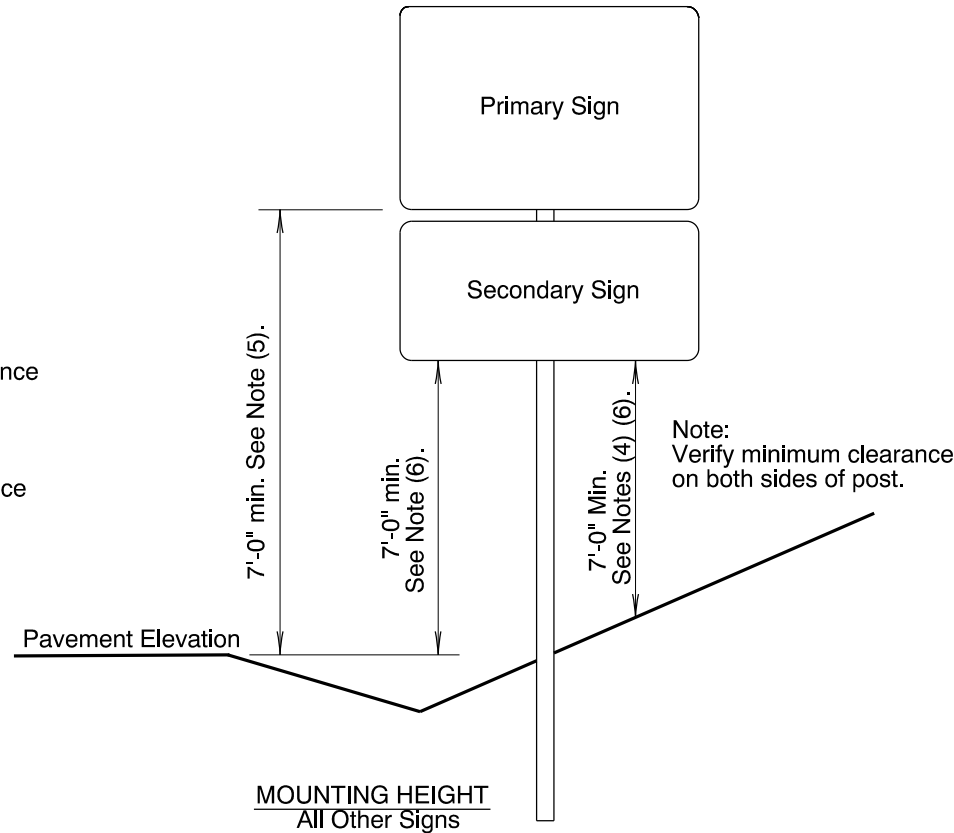
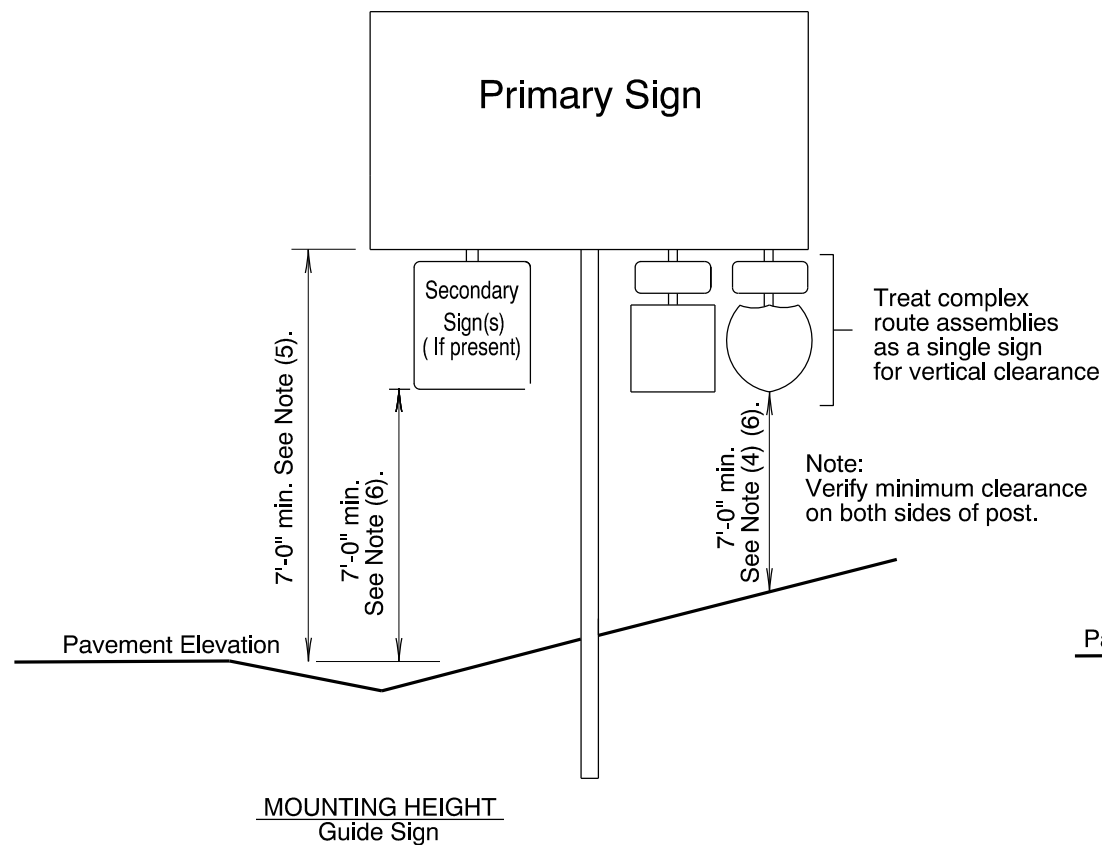


POST SPACING OVERLAP CONNECTION

GEOTEXTILE END CONNECTIONS
NOT TO SCALE

POST SPACING TABLE	
6'	Sediment Fence with Geotextile elongation less than 50%
4'	Sediment Fence with Geotextile elongation 50% or more

CALC. BOOK NO. <u>6403, 6404, 6405</u>	SDR DATE <u>July, 2020</u>											
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 SEDIMENT FENCE 2021											
	<table border="1"> <thead> <tr> <th>DATE</th> <th>REVISION</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	DATE	REVISION	DESCRIPTION								
DATE	REVISION	DESCRIPTION										



General Installation Notes:

- a. Signing details shown on this sheet are intended to convey "typical" conditions only. Individual locations may require installation different from those shown. For guidance regarding unique installations or exceptions call the Project Sign Designer or Region Traffic Section.
- b. Locate breakaway supports away from ditches to avoid problems with erosion, corrosion, debris, maintenance and breakaway performance. See Dwg. No. TM635 for more information.
- c. For wood post support details see Dwg. No. TM670.
- d. For perforated steelsquare tube support details see Dwg. No. TM681.
- e. For triangular base breakaway support details see Dwg. No. TM602.
- f. For multi-post breakaway support details see Dwg. No. TM600.
- g. Mounting heights should not be more than 3 inches more than the minimum heights shown, where practical.
- h. 2" vertical spacing between all signs.

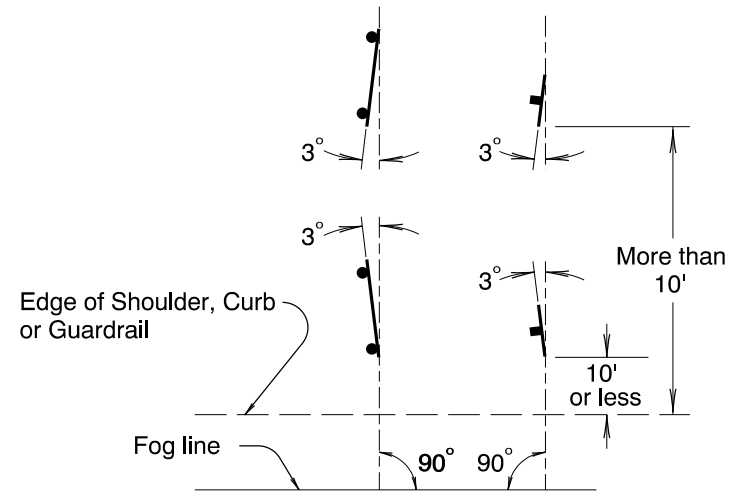
Notes:

- 1). 6' minimum if behind barrier.
- 2). 2' minimum if restricted R/W.
- 3). 20' for ramp terminals.
- 4). 8' minimum if bicycle path underneath.
- 5). 8' minimum if secondary signs attached.
- 6). 5' minimum if outside clearzone, in rural areas and no pedestrians underneath.
- 7). For multi-post installations measure distance from post closest to roadway.

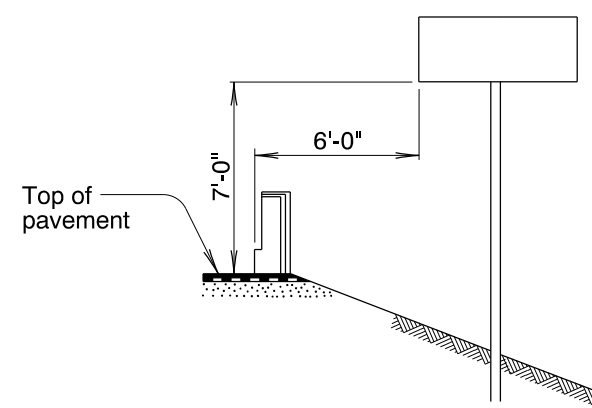
CALC. BOOK NO. <u>N/A</u>	SDR DATE <u>01/08/2018</u>
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
OREGON STANDARD DRAWINGS	
SIGN INSTALLATION DETAILS	
2021	
DATE	REVISION DESCRIPTION

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

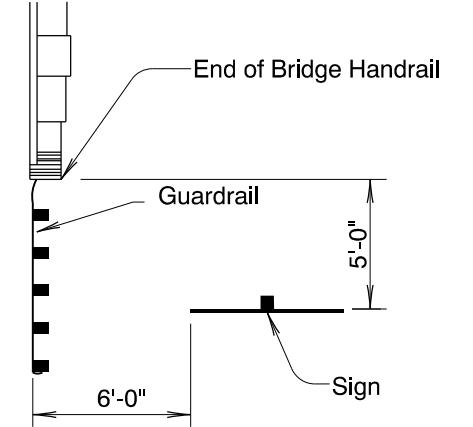
TM201.dgn 1-3-2017



SIGN PLACEMENT

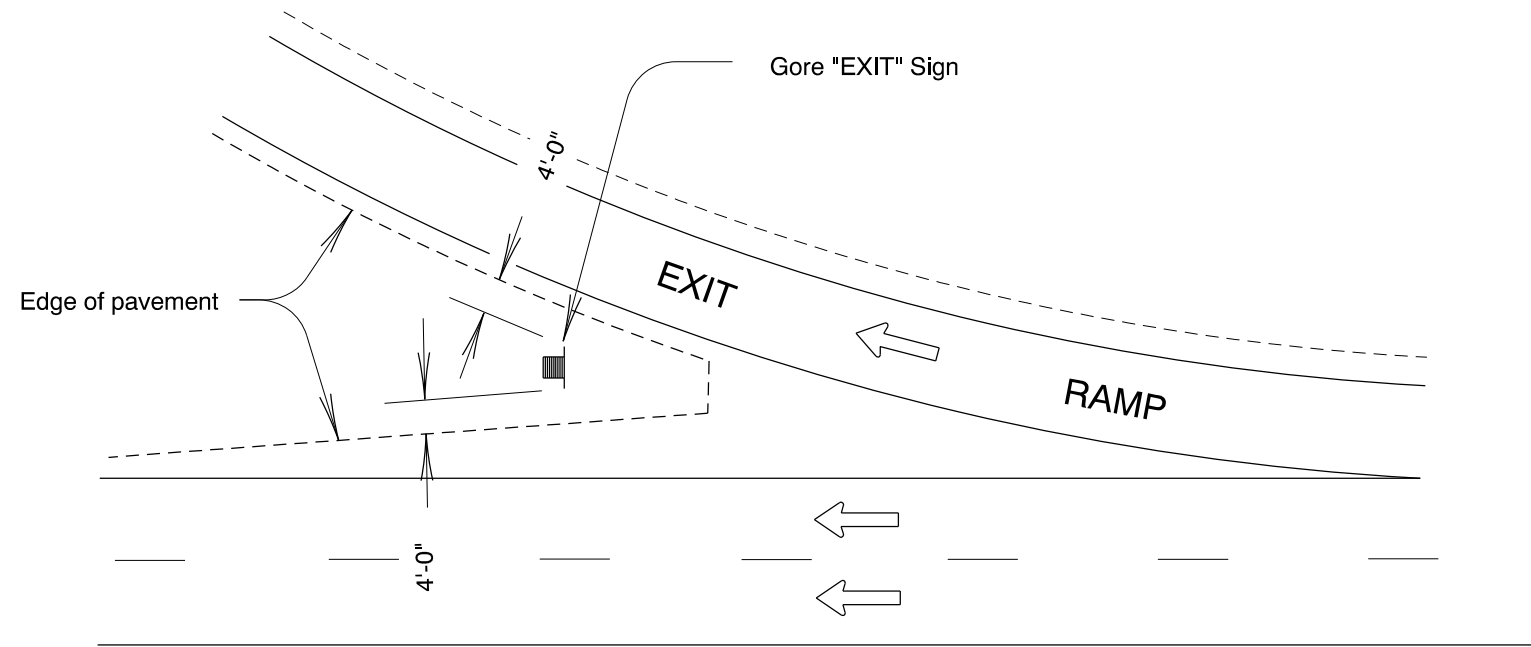


ELEVATION



PLAN

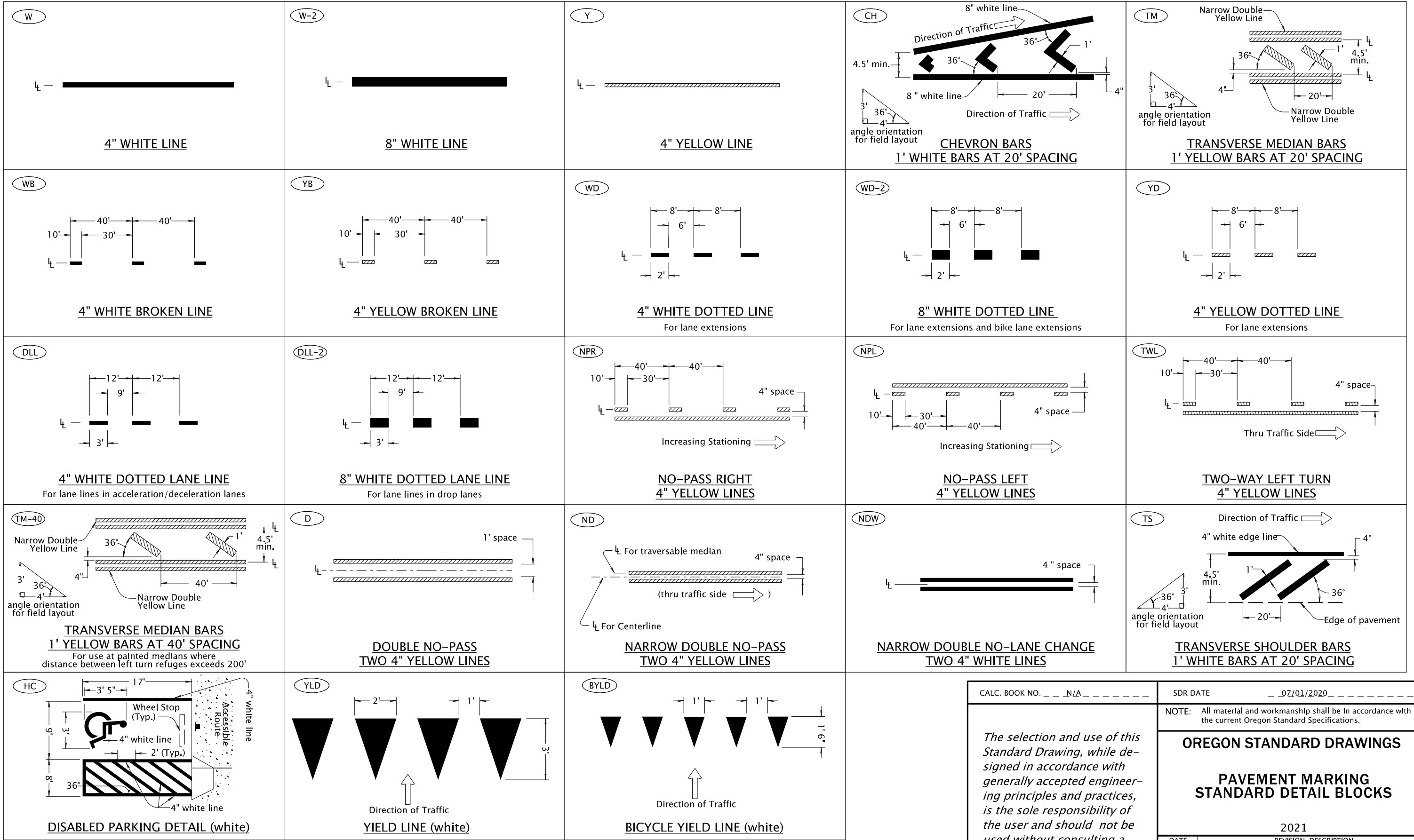
SIGN LOCATION FOR FREEWAY OVERCROSSING
(MINIMUM VALUES)



TYPICAL "EXIT" SIGN INSTALLATION

CALC. BOOK NO. N/A	SDR DATE 12-10-09
<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
	OREGON STANDARD DRAWINGS
	MISCELLANEOUS SIGN PLACEMENT DETAILS
	2021
DATE	REVISION DESCRIPTION

TM201



← Direction Of Traffic, Increasing Stationing Or Thru Traffic Side

⊥ Lane line dimensions are shown on the striping plans

LEGEND

CALC. BOOK NO. ___ N/A ___

SDR DATE ___ 07/01/2020 ___

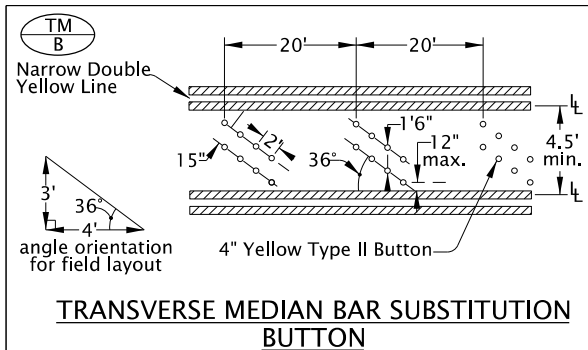
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS
PAVEMENT MARKING
STANDARD DETAIL BLOCKS

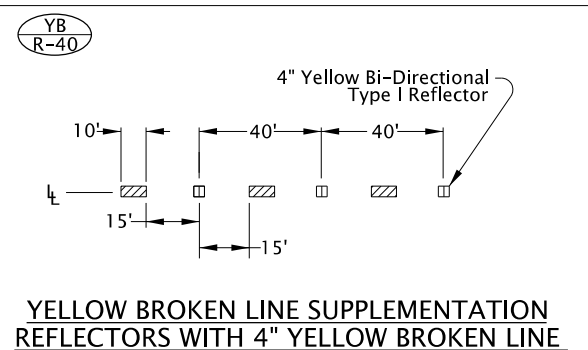
2021

DATE	REVISION DESCRIPTION
07/2020	Changed Min. widths for CH, TM, TM-40, and TS

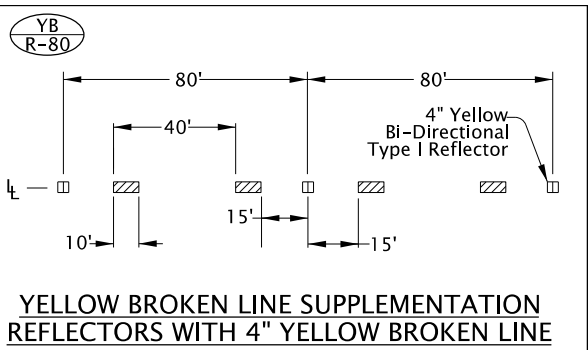
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.



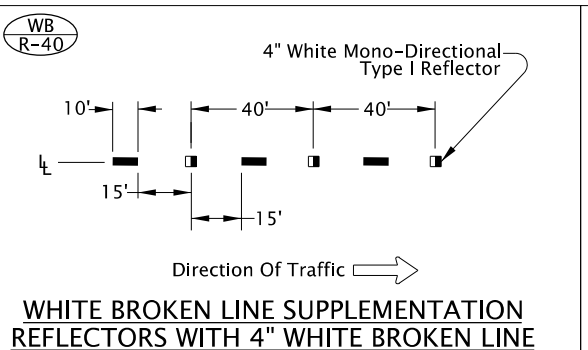
TRANSVERSE MEDIAN BAR SUBSTITUTION BUTTON



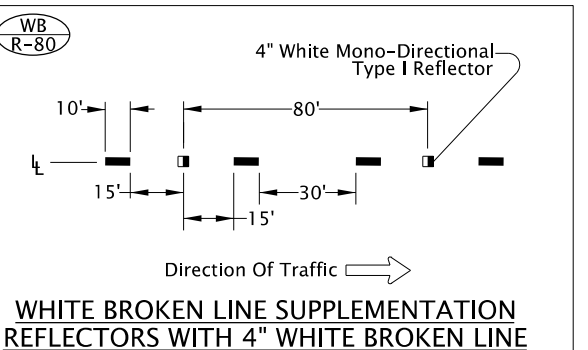
YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE



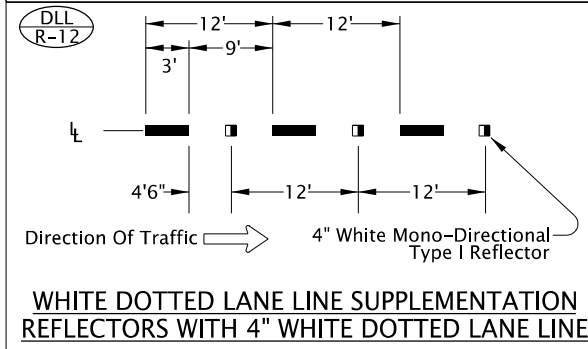
YELLOW BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" YELLOW BROKEN LINE



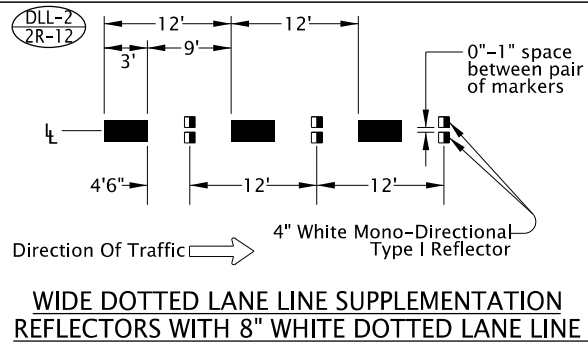
WHITE BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE



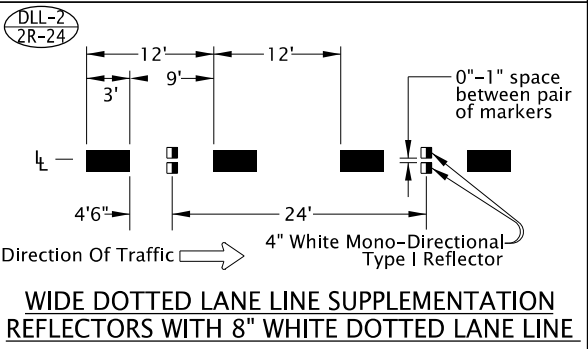
WHITE BROKEN LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE BROKEN LINE



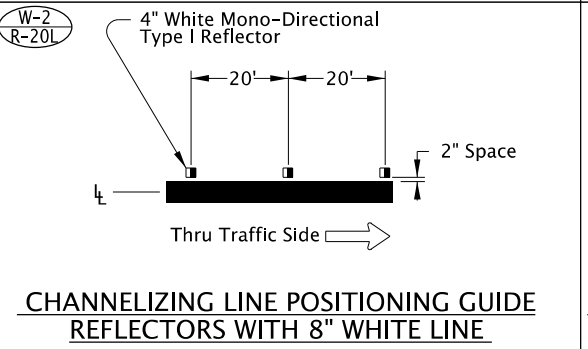
WHITE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 4" WHITE DOTTED LANE LINE



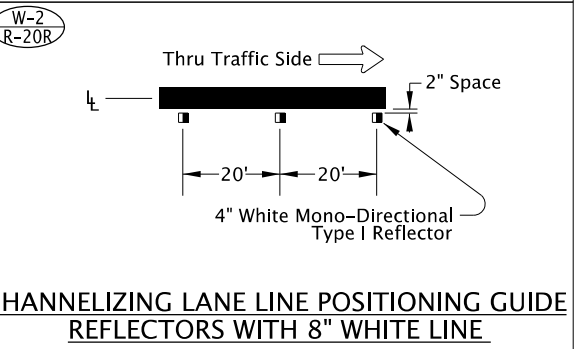
WIDE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE DOTTED LANE LINE



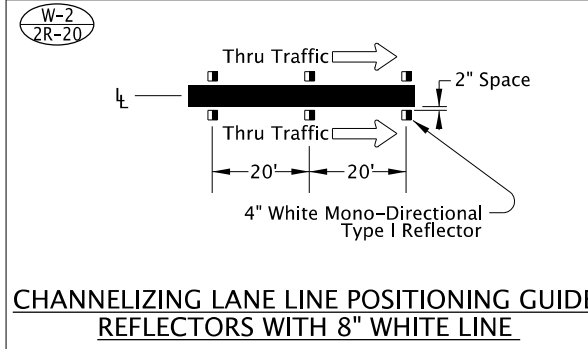
WIDE DOTTED LANE LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE DOTTED LANE LINE



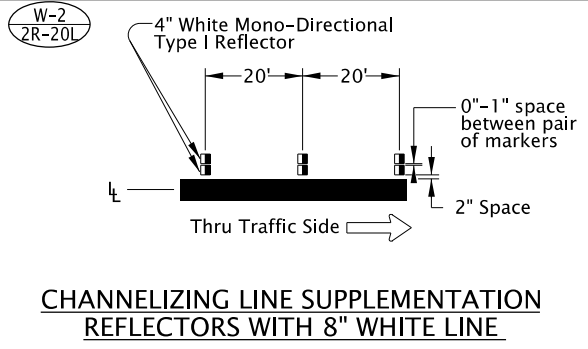
CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE



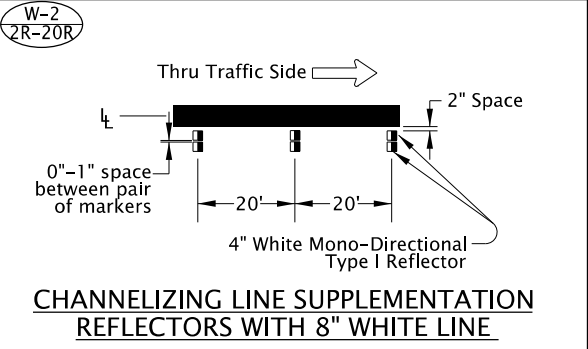
CHANNELIZING LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE



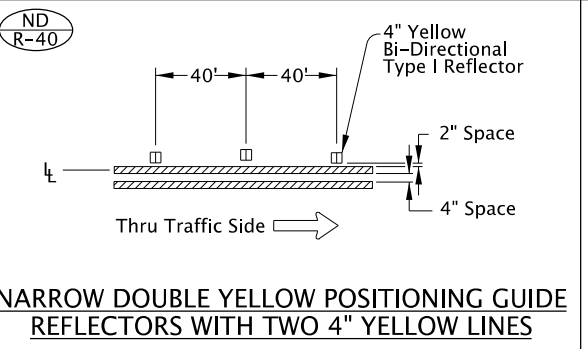
CHANNELIZING LANE LINE POSITIONING GUIDE REFLECTORS WITH 8" WHITE LINE



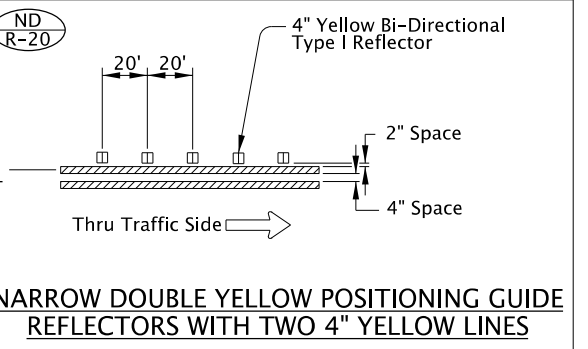
CHANNELIZING LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE LINE



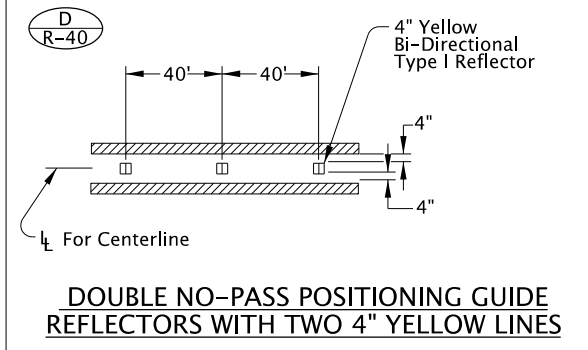
CHANNELIZING LINE SUPPLEMENTATION REFLECTORS WITH 8" WHITE LINE



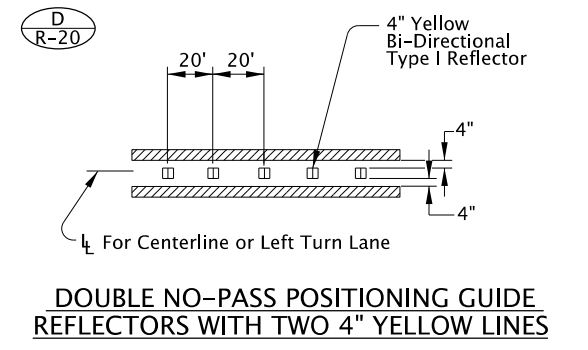
NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES



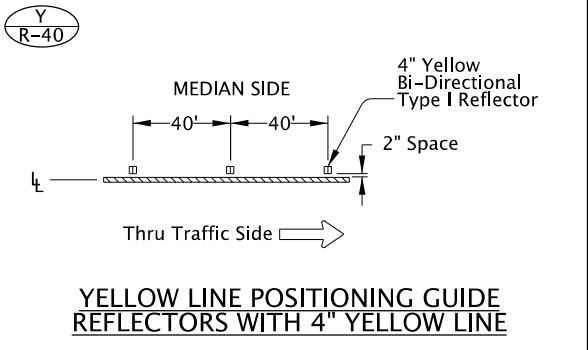
NARROW DOUBLE YELLOW POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES



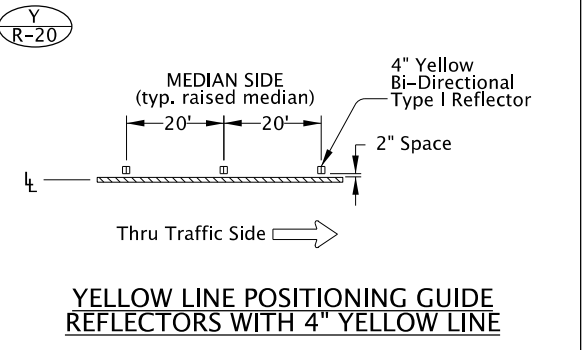
DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES



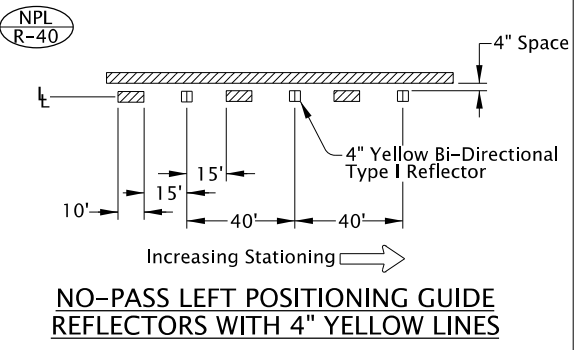
DOUBLE NO-PASS POSITIONING GUIDE REFLECTORS WITH TWO 4" YELLOW LINES



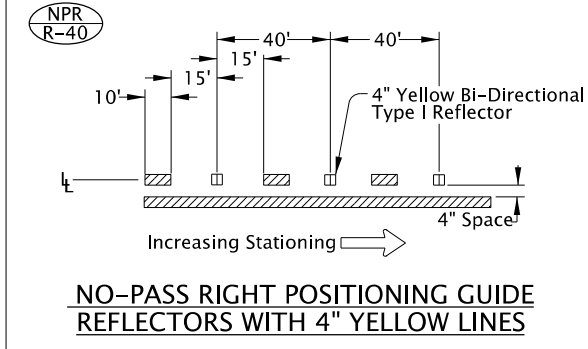
YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE



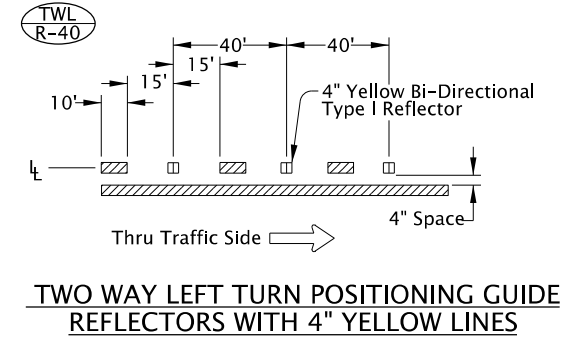
YELLOW LINE POSITIONING GUIDE REFLECTORS WITH 4" YELLOW LINE



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 ___

SDR DATE ___ 07/01/2020 ___

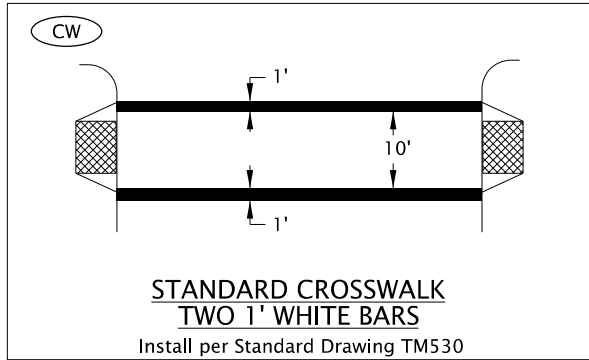
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

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

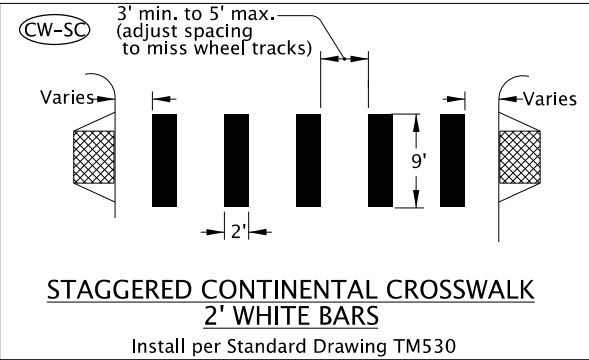
OREGON STANDARD DRAWINGS
PAVEMENT MARKING
STANDARD DETAIL BLOCKS

DATE	REVISION DESCRIPTION
07/2020	Changed min. width of TM/B from 6' to 4.5'

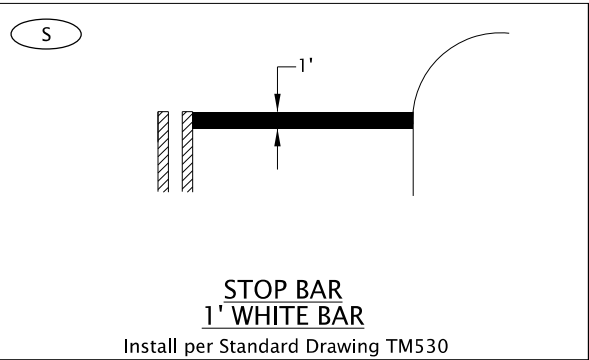
TM502



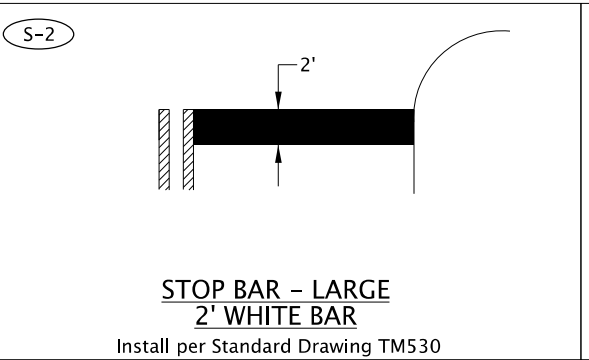
STANDARD CROSSWALK
TWO 1' WHITE BARS
Install per Standard Drawing TM530



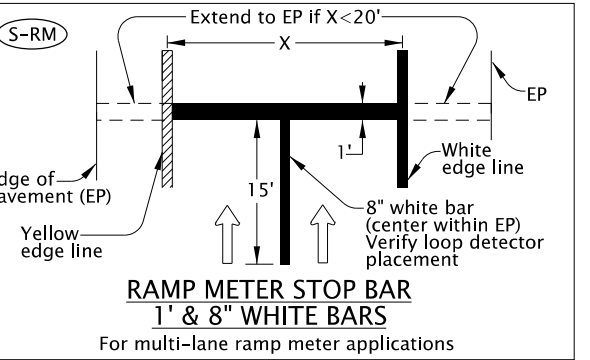
STAGGERED CONTINENTAL CROSSWALK
2' WHITE BARS
Install per Standard Drawing TM530



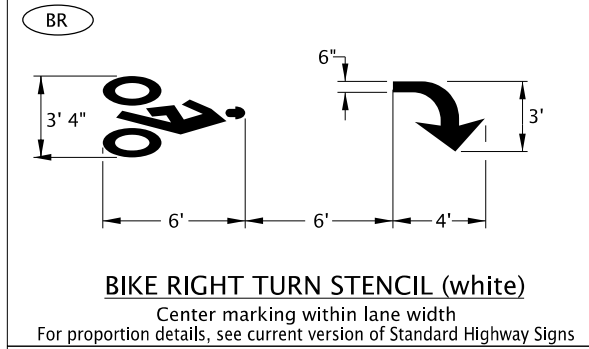
STOP BAR
1' WHITE BAR
Install per Standard Drawing TM530



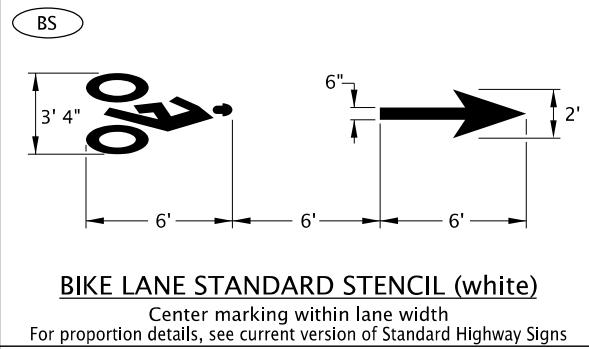
STOP BAR - LARGE
2' WHITE BAR
Install per Standard Drawing TM530



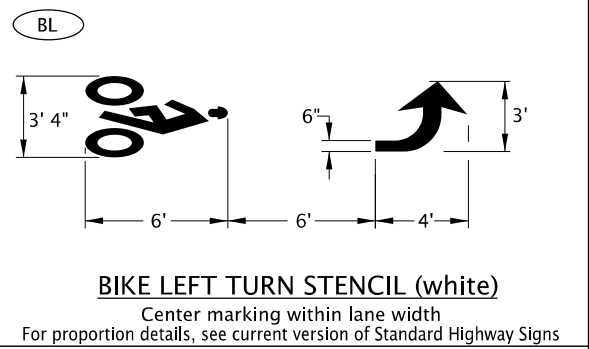
RAMP METER STOP BAR
1' & 8" WHITE BARS
For multi-lane ramp meter applications



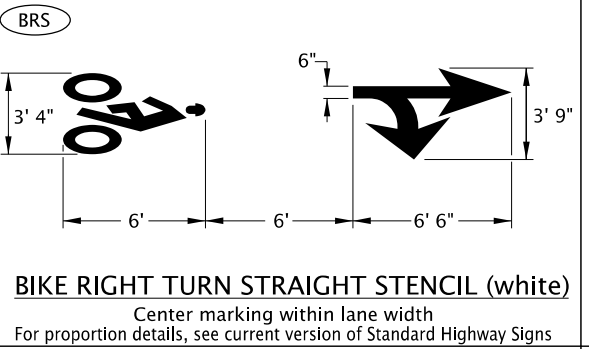
BIKE RIGHT TURN STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs



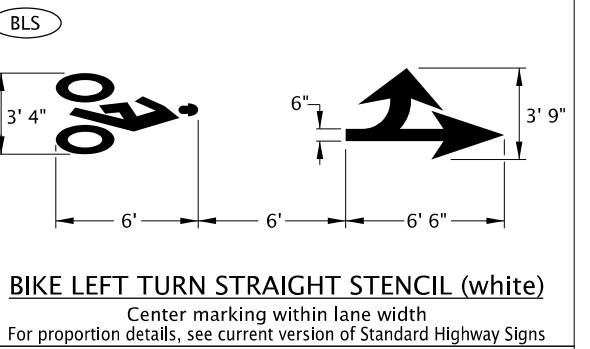
BIKE LANE STANDARD STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs



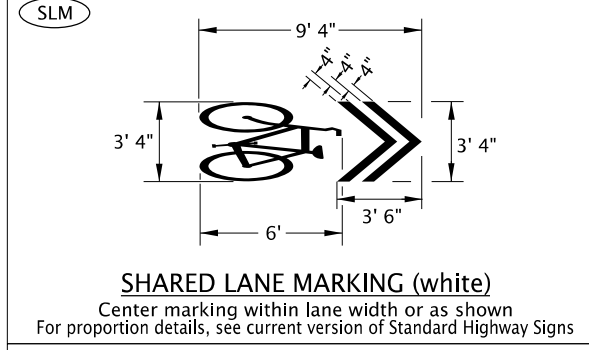
BIKE LEFT TURN STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs



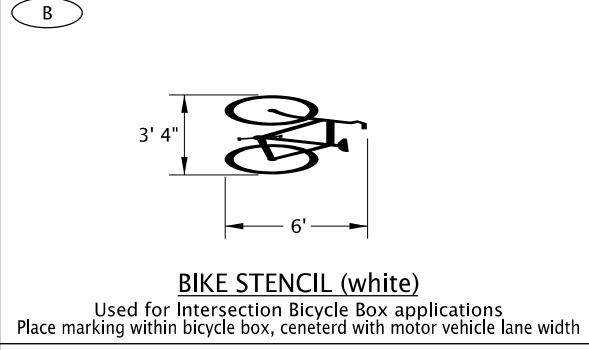
BIKE RIGHT TURN STRAIGHT STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs



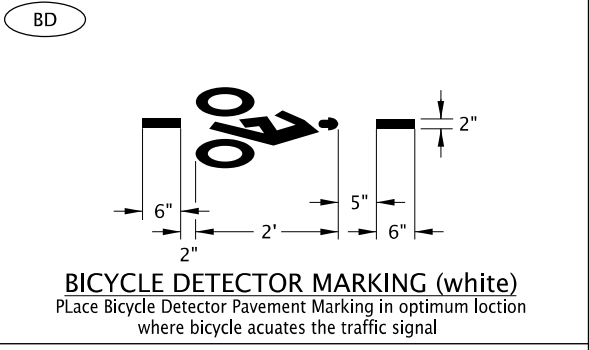
BIKE LEFT TURN STRAIGHT STENCIL (white)
Center marking within lane width
For proportion details, see current version of Standard Highway Signs



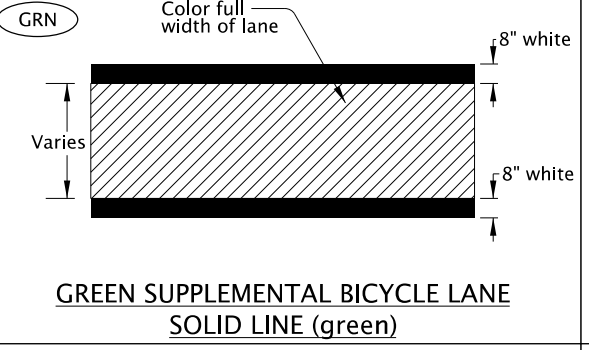
SHARED LANE MARKING (white)
Center marking within lane width or as shown
For proportion details, see current version of Standard Highway Signs



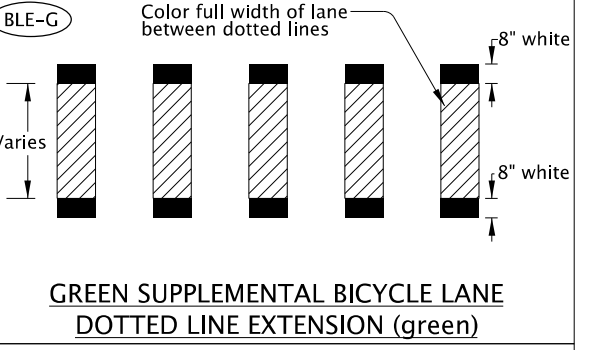
BIKE STENCIL (white)
Used for Intersection Bicycle Box applications
Place marking within bicycle box, centered with motor vehicle lane width



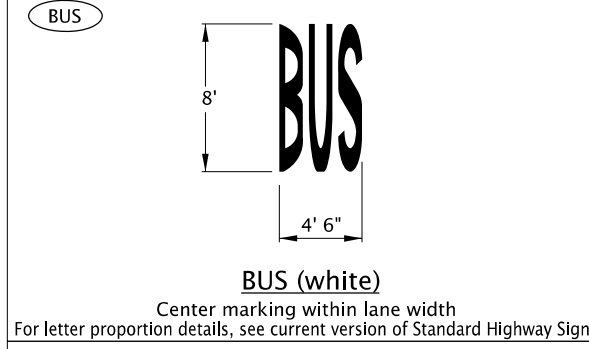
BICYCLE DETECTOR MARKING (white)
Place Bicycle Detector Pavement Marking in optimum location where bicycle acuates the traffic signal



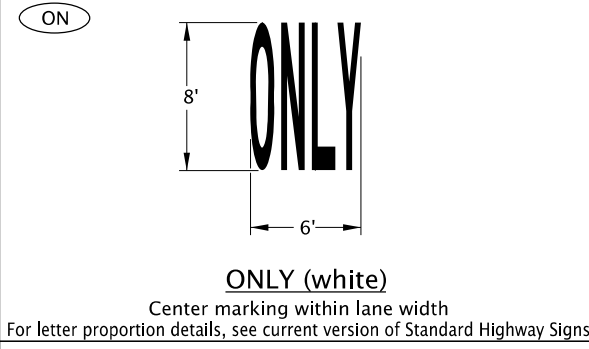
GREEN SUPPLEMENTAL BICYCLE LANE
SOLID LINE (green)



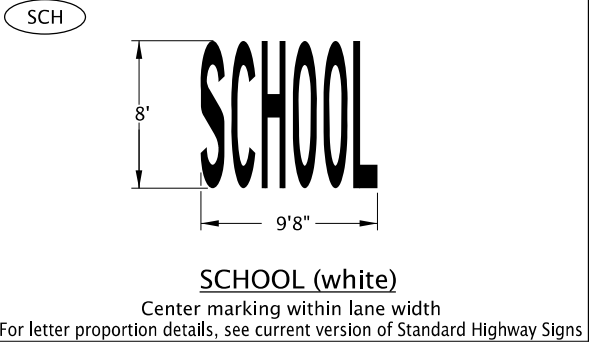
GREEN SUPPLEMENTAL BICYCLE LANE
DOTTED LINE EXTENSION (green)



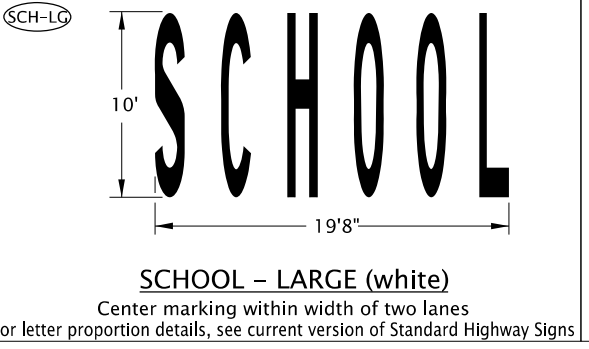
BUS (white)
Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs



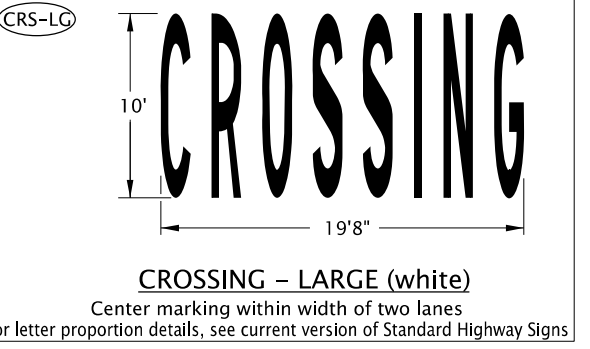
ONLY (white)
Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs



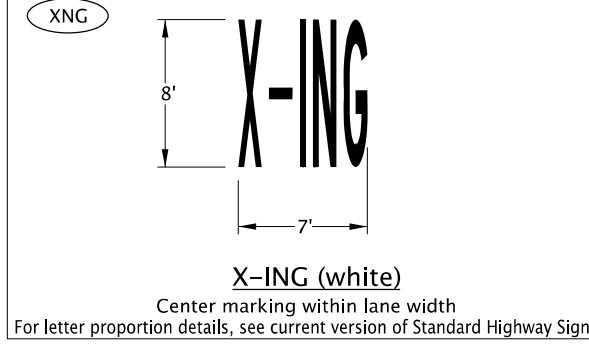
SCHOOL (white)
Center marking within lane width
For letter proportion details, see current version of Standard Highway Signs



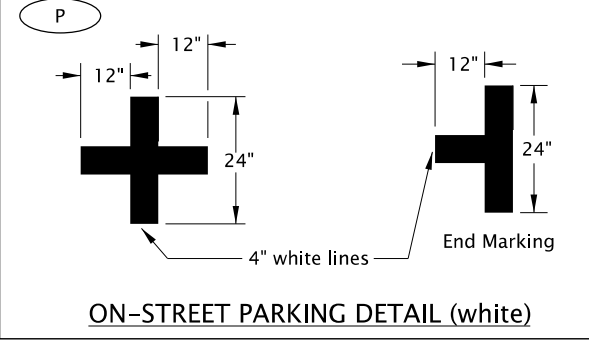
SCHOOL - LARGE (white)
Center marking within width of two lanes
For letter proportion details, see current version of Standard Highway Signs



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



ON-STREET PARKING DETAIL (white)

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

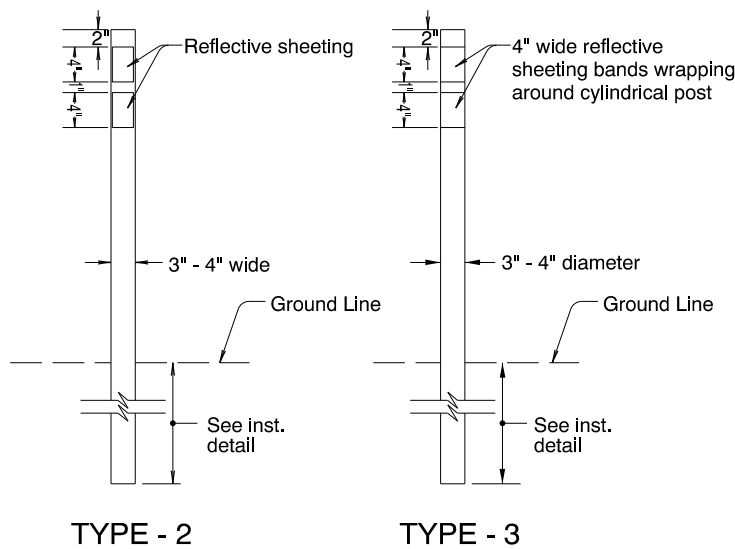
LEGEND
← Direction of Travel

CALC. BOOK NO. ___ N/A ___

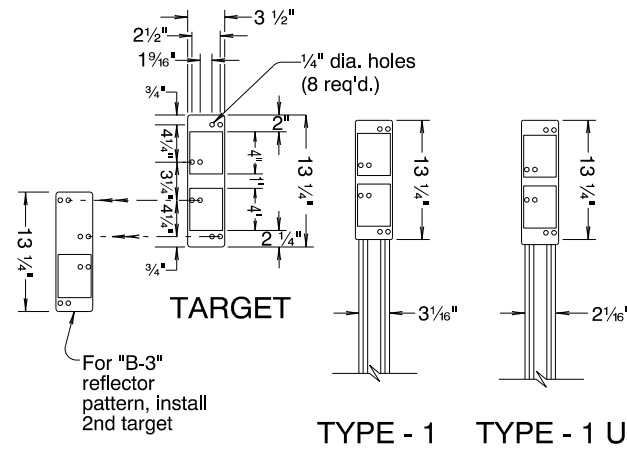
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without consulting a Registered Professional Engineer.

SDR DATE		___01/03/2020___	
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications.			
OREGON STANDARD DRAWINGS			
PAVEMENT MARKING			
STANDARD DETAIL BLOCKS			
2021			
DATE	REVISION DESCRIPTION		

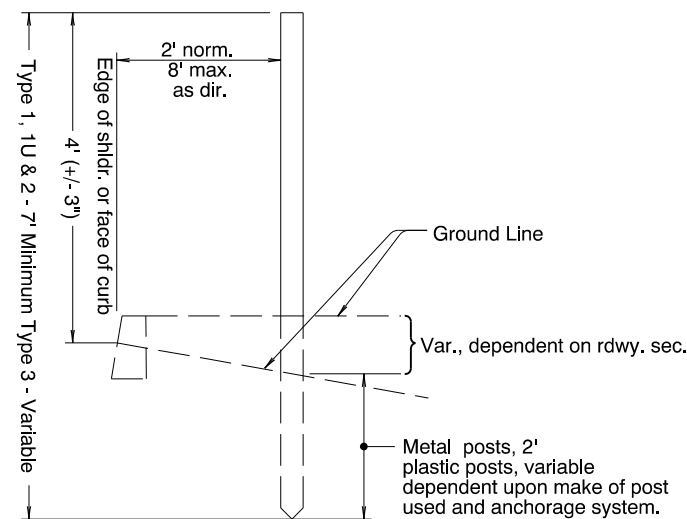
TM503



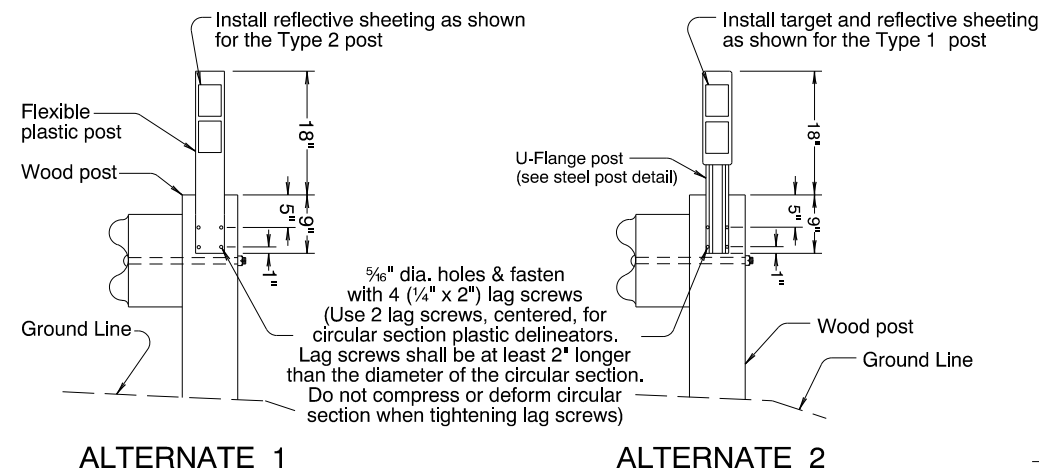
TYPE - 2 **TYPE - 3**
FLEXIBLE PLASTIC POSTS



STEEL POSTS



INSTALLATION DETAIL



ALTERNATE 1 **ALTERNATE 2**
TYPE - 4
GUARDRAIL AREAS (WITH WOOD POSTS)

NOTES:

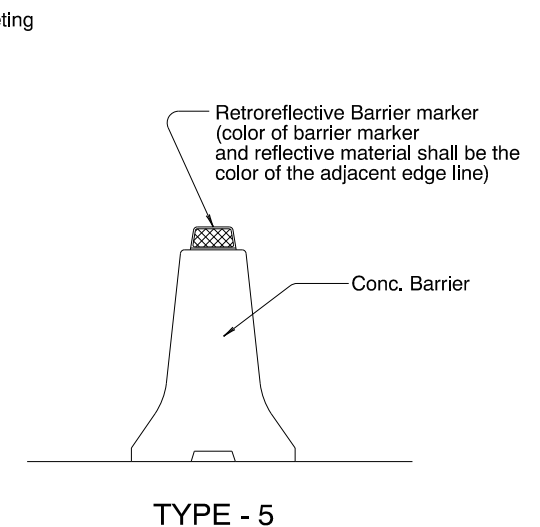
POST:
Galv. steel, nominal weight Type 1, 2 lb/ft, Type 1 U, 1.12 lb/ft.

See Standard Drawing TM571 for steel post dimensions and details.

TARGET:
Aluminum sheet, nominal thickness .050". Fasten to post with 3/8" dia. aluminum blind rivets and washers.

For "B-3" reflector pattern, top target shall overlap bottom target.

REFLECTORS:
3" x 4" reflective sheeting unless otherwise shown. (3 1/2" x 4" reflective sheeting is an acceptable alternate unless otherwise shown.)
Acrylic prismatic reflectors acceptable on Type 1, 1 U, 2 and 4 posts and Type 5 barrier mounts.
Place required number in sequence from top of target.



TYPE - 5
CONCRETE BARRIER AREAS
(Install barrier markers at 50' spacing unless otherwise noted in plans)

GENERAL NOTES:

- Spacing shall be measured along the shoulder.
- On roads with less than 500 vehicle ADT, delineators are not to be used except where situations such as sharp horizontal curves, etc. exist.
- To clear driveways, crossroads etc., or for required adjustments at ramps and at intersections, either:
(a) vary placement of that post up to 25% of spacing shown, or;
(b) eliminate said post if limit of variation must be exceeded.
- Judgement should be exercised in the installation of delineators in cut section, particularly on roads constructed to older standards where ditches are narrow and where delineators tend to hamper maintenance operations.
- On horizontal curves place delineators nearly opposite each other.
- At guard rail locations the delineators are to be installed behind the rail and shall be located adjacent to guard rail posts as shown for Type 4 Delineators.
- Install all delineators with reflectors facing adjacent oncoming traffic.
- Offset delineators an additional 4' in areas of heavy snow removal operations.
- Backside Delineators may be used in frequently snow plowed areas where use of snow poles is not justified. When Backside Delineators are specified, substitute "W-1" and "W-2" with "W-1B" and "W-2B" respectively, on Type 1 steel posts. Do not install Backside Delineators on one-way sections of roadway, freeways and ramps, or on radius sections.
- Refer to TM 222 for bracket assembly details for Backside Reflector Pattern.

To be accompanied by Drg. No. TM571, TM575, TM576, and/or TM577 as specified.

CALC. BOOK NO. <u> N/A </u>	SDR DATE <u> 01/06/2012 </u>
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications	
OREGON STANDARD DRAWINGS	
TRAFFIC DELINEATORS	
2021	
DATE	REVISION DESCRIPTION

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

TANGENT ▲ MAX. SPACING EACH SIDE OF ROADWAY IN FEET	HORIZONTAL CURVES ▲ MAX. SPACING EACH SIDE OF ROADWAY IN FEET				
	DEGREE OF CURVE	ON CURVE	IN ADVANCE OF & BEYOND CURVE		
			FIRST SPACE	SECOND SPACE	THIRD SPACE
400	Lower Than 1	300	300	300	300
	1	230	300	300	300
	2	160	300	300	300
	3	130	260	300	300
	4	110	220	300	300
	5	100	200	300	300
	6	90	180	270	300
	7 - 8	80	160	240	300
	9 - 11	70	140	210	300
	12 - 16	60	120	180	300
	17 - 22	50	100	150	300
	23 - 34	40	80	120	240
	35 - 53	30	60	90	180
	54 & Higher	20	40	60	120

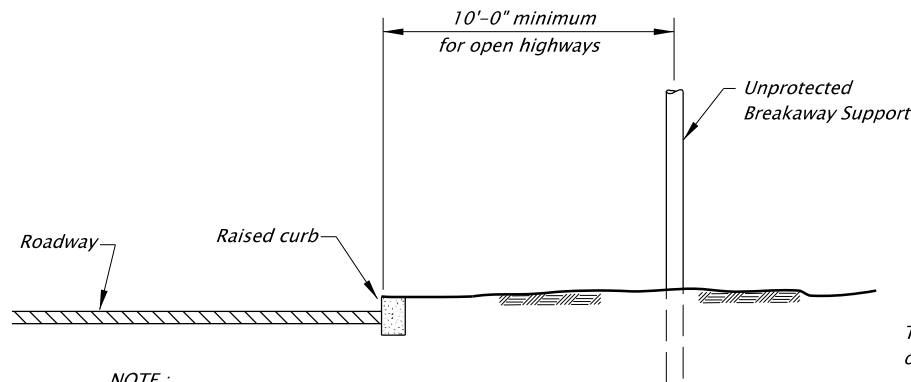
(Min. spacing 20 feet)

(▲ Install "W-1" reflective pattern unless otherwise noted. See Standard Drawings TM575 thru TM577 for spacing, layout, and reflective pattern of delineators at interchange ramps, channelized intersections, lane reductions, emergency escape ramps and freeway crossovers.)

DELINEATOR SPACING TABLE FOR TYPES 1, 1U, 2, and 4

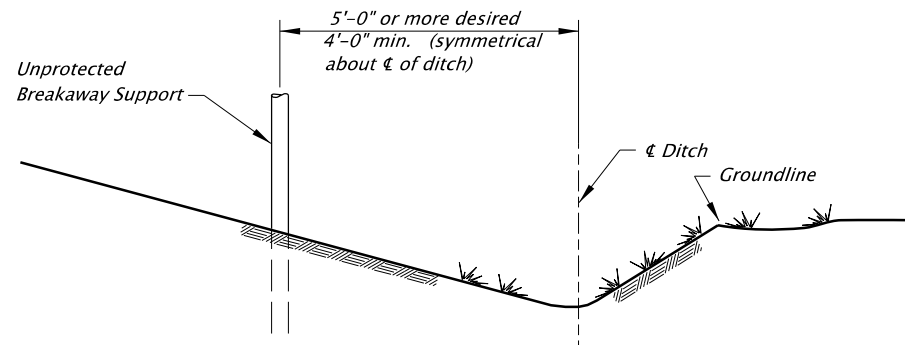
REFLECTOR PATTERN TABLE					
	Color Type	Color Of Reflector And Target Or Post	Number Of Reflectors	Color Of Reflector And Target Or Post On Backside	Number Of Reflectors On Backside
Standard Pattern	"W-1"	White	1	Not Applicable	Not Applicable
	"W-2"	White	2		
	"Y-1"	Yellow	1		
	"Y-2"	Yellow	2		
	"B-1"	Blue	1		
	"B-2"	Blue	2		
	"B-3"	Blue	3		
	"R-1"	Red	1		
Backside Pattern	"W-1B"	White	1	White	2
	"W-2B"	White	2	White	2

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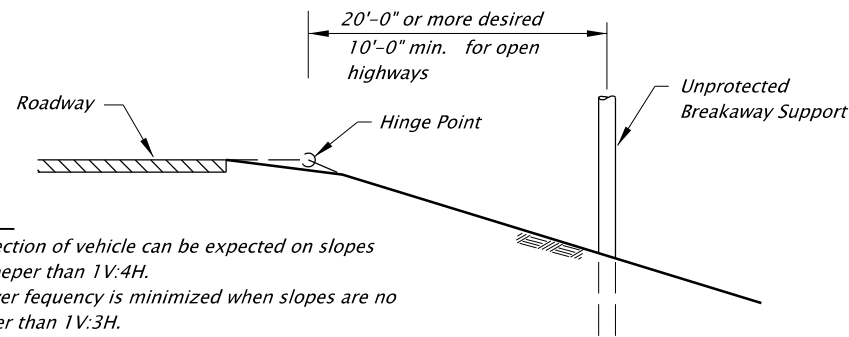
NOTE:
Locate supports far enough behind curb to allow vehicle to stabilize before impacting support.

BREAKAWAY SUPPORTS BEHIND RAISED CURBS



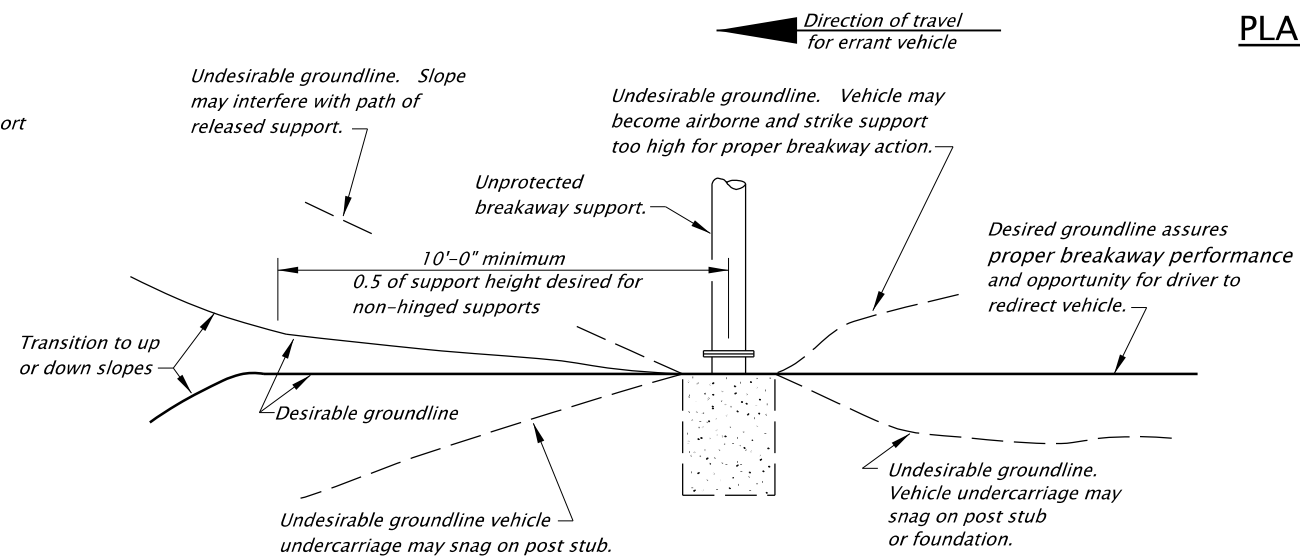
NOTE:
Locate breakaway supports away from ditches to avoid problems with erosion, corrosion, debris, maintenance, and breakaway performance.

BREAKAWAY SUPPORTS NEAR DITCHES



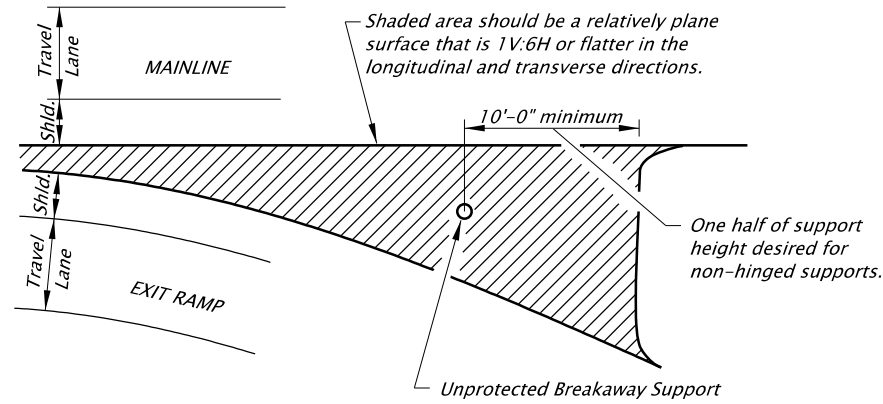
NOTE:
Redirection of vehicle can be expected on slopes no steeper than 1V:4H.
Rollover frequency is minimized when slopes are no steeper than 1V:3H.
Locate support beyond hinge point as shown to allow vehicle to stabilize before impact.

BREAKAWAY SUPPORT ON FILL SLOPE

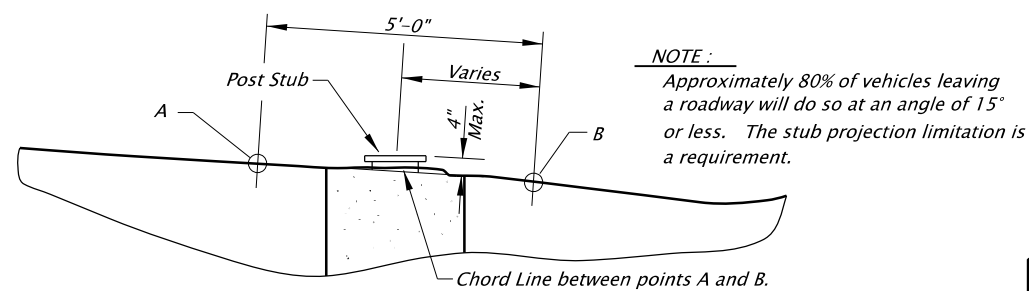


BREAKAWAY SUPPORT - PARTIAL ELEVATION

(Along possible paths of errant vehicles)



GORE AREA BREAKAWAY SUPPORT LOCATION



NOTE:
Approximately 80% of vehicles leaving a roadway will do so at an angle of 15° or less. The stub projection limitation is a requirement.

UNPROTECTED BREAKAWAY SUPPORT CLEARANCE DIAGRAM

Section perpendicular to assumed path of errant vehicle. (Most likely path is a 15° angle from adjacent traffic flow)

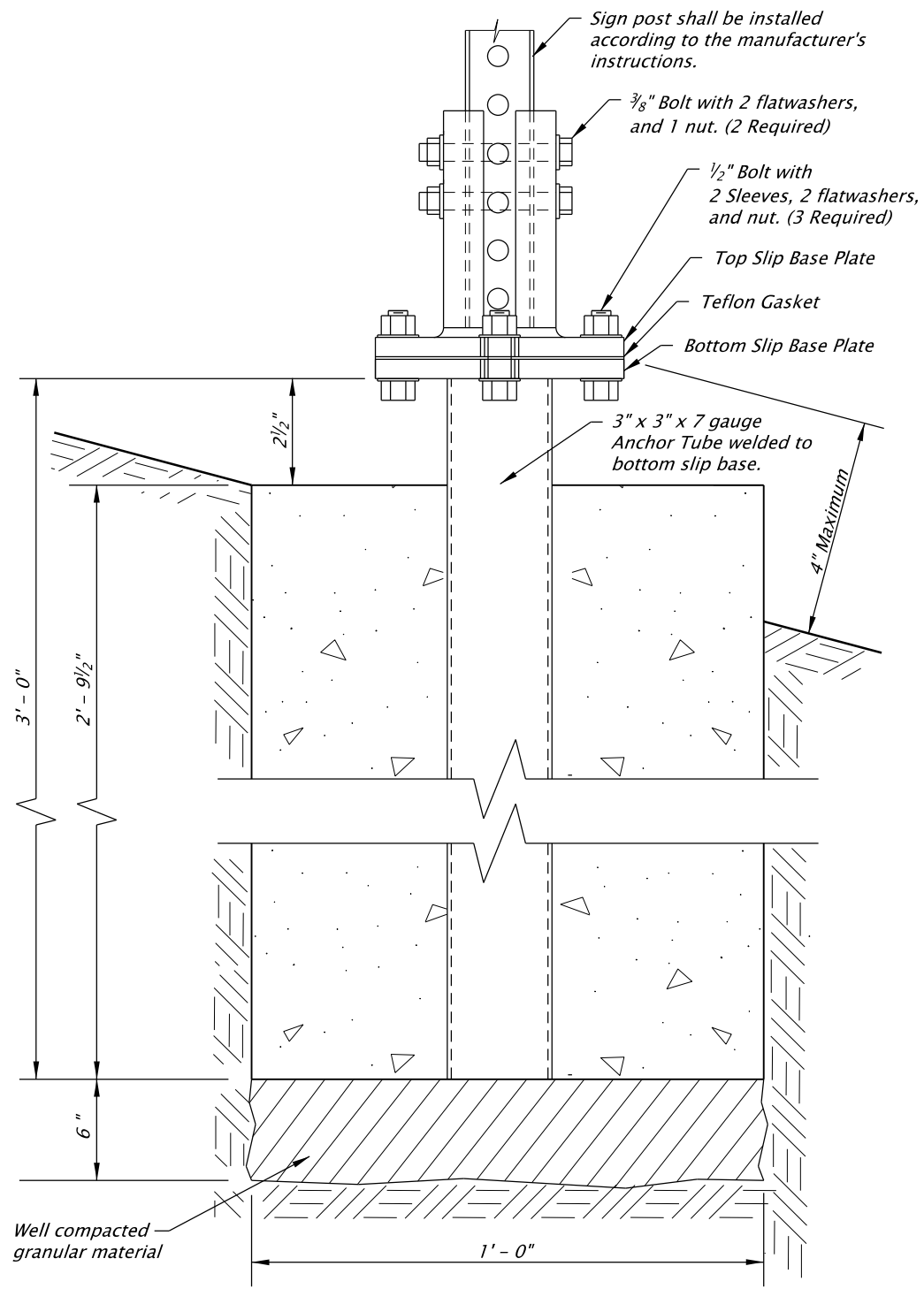
PLACEMENT OF UNPROTECTED BREAKAWAY SUPPORTS:

The location of unprotected breakaway supports with respect to the travel lane(s) and the roadside terrain and other geometric conditions over which the vehicle travels before impacting the support will affect the support's breakaway performance. Breakaway supports located in gore areas are particularly vulnerable to vehicle impacts. Breakaway supports located across tee intersections, at the end of lane drop or on the outside of horizontal curves are also likely to be struck. Locating breakaway supports in these areas should be avoided if possible. If the breakaway support must be located in these areas, locate them to produce an impact situation that is as forgiving as possible while assuring adequate recovery space beyond the support(s). Breakaway supports placed up on cut slopes generally result in a safer impact situation than for those placed down on fill slopes. The support placed on a cut slope will be lighter than a support placed on fill slope. The momentum of a vehicle traversing a cut slope will generally be less than that for a vehicle traversing a fill slope. A vehicle going up a cut slope is generally more stable and more easily redirected than a vehicle going down a fill slope. Placement of breakaway supports in or near ditches should be avoided. Breakaway supports should not be located near raised curbs or near the hinge point of the fill slope. Where possible, supports should be located behind established barriers. The guidelines contained herein should be used if possible. However, adjustments to the guidelines may be necessary because of right-of-way and/or other constraints. See TM200 requirements when signs are mounted on unprotected Breakaway Supports.

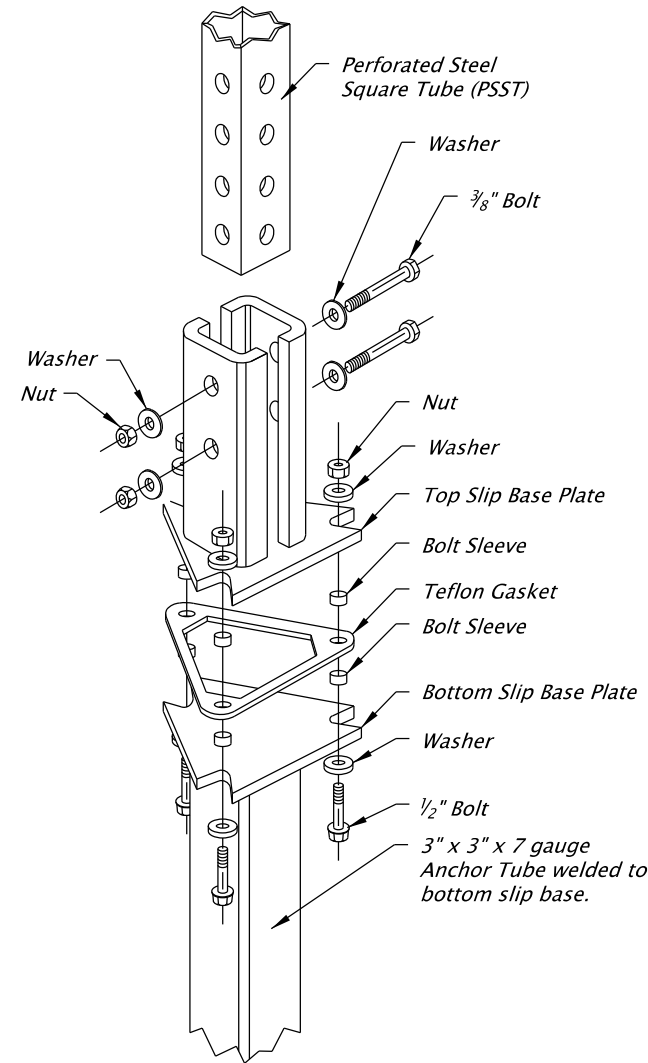
CALC. BOOK NO. _____		SDR DATE 06-JUL-2015	
NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications			
OREGON STANDARD DRAWINGS			
BREAKAWAY SIGN & LUMINAIRE SUPPORTS - SUPPORT LOCATION GUIDELINES			
2021			
DATE	REVISION DESCRIPTION		

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

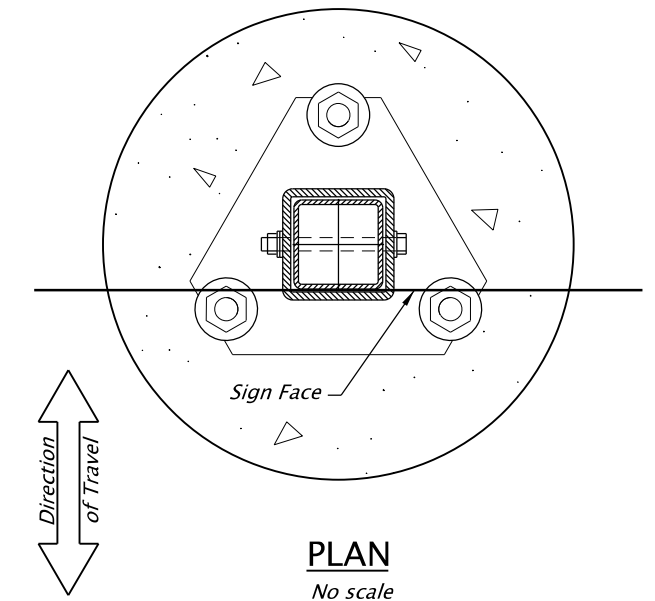
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SLIP BASE ELEVATION
No scale



SLIP BASE EXPLODED VIEW
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. Slip base 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. Material grade for base hardware connection shall be according to the manufacturer's recommendation and based on crash testing.
5. All slip bases shall be pre-assembled by the manufacturer and shall be installed according to the manufacturer's instructions.
6. Use slip bases listed on the ODOT Qualified products list or submit crash testing data, installation instructions, and unstamped working drawings according to 00150.35.
7. Slip base details shown are not for a specific manufacturer and are only shown to convey general pieces of a slip base system. Specific slip base material will be according to the manufacturer's documentation.

Accompanied by dwgs. TM681, TM687

CALC. BOOK NO. <u>5752</u>	SDR DATE <u>06-JAN-2012</u>											
<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>	NOTE: All material and workmanship shall be in accordance with the current Oregon Standard Specifications											
	OREGON STANDARD DRAWINGS PERFORATED STEEL SQUARE TUBE (PSST) SLIP BASE FOUNDATION 2021											
	<table border="1"> <thead> <tr> <th>DATE</th> <th>REVISION</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	DATE	REVISION	DESCRIPTION								
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