

#### DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING

150 Beavercreek Road Oregon City, OR 97045

	August	14,	2025
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BCC Agenda Date/Item:\_\_\_\_\_

Board of County Commissioners Clackamas County

Approval of a Public Improvement Contract with Knife River Corporation Northwest for pavement overlay and construction for the Johnson Creek Blvd Improvements Project. Contract Value is \$1,964,999.22 for 18 months. Funding is through the County Road Fund. No County General Funds are involved.

Previous Board Action/Review	05/22/2025: Approval of a C America for construction pha 09/05/2024: Approval of a R and purpose for Acquisition Property and Authorizing Go Actions for the Johnson Cree Maintenance) Improvements 4/20/2023: Approval of Engil Consor North America, Inc. of Improvements Project.	ase services. esolution Declaring the Pu of Right of Way, Easemen ood Faith Negotiations and ek Blvd (79th Place to End s Project. neering and Related Servi	Iblic Necessity ts and Fee Condemnation I of County ces Contract with
Performance	This project will provide strong	ng infrastructure.	
Clackamas			
Counsel Review	Yes	Procurement Review	Yes
Contact Person	Jordan Cools	Contact Phone	503-742-4654

**EXECUTIVE SUMMARY**: The County is utilizing County Road funds to implement roadway improvements between 79th Place and the end of county-maintained (ECM) portion of the road at the Clackamas County and Multnomah County line. Johnson Creek Boulevard is an arterial roadway with large volumes of vehicle traffic and the roadway pavement between 79th Place and ECM and on Bell Avenue between Johnson Creek Boulevard and Alberta Avenue is in need of rehabilitation. The roadway pavement will be resurfaced on these two streets to provide a safer traveling surface and preserve the pavement's structure. The project includes ADA curb ramp retrofits or replacements to be in compliance with ADA standards and to improve accessibility and safety for pedestrians. Signalized corners will be modified to meet ADA requirements for pedestrian push button reach; height and level landing and the project will also

upgrade bicycle detection at the Bell Avenue intersection and make a minor widening improvement to the median lane at Stanley Ave intersection to improve safety.

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The total construction contract cost is \$1,964,999.22 and will be paid through

County Road Funds. Construction is expected to be substantially completed by June 30, 2026 and the purchase order will expire December 31, 2026 to allow for plant establishment.

**PROCUREMENT PROCESS:** This project was advertised in accordance with ORS and LCRB Rules on May 20, 2025, Invitation to Bid 2025-48. Bids were publicly opened on June 18, 2025. The County received five (5) bids in response to the Invitation to Bid from Kodiak Pacific Construction Co; Westech Construction, Inc.; Kerr Contractors Oregon, LLC; Knife River Corporation – Northwest; and Carter & Company, Inc. The apparent lowest bid was from Knife River Corporation – Northwest with a total value of \$1,964,999.22. A review of the bids received led to a recommendation for a contract award to the apparent low bidder, Knife River Corporation – Northwest.

**RECOMMENDATION:** Staff respectfully recommends that the Board of County Commissioners approve Public Improvement Contract #1403 with Knife River Corporation – Northwest for the Johnson Creek Blvd (79th to ECM) Improvements Project.

Respectfully submitted,

Dan Johnson

Dan Johnson, Director Department of Transportation & Development



## CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

Contract #0000001403

This Public Improvement Contract (the "Contract") is made by and between the Clackamas County, a political subdivision of the State of Oregon ("Owner"), and **Knife River Corporation - Northwest** ("Contractor"), both collectively referred to as the "Parties". This Contract shall become effective on the date this Contract has been signed by all the Parties and shall expire upon completion the completion of all obligations under the terms of this Contract unless terminated earlier by the Parties.

Project Name: # 2025-48 Johnson Creek Blvd (79th Pl to ECM) Improvements Project

### 1. Contract Price, Contract Documents and Work.

The Contractor hereby agrees to perform all the work described in, and reasonably inferred from, the Contract Documents, as further defined below ("Work"). In consideration of the Contractor performing the Work in accordance with the terms of the Contract, the Owner agrees to pay the Contractor an amount not to exceed **One Million Nine Hundred Sixty-Four Nine Hundred Ninety-Nine Dollars and Twenty-Two Cents** (\$1,964,999.22) (the "Contract Price"). Payment will be made in accordance with the terms and conditions provided in the Contract Documents. The Contract Price is the amount contemplated by the Base Bid, as indicated in the accepted Bid. The Contract Price is the amount contemplated by the Base Bid, as indicated in the accepted Bid.

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

- 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 Johnson Creek Blvd (79th Pl to ECM) Improvements Project (the "Specifications"), together with the provisions of the Oregon Standard Specifications for Construction (2021) 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 Owner to exercise any rights and remedies available under this Contract including, but not limited to, termination for default.

#### 2. Representatives.

Contractor has named <u>Alex Brock</u> 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 <u>Jordan Cools</u> as	its
Authorized Representative in the administration of this Contract. The above-named individual shall be t	the
initial point of contact for matters related to Contract performance, payment, authorization, and to carry of the responsibilities of the Owner.	out

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:** Alex Brock shall be the Contractor's project executive, and will provide oversight and guidance throughout the project term.

**Project Manager**: <u>Austin Cooksey</u> shall be the Contractor's project manager and will participate in all meetings throughout the project term.

**Job Superintendent**: <u>Aaron Vohland</u> shall be the Contractor's on-site job superintendent throughout the project term.

**Project Engineer:** <u>Jordan Buttler</u> 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.

The Contractor agrees to complete the Work in accordance with the following key dates:

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

SUBSTANTIAL COMPLETION DATE: June 30, 2026

FINAL COMPLETION DATE: December 31, 2026

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 Owner's 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 Subsubcontractors 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.

The Contractor shall comply with all federal, state and local laws, regulation, executive orders and ordinances applicable to this Contract. Contractor represents and warrants that it has complied, and will continue to comply throughout the duration of this Contract and any extensions, with all tax laws of this state or any political subdivision of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318. Any violation of this section shall constitute a material breach of this Contract and shall entitle Owner 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 or applicable law

#### 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 Specifications, Contract Documents 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. The liquidated damages amount is not a penalty, but a reasonable estimate of the loss the Owner will suffer. Liquidated damages are set forth in the Contract Documents and may include the following:

- 11.1 15.0 percent of C divided by T as defined in this Section. per Calendar day past the Substantial Completion date, as set forth in section 00180.85 (b).
- 11.2 \$500 per 15 minutes, or for a portion of 15 minutes, per lane, as set forth in 00180.85. (c).
- 11.3 \$500 per 20 minutes, or a portion of 20 minutes, for stopping or holding traffic longer than 20 minutes, as set forth in 00180.85 (e).

- 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 Owner 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.
- **15. 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.

**In witness whereof**, Owner executes this Contract and the Contractor does execute the same as of the day and year first above written.

Contractor DATA:

Knife River Corporation- Northwest 32260 Old Highway 34 Tangent, Oregon 97389

Contractor CCB # 2101 Expiration Date: 8/10/2026

Oregon Business Registry # 068610-17 Entity Type: DBC

Payment information will be reported to the IRS under the name and taxpayer ID# provided by the Contractor. Information must be provided prior to contract approval. Information not matching IRS records could subject Contractor to 28 percent backup withholding.

State of Formation: Oregon

Knife River Corporation - Northwest	Clackamas County	
× Mmy Ingelie 7.18.25		
Authorized Signature Date	Chair	Date
Molly Hesseltine Assistant Secretary		
Name / Title Printed	Recording Secretary	
	Approved As To Form:	
	Amanda 1111	8/6/2025
	County Counsel	Date



# CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

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# CLACKAMAS COUNTY NOTICE OF PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

### INVITATION TO BID #2025-48 Johnson Creek Blvd (79th Pl to ECM) Improvements Project May 20, 2025

Clackamas County ("County") through its Board of County Commissioners is accepting sealed bids for the **Johnson Creek Blvd (79th Pl to ECM) Improvements Project** until **June 18, 2025, 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: <a href="https://oregonbuys.gov/bso/view/login/login.xhtml">https://oregonbuys.gov/bso/view/login/login.xhtml</a>, Document No.S-C01010-00013919.

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, <u>Bid Locker</u>. *Email submissions to Clackamas County email addresses will no longer be accepted.* 

- A. Completed proposal documents must arrive electronically via Bid Locker located at <a href="https://bidlocker.us/a/clackamascounty/BidLocker">https://bidlocker.us/a/clackamascounty/BidLocker</a>.
- 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 <a href="https://www.clackamas.us/how-to-bid-on-county-projects">https://www.clackamas.us/how-to-bid-on-county-projects</a>.

Engineers Estimate: 3,258,892.00

#### Contact Information

Procurement Process and Technical Questions: Tralee Whitley at <a href="https://doi.org/10.108/journal.org/">TWhitley@clackamas.us</a>

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 (ACP) or a combination of Miscellaneous Highway Appurtenances (MHA) and either Pavement Markings (PAVE) or Electrical (ELEC).

### **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 5, 2025 and amended on April 5, 2025, which can be downloaded at the following web address: <a href="http://www.oregon.gov/boli/WHD/PWR/Pages/pwr\_state.aspx">http://www.oregon.gov/boli/WHD/PWR/Pages/pwr\_state.aspx</a> 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: <a href="http://www.clackamas.us/code/documents/appendixc.pdf">http://www.clackamas.us/code/documents/appendixc.pdf</a>. 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: #2025-48 Johnson Creek Blvd (79th Pl to ECM) Improvements
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 & Oiling (ACP), or a combination of Miscellaneous Highway Appurtenances (MHA), and either Pavement Markings (PAVE) or Electrical (ELEC).
- 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. <a href="https://bidlocker.us/a/clackamascounty/BidLocker">https://bidlocker.us/a/clackamascounty/BidLocker</a>.

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
<a href="https://clackamascounty.zoom.us/j/83602613322">https://clackamascounty.zoom.us/j/83602613322</a>

Meeting ID: 836 0261 3322

One tap mobile

+14086380968,.83602613322# US (San Jose) 16694449171,.83602613322# US

Dial by your location

- +1 408 638 0968 US (San Jose)
- +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)
- +1 312 626 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
- +1 301 715 8592 US (Washington DC)
- +1 305 224 1968 US
- +1 309 205 3325 US

Meeting ID: 836 0261 3322

Find your local number: <a href="https://clackamascounty.zoom.us/u/kcxejWRItJ">https://clackamascounty.zoom.us/u/kcxejWRItJ</a>

\*\*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 <a href="https://bidlocker.us/a/clackamascounty/BidLocker">https://bidlocker.us/a/clackamascounty/BidLocker</a> 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: Knife River Corporation - Northwest To Project Name: # 2025-48 Johnson Creek Blvd (79th PI to ECM) Improvements Project



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)
ALTIC CONT.	gavatic
	ongret

PRIME CONTRACTOR SHALL DISCLOSE AND LIST <u>ALL</u> 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 <a href="https://bidlocker.us/a/clackamascounty/BidLocker">https://bidlocker.us/a/clackamascounty/BidLocker</a> within 2 hours of the BID/Quote Closing Date/Time.

LIST ALL SUBCONTRACTORS BELOW Use correct legal name of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	ME St	Certified elf-reporti BE/WBE/E ubcontrac eck box	ng ESB etor
Name ← Flagg♪			MBE	WBE	ESB
Address  City/St/Zip  Phone#  3-749-2  OCCB#	Jaggin	15.00		<b>P</b>	С
Name  Address  Box 40  City/St/Zip  Phone#  3-563-62  OCCB#  333	sphalt	47,514			
Name en Corporat  Address 156 Belts  City/St/Zip risburg, OR 97  Phone# 1-520-12  OCCB# 7090	(ectri)	₹4,563 Þ			
Name Address City/St/Zip Phone# OCCB#					

# CLACKAMAS COUNTY GOOD FAITH EFFORT M/W/ESB CONTACT / BIDS RECEIVED LOG (FORM 2)

Prime Contractor:

Knife River Corporation - Northwest

Project: # 2025-48 Johnson Creek Blvd (79th PI to ECM) Improvements Project

Prime Contractor must contact or endeavor to contact at least 3 M/W/ESB Subcontractors for each Division of Work. Prime Contractor shall record its contacts with M/W/ESB 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/W/ESB	Divisions of Work	Date Sollicitation	PHO	NE CONTACT		BID ACTIVIT Check Yes o			EJECTED BIDS received & not used)	
SUBCONTRACTOR	(Painting, electrical, landscaping, etc.)	Letter / Fax Sent	Date of Call	Person Receiving Call	Will Bid	Bld Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	Notes
gn Quality	Laggin	19/2	V12/2	hell	× 'es	es F No	☐ Yes ☐ No			
+ Flaggir	Jaggin -	V9/1	V <sub>12/2</sub>	Clauria	<b>≫</b> 68	T Yes	Yes			
	aggir			Chule.	□ No Yes	o Yes	☐ No ☐ Yes			
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ing Electri	Qectri)	<b>√</b> 9/	√12/2	oft Voicema:	☐ Yes	Yes	☐ Yes			
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Alligan Elect.	lectri/	5/9/	<u>\12/2</u>	ift Voicema	I No	₩ No	厂 No			
					☐ Yes ☐ No	Yes No	Г Yes Г No			

SRINDING COMPANY FOR THIS SCOPE OF

Clackamas County GFE (2/2023)



# CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

### **BID BOND**

Project Name: # 2025-48 Johnson Creek Blvd (79th Pl to ECM) Improvements Project

We,	Knife River Corporation - Northwest	as "Princ	cipal,"		
	(Name of Principal)		•		
and	Liberty Mutual Insurance Company	. ar	. M.	A Corpor	ation.
and.	(Name of Surety)			оогрог	ado.,
ourse	orized to transact Surety business elves, our respective heirs, executo kamas County ("Obligee") the sum of	ors, administrators	ırety," hereb , successor	by jointly and sets and assigns to)	verally bind o pay unto
	Ten Percent of Amount Bid			do	llars.
into a as ma perfor prose bond between	I, THEREFORE, if the Obligee shall a Contract with the Obligee in accorda ay be specified in the bidding or Contract and for the cution thereof, or in the event of the for bonds, if the Principal shall pay to been the amount specified in said bid accontract with another party to perform	nce with the terms act Documents with e prompt payment failure of the Princi, the Obligee the dift and such larger an	of such bid, and some of labor are some of labor are some of the sound of the sound for which one of the sound for which the sound for which sound for the sound	and give such bor ufficient surety for nd material furnis such Contract and to exceed the per ich the Obligee m	nd or bonds the faithful thed in the digive such talty hereof ay in good
IN W	TITNESS WHEREOF, we have cause prized legal representatives this5th	ed this instrument	to be execu	ited and sealed b	oy our duly
cipal:	Knife River Corporation - Northwest	Surety: Liber	rty Mutual Inst	irance Company	_
×V	Molly Hesselline	_ By: Attorney-In-Fa	celey	Mug	Jal INSU
	Assistant Secretary  // Official Capacity	Haley Pflug	Name		— ( 1912
st:X	Jelly I H. J	8400 Normandale			-
	Corporation Secretary	Dia annimator MA			
	Jeffrey R. Steyaert Assistant Secretary	Bloomington, MN	State	Zip	
		952-806-2398		952-842-6871	

## **Surety Acknowledgment**

State of	Minnesota	1
		} ss.
County of	Hennepin	3

On this 5th day of June 2025, before me personally came Haley Pflug, to me known, who being by me duly sworn, did depose and say that she is the Attorney-in-Fact of

<u>Liberty Mutual Insurance Company</u> described in and which executed the above instrument; that she knows the seal of said corporation; that the seal affixed to said instruments is such corporate seal, that it was so affixed by order of the Board of Directors of said corporation, and that she signed her name to it by like order.

Kelly We Eyler Notary Public

KELLY NICOLE ENGHAUSER Notary Public State of Minnesota My Commission Expires January 31, 2026



### POWER OF ATTORNEY

Liberty Mutual Insurance Company The Ohio Casualty Insurance Company West American Insurance Company

Certificate No: 8213854 - 190003

/or Power of Attorney 0-832-8240 or email

61

For bon please

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Blake S. Bohlig; Brian D. Carpenter, Charles Draper, Kelly Nicole Enghauser, Heather R. Goedtel; Erik T. Gunkel; Michelle Halter, Jessica Hecker, Kathryn E. Kade; Nicole Langer; Craig Olmstead; Haley Pflug; Laurie Pflug; Michelle Ward; Sara Whitfield

all of the city of	Bloomington	state of	MN	each individually if there be more than one named, its true and lawful attorney-in-fact to make
execute, seal, ackno	wledge and deliver, for and	on its behalf as sur	ety and as its act a	and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance
of these presents ar	nd shall be as binding upor	the Companies as	if they have been	n duly signed by the president and attested by the secretary of the Companies in their own proper
persons.				

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 17th day of April 2025





Liberty Mutual Insurance Company The Ohio Casualty Insurance Company West American Insurance Company

By:

Nathan J. Zangerle, Assistant Secretary

State of PENNSYLVANIA County of MONTGOMERY

(POA) verification inquiries, HOSUR@libertymutual.com , 2025 before me personally appeared Nathan J. Zangerle, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



ommonwealth of Pennsylvania - Notary Sea Teresa Pastella, Notary Public Montgomery County My commission expires March 28, 2029 Commission number 1126044

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

and/or Power Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety bond as any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Nathan J. Zangerle, Assistant Secretary to appoint such attomeys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this







Renee C. Llewellyn, Assistant Secretary



### **CLACKAMAS COUNTY** PUBLIC IMPROVEMENT CONTRACT

### **BID FORM**

PROJECT: # 2025-48 Johnson Creek Blvd (79th Pl to ECM) Improvements Project BID CLOSING: June 18, 2025, 2:00 PM, Pacific Time BID OPENING: June 18, 2025, 2:05 PM, Pacific Time

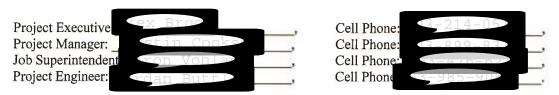
M:	Knife River Corporation - Northwest	
	Bidder's Name (must be full legal name, not ABN/DBA)	
	https://bidlocker.us/a/clackamascounty/BidLocker	
	Bidder is (check one of the following and insert information requested):	
	a. An individual; or	
-	b. A partnership registered under the laws of the State 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	
_		
á	of the State of;  and authorized to do business in the State of Oregon hereby proposes to furnish all materi and perform all work hereinafter indicated for the above project in strict accordance with t Documents for the Basic Bid as follows:	
1	of the State of; and authorized to do business in the State of Oregon hereby proposes to furnish all materiand perform all work hereinafter indicated for the above project in strict accordance with the state of Oregon hereby proposes to furnish all materiand perform all work hereinafter indicated for the above project in strict accordance with the state of Oregon hereby proposes to furnish all materiand performs all work hereinafter indicated for the above project in strict accordance with the state of Oregon hereby proposes to furnish all materiand performs all work hereinafter indicated for the above project in strict accordance with the state of Oregon hereby proposes to furnish all materiand performs all work hereinafter indicated for the above project in strict accordance with the state of Oregon hereby proposes to furnish all materiand performs all work hereinafter indicated for the above project in strict accordance with the state of Oregon hereby proposes to furnish all materiand performs all work hereinafter indicated for the above project in strict accordance with the state of Oregon hereby proposes to furnish the state of Oregon hereby proposes the oregon hereby p	the (
Nine	of the State of, and authorized to do business in the State of Oregon hereby proposes to furnish all materiand perform all work hereinafter indicated for the above project in strict accordance with to Documents for the Basic Bid as follows:	the (
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- rk relating to the following Alternate(s) as designated in the Specifications: N/A
- 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.
- The work shall be completed within the time stipulated and specified in 00180.50(h) of the Special Provisions for Johnson Creek Blvd (79th PL to ECM) Improvements Project.

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:
(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
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.
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 Liberty Mutual Fire Ins Ce., Policy No. WATH D, and that Contractor shall submit Certificates of Insurance as required.

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

14.



- 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 FIR	RM	Knife River Corporation - Northwest
ADDRESS		32760 Old Highway 34
		Tangent, OR 97389
TELEPHONE	NO	541-918-5100
EMAIL	Au	istin. Cooksey@ Kniferiver.com
SIGNATURE	1)	N/A Sole Individual
or	2)	N/A Partner
or	3)	Authorized Officer or Employee of Corporation
		Mofly Hesseltine Assistant Secretary

END OF BID

### **BID SCHEDULE**

### Johnson Creek Boulevard (79th PI to ECM) Improvements Project

2/28/2025

ITEM	SPEC	DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL PRICE
HARA	SSMENT	PREVENTION AND EXTRA WORK AS AUTHORIZED				
1	00180	WORKPLACE HARASSMENT PREVENTION PLAN	LS	1	\$2,100.00	\$2,100.00
2	00197	EXTRA WORK AS AUTHORIZED	AA	1	\$150,000.00	\$150,000.00
TEMP	ORARY F	EATURES AND APPURTENANCES	1			
3	00210	MOBILIZATION	LS	1	\$150,000.00	\$150,000.00
4	00221	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	LS	1	\$150,000.00	\$150,000.00
5	00222	TEMPORARY PROJECT INFORMATION SIGNS	SQFT	210	\$15.90	\$3,339.00
6	00222	PORTABLE CHANGEABLE MESSAGE SIGNS	EACH	7	\$4,760.00	\$33,320.00
7	00225	STRIPE REMOVAL	FOOT	_	\$3.65	\$547.50
8	00225	LEGEND REMOVAL	SQFT	_	\$5.50	\$550.00
9	00280	EROSION CONTROL	LS	1	\$1,500.00	\$1,500.00
10	00280	SEDIMENT FENCE	FOOT	200	\$3.70	\$740.00
11	00280	INLET PROTECTION, TYPE 3	EACH	_	\$89.50	\$4,833.00
12	00280	INLET PROTECTION, TYPE 4	EACH	_	\$104.00	\$1,144.00
13		INLET PROTECTION, TYPE 10	EACH	+	\$136.00	\$272.00
14		INLET PROTECTION, TYPE 11	EACH	_	\$188.00	\$376.00
15		POLLUTION CONTROL PLAN	LS	1	\$2,700.00	\$2,700.00
ROAD		IF DEED HON GONTHOLF EAR	Lo	<u> </u>	\$2,700.00	\$2,700.00
16		CONSTRUCTION SURVEY WORK	Ls	1	[dan con on]	#20 COO OO
17		REMOVAL OF SURFACINGS	SQYD		\$30,600.00 \$16.00	\$30,600.00
18		CLEARING AND GRUBBING	LS	1	\$23,000.00	\$11,696.00
19		GENERAL EXCAVATION	CY	50	\$93.00	\$23,000.00 \$4,650.00
20		12 INCH SUBGRADE STABILIZATION	SQYD		\$80.00	\$15,760.00
21		SUBGRADE GEOTEXTILE	SQYD		\$2.00	\$558.00
		SEWERS	JUGIE	210	Ų2.00	
22		CONCRETE INLETS, TYPE G-2	EACH	2	\$4,900.00	\$9,800.00
23		REPLACE OR INSTALL MONUMENT BOXES	EACH		\$1,600.00	\$3,200.00
24		ADJUSTING BOXES	EACH		\$308.00	\$616.00
25	00490	ADJUSTING WATER VALVE AND GAS VALVE BOXES	EACH		\$308.00	\$308.00
26	00490	ADJUSTING INLETS	EACH		\$950.00	\$19,950.00
27	00490	MINOR ADJUSTMENT OF MANHOLES, STORM	EACH	4	\$2,900.00	\$11,600.00
28	00490	MINOR ADJUSTMENT OF MANHOLES, SANITARY SEWER	EACH	6	\$2,900.00	\$17,400.00
29		MAJOR ADJUSTMENT OF MANHOLES	EACH	1	\$5,600.00	\$5,600.00
BRIDG						
30	15	BRIDGE DECK COLD PLANE PAVEMENT REMOVAL, 2 INCHES DEEP	SQYD	460	\$3.60	\$1,656.00
31		BRIDGE APPROACH SLAB COLD PLANE PAVEMENT REMOVAL, 2 INCHES DEEP	SQYD	256	\$3.60	\$921.60
32		BRIDGE JOINT REHABILITATION	LS	1	\$11,900.00	\$11,900.00
BASES				A 440	VII, 200.00	\$11,500.00
33		COLD PLANE PAVEMENT REMOVAL, 2 INCHES DEEP	SQYD	44,801	\$3.65	¢162 522 65
34		AGGREGATE SHOULDERS	TON	190	\$77.00	\$163,523.65 \$14,630.00
35		3/4 INCH - 0 AGGREGATE BASE	TON	240	\$67.00	\$16,080.00
	NG SURF		TON	240	707.00	7 20 / 000 . 00
36		LEVEL 3, 1/2 INCH, PG 64-22 ACP MIXTURE	TON	920	\$95.00	\$87,400.00
37		LEVEL 3, 1/2 INCH, PG 64-22 ACP MIXTURE	TON	5,220	\$98.00	\$511,560.00
38			_			\$110,210.00
30	00748	20 INCH ASPHALT CONCRETE PAVEMENT REPAIR	SQYD	1,070	\$103.00	Ş11U, Δ1U.UU

### **BID SCHEDULE**

### Johnson Creek Boulevard (79th PI to ECM) Improvements Project

2/28/2025

ITEM	SPEC	DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL PRICE
39	00749	EXTRA FOR ASPHALT APPROACHES	EACH	20	\$1,540.00	\$30,800.00
40	00749	EXTRA FOR ASPHALT WALKS	SQFT	360	\$12.10	\$4,356.00
41	00759	CONCRETE CURBS, CURB AND GUTTER	FOOT	564	\$43.80	\$24,703.20
42	00759	CONCRETE CURBS, STANDARD CURB (GRADE CORRECTION CURB)	FOOT	159	\$39.50	\$6,280.50
43	00759	SIDEWALK THICKENED EDGE	FOOT	30	\$54.80	\$1,644.00
44	00759	CONCRETE DRIVEWAYS	SQFT	33	\$25.40	\$838.20
45	00759	EXTRA FOR NEW CURB RAMPS	EACH	16	\$781.00	\$12,496.00
46	00759	CONCRETE WALKS	SQFT	3,260	\$11.10	\$36,186.00
47	00759	TRUNCATED DOMES ON NEW SURFACES	SQFT	260	\$37.60	\$9,776.00
48	00759	DETECTABLE GUIDE STRIPS, YELLOW	SQFT	91	\$29.19	\$2,656.29
PERM	ANENT T	RAFFIC SAFETY AND GUIDANCE DEVICES				
49	00855	BI-DIRECTIONAL YELLOW TYPE IAR MARKERS, RECESSED	EACH	326	\$17.90	\$5,835.40
50	00855	MONO-DIRECTIONAL WHITE TYPE IAR MARKERS, RECESSED	EACH	35	\$17.90	\$626.50
51	00856	TUFF CURB TRAFFIC SEPARATOR CURBS	EACH	11	\$651.00	\$7,161.00
52	00858	RUBBER SPEED BUMPS	EACH	18	\$515.00	\$9,270.00
53	00865	THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED	FOOT	52,824	\$1.45	\$76,594.80
54	00865	DRIBBLE LINE, SPRAYED, SURFACE	FOOT	19,379	\$0.22	\$4,263.38
55	00867	PAVEMENT LEGEND, TYPE B-HS: ARROWS	EACH	18	\$407.00	\$7,326.00
56	00867	PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL	EACH	10	\$407.00	\$4,070.00
57	00867	PAVEMENT LEGEND, TYPE B-HS: "STOP AHEAD"	EACH	1	\$2,550.00	\$2,550.00
58	00867	PAVEMENT BAR, TYPE B-HS	SQFT	1,548	\$17.90	\$27,709.20
59	00868	PAVEMENT LEGEND, TYPE B-HS: GREEN BICYCLE "WAIT HERE"	EACH	2	\$922.00	\$1,844.00
60	00868	GREEN BICYCLE LANE, PREFORMED THERMOPLASTIC FILM	SQFT	160	\$21.70	\$3,472.00
PERMA	MENT T	RAFFIC CONTROL AND ILLUMINATION SYSTEMS				
61	00902	CROSSWALK CLOSURE SUPPORTS	EACH	4	\$2,500.00	\$10,000.00
62	00905	REMOVE AND REINSTALL EXISTING SIGNS	LS	1	\$3,500.00	\$3,500.00
63	00905	REMOVE AND REINSTALL EXISTING SIGNS ON NEW SIGN SUPPORT	LS	1	\$3,500.00	\$3,500.00
64	00990	TRAFFIC SIGNAL MODIFICATION, JOHNSON CREEK BLVD AT PCP	LS	1	\$15,000.00	\$15,000.00
65	HIIGHT	TRAFFIC SIGNAL MODIFICATION, JOHNSON CREEK BLVD AT FLAVEL	LS	1	\$2,800.00	\$2,800.00
66		TRAFFIC SIGNAL MODIFICATION, JOHNSON CREEK BLVD AT BELL	LS	1	\$68,900.00	\$68,900.00
RIGHT-	OF-WAY	DEVELOPMENT AND CONTROL				
67		ROADSIDE RESTORATION	LS	1	\$3,650.00	\$3,650.00
68	01030	ROADSIDE RESTORATION, PORTLAND PARKS & REC	LS	1	\$3,150.00	\$3,150.00

PROPOSED COST BID SCHEDULE \$1,961,961.00

(Numerically)

PROPOSED COST BID SCHEDULE One Million Nine hundred Sixty One Thousand Nine Hundred Sixty One Dollars (Written in Words)

COMPANY NAME Knife River Corporation - Northwest

AUTHORIZED SIGNATURE

Assistant Secretary

# FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM PROJECT: #2025-48

### Johnson Creek Blvd (79th Pl to ECM) Improvements Project

### BID OPENING: June 18, 2025, 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 <a href="https://bidlocker.us/a/clackamascounty/BidLocker">https://bidlocker.us/a/clackamascounty/BidLocker</a>.
- 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 <a href="https://www.clackamas.us/how-to-bid-on-county-projects">https://www.clackamas.us/how-to-bid-on-county-projects</a>.

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.

SURCONTRACTOR NAME	DOLLAR VALUE	CATEGORY OF WORK
+ Flaggir	5.00 / A	Jaggin
an Western Comp	C 1 A	Kindin
ken Corporati	34,505 1	+CLITC=
§		
79-		
· ·		

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: Knif	e River Corpo	ration - Northwest		
Bidder Signature:	Army	maurin	Phone #_541 - 919	3-5100
	Molly Hessellme	v		



### CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

### PERFORMANCE BOND

Bond No.: 19005928	39/108300731		
Solicitation: #2025-	48		
Project Name: Johns	son Creek Blvd (79th	Pl to ECM) Improvements Proje	ct
Liberty Mutual Insurance Company	(Surety #1)	Bond Amount No. 1:	<b>\$</b> 982,499.61
Travelers Casualty**	(Surety #2)*	Bond Amount No. 2:*	\$ 982,499.61
*If using multiple sure **and Surety Compar		Total Penal Sum of Bond:	\$1,964,999.22

We, Knife River Corporation - Northwest as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto Clackamas County, the sum of (Total Penal Sum of Bond) One Million Nine Hundred Sixty Four Thousand Nine Hundred Ninety Nine & 22/100 (Provided, that we the Sureties bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety); and

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	17th	day of _	July <b>20</b> 25 .
			PRINCIPAL: Knife River Corporation - Northwest  By:   Molly Hesseltine Assistant Secretary  Official Capacity  Attest:
			Liberty Mutual Insurance Company &  SURETY: Travelers Casualty and Surety Company of  [Add signatures for each if using multiple bonds]

1912

America

[Power-of-Attorney must accompany each bond]

Name

BY ATTORNEY-IN-FACT:

Haley Pflug

Signature
8400 Normandale Lake Blvd., Suite 1700

Address
Bloomington, MN 55437

City State Zip
952-806-2398 / 952-842-6871

Phone Fax





### CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

#### PAYMENT BOND

Bond No.: 19005	9289/108300/31		
Solicitation: #202	25-48		
Project Name: Jo	hnson Creek Blvd (79t	th Pl to ECM) Improvements Proj	ect
Liberty Mutual	And the same of the supplemental to the second state of the supplemental to the suppl	-	
Insurance Company	(Surety #1)	Bond Amount No. 1:	<b>\$</b> 982,499.61
Travelers Casualty*		Bond Amount No. 2:*	<b>\$</b> 982,499.61
* If using multip		Total Penal Sum of Bond:	\$ 1,964,999.22
**and Surety Com	pany of America		a
We,	Knife River Corporation	- Northwest as Princ	ipal, and the above ide

We, Knife River Corporation - Northwest, as Principal, and the above identified Surety(ies), authorized to transact surety business in Oregon, as Surety, hereby jointly and severally bind ourselves, our respective heirs, executors, administrators, successors and assigns firmly by these presents to pay unto Clackamas County, the sum of (Total Penal Sum of Bond) One Million Nine Hundred Sixty Four Thousand Nine Hundred Ninety Nine & 22/100 (Provided, that we the Sureties bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sum only as is set forth opposite the name of such Surety); and

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, 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 schedule of contract prices which are set forth in the Contract and any attachments, and all authorized modifications of the Contract which increase the amount of the work, or the cost of the Contract, or constitute authorized extensions of time for performance of the Contract, notice of any such modifications hereby being waived by the Surety:

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 and any duly authorized modifications that are made, upon the terms set forth therein, and within the time prescribed therein, or as extended therein 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 claim for direct or indirect damages 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 Contractor or its subcontractors, and shall promptly pay all persons supplying labor, materials or both to the Principal or its subcontractors for prosecution of the work provided in the Contract; and shall promptly pay all contributions due the State Industrial Accident Fund and the State Unemployment Compensation Fund from the Principal or its subcontractors in connection with the performance of the Contract; and shall pay over to the Oregon Department of Revenue all sums required to be deducted and retained from the wages of employees of the Principal and its subcontractors pursuant to ORS 316.167, and

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:

SEALED BY	OUR DULY	AUTHORIZED	LEGAL REPRE	SENTATIVES:	
Dated this	17th	day of	July ·	<b>20</b> 25 .	
e.			PRINCIPAL  By:   Molly Hesseltin  Assistant Secre  Attest:   Jeffrey Fl  Assistant	Official Capacity Stevaert Corporation Secretary	
			SURETY: Tra	perty Mutual Insurance Company & avelers Casualty and Surety Company of ess for each if using multiple bonds]	INSUR
		~	BY ATTORNI [Power-of-Atto	EY-IN-FACT: orney must accompany each bond]	1912 0
				Haley Pflug Name	OHON THE NEW YORK
			8400 Norn	Signature mandale Lake Blvd., Suite 1700	MO SURET COMMINION OF THE PROPERTY OF THE PROP
			Bloomin	Address agton, MN 55437	HARTFORD, ON CONN.

State

Fax

952-842-6871

Zip

City

Phone

952-806-2398

### **Surety Acknowledgment**

State of	Minnesota	}
		} ss
County of	Hennepin	}

On this <u>17th</u> day of <u>July 2025</u>, before me personally came <u>Haley Pflug</u>, to me known, who being by me duly sworn, did depose and say that she is the Attorney-in-Fact of <u>Liberty Mutual Insurance Company & Travelers Casualty and Surety Company of America</u> described in and which executed the above instrument; that she knows the seal of said corporation; that the seal affixed to said instruments is such corporate seal, that it was so affixed by order of the Board of Directors of said corporation, and that she signed her name to it by like order.

Notary Public

KELLY NICOLE ENGHAUSER
Notary Public
State of Minnesota
My Commission Expires
January 31, 2026



### **POWER OF ATTORNEY**

Liberty Mutual Insurance Company The Ohio Casualty Insurance Company West American Insurance Company

Certificate No: 8213854 - 190003

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Blake S. Bohlig; Brian D. Carpenter, Charles Draper, Kelly Nicole Enghauser, Heather R. Goedtel, Erik T. Gunkel, Michelle Halter, Jessica Hecker, Kathryn E. Kade, Nicole Langer; Craig Olmstead; Haley Pflug; Laurie Pflug; Michelle Ward; Sara Whitfield

each individually if there be more than one named, its true and lawful attorney-in-fact to make, MN Bloomington execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 17th day of April

INSUR





Liberty Mutual Insurance Company The Ohio Casualty Insurance Company West American Insurance Company

Nathan J. Zangerle, Assistant Secretary

State of PENNSYLVANIA County of MONTGOMERY ss

\_\_\_\_, 2025 before me personally appeared Nathan J. Zangerle, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance April 17th day of Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



Commonwealth of Pennsylvania - Notary Seal Teresa Pastella, Notary Public Montgomery County My commission expires March 28, 2029 Commission number 1126044 Member, Pennsylvania Association of Notaries

By: Jeresa Pastella Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV - OFFICERS: Section 12. Power of Attorney.

Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety a any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall Ø have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such For bon please instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation - The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Nathan J. Zangerle, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization - By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 17th day of







Renee C. Llewellyn, Assistant Secretary

LMS-12873 LMIC OCIC WAIC Multi Co 02/24

Attorney (POA) verification inquiries, or email HOSUR@libertymutual.com nd/or Power of 610-832-8240

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### Travelers Casualty and Surety Company of America Travelers Casualty and Surety Company St. Paul Fire and Marine Insurance Company

#### POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint Haley Pflug

BLOOMINGTON

Minnesota

Min

acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this 21st day of April, 2021.







State of Connecticut

City of Hartford ss.

On this the 21st day of April, 2021, before me personally appeared Robert L. Raney, who acknowledged himself to be the Senior Vice President of each of the Companies, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of said Companies by himself as a duly authorized officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission expires the 30th day of June, 2026



Anna P. Nowik, Notary Public

Robert L. Raney, Senior Vice President

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of each of the Companies, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary of each of the Companies, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 17th day of July







Kevin E. Hughes, Assistant Secretary



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

PROJECT: #2025-48 Johnson Creek Blvd (79th Pl to ECM) Improvements Project

#### **Project Background:**

The County is implementing roadway improvements on Johnson Creek Blvd between 79th Place and End of County Maintenance (ECM). These improvements will provide improved accessibility for pedestrians and will preserve the roadway through pavement rehabilitation. Existing curb ramps will be retrofitted or replaced to comply with ADA standards. The signalized corners will be modified to meet pedestrian push button ADA requirements. The roadway pavement along Johnson Creek Blvd between 79th Pl and ECM and along Bell Ave between Johnson Creek Blvd and Alberta Ave will be resurfaced for improved safety, comfort, and roadway preservation.

**Engineers Estimate: \$3,258,892.00** 

#### **Key Dates:**

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

Substantial Completion: June 30, 2026 Final Completion: December 31, 2026

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:

- PLANS FOR JOHNSON CREEK BLVD (79<sup>th</sup> PL TO ECM) IMPROVEMENTS PROJECT (123 pages)
- SPECIAL PROVISIONS FOR JOHNSON CREEK BLVD (79<sup>th</sup> PL TO ECM) IMPROVEMENTS PROJECT (76 pages)
- Field Explorations and Laboratory Testing Excerpt from Johnson Creek Boulevard Improvements Pavement Report (31 pages)
- Portland Parks & Recreation Non-Park Use of Park Property (NPUP) Permits General Requirements for Permitees (41 pages)

## **CLACKAMAS COUNTY** DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

## JOHNSON CREEK BLVD (79TH PL TO ECM) **IMPROVEMENTS PROJECT**

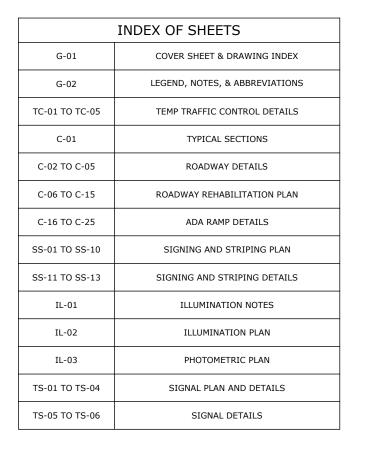
FEBRUARY 2025

## FINAL DESIGN

**CLACKAMAS COUNTY** 

VICINITY MAP

1" = 3000'



#### SITE SE DUKE ST **BEGINNING OF PROJECT** STA 1+00 SE FLAVEL ST CLACKAMAS COUNTY SE BELL AVE STA 110+48 MULTNOMAH COUNTY SE CLATSOP ST CLACKAMAS COUNTY SE ALBERTA AVE **END OF PROJECT** STA 93+13 205 213 SE KING RD SE KING RD Know what's below.

**OREGON** 



(79th PI to E IMPROVEMENTS

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREER
ORFGON CITY. OR 97045

DRAFTED BY: JWO/NMH

G-01

PORTLAND, OREGON 97258 P 503.225.9010

Call before you dig.

ATTENTION!

SE BELL AVE

STA 100+00

OREGON LAW REQUIRES YOU TO FOLLOW RULES ADOPTED BY THE OREGON UTILITY NOTIFICATION CENTER. THOSE RULES ARE SET FORTH IN OAR 952-001-0010 THROUGH OAR 952-001-0100. YOU MAY OBTAIN COPIES OF THE RULES FROM THE CENTER OR ANSWERS TO QUESTIONS ABOUT THE RULES BY CALLING (503) 232-1987.

#### **GENERAL NOTES:**

- INSTALL TEN PROJECT SIGNS PRIOR TO COMMENCING WITH WORK. MOUNT SIGN TO SINGLE WOOD SUPPORT. INSTALL AT THE BEGINNING AND END OF THE PROJECT LIMITS, NEAR THE INTERSECTIONS OF SE STANLEY AVE, SE 55TH AVE, ALBERTA AVE, SE 70TH AVE, AND AT EACH SIGNALIZED INTERSECTION. COORDINATE FINAL LOCATION WITH INSPECTOR. SEE PROJECT SIGN DETAIL, THIS SHEET.
- PRIOR TO MAINLINE PAVING OPERATIONS, THE ENGINEER WILL DIRECT LOCATIONS OF ASPHALT CONCRETE PAVEMENT REPAIR, AND SUBGRADE STABILIZATION (INCLUDING ANY ADDITIONAL PAVEMENT RESTORATION NOT SHOWN ON PLANS). . WORK TO BE COMPLETED PRIOR TO MAINLINE COLD PLANE PAVEMENT REMOVAL. CONTRACTOR TO INCORPORATE APPROPRIATE TIME AND RESOURCES IN THE PROJECT SCHEDULE TO COMPLETE THIS WORK (WITHOUT ADJUSTMENT TO OVERALL DURATION OF PROJECT).
- DURING MILLING AND PAVING OPERATIONS, OR OTHER CONSTRUCTION WORK LIMITING BUSINESS ACCESS, INSTALL BUSINESS ACCESS SIGN ON TYPE II BARRICADE AS DIRECTED ON SHEETS C-06, C-07, AND C-11. SEE BUSINESS ACCESS SIGN DETAIL, THIS SHEET.

#### **VERTICAL DATUM AND BASIS OF BEARINGS:**

ALL PLAN INFORMATION IS BASED ON A HYBRID OF AERIAL DRONE SURVEY AND FIELD RUN SURVEY AT CORNERS WITH ADA

VERTICAL DATUM: ELEVATIONS ARE BASED ON NGS BENCHMARK PID RD1491. LOCATED NEAR THE SW CORNER OF THE INTERSECTION OF MILWAUKIE EXPRESSWAY (OR224) AND SE WEBSTER ROAD. ELEVATION = 31.131 FEET

BASIS OF BEARINGS: STATE PLANE OREGON NORTH 3601 NAD83(2011).

#### **RIGHT-OF-WAY REPRESENTATION:**

ALL LINE-WORK SHOWN RELATING PROPERTY BOUNDARY TO SCAN DATA IS FOR GRAPHICAL REPRESENTATION ONLY. ANY APPARENT DISCREPANCIES BETWEEN SAID DATA WILL REQUIRE FIELD VERIFICATION THROUGH A PROPER RIGHT-OF-WAY

#### **EROSION CONTROL NOTES**

- COMPLY WITH CLACKAMAS COUNTY WATER ENVIRONMENT SERVICES (WES) EROSION CONTROL STANDARDS.
- REFER TO ROADWAY REHABILITATION PLANS FOR INLET PROTECTION PROVIDE 200 LF ALLOWANCE FOR SEDIMENT FENCE.

#### TRAFFIC CONTROL/PHASING NOTES:

CONTRACTOR SHALL FOLLOW AN APPROVED PHASING PLAN THAT MEETS THE MINIMUM REQUIREMENTS AS SET FORTH IN THE CONTRACT DOCUMENTS, ANY PROPOSED PHASING THAT CONFLICTS WITH REQUIREMENTS NOTED IN THE CONTRACT DOCUMENTS, SHALL BE APPROVED IN WRITING BY THE COUNTY PRIOR TO BEGINNING WORK

#### **ODOT STANDARD DRAWINGS** (EFFECTIVE DATE: 06/01/2024 - 11/30/2024):

• BR165	• RD909	<ul><li>TM460</li></ul>	<ul> <li>TM820</li> </ul>
• RD335	• RD910	<ul><li>TM462</li></ul>	• TM821
• RD336	• RD912	<ul><li>TM466</li></ul>	• TM822
• RD338	• RD920	• TM467	• TM840
<ul> <li>RD356</li> </ul>	• RD922	<ul> <li>TM470</li> </ul>	<ul><li>TM841</li></ul>
• RD360	• RD930	• TM471	<ul><li>TM842</li></ul>
• RD364	• RD936	• TM472	• TM843
• RD365	• RD950	<ul><li>TM482</li></ul>	<ul><li>TM844</li></ul>
• RD376	• RD952	<ul><li>TM485</li></ul>	<ul><li>TM845</li></ul>
• RD602	• RD960	<ul><li>TM500</li></ul>	• TM851
•RD610	• RD1010	<ul> <li>TM501</li> </ul>	<ul> <li>TM852</li> </ul>
• RD722	• RD1015	<ul><li>TM502</li></ul>	<ul><li>TM853</li></ul>
• RD900	• RD1040	<ul> <li>TM503</li> </ul>	<ul> <li>TM855</li> </ul>
• RD902	• TM450	• TM531	
• RD904	<ul><li>TM453</li></ul>	<ul><li>TM800</li></ul>	
• RD905	• TM457	• TM810	

#### **COUNTY STANDARD DRAWINGS:**

• D600 • M150 •S150

**LEGEND** 

SANITARY SEWER	— — ss— —
STORM DRAIN	— — SD— —
UTILITY REMOVAL	
WATERLINE	— — w— —
OVERHEAD UTILITY	OVHD
UNDERGROUND POWER	— —E— —
FIBER OPTIC	FO
GAS	— — G— —
CABLE TELEVISION	CATV
TELEPHONE	— т— —
RIGHT-OF-WAY	
PROPERTY LINE	
WOOD FENCE	
CHAIN LINK FENCE	$-\bigcirc$
STANDARD CURB	
CURB AND GUTTER	

AC PAVEMENT SIDEWALK CAP/PLUG 0 **CLEANOUT** 0 MANHOLE CATCH BASIN/FIELD INLET WATER VALVE

GAS VALVE FIRE HYDRANT ASSEMBLY WATER METER Ш MATI BOX LIGHT POST -0-UTILITY POLE GUY WIRE/ANCHOR  $\bowtie$ POWER JUNCTION BOX POWER ELECTRICAL TRANSFORMER  $\triangle$ 

Р FLECTRICAL VAULT (1) UNKNOWN UTILITY MANHOLE STREET LIGHT/LIGHT POLE Ø TSB TRAFFIC SIGNAL BOX TRAFFIC SIGNAL POLE

С

COMMUNICATIONS VAULT TELEPHONE RISER **BOLLARD** BENCHMARK

FOUND MONUMENT TREE DECIDUOUS TREE CONIFEROUS SAWCUT

ACP REPAIR AREA LANDING AREA TRUNCATED DOMES **GUIDE STRIPS** SHOULDER ROCK

ROAD WIDENING AREA

**PROPOSED** 

**EXISTING** 

m

TSB

 $\boxtimes \times \boxtimes$ 

ME MIN MON

MONUMENT MUTCD

**ABBREVIATIONS** 

ABANDON

**PAVEMENT** 

**ADJACENT** 

**AVENUE** 

AGGREGATE

BOULEVARD

CENTERLINE C/L CENTERLINE
CLACKCO CLACKAMAS COUNTY

CONCRETE

COURT DEPARTMENT

DRIVE

EACH

DRAWING

DRIVEWAY

END OF COUNTY

FEDERAL HIGHWAY

ADMINISTRATION

MATCH EXISTING

MAINTENANCE

**ELEVATION** 

EXISTING

**EXPOSURE** 

FLOW LINE

MAXIMUM

HORIZONTAL

COORDINATED

DESCRIPTION

BETWEEN

BACK OF CURB

ASPHALTIC CONCRETE

ASPHALTIC CONCRETE

AMERICANS WITH

DISABILITIES ACT

BEGIN CURB RETURN

CONSTRUCT/CONSTRUCTION

ABAN

ACP

ADA

AD1

AGG

AVE

BCR

BOC

BTWN

COMM

CONC

CONST

DEPT

DESC

DET

DWG

DWY

ECM

**EL\ELEV** 

**EXIST** 

FHWA

HORIZ

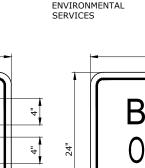
MAX

EΑ

COOR'D

MANUAL ON UNIFORM

MINIMUM



TRAFFIC CONTROL DEVICES

PEDESTRIAN CHANNELIZING

PORTABLE CHANGEABLE

PERFORMANCE GRADE

NON-PARK USE PERMIT

OREGON DEPARTMENT

OF TRANSPORTATION

POINT OF CURVE

MESSAGE SIGN

RIGHT-OF-WAY

SEWER CLEAN OUT

RECREATION

SOUTH EAST

REQUIRED

SIDEWALK

SHEET

STREET

STATION

STANDARD

THROUGH

**TYPICAL** 

**VARIES** 

WITH

WATER

SOUTH WEST

SQUARE YARD

TRAFFIC CONTROL PLAN

TEMPORARY PEDESTRIAN

THICK/THICKNESS

ACCESS ROUTE

PAVEMENT

NORTH EAST

NOT TO SCALE

NORTH WEST

NUMBER

NO

NPUP

NTS

ODOT

PCD

**PCMS** 

**PVMT** 

R/W

REQ'D

SCO SE

SHT

STA

STD

SW

SY

TCP

THK

THRII

**TPAR** 

VAR

WES

#### **PAVING SIGN**

**PAVING** 

**SUMMER 2025** 

**CLACKAMAS** 

#### SIGN NOTES:

- SIGNS TO BE ORANGE BACKGROUND WITH BLACK LETTERING AND BORDERS.
- 2. TEXT FONT TO BE FHWA C.
- COUNTY LOGO TO COMPLY WITH SPECIFICATIONS IN THE COUNTY BRAND GUIDE: HTTP://WEB1.CLACKAMAS.US/PGA/LOGO.HTML#GUIDE.

### PROJECT SIGN DETAIL



### ACCESS SIGN

#### SIGN NOTES

- SIGNS TO BE BLUE BACKGROUND WITH WHITE
- 2. TEXT FONT TO BE FHWA C.

P 503.225.9010

BUSINESS ACCESS SIGN DETAIL





RENEWS 12-31-25

REVIATIONS SLVD GEND, NOTES, & ABBREV JOHNSON CREEK BLV (79th PI to ECM) IMPROVEMENTS PROJE

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DRAFTED BY:
JWO/NMH
CHECKED BY: DESIGNED BY: NMH/MDE

NO. G-02

• C140

• U250A U250B

• S960 • U200

#### TCP AND TPAR APPLICATIONS BY ADA CORNER

RAMP LOCATION	CORNER NUMBER	QUADRANT	TCP	TPAR
PRECISION CAST PARTS.	1	SE	ONE LANE CLOSURE. 2-LANE, 2-WAY (SINGLE FLAGGED BI-DIRECTIONAL LANE). SEE ODOT STD DWG TM855 FOR DETAILS. PROVIDE PRECISION CAST PARTS ADVANCE NOTIFICATION OF NO LESS THAN 2 WEEKS PRIOR TO TEMPORARY IMPACTS OR CLOSURES OF ACCESS POINTS.	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTRIAN ACCESS. COORDINATE WITH PROPERTY OWNER (PRECISION CAST PARTS) TO DETOUR PEDESTRIANS TO CROSS AT EAST PRECISION CAST PARTS CROSSING. ENSURE CONSTRUCTION IS PHASED SO EAST CROSSING REMAINS OPEN WHILE WEST CROSSING IS CLOSED.
WESTLOT	2	NE	ONE LANE CLOSURE. 2—LANE, 2—WAY (SINGLE FLAGGED BI—DIRECTIONAL LANE). SEE ODOT STD DWG TM855 FOR DETAILS. PROVIDE PRECISION CAST PARTS ADVANCE NOTIFICATION OF NO LESS THAN 2 WEEKS PRIOR TO TEMPORARY IMPACTS OR CLOSURES OF ACCESS POINTS.	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTRIAN ACCESS. COORDINATE WITH PROPERTY OWNER (PRECISION CAST PARTS) TO DETOUR PEDESTRIANS TO CROSS AT EAST PRECISION CAST PARTS CROSSING. ENSURE CONSTRUCTION IS PHASED SO EAST CROSSING REMAINS OPEN WHILE WEST CROSSING IS CLOSED.
PRECISION CAST PARTS,	1	SE	ONE LANE CLOSURE. 2—LANE, 2—WAY (SINGLE FLAGGED BI—DIRECTIONAL LANE). SEE ODOT STD DWG TM855 FOR DETAILS. PROVIDE PRECISION CAST PARTS ADVANCE NOTIFICATION OF NO LESS THAN 2 WEEKS PRIOR TO TEMPORARY IMPACTS OR CLOSURES OF ACCESS POINTS.	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTRIAN ACCESS. COORDINATE WITH PROPERTY OWNER (PRECISION CAST PARTS) TO DETOUR PEDESTRIANS TO CROSS AT WEST PRECISION CAST PARTS CROSSING. ENSURE CONSTRUCTION IS PHASED SO WEST CROSSING REMAINS OPEN WHILE EAST CROSSING IS CLOSED.
EAST LOT	2	NE	ONE LANE CLOSURE. 2—LANE, 2—WAY (SINGLE FLAGGED BI—DIRECTIONAL LANE). SEE ODOT STD DWG TM855 FOR DETAILS. PROVIDE PRECISION CAST PARTS ADVANCE NOTIFICATION OF NO LESS THAN 2 WEEKS PRIOR TO TEMPORARY IMPACTS OR CLOSURES OF ACCESS POINTS.	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTRIAN ACCESS. COORDINATE WITH PROPERTY OWNER (PRECISION CAST PARTS) TO DETOUR PEDESTRIANS TO CROSS AT WEST PRECISION CAST PARTS CROSSING. ENSURE CONSTRUCTION IS PHASED SO WEST CROSSING REMAINS OPEN WHILE EAST CROSSING IS CLOSED.
OF FLAVEL DR	2	NE	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE NEAR SIDE (LANE SHIFT). SEE ODOT STD DWG TM842 FOR DETAILS, SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TC IS IN PLACE DURING WORK HOURS.	UTILIZE TYPICAL DETAIL ON SHEET TC-02 AND MODIFY AS NEEDED. USE APPROPRIATE TEMPORARY TRAFFIC CONTROL WARNING SIGNS WHERE IT IS NECESSARY TO CLOSE THE BIKE LANE.
SE FLAVEL DR	3	NW	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE FAR SIDE (LANE SHIFT). SEE ODOT STD DWG TM842 FOR DETAILS. SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TC IS IN PLACE DURING WORK HOURS.	UTILIZE TYPICAL DETAIL ON SHEET TC-02 AND MODIFY AS NEEDED. USE THE LEFT TURN MEDIAN CLOSURE AS SHOWN ON TM842 IF NECESSARY TO PROVIDE ADEQUATE LANE WIDTHS. USE APPROPRIATE TEMPORARY TRAFFIC CONTROL WARNING SIGNS WHERE IT IS NECESSARY TO CLOSE THE BIKE LANE.
	1	SE	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE FAR SIDE (LANE SHIFT). SEE ODOT STD DWG TM842 FOR DETAILS. SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TC IS IN PLACE DURING WORK HOURS.	UTILIZE TYPICAL DETAIL ON SHEET TC-02 AND MODIFY AS NEEDED. USE THE LEFT TURN MEDIAN CLOSURE AS SHOWN ON TM842 IF NECESSARY TO PROVIDE ADEQUATE LANE WIDTHS. USE APPROPRIATE TEMPORARY TRAFFIC CONTROL WARNING SIGNS WHERE IT IS NECESSARY TO CLOSE THE BIKE LANE.
SE BELL AVE	2	NE	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE NEAR SIDE (LANE SHIFT). SEE ODOT STD DWG TM842 FOR DETAILS. SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TC IS IN PLACE DURING WORK HOURS.	CONSTRUCT IN MULTIPLE PHASES TO MAINTAIN ACCESS TO SPRINGWATER CORRIDOR AND PROVIDE TPAR BEHIND WORK ZONE. SEE DETAIL ON SHEETS TC-03 AND TC-04.
SE BELL AVE	3	NW	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE FAR SIDE (LANE SHIFT). SEE ODOT STD DWG TM842 FOR DETAILS. SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TC IS IN PLACE DURING WORK HOURS.	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTRIAN ACCESS. PHASE CONSTRUCTION SO THESE RAMPS ARE OPEN TO PEDESTRIAN ACCESS DURING CONSTRUCTION OF CORNERS 2 AND 4 AT SE BELL AVE.
	4	SW	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE NEAR SIDE (LANE SHIFT). SEE ODOT STD DWG TM842 FOR DETAILS. SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TC IS IN PLACE DURING WORK HOURS.	CONSTRUCT IN MULTIPLE PHASES TO MAINTAIN ACCESS TO SPRINGWATER CORRIDOR AND PROVIDE TPAR BEHIND WORK ZONE. SEE DETAIL ON SHEETS TC-03 AND TC-04.
SE 70TH AVE	1	SE	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE NEAR SIDE (LANE SHIFT)	UTILIZE TYPICAL DETAIL ON SHEET TC-02 AND MODIFY AS NEEDED. USE MEDIAN FOR THRU TRAFFIC IF NECESSARY TO PROVIDE ADEQUATE LANE WIDTHS. USE APPROPRIATE TEMPORARY TRAFFIC CONTROL WARNING SIGNS WHERE IT IS NECESSARY TO CLOSE THE BIKE LANE. NO PEDESTRIAN ACCESS ROUTE REQUIRED ON SE 70TH AVE.
SE 74TH AVE	3	NW	2-LANE, 2-WAY ROADWAY WITH SHOULDER CLOSURE (IF NECESSARY, USE LANE SHIFT TO PROVIDE 11 FT MINIMUM LANE WIDTHS). SEE ODOT STD DWG TM841 FOR DETAILS.	UTILIZE TYPICAL DETAIL ON SHEET TC-02 AND MODIFY AS NEEDED. USE MEDIAN FOR THRU TRAFFIC IF NECESSARY TO PROVIDE ADEQUATE LANE WIDTHS. USE APPROPRIATE TEMPORARY TRAFFIC CONTROL WARNING SIGNS WHERE IT IS NECESSARY TO CLOSE THE BIKE LANE. NO PEDESTRIAN ACCESS ROUTE REQUIRED ON SE 74TH AVE.

# of Record for the electronic file if an aumentic occurrent is required or authentifiely is in question. OREGON OREGON OUR BER 12. POUGLNS RENEWS 12-31-25

EMP TRAFFIC CONTROL DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT TEMP

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045



DESIGNED BY:
NMH/MDE
DRAFTED BY:
JWO/NMH
CHECKED BY:

REVISIONS

NO. DATE:

TC-01

#### **NOTES:**

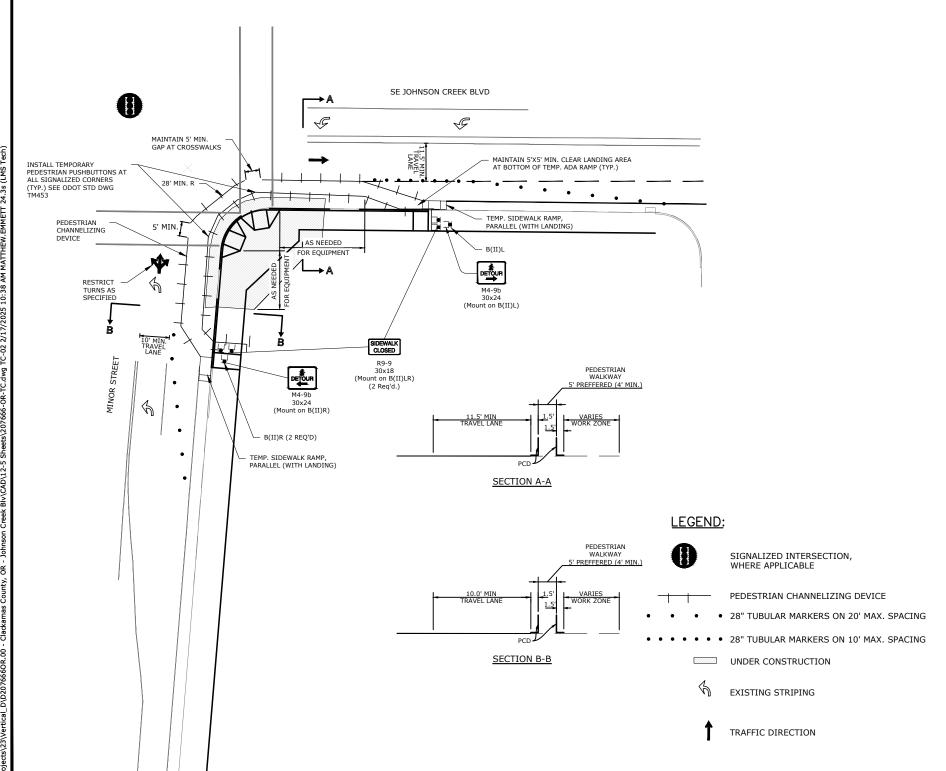
- DETAILED DESIGN OF MAINLINE AND INTERSECTION TRAFFIC CONTROL TEMPORARY PEDESTRIAN ACCESSIBLE ROUTE (TPAR) TO FOLLOW ODOT TRAFFIC CONTROL PLANS DESIGN MANUAL. REFER TO SPECIFICATIONS FOR REQUIREMENTS.

  2. SUBMIT TRAFFIC CONTROL PLANS TO THE COUNTY FOR APPROVAL PRIOR TO
- BEGINNING WORK.
- WORK WILL BE LIMITED TO ONE CORNER AT A TIME PER INTERSECTION. OBTAIN APPROVAL FROM THE COUNTY FOR ADDITIONAL WORK ZONES AT AN INTERSECTION. THE ABOVE ARE SUGGESTED LOCATION APPLICATIONS OF TPAR OPTIONS, ALONG
- WITH ADDITIONAL PROVISIONS AND REQUIREMENTS. ALTERNATE TPAR PLANS MAY BE USED. ALL TPAR PLANS MUST BE APPROVED BY THE ENGINEER. IF NECESSARY, USE TEMPORARY PUSHBUTTONS TO MAINTAIN PEDESTRIAN ACCESS TO CROSSWALKS. SIGNAL RECALL WILL NOT BE PERMITTED CROSSING JOHNSON
- CREEK BLVD. REFER TO SPECIFICATIONS FOR REQUIREMENTS. REFER TO SPECIFICATIONS FOR SIGNAL SHUT-OFF AND WORK HOUR RESTRICTIONS.



## TEMPORARY PEDESTRIAN ACCESS ROUTE PLANS TYPICAL CORNER BYPASS DETOUR



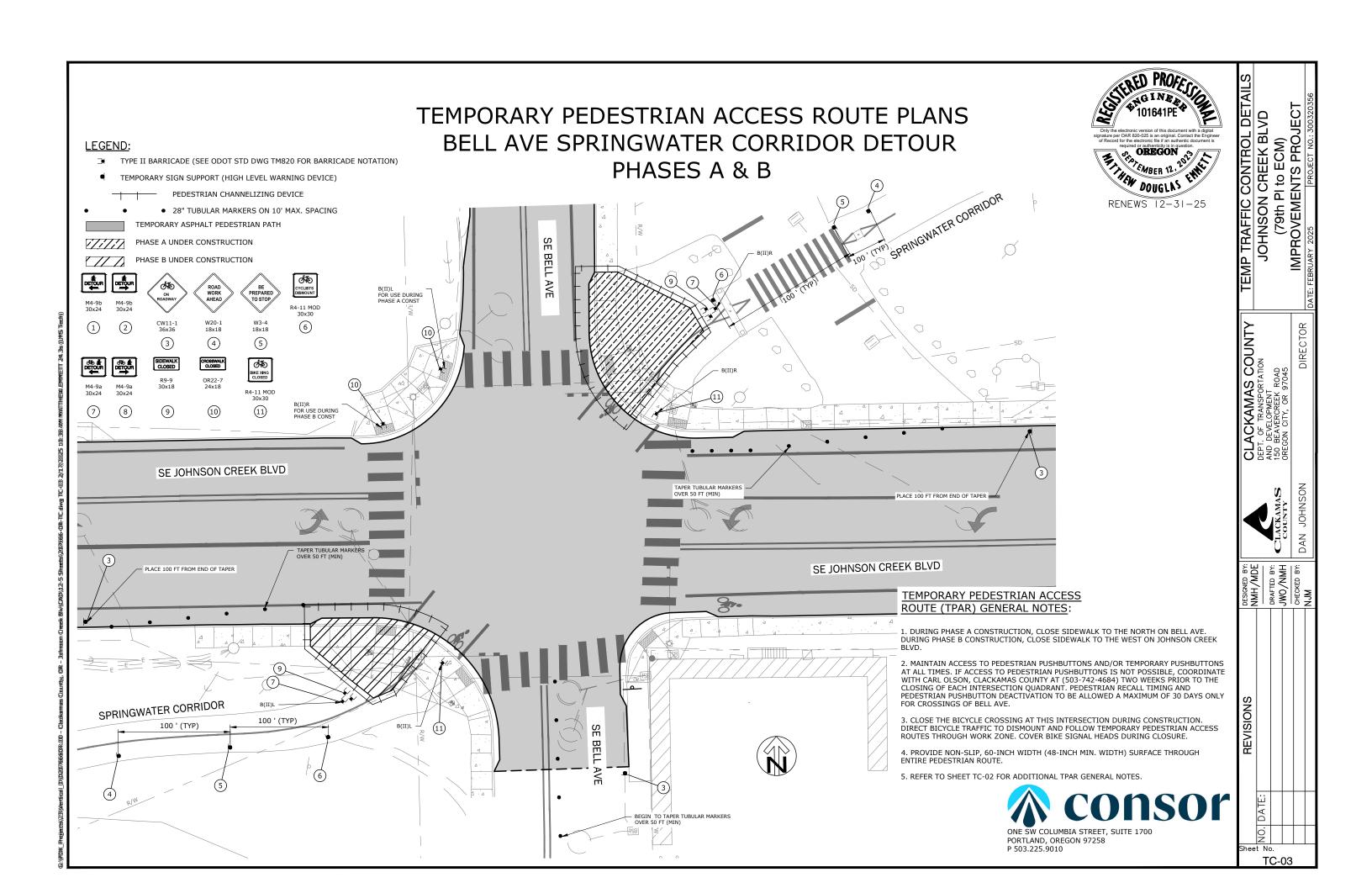


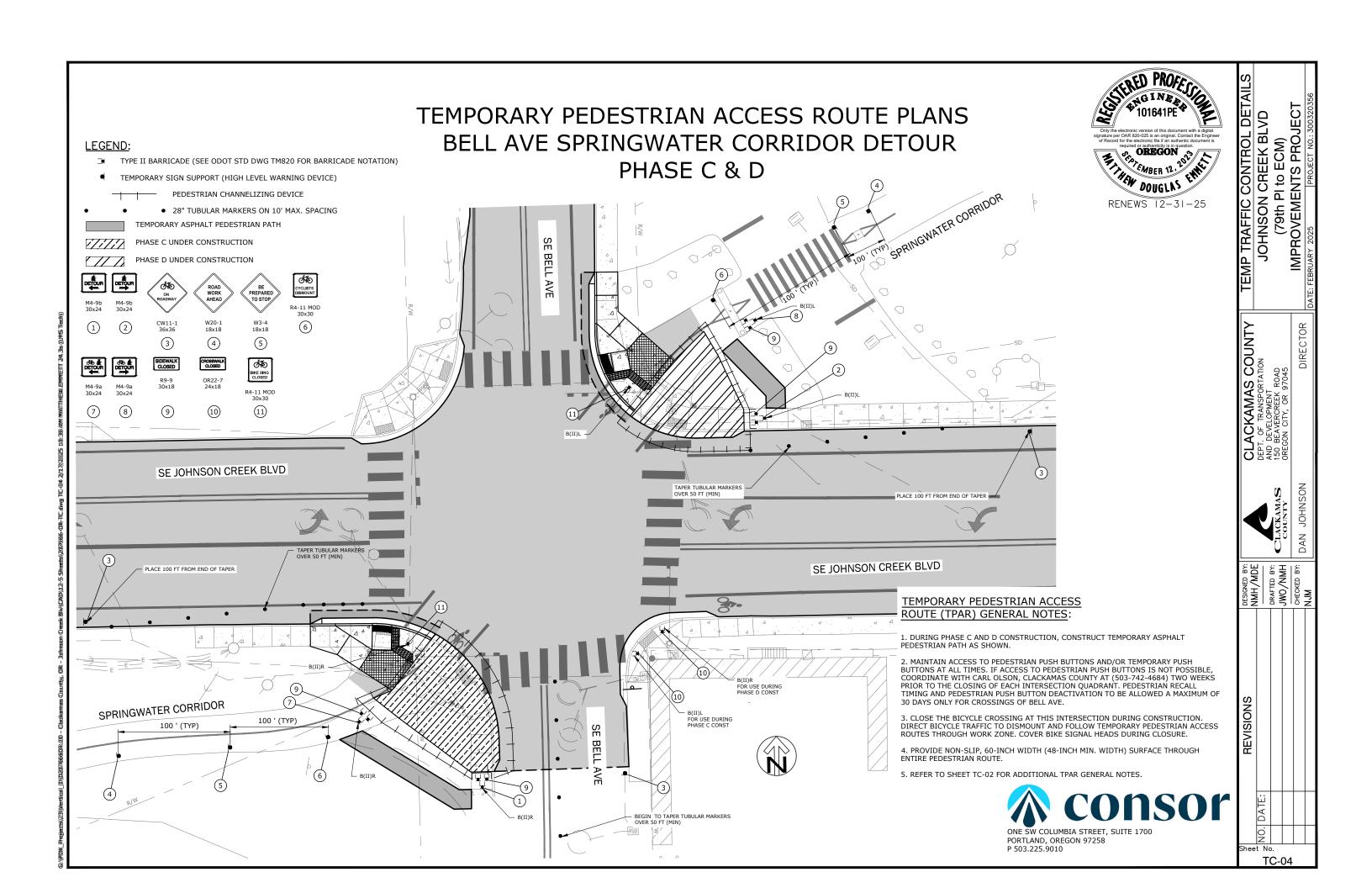
## TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) GENERAL NOTES:

- 1. FOR USE AT CORNERS WITHOUT ROW OR PUE AVAILABLE FOR TEMP. PEDESTRIAN ROUTING, OR WHEN SPACE WITHIN ROW OR POE IS INSUFFICIENT. ADAPT LAYOUT AS NEEDED AT EACH CORNER TO FACILITATE CONSTRUCTION AND CLOSED TRAFFIC LANES
- 2. NOTIFY TRIMET 5 DAYS PRIOR TO WORK AND COORDINATE WITH TRIMET TO TEMPORARILY CLOSE OR RELOCATE BUS STOPS AS NECESSARY.
- 3. ADJUST TRAFFIC CONTROL SET-UP AS NECESSARY TO MAINTAIN DRIVEWAY ACCESS. IF PROPERTY HAS MULTIPLE ACCESSES, COORDINATE WITH OWNER TO CLOSE A SINGLE DRIVEWAY ACCESS AS NECESSARY.
- 4. MAINTAIN ACCESS TO PEDESTRAIN PUSHBUTTONS AND/OR TEMPORARY PUSHBUTTONS AT ALL TIMES.
- 5. CONTRACTOR TO PROVIDE DETAILED PEDESTRIAN TRAFFIC CONTROL PLANS FOR CURB RAMP AND SIDEWALK CLOSURES AS A PART OF THE OVERALL PROJECT TRAFFIC CONTROL PLANS. SEE TC-01 THROUGH TC-04, ODOT STANDARD DRAWINGS, AND THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 6. WHEN CLOSING OR RELOCATING CROSSWALKS OR OTHER PEDESTRIAN FACILITIES PROVIDE ADA COMPLIANT FACILITIES. INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES BY PROVIDING TEMPORARY PEDESTRIAN PUSHBUTTONS AND ADEQUATE SLOPE TRANSITIONS AND SURFACING.
- 7. PROVIDE NON-SLIP, 60-INCH WIDTH (48-INCH MIN. WIDTH) SURFACE THROUGH ENTIRE PEDESTRIAN ROUTE.
- 8. ONLY PEDESTRIAN TRAFFIC CONTROL DEVICES ARE SHOWN WITHIN THESE PLANS. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC.
- 9. MINIMIZE PEDESTRIAN OUT-OF-DIRECTION TRAVEL. MAXIMUM ALLOWED OUT-OF-DIRECTION TRAVEL IS 1,000 FEET.
- 10. PROVIDE LANE CLOSURES PER ODOT STD. DRGS. TM840, TM841, TM842 & TM843.
- 11. CLACKAMAS COUNTY SHALL APPROVE ALL LANE CLOSURES PRIOR TO IMPLEMENTATION.
- 12. RESTORE ALL TPAR SURFACES TO THEIR ORIGINAL CONDITION AT THE COMPLETION OF CONSTRUCTION ACTIVITIES.
- 13. SEE TRAFFIC SIGNAL GENERAL NOTES ON SHEET TS-01 FOR TRAFFIC SIGNAL REQUIREMENTS.
- 14. FURNISH AND INSTALL PCMS 14 CALENDAR DAYS PRIOR TO LANE CLOSURES. SEE THE PROJECT SPECIFICATIONS AND SHEET TC-05 FOR ADDITIONAL INFORMATION.

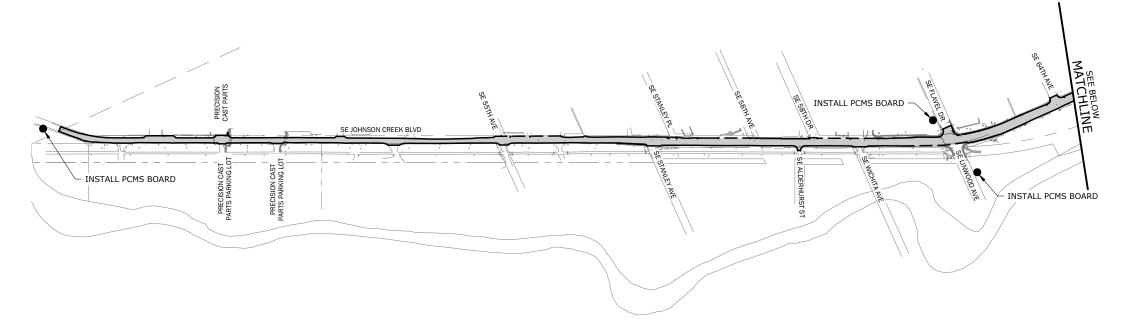


EMP TRAFFIC CONTROL DETA JOHNSON CREEK BLVD (79th PI to ECM) IMPROVEMENTS PROJECT CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045  $\overline{\Box}$ DRAFTED BY:
JWO/NMH
CHECKED BY:





## PORTABLE CHANGEABLE MESSAGE BOARD LOCATIONS



PLAN SCALE: 1"=500'



EMP TRAFFIC CONTROL DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREK ROAD
OREGON CITY, OR 97045

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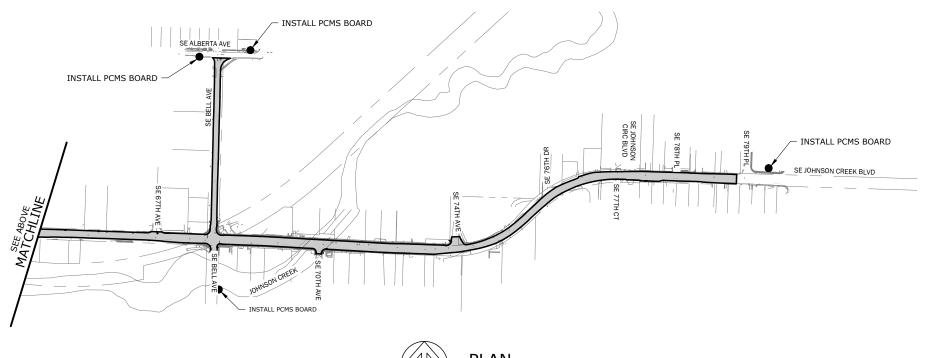
REVISIONS

NO. DATE:

TC-05

#### **GENERAL NOTES:**

- 1. FURNISH AND INSTALL PCMS 14 CALENDAR DAYS PRIOR TO LANE CLOSURES. SEE THE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 2. PRIOR TO INSTALLING, CONFIRM LOCATION OF PCMS WITH CLACKCO.





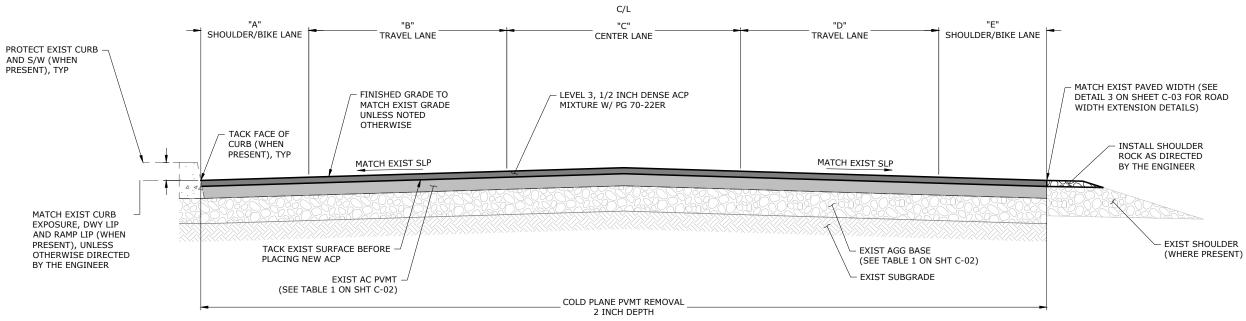
PORTLAND, OREGON 97258 P 503.225.9010

	TYPICAL SECTION WIDTHS						
BEGIN STA.	END STA.	COLD PLANE REMOVAL DEPTH	"A"	"B"	"C"	"D"	"E"
STA. 1+30.00	STA. 20+00.00	2"	2.0'	11.0'	0.0'	11.0'	2.0'
STA. 20+00.00	STA. 23+99.66	2"	0.0'	10.0' - 11.0' *	0.0'	10.0' - 11.0' *	0.0'
STA. 23+99.66	STA. 30+18.01	2"	2.0' - 5.5' *	11.0'	0.0'	11.0'	2.0'
STA. 30+18.01	STA. 31+98.17	2"	5.5'	11.0'	0.0' - 10.0' **	11.0'	2.0'
STA. 31+98.17	STA. 32+45.16	2"	5.5'	11.0'	10.0' - 13.0' **	11.0'	2.0'
STA. 32+45.16	STA. 45+01.05	2"	0.0' - 5.5' *	11.0'	13.0'	11.0'	2.0'
STA. 45+01.05	STA. 48+20.39	2"	5.5'	11.0'	13.0'	11.0'	2.0'
STA. 48+20.39	STA. 48+62.21	2"	6.0'	11.0'	13.0'	11.0'	6.0'
STA. 48+62.21	STA. 51+59.21	2"	6.0'	11.0'	13.0'	11.0'	6.0'
STA. 51+59.21	STA. 61+91.29	2"	2.0' - 6.0' *	11.0'	13.0'	11.0'	0.0' - 6.0' *
STA. 61+91.29	STA. 68+30.46	2"	6.0'	11.0'	13.0'	11.0'	6.0'
STA. 68+30.46	STA. 69+62.90	0"	6.0'	11.0'	13.0'	11.0'	6.0'
STA. 69+93.64	STA. 72+83.74	2"	6.0'	11.0'	13.0'	11.0'	6.0'
STA. 72+83.74	STA. 75+87.57	2"	6.0' - 11.0' *	11.0'	13.0' - 0.0' **	11.0'	6.0' - 12.0' *
STA. 75+87.57	STA. 85+76.31	2"	6.0' - 11.0' *	11.0'	0.0'	11.0'	6.0' - 12.0' *
STA. 85+76.31	STA. 91+03.36	2"	6.0'	11.0'	0.0' - 13.0' **	11.0'	12.0' - 6.0' *
STA. 91+03.36	STA. 92+23.36	2"	6.0'	11.0'	13.0'	11.0'	6.0'
STA. 100+20.00	STA. 111+27.77	2"	0.0'	12.0'	0.0'	12.0'	0.0'



#### NOTES:

- \* WIDTHS VARY BETWEEN THE STATION RANGE SHOWN.
- \*\* LANE WIDTH TAPERS BETWEEN THE STATION RANGE SHOWN.



#### NOTES:

- TRAFFIC IS NOT ALLOWED ON THE COLD PLANED SURFACE. BEFORE OPENING THE AREA TO TRAFFIC, PAVE THE SURFACE ACCORDING TO 00744.51.
   FIELD VERIFY PAVEMENT CONDITION WITH ENGINEER AFTER COLD PLANING. CONSTRUCT ADDITIONAL
- FIELD VERIFY PAVEMENT CONDITION WITH ENGINEER AFTER COLD PLANING. CONSTRUCT ADDITIONAL PAVEMENT RESTORATIONS AS DIRECTED PRIOR TO TOP LIFT PAVING. SEE GENERAL NOTE 2 ON G-02.
- PROTECT LONGITUDINAL AND TRANSVERSE JOINTS BY PLACING AND MAINTAINING AN ASPHALT CONCRETE WEDGE ACCORDING TO SEE 00225.02.

4. SEE ODOT STD DWG RD610 FOR INLAY EDGE DETAIL.

TYPICAL SECTION
SCALE: NTS



REVISIONS

DESIGNED BY:

NMH/MDE

ORAFTED BY:

DRAFTED BY:

ORAFTED BY

TYPICAL SECTIONS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECT

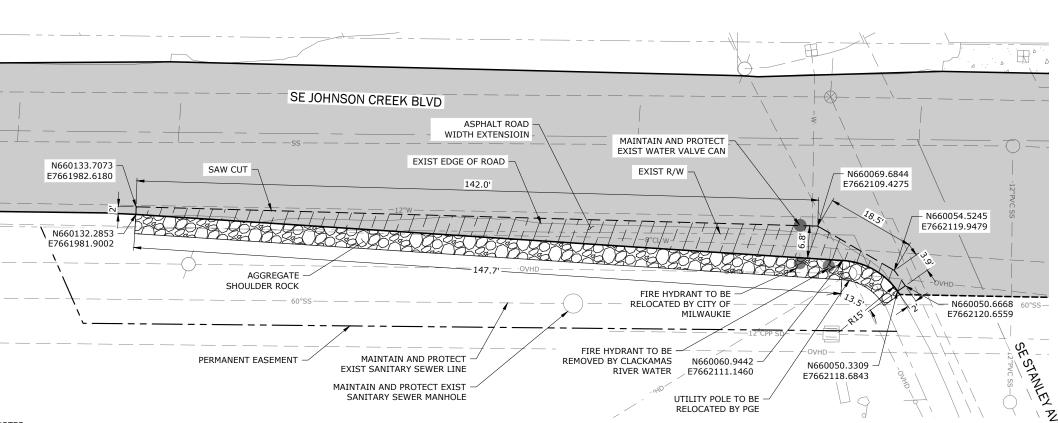
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#### NOTES:

- \* DATA FROM "PAVEMENT REPORT JOHNSON CREEK BOULEVARD (79TH TO ECM) IMPROVEMENTS PROJECT" DATED NOVEMBER 29, 2023, AS PREPARED BY GRI.
- \*\* PAVEMENT CORE STATIONS ARE APPROXIMATE AND UTILIZE THE ENGINEERING DESIGN STATIONING. FIELD VERIFY AS NEEDED.



#### **EXISTING PAVEMENT SECTION DATA**



NOTES:

1. SEE DETAIL 3 ON SHEET C-03 FOR CROSS SECTION DETAILS.

2. TOP LIFT OF EXTENSION SECTION IS SACRIFICIAL AND WILL BE BE REMOVED AND REPLACED WITH LEVEL 3, 1/2 INCH DENSE ACP MIXTURE WITH PG 70-22ER AS PART OF THE GRIND AND INLAY REHABILITATION TREATMENT.

ROAD WIDTH EXTENSION, LAYOUT DETAIL

SCALE: 1:20

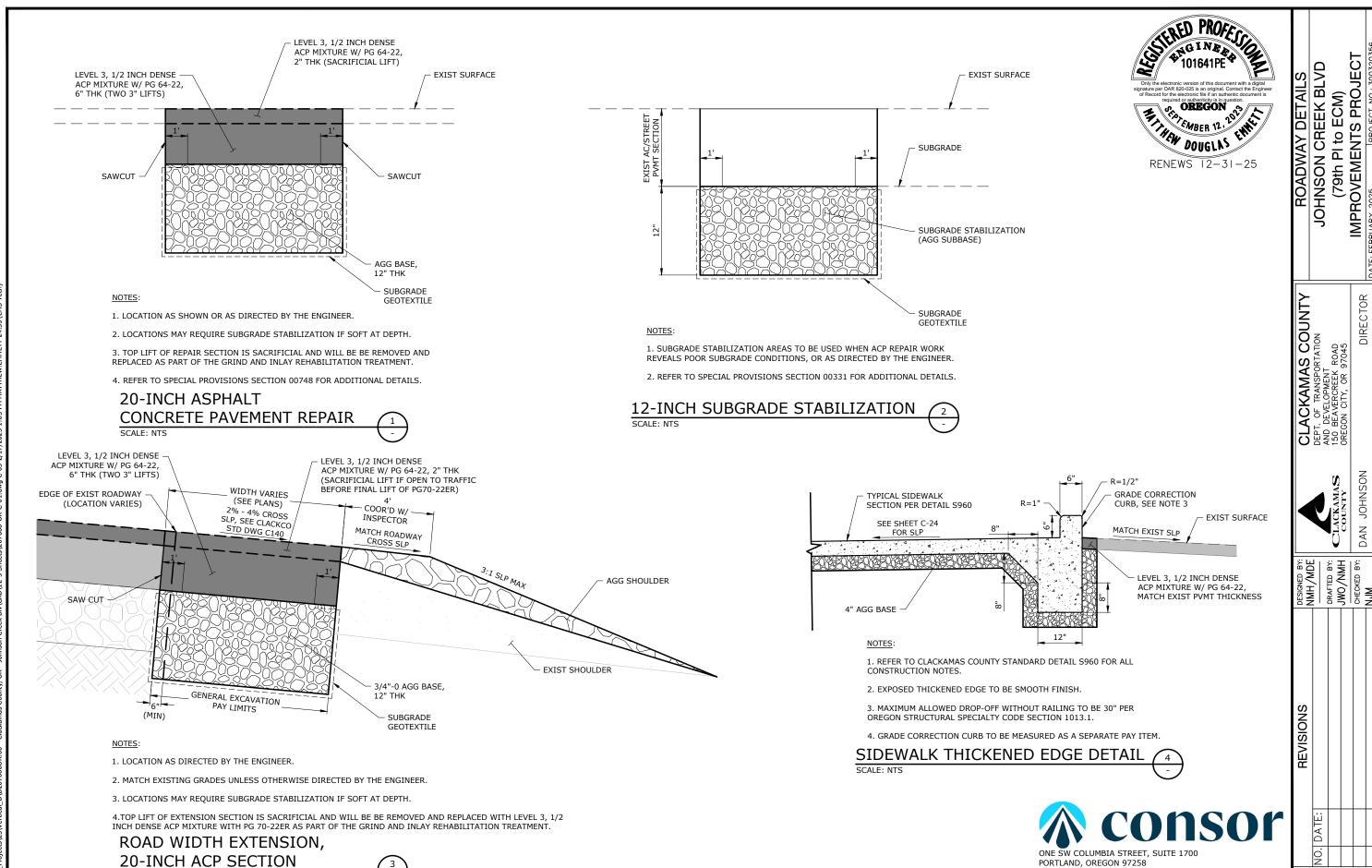


ONE SW COLUMBIA STREET, SUITE 1700
PORTLAND, OREGON 97258
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SOADWAY DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREK ROAD
OREGON CITY, OR 97045 DRAFTED BY:
JWO/NMH
CHECKED BY: REVISIONS NO. DATE:

C-02

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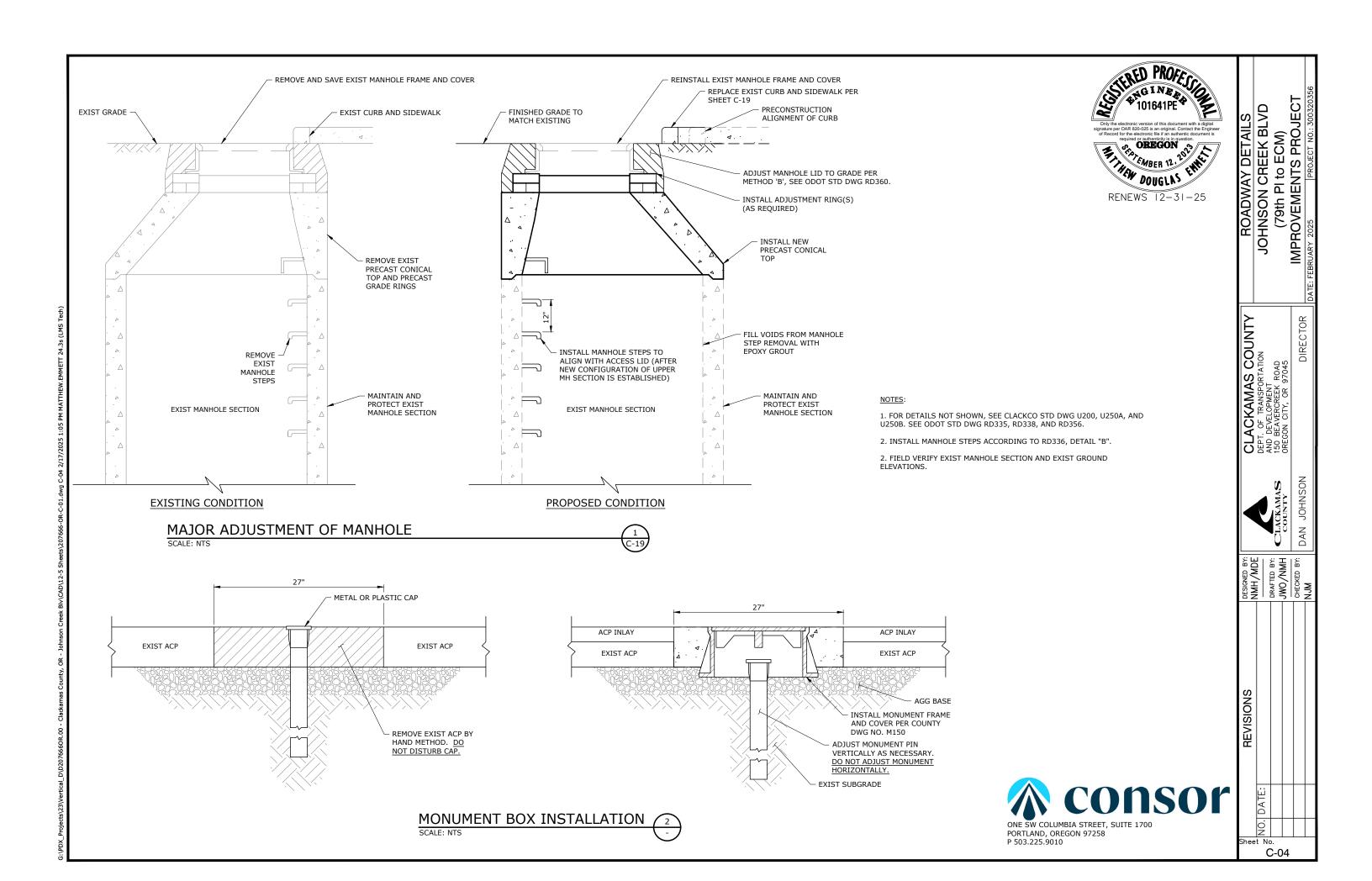


ONE SW COLUMBIA STREET, SUITE 1700

C-03

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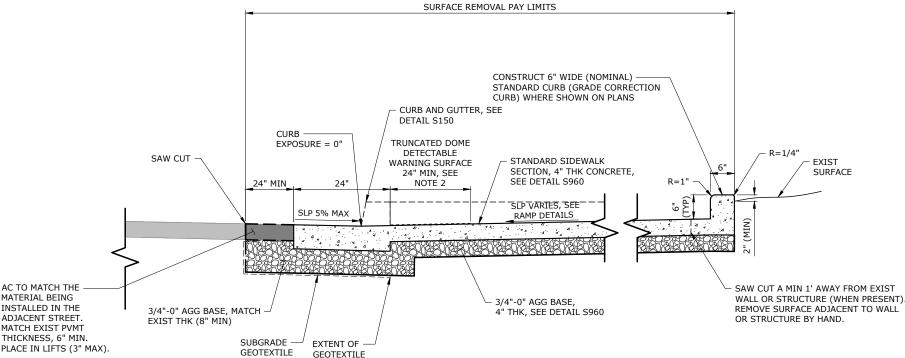
20-INCH ACP SECTION



#### AMERICANS WITH DISABILITIES ACT (ADA) NOTES:

- 1. WORK WITHIN THE PUBLIC RIGHT-OF-WAY TO BE IN ACCORDANCE WITH THE PROPOSED GUIDELINES FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG), AS PUBLISHED BY THE UNITED STATES ACCESS BOARD.
- 2. UNLESS OTHERWISE SPECIFIED ON THE PLANS, OR DIRECTED BY THE INSPECTOR, CROSS SLOPES OF SIDEWALKS TO BE A NOMINAL 1.5%. CROSS SLOPES TO NOT BE LESS THAN 1% NOR EXCEED 2%. SIDEWALK TRANSITIONS TO BE REPLACED TO THE NEXT NEAREST JOINT.
- 3. MAXIMUM SLOPES SHOWN ON THE PLANS REPRESENT THE MAXIMUM ALLOWABLE SLOPES PERMITTED BY CURRENT ADA REQUIREMENTS. THE CONTRACTOR TO TAKE INTO CONSIDERATION CONSTRUCTION TOLERANCES WHEN PLACING SIDEWALKS AND RAMPS TO ENSURE MAXIMUM SLOPES ARE NOT EXCEEDED.
- 4. SURVEY HAS BEEN COMPLETED FOR ALL CURB RAMPS SHOWN AND WAS USED TO CREATE THE PROJECT PLAN SHEETS.
- 5. COMPLETE ALL SURVEY STAKING AS NEEDED USING INFORMATION PROVIDED.
- 6. THE CURB RAMP SURFACE REMOVAL LIMITS TO BE REVIEWED BY THE INSPECTOR FOR GENERAL CONFORMITY PRIOR TO REMOVAL OF SURFACINGS. CONTRACTOR TO PROVIDE 24 HOUR NOTICE TO INSPECTOR OF REMOVAL LIMITS BEING STAKED AS WELL AS NOTIFY INSPECTOR AT THE TIME THE LIMITS ARE ESTABLISHED.
- 7. THE PRIME CONTRACTOR AND CONCRETE SUBCONTRACTOR TO ATTEND A PRE-POUR MEETING ONSITE WITH THE INSPECTOR TO DISCUSS THE CURB RAMP CONSTRUCTION PROCESS
- 8. FIELD LAYOUT TO BE REVIEWED BY THE ENGINEER PRIOR TO CONCRETE PLACEMENT. CONCRETE FOR SIDEWALKS, CURBS, AND RAMPS SHALL BE PLACED NO EARLIER THAN 4 HOURS AFTER FINAL PLACEMENT OF FORMWORK TO ALLOW FOR INSPECTION PRIOR TO POUR AND ADJUSTMENT BY CONTRACTOR IF NEEDED. CONTRACTOR TO PROVIDE 24 HOUR NOTICE TO INSPECTOR OF FORMWORK BEING PLACED AS WELL AS NOTIFY INSPECTOR AT THE TIME FORMWORK HAS BEEN FULLY COMPLETED.
- 9. INSPECTOR'S PRE-REMOVAL OF SURFACING AND PRE-POUR REVIEW DOES NOT CONSTITUTE ACCEPTANCE OF FINAL GRADES; THE CONTRACTOR REMAINS RESPONSIBLE FOR THE FINAL GRADES.
- 10. ALL SAWCUTTING AND PAVEMENT REMOVAL TO BE TO THE NEAREST JOINT.
- 11. SLOPES TO BE MEASURED BY THE INSPECTOR BY USING A 2 FOOT DIGITAL LEVEL, WHICH WILL BE THE OFFICIAL RECORD OF THE SLOPES. IN THE EVENT THAT DIFFERENT READINGS ARE TAKEN BETWEEN THE INSPECTOR'S LEVEL AND THE CONTRACTOR'S, THE INSPECTOR'S READINGS GOVERN.
- 12. MEASUREMENT OF SLOPES TO BE PERFORMED ON THE WALKABLE SURFACE AND NOT TAKE INTO CONSIDERATION THE TOP OF THE CURB.
- 13. COMPLETED SIDEWALKS OR OTHER HARDSCAPE ELEMENTS THAT EXCEED MAXIMUM SPECIFIED SLOPES OR ARE LESS THAN MINIMUM SPECIFIED SLOPES TO BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- 14. THE MAXIMUM CLOSURE TIME, BETWEEN DEMOLITION AND COMPLETION, FOR ANY CURB RAMP OR CORNER TO BE 7 CALENDAR DAYS. CONTRACTOR TO PROVIDE PEDESTRIAN TRAFFIC CONTROL PLAN FOR CURB RAMP & SIDEWALK CLOSURES AS A PART OF THE OVERALL PROJECT TRAFFIC CONTROL PLANS.
- 15. PROTECT FRESHLY POURED CONCRETE FROM VANDALISM OR OTHER DAMAGE FOR A MINIMUM OF 24 HOURS OR UNTIL CURED ENOUGH TO SUPPORT TYPICAL USE, WHICHEVER IS LONGER. ANY CONCRETE DAMAGED BY VANDALISM OR OTHER CAUSES SHALL BE REPLACED AT NO COST TO THE PROJECT.
- 16. CONTRACTOR TO REPAIR/REPLACE ALL DAMAGE TO EXISTING FLATWORK OR SITE FEATURES NOT INTENDED FOR DEMOLITION. ALL ADJACENT AREAS DISTURBED THROUGH THE CONSTRUCTION OF THE SIDEWALK RAMPS SHALL BE RETURNED TO THEIR ORIGINAL CONDITION PRIOR TO PROJECT COMPLETION. THIS INCLUDES, BUT IS NOT LIMITED TO, LANDSCAPE RESTORATION AROUND NEW RAMPS.
- 17. CONTRACTOR SHALL TAKE EXTRA CARE TO AVOID DAMAGING ANY IRRIGATION, WIRING, OR OTHER FACILITIES IN THE AREA OF THE NEW RAMP. ANY FACILITIES ENCOUNTERED TO BE RELOCATED BY THE CONTRACTOR WITHOUT DAMAGE TO AN APPROPRIATE LOCATION OUTSIDE THE RAMP/WALK AREA. IF DAMAGE OCCURS, REPAIRS WILL BE MADE WITHIN 48-HOURS.
- 18. REUSE OF THE EXIST AGGREGATE BASE UNDER THE SIDEWALK, MAY BE ALLOWED AT THE SOLE DISCRETION OF THE INSPECTOR.





#### NOTES:

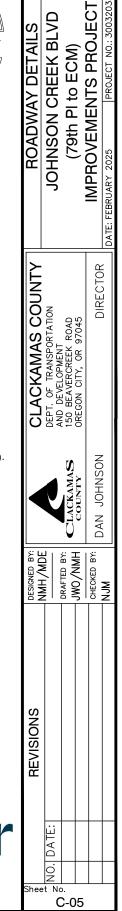
- 1. TOOLED JOINTS ARE REQUIRED AT ALL SIDEWALK RAMP SLOPE BREAK LINES.
- 2. PLACE TRUNCATED DOME DETECTABLE WARNING SURFACE IN THE LOWER 2 FEET ADJACENT TO TRAFFIC OR THE FIRST 2 FEET AT THE BACK OF THE DIRECTIONAL CURB IF DIRECTED BY THE PLANS.
- 3. ADJUST CURB PROFILE WITH LANDING AREA AS NEEDED. BLEND WITH EXISTING STREET GRADE TO MINIMIZE EFFECT OF CHANGE.
- 4. ADJUST SAW CUT LIMITS AS NECESSARY TO MAINTAIN A MAX 5% COUNTERSLOPE AT THE RAMP THROAT.

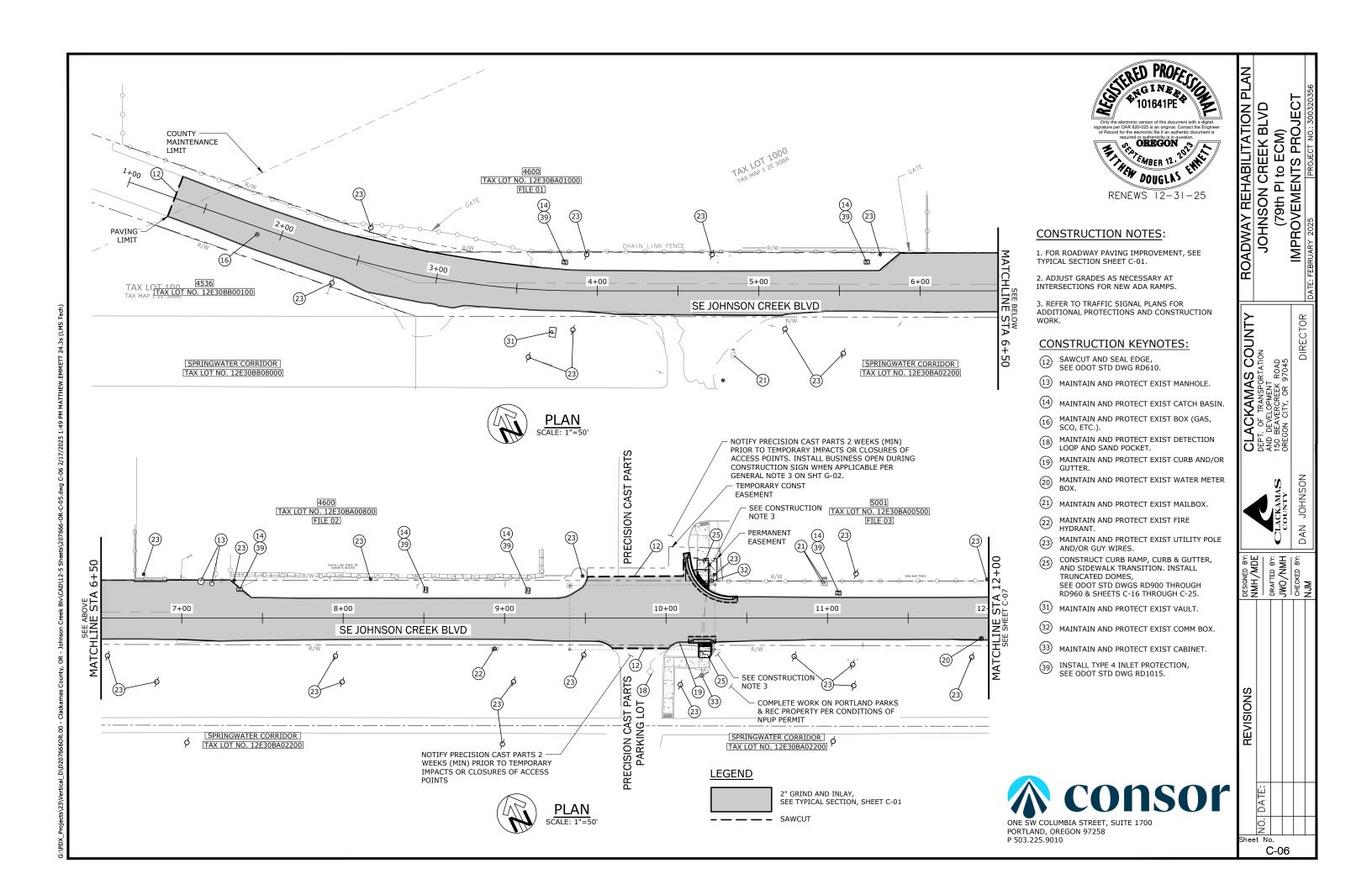
#### TYPICAL SIDEWALK RAMP REPLACEMENT SECTION

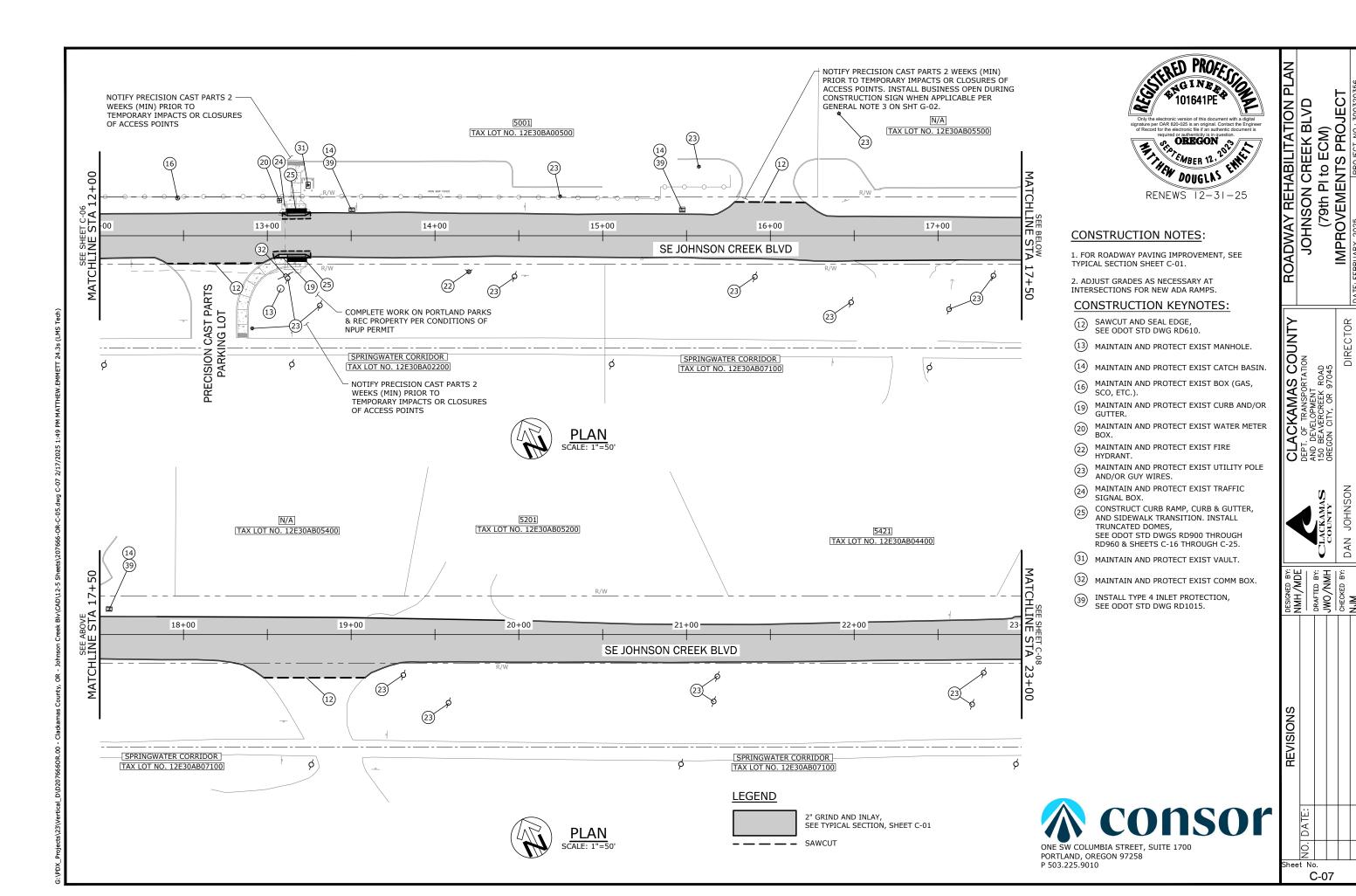
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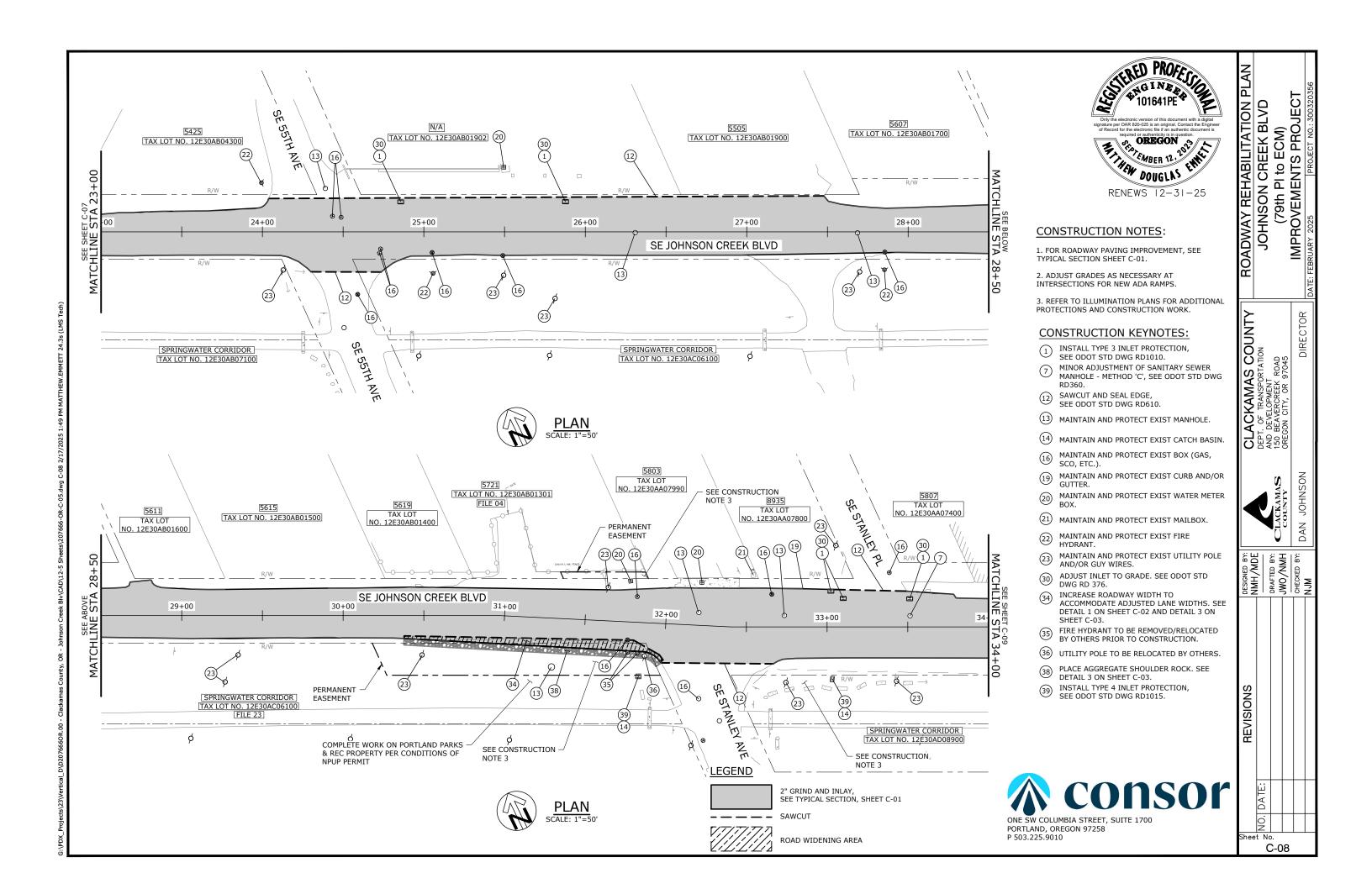


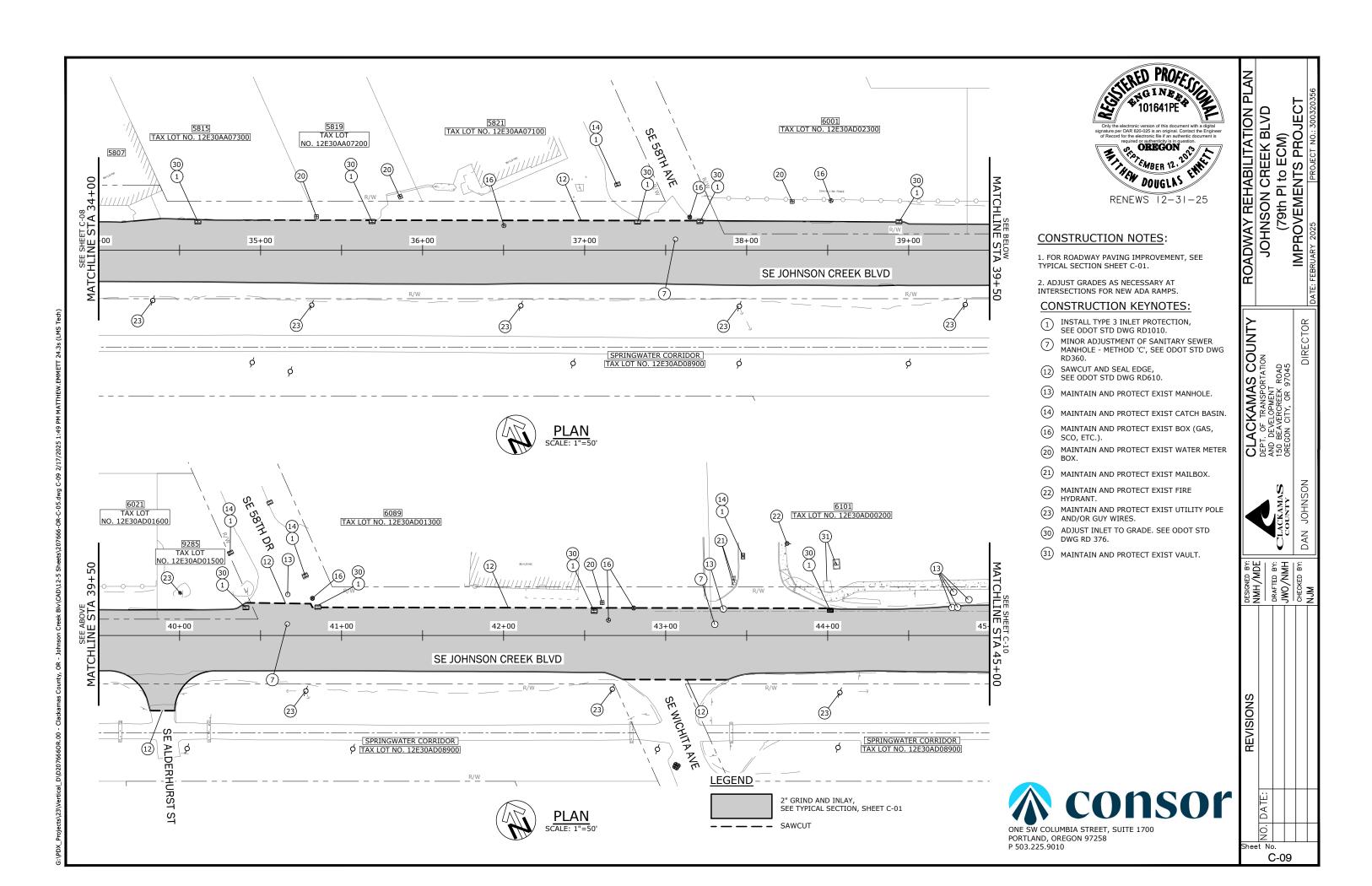


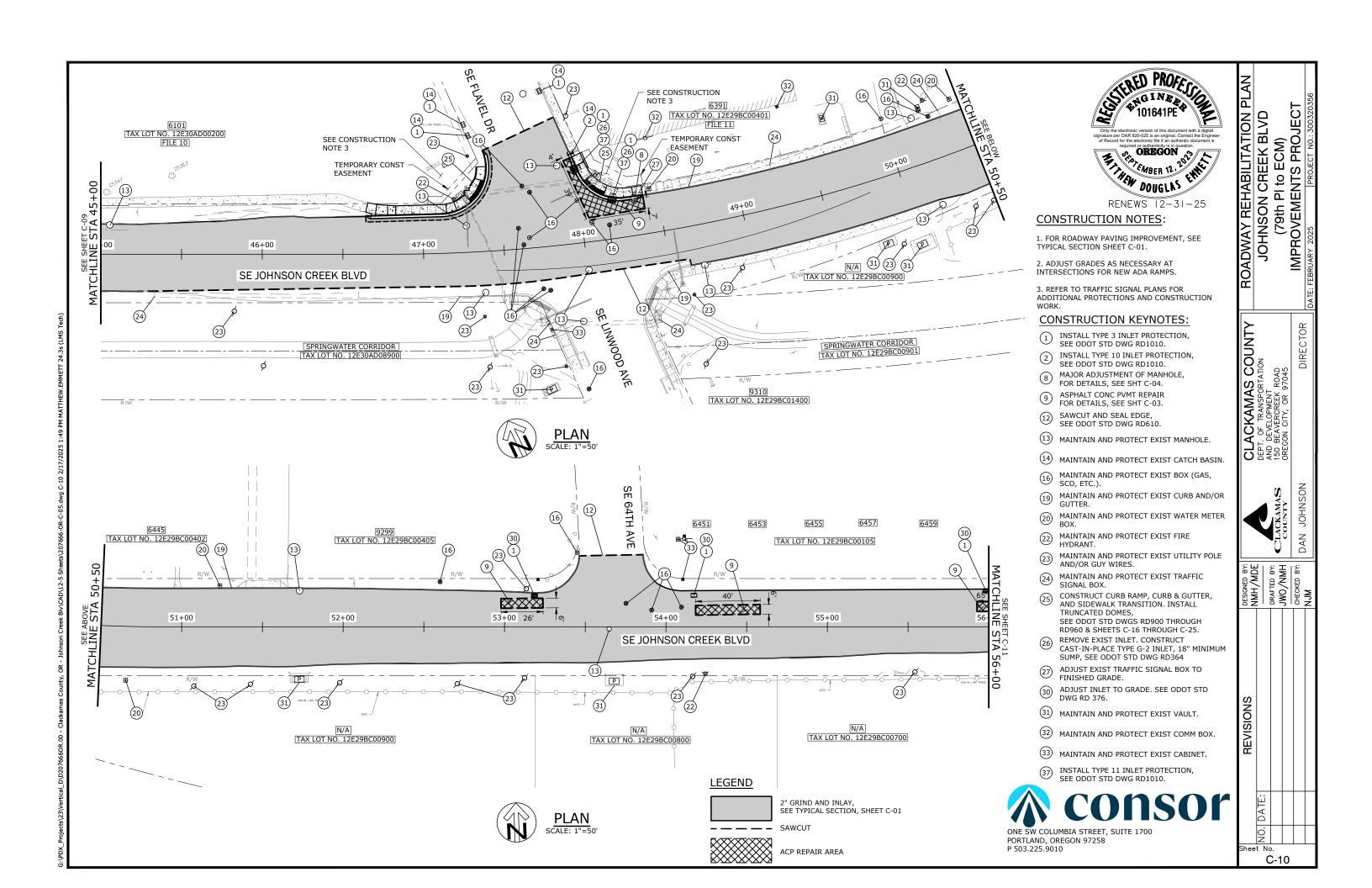


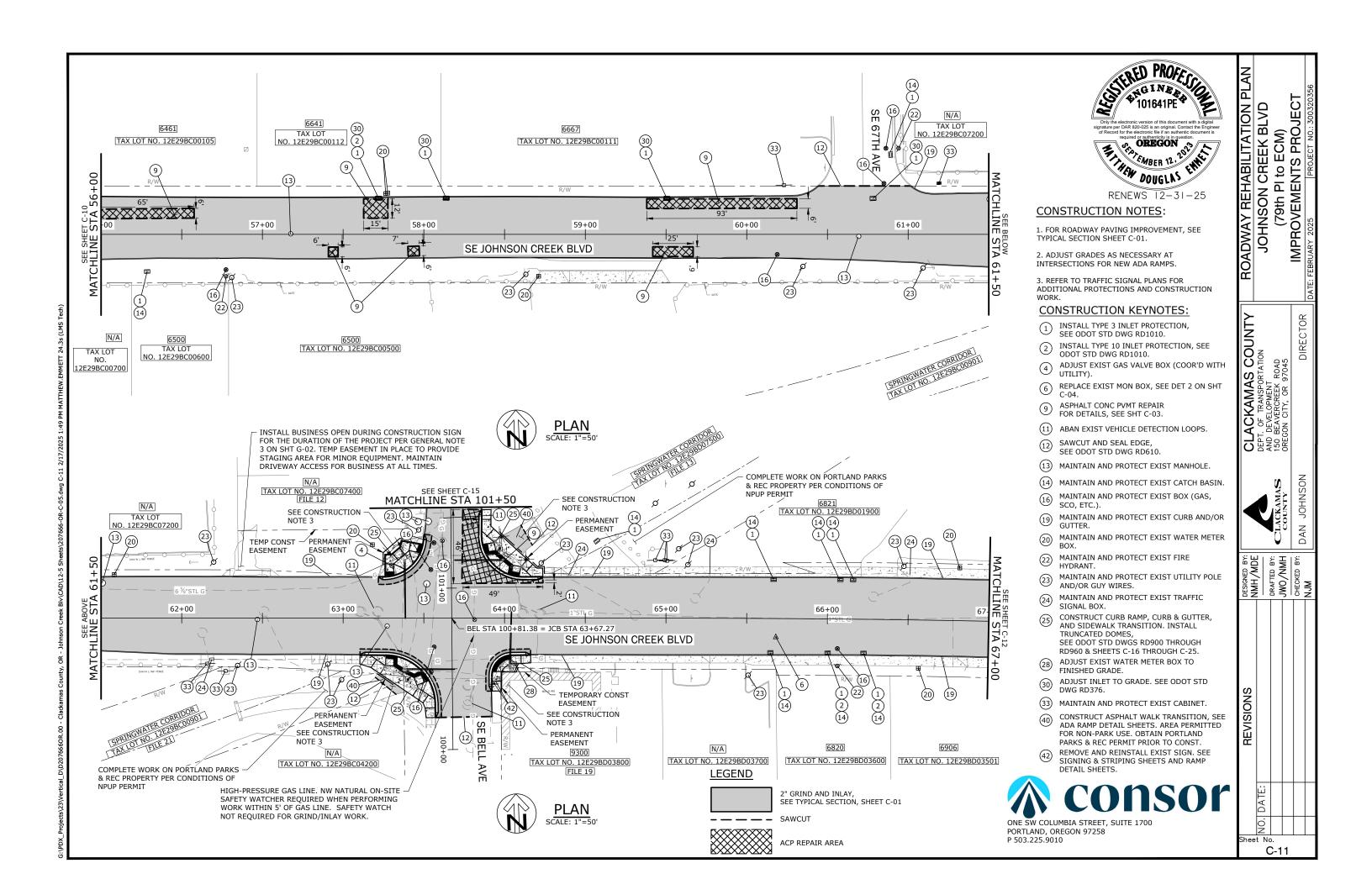


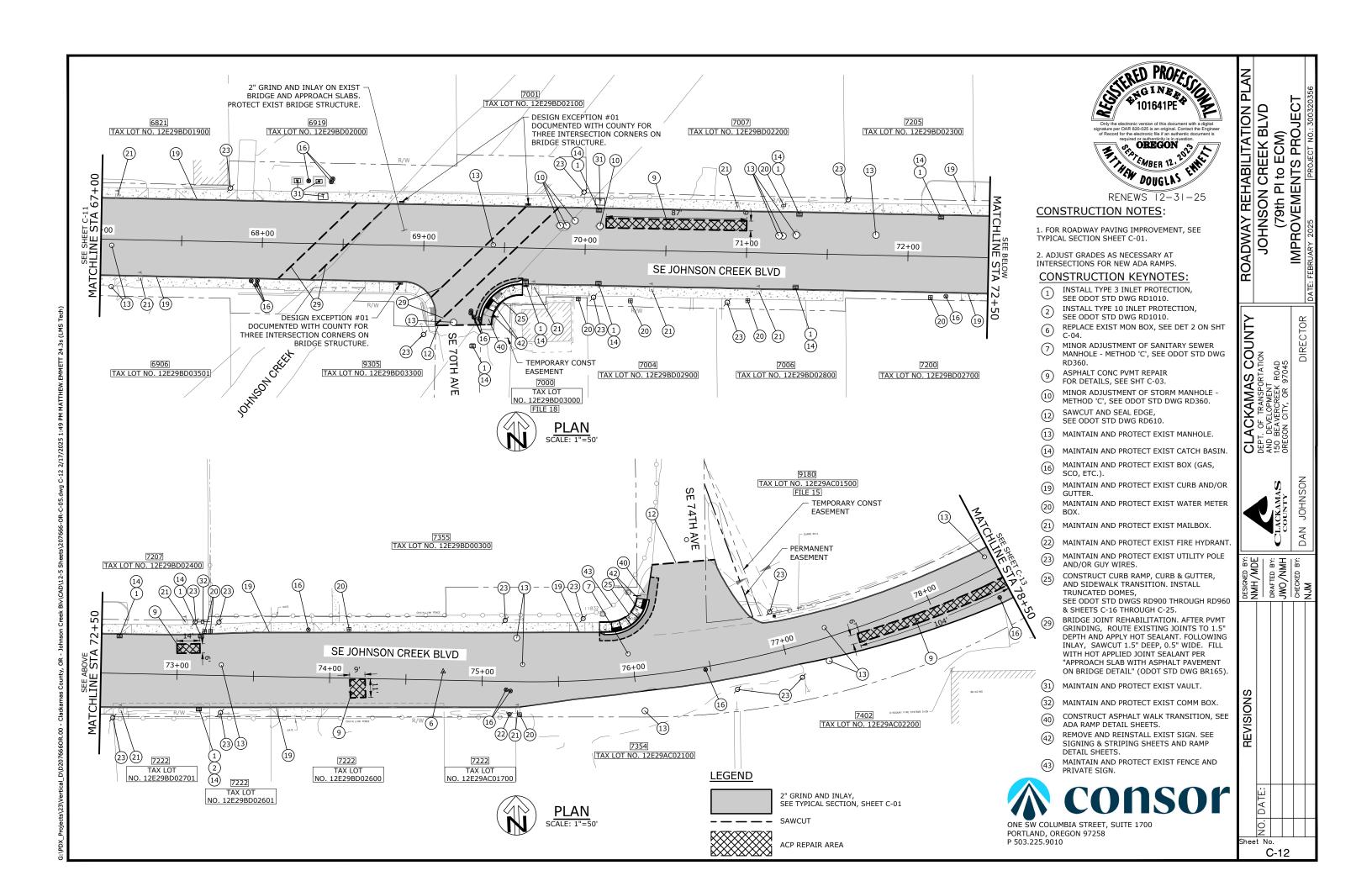


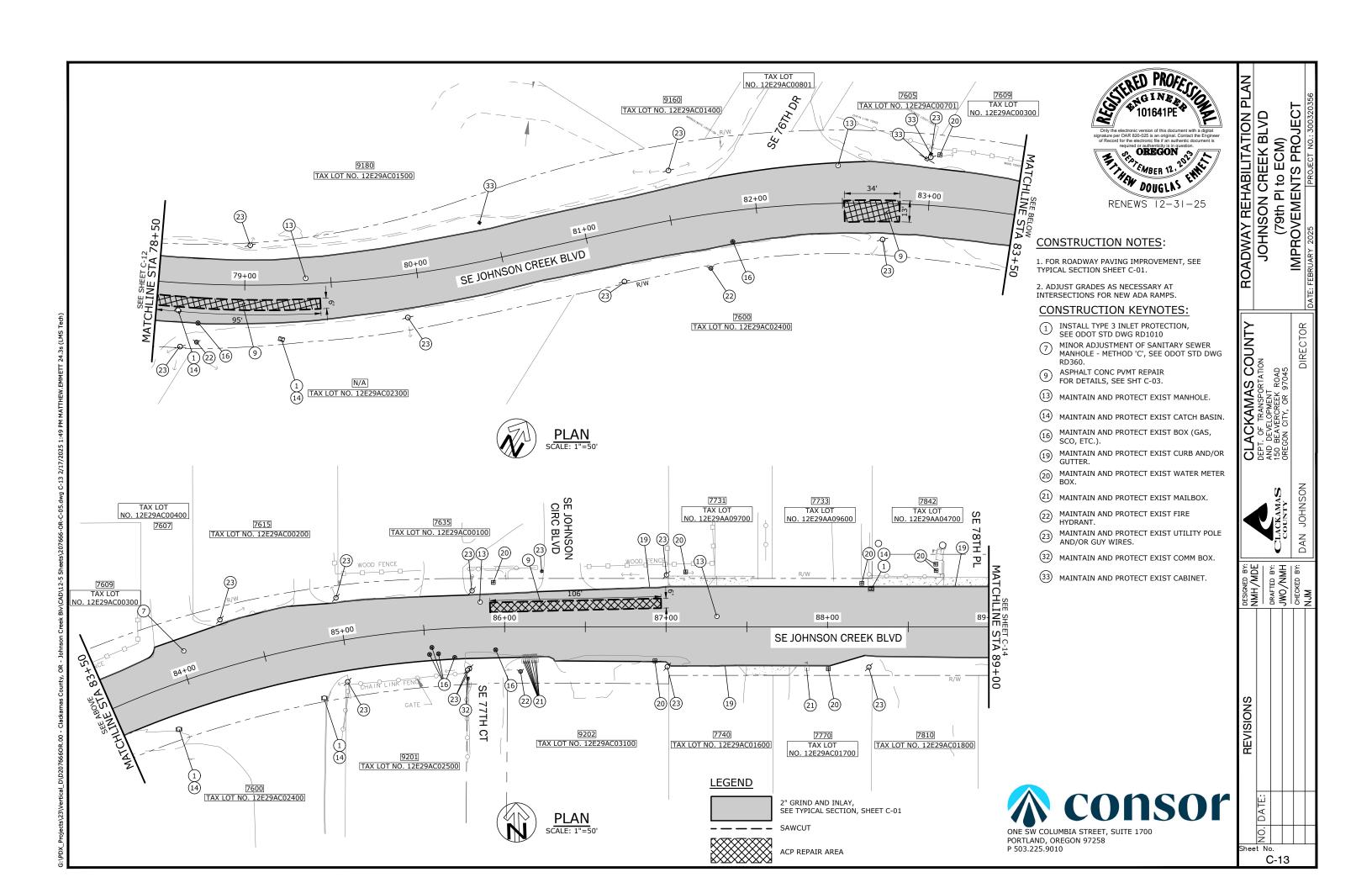


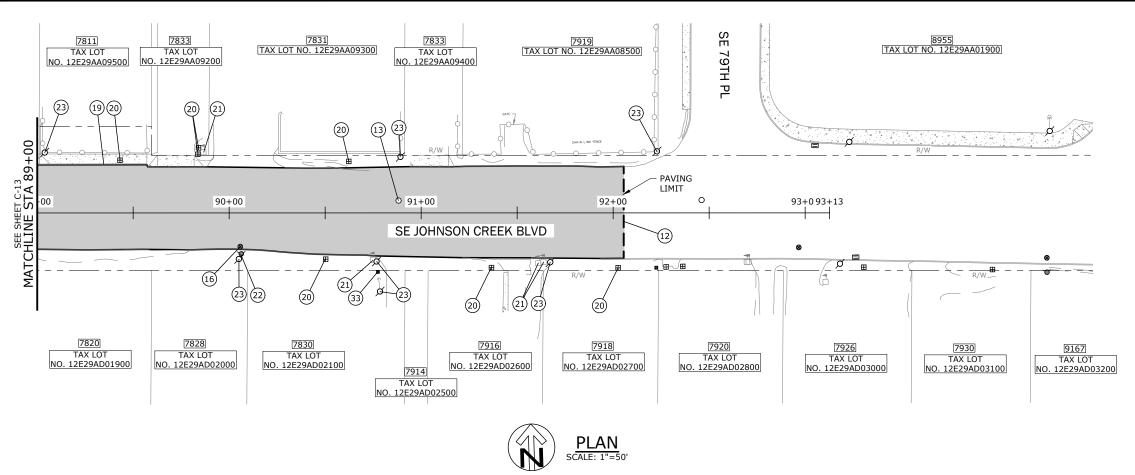














#### CONSTRUCTION NOTES:

- 1. FOR ROADWAY PAVING IMPROVEMENT, SEE TYPICAL SECTION SHEET C-01.
- 2. ADJUST GRADES AS NECESSARY AT INTERSECTIONS FOR NEW ADA RAMPS.

#### CONSTRUCTION KEYNOTES:

- SAWCUT AND SEAL EDGE, SEE ODOT STD DWG RD610.
- (13) MAINTAIN AND PROTECT EXIST MANHOLE.
- MAINTAIN AND PROTECT EXIST BOX (GAS, SCO, ETC.).
- MAINTAIN AND PROTECT EXIST CURB AND/OR GUTTER.
- (20) MAINTAIN AND PROTECT EXIST WATER METER BOX.
- (21) MAINTAIN AND PROTECT EXIST MAILBOX.
- MAINTAIN AND PROTECT EXIST FIRE HYDRANT.
- MAINTAIN AND PROTECT EXIST UTILITY POLE AND/OR GUY WIRES.
- (33) MAINTAIN AND PROTECT EXIST CABINET.

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NO. DATE:

C-14

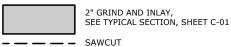
DESIGNED BY:
NMH/MDE
DRAFTED BY:
JWO/NMH
CHECKED BY:

ROADWAY REHABILITATION PLAN JOHNSON CREEK BLVD (79th PI to ECM) IMPROVEMENTS PROJECT

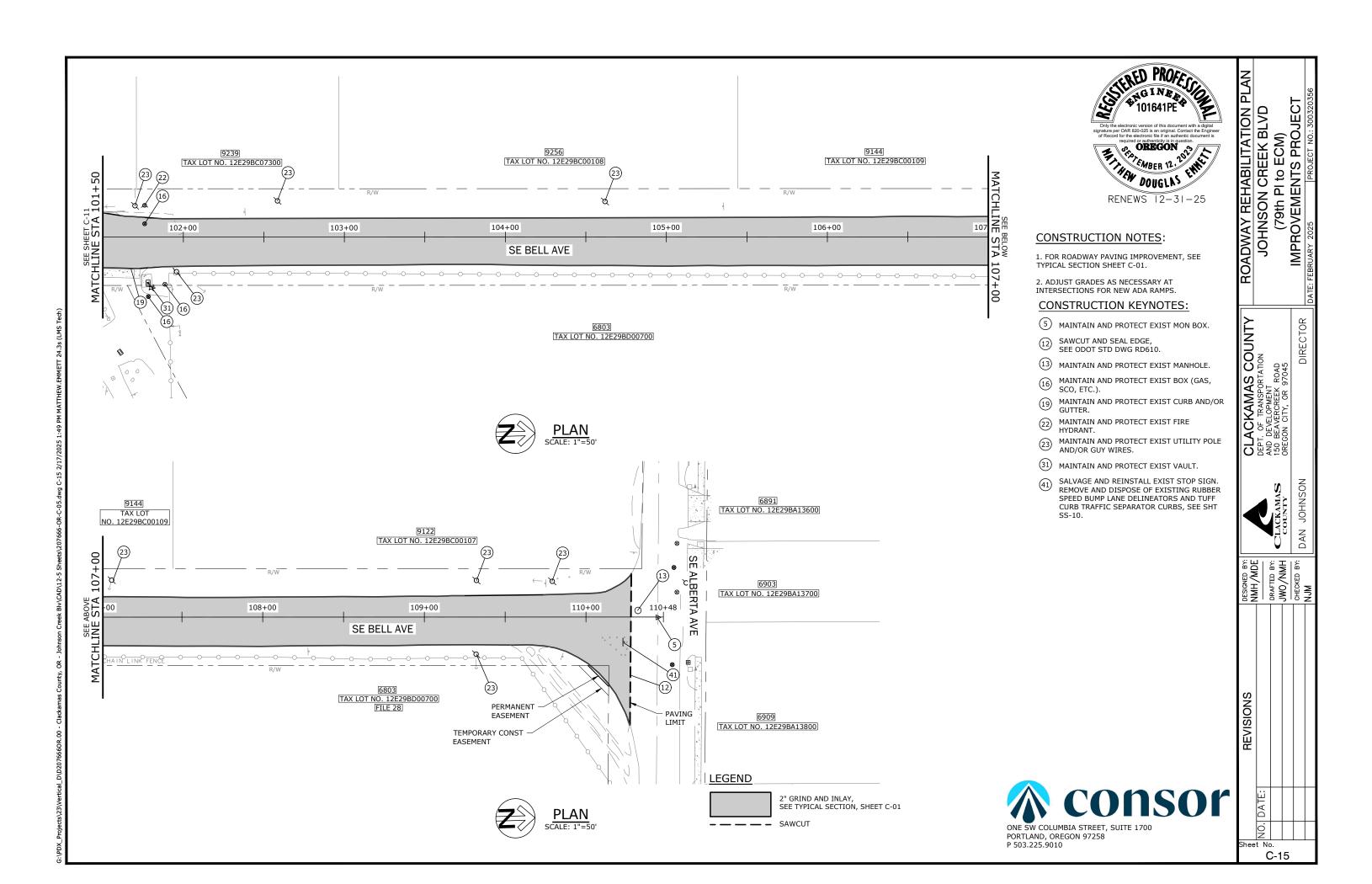
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AND DEVELOPMENT
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OREGON CITY, OR 97045

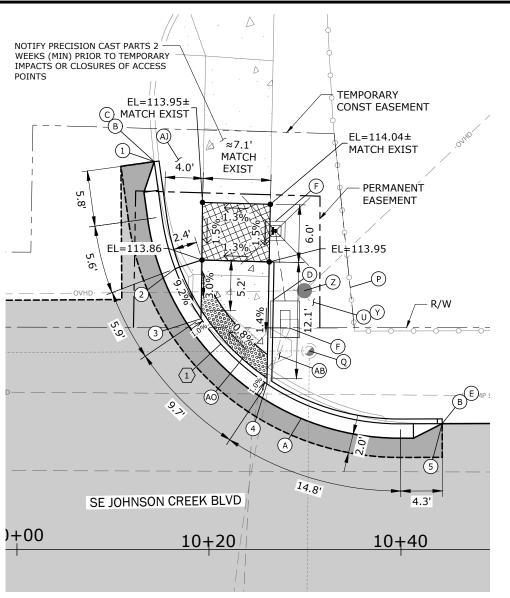
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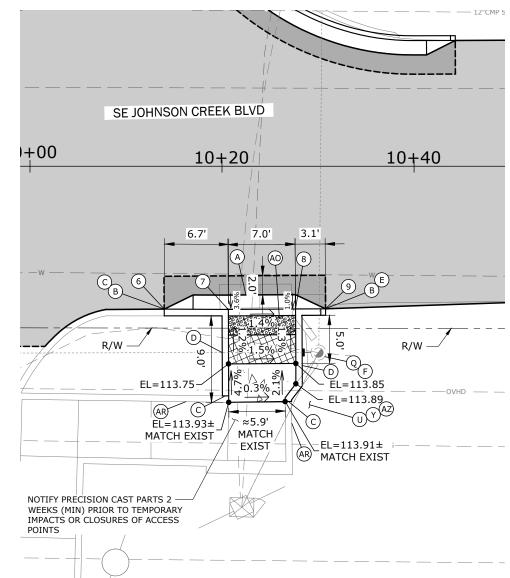
LEGEND

















## SE JOHNSON CREEK BLVD @ PRECISION CAST PARTS WEST CROSSING

#### **KEY NOTES**

- (A) INSTALL CURB AND GUTTER, SEE STD DWG S150.
- $\begin{picture}(60,0)\put(0,0){\line(1,0){10}}\put(0,0){\line(1,0){10}$
- C MATCH EXIST CURB.
- D INSTALL GRADE CORRECTION CURB, SEE DETAIL ON SHEET C-05.
- E TRANSITION CURB EXP. FROM 6" TO 0" OVER 6" HORIZ.
- SEE SHEETS TS-01 THROUGH TS-04 FOR TRAFFIC SIGNAL INFORMATION.
- P MAINTAIN AND PROTECT EXIST FENCE.
- Q MAINTAIN AND PROTECT EXIST SIGNAL POLE.

- (U) MAINTAIN AND PROTECT EXIST LANDSCAPING.
- Y RESTORE WITH MATCHING BARK MULCH (TYP)
- Z MAINTAIN AND PROTECT EXIST UTILITY POLE.
- AB) REMOVE EXIST HARDSCAPE SURFACINGS.
- (AJ) MAINTAIN AND PROTECT EXIST RIVER ROCK LANDSCAPING.
- (AO) INSTALL DETECTABLE WARNING, SEE RD902 THRU RD905.
- AR) MAINTAIN AND PROTECT EXIST CURB.
- (AZ) COMPLETE ROADSIDE RESTORATION PER CONDITIONS OF NPUP WITH PORTLAND PARKS & REC.

LOCATION	GUTTER STA.	GUTTER ELEVATION	BOC ELEVATION
1	10+14.30	113.53 ME	113.91 ME
2	10+16.48	113.66	114.16
3	10+19.16	113.69	113.69
4	10+26.04	113.77	114.27
5	10+44.29	114.00 ME	114.00 ME
6	10+13.98	113.64 ME	114.12 ME
7	10+20.66	113.67	114.17
8	10+27.66	113.77	114.27
9	10+30.78	113.80 ME	113.80 ME



#### LEGEND

MIN LEVEL AREA 5'x5'
FOR THE PURPOSE OF THIS APPLICATION A MAX 2.0%
FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED
LEVEL

TRUNCATED DOME DETECTABLE WARNING SURFACE MIN 2' WIDE

SAW CUT EXTENTS FOR AREA OF SURFACE REMOVAL

MIN 2' WIDER THAN PROPOSED CURB AND GUTTER SLOPE 1.5% MAX (MAX 2.0% FINISHED SURFACE SLOPE)

(NORMAL SIDEWALK CROSS SLOPE)

SLOPE 7.5% MAX (MAX 8.3% FINISHED SURFACE SLOPE) (RAMP LENGTH 15' MAX MEASURED ALONG FINISHED

SLOPE 4.0% MAX (MAX 5.0% FINISHED SURFACE SLOPE)

(MAX  $\pm 0.5\%$  FINISHED SURFACE SLOPE TOLERANCE) SLOPE IS GREATER THAN 8.33%AND LENGTH IS 15' MIN (MAX  $\pm 0.8\%$  FINISHED SURFACE SLOPE TOLERANCE)

SIDEWALK TRANSITION PANEL (RATE OF CROSS SLOPE CHANGE IS LESS THAN OR EQUAL TO 0.5% PER FOOT)

#### **CONSTRUCTION NOTES:**

- 1. SLOPES HOLD OVER ELEVATIONS.
- 2. FOR SECTION DETAILS, SEE SHEET C-05, TYPICAL SIDEWALK RAMP REPLACEMENT SECTION.
- 3.MAXIMUM CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 4. FLARE SLOPE IS 9.0% MAX (10% MAX FINISHED SURFACE SLOPE)
- 5. SEE ALIGNMENT AND GENERAL CONSTRUCTION SHEETS, SIGNAL SHEETS, AND STANDARD DRAWINGS FOR DETAILS NOT SHOWN.
- $6.\ TOP\ OF\ CURB\ HAS\ MAXIMUM\ SLOPE\ OF\ 1.5\%\ TO\ THE\ STREET\ RESULTING\ IN\ A\ 0.01'\ DIFFERENCE\ IN\ ELEVATION\ BETWEEN\ TOP\ FRONT/FACE\ OF\ CURB\ AND\ TOP\ BACK\ OF\ CURB.$

CURB RETURN DATA						
CURB	DESCRIPTION	GUTTER STA.	ELEV	CURVE DATA		
	BCR: N661024.17 E7660193.98	10+15.10	113.95	L = 35.92' Λ = 82°18'48"		
(1)	END: N661054.39 E7660180.95	10+39.96	113.60	$A = 82^{\circ}1848$ R = 25.00		



ONE SW COLUMBIA STREET, SUITE 1700 PORTLAND, OREGON 97258 P 503.225.9010 CLACKAMAS COUNTY
DET. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045
DIRECTOR
DIRECTOR
DIRECTOR
DIRECTOR
DATE: FEBRUARY 2025
| PROJECT NO.: 30032035

CLACKAMAS COUNTY

EVISIONS

EVISIONS

NMH/MDE

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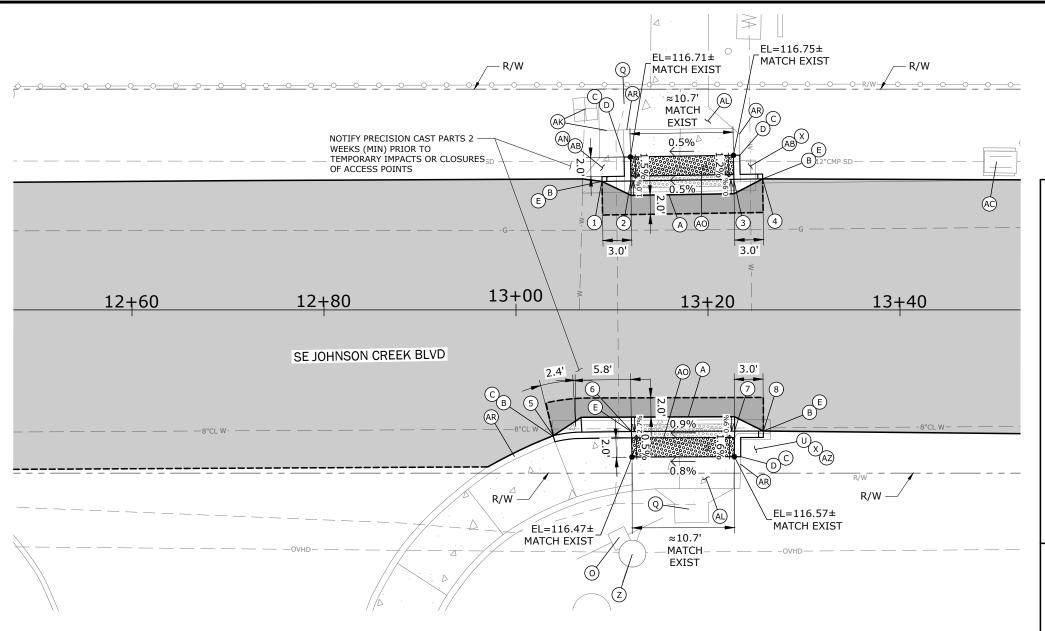
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C-16



## SE JOHNSON CREEK BLVD @ PRECISION CAST PARTS EAST CROSSING



#### KEY NOTES

- $oxed{\mathsf{A}}$  INSTALL CURB AND GUTTER, SEE STD DWG S150.
- $\begin{tabular}{ll} \hline B & TRANSITION CURB AND GUTTER TO STANDARD CURB OVER 3 FT. \end{tabular}$
- (C) MATCH EXIST CURB.
- D INSTALL GRADE CORRECTION CURB, SEE DETAIL ON SHEET C-05.
- (E) TRANSITION CURB EXP. FROM 6" TO 0" OVER 6" HORIZ.
- MAINTAIN AND PROTECT EXIST SIGN.
- (Q) MAINTAIN AND PROTECT EXIST SIGNAL POLE.
- (U) MAINTAIN AND PROTECT EXIST LANDSCAPING.
- (X) RESTORE WITH MATCHING TOPSOIL AND GRASS SEEDING

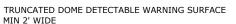
- Z MAINTAIN AND PROTECT EXIST UTILITY POLE.
- (AB) REMOVE EXIST HARDSCAPE SURFACINGS.
- AC MAINTAIN AND PROTECT INLET.
- (AK) MAINTAIN AND PROTECT EXIST UTILITY BOX.
- AL MAINTAIN AND PROTECT EXIST CONC WALK.
- (AN) RESTORE WITH SHOULDER AGGREGATE.
- AO) INSTALL DETECTABLE WARNING, SEE RD902 THRU RD905.
- (AR) MAINTAIN AND PROTECT EXIST CURB.
- $\stackrel{\hbox{\scriptsize (AZ)}}{}$  COMPLETE ROADSIDE RESTORATION PER CONDITIONS OF NPUP WITH PORTLAND PARKS & REC.

LOCATION	GUTTER STA.	GUTTER ELEVATION	BOC ELEVATION
1	13+08.96	116.66 ME	116.66 ME
2	13+11.96	116.68	117.18
3	13+22.69	116.73	117.23
4	13+25.69	116.74 ME	116.74 ME
5	13+03.88	116.36 ME	116.86 ME
6	13+12.03	116.45	116.46
7	13+22.77	116.53	117.03
8	13+25.77	116.57 ME	116.57 ME



#### LEGEND

TURNING SPACE MIN LEVEL AREA 5'x5' FOR THE PURPOSE OF THIS APPLICATION A MAX 2.0% FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED LEVEL



SAW CUT EXTENTS FOR AREA OF SURFACE REMOVAL MIN 2' WIDER THAN PROPOSED CURB AND GUTTER

(MAX 2.0% FINISHED SURFACE SLOPE) (NORMAL SIDEWALK CROSS SLOPE)

(MAX 5.0% FINISHED SURFACE SLOPE)

SLOPE 7.5% MAX (MAX 8.3% FINISHED SURFACE SLOPE) (RAMP LENGTH 15' MAX MEASURED ALONG FINISHED SURFACE SLOPE) SLOPE 4.0% MAX

SLOPE AS SHOWN (MAX ±0.5% FINISHED SURFACE SLOPE TOLERANCE)

SLOPE IS GREATER THAN 8.33% AND LENGTH IS 15' MIN (MAX ±0.8% FINISHED SURFACE SLOPE TOLERANCE)

SIDEWALK TRANSITION PANEL
(RATE OF CROSS SLOPE CHANGE IS LESS THAN OR EQUAL TO 0.5% PER FOOT)

#### CONSTRUCTION NOTES:

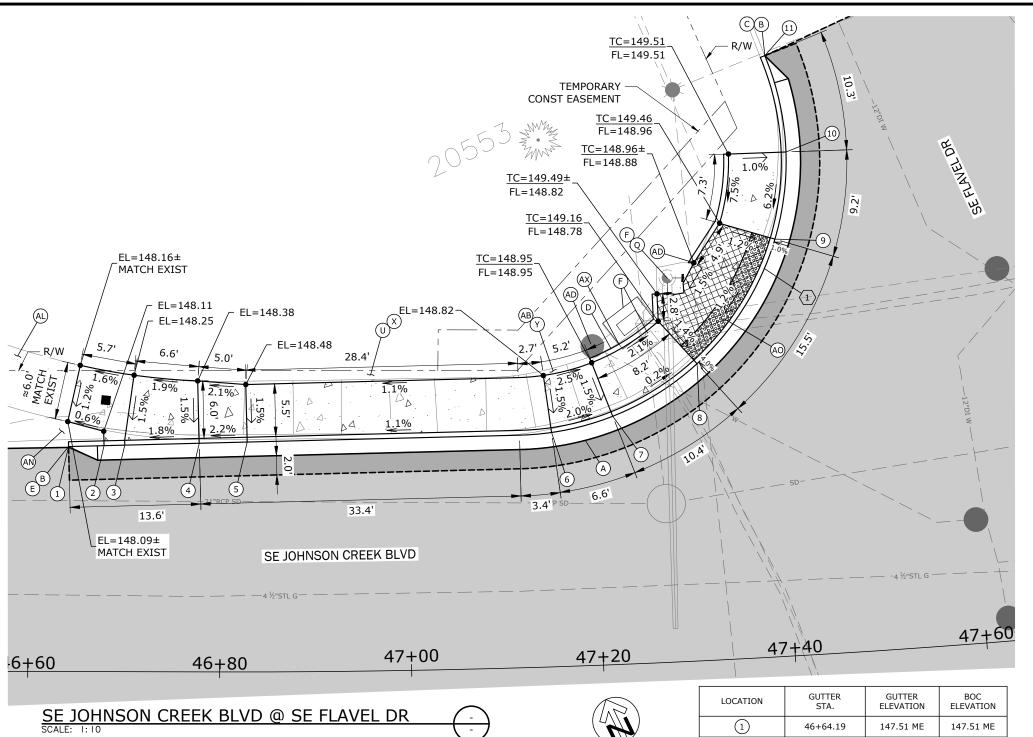
- 1. SLOPES HOLD OVER ELEVATIONS.
- 2. FOR SECTION DETAILS, SEE SHEET C-05, TYPICAL SIDEWALK RAMP REPLACEMENT SECTION.
- 3.MAXIMUM CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 4. FLARE SLOPE IS 9.0% MAX (10% MAX FINISHED SURFACE SLOPE)
- 5. SEE ALIGNMENT AND GENERAL CONSTRUCTION SHEETS, SIGNAL SHEETS, AND STANDARD DRAWINGS FOR DETAILS NOT SHOWN.
- 6. TOP OF CURB HAS MAXIMUM SLOPE OF 1.5% TO THE STREET RESULTING IN A 0.01' DIFFERENCE IN ELEVATION BETWEEN TOP FRONT/FACE OF CURB AND TOP BACK OF CURB.



ADA RAMP DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY. OR 97045 DRAFTED BY:
JWO/NMH
CHECKED BY:

NO.

C-17





#### KEY NOTES

- $\begin{tabular}{ll} \hline B & TRANSITION CURB AND GUTTER TO STANDARD CURB OVER 3 FT. \end{tabular}$
- C MATCH EXIST CURB.
- $\begin{tabular}{ll} \hline \end{tabular}$  Install grade correction curb, see detail on sheet c-05.
- (E) TRANSITION CURB TO 0" EXP. OVER 6" HORIZ.
- SEE SHEETS TS-01 THROUGH TS-04 FOR TRAFFIC SIGNAL
- MAINTAIN AND PROTECT EXIST SIGNAL POLE.
- MAINTAIN AND PROTECT EXIST LANDSCAPING.

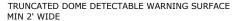
- (X) RESTORE WITH MATCHING TOPSOIL AND GRASS SEEDING.
- (Y) RESTORE WITH MATCHING BARK MULCH (TYP).
- (AB) REMOVE EXIST HARDSCAPE SURFACINGS.
- (AD) MAINTAIN AND PROTECT EXIST HYDRANT.
- AL MAINTAIN AND PROTECT EXIST CONC WALK.
- (AN) RESTORE WITH SHOULDER AGGREGATE.
- (AO) INSTALL DETECTABLE WARNING, SEE RD902 THRU RD905.
- TRANSITION CURB TO MATCH SIGNAL POLE FOUNDATION
- MATCH GRADE CORRECTION CURB TC ELEVATION TO EXIST TRAFFIC SIGNAL BOX CONC APRON.

LOCATION	GUTTER STA.	GUTTER ELEVATION	BOC ELEVATION
1	46+64.19	147.51 ME	147.51 ME
2	46+67.89	147.60	148.10
3	46+70.05	147.65	148.15
4	46+77.80	147.79	148.29
5	46+82.88	147.90	148.40
6	47+15.39	148.24	148.74
7	47+21.98	148.37	148.87
8	47+33.08	148.69	148.70
9	47+40.40	148.88	148.89
10	(10) 47+42.17		149.45
11)	47+40.46	149.54 ME	150.05 ME



#### LEGEND

MIN LEVEL AREA 5'x5' FOR THE PURPOSE OF THIS APPLICATION A MAX 2.0% FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED



SAW CUT EXTENTS FOR AREA OF SURFACE REMOVAL MIN 2' WIDER THAN PROPOSED CURB AND GUTTER

(MAX 2.0% FINISHED SURFACE SLOPE) (NORMAL SIDEWALK CROSS SLOPE) SLOPE 7.5% MAX (MAX 8.3% FINISHED SURFACE SLOPE)

(MAX 5.0% FINISHED SURFACE SLOPE)

(RAMP LENGTH 15' MAX MEASURED ALONG FINISHED SLOPE 4.0% MAX

(MAX ±0.5% FINISHED SURFACE SLOPE TOLERANCE)

SLOPE IS GREATER THAN 8.33% AND LENGTH IS 15' MIN (MAX ±0.8% FINISHED SURFACE SLOPE TOLERANCE)

SIDEWALK TRANSITION PANEL (RATE OF CROSS SLOPE CHANGE IS LESS THAN OR EQUAL TO 0.5% PER FOOT)

#### **CONSTRUCTION NOTES:**

- 1. SLOPES HOLD OVER ELEVATIONS.
- 2. FOR SECTION DETAILS, SEE SHEET C-05, TYPICAL SIDEWALK RAMP REPLACEMENT SECTION.
- 3.MAXIMUM CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 4. FLARE SLOPE IS 9.0% MAX (10% MAX FINISHED SURFACE SLOPE)
- 5. SEE ALIGNMENT AND GENERAL CONSTRUCTION SHEETS, SIGNAL SHEETS, AND STANDARD DRAWINGS FOR DETAILS NOT SHOWN.
- 6. TOP OF CURB HAS MAXIMUM SLOPE OF 1.5% TO THE STREET RESULTING IN A 0.01' DIFFERENCE IN ELEVATION BETWEEN TOP FRONT/FACE OF CURB AND TOP BACK OF CURB.

CURB RETURN DATA						
CURB	DESCRIPTION	GUTTER STA.	ELEV	CURVE DATA		
$\langle 1 \rangle$	BCR: N659434.66 E7663503.06	47+11.95	148.20	L = 54.82' \(\Lambda = 111°21'19"		
1	END: N659458.72 E7663543.14	47+40.66	149.51	$A = 111^{-2.1} 19$ R = 28.50'		



PORTLAND, OREGON 97258 P 503.225.9010

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CLACKAMAS COUNTY	DEPT. OF TRANSPORTATION AND DEVELOPMENT	150 BEAVERCREEK ROAD OREGON CITY, OR 97045	DIRECTOR	
•		CLACKAMAS	NORNHOI. NAC	,
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DRAFTED BY:
JWO/NMH
CHECKED BY:

NO.

C-18

ADA RAMP DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT

## SE JOHNSON CREEK BLVD @ SE FLAVEL DR





#### **KEY NOTES**

- (A) INSTALL CURB AND GUTTER, SEE STD DWG S150.
- TRANSITION CURB AND GUTTER TO STANDARD CURB OVER
- C MATCH EXIST CURB.
- SEE SHEETS TS-01 THROUGH TS-04 FOR TRAFFIC SIGNAL
- MAJOR ADJUSTMENT OF MANHOLE, FOR DETAILS, SEE SHT
- M CONSTRUCT TYPE G-2 INLET, SEE STD DWG RD364.
- Q MAINTAIN AND PROTECT EXIST SIGNAL POLE.
- (U) MAINTAIN AND PROTECT EXIST LANDSCAPING.

- (W) RESTORE EXIST IRRIGATION AS NECESSARY.
- (AA) MAINTAIN AND PROTECT EXIST 21 INCH CMP SD.
- (AC) MAINTAIN AND PROTECT EXIST INLET.
- (AE) PAVEMENT REPAIR AREA, SEE ROADWAY REHABILITATION PLANS.
- (AK) MAINTAIN AND PROTECT EXIST UTILITY BOX.
- (AO) INSTALL DETECTABLE WARNING, SEE RD902 THRU RD905.
- (AP) REMOVE EXIST INLET.

LOCATION	GUTTER STA.	GUTTER ELEVATION	BOC ELEVATION
1	47+98.03	148.55 ME	149.22 ME
2	47+99.88	148.57	149.07
3	48+03.92	149.10	149.11
4	48+15.42	149.30	149.31
5	48+34.15	149.91	150.41
6	48+40.28	149.96 ME	150.46 ME



#### LEGEND

MIN LEVEL AREA 5'x5' FOR THE PURPOSE OF THIS APPLICATION A MAX 2.0% FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED



SAW CUT EXTENTS FOR AREA OF SURFACE REMOVAL MIN 2' WIDER THAN PROPOSED CURB AND GUTTER

(MAX 2.0% FINISHED SURFACE SLOPE)

(NORMAL SIDEWALK CROSS SLOPE) SLOPE 7.5% MAX (MAX 8.3% FINISHED SURFACE SLOPE) (RAMP LENGTH 15' MAX MEASURED ALONG FINISHED

SLOPE 4.0% MAX (MAX 5.0% FINISHED SURFACE SLOPE)

(MAX ±0.5% FINISHED SURFACE SLOPE TOLERANCE)

SLOPE IS GREATER THAN 8.33% AND LENGTH IS 15' MIN (MAX ±0.8% FINISHED SURFACE SLOPE TOLERANCE)

SIDEWALK TRANSITION PANEL (RATE OF CROSS SLOPE CHANGE IS LESS THAN OR EQUAL TO 0.5% PER FOOT)

#### **CONSTRUCTION NOTES:**

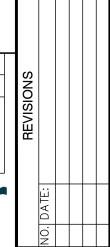
- 1. SLOPES HOLD OVER ELEVATIONS.
- 2. FOR SECTION DETAILS, SEE SHEET C-05, TYPICAL SIDEWALK RAMP REPLACEMENT SECTION.
- 3.MAXIMUM CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 4. FLARE SLOPE IS 9.0% MAX (10% MAX FINISHED SURFACE SLOPE)
- 5. SEE ALIGNMENT AND GENERAL CONSTRUCTION SHEETS, SIGNAL SHEETS, AND STANDARD DRAWINGS FOR DETAILS NOT SHOWN.
- 6. TOP OF CURB HAS MAXIMUM SLOPE OF 1.5% TO THE STREET RESULTING IN A 0.01' DIFFERENCE IN ELEVATION BETWEEN TOP FRONT/FACE OF CURB AND TOP BACK OF CURB.

		CURB F	RETURN	N DATA	١
	CURB	DESCRIPTION	GUTTER STA.	ELEV	CURVE DATA
	(1)	BCR: N659421.70 E7663590.44	48+01.14	148.68	L = 35.87' Δ = 74°43'53
		END: N659394.50 E7663609.80	48+28.89	149.84	R = 27.50'



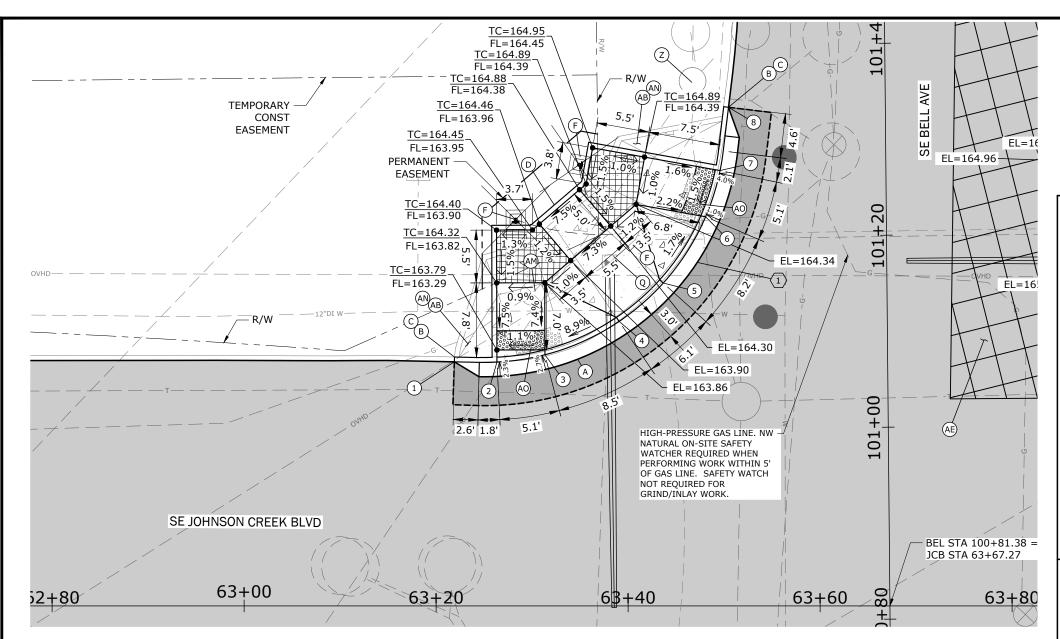
ONE SW COLUMBIA STREET, SUITE 1700 PORTLAND, OREGON 97258 P 503.225.9010

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_	CLACKAMAS COUNTY	DEPT. OF TRANSPORTATION	OPMENT	150 BEAVERCREEK ROAD	UREGON CITY, UR 9/045		2
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				Ü	<u>ٽ</u>	NAC	
	DESIGNED BY:	- NMH/MDE	- DRAFTED BY.	- IWO VIMH	Jana / Caro	СНЕСКЕВ ВҮ:	W N



C-19

AT) ADJUST EXIST UTILITY BOX TO GRADE.



## SE JOHNSON CREEK BLVD @ SE BELL AVE





#### **KEY NOTES**

- (A) INSTALL CURB AND GUTTER, SEE STD DWG S150.
- $\begin{picture}(60,0)\put(0,0){\line(1,0){10}}\put(0,0){\line(1,0){10}$
- C MATCH EXIST CURB.
- D INSTALL GRADE CORRECTION CURB, SEE DETAIL ON SHEET C-05.
- (Q) MAINTAIN AND PROTECT EXIST SIGNAL POLE.
- Z MAINTAIN AND PROTECT EXIST UTILITY POLE.
- (AB) REMOVE EXIST HARDSCAPE SURFACINGS.

- PAVEMENT REPAIR AREA, SEE ROADWAY REHABILITATION PLANS.
- ADJUST EXIST VALVE CAN (COORDINATE WITH NW NATURAL).
- (AN) RESTORE WITH GRAVEL.
- (AO) INSTALL DETECTABLE WARNING, SEE RD902 THRU RD905.

LOCATION	GUTTER STA.	GUTTER ELEVATION	BOC ELEVATION
1	63+21.90	163.15 ME	163.53 ME
2	63+26.34	163.26	163.76
3	63+31.33	163.34	163.35
4	63+39.06	163.57	164.08
5	63+43.66	163.83	164.33
6	63+48.07	164.16	164.17
7	63+49.58	164.24	164.74
8	63+50.45	164.66 ME	165.00 ME



#### **LEGEND**

SLOPE 4.0% MAX

TURNING SPACE MIN LEVEL AREA 5'x5' FOR THE PURPOSE OF THIS APPLICATION A MAX 2.0% FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED LEVEL



SAW CUT EXTENTS FOR AREA OF SURFACE REMOVAL MIN 2' WIDER THAN PROPOSED CURB AND GUTTER

SLOPE 1.5% MAX (MAX 2.0% FINISHED SURFACE SLOPE) (NORMAL SIDEWALK CROSS SLOPE)

(MAX 5.0% FINISHED SURFACE SLOPE)

SLOPE 7.5% MAX (MAX 8.3% FINISHED SURFACE SLOPE) (RAMP LENGTH 15' MAX MEASURED ALONG FINISHED SURFACE SLOPE)

SLOPE AS SHOWN (MAX ±0.5% FINISHED SURFACE SLOPE TOLERANCE)

SLOPE IS GREATER THAN 8.33% AND LENGTH IS  $15^{\circ}$  MIN (MAX  $\pm 0.8\%$  FINISHED SURFACE SLOPE TOLERANCE)

SIDEWALK TRANSITION PANEL (RATE OF CROSS SLOPE CHANGE IS LESS THAN OR EQUAL TO 0.5% PER FOOT)

#### CONSTRUCTION NOTES:

- 1. SLOPES HOLD OVER ELEVATIONS.
- 2. FOR SECTION DETAILS, SEE SHEET C-05, TYPICAL SIDEWALK RAMP REPLACEMENT SECTION.
- 3.MAXIMUM CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 4. FLARE SLOPE IS 9.0% MAX (10% MAX FINISHED SURFACE SLOPE)
- 5. SEE ALIGNMENT AND GENERAL CONSTRUCTION SHEETS, SIGNAL SHEETS, AND STANDARD DRAWINGS FOR DETAILS NOT SHOWN.
- $6.\ \,$  TOP OF CURB HAS MAXIMUM SLOPE OF 1.5% TO THE STREET RESULTING IN A 0.01' DIFFERENCE IN ELEVATION BETWEEN TOP FRONT/FACE OF CURB AND TOP BACK OF CURB.

		CURB F	RETURN	N DATA	4
	CURB	DESCRIPTION	GUTTER STA.	ELEV	CURVE DATA
	(1)	BCR: N659309.25 E7665094.06	63+24.58	163.20	L = 36.79' Λ = 84°18'54'
		END: N659330.35 E7665120.15	63+49.91	164.38	R = 25.00'



PORTLAND, OREGON 97258 P 503.225.9010 ADA RAMP DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREK ROAD
OREGON CITY, OR 97045 DAN

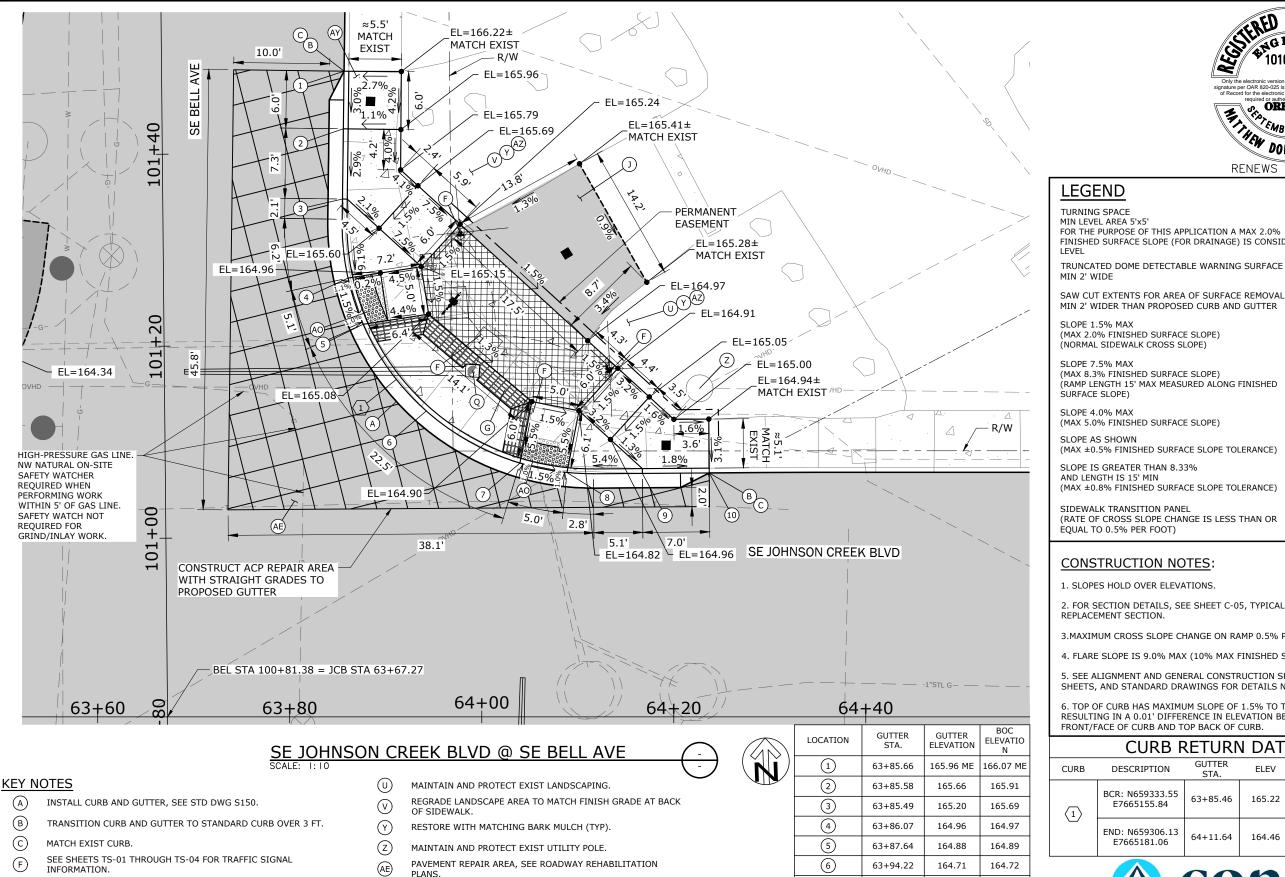
REVISIONS
DATE:

NO.

C-20

DRAFTED BY:
JWO/NMH
CHECKED BY:
NJM

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(8)

(9)

(10)

64+03.97

64+08.88

64+16.73

64 + 23.70

164.55

164.48

164.44

164.40 MF 164.78 MF

164.56

164.49

164.90

INFORMATION.

INSTALL DETECTABLE GUIDE STRIP, SEE RD909.

REC PERMIT PRIOR TO CONSTRUCTION.

MAINTAIN AND PROTECT EXIST SIGNAL POLE.

CONSTRUCT ASPHALT WALK ACCORDING TO ODOT STD DWG

PERMITTED FOR NON-PARK USE. OBTAIN PORTLAND PARKS &

RD602, ACCESSIBLE TO MAINTENANCE VEHICLES. AREA

(AO)

(AY)

INSTALL DETECTABLE WARNING, SEE RD902 THRU RD905.

WITH PORTLAND PARKS & REC.

CONSTRUCT DRIVEWAY APRON, SEE CLACKCO STD DWG D600.

COMPLETE ROADSIDE RESTORATION PER CONDITIONS OF NPUP

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DETAILS EEK BLVD ECM)

ADA RAMP DETA JOHNSON CREEK E (79th PI to ECM) IMPROVEMENTS PRC

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY. OR 97045

FOR THE PURPOSE OF THIS APPLICATION A MAX 2.0% FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED

TRUNCATED DOME DETECTABLE WARNING SURFACE

MIN 2' WIDER THAN PROPOSED CURB AND GUTTER

(MAX 2.0% FINISHED SURFACE SLOPE) (NORMAL SIDEWALK CROSS SLOPE)

(MAX 8.3% FINISHED SURFACE SLOPE) (RAMP LENGTH 15' MAX MEASURED ALONG FINISHED

SLOPE IS GREATER THAN 8.33%

SIDEWALK TRANSITION PANEL (RATE OF CROSS SLOPE CHANGE IS LESS THAN OR

- 2. FOR SECTION DETAILS, SEE SHEET C-05, TYPICAL SIDEWALK RAMP
- 3.MAXIMUM CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 4. FLARE SLOPE IS 9.0% MAX (10% MAX FINISHED SURFACE SLOPE)
- 5. SEE ALIGNMENT AND GENERAL CONSTRUCTION SHEETS, SIGNAL SHEETS, AND STANDARD DRAWINGS FOR DETAILS NOT SHOWN.
- 6. TOP OF CURB HAS MAXIMUM SLOPE OF 1.5% TO THE STREET RESULTING IN A 0.01' DIFFERENCE IN ELEVATION BETWEEN TOP FRONT/FACE OF CURB AND TOP BACK OF CURB.

CURB RETURN DATA						
CURB	DESCRIPTION	GUTTER STA.	ELEV	CURVE DATA		
(1)	BCR: N659333.55 E7665155.84	63+85.46	165.22	L = 41.54'		
	END: N659306.13 E7665181.06	64+11.64	164.46	Δ = 91°24'27" R = 26.00'		

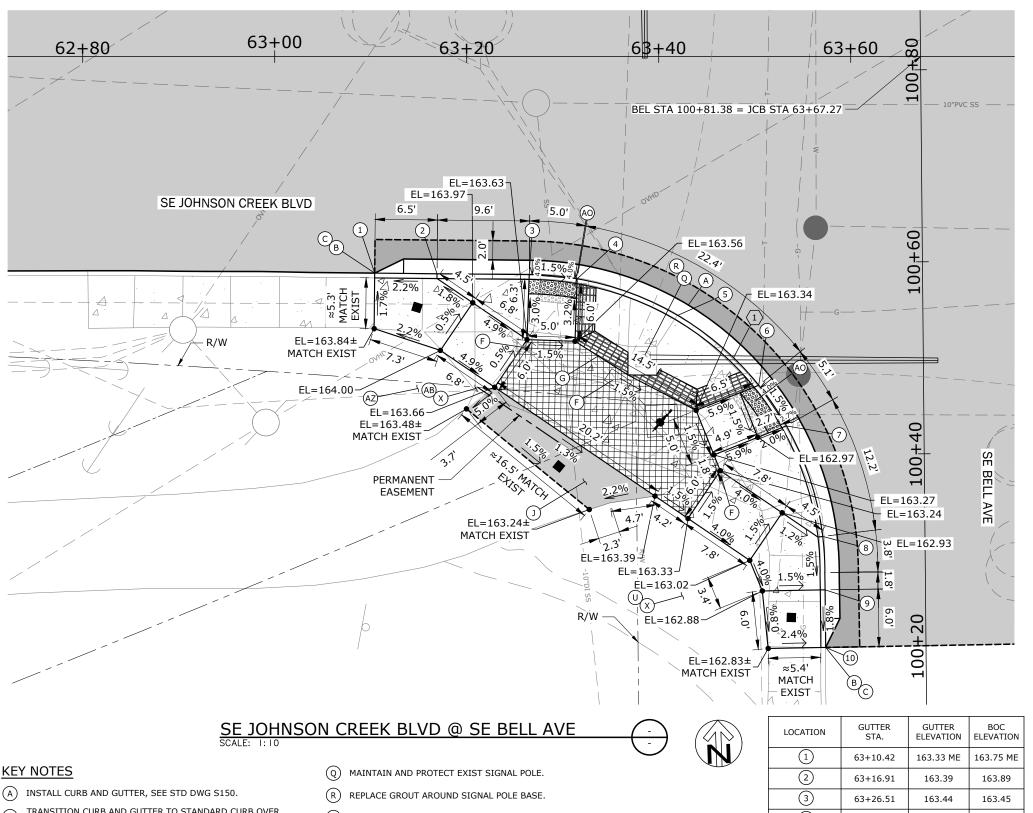


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DRAFTED BY:
JWO/NMH
CHECKED BY: NO.

C-21

DAN



- KEY NOTES
- B TRANSITION CURB AND GUTTER TO STANDARD CURB OVER 3 FT.
- (C) MATCH EXIST CURB.
- SEE SHEETS TS-01 THROUGH TS-04 FOR TRAFFIC SIGNAL
- G INSTALL DETECTABLE GUIDE STRIP, SEE RD909.
- CONSTRUCT ASPHALT WALK ACCORDING TO ODOT STD DWG RD602, ACCESSIBLE TO MAINTENANCE VEHICLES.
  AREA PERMITTED FOR NON-PARK USE. OBTAIN PORTLAND PARKS & REC PERMIT PRIOR TO CONSTRUCTION.
- MAINTAIN AND PROTECT EXIST LANDSCAPING.
- (X) RESTORE WITH MATCHING TOPSOIL AND GRASS SEEDING.
- (AB) REMOVE EXIST HARDSCAPE SURFACINGS.
- (AO) INSTALL DETECTABLE WARNING, SEE RD902 THRU RD905.
- COMPLETE ROADSIDE RESTORATION PER CONDITIONS OF NPUP WITH PORTLAND PARKS & REC

LOCATION	GUTTER STA.	GUTTER ELEVATION	BOC ELEVATION
1	63+10.42	163.33 ME	163.75 ME
2	63+16.91	163.39	163.89
3	63+26.51	163.44	163.45
4	63+31.50	163.36	163.37
5	63+41.97	163.20	163.21
6	63+50.42	162.99	163.00
7	63+53.29	162.91	162.92
8	63+57.07	162.37	162.87
9	63+57.33	162.29	162.79
10	63+57.39	162.21 ME	162.70 ME



#### **LEGEND**

MIN LEVEL AREA 5'x5' FOR THE PURPOSE OF THIS APPLICATION A MAX 2.0% FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED

TRUNCATED DOME DETECTABLE WARNING SURFACE MIN 2' WIDE

SAW CUT EXTENTS FOR AREA OF SURFACE REMOVAL MIN 2' WIDER THAN PROPOSED CURB AND GUTTER

(MAX 2.0% FINISHED SURFACE SLOPE) (NORMAL SIDEWALK CROSS SLOPE) SLOPE 7.5% MAX (MAX 8.3% FINISHED SURFACE SLOPE)

(MAX 5.0% FINISHED SURFACE SLOPE)

(RAMP LENGTH 15' MAX MEASURED ALONG FINISHED SLOPE 4.0% MAX

(MAX ±0.5% FINISHED SURFACE SLOPE TOLERANCE)

SLOPE IS GREATER THAN 8.33% AND LENGTH IS 15' MIN (MAX ±0.8% FINISHED SURFACE SLOPE TOLERANCE)

SIDEWALK TRANSITION PANEL (RATE OF CROSS SLOPE CHANGE IS LESS THAN OR EQUAL TO 0.5% PER FOOT)

#### **CONSTRUCTION NOTES:**

1. SLOPES HOLD OVER ELEVATIONS.

CURB

- 2. FOR SECTION DETAILS, SEE SHEET C-05, TYPICAL SIDEWALK RAMP REPLACEMENT SECTION.
- 3.MAXIMUM CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 4. FLARE SLOPE IS 9.0% MAX (10% MAX FINISHED SURFACE SLOPE)
- 5. SEE ALIGNMENT AND GENERAL CONSTRUCTION SHEETS, SIGNAL SHEETS, AND STANDARD DRAWINGS FOR DETAILS NOT SHOWN.
- $6.\ \mathsf{TOP}\ \mathsf{OF}\ \mathsf{CURB}\ \mathsf{HAS}\ \mathsf{MAXIMUM}\ \mathsf{SLOPE}\ \mathsf{OF}\ 1.5\%\ \mathsf{TO}\ \mathsf{THE}\ \mathsf{STREET}\ \mathsf{RESULTING}\ \mathsf{IN}\ \mathsf{A}\ 0.01'\ \mathsf{DIFFERENCE}\ \mathsf{IN}\ \mathsf{ELEVATION}\ \mathsf{BETWEEN}\ \mathsf{TOP}$ FRONT/FACE OF CURB AND TOP BACK OF CURB.

CURB F	\		
DESCRIPTION	GUTTER STA.	ELEV	CURVE DATA
BCR: N659261.12 E7665094.38	63+26.61	163.43	L = 48.42'

			40.0	104
1)	END: N659229.02 E7665123.95	63+57.30	162.32	Δ = 89°29'11" R = 31.00'
1	BCR: N659261.12 E7665094.38	63+26.61	163.43	L = 48.42'



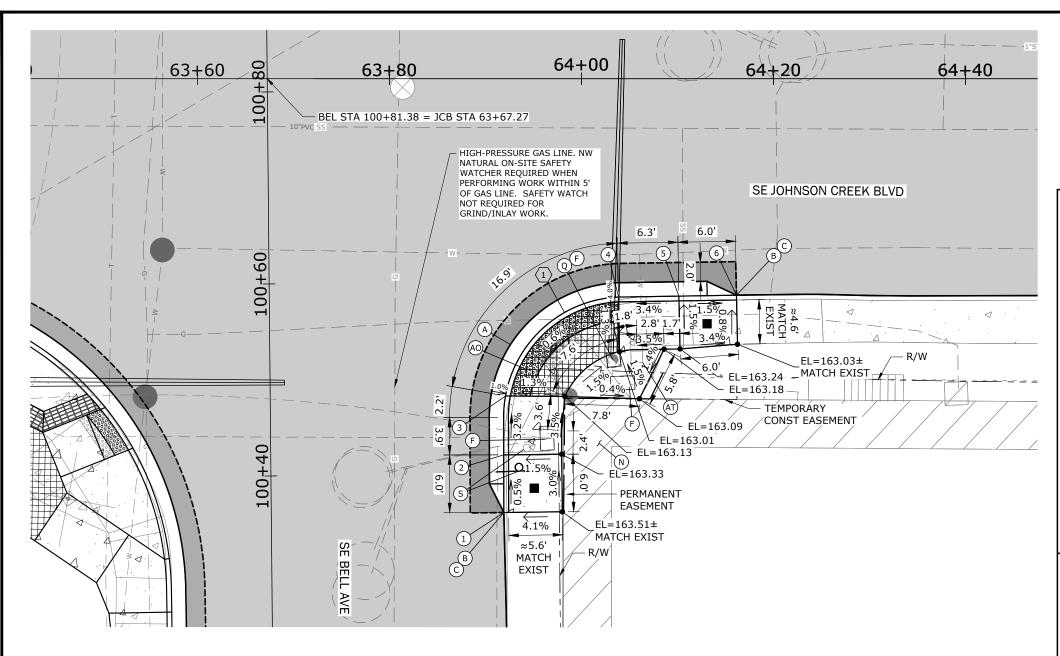
PORTLAND, OREGON 97258 P 503.225.9010

ADA RAMP DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREK ROAD
OREGON CITY, OR 97045

DRAFTED BY:
JWO/NMH
CHECKED BY:
NJM

NO.

C-22



SE JOHNSON CREEK BLVD @ SE BELL AVE





#### KEY NOTES

- TRANSITION CURB AND GUTTER TO STANDARD CURB OVER
- C MATCH EXIST CURB.
- F SEE SHEETS TS-01 THROUGH TS-04 FOR TRAFFIC SIGNAL INFORMATION.
- N MAINTAIN AND PROTECT EXIST BUILDING.
- Q MAINTAIN AND PROTECT EXIST SIGNAL POLE.

- REMOVE AND REINSTALL EXIST SIGN AND EXIST POST, SEE
- (AO) INSTALL DETECTABLE WARNING, SEE RD902 THRU RD905.
- (AO) ADJUST EXIST UTILITY BOX TO GRADE.

LOCATION	GUTTER STA.	GUTTER ELEVATION	BOC ELEVATION
1	63+91.92	162.83 ME	163.28 ME
2	63+91.91	162.89	163.25
3	63+92.10	163.04	163.05
4	64+03.88	162.93	162.94
5	64+10.15	162.70	163.16
6	64+16.15	162.60 ME	163.07 ME



#### LEGEND

MIN LEVEL AREA 5'x5'
FOR THE PURPOSE OF THIS APPLICATION A MAX 2.0%
FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED
LEVEL

TRUNCATED DOME DETECTABLE WARNING SURFACE MIN 2' WIDE

SAW CUT EXTENTS FOR AREA OF SURFACE REMOVAL MIN 2' WIDER THAN PROPOSED CURB AND GUTTER  $\,$ 

(MAX 2.0% FINISHED SURFACE SLOPE) (NORMAL SIDEWALK CROSS SLOPE) SLOPE 7.5% MAX (MAX 8.3% FINISHED SURFACE SLOPE)

SURFACE SLOPE)
SLOPE 4.0% MAX

(MAX 5.0% FINISHED SURFACE SLOPE)

SLOPE AS SHOWN (MAX  $\pm 0.5\%$  FINISHED SURFACE SLOPE TOLERANCE)

(RAMP LENGTH 15' MAX MEASURED ALONG FINISHED

SLOPE IS GREATER THAN 8.33% AND LENGTH IS 15' MIN (MAX ±0.8% FINISHED SURFACE SLOPE TOLERANCE)

SIDEWALK TRANSITION PANEL (RATE OF CROSS SLOPE CHANGE IS LESS THAN OR EQUAL TO 0.5% PER FOOT)

#### **CONSTRUCTION NOTES:**

- 1. SLOPES HOLD OVER ELEVATIONS.
- 2. FOR SECTION DETAILS, SEE SHEET C-05, TYPICAL SIDEWALK RAMP REPLACEMENT SECTION.
- 3.MAXIMUM CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 4. FLARE SLOPE IS 9.0% MAX (10% MAX FINISHED SURFACE SLOPE)
- 5. SEE ALIGNMENT AND GENERAL CONSTRUCTION SHEETS, SIGNAL SHEETS, AND STANDARD DRAWINGS FOR DETAILS NOT SHOWN.
- $6.\ \,$  TOP OF CURB HAS MAXIMUM SLOPE OF 1.5% TO THE STREET RESULTING IN A 0.01' DIFFERENCE IN ELEVATION BETWEEN TOP FRONT/FACE OF CURB AND TOP BACK OF CURB.

		CURB F	RETURN	N DATA	<b>A</b>
	CURB	DESCRIPTION	GUTTER STA.	ELEV	CURVE DATA
	(1)	BCR: N659246.27 E7665159.19	63+91.90	162.99	L = 19.46' Λ = 89°12'23
		END: N659258.35 E7665171.93	64+04.21	162.92	R = 12.50'



PORTLAND, OREGON 97258 P 503.225.9010 ADA RAMP DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREK ROAD
OREGON CITY, OR 97045

CLACKAMAS

DESIGNED BY:

NMH/MDE

DRAFTED BY:

CLA

UWO/NMH

CCC

CHECKED BY:

CHECKED BY:

DAN

REVISIONS

NO. DATE:

reet No. C-23

## SE JOHNSON CREEK BLVD @ SE 70TH AVE





#### **KEY NOTES**

- (A) INSTALL CURB AND GUTTER, SEE STD DWG S150.
- TRANSITION CURB AND GUTTER TO STANDARD CURB OVER
- INSTALL GRADE CORRECTION CURB, SEE DETAIL ON SHEET D INSTA
- CONSTRUCT PEDESTRIAN TRAVERSABLE ASPHALT SHOULDER. MATCH EXIST ROADWAY GRADE, SEE STD DWG RD950, SHOULDER OPTION "EW-2".
- P MAINTAIN AND PROTECT EXIST FENCE.
- REMOVE AND REINSTALL EXIST SIGN ON NEW POST, SEE
- (U) MAINTAIN AND PROTECT EXIST LANDSCAPING.

- (AC) MAINTAIN AND PROTECT EXIST INLET.
- BRIDGE AND APPROACH SLAB JOINTS, SEE ROADWAY REHABILITATION PLANS.
- INSTALL CROSSWALK CLOSURE BARRICADE, SEE SHT
- INSTALL THICKENED EDGE SIDEWALK, SEE DETAIL ON SHT C-02.
- (AO) INSTALL DETECTABLE WARNING, SEE RD902 THRU RD905.
- TRANSITION GUTTER TO MATCH INLET.
- MAINTAIN AND PROTECT EXIST MAILBOX.

LOCATION	GUTTER STA.	GUTTER ELEVATION	BOC ELEVATION
1	69+36.25	165.04 ME	165.04 ME
2	69+38.40	165.94	165.95
3	69+42.05	166.02	166.03
4	69+61.71	166.83 ME	167.40 ME



#### LEGEND

TURNING SPACE MIN LEVEL AREA 5'x5' FOR THE PURPOSE OF THIS APPLICATION A MAX 2.0% FINISHED SURFACE SLOPE (FOR DRAINAGE) IS CONSIDERED



SAW CUT EXTENTS FOR AREA OF SURFACE REMOVAL MIN 2' WIDER THAN PROPOSED CURB AND GUTTER

(MAX 2.0% FINISHED SURFACE SLOPE) (NORMAL SIDEWALK CROSS SLOPE) SLOPE 7.5% MAX (MAX 8.3% FINISHED SURFACE SLOPE)

(MAX 5.0% FINISHED SURFACE SLOPE)

(RAMP LENGTH 15' MAX MEASURED ALONG FINISHED SLOPE 4.0% MAX

(MAX ±0.5% FINISHED SURFACE SLOPE TOLERANCE)

SLOPE IS GREATER THAN 8.33% AND LENGTH IS 15' MIN (MAX ±0.8% FINISHED SURFACE SLOPE TOLERANCE)

SIDEWALK TRANSITION PANEL (RATE OF CROSS SLOPE CHANGE IS LESS THAN OR EQUAL TO 0.5% PER FOOT)

#### **CONSTRUCTION NOTES:**

- 1. SLOPES HOLD OVER ELEVATIONS.
- 2. FOR SECTION DETAILS, SEE SHEET C-05, TYPICAL SIDEWALK RAMP REPLACEMENT SECTION.
- 3.MAXIMUM CROSS SLOPE CHANGE ON RAMP 0.5% PER FOOT.
- 4. FLARE SLOPE IS 9.0% MAX (10% MAX FINISHED SURFACE SLOPE)
- 5. SEE ALIGNMENT AND GENERAL CONSTRUCTION SHEETS, SIGNAL SHEETS, AND STANDARD DRAWINGS FOR DETAILS NOT SHOWN.
- 6. TOP OF CURB HAS MAXIMUM SLOPE OF 1.5% TO THE STREET RESULTING IN A 0.01' DIFFERENCE IN ELEVATION BETWEEN TOP FRONT/FACE OF CURB AND TOP BACK OF CURB.

CURB RETURN DATA					
CURB	DESCRIPTION	GUTTER STA.	ELEV	CURVE DATA	
(1)	BCR: N659207.84 E7665701.46	69+36.25	165.08	L = 38.78' Δ = 88°51'56"	
	END: N659231.81 E7665726.98	69+60.38	166.85	R = 25.00'	

PORTLAND, OREGON 97258

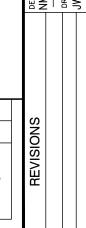
P 503.225.9010



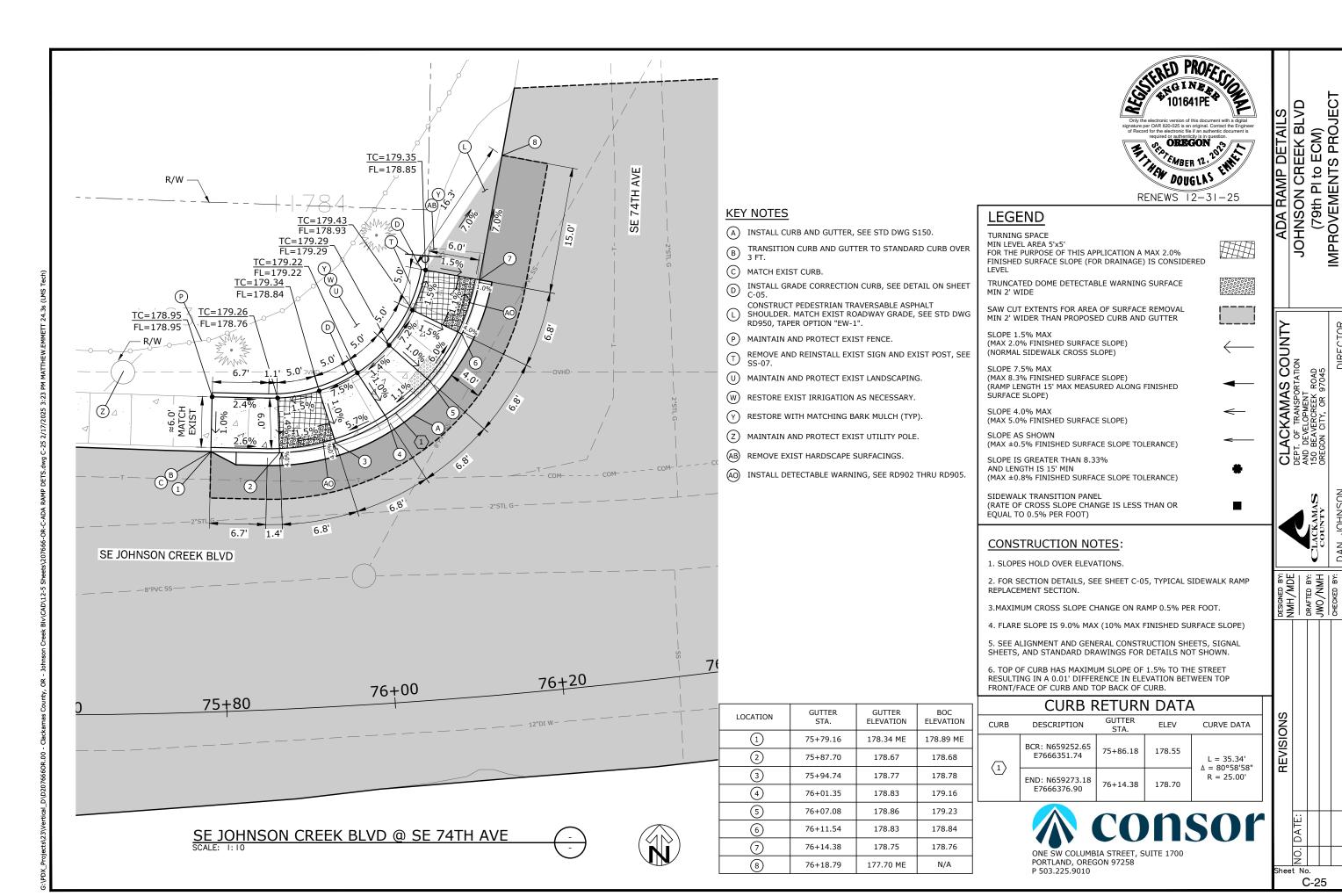
ADA RAMP DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREK ROAD
OREGON CITY, OR 97045 DRAFTED BY:
JWO/NMH
CHECKED BY:
NJM

DIREC

DAN



NO. DATE: C-24

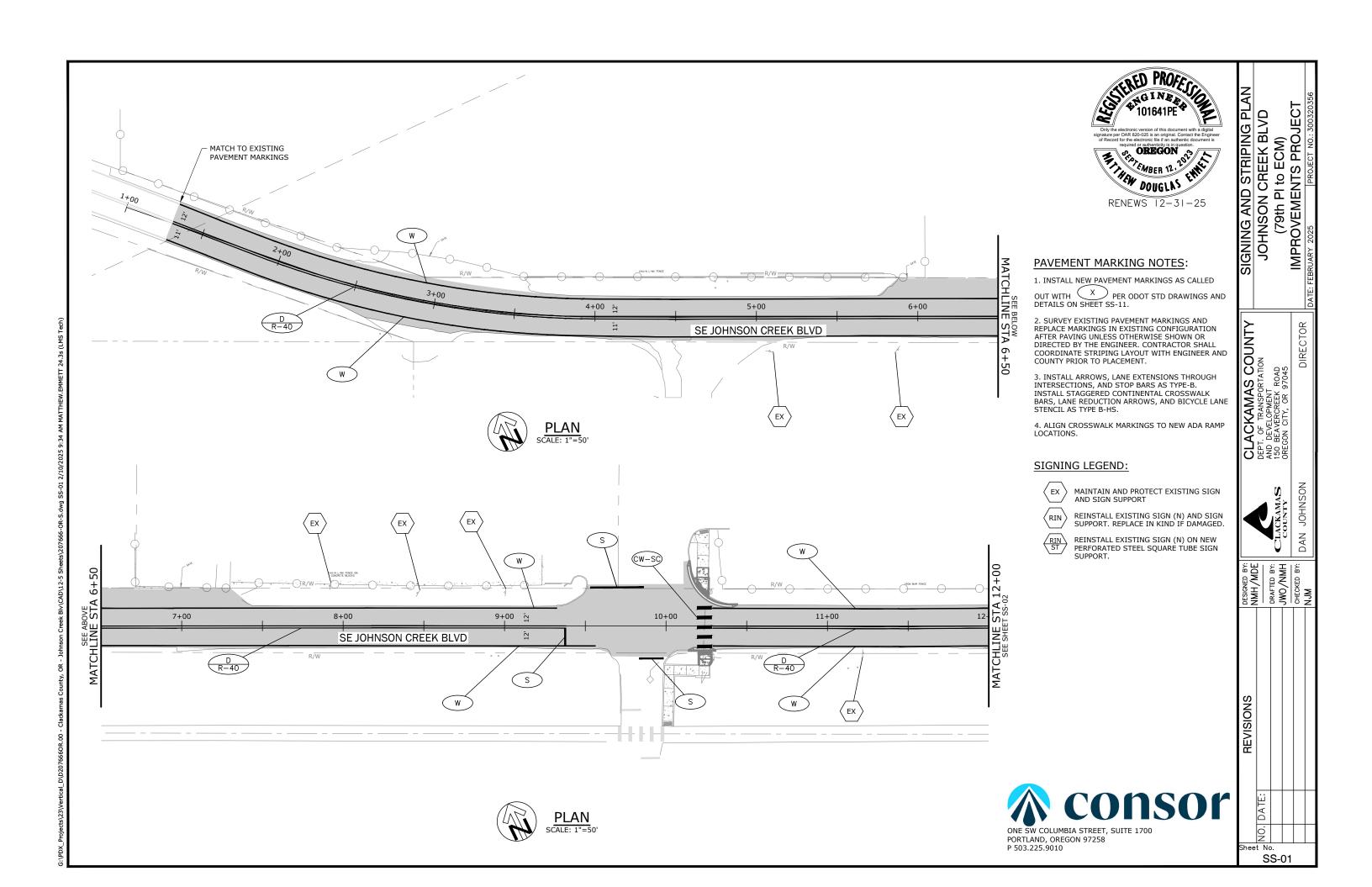


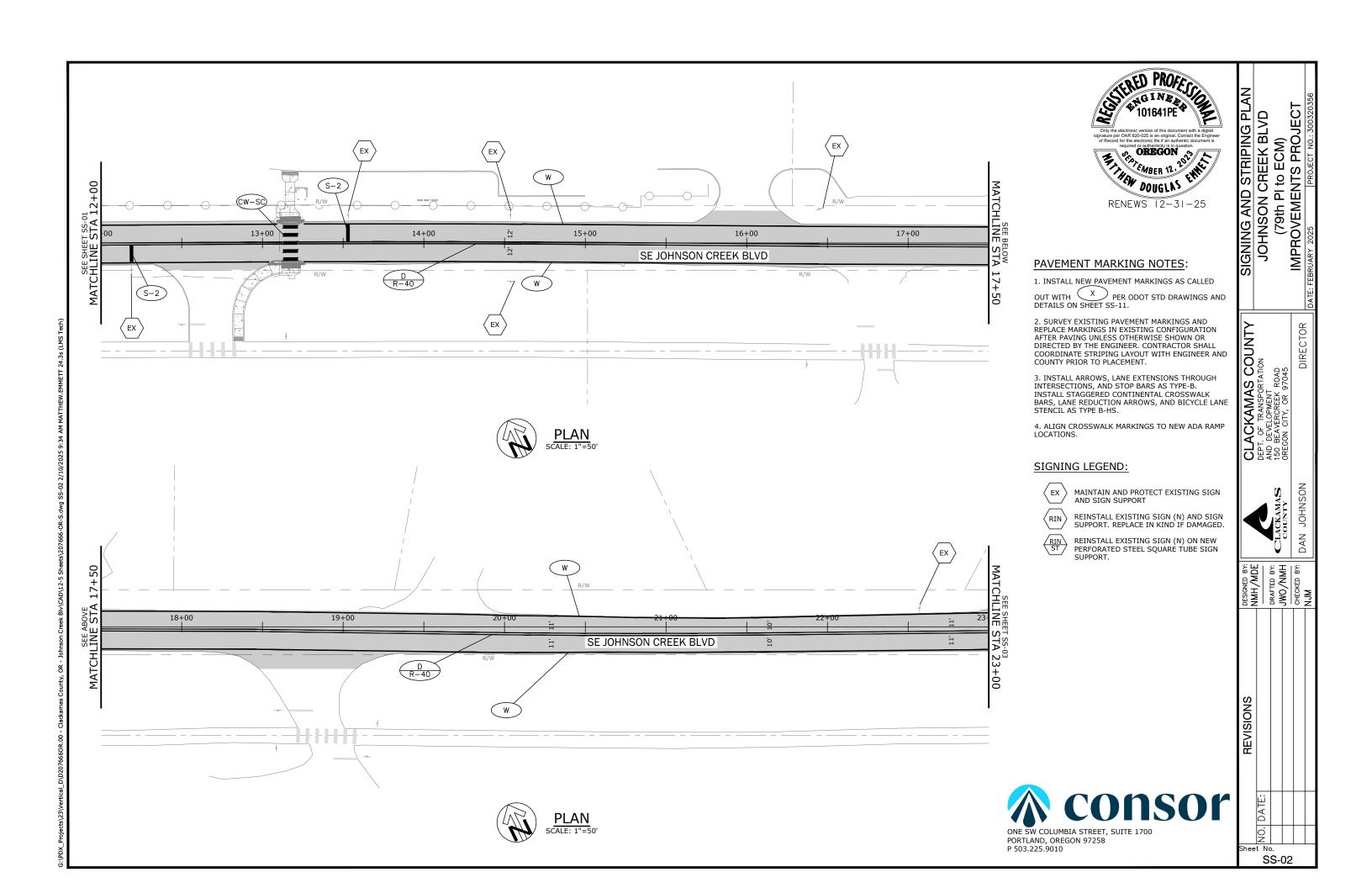
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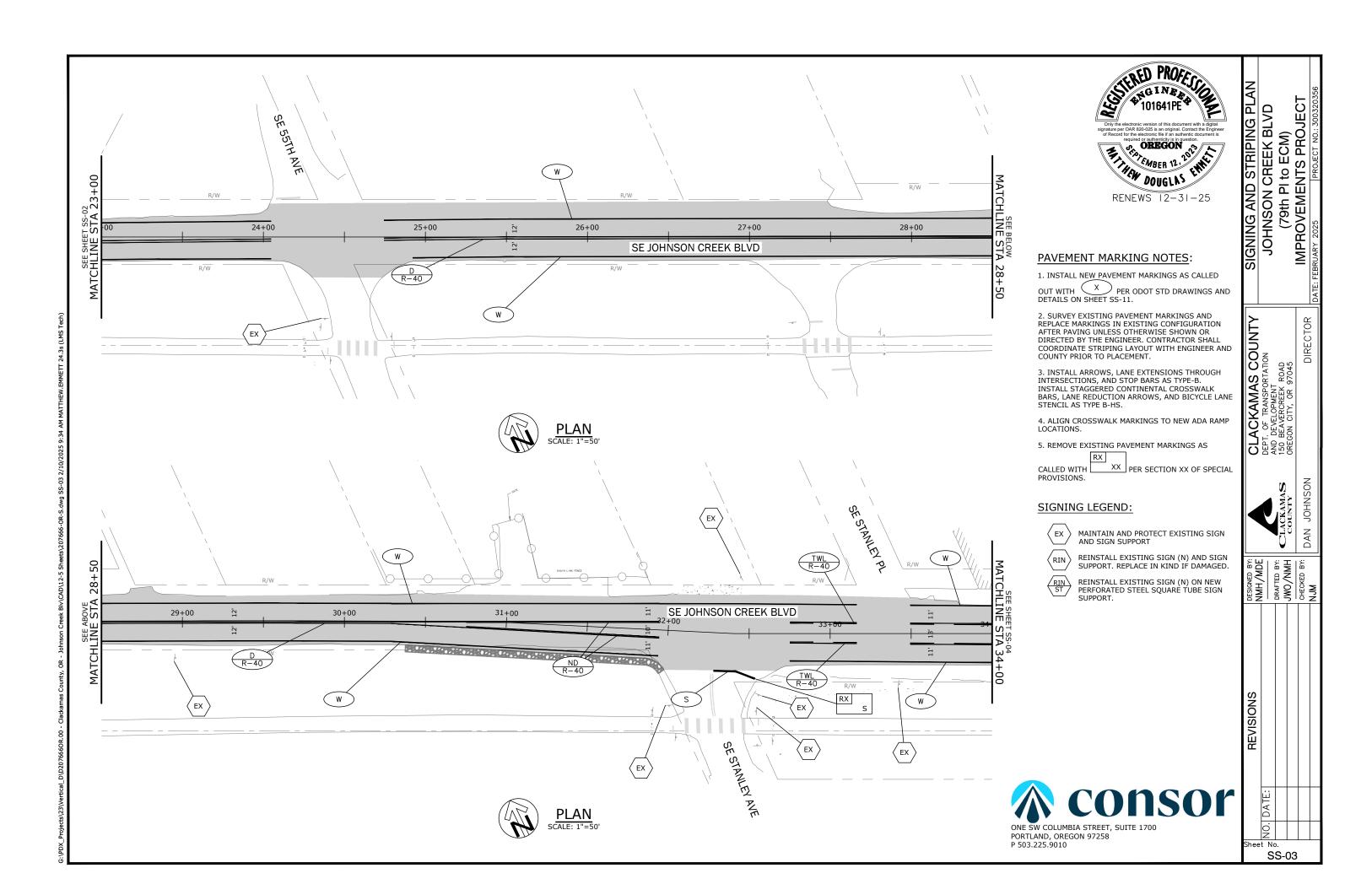
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JWO/NMH
CHECKED BY:
NJM

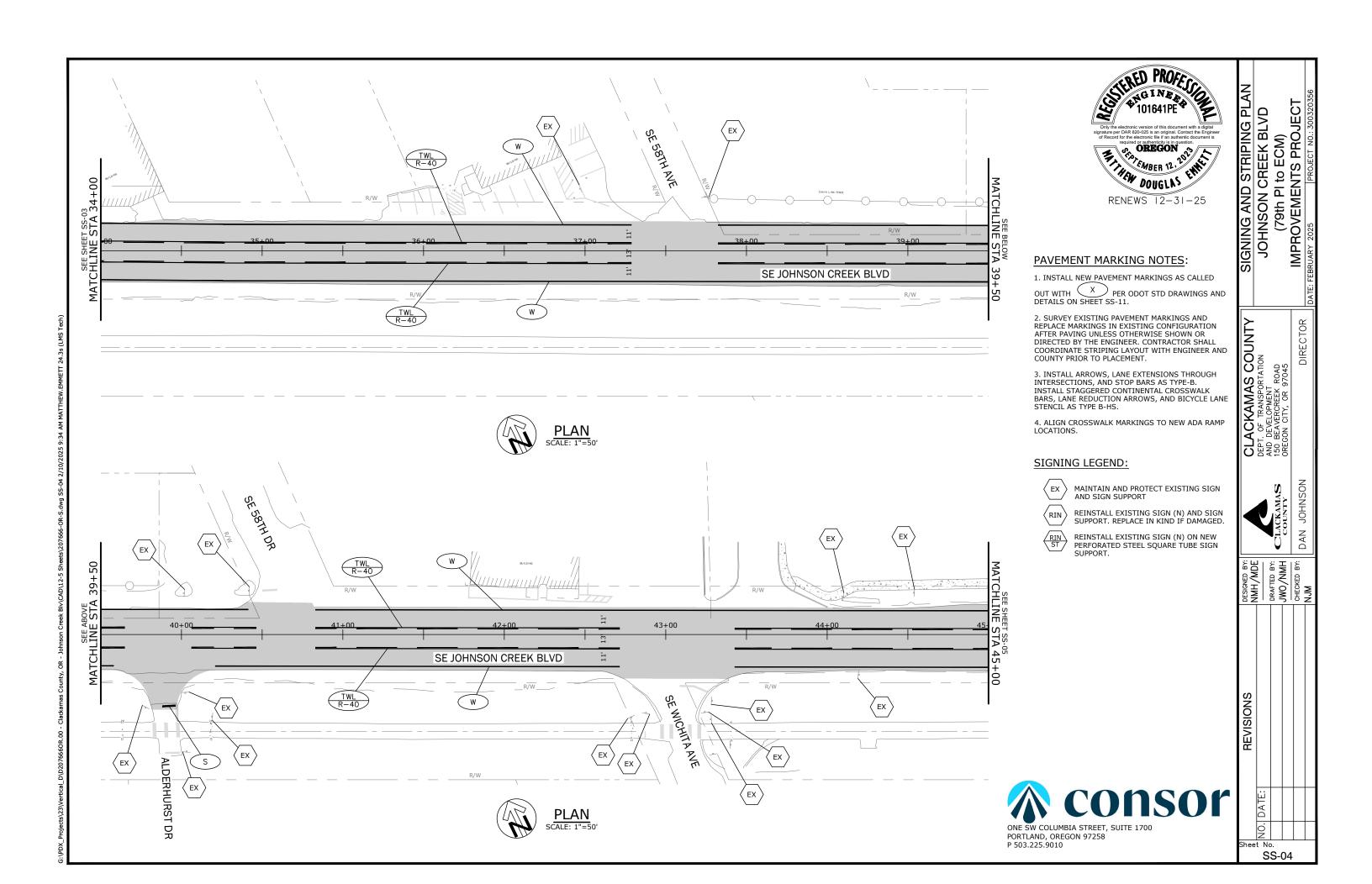
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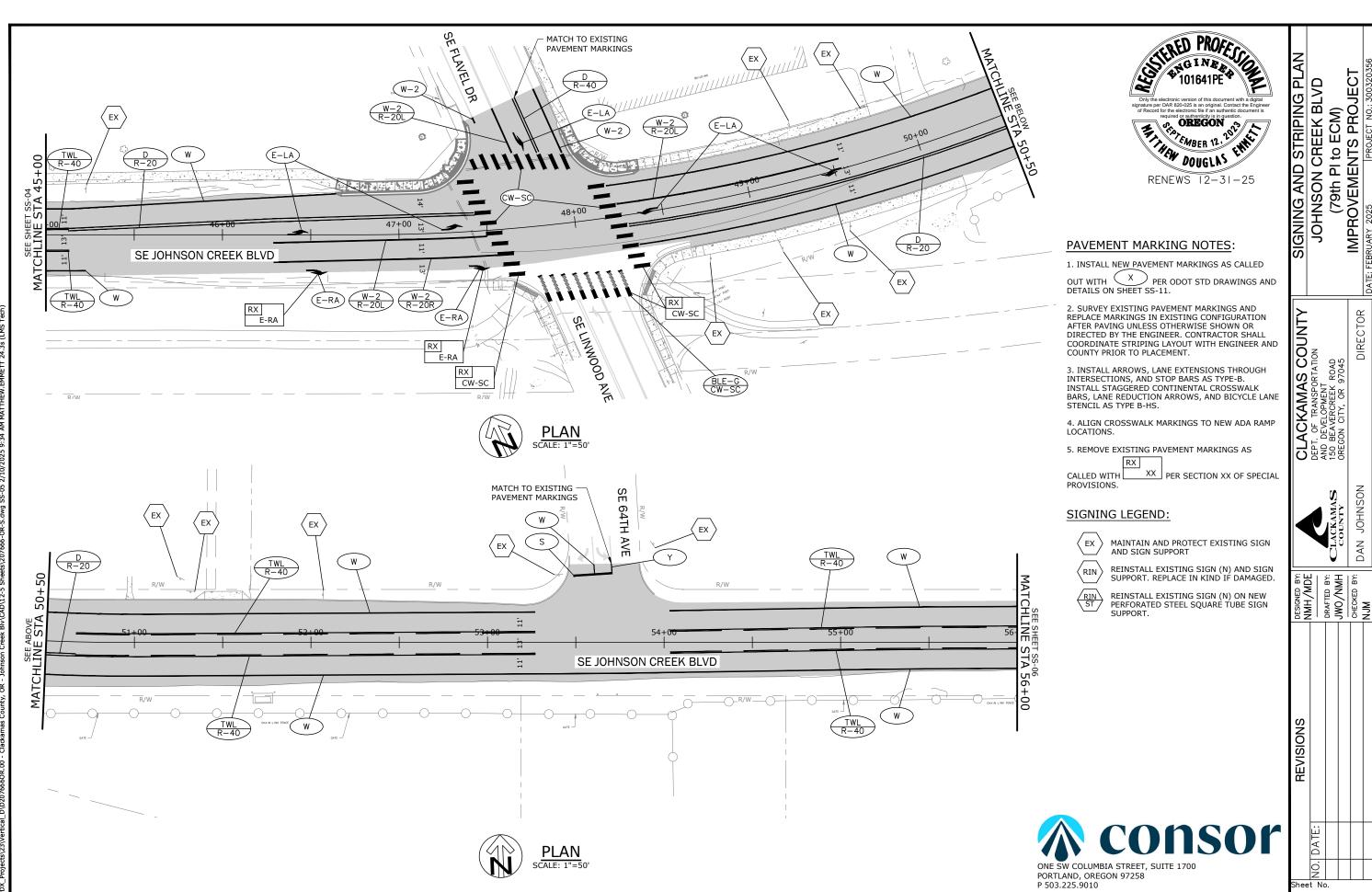
C-25



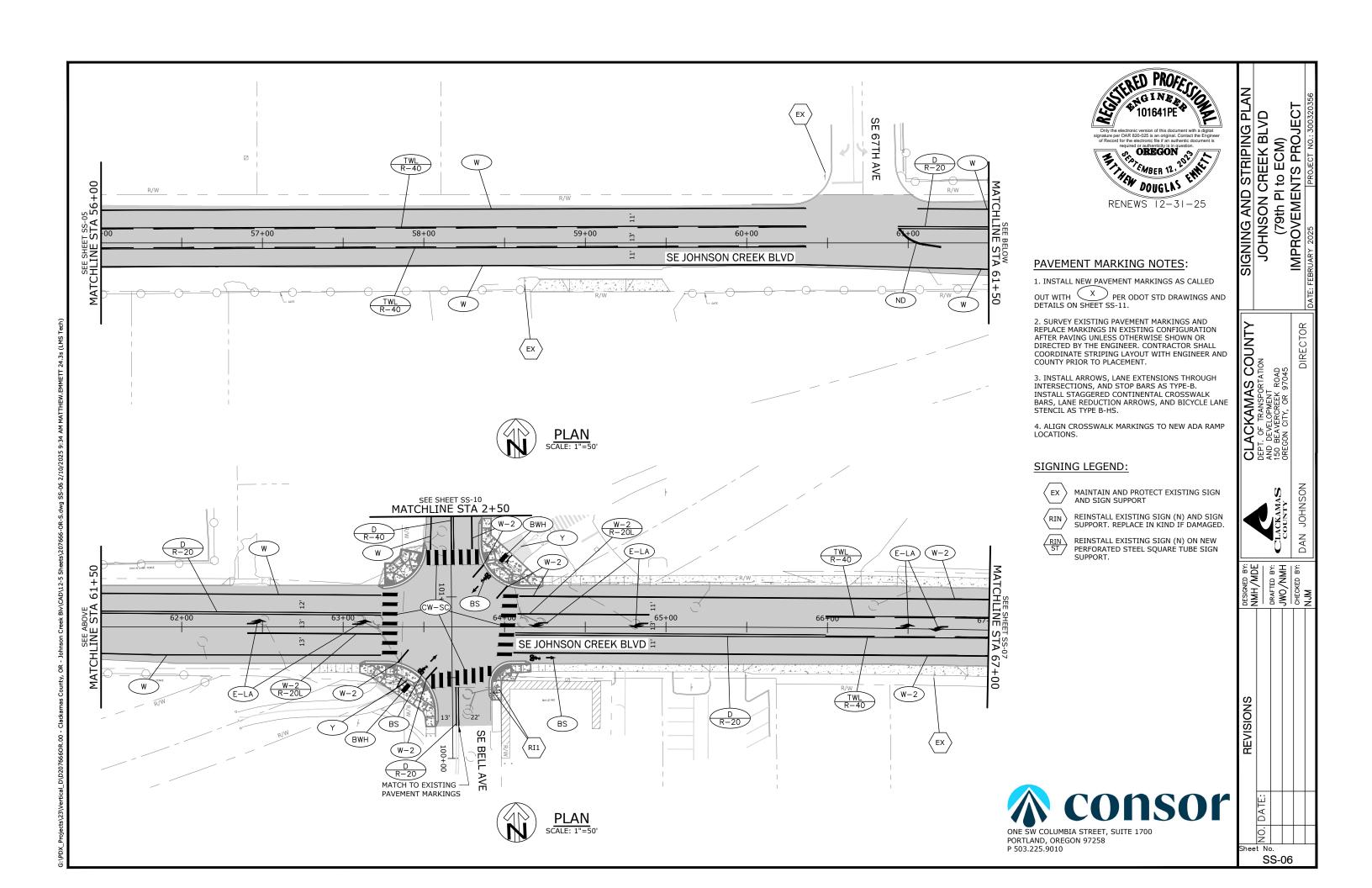


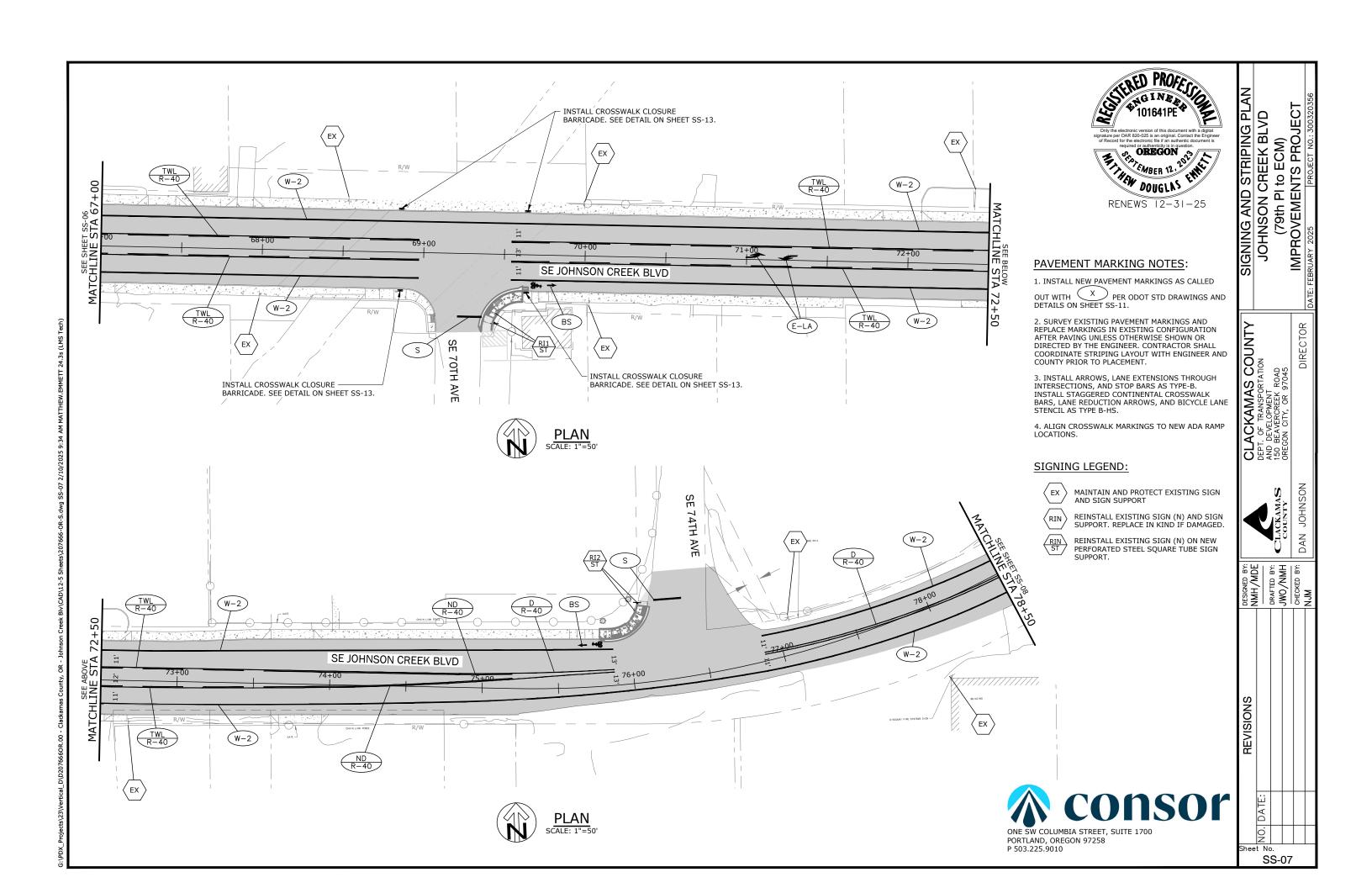


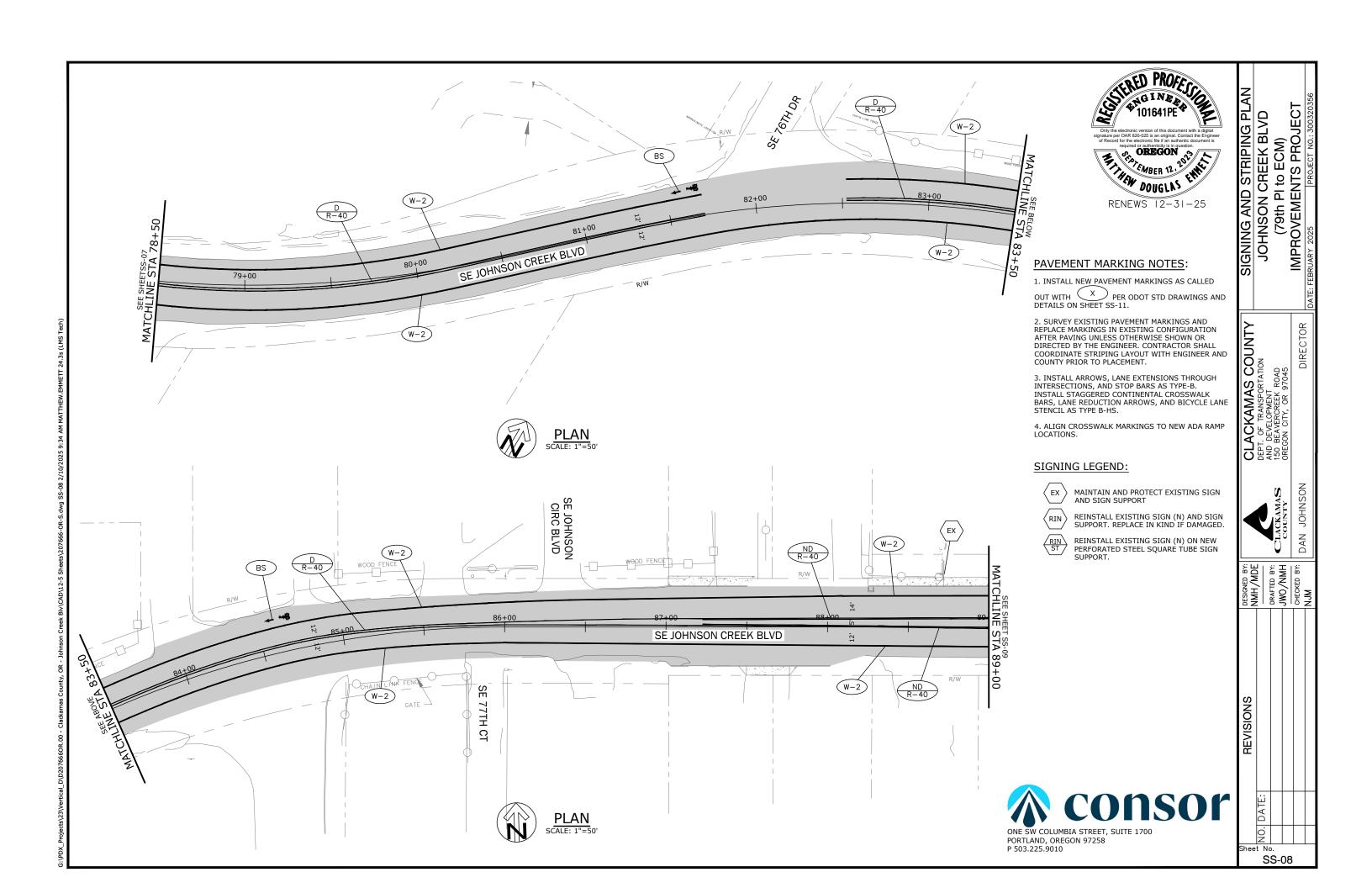


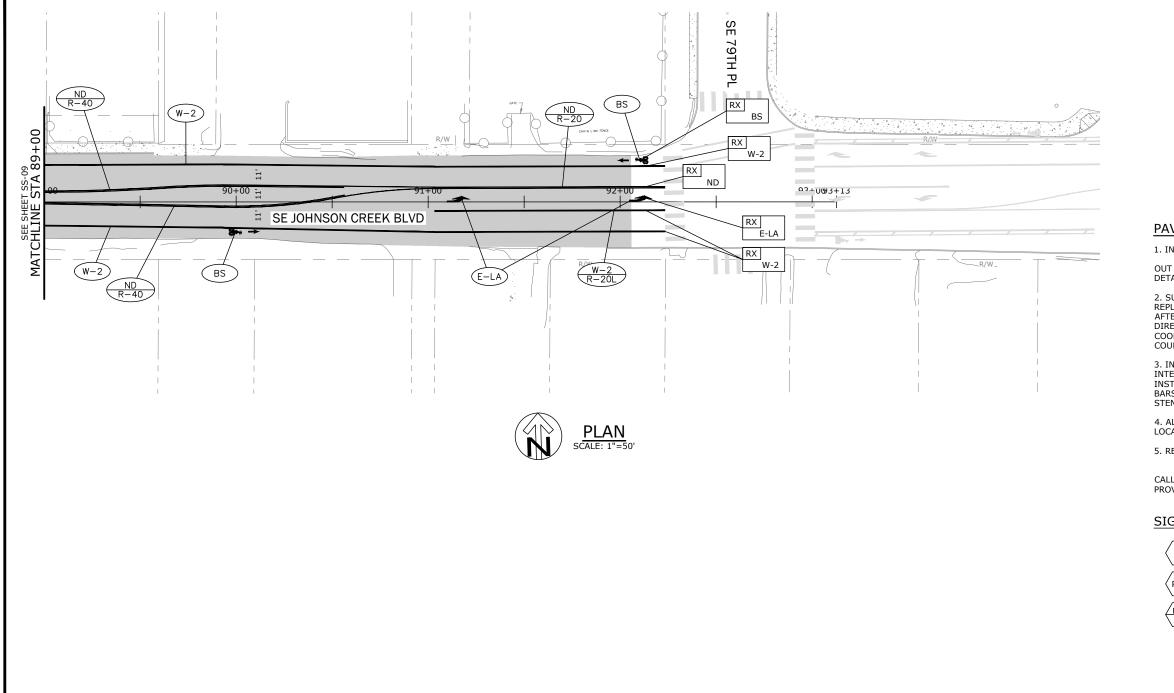


SS-05











SIGNING AND STRIPING PLAN JOHNSON CREEK BLVD (79th PI to ECM) IMPROVEMENTS PROJECT

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DIRECTOR

#### PAVEMENT MARKING NOTES:

- 1. INSTALL NEW PAVEMENT MARKINGS AS CALLED OUT WITH X PER ODOT STD DRAWINGS AND DETAILS ON SHEET SS-11.
- 2. SURVEY EXISTING PAVEMENT MARKINGS AND REPLACE MARKINGS IN EXISTING CONFIGURATION AFTER PAVING UNLESS OTHERWISE SHOWN OR DIRECTED BY THE ENGINEER. CONTRACTOR SHALL COORDINATE STRIPING LAYOUT WITH ENGINEER AND COUNTY PRIOR TO PLACEMENT.
- 3. INSTALL ARROWS, LANE EXTENSIONS THROUGH INTERSECTIONS, AND STOP BARS AS TYPE-B. INSTALL STAGGERED CONTINENTAL CROSSWALK BARS, LANE REDUCTION ARROWS, AND BICYCLE LANE STENCIL AS TYPE B-HS.
- 4. ALIGN CROSSWALK MARKINGS TO NEW ADA RAMP LOCATIONS.
- 5. REMOVE EXISTING PAVEMENT MARKINGS AS

	RX		
CALLED WITH		XX	PER SECTION XX OF SPECIAL
PROVISIONS.			

#### SIGNING LEGEND:

MAINTAIN AND PROTECT EXISTING SIGN AND SIGN SUPPORT

RIN REI

REINSTALL EXISTING SIGN (N) AND SIGN SUPPORT. REPLACE IN KIND IF DAMAGED.

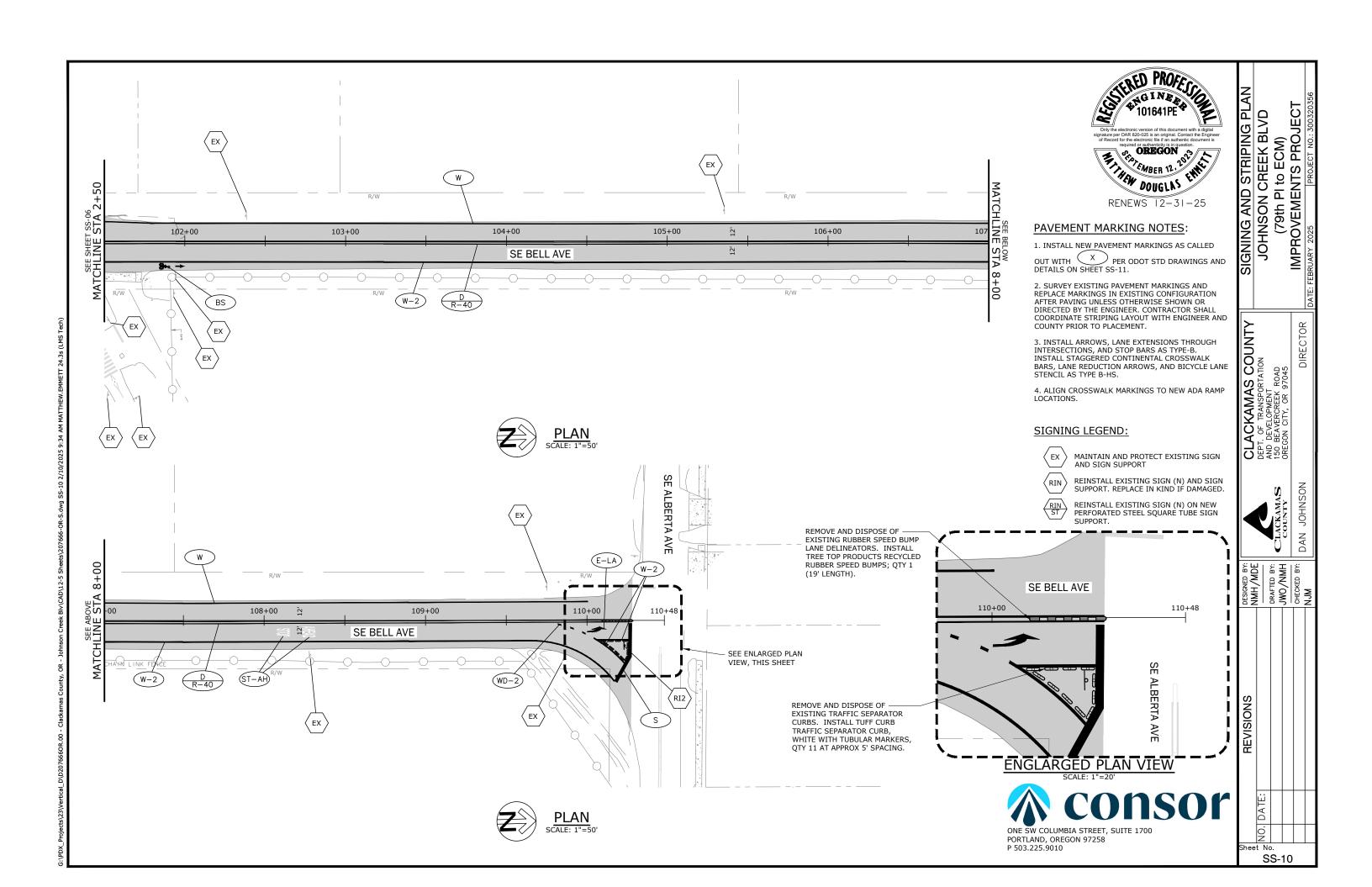


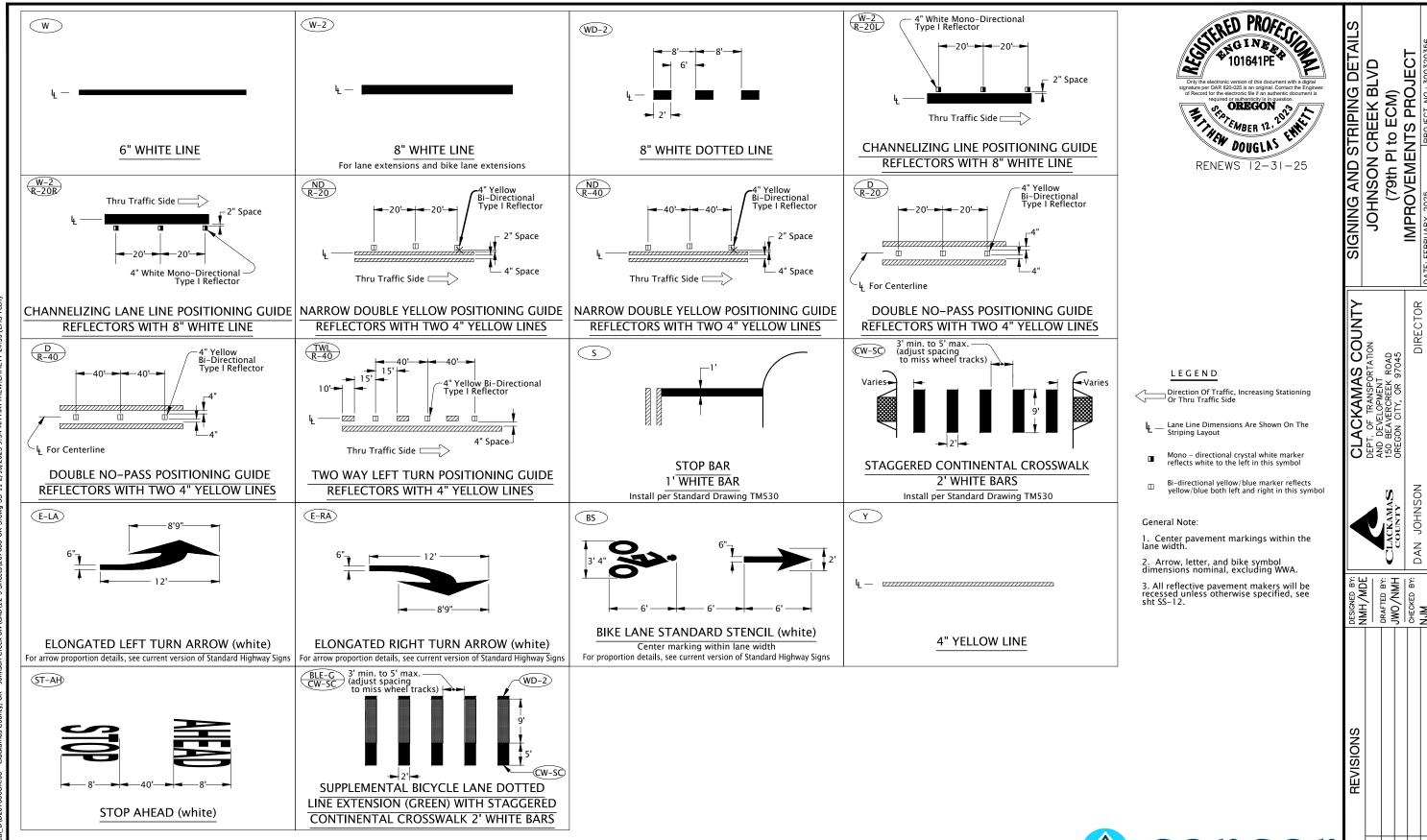
P 503.225.9010

REINSTALL EXISTING SIGN (N) ON NEW PERFORATED STEEL SQUARE TUBE SIGN SUPPORT.

SQUARE TOBE SIGN	DESI		DRA	<u></u>	Ę
	REVISIONS				
sor		NO.  DATE:			
00					
	Shee	t No	S-(	09	

ONE SW COLUMBIA STREET, SUITE 1700
PORTLAND, OREGON 97258

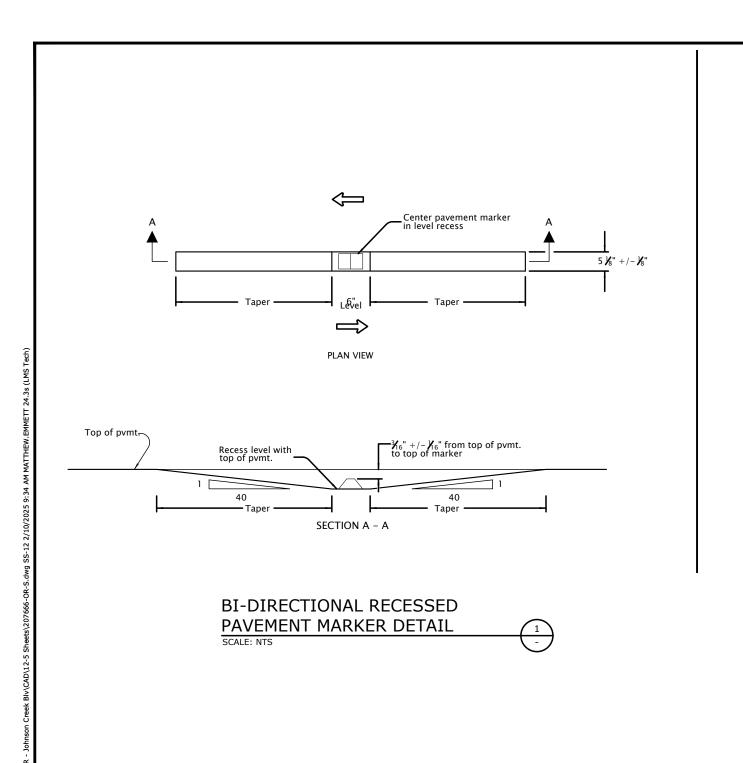


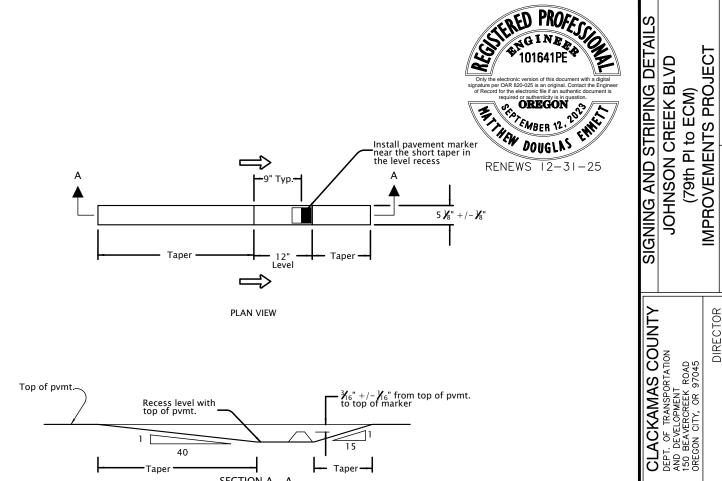


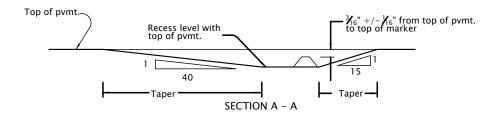
ONE SW COLUMBIA STREET, SUITE 1700
PORTLAND, OREGON 97258
P 503.225.9010

NO.

SS-11

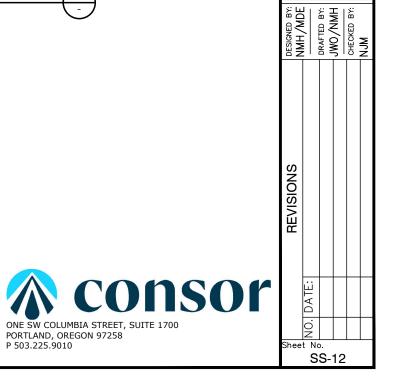


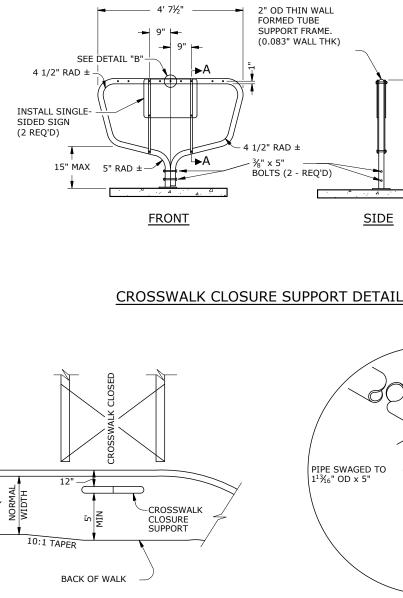




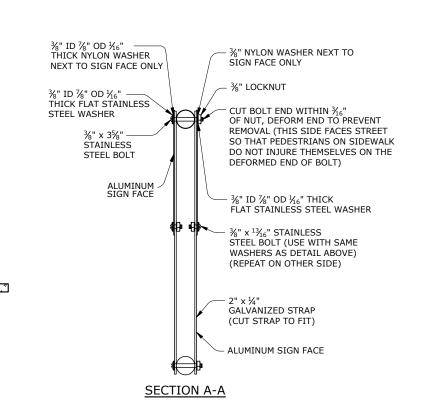
MONO-DIRECTIONAL RECESSED PAVEMENT MARKER DETAIL





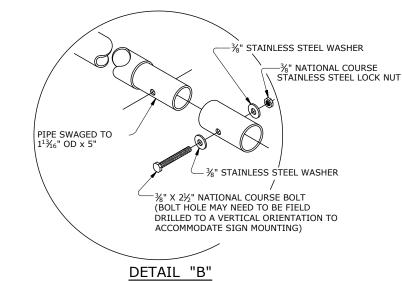


**PLAN VIEW** 









-CROSSWALK  $\frac{5}{8}$ " dia drain hole CLOSURE POST THROUGH ANCHOR PLATE 1/2" ANCHOR BOLT W/ STD WASHER & SELF LOCKING NUT (TYP) DIRECTION OF HANDR CROSSWALK CLOSURE POST 3/16" CONCRETE STRUCTURE %" DIA HOLE USE RESIN BONDING SYSTEM  $^{ extstyle }$ └─1½" MIN FROM ODOT'S QPL (TYP) **PLAN VIEW** SIDE VIEW

**GENERAL NOTES:** 

**SIDE** 

- 1. ALL HOLES IN THE TUBE SUPPORT FRAME TO BE PREDRILLED BY THE MANUFACTURER. (1/32" LARGER THAN MOUNTING BOLT)

  2. PIPE SWAGED BY THE MANUFACTURER.

ANCHOR PLATE FOR BOLT DOWN OPTION

CROSSWALK CLOSURE DETAIL SCALE: NTS





SIGNING AND STRIPING DETAILS
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREK ROAD
OREGON CITY, OR 97045 DRAFTED BY:
JWO/NMH
CHECKED BY:
NJM REVISIONS NO. DATE: Sheet No.

SS-13

#### **GENERAL NOTES**

- All materials and workmanship shall conform to PGE Schedule 95 Option "A" specifications. All materials and installation shall be approved by PGE.
- 2. All electrical equipment shall conform to the current standards of the National Electrical Manufacturers Association (NEMA) and the Underwriters Laboratories, Inc. (U.L.) wherever applicable. In addition to the requirements of the plans, standard specifications, and the special provisions, all materials and workmanship shall conform to the current requirements of the National Electrical Code (NEC) the National Electrical Safety Code, standards of the American National Standards Institute (ANSI), and any local ordinances which may apply.
- 3. Coordinate with other utilities to ensure proper installation.
- 4. Contractor shall coordinate with PGE for illumination work. All materials and work shown on this plan are to be furnished and performed by PGE. The contractor shall coordinate with PGE (Rico Torres Solis, 503.403.9084, rodrigo.solis@pgn.com) a minimum of 4 weeks before starting PGE related infrastructure to schedule a coordination meeting for all power requirements. Reference PGE Work Order M3518414.
- 5. Clackamas County will pay for the PGE line extension cost agreement (LECA). Once the lighting is operational, monthly billings will be paid by the City of Milwaukie Public Works (Peter Passarelli, 503.786.7614, passarellip@milwaukieoregon.gov).
- Existing street lights shall remain operational during construction unless approved otherwise in writing by Clackamas County.

#### PGE APPROVED STREET LIGHTING EQUIPMENT

1. Mast arm for wood poles shall be PGE approved.

The approved 6' mast arms for wood poles are:

Manufacturer:Catalog Number:SALCOWPSG-125-8-S-PGEMaclean Power SystemsS-125-8SG-30R

2. The luminaire shall be supplied and installed by PGE. The PGE approved luminaires are:

Manufacturer:Catalog Number:GE, 87W LEDERL1011B5330AGRAYGL

Leotek, 88W LED GCM2-40H-MV-WW-2R-GY-700-PCR7-RWG-WL-FDC-PGE

VERTICAL ILLU	JMINANCE AT MAR	KED PEDESTRIAN MID-BLOC	K CROSSING
CDOCCMALK	CROSSWALK DIRECTION		NCE (FOOT-CANDLES)
CROSSWALK	DIRECTION	TARGET	DESIGN
SE JOHNSON CREEEK BLVD	WEST FACING	1.4	1.70
(FUTURE)	EAST FACING	1.4	1.70

	INTERSEC	CTION PHOTOMETRIC	ANALYSIS SUMM	ARY		
			PEDESTRIAN		AVERAGE LIGHT	UNIFORMITY
LOCATION	JURSIDICTION	CLASSIFICATION	CONFLICT AREA		LEVEL (fc)	(AVE/MIN)
JOHNSON CREEK BOULEVARD @	CLACKAMAS COUNTY	MA IOR/COLLECTOR	LOW	RECOMMENDED	> 1.4	≤ 3.0:1
SE STANLEY AVE	CLACKAIVIAS COUNTY	IVIAJOR/CULLECTOR	LOW	DESIGN	1.8	2.9 : 1

				LIGHT POLE TABLE									
		STATION (JC	OFFSET (JC		APPROXIMATE	ARM LENGTH	H LUMINAIRE						
POLE NO.	ROADWAY	,	ALIGNMENT)	I TVDE AND DOLE STVLE	MOUNTING HEIGHT (FEET)	(FEET)	STYLE	DISTRIBUTION	INITIAL LUMENS	INITIAL WATTS	BUG RATING		
1	SE JOHNSON CREEK BLVD	31+82.5	30.0' LT	NEW WOOD POLE	30	6	COBRAHEAD	TYPE 2 MEDIUM	10500	87W	B2 U0 G2		
PGE #8389	SE JOHNSON CREEK BLVD	31+55.0	22.75' RT	NEW WOOD POLE	30	6	COBRAHEAD	TYPE 2 MEDIUM	10500	87W	B2 U0 G2		
PGE #8685	SE JOHNSON CREEK BLVD	(EXISTING)	(EXISTING)	EXISTING WOOD POLE	30	6	COBRAHEAD	TYPE 2 MEDIUM	10500	87W	B2 U0 G2		

#### **LEGEND**

#### POLES, ARMS, AND FIXTURES



Install wood pole number (N) for illumination, see lighting notes and light pole and luminaire schedule.



Install luminaire with photocell. See light pole schedule.



Install (X=feet) luminaire arm on existing utility pole.



Propose new utility pole (by PGE).

Retain and protect existing utility pole.



ILLUMINATION NOTES
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT KAMAS COUNT DRAFTED JCH CHECKED

NO. DATE:

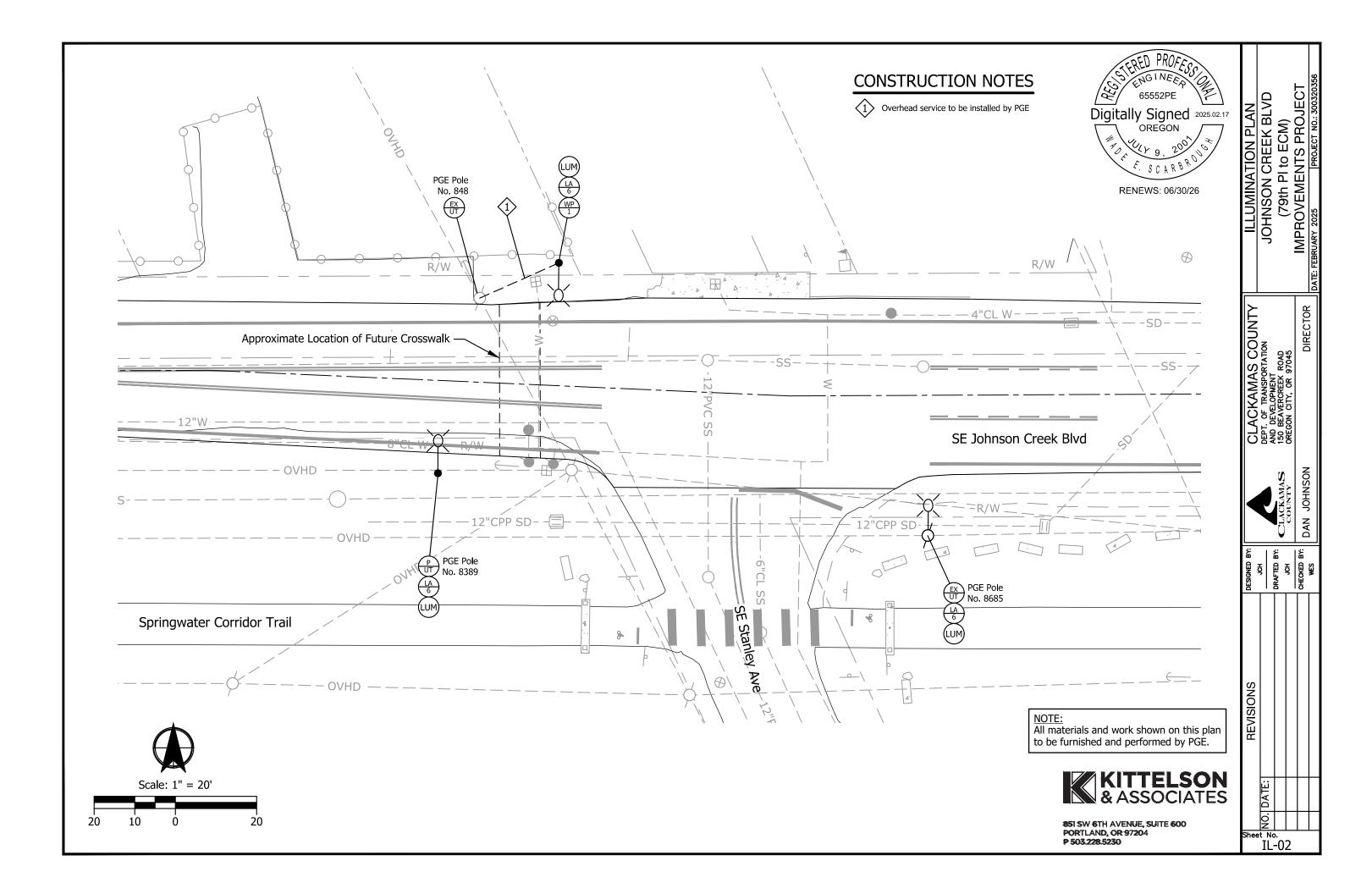
Sheet No. IL-01

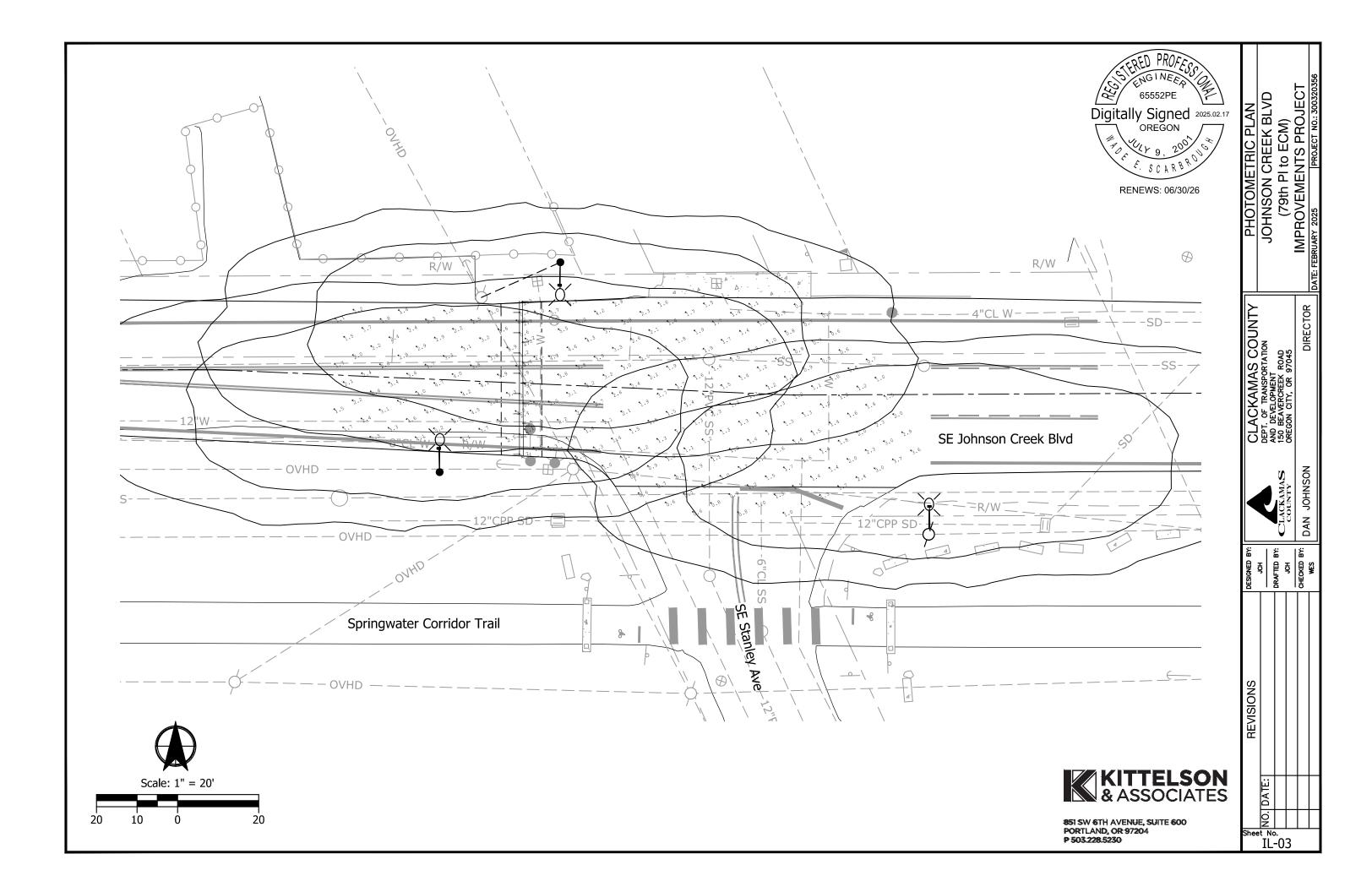
NOTE:

All materials and work shown on this plan to be furnished and performed by PGE.



851 SW 6TH AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230





#### LEGEND

#### **CABINETS**

EX

Retain and protect existing controller and cabinet.

#### **POLES**

EX MPL

Retain and protect existing traffic mast arm pole with luminaire extension.

EX MA

Retain and protect existing mast arm.

EX MP

Retain and protect existing signal pole.

EX SP

Retain and protect existing signal strain pole.

EX PP

Retain and protect existing traffic pedestrian signal pedestal.

EX

Retain and protect existing vehicle signal pedestal.

EX

Retain and protect existing pushbutton post.

RX

Remove existing pedestrian signal pedestal.

(PP)

Install pedestrian signal pedestal with frangible base on (N=Number) foundation. See TM457 for details.

#### **SIGNALS**

EX BPh

Retain and protect existing phase (Ph=Phase) bicycle signal.



Retain and protect existing pedestrian signal.



Retain and protect existing pedestrian signal and pushbutton.



Retain and protect existing accessible pedestrian signal pushbutton.



Remove existing pedestrian pushbutton.

Remove existing pedestrian signal and pushbutton.



Remove existing pedestrian signal.



Install phase (Ph=phase) countdown pedestrian signal with clamshell mount and pushbutton with mount. Include phase (Ph=phase) audible pedestrian signal (Polara iNS2 with 9"x15" sign and pedestrian head control unit iPHCU3W).

#### FIRE PREEMPTION



Retain and protect existing fire preemption detector unit.

#### JUNCTION BOXES



Retain and protect existing junction box. Adjust to finish grade if needed.



Remove existing junction box.



Install 22"x12"x12" (min. dimension) precast concrete junction box.



Install 22"x12"x12" (min. dimension) precast concrete junction box with concrete apron.



Install 30"x17"x12" (min. dimension) precast concrete junction box.



Install 30"x17"x12" (min. dimension) precast concrete junction box with concrete apron.

#### **WIRES**



Remove existing wiring



Retain and protect existing wiring



Install (X=number of cables) control cables with (N=number) (G=AWG wire size) AWG conductors



Install 3-conductor cable for phase (Ph=phase) thermal detection camera

#### CONDUIT



Retain and protect existing (S=size) conduit



Install (S=size) inch conduit



Abandon existing conduit

#### **DETECTION**



Retain and protect existing radar detector unit



Retain and protect existing vehicle detection camera



Install phase (Ph) pre-formed bicycle detector loop. See detail.



Install FLIR TrafiSense AI 632 model thermal detection camera for vehicle phase (Ph=phase).



Install FLIR Type TI BPL3 Edge B and SIU Interface Card.

#### ACCOMPANIED BY:

OREGON STD DWGS: TM450, TM457, TM460, TM462, TM466, TM467, TM470, TM471, TM472, TM482, TM485



RENEWS: 06/30/26

#### **GENERAL NOTES**

- All materials and workmanship shall conform to Clackamas County ordinances and Special Provisions, the 2024 Oregon Standard Specifications for Construction, and the Oregon Standard Drawings listed below.
- The contractor shall supply all equipment, materials, and labor required for the signal operations shown in this plan. All signal control equipment shall be tested at the ODOT signal lab in Salem at the contractors expense per specification.
- 3. The contractor shall verify the locations of existing utilities and coordinate this work with the utility companies/agencies to eliminate any conflicts.
- 4. The contractor shall field verify the location of all signal equipment before installation.
- Clackamas County will provide signal field testing services at the contractor's expense.
- 6. Clackamas County will provide signal timing.
- Equipment submittals and pole drawings shall be provided to Clackamas County by the contractor after an initial review as been completed by the project engineer. Clackamas County approval of these submittals must be obtained prior to construction.
- 8. Retain and protect existing signal and radar detection during construction.
- 9. All junction boxes shall be placed in sidewalk or concrete apron.
- Install #12 stranded copper (orange) tracer wire in all conduits. Ground all tracer wires.
- 11. Conduit shall be placed in same trench with other conduits when possible.
- Top of signal and pedestrian foundations shall match top of finished grade of sidewalk.
- 13. All conduit runs shall be within right-of-way.
- 14. Install poly pull tape (1800 LBF min. strength, non conductive) in all conduits.
- 15. All underground conduits and fittings shall be Schedule 80 PVC.
- 16. Use spare #14AWG for pedestrian button interconnect cables.
- 17. All existing traffic signal equipment to be removed that is deemed usable by Clackamas County shall be salvaged and delivered to 902 Abernethy Road, Oregon City. Contact the County inspector prior to removal of existing traffic signal equipment. See Special Provisions (00950.42) for additional information.



851 SW 6TH AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230 SIGNAL PLAN JOHNSON CREEK BLVD (79th PI to ECM) IMPROVEMENTS PROJECT CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045 DRAFTED
ABL
CHECKED REVISION TS-01

#### SIGNAL PLAN JOHNSON CREEK BLVD AND PRECISION CAST PARTS - WEST DRIVEWAY

POLE NO. 1

SE JOHNSON CREEK BLVD

EX POLE NO. 3

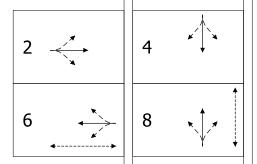
EX POLE NO. 2



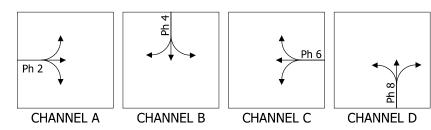
RENEWS: 06/30/26

#### CONSTRUCTION NOTES

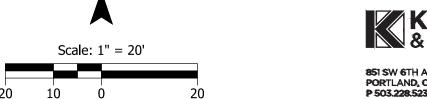
Install pedestrian pushbutton on 12-inch extension bracket. Adjust pushbutton height as necessary. Seal and repair existing holes with hot-dip galvanized hex or square socket pipe plug flush with pole surface. Repair damaged galvanizing according to ASTM A780.



#### NORMAL PHASE ROTATION



FIRE PREEMPTION OPERATION





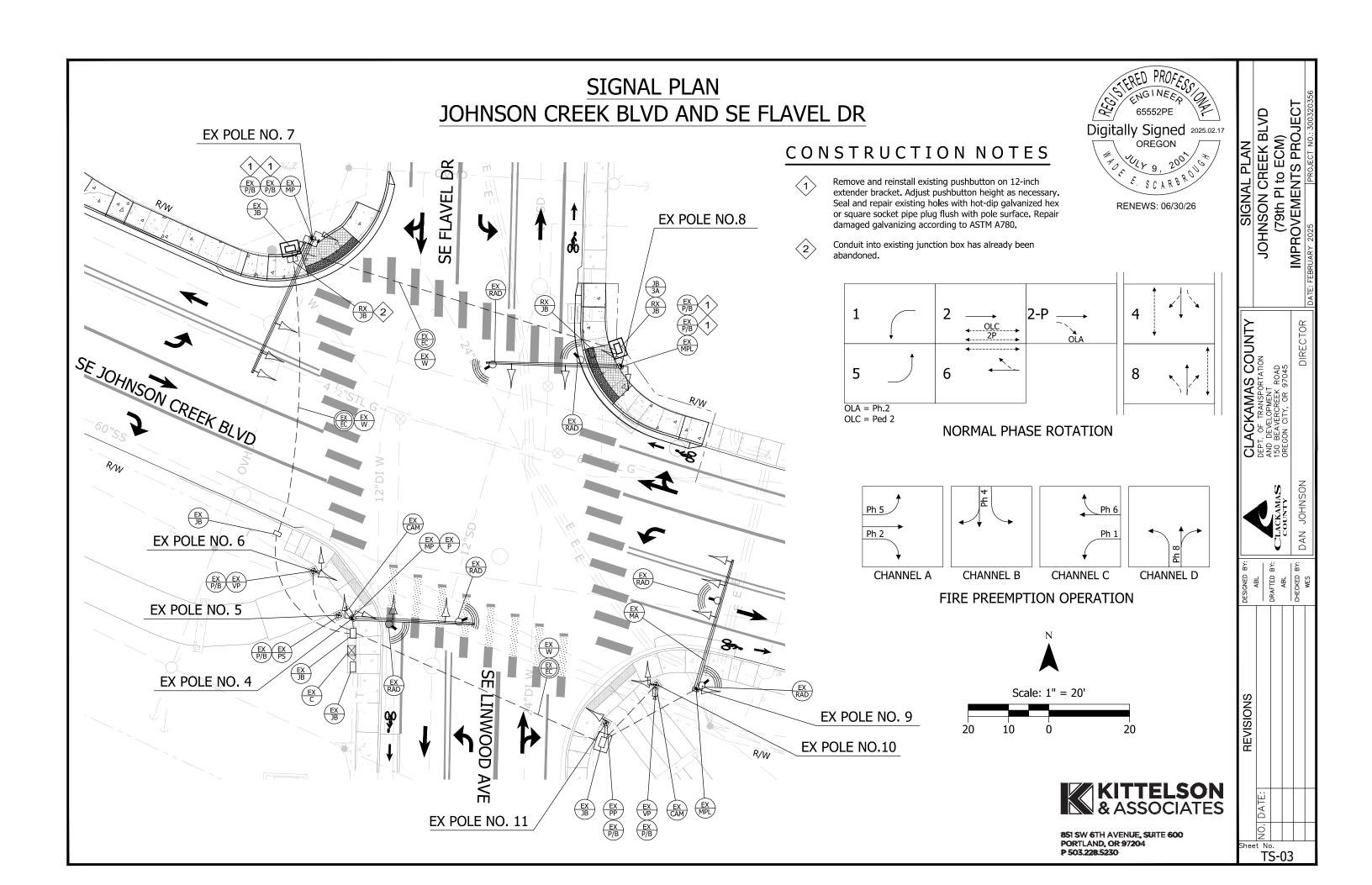
851 SW 6TH AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230

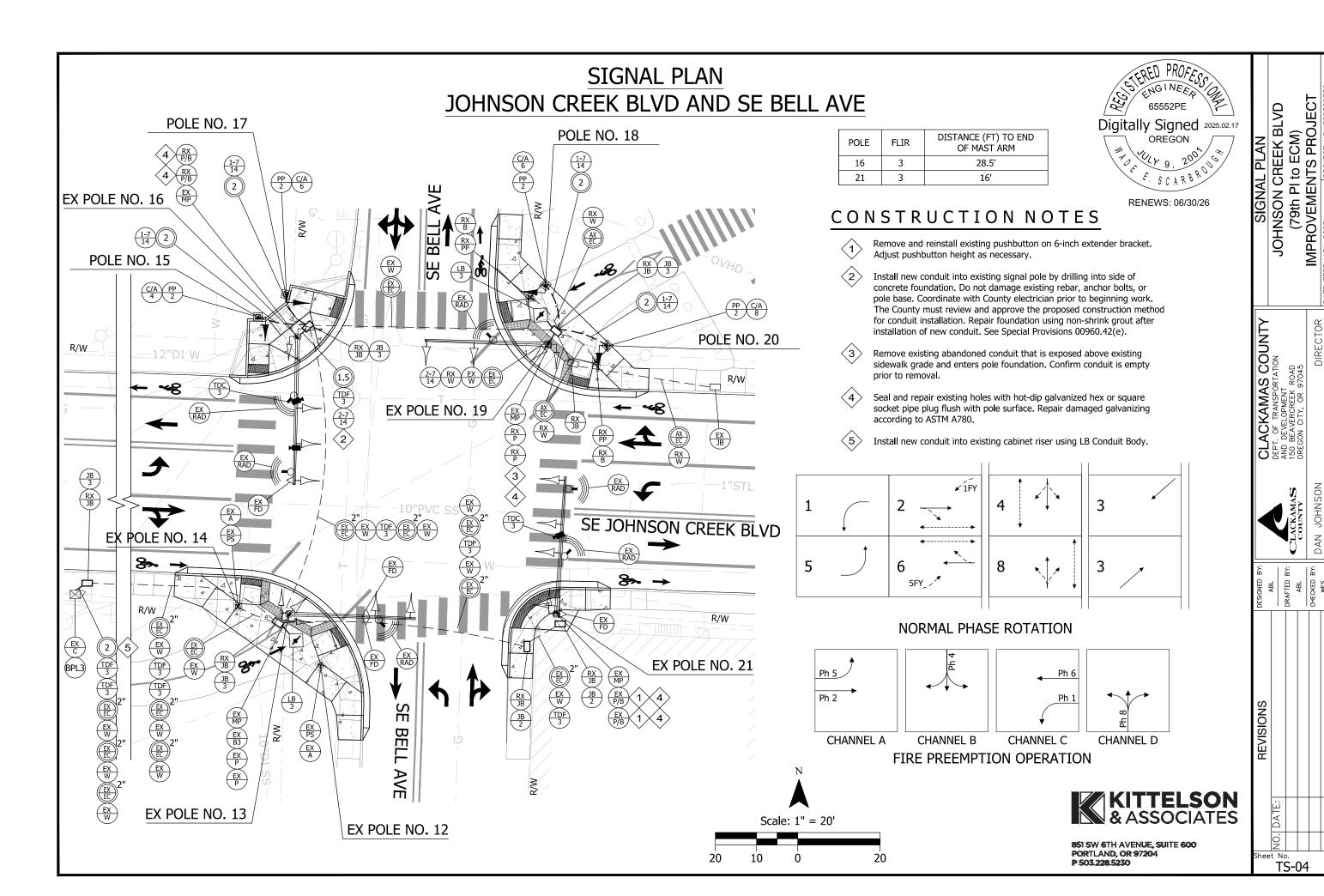
SIGNAL PLAN
JOHNSON CREEK BLVD
(79th PI to ECM)
IMPROVEMENTS PROJECT

REVISIONS

Sheet No. TS-02

CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEPUTCHOMENT
150 BEAVERCREEK ROAD
OREGON CITY. OR 97045





#### POLE ENTRANCE CHART

		See TM650 thru TM653		EQUIPM	IENT ON	n Pole		
POLE NO.	SHEET NO.	ТҮРЕ	PED. SIGNAL DEG.	PED. PUSHBUTTON DEG.	TERM. CABINET DEG.	SIGN DEG.	TRAFFIC SIGNAL DEG.	RADAR UNIT
1	TS-02	PP	300	300				
2	TS-02	EX(SP)						
3	TS-02	EX(SP)	300	300				
4	TS-03	EX(MP)	EX, EX					
5	TS-03	EX(PS)		EX				
6	TS-03	EX(VP)	EX	EX			EX	
7	TS-03	EX(MP)	EX, EX	EX, EX				
8	TS-03	EX(MPL)	EX, EX	EX, EX				EX
9	TS-03	EX(MPL)	EX				EX	
10	TS-03	EX(VP)	EX	EX			EX	EX
11	TS-03	EX(PP)	EX	EX				
12	TS-04	EX(PS)		EX				
13	TS-04	EX(MP)	EX, EX				EX	
14	TS-04	EX(PS)		EX				
15	TS-04	PP	90	90				
16	TS-04	EX(MP)					EX	
17	TS-04	PP	180	180				
18	TS-04	PP	180	180				
19	TS-04	EX(MP)					EX	
20	TS-04	PP	270	270				
21	TS-04	EX(MP)	EX, EX					

#### MISC. ITEMS

PP = Pedestrian signal pedestal (See Std. Dwg. TM457)

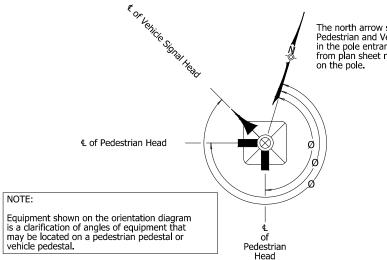
PS = Pedestrian pushbutton post (See Std. Dwg. TM457)

SP = Signal strain pole

VP = Vehicle signal pedestal (See Std. Dwg. TM460)

MP = Mast arm pole (See Std. Dwg. TM450)

MPL = Mast arm pole with luminaire extension (See Std. Dwg. TM450)



The north arrow shown relates to zero degrees on Pedestrian and Vehicle signal poles. Degrees shown in the pole entrance chart show the degrees clockwise from plan sheet north arrow (zero) to equipment located on the pole.

OREGON

RENEWS: 06/30/26

#### PEDESTRIAN PEDESTAL / VEHICLE PEDESTAL ORIENTATION DIAGRAM

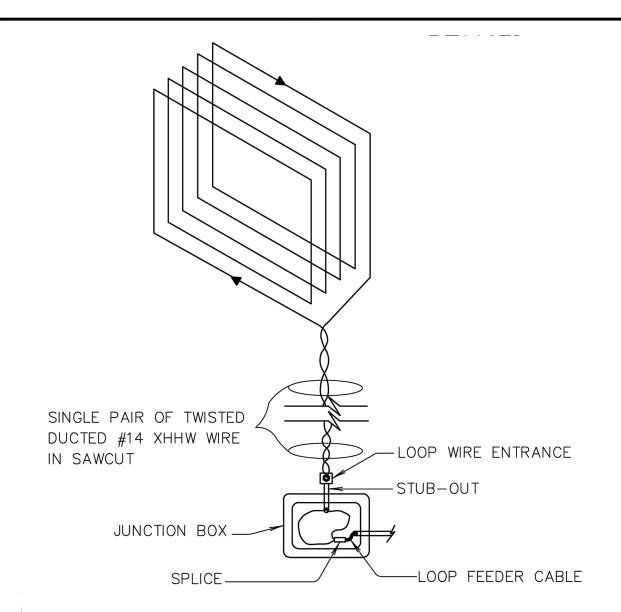
#### FLIR COMPONENT SCHEDULE

LOCATION	EQUIPMENT	KAR-GOR PART#	QTY.
SE JOHNSON CREEK BLVD	FLIR TRAFISENSE AI 632 WITH SUNSHEILD (10-7756)	7250-2632-AI	2
AND BELL AVE	TI BPL3 EDGE B AND SIU INTERFACE CARD		1



851 SW 6TH AVENUE, SUITE 600 PORTLAND, OR 97204 P 503.228.5230

	SIGNAL DETAILS	ON IS SEEK BLVD	JOHNSON OTHER DEVD	(N) = 01 to E(N)				DATE: FEBRUARY 2025   PROJECT NO.: 300320356
	CLACKAMAS COUNTY	DEPT. OF TRANSPORTATION	AND DEVELOPMENT				NO N	•
•	<b>-</b>			CLACKAMA!	COUNTY		NOSNHOL NAC	
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# ARROW INDICATES DIRECTION WIRE IS WOUND PROTECTED LEAD-IN WIRES (IN TUBING)

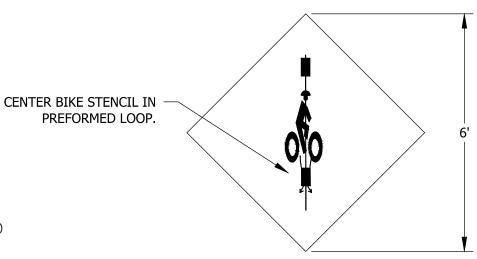
#### PREFORMED LOOP ASSEMBLY

#### FLEXIBLE TUBING PREFORMED DETECTOR LOOP

### BICYCLE LOOP LOOP DETECTOR WINDING PATTERN

(ARROWS INDICATE DIRECTION OF LOOP WINDING)

LOOPS SHALL BE OF THE PARALLELOGRAM TYPE WITH 5 TURNS OF DUCTED NO. 14 XHHW STRANDED WIRE CENTERED IN THE TRAFFIC LANE OR AS SHOWN ON PLANS. LOOP WIRE SHALL BE TWISTED 4 TO 6 TURNS PER FOOT BETWEEN LOOP AND JUNCTION BOX. ALL LOOPS SHALL BE INDIVIDUALLY WIRED AS SHOWN.

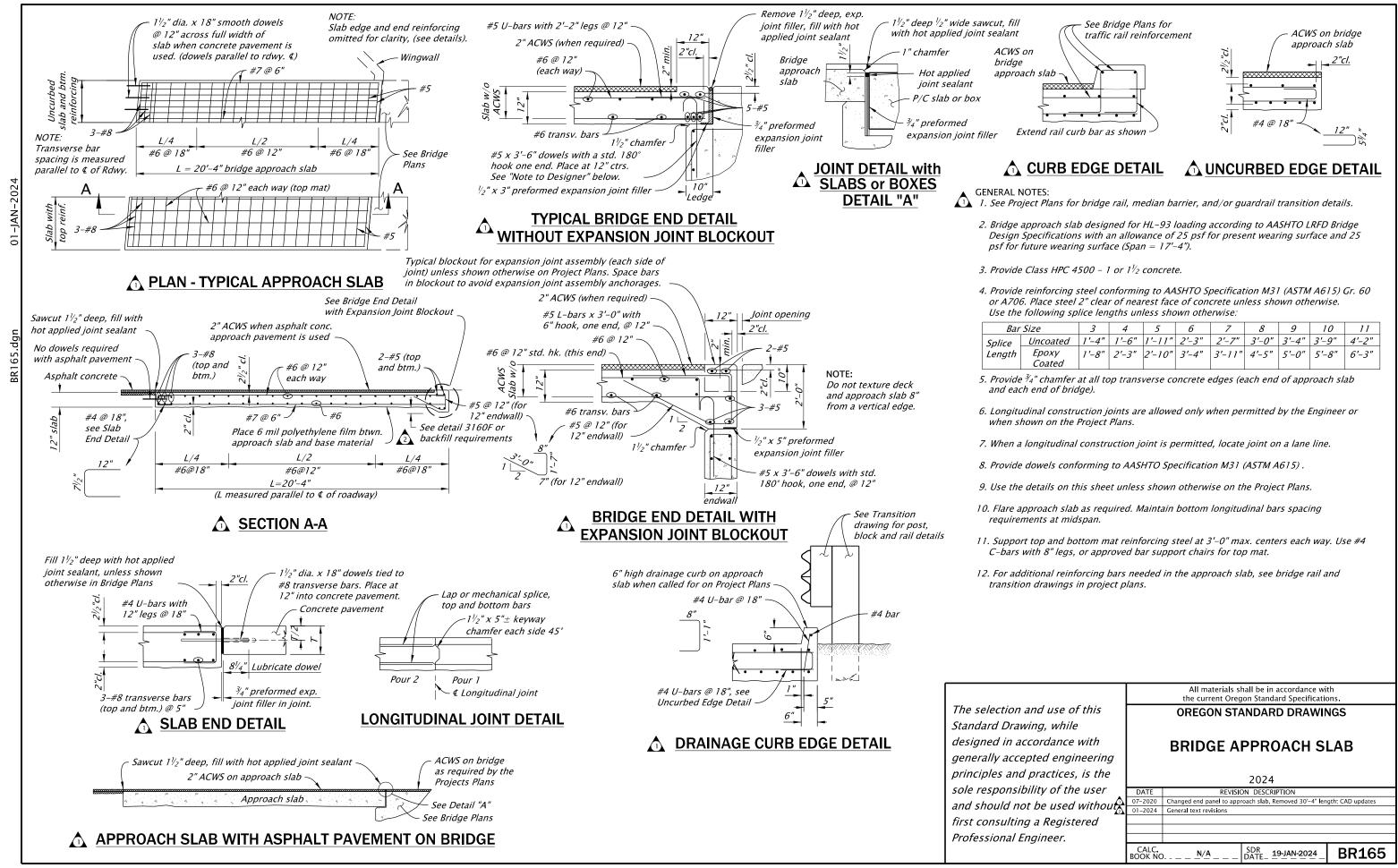


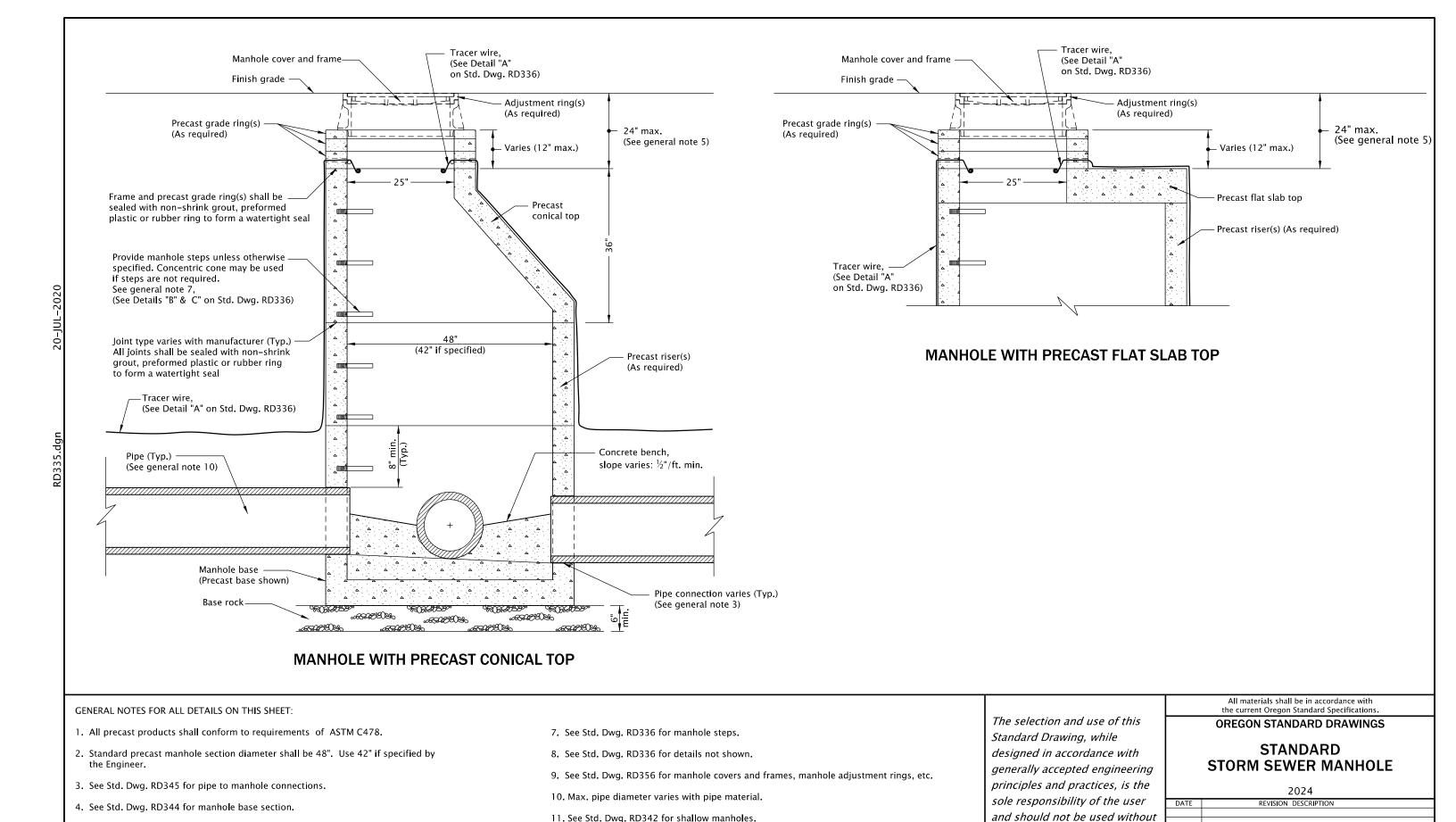
PREFORMED BIKE LOOP



851 SW 6TH AVENUE, SUITE 600 PORTLAND, OR 97204 P 503,228,5230

REVISIONS REVISIONS PSIGNED BY:  ABL  ABL  ABL  ABL  ABL  ABL  ABL  AB	DATE: FEBRUARY 2025   PROJECT NO.: 300320356			WES		
REVISIONS    DESIGNATE   Prince   Princ	IMPROVEMEN IS PROJECT	DIRFCTOR	M DAN JOHNSON	CHECKED BY		
REVISIONS DESIGNED BY:    NO. DATE:   ABL   ABL		UREGON CITY, OR 9/045	COUNTY	ABL		06
REVISIONS DESIGNED BY:  ABL  ABL  DEPT. OF TRANSPORTATION AND DEVELOPMENT	(79th Pl to ECM)	150 BEAVERCREEK ROAD	_			S-C
REVISIONS DESIGNED BY:  ABL  OF TRANSPORTATION  OF TRANSPORTATION	DATE VIDENILOR	AND DEVELOPMENT				No TS
DESIGNED BY: CLACKAMAS COUNTY	רע ום אםםםט ועספועדטו	DEPT. OF TRANSPORTATION		ABL	ATE.	et -
	SIGNAL DETAILS	CLACKAMAS COUNTY	ıkı	DESIGNED B.	REVISIONS	Shee





12. Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.

5. Adjust 24" maximum.

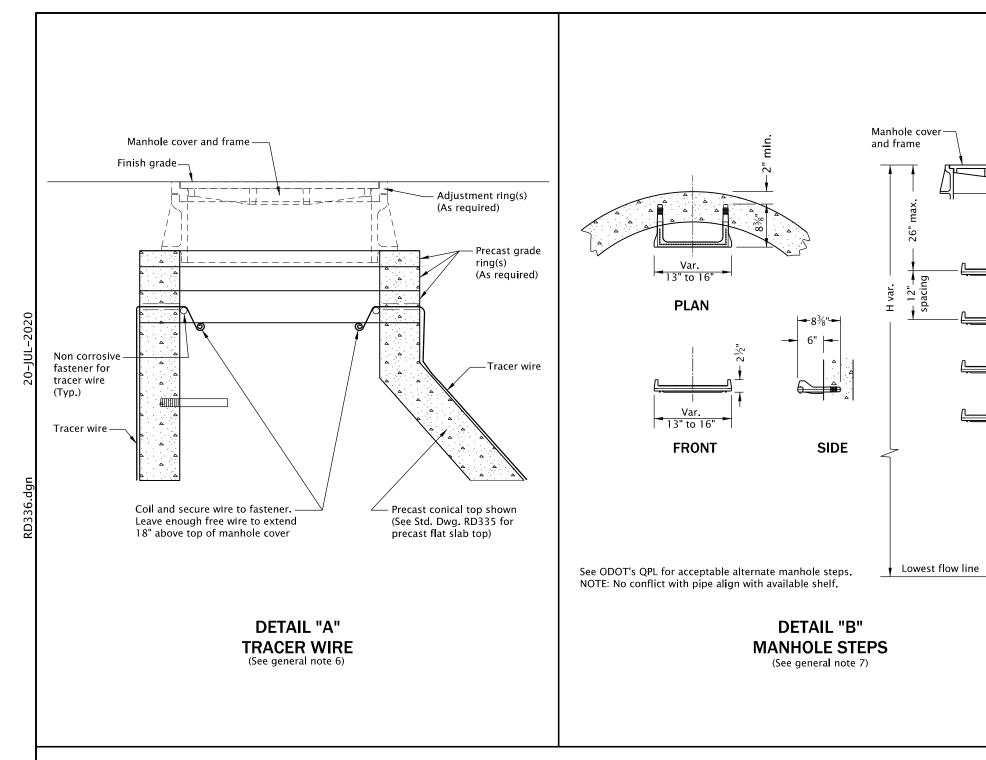
6. All connecting pipes shall have a tracer wire, or approved alternate.

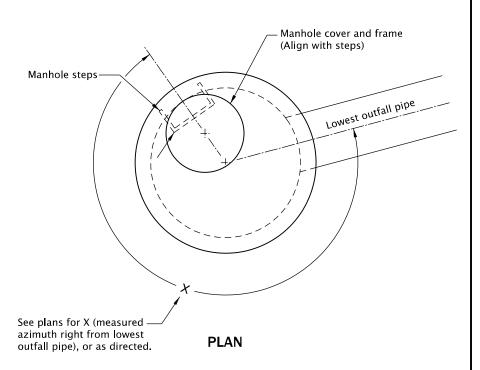
CALC. BOOK NO. \_ \_ \_ \_ N/A \_

SDR DATE\_ 21-JUN-2019 **RD335** 

first consulting a Registered

Professional Engineer.





# DETAIL "C" PRECAST CONICAL TOP OR PRECAST FLAT SLAB TOP AND MANHOLE STEPS ORIENTATION (See general note 7)

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

- 1. All precast products shall conform to requirements of ASTM C478.
- 2. Standard precast manhole section diameter shall be 48". Use 42" if specified by the Engineer.
- 3. See Std. Dwg. RD345 for pipe to manhole connections.
- 4. See Std. Dwg. RD344 for manhole base section.
- 5. Adjust 24" maximum.
- 6. All connecting pipes shall have a tracer wire, or approved alternate.

  Place tracer wire directly over pipe centerline and on top of the pipe zone material.

- 7. Steps shall conform to requirements of ASTM C478. When H=42" or less omit steps. See Detail "C" for alignment of steps, and manhole cover and frame.
- 8. See Std. Dwg. RD335 for details not shown.
- 9. See Std. Dwg. RD356 for manhole covers and frames, manhole adjustment rings, etc.
- 10. Max. pipe diameter varies with pipe material.
- 11. See Std. Dwg. RD342 for shallow manholes.
- 12. See project plans for details not shown.

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

—Finish grade

the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

STANDARD

MANHOLE DETAILS

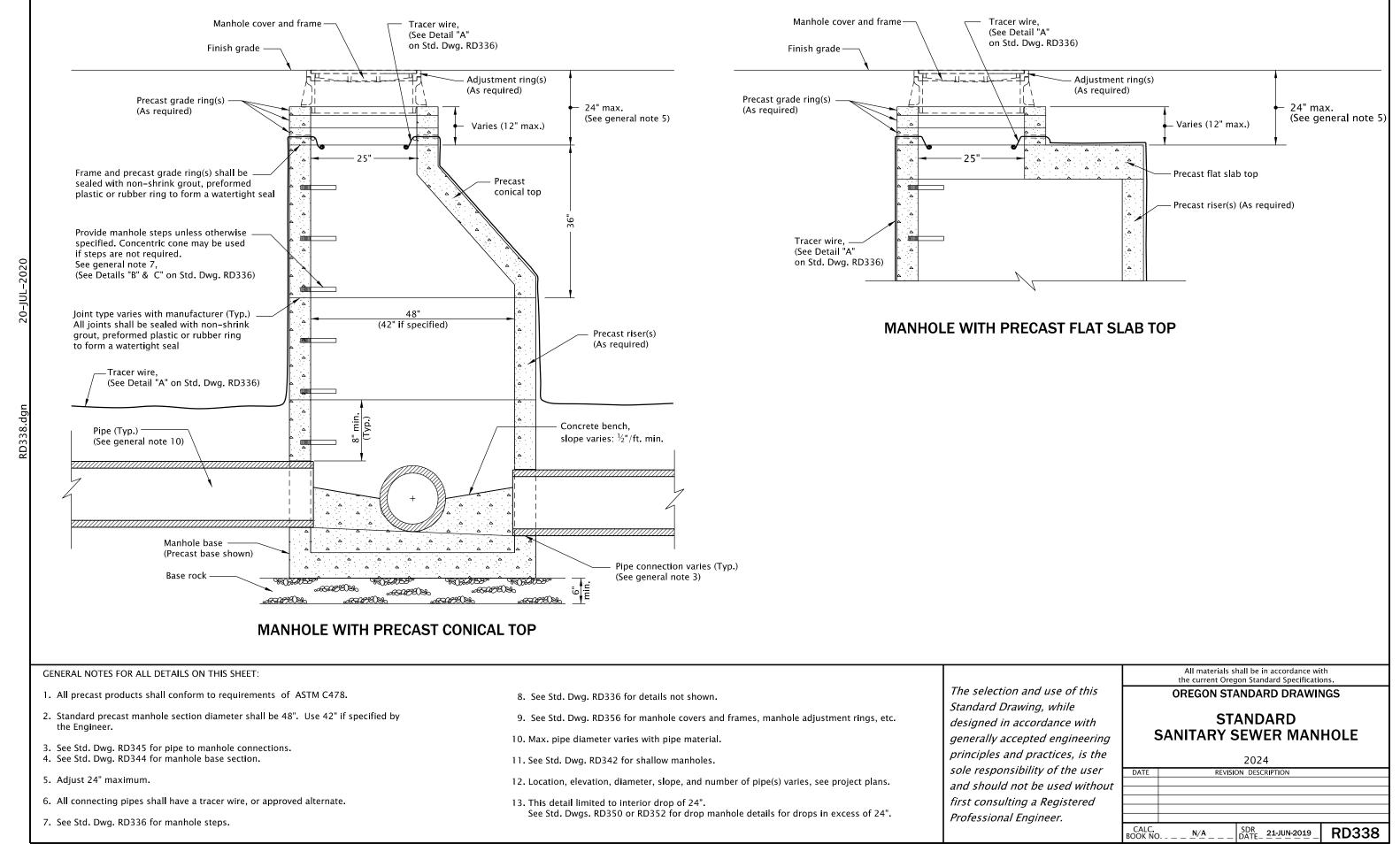
2024

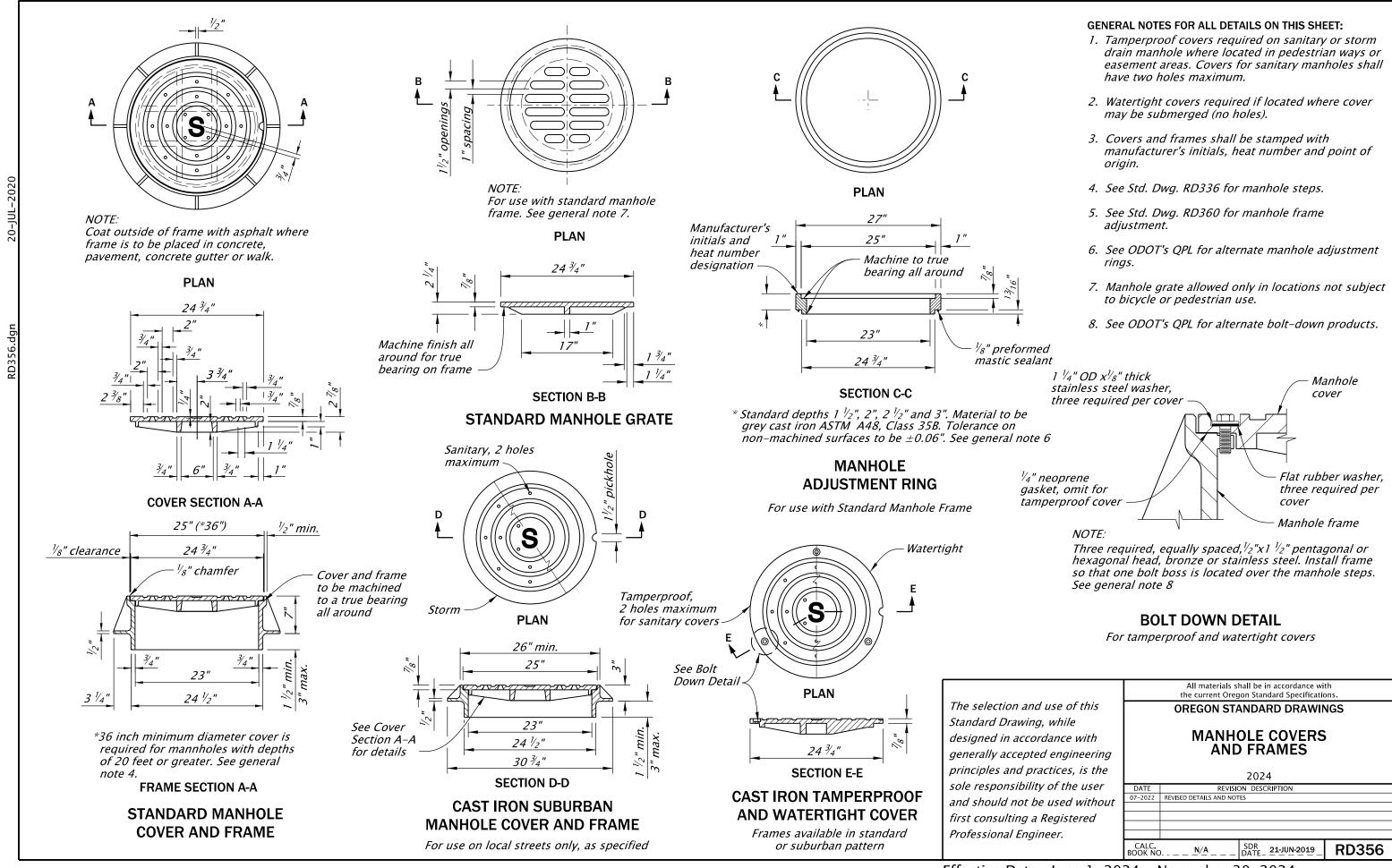
REVISION DESCRIPTION

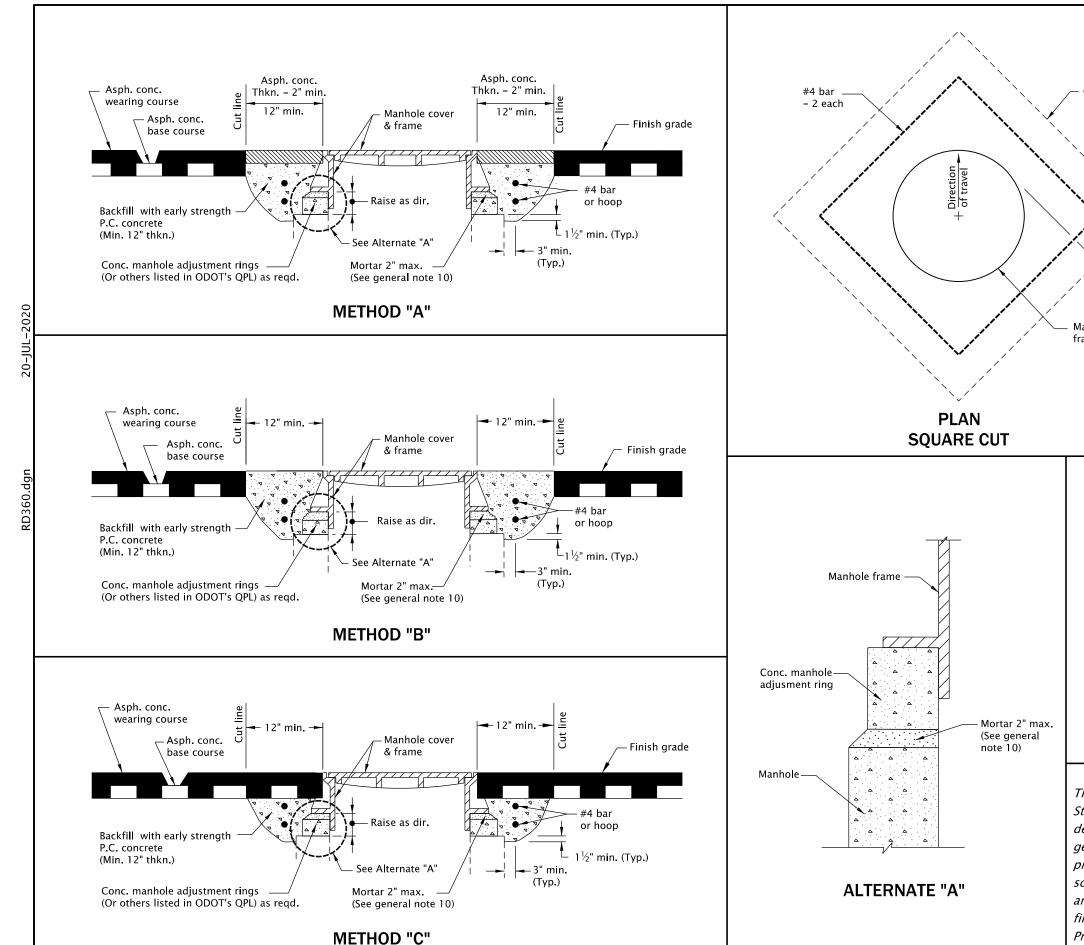
SDR DATE\_ 16-JAN-2019 **RD336** 

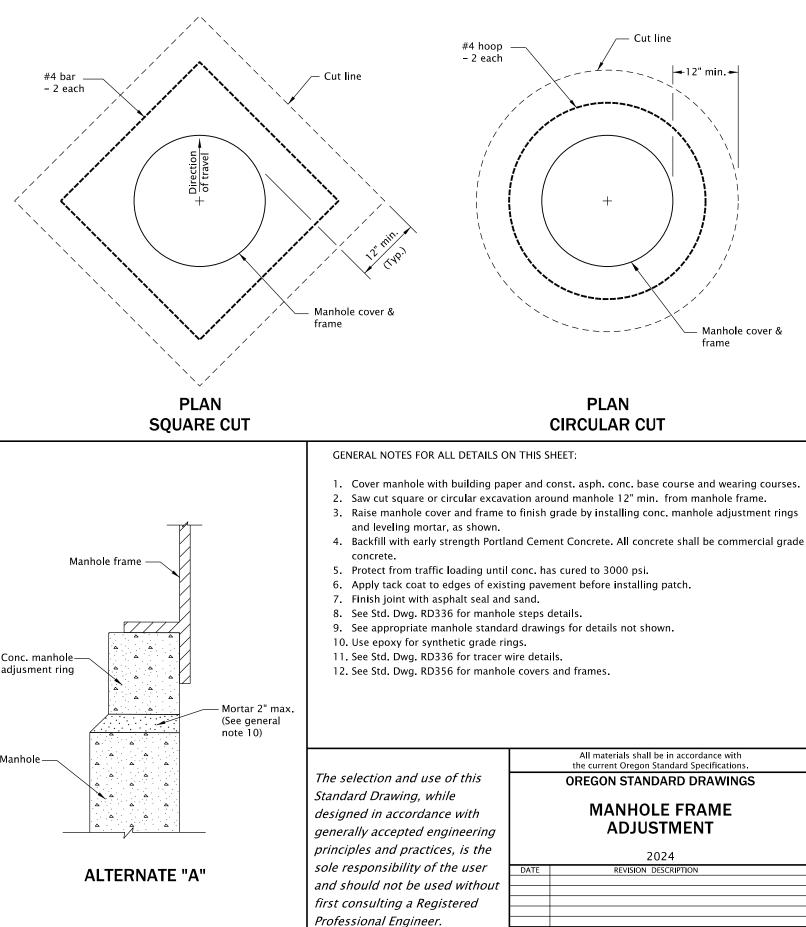
All materials shall be in accordance with

CALC. BOOK NO. -



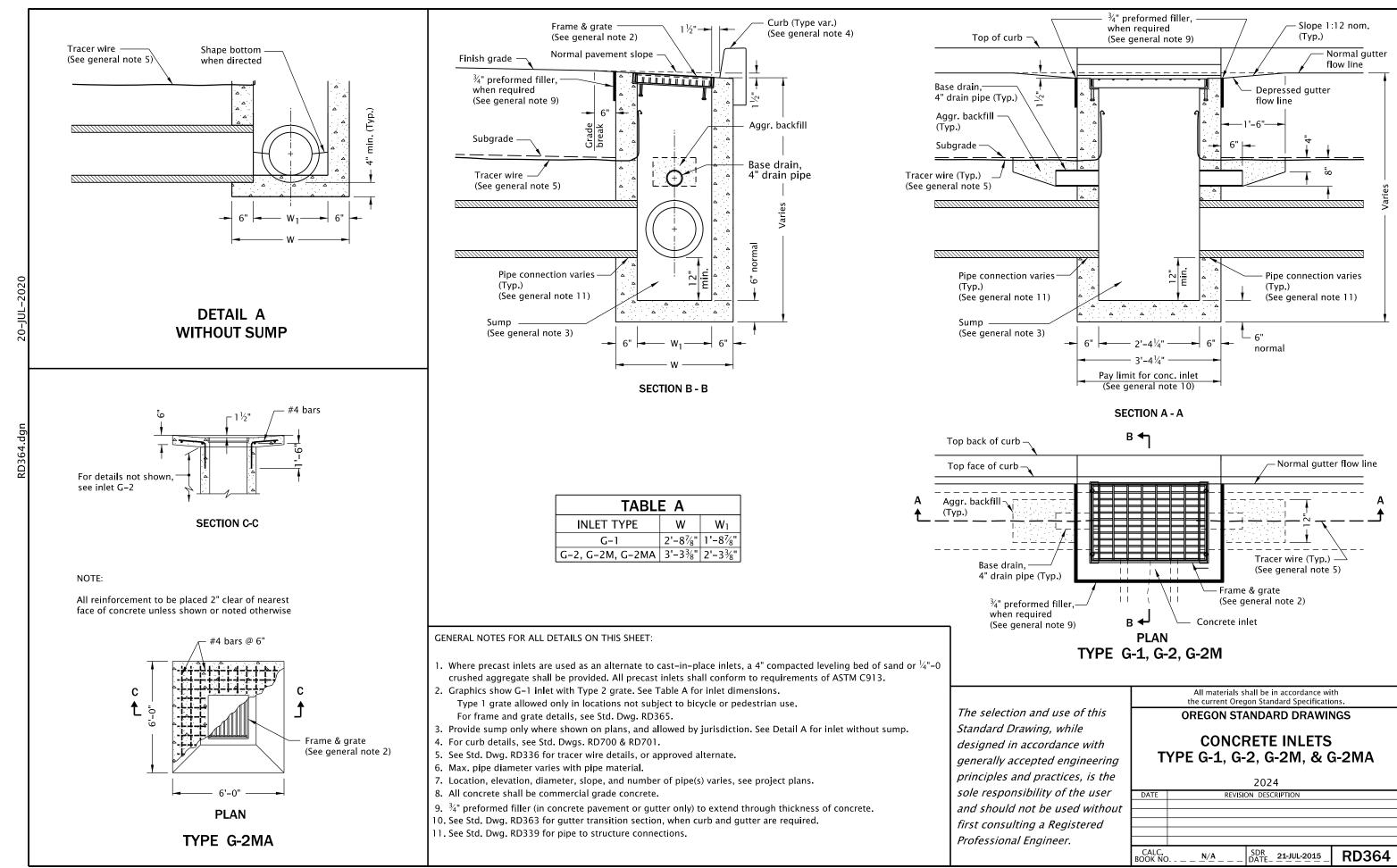


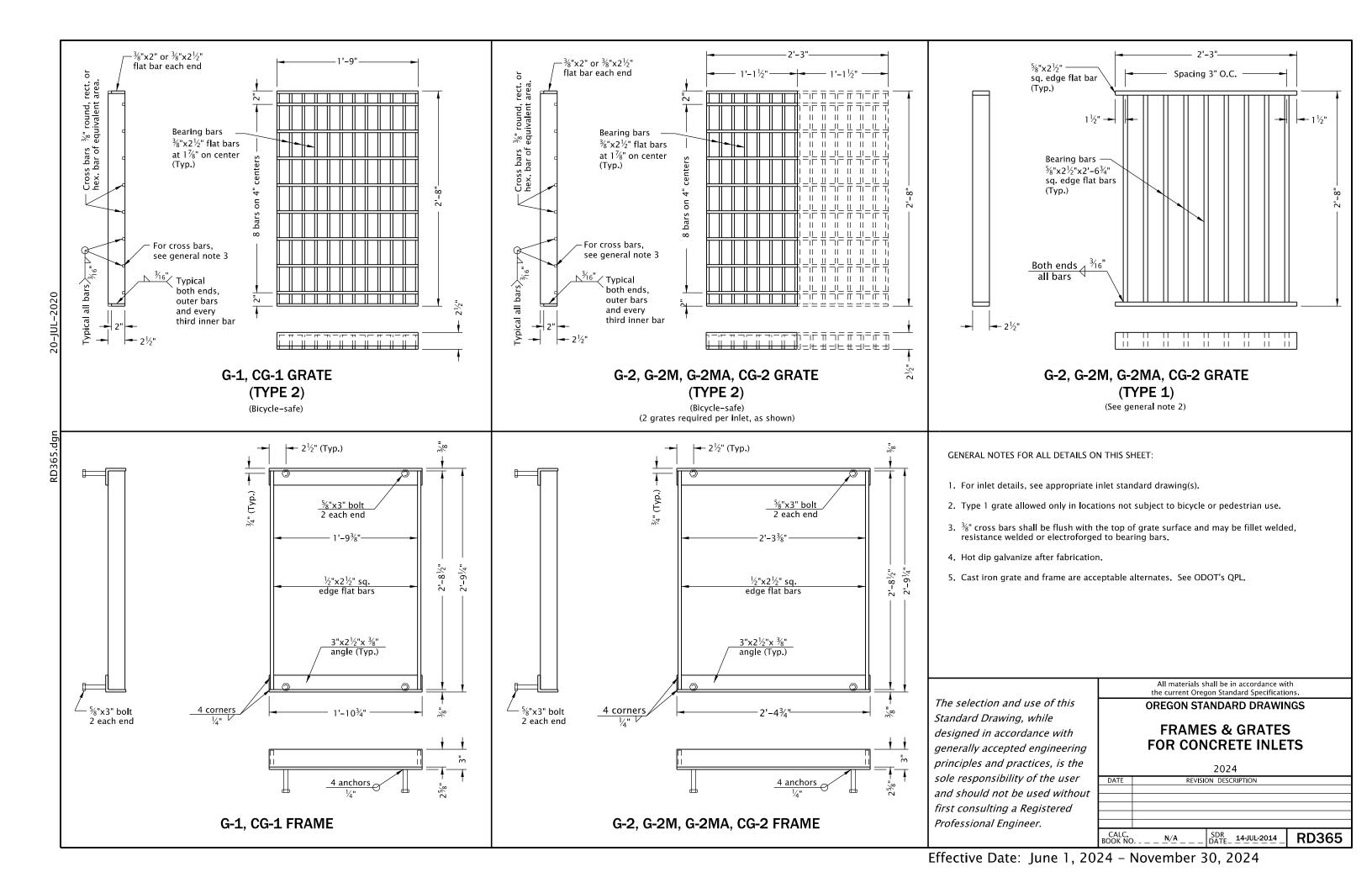


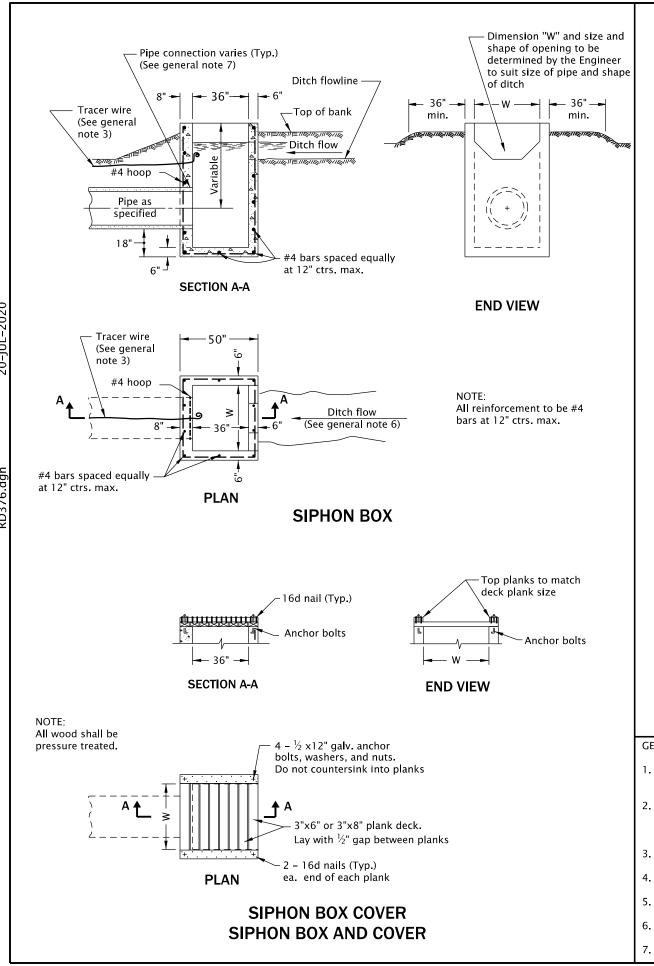


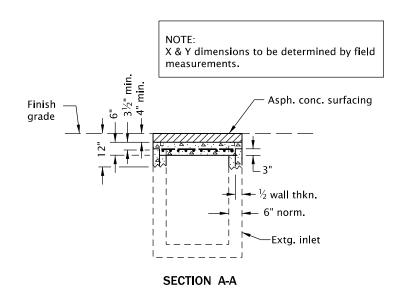
CALC. BOOK NO

SDR DATE\_ 21-JUL-2015 **RD360** 

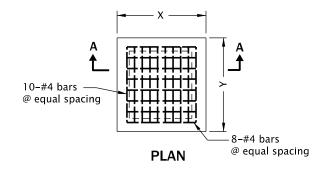




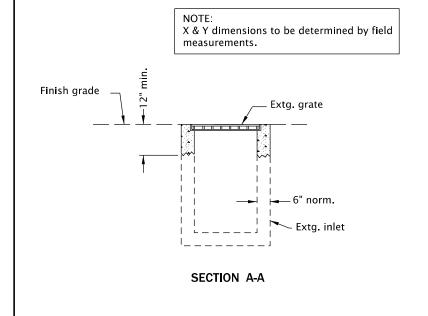


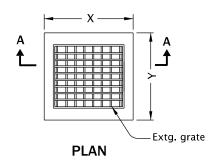


Place bars in concrete inlet cap  $1\frac{1}{2}$ " min. clear of bottom face of concrete and  $3\frac{1}{2}$ " min. clear of top face of concrete.



#### **CONCRETE INLET CAP**





#### ADJUST EXISTING INLET

(For details not shown, see Std. Dwg. RD366)

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

- 1. All reinforcement to be placed a minimum of 2" clear of nearest face of concrete unless otherwise shown or noted.
- If metal frame and grate is reqd. conform to details for Type 1 grate.
   Size frame and grate to match dimensions of siphon box used, see Std. Dwg. RD364.
- 3. See Std. Dwg. RD336 for tracer wire details.
- 4. Max. pipe diameter varies with pipe material.
- 5. All precast products shall conform to requirements of ASTM C913.
- 6. Alignment of ditch, siphon box, and pipe varies, see project plans.
- 7. See Std. Dwg. RD339 for pipe to structure connections.

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

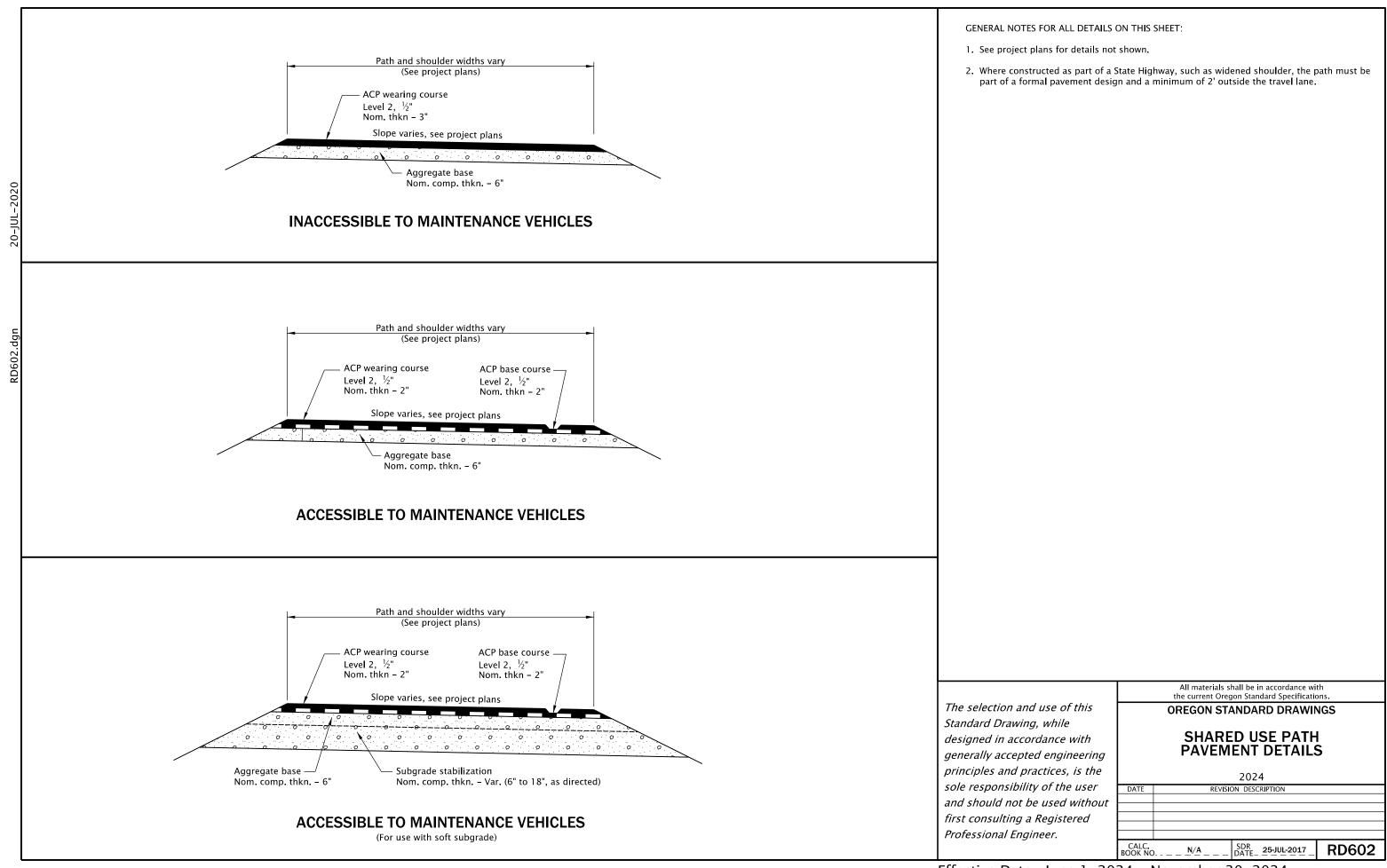
## OREGON STANDARD DRAWINGS MISCELLANEOUS DRAINAGE STRUCTURES, SIPHON BOX, INLET CAP AND INLET ADJUSTMENT

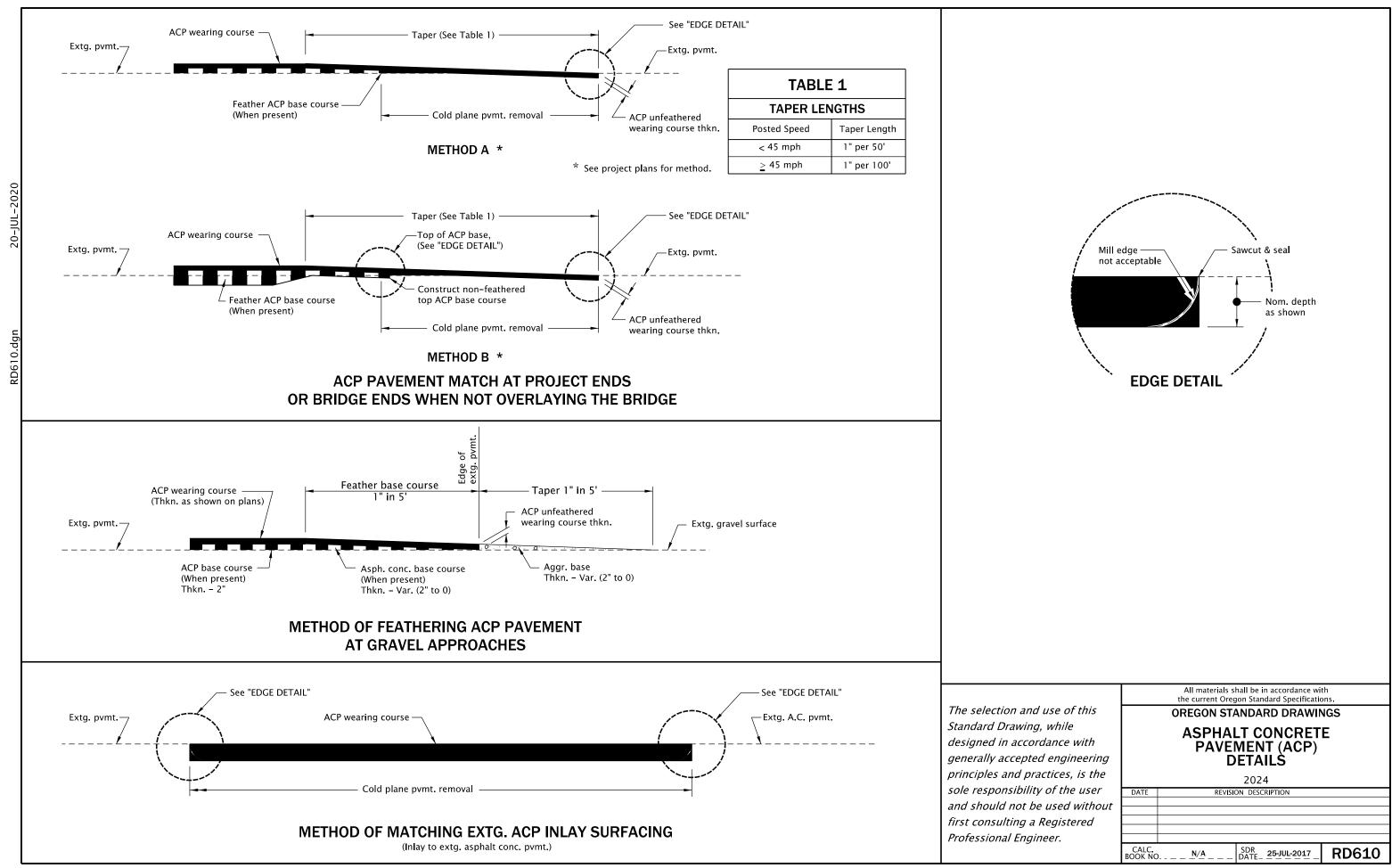
All materials shall be in accordance with

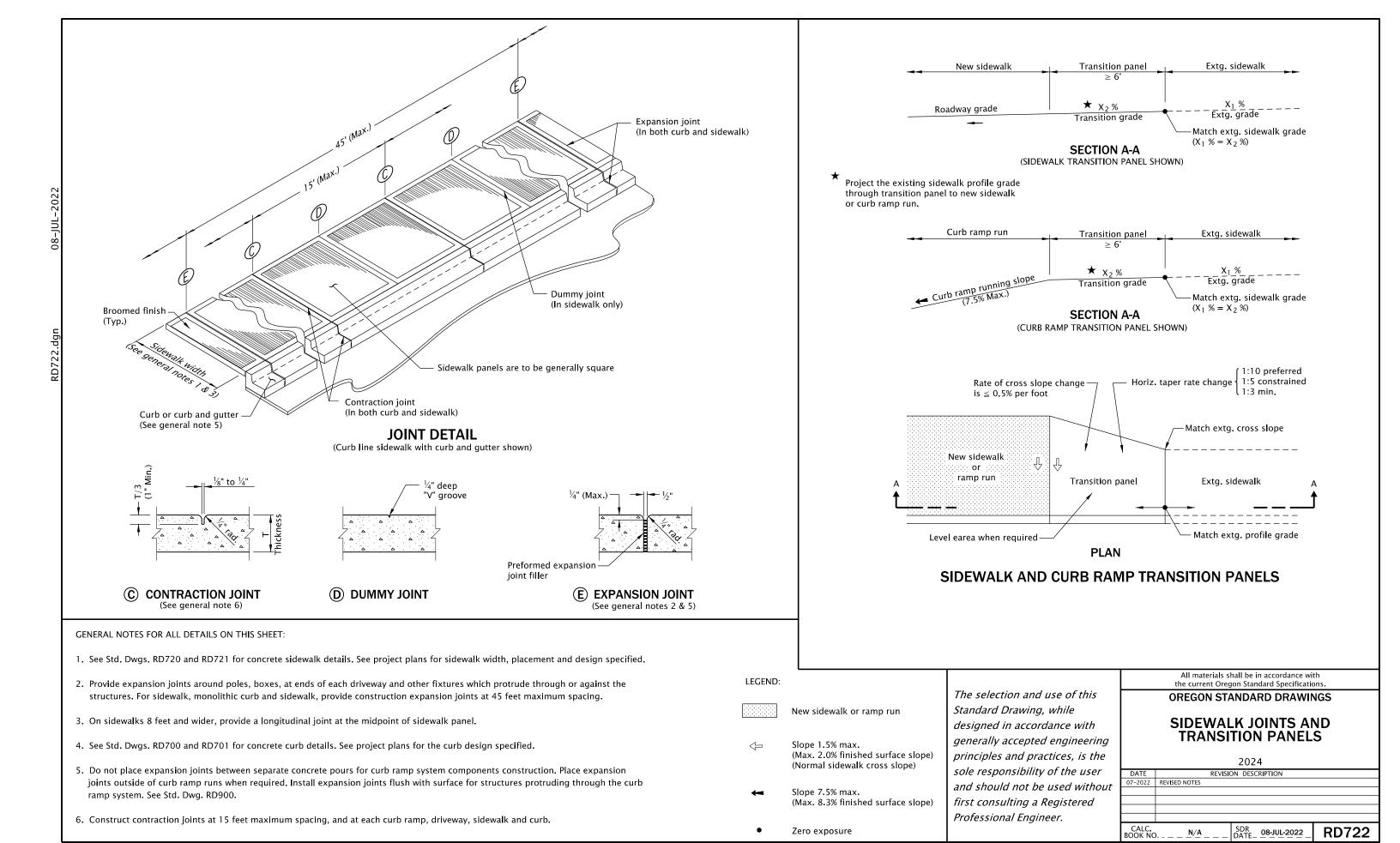
the current Oregon Standard Specifications.

DATE REVISION DESCRIPTION

CALC. BOOK NO. \_ N/A \_ SDR DATE 14-JUL-2014 RD376







#### **CURB RAMP INDEX**

STD. DWG. NO.	STD. DWG. TITLE
RD900	Curb Ramp Components And Legend
RD901	Curb Ramp Legend And Corner Identification
RD902	Detectable Warning Surface Details
RD904	Detectable Warning Surface Placement For Curb Ramps
RD905	Detectable Warning Surface Placement For Directional Curbs
RD906	Detectable Warning Surface Placement For Accessible Route Island
RD908	Detectable Warning Surface Placement For Rail
RD909	Detectable Guide Strip Placement At Bike Ramps
RD910, RD912	Perpendicular Curb Ramp
RD913	Perpendicular Curb Ramp With Closure
RD916	Perpendicular Curb Ramp Single Ramp
RD920	Parallel Curb Ramp
RD922	Parallel Curb Ramp Single Ramp
RD930, RD932 & RD936	Combination Curb Ramp
RD938	Combination Curb Ramp Single Ramp
RD940	Blended Transition Curb Ramp Single Ramp
RD950 & RD952	End Of Walk Curb Ramp
RD960	Unique Curb Ramp

#### LEGEND: INTERSECTION

Marked or intended crossing location

Sidewalk or other traversable surface

Detectable warning surface (DWS)

Level area (Turning space/landing)

Cross slope 1.5% max.
(Max. 2.0% finished surface slope)
(Normal sidewalk cross slope)

Running slope 4.0% max. (Max. 4.9% finished surface slope)

Running slope 7.5% max.
(Max. 8.3% finished surface slope)

Counter slope 4.0% max, ascending or descending (Max. 5.0% finished surface slope)
Slope as required for drainage

Flare slope
(Max. 10.0% finished surface slope)

4'x4' clear space

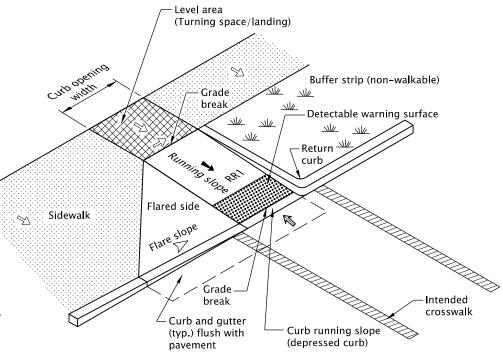
RR1 Ramp Run Position 1

#### **INTERSECTION CONDITION TYPES**

MB = Midblock, less than or equal to roadway grade finished gutter flow slope.

U = Signalized or Uncontrolled, max. 5.0% finished gutter flow slope.

SY = Stop or Yield, max. 2.0% finished gutter flow slope.



#### TYPICAL CURB RAMP SYSTEM COMPONENTS

(PERPENDICULAR TYPE SHOWN)

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

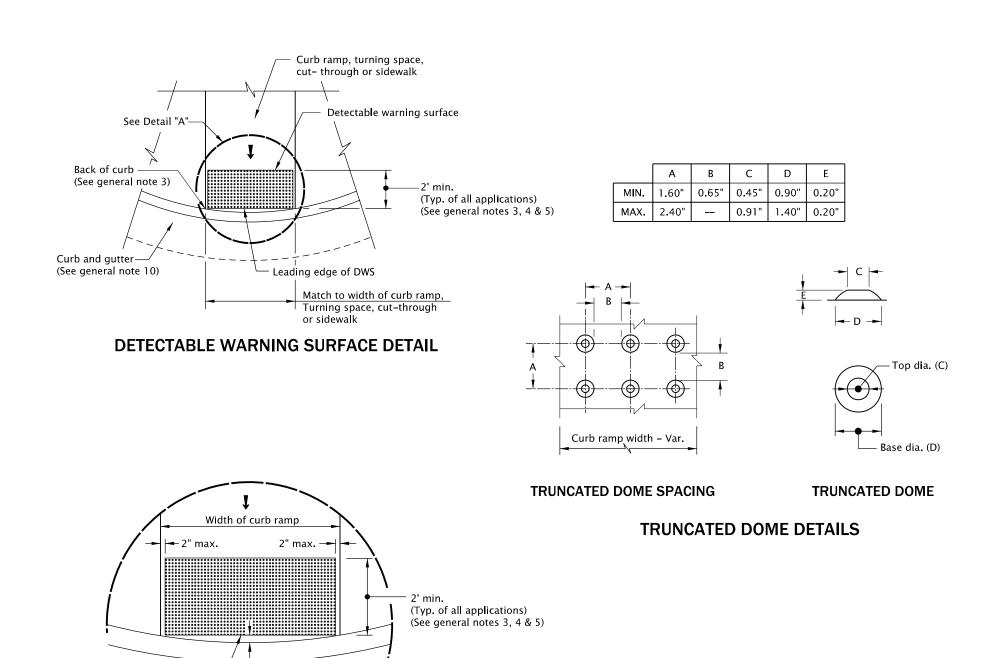
All materials shall be in accordance with the current Oregon Standard Specifications.

#### OREGON STANDARD DRAWINGS

#### CURB RAMP COMPONENTS AND LEGEND

2024

DATE	REVISION DESCRIPTION	
07-2020	NEW DRAWING CREATED	
07-2021	REVISED DETAILS AND NOTES	
01-2022	REVISED LEGEND	
11-2023	REVISED LEGEND	
CALC.	N/A SDR 19-JAN-2024 RD90	0



Detectable warning  $\overline{\phantom{a}}$ 

surface

└─ 2" max.

**DETAIL "A"** 

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

- 1. Detectable warning surface details & locations are based on applicable ODOT Standards.
- See project plans for details not shown. See Std. Dwgs. RD700 & RD701 for curbs.
- 3. The detectable warning surface shall extend the full width of the curb ramp opening, shared use path, blended transition, turning space, or other roadway entrance as applicable. A gap of up to 2 inches on each side of the detectable warning surface is permitted (measured at the leading edge of the detectable warning surface panel as shown in Detail "A").
- 4. Detectable warning surface shall be placed at the back of curb for a minimum depth of 2 ft. in the direction of pedestrian travel at curb ramps that are adjacent to traffic. Detectable warning surface may be radial or rectangular, but must comply with the truncated dome size and spacing standards. Detectable warning surface may be cut to meet necessary shape as shown in plans. Detectable warning surface across a grade break is prohibited. Place abutting panels within 1/4 inch of each other and install anchors, as specified by manufacturers, along cut edge.
- 5. Color to be safety yellow if no color specified in construction note. Alternative colors require a design exception on or along state highways.
- 6. Detectable warning surface shall be used in the following locations:
  - a) Curb ramps at street crossings.
  - b) Crossing islands (Accessible Route Islands).
  - c) Rail crossings.
- 7. Where public transportation stations (rail, bus, etc.) use platform boarding, detectable warning surface shall be placed along the full edge length of the station, when not protected by platform screens or guards, (see Std. Dwg. RD908).
- 8. Detectable warning surface shall not be used on the following locations:
  - a) End of sidewalk transitions that are not at a crosswalk, (see Std. Dwgs. RD950, RD952 and RD960).
  - b) Driveways, unless constructed with curb return or are signalized.
  - c) Parking lots, access aisles and passenger loading zones where curb ramp does not lead to vehicular way.
- 9. Where no curb is present, the detectable warning surface shall be placed at the edge of the roadway.
- 10. On or along state highways, curb and gutter is required at curb ramps.

LEGEND:

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Detectable warning surface

← Cry

Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)

Running slope 7.5% max.
(Max. 8.3% finished surface slope)

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

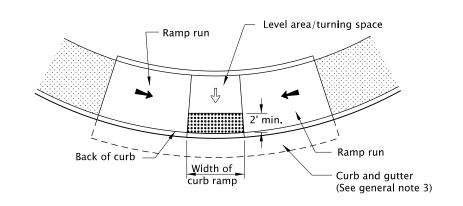
All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

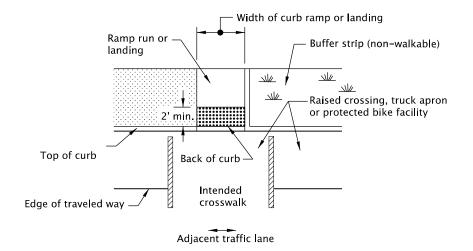
#### DETECTABLE WARNING SURFACE DETAILS

2024

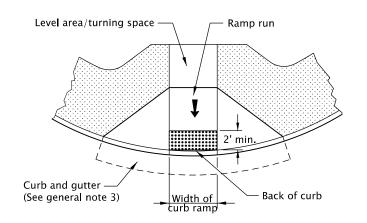
ı			
ı	DATE	REVISION DESCRIPTION	
ı	07-2020	NEW DRAWING CREATED	
ı	07-2021	REVISED DETAILS AND NOTES	
ı			
ı			
ı			
ı	CALC. BOOK NO	N/A SDR 19-JUL-2021	RD902



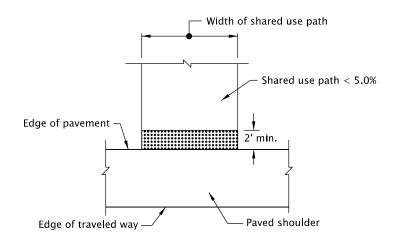
PARALLEL CURB RAMP



#### RAISED CROSSING, TRUCK APRON OR PROTECTED BIKE FACILITY



PERPENDICULAR CURB RAMP GRADE BREAK IN FRONT OF CURB



**SHARED-USE PATH CONNECTION** 

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

- 1. Detectable warning surface details & locations are based on applicable ODOT Standards.
- See project plans for details not shown.
   See Std. Dwgs. RD700 & RD701 for curbs.
   See Std. Dwg. RD902 for detectable warning surface installation details.
- 3. On or along state highways, curb and gutter is required at curb ramps.
- 4. Detectable warning surface placement for perpendicular ramps vary as shown.

#### LEGEND:

Marked or intended crossing location

Sidewalk

.....

Detectable warning surface

 $\leftarrow$ 

Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope)

Running slope 7.5% max.
(Max. 8.3% finished surface slope)

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

OREGON STANDARD DRAWINGS

#### DETECTABLE WARNING SURFACE PLACEMENT FOR CURB RAMPS

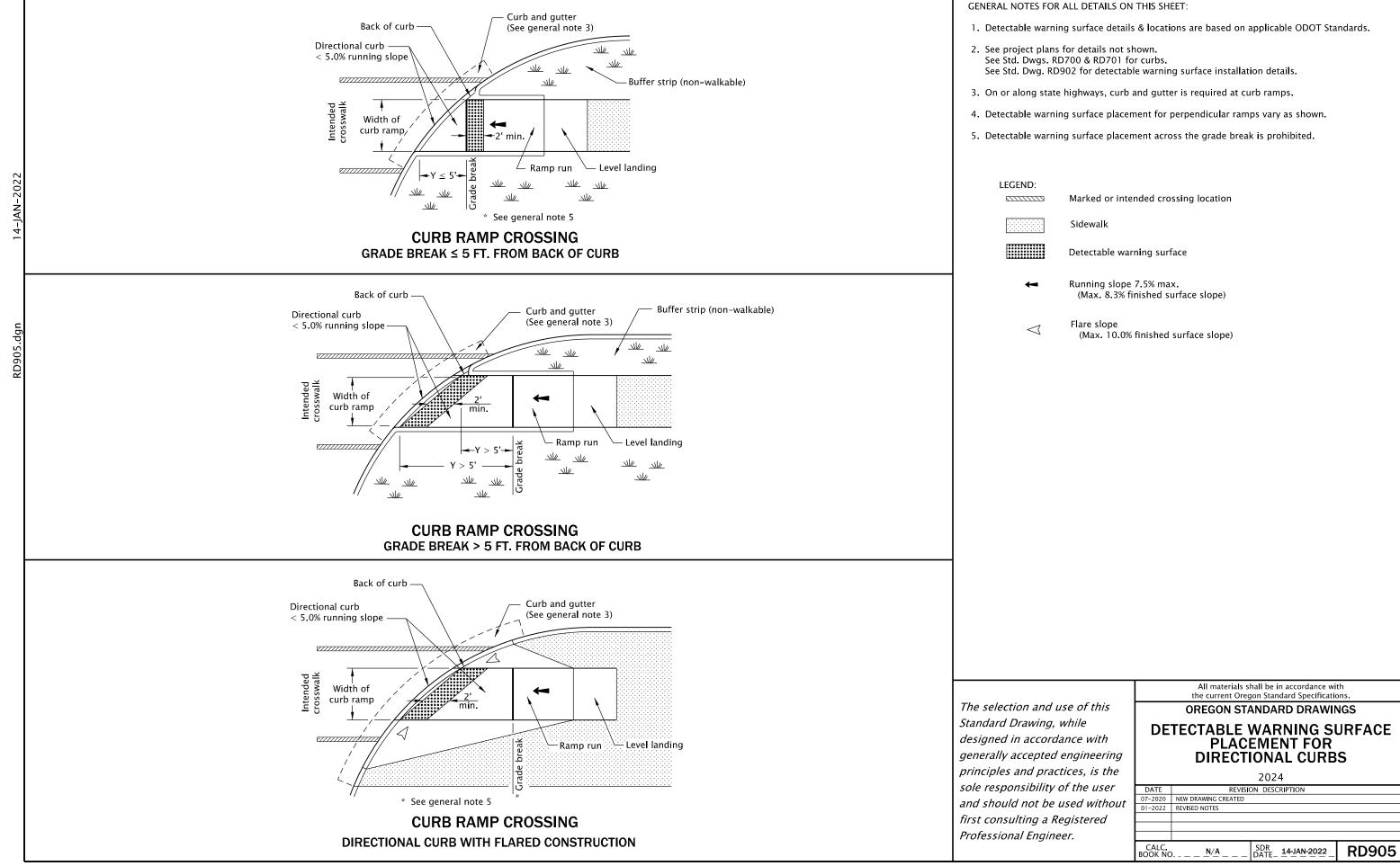
All materials shall be in accordance with

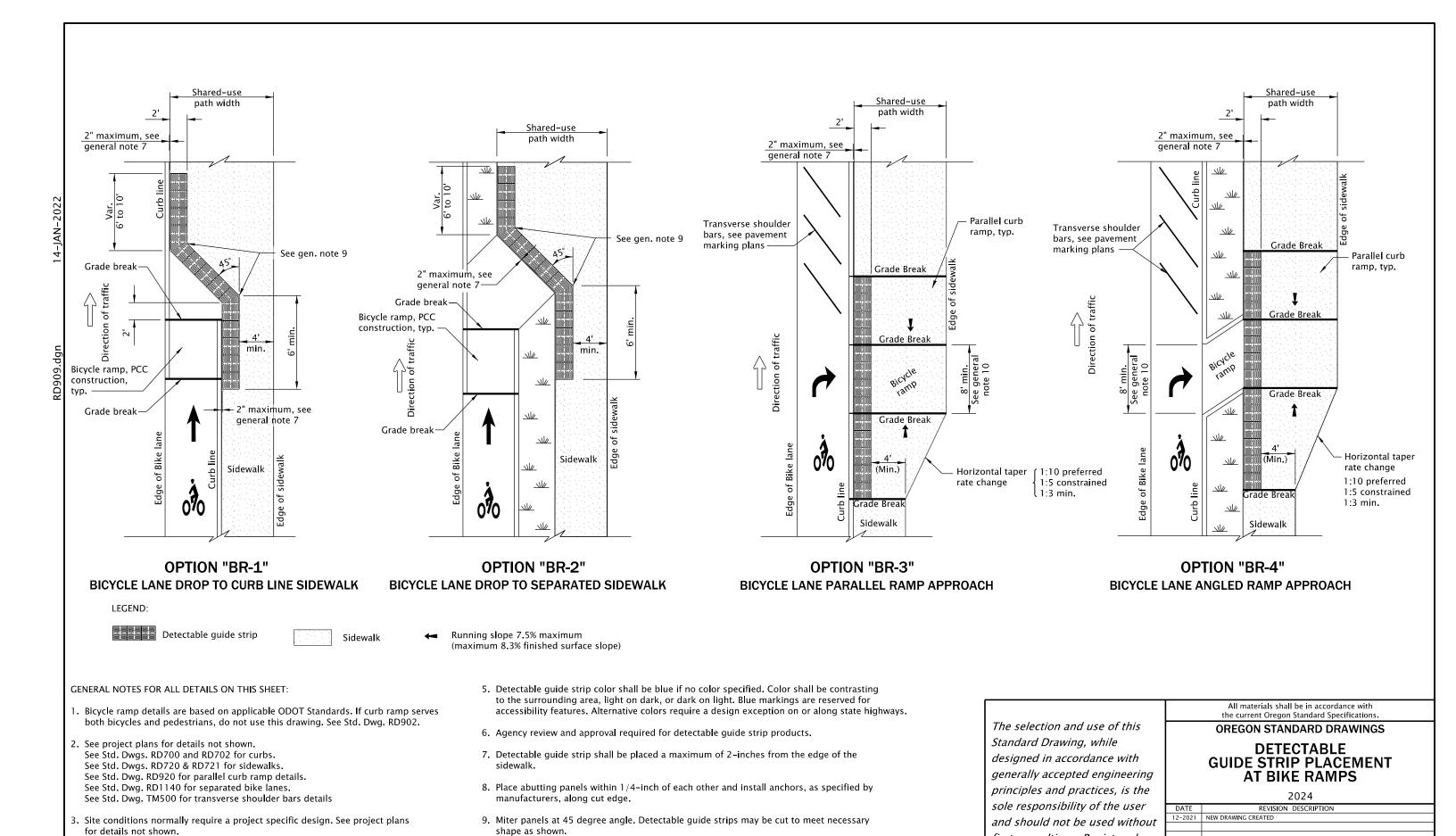
the current Oregon Standard Specifications.

2024

DATE REVISION DESCRIPTION
07-2020 NEW DRAWING CREATED

CALC.
BOOK NO. \_ \_ N/A \_ \_ SDR DATE 20-JUL-2020 RD904





10. When a curb ramp is used to provide bicycle access from a roadway

to a sidewalk, the curb ramp opening will be  $\geq$  8' wide.

4. Curb ramps for shared use paths intersecting a roadway shall be full width of

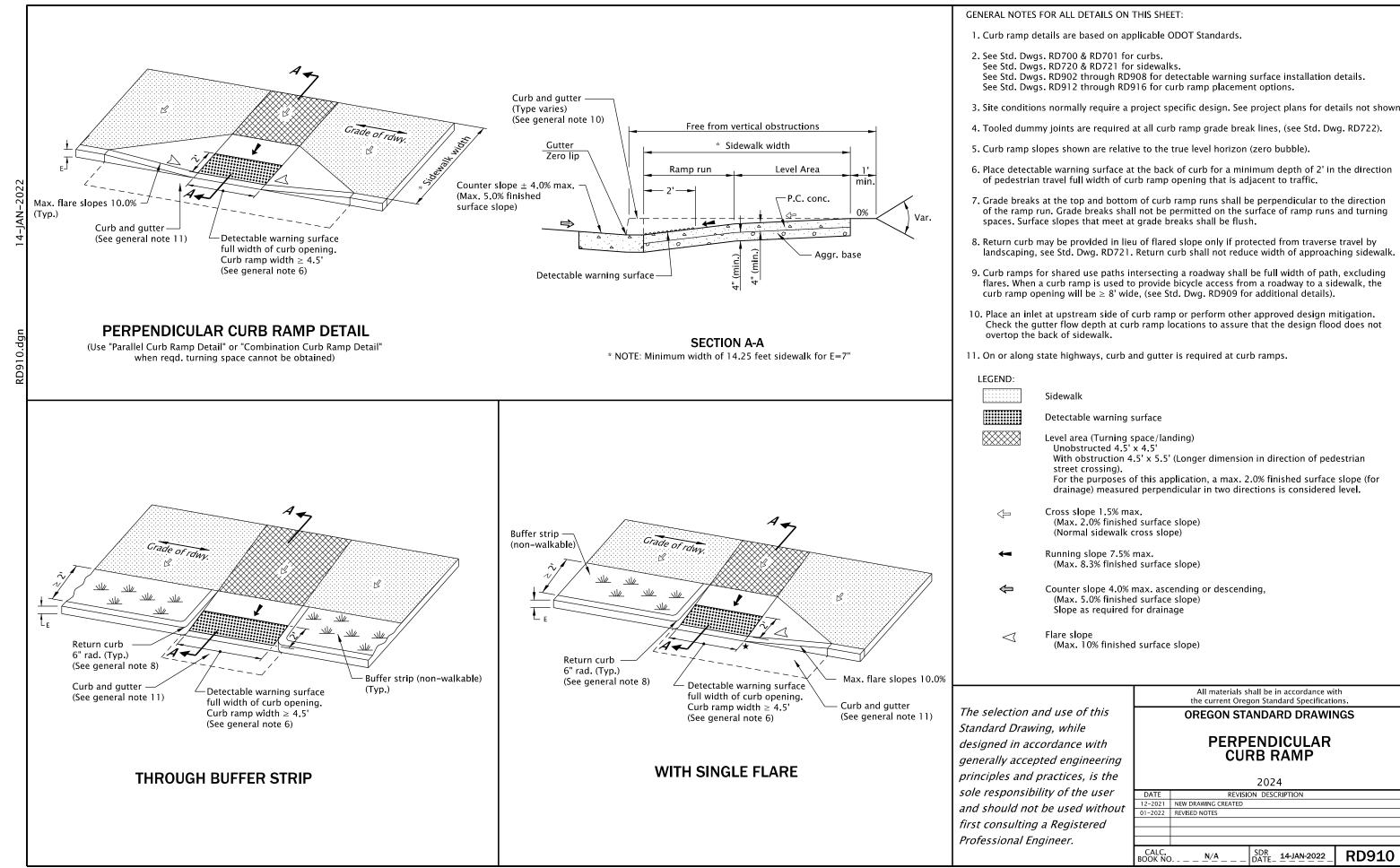
path, excluding flares.

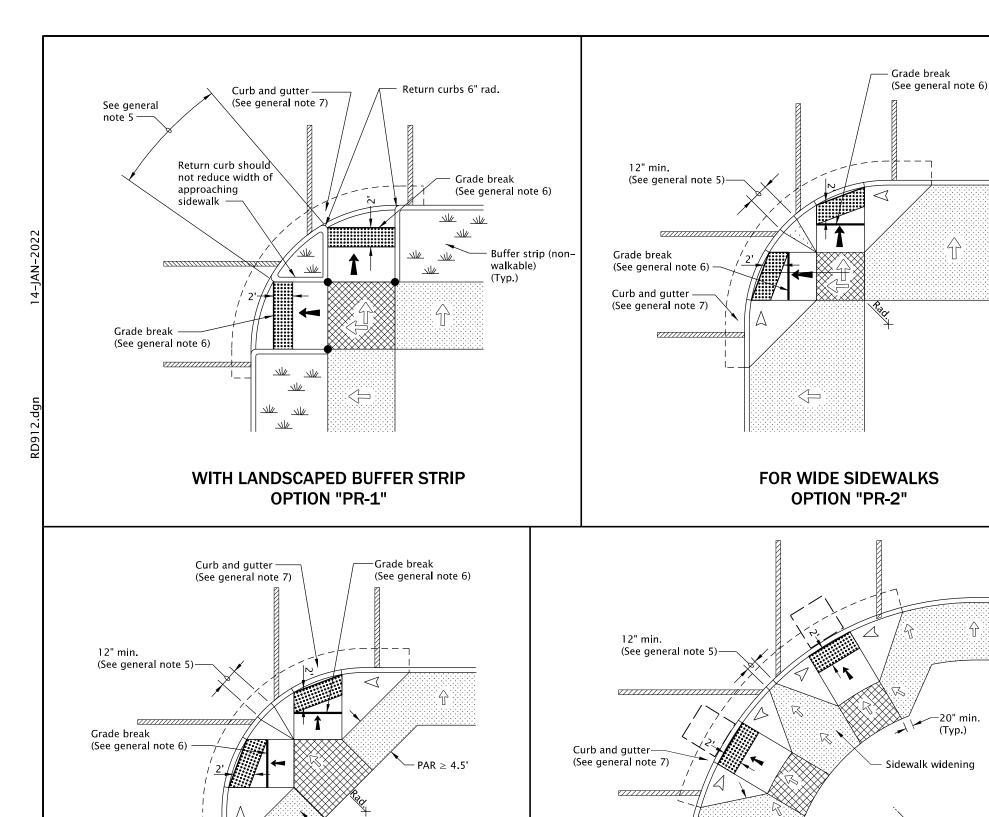
CALC BOOK NO

SDR DATE 14-JAN-2022 RD909

first consulting a Registered

Professional Engineer.





Sidewalk widening

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FOR NARROW SIDEWALKS

**OPTION "PR-3"** 

W. PAR ≥ 4.5' · FOR NARROW SIDEWALKS **OPTION "PR-4"** 

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET: 1. Curb ramp details are based on applicable ODOT Standards. 2. See project plans for details not shown. See Std. Dwgs. RD700 & RD701 for curbs. See Std. Dwgs. RD720 & RD721 for sidewalks. See Std. Dwg. RD910 for perpendicular curb ramp details. See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details. 3. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722). 4. Curb ramp slopes shown are relative to the true level horizon (zero bubble). 5. When 2 curb ramps are immediately adjacent, the curb exposure (E) between the adjacent side flares may range between 3" and full design exposure. 6. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush. 7. On or along state highways, curb and gutter is required at curb ramps.

LEGEND: Marked or intended crossing location Sidewalk Detectable warning surface Level area (Turning space/landing) Unobstructed 4.5' x 4.5' With obstruction 4.5' x 5.5' (Longer dimension in direction of pedestrian street crossing). For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level. Cross slope 1.5% max. (Max. 2.0% finished surface slope) (Normal sidewalk cross slope) Running slope 7.5% max. (Max. 8.3% finished surface slope) Flare slope  $\triangleleft$ (Max. 10% finished surface slope) Zero curb exposure 4' x 4' clear space Pedestrian Access Route

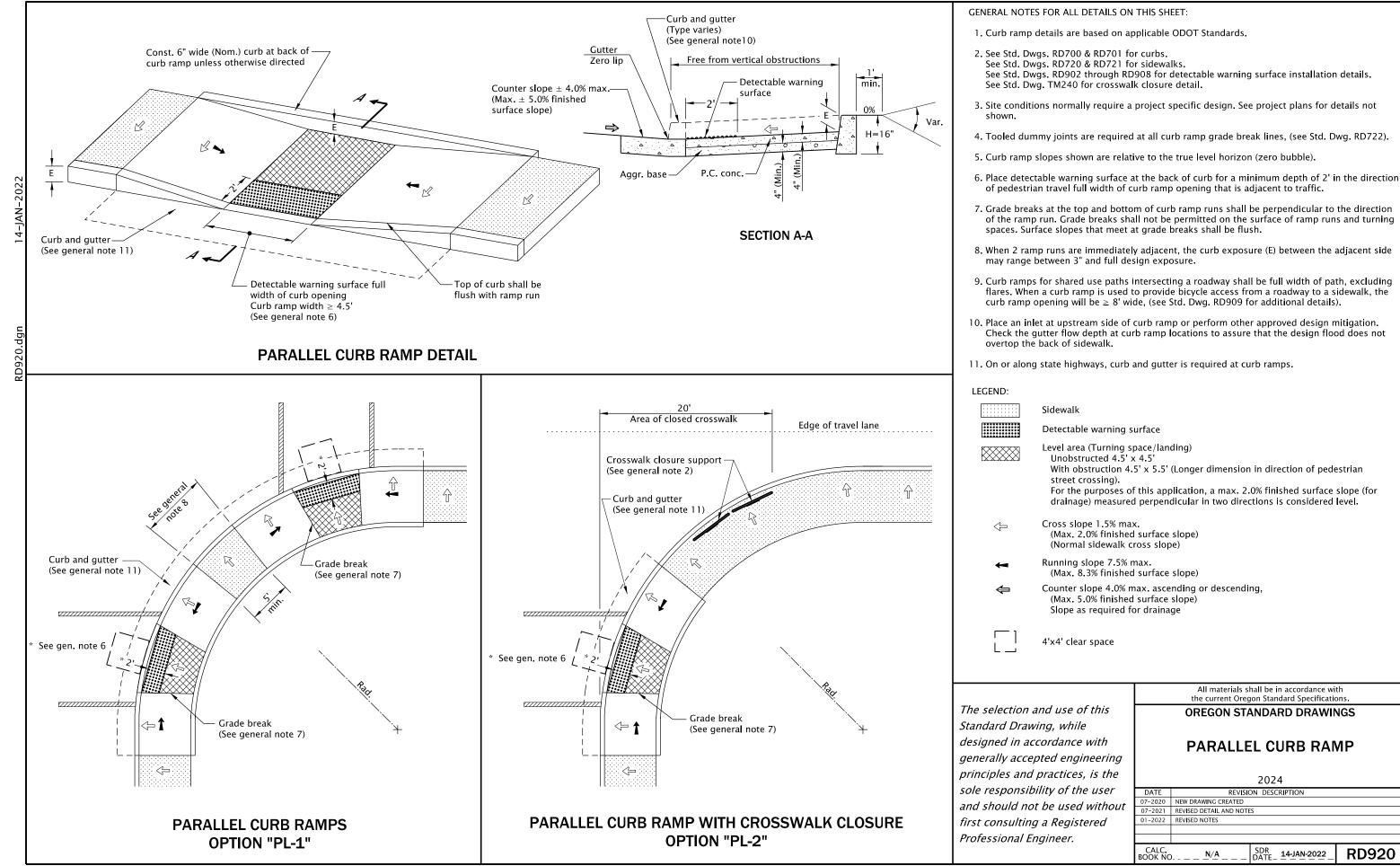
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

the current Oregon Standard Specifications. **OREGON STANDARD DRAWINGS PERPENDICULAR CURB RAMP** 

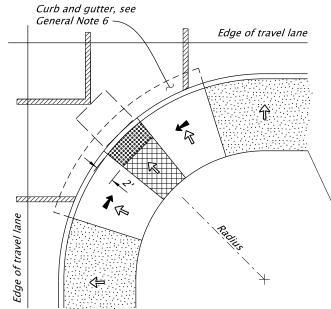
All materials shall be in accordance with

2024

REVISION DESCRIPTION 07-2020 NEW DRAWING CREATED 07-2021 REVISED DETAIL AND NOTES 01-2022 REVISED DETAILS AND NOTES NOTE: CALC. BOOK NO. -SDR DATE\_ 14-JAN-2022 **RD912** 

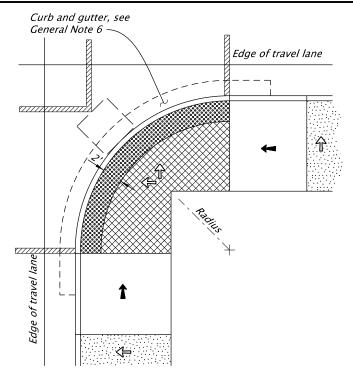






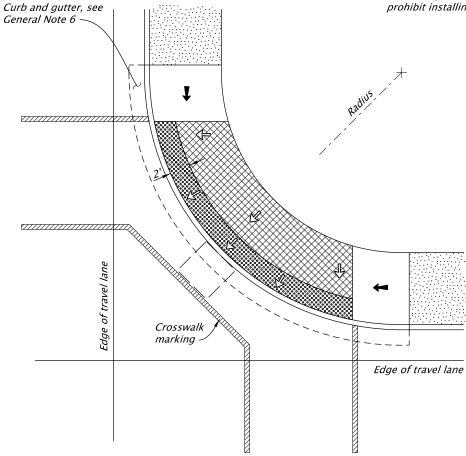
#### DIAGONAL PARALLEL CURB RAMP OPTION "PL-3"

(Use only when site constraints prohibit installing two curb ramps and both crosswalks are open)



# DEPRESSED CURB RAMP SMALL RADIUS OPTION "PL-4"

(Use only when site constraints prohibit installing two curb ramps)



# DEPRESSED CURB RAMP LARGE RADIUS OPTION "PL-5"

(Use only when site constraints prohibit installing two curb ramps)

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

- 1. Curb ramp details are based on applicable ODOT Standards.
- 2. See project plans for details not shown. See drawings RD700 and RD701 for curbs. See drawings RD720 and RD721 for sidewalks. See drawings RD902 through RD908 for detectable warning surface installation details. See drawing RD920 for parallel curb ramp details.
- 3. Tooled dummy joints are required at all curb ramp slope break lines. See drawing RD722.
- 4. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
- 5. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
- 6. On or along state highways, curb and gutter is required at curb ramps. Curb and gutter shall be flush with the adjacent pavement.
- 7. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
- 8. Only use curb ramp options allowed by jurisdiction. Single ramps requires design exception on or along state highways.

#### LEGEND:

Marked or intended crossing location

Sidewalk

Detectable warning surface (DWS)

Level area (Turning space/landing) Unobstructed 4.5' x 4.5'

With obstruction 4.5' x 5.5' (longer dimension in direction of pedestrian street crossing).

For the purposes of this application, a maximum 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.

Cross slope 1.5% maximum
(Maximum 2.0% finished surface slope)
(Normal sidewalk cross slope)

Running slope 7.5% maximum (Maximum 8.3% finished surface slope)

4'x4' clear space

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

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

#### OREGON STANDARD DRAWINGS

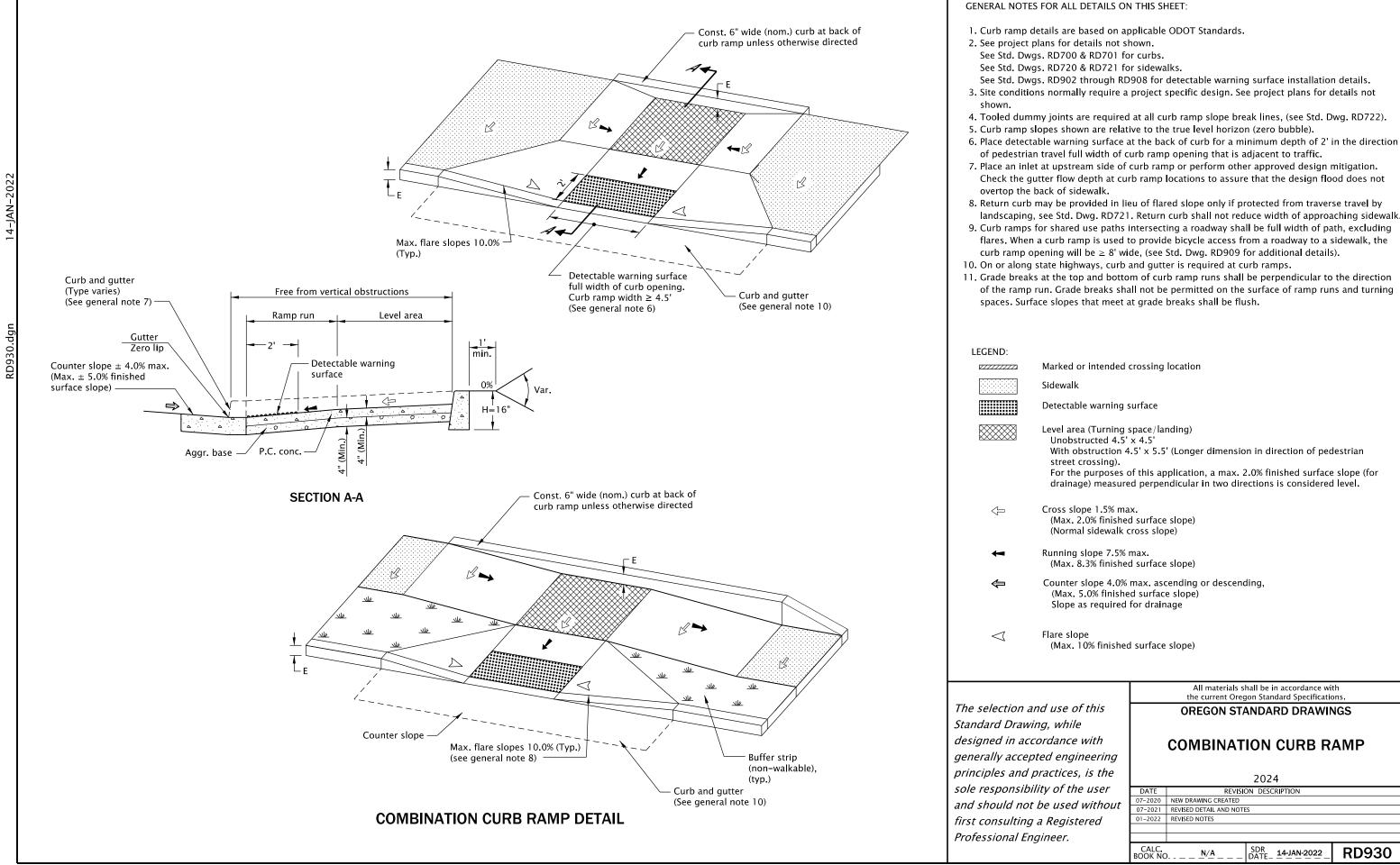
#### PARALLEL CURB RAMP SINGLE RAMP

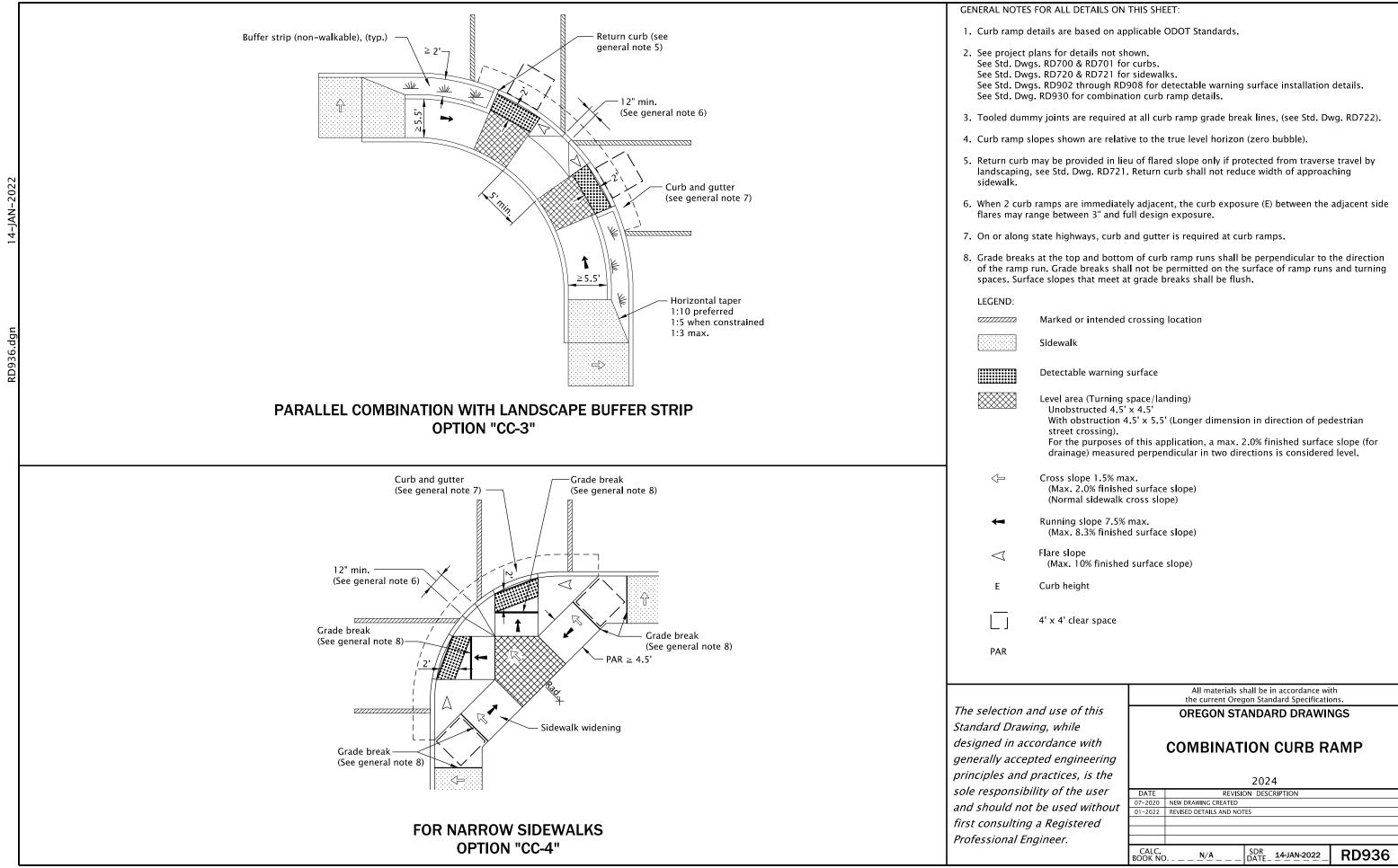
2024

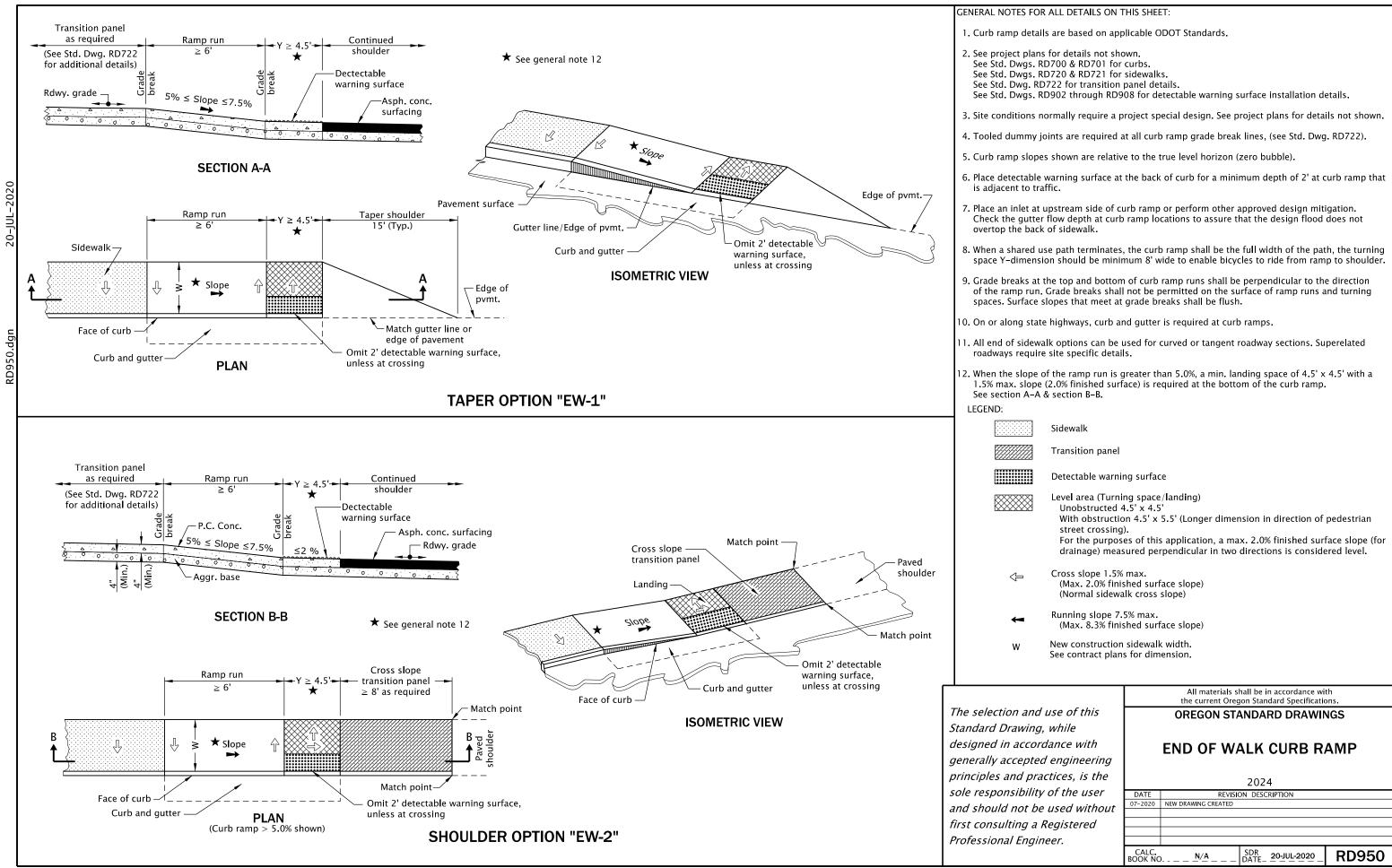
DATE REVISION DESCRIPTION

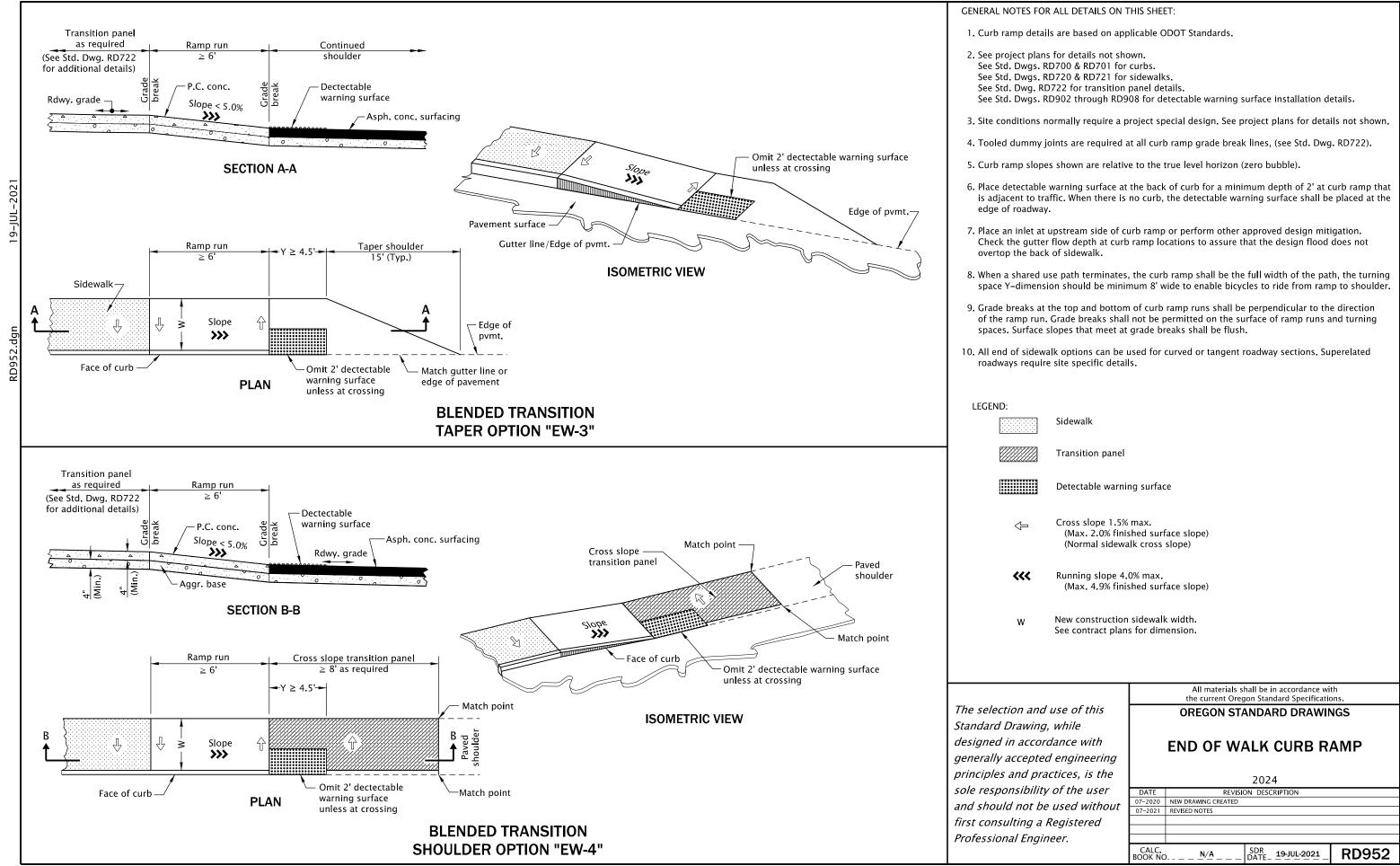
01-2025 UPDATED CAD STANDARDS

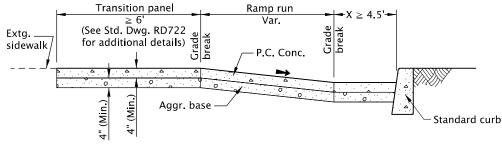
CALC.
BOOK NO. \_\_\_\_N/A \_\_\_ SDR DATE 10-JAN-2025 RD922



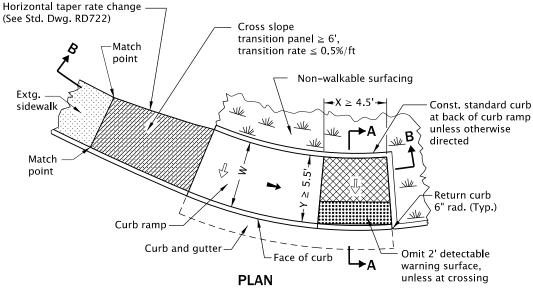


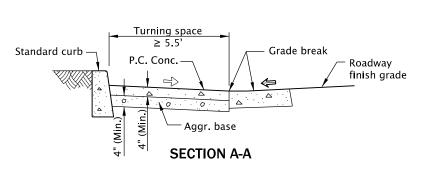


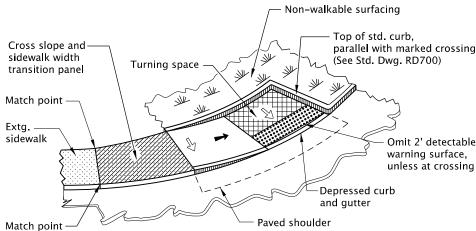




**SECTION B-B** 







ISOMETRIC VIEW

#### **CURBED OPTION**

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

- 1. Curb ramp details are based on applicable ODOT applicable Standards.
- 2. See project plans for details not shown.
- See Std. Dwgs. RD700 & RD701 for curbs.
- See Std. Dwgs. RD720 & RD721 for sidewalks.
- See Std. Dwg. RD722 for transition panel details.
- See Std. Dwgs. RD902 through RD908 for detectable warning surface installation details. See Std. Dwg. RD920 for parallel curb ramp details.
- 3. Site conditions normally require a project special design. See project plans for details not shown.
- 4. Tooled dummy joints are required at all curb ramp grade break lines, (see Std. Dwg. RD722).
- 5. Curb ramp slopes shown are relative to the true level horizon (zero bubble).
- 6. Place detectable warning surface at the back of curb for a minimum depth of 2' in the direction of pedestrian travel full width of curb ramp opening that is adjacent to traffic.
- 7. Place an inlet at upstream side of curb ramp or perform other approved design mitigation. Check the gutter flow depth at curb ramp locations to assure that the design flood does not overtop the back of sidewalk.
- 8. When a shared use path terminates, the curb ramp shall be the full width of the path, the turning space Y-dimension should be minimum 8' wide to enable bicycles to ride from ramp to shoulder.
- 9. Grade breaks at the top and bottom of curb ramp runs shall be perpendicular to the direction of the ramp run. Grade breaks shall not be permitted on the surface of ramp runs and turning spaces. Surface slopes that meet at grade breaks shall be flush.
- 10. On or along state highways, curb and gutter is required at curb ramps.
- 11. Unique curb ramp option can be used for curved or tangent roadway sections. Superelevated roadways require a site specific detail.

#### LEGEND:

Sidewalk



Detectable warning surface

Transition panel



Level area (Turning space/landing)

Unobstructed 4.5' x 4.5'

With obstruction 4.5'  $\times$  5.5' (Longer dimension in direction of pedestrian street crossing).

For the purposes of this application, a max. 2.0% finished surface slope (for drainage) measured perpendicular in two directions is considered level.

← C

Cross slope 1.5% max.

(Max. 2.0% finished surface slope) (Normal sidewalk cross slope)

Running slope 7.5% max.

(Max. 8.3% finished surface slope)

Counter slope 4.0% max. ascending or descending, (Max. 5.0% finished surface slope)

Slope as required for drainage

New construction sidewalk width. See contract plans for dimension

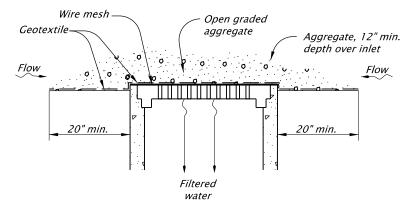
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OREGON STANDARD DRAWINGS

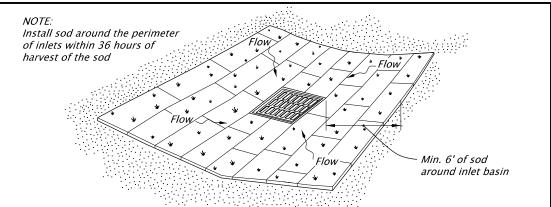
#### UNIQUE CURB RAMP

2024

DATE	REVISION	ON DESCRIPTION	
07-2020	NEW DRAWING CREATED		
07-2021	REVISED DETAILS AND NOT	TES	
CALC.	N/A	SDR DATE 19-JUL-2021	RD960



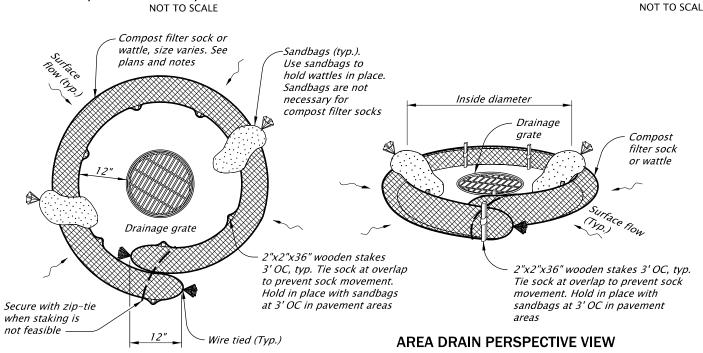
#### Grate #5 Rebar #5 Rebar Flow Sewn 6" Sewn 6' overlap overlap Geotextile insert Filtered water

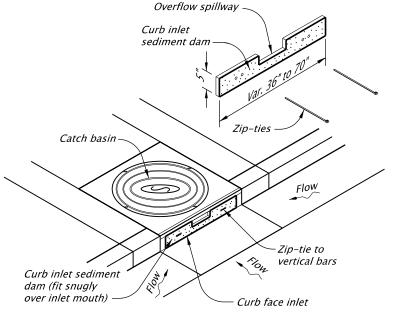


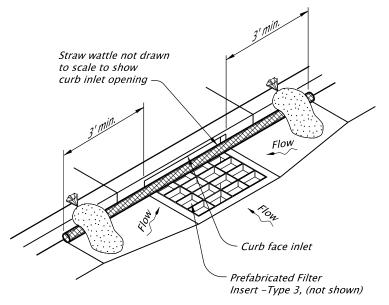
#### GEOTEXTILE/WIRE MESH/AGGREGATE - TYPE 2

PREFABRICATED FILTER INSERT - TYPE 3 **NOT TO SCALE** 

#### **SOD PROTECTION - TYPE 6** NOT TO SCALE







#### **AREA DRAIN PLAN**

Compost filter sock or wattle. Use

sandbags to hold wattles in place.

Place a sandbag at each

3' OC to hold in place

end of wattle and

Sandbags are not necessary for

compost filter socks

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.

**CURB INLET SEDIMENT DAM - TYPE 10** 

NOT TO SCALE

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

Type 11 - Wattle barrier with filter insert Install prefabricated filter insert per Type 3 detail.

#### **WATTLE BARRIER WITH FILTER INSERT - TYPE 11**

are combined at a catch basin.

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

Adjust, replace or modify the inlet protection as needed to prevent sediment laden water from entering the catch basin.

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#### All materials shall be in accordance with the current Oregon Standard Specifications. **OREGON STANDARD DRAWINGS**

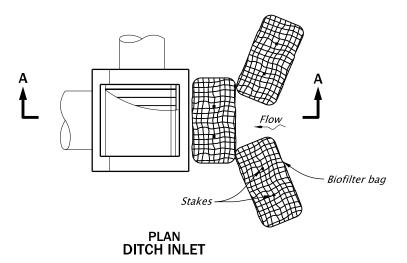
**INLET PROTECTION** TYPE 2, 3, 6, 7, 10 AND 11

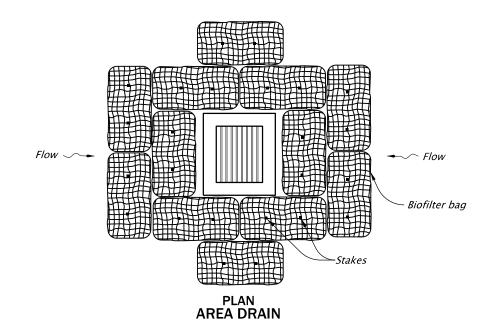
2024

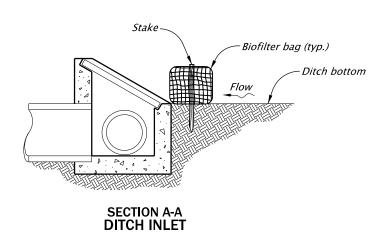
DATE	REVISION DESCRIPTION
01-2021	REMOVED CALC BOOK NUMBERS
01-2021	MOVED NOTES UP FROM OVERLAPPING THE SHEET BORDER
CALC.	N/A SDR 20-JAN-2021 <b>RD1010</b>

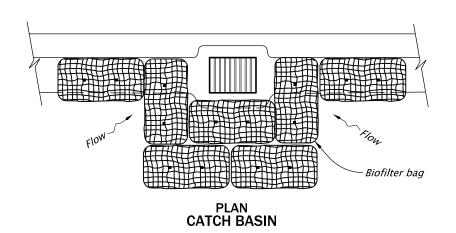
## **CURB INLET PERSPECTIVE VIEW**

COMPOST FILTER SOCK OR WATTLE - TYPE 7 NOT TO SCALE









#### **BIOFILTER BAGS - TYPE 4**

NOT TO SCALE

#### NOTES

- 1. Stake biofilter bags with 2"x2"x36" wood stakes, and use a minimum 2 stakes per bag. Drive stakes a minimum of 6" into the ground and flush with the top of the bags.
- 2. Omit stakes when bags are placed on pavement surface.
- 3. Overlap all bag joints 6".

4. Biofilter bags used on active roadways are easily displaced and made ineffective if struck by vehicles. If struck by a cyclist, falls with injury could result. On active roadways alternative inlet protection should be considered.

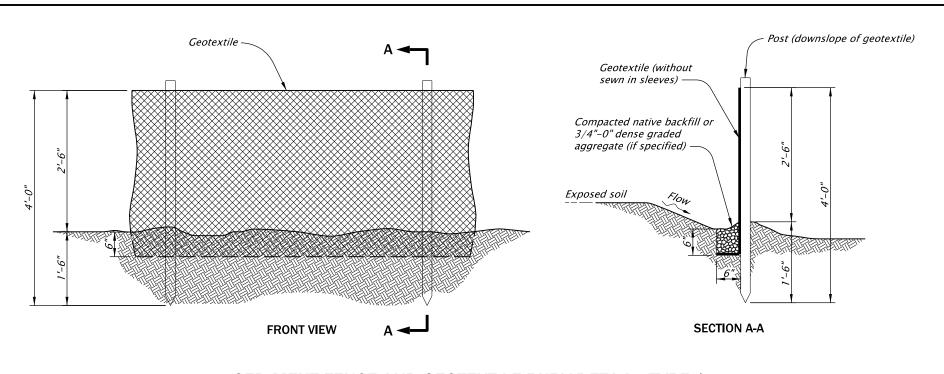
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# OREGON STANDARD DRAWINGS INLET PROTECTION TYPE 4

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

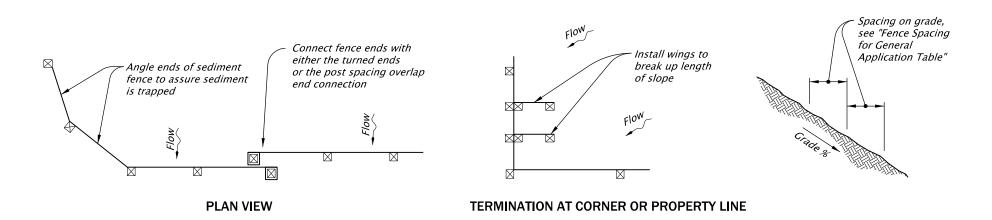
2024

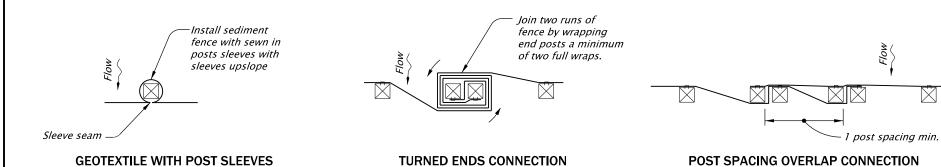
ATE	REVISI	ON DESC	CRIPTION	
-2021	REMOVED CALC BOOK NUM	MBERS		
ALC.	N/A	SDR DATE	20-JAN-2021	RD1015



#### **SEDIMENT FENCE AND GEOTEXTILE BURY DETAIL - TYPE 1**

NOT TO SCALE





#### **GEOTEXTILE END CONNECTIONS**

NOT TO SCALE

### Post (downslope of geotextile) Sediment fence geotextile Bury 1' flap of fence with 3/4" min. rock, mineral soil, or approved equal Exposed soil Sediment fence geotextile -1'-0" 1. Use must be approved by the engineer. 2. Not approved for use with sediment fencing with sewn-in post sleeves.

#### **ALTERNATE SEDIMENT FENCE** WITHOUT TRENCHING - TYPE 2

NOT TO SCALE

#### GENERAL NOTES:

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					
<i>Grade &lt; 10%</i>	300'				
<i>10% ≤ Grade &lt; 15%</i>	150'				
15% <u>≤</u> Grade < 20% 100'					
<i>20%</i> ≤ <i>Grade</i> < <i>30%</i> 50′					
<i>30% <b>≤</b> Grade</i>	25'				

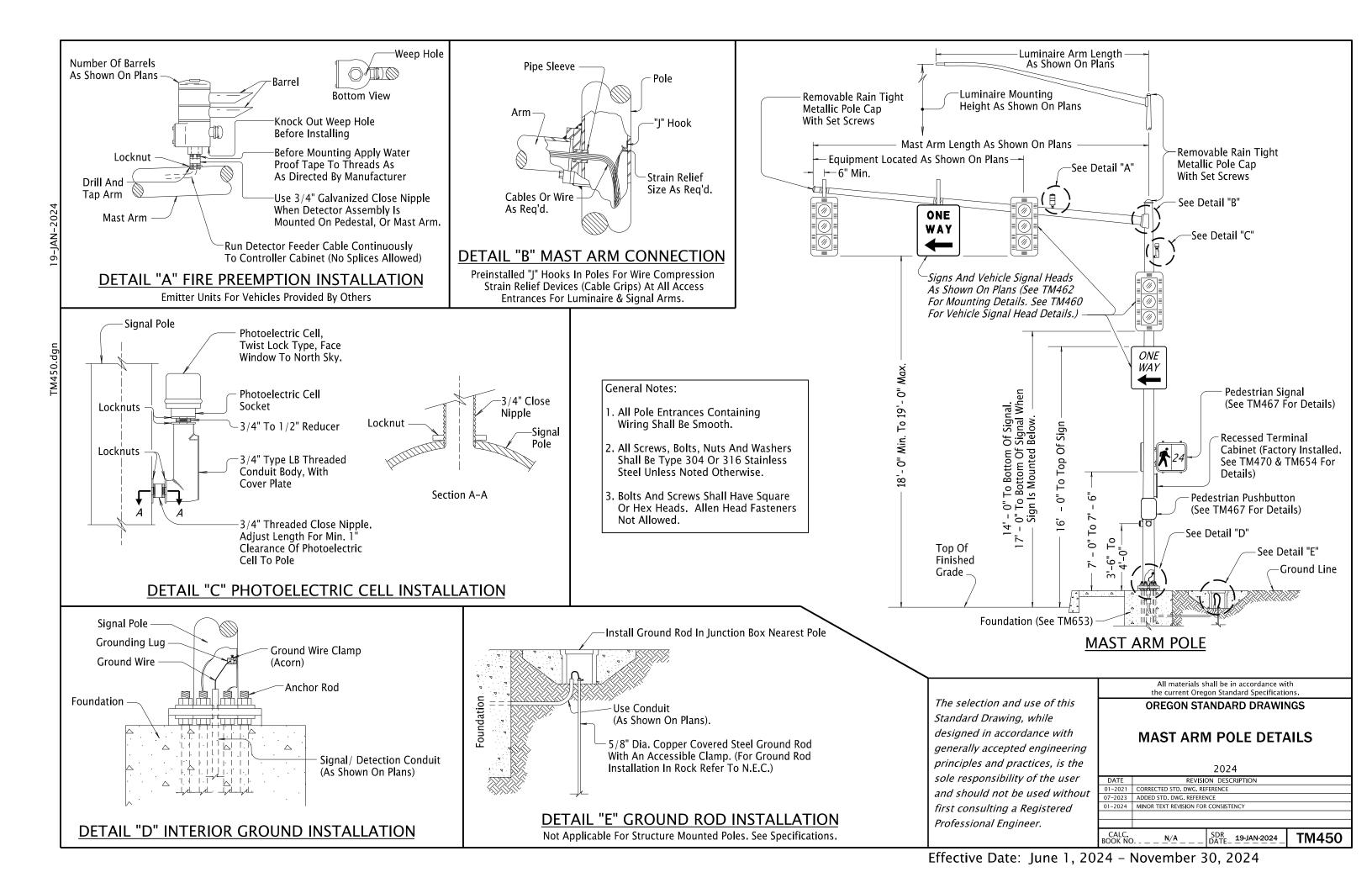
POST SPACING TABLE						
6'	Sediment Fence with Geotextile elongation less than 50%					
4'	Sediment Fence with Geotextile elongation 50% or more					

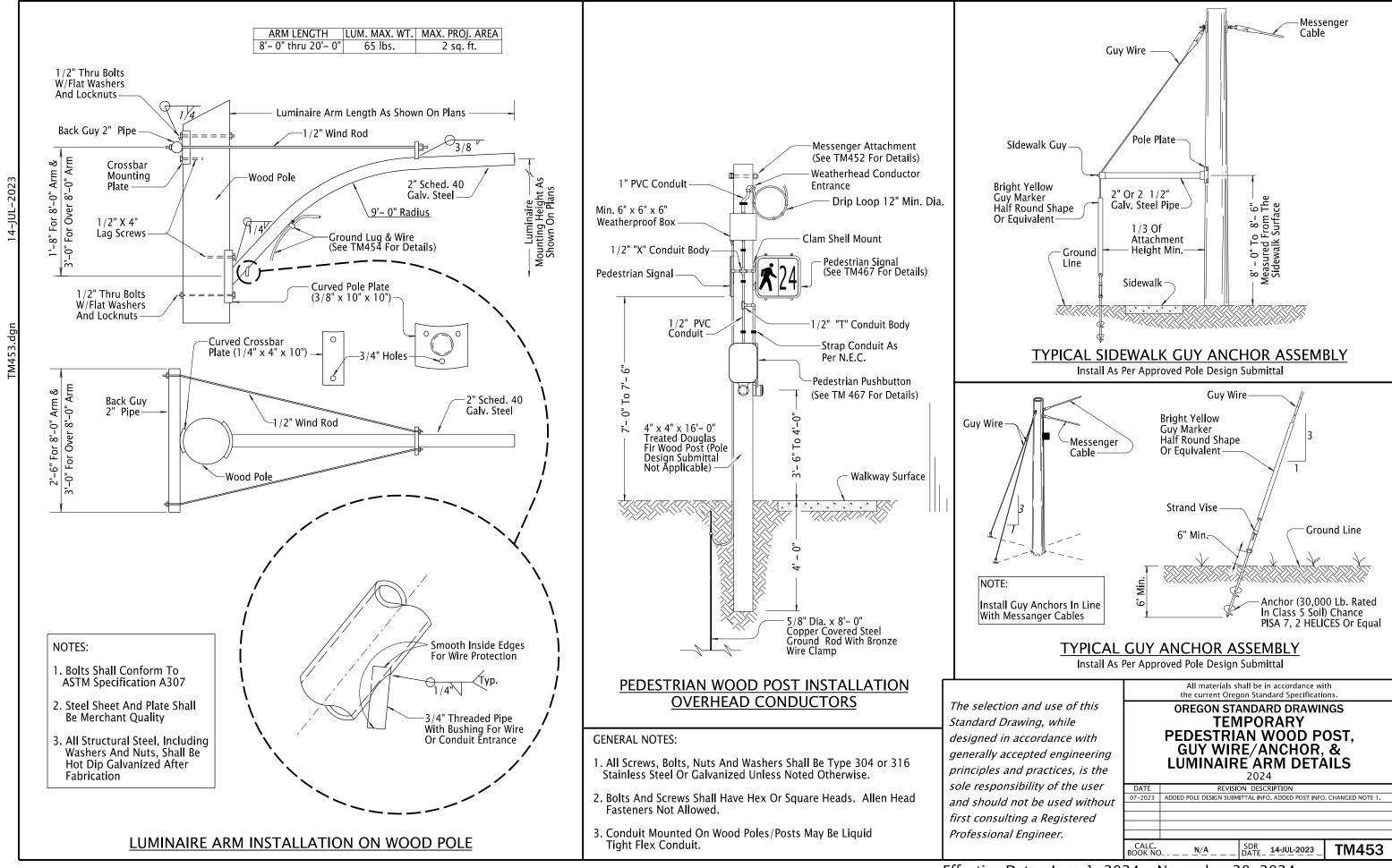
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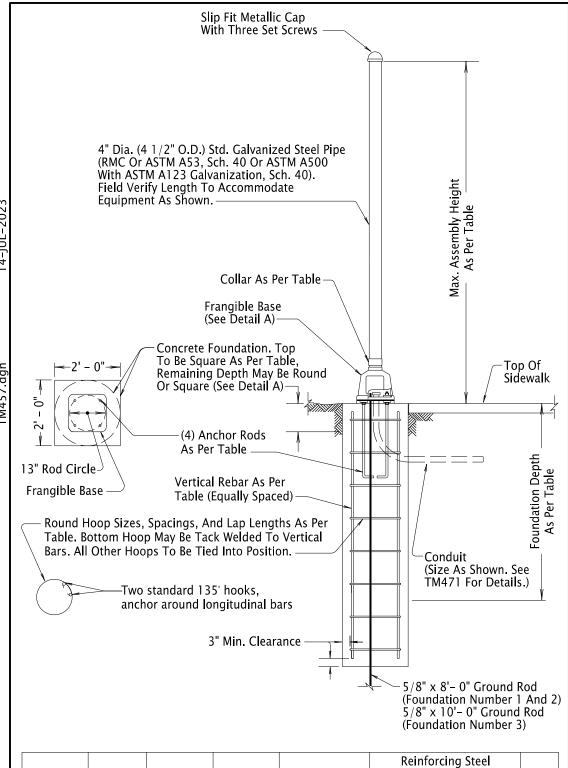
**OREGON STANDARD DRAWINGS SEDIMENT FENCE** 2024 REVISION DESCRIPTION

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

01-2021 REMOVED CALC BOOK NUMBERS CALC BOOK NO SDR DATE\_ 20-JAN-2021 RD1040

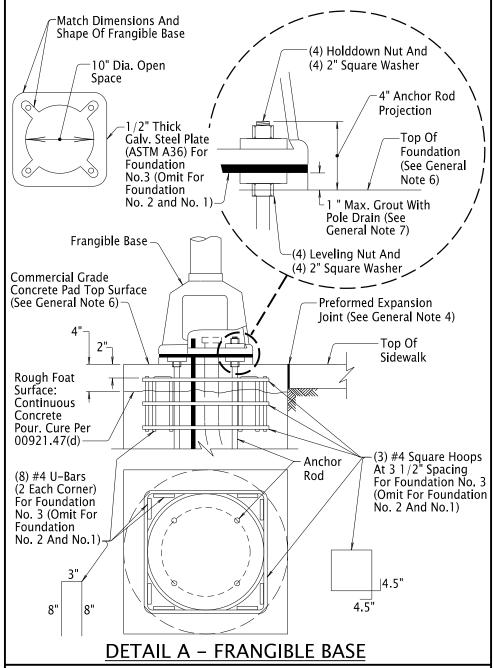






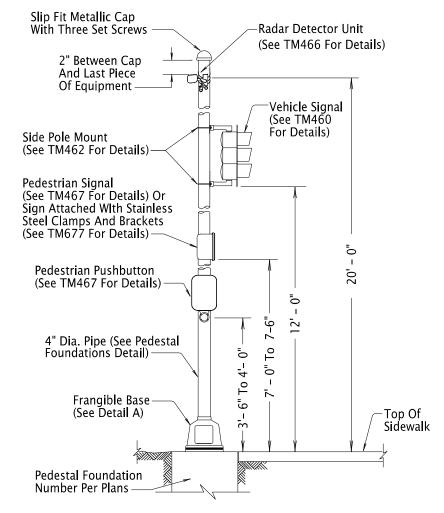
					Re	inforcing St	teel	
Pedestal Foundation Number	Max. Assembly Height	Foundation Depth	Depth of Square Foundation	Anchor Rods (ASTM F 1554 Grade 36)	Vertical Rebar	Hoop Size & Spacing	Hoop Lap Length	Collar
1	6' - 0"	2' - 0"	4"	3/4" x 18" x 4"	N/A	N/A	N/A	N/A
2	10' - 0"	3' - 0"	4"	(6" Thread)	IN/A	IN/A	IN/A	IN/A
3	20' – 6"	8' - 0"	12"	1" x 36" x 4" (6" Thread)	8-#6	#4-12"	6" with 2 hooks	Req'd

#### PEDESTAL FOUNDATIONS



#### General Notes:

- . All Bolts, Nuts And Washers To Conform To 02560.20 And Be Galvanized Steel According To 02560.40 Unless Noted Otherwise.
- 2. All Anchor Rods To Be Galvanized Steel Conforming To 02560.30.
- 3. All Pole Entrances Containing Wiring To Be Smooth.
- 4. Install 1/4" Thick Preformed Expansion Joint Filler Around Footing In Sidewalk Areas
- 5. The Entire Foundation To Be Located On A Single Plane With Less Than 2% Slope. The Flat Edge(s) Of The Foundation May Be Adjacent To The Turn Space, Back Of Walk, Or A Curb Ramp Grade Break Line.
- 6. Install Commercial Grade Concrete Pad Above Rough Float Surface With Top Surface Matching Sidewalk Grade And Less Than 1/4 "Vertical Exposure From Adjacent Grade. Clean Rough Float Surface Prior To Placing Fresh Concrete By Removing All Scum, Laitance, Loose Gravel, And Sediment. Pour During Sidewalk Installation After Installing Pipe And Appurtenances.
- 7. Non–Shrink High Early Strength Grout (Non–Ferrous) with 3/4" Diameter Pole Drain And A Minimum Strength of 5000 psi. Do Not Use Footing Concrete.



#### Notes:

- 1. Equipment Shown In the Assembly Detail Is An Example Of The Equipment That May Be Mounted. Install Equipment As Shown.
- 2. See TM492 For Ramp Meter Pedestal Mounting Details.
- 3. See TM493 For RRFB Pedestal Mounting Details.

#### TRAFFIC SIGNAL PEDESTAL ASSEMBLY

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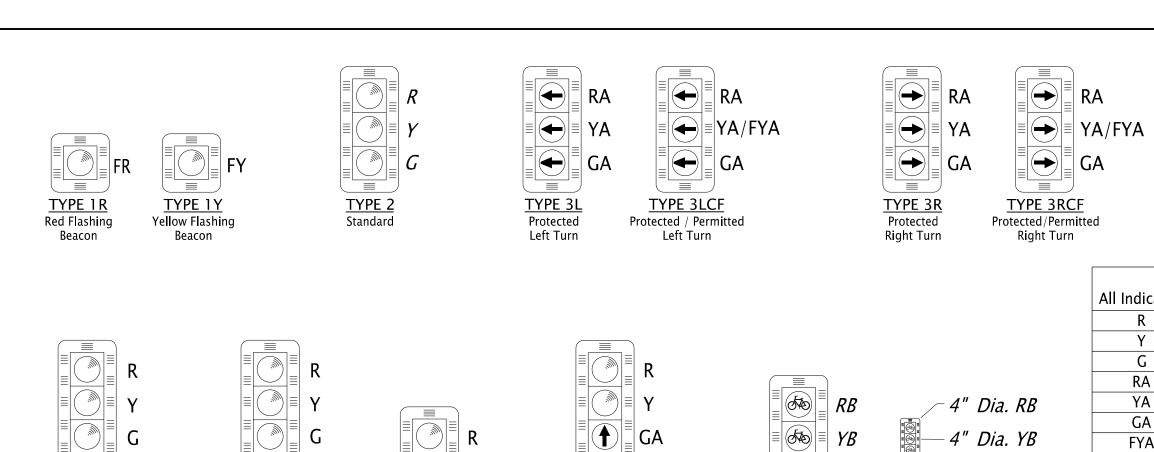
All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS

# PEDESTAL FOUNDATION AND TRAFFIC SIGNAL ASSEMBLY

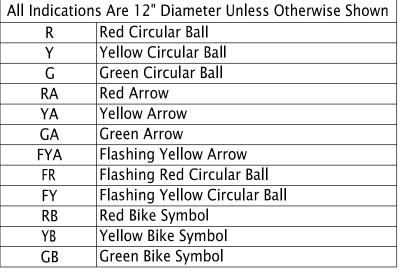
2024

		2021			
DATE	REVISIO	ON DESCRIPTION			
01-2021	UPDATED ALL ANCHOR RO	D DETAILS. CORRECTED STD	. DWG. REFERENCE		
07-2022	COMPLETE REDESIGN OF F	OUNDATION AND INSTALLAT	ION PROCEDURE		
07-2023	NOTE 5 - CHANGED TO 2% SLOPE. ADDED RMC AS PIPE OPTION. MINOR				
	TEXT CHANGES FOR CLARITY.				
CALC. BOOK NO	CALC. BOOK NO N/A SDR 14-JUL-2023 _ TM457				



TYPE 9

Split Phase Only



**Color Indications** 

#### VEHICLE SIGNAL HEAD DESIGNATIONS AND LENS ARRANGEMENT

GB

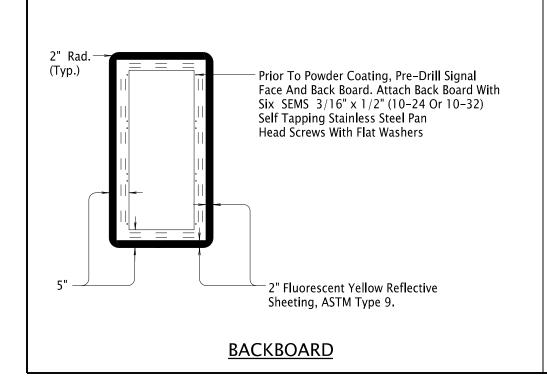
TYPE 12M

Mini Nearside

Bike

TYPE 12

Bike



TYPE 4

Spilt Phase Only

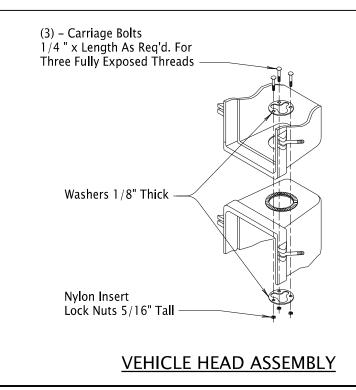
GA

TYPE 8

Ramp Meter Only

TYPE 7

**Rail Preemption Only** 



#### General Notes:

- 1. All Screws, Bolts, Nuts And Washers Shall Be Type 304 Or 316 Stainless Steel Unless Noted Otherwise.
- 2. Bolts And Screws Shall Have Square Or Hex Heads Unless Otherwise Noted. Allen Head Fasteners Not Allowed.
- 3. Assemble The Heavy Duty Polycarbonate Vehicle Signal, Visor, And Backboard With Bolted Connections, Stainless Steel Reinforcing Strips And Stainless Steel Plates.

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VEHICLE SIGNAL DETAILS

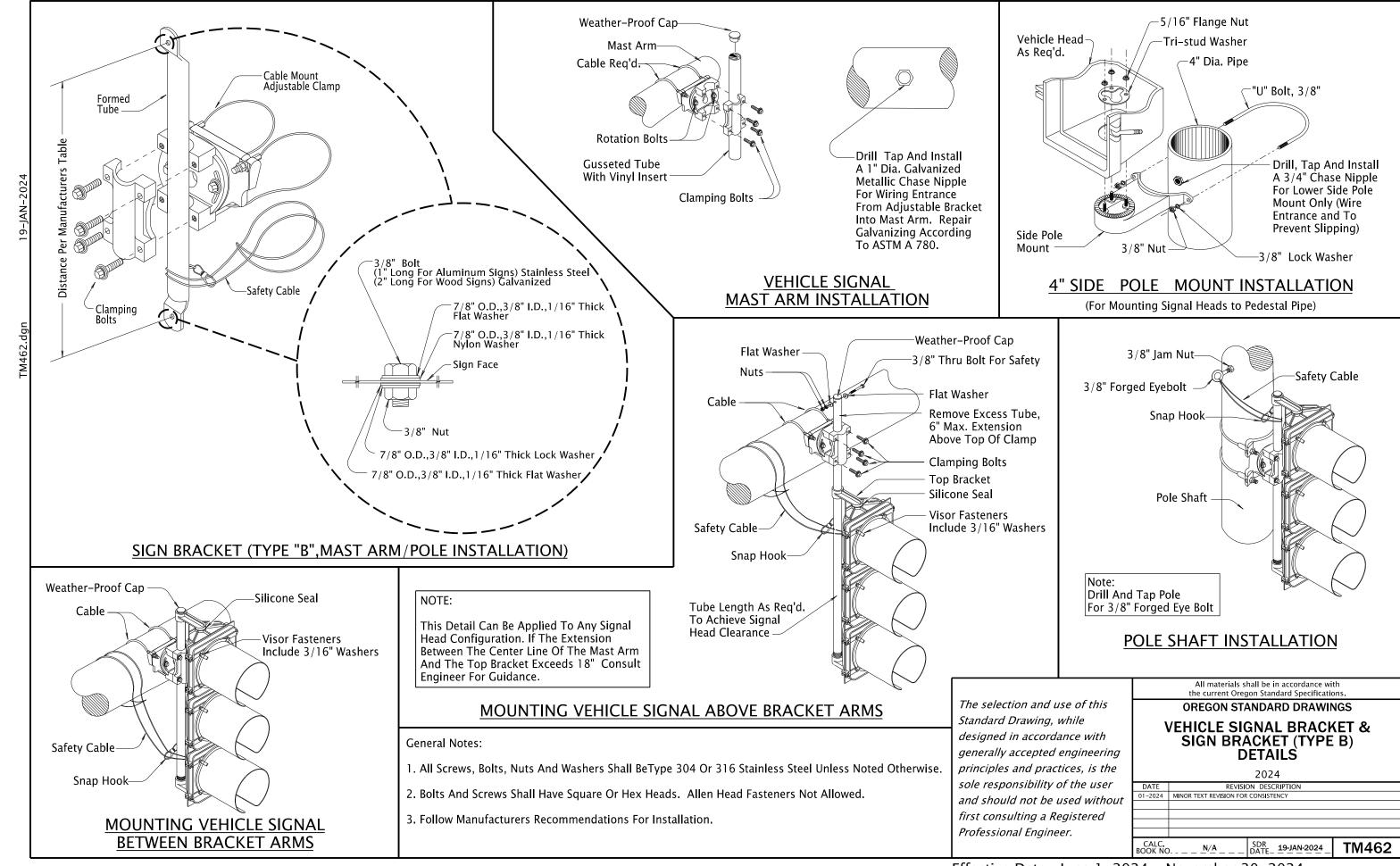
All materials shall be in accordance with

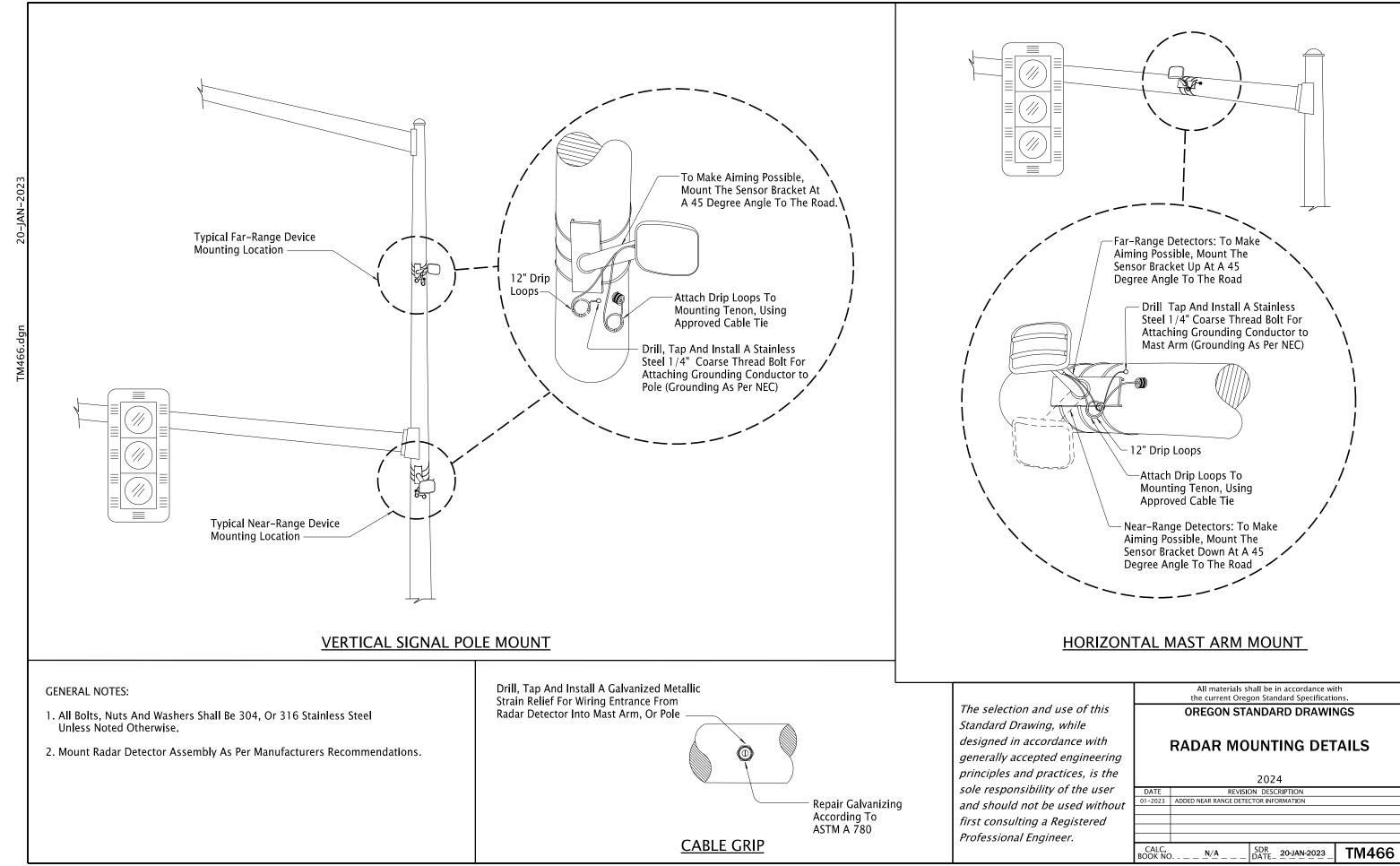
the current Oregon Standard Specifications.

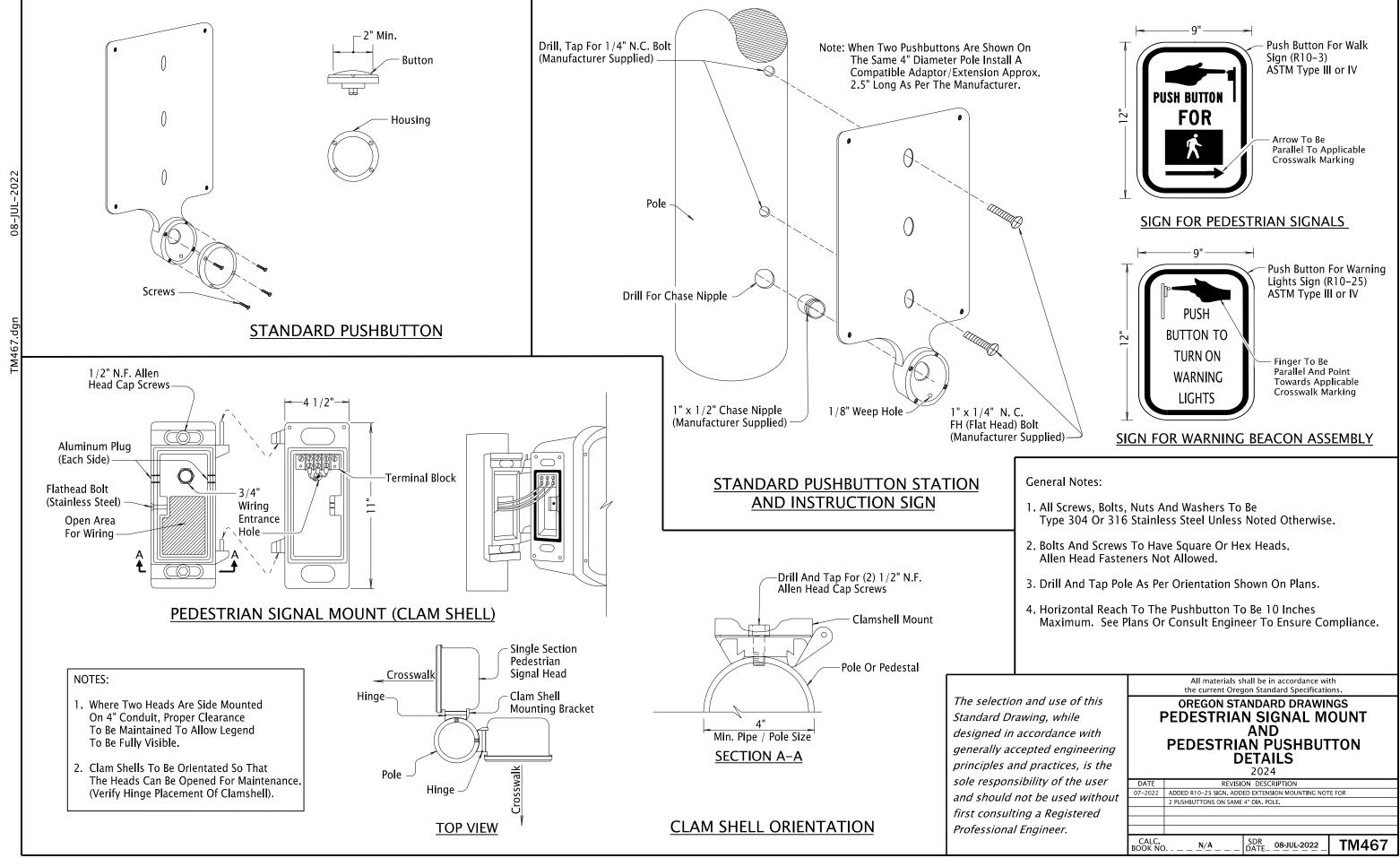
**OREGON STANDARD DRAWINGS** 

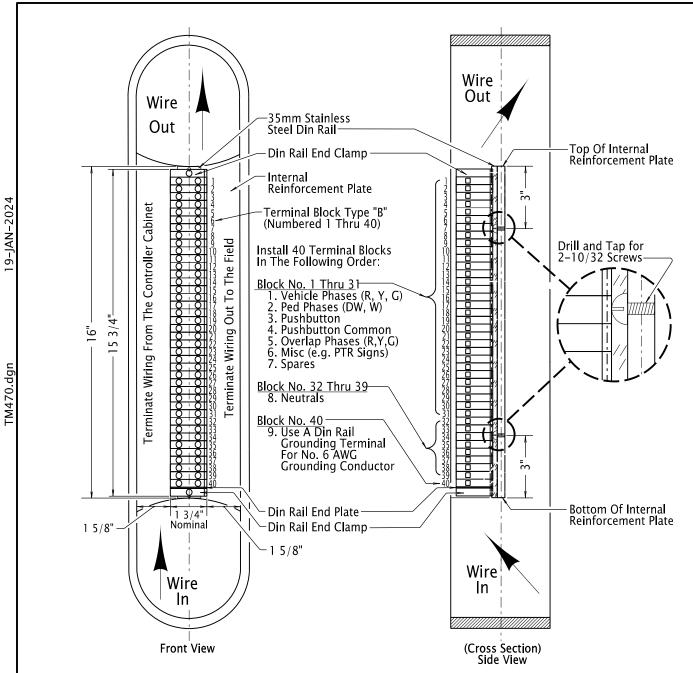
2024

DATE	REVISION DESCRIPTION	
1-2024	ADDED TYPE 12 AND 12M. REMOVED TYPE 3LBF, 5, 6L, AN	D 10.
CALC. OOK NO	SDR 19-JAN-2024 DATE	TM460





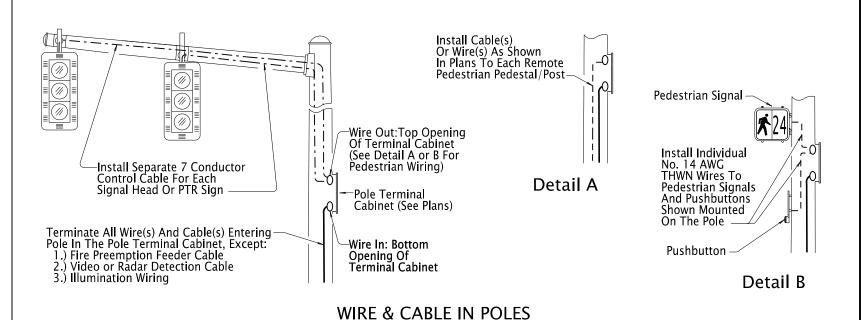




#### DIN RAIL. TERMINAL BLOCKS. & WIRING IN POLE RECESSED TERMINAL CABINET

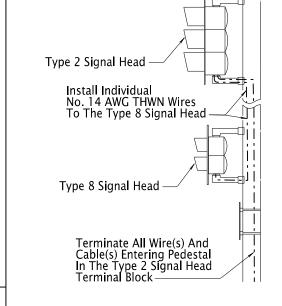
		PEDESTRIAN PHASES	VEHICLE PHASES	SIGNAL HEAD TYPES			S	
7 CONDUCTOR CONDUCTOR NUMBER		L CABLE FIRST TRACER	1 Pedestrian Phase	1 Vehicle Phase	6L or 3LBF	4L, 5, or 7	1R, 1Y, 2, 3L, 3LCF, 3U,3R, 4, 9, 12, or 12M	10
1	WHITE	_	NEUTRAL	NEUTRAL	NEUTRAL	NEUTRAL	NEUTRAL	NEUTRAL
2	BLACK	_	WALK	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW
3	RED	_	DONT WALK	RED	RED	RED	RED	RED 1
4	ORANGE	_	P.B. COMMON	SPARE	FLASHING YELLOW	TURN YELLOW	SPARE	RED 2
5	GREEN	_	PUSHBUTTON	GREEN	GREEN	GREEN	GREEN	SPARE
6	BLUE	_	SPARE	SPARE	SPARE	TURN GREEN	SPARE	SPARE
7	WHITE	BLACK	SPARE	SPARE	SPARE	SPARE	SPARE	SPARE

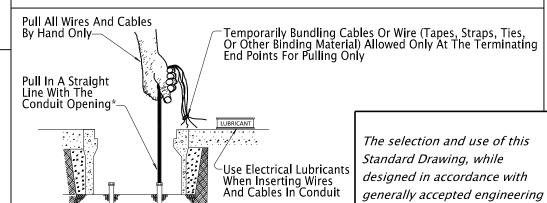
COLOR CODE CHART CONTROL CABLE



#### General Notes:

- 1. Install All Wire And Cable Between Terminal Blocks Without Splicing.
- 2. Mark Phase Number/Identification On All Cable In Junction Boxes, Terminal Cabinets, Service Cabinets, And Controller Cabinets With Permanent Tags. Use Handheld Labeler (Brady IDXPERT With XC-1500-580-WT-BK Tags Or Approved Equal). Wiring For Overlaps Shall Be Labeled (OLA,OLB,OLC,OLD).
- 3. Install No. 16 AWG TFFN Orange Base With Blue Tracertone Wire In All Conduits As A Locate Wire. Leave Slack As Required In General Note 5 And Install A Wire Nut. Do Not Join Multiple Locate Wires Under A Common Wire Nut Unless Otherwise Shown.
- 4. Tape The Ends Of Unsued Conductors With Insulated Vinyl Plastic Tape.
- 5. Leave Slack In Each Wire And Cable As Follows:
  - A.) 2 Feet In Junction Boxes And Poles
  - B.) 6 Feet In The First Junction Box Nearest The Controller Cabinet
  - C.) 6 Feet In Controller Cabinet And Service Cabinet
- 6. Install Polyethylene Pull Line In All Conduits Noted On The Plans For Future Use (No Wires/Cables In Conduit). Leave 6 Feet Of Slack Pull Line.
- 7. At Existing Installations The Contractor Is Responsible For the Re-wiring And Re-numbering Of New And Existing Control Cables, In All Junction Boxes, Terminal Cabinets, Service Cabinets, And Controller Cabinets.





\* Use A Pulley Device To Achieve A Straight Line If Pulls Are Made With Poles Or Controller Cabinets In Place

WIRE & CABLE IN CONDUITS

WIRE & CABLE IN RAMP METER
PEDESTALS

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

#### OREGON STANDARD DRAWINGS

# WIRE & CABLE INSTALLATION

2024

			•	
DATE	REVISIO	ON DESC	RIPTION	
01-2024	REVISED SIGNAL HEAD TYP	ES IN COL	OR CODE CHART CON	TROL CABLE DETAIL
CALC. BOOK NO	) <u>N/A</u>	SDR DATE_	19-JAN-2024	TM470

Effective Date: June 1, 2024 - November 30, 2024

principles and practices, is the

sole responsibility of the user

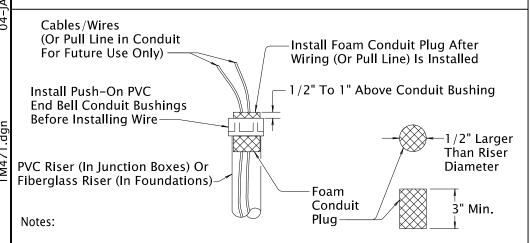
and should not be used without first consulting a Registered Professional Engineer.

# Minimum Cover From Top of Finished Surface (Use Permit Depth If Greater Than These) Type Of Roadway & Other Areas Conduit Shoulders Metallic 24" 18" Non-Metallic 30" 18"

#### Note:

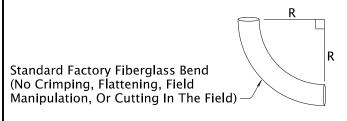
Additional Cover Depth May Be Necessary Near Foundations And Junction Boxes
 To Accommodate The Minimum Radius ("R") Of The Conduit Elbow. See "Conduit Elbow",
 "Conduit Installation In Foundations" And "Conduit Installation In Junction Boxes" Details
 For More Information.

#### MINIMUM COVER FROM FINISHED SURFACE



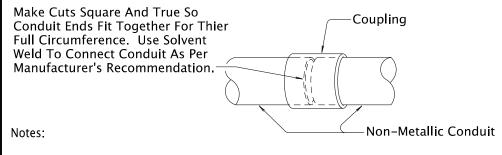
- 1.) Ream Conduit Ends To Remove Rough Edges And Burrs
- 2.) Temporarily Plug Or Cap Conduit Ends At All Times To Keep Debris Out

#### **CONDUIT ENDS AND BUSHINGS**



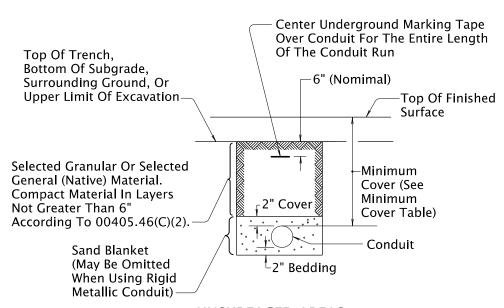
Conduit Diameter	R (min.)
1 1/2"	10"
2"	12"
2 1/2"	15"
3"	18"

#### **CONDUIT ELBOWS**

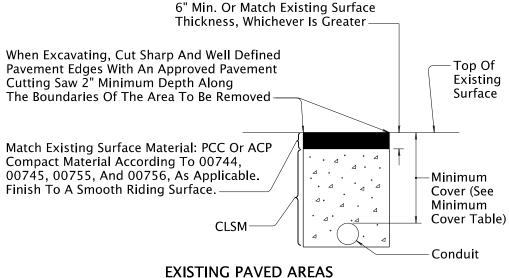


1.) Slip Joints, Running Threads Or Reducing Couplings Not Allowed. Use The Same Size Conduit For The Entire Length, Outlet To Outlet.

#### **CONDUIT COUPLINGS**



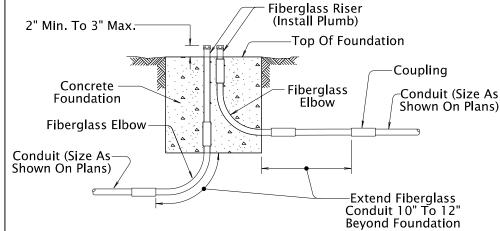
UNSURFACED AREAS (new roadway prior to paving, shoulders, under sidewalk, landscaped areas, etc.)



#### Trenching & Backfill Notes:

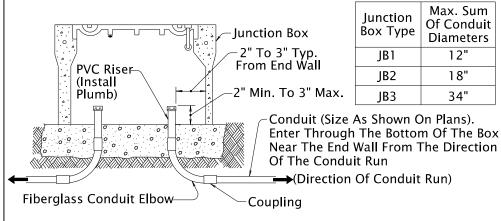
- Excavate According To 00960.40. In Areas To Be Paved Or Landscaped, Place All Conduit Before Paving Or Landscaping.
- 2. Hold Trench Width To A Practical Minimum
- 3. Do Not Backfill Trenches Until Inspected By The Engineer
- 4. Furnish Backfill Materials According To 00960.10

#### **CONDUIT OPEN TRENCH EXCAVATION & BACKFILL**



#### CONDUIT INSTALLATIONS IN FOUNDATIONS

(Applicable for Pole, Pedestal, Post, Service Cabinet and Controller Cabinet Foundations)



#### CONDUIT INSTALLATION IN JUNCTION BOXES

#### General Notes:

- 1. Install Non-Metallic Conduit Unless Otherwise Shown. Conduit Runs Shall Be Continous Between Any Pole, Junction Box, Or Cabinet.
- 2. Install Conduit By Open Trench Method, Horizontal Directional Drilling, Or As Shown
- 3. Conduit Runs Shown On Plans Are For Bidding Purposes Only. Locations May Be Changed To Avoid Obstructions.
- 4. Larger Conduit Than Specified May Be Used At The Option And Cost Of The Contractor If Max. Sum Of Conduit Diameters In Junction Box Is Not Exceeded.

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TRENCHING & CONDUIT INSTALLATION

All materials shall be in accordance with

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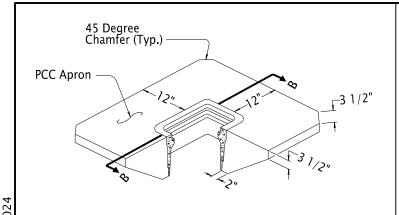
**OREGON STANDARD DRAWINGS** 

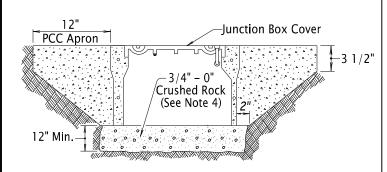
2024

DATE REVISION DESCRIPTION

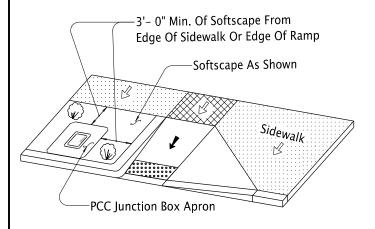
01–2021 ADDED NOTE 1 TO "MINIMUM COVER FROM FINISHED SURFACE" DETAIL

CALC.
BOOK NO. \_\_\_\_N/A \_\_\_\_ SDR DATE 04-JAN-2021 TM471



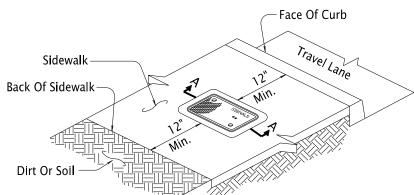


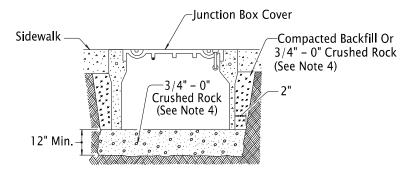
#### SECTION B-B



#### JUNCTION BOX INSTALLATION IN UNSURFACED AREA

(This Detail Only Applicable for Junction Boxes Located In Incidental Travel Areas; Gravel Shoulders, Behind Guardrail, Etc. Do Not Install In Travel Lanes, Paved Shoulders, Or Other Areas Exposed To Traffic.)

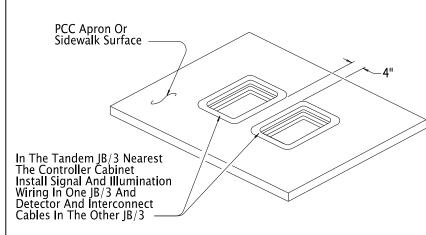




#### SECTION A-A

#### JUNCTION BOX INSTALLATION IN PCC SIDEWALK

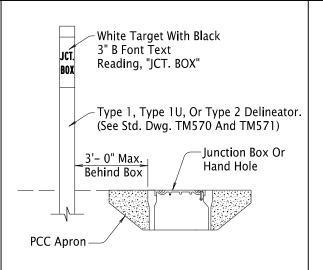
(This Detail Only Applicable for Junction Boxes Located In Flat Areas Of Sidewalks. Do Not Install In Slopes Of Ramps Or Driveways)



#### TANDEM JB/3A JUNCTION BOX DETAILS

#### GENERAL NOTES:

- 1. Install Top of Junction Box And Hand Hole Flush With The Sidewalk, Surrounding Grade, Or Top Of Curb. For Hand Holes Installed In The Roadway Or Shoulder, Leave The Top Of The Hand Hole 1/2" Below The Pavement Surface.
- 2. Install Junction Boxes And Hand Holes At The Approximate Locations Shown, Or If Not Shown, No More Than 300 Feet Apart For Junction Boxes And No More Than 1000 Feet Apart For Hand Holes.
- 3. More Junction Boxes And Hand Holes Than Specified May Be Installed To Facilitate The Work At The Option And Cost Of The Contractor
- 4. Use Materials According To 00640.10 and 00640.16. Use Compaction Equipment Suitable For Area And Compact Each Six Inch Layer With Sufficient Coverages To Produce A Firm Unyielding Surface. Do Not Install Conductors Until Surface Has Been Constructed.

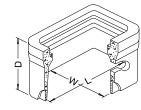


#### **DELINEATION OF JUNCTION BOX &** HAND HOLE IN UNSURFACED AREA



Lift Eve Junction Box Cover With Recessed Lifting Eye Or Max. 3/8" Lift Hole —

#### JUNCTION BOX **COVER DETAILS**



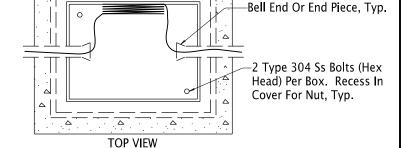
Type*	L	W	D
JB1	17"	10"	12"
JB2	22"	12"	12"
JB3	30"	17"	12"
HH-1	24"	30"	24"
HH-2	30"	48"	24"
HH-3	30"	48"	36"

\*Iunction Box Or Handhole Type As Shown On Plans

**DIMENSION TABLE** 

Polymer concrete cover for non-delibrate traffic. Covers must be marked "FIBER OPTICS" with min. letter height of 1". 12" Min. Polymer Concrete Hand Hole PVC conduit -PVC Conduit –12" Min. SIDE VIEW Coil 50'- 0" minimum of slack fiber optic cable in handholes. Take care not to pinch the fiber optic cable when installing handhole lid. 3/4" - 0" Crushed Rock (See Note 4)

PCC apron



FIBER OPTIC CABLE HAND HOLE INSTALLATION

the current Oregon Standard Specifications. The selection and use of this **OREGON STANDARD DRAWINGS** Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without

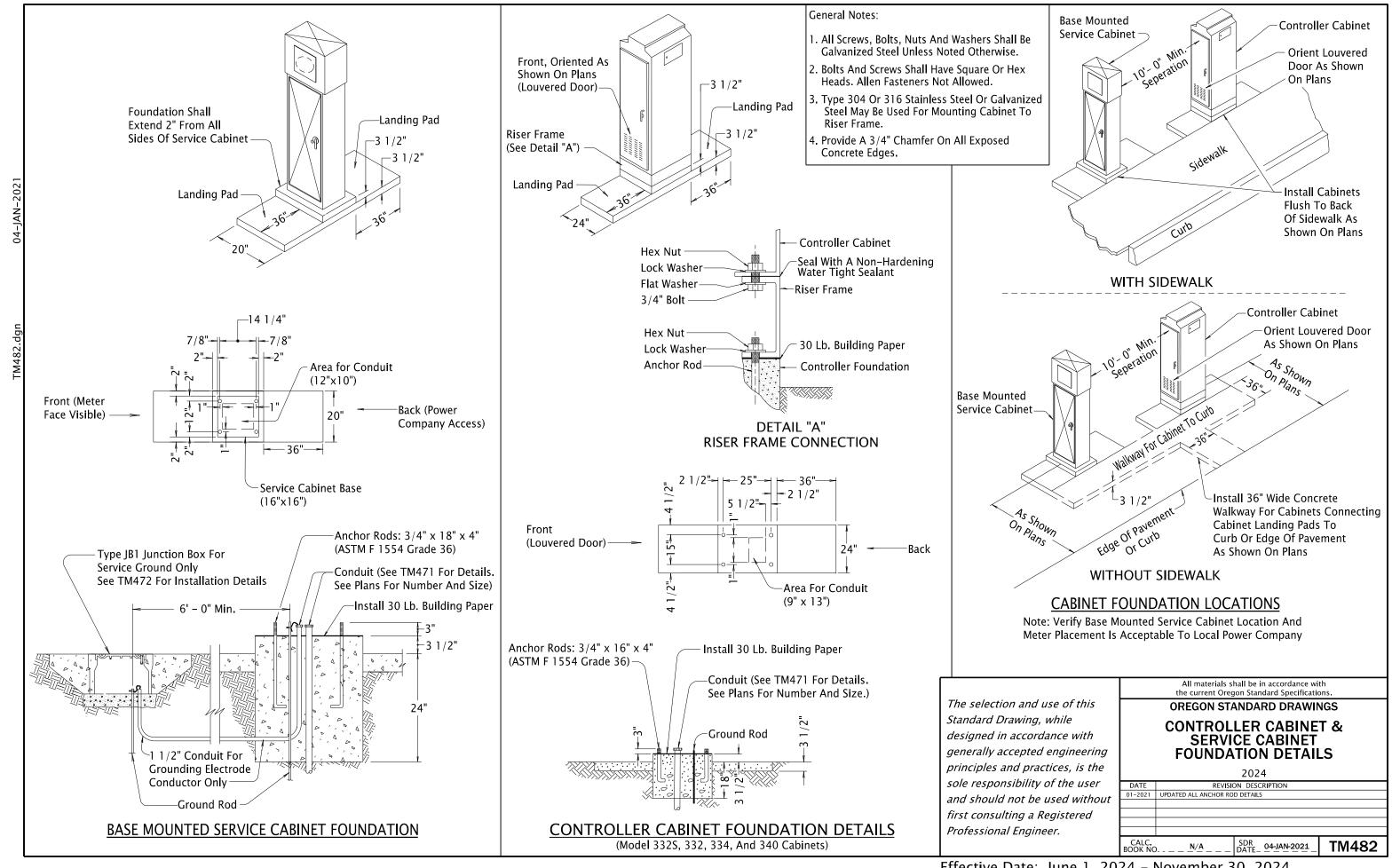
first consulting a Registered

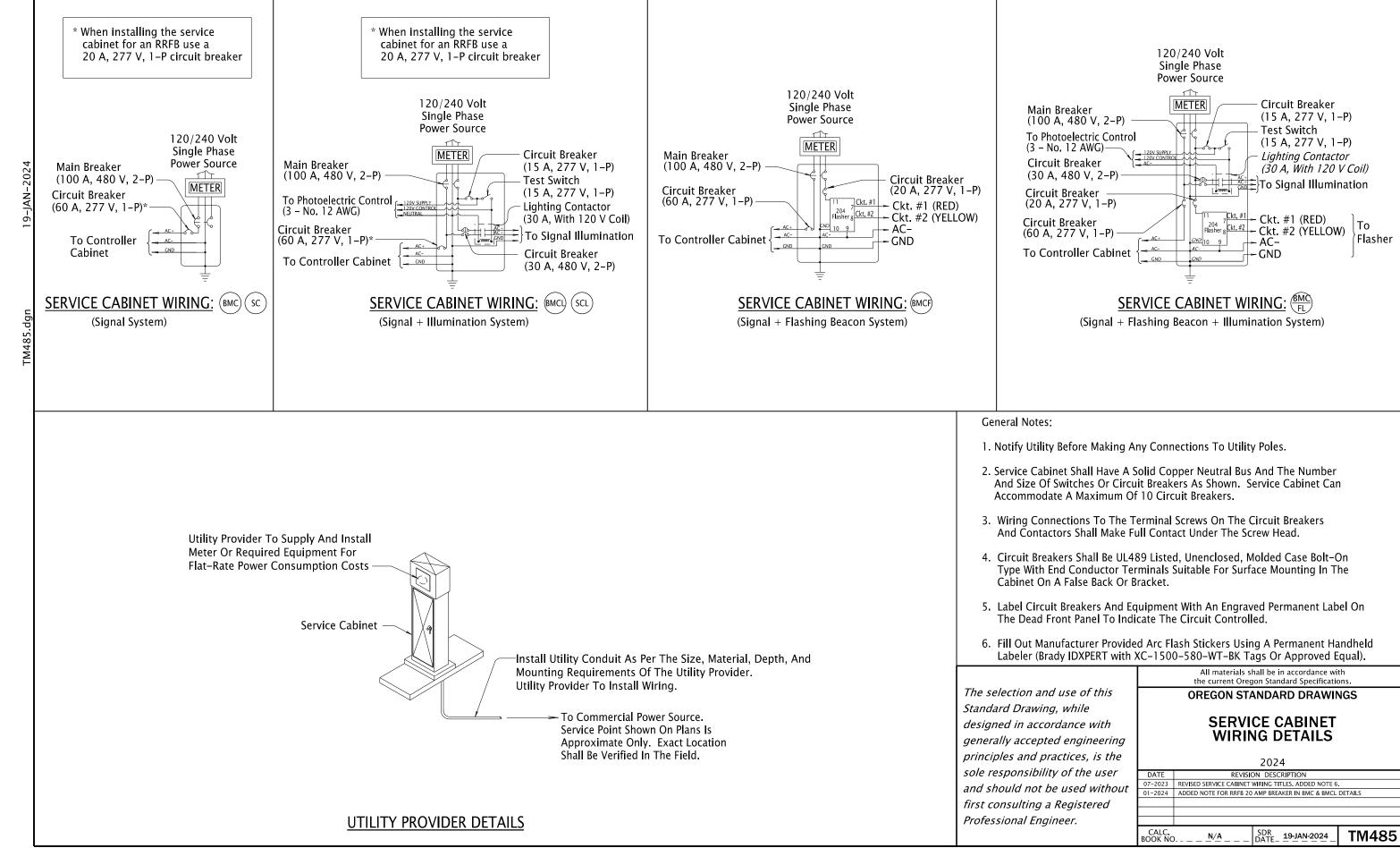
Professional Engineer.

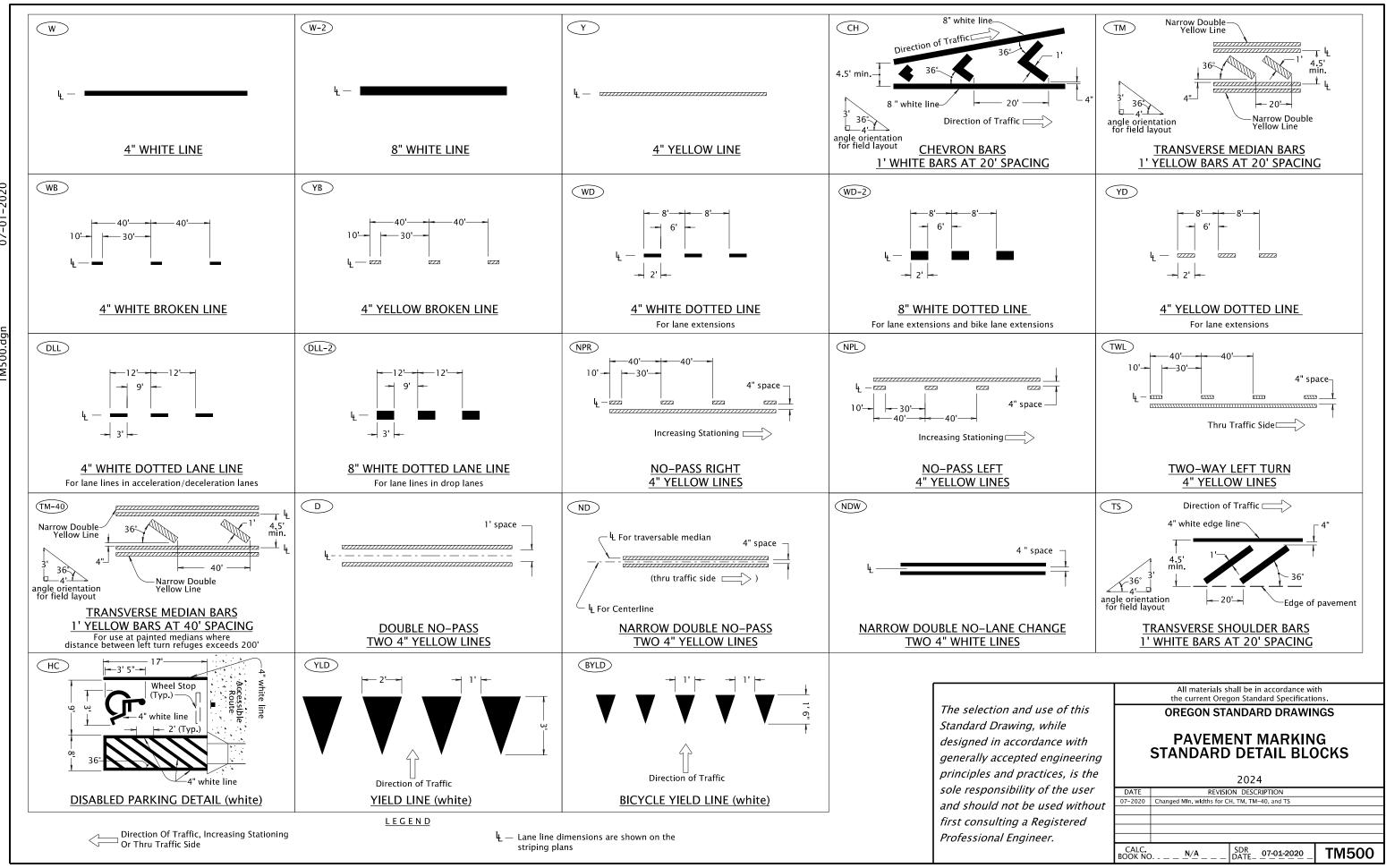
JUNCTION BOXES/HAND HOLES

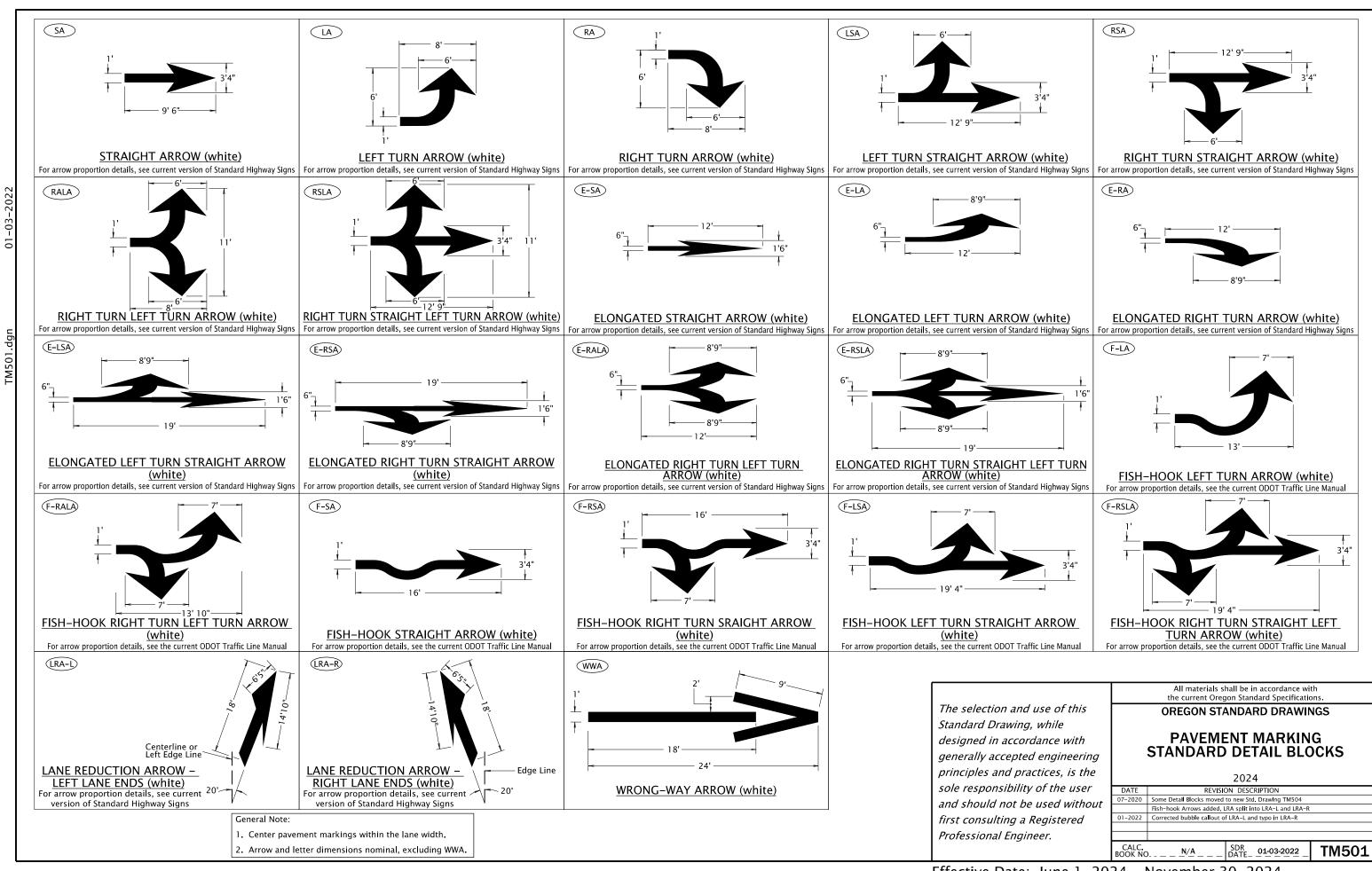
All materials shall be in accordance with

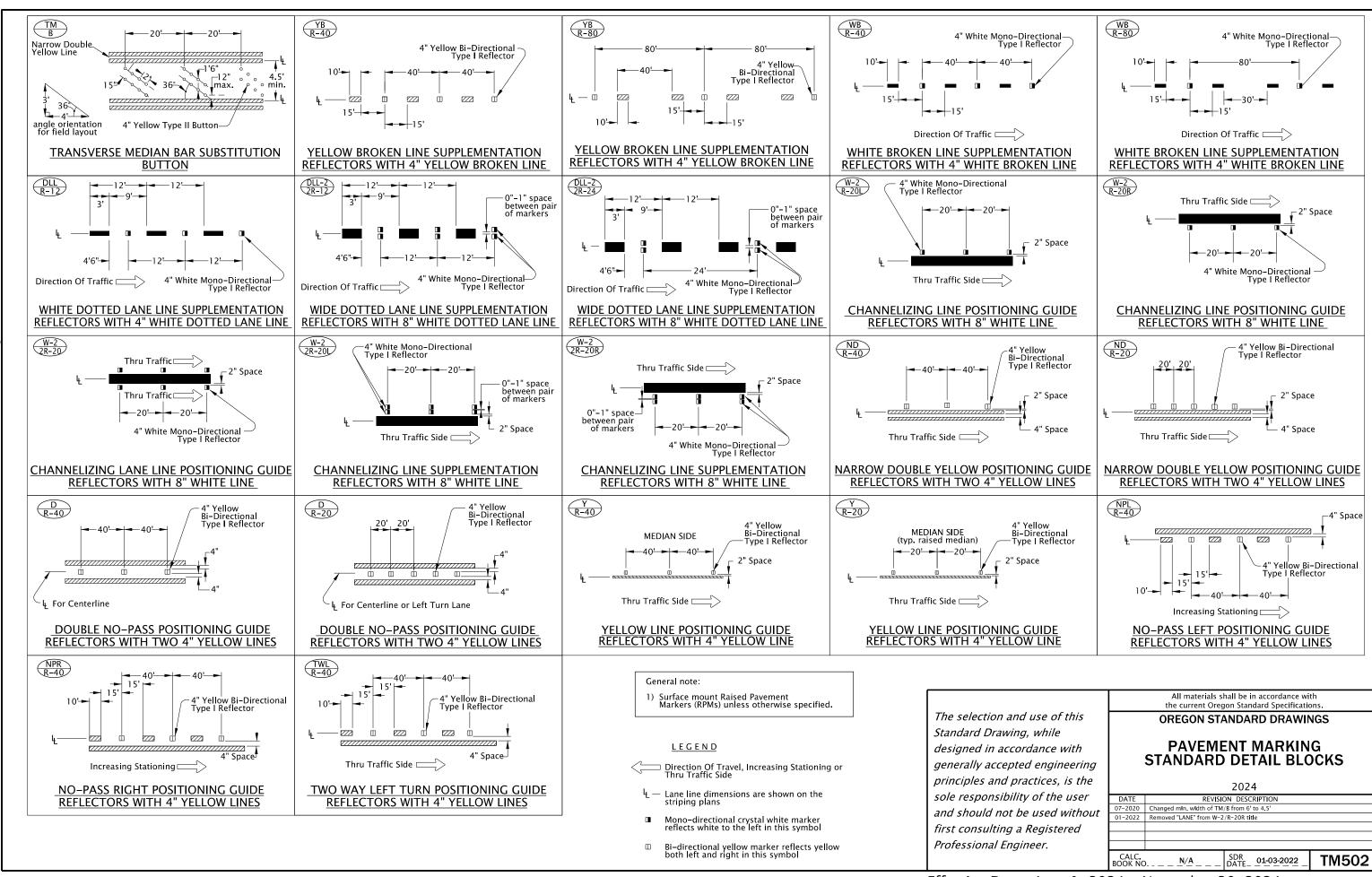
2024 REVISION DESCRIPTION 07-2022 ADDED NEW MARKING (ILLUMINATION & ELECTRICAL) FOR IB COVER 01-2024 CHANGED DIMENSION FOR IB DELINEATION CALC BOOK NO SDR DATE\_ 19-JAN-2024 TM472

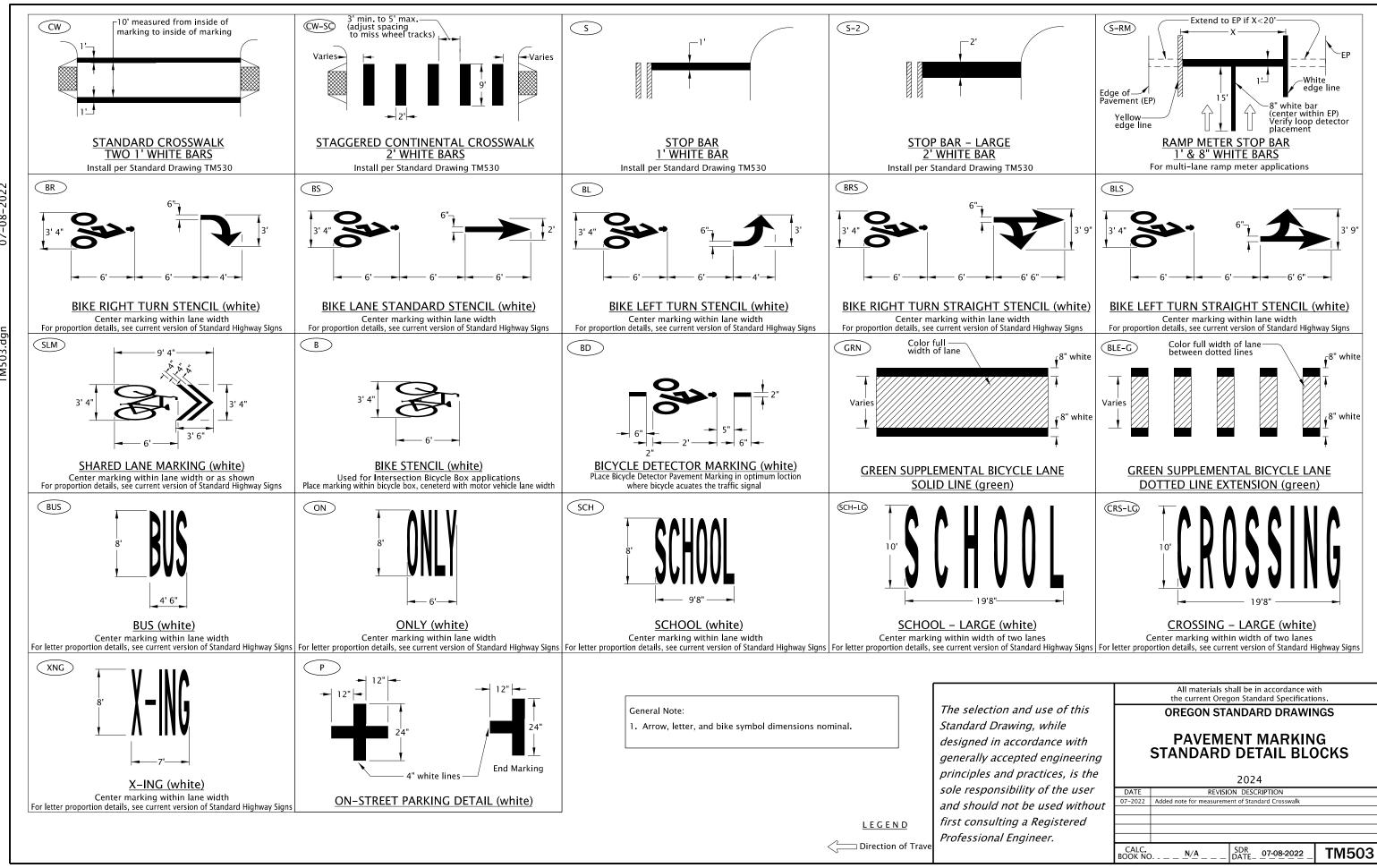


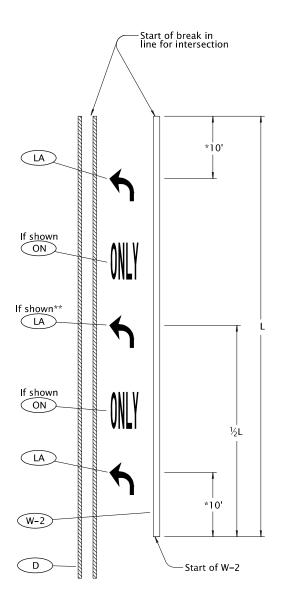


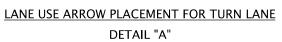


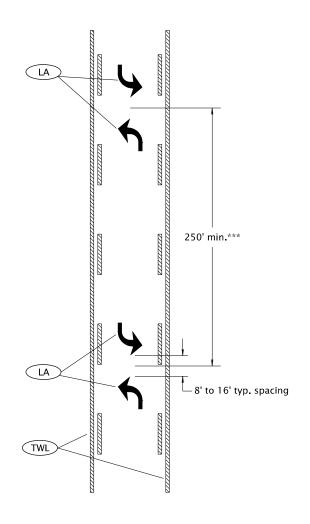












TWO-WAY LEFT TURN LANE ARROW PLACEMENT

DETAIL "B"

#### General Notes:

- 1) Center pavement marking legends within the lane.
- Placement of lane use arrows with respect to the 8" wide white line (W-2) channelization shown in Detail "A" applies to both left and right turn lanes.
- 3) Center "ONLY" markings between lane use arrows.
- \* 15' when installing elongated arrows.
- \*\* When L is greater than 400', install 3rd lane use arrow at  $\frac{1}{2}$  L as shown in Detail "A".
- \*\*\* Double arrows to be placed at even intervals, proportioned within block or as shown.

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

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

OREGON STANDARD DRAWINGS

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

TURN ARROW MARKING DETAILS

2024

DATE REVISION DESCRIPTION
07-2020 Extended accompanied by drawings to include TM504

CALC.
BOOK NO. NA DATE 07-01-2020 TM531

TAPER TYPES & FORMULAS				
TAPER	FORMULA			
Merging (Lane Closure)	"L"			
Shifting	"L"/2 or ½"L"			
Shoulder Closure	"L"/3 or ⅓"L"			
Flagging (See Drg. TM850)	50' – 100'			
Downstream (Termination)	Varies (See Drawings)			

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

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

МІ	NIMU	JM L	ENG	THS	TABLE
"L" VALUE FOR TAPERS (ft)			DUESED 11011 (C.)		
W = Lane or Shoulder Width being closed or shifted			BUFFER "B" (ft)		
★ SPEED (mph)	W ≤ 10	W = 12	W = 14	W = 16	
25	105	125	145	165	75
30	150	180	210	240	100
35	205	245	285	325	125
40	265	320	375	430	150
45	450	540	630	720	180
50	500	600	700	800	210
55	550	660	770	880	250
60	600	720	840	960	285
65	650	780	910	1000	325
70	700	840	980	1000	365
FREEWAYS					
55	1000	1000	1000	1000	250
60	1000	1000	1000	1000	285
65	1000	1000	1000	1000	325
70	1000	1000	1000	1000	365

#### NOTES

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

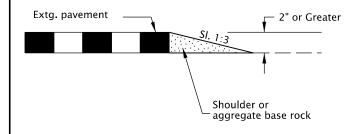
TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE							
★ SPEED (mph)	Sig	n Spacing (	Max. Channelizing				
	Α	В	С	Device Spacing (ft)			
20 – 30	100	100	100	20			
35 – 40	350	350	350	20			
45 – 55	500	500	500	40			
60 – 70	700	700	700	40			
Freeway	1000	1500	2640	40			

#### NOTES

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

#### NOTES:

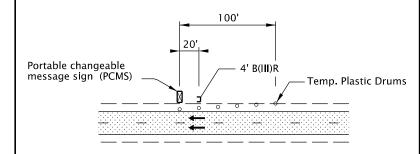
- When paved shoulders adjacent to excavations are less than four feet wide protect longitudinal abrupt edge as shown.
- Use aggregate wedge when abrupt edge is 2 inches or greater.



#### **EXCAVATION ABRUPT EDGE**

#### NOTES:

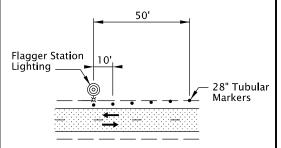
- Install PCMS beyond the outside shoulder, when possible.
- Use the appropriate type of barricade panels for PCMS location. Right shoulder, use Type B(III)R Left shoulder, use Type B(III)L
- Use six drums in shoulder taper on 20' spacing. The drums and barricade may be omitted when PCMS is placed behind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



# PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) INSTALLATION

#### NOTES:

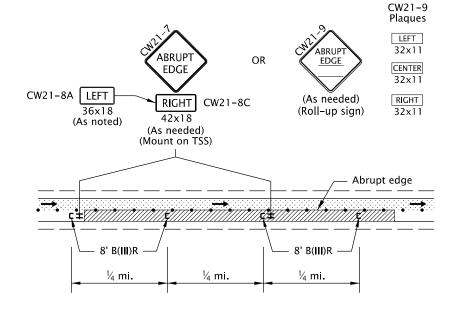
- Install Flagger Station Lighting beyond the outside shoulder, where practical.
- Use six tubular markers in shoulder taper on 10' spacing.
- Place cart / generator / power supply off of the shoulder, as far as practical.



# FLAGGER STATION LIGHTING DELINEATION

#### NOTES:

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



TYPICAL ABRUPT EDGE DELINEATION

#### GENERAL NOTES FOR ALL TCP DRAWINGS:

- Signs and other Traffic Control Devices (TCD) shown are the minimum required.
- Place a barricade approx. 20' ahead of all sequential arrow boards.
- Arrows shown in roadway are directional arrows to indicate traffic movements.
- All signs are 48" x 48" unless otherwise shown.
   Use fluorescent orange sheeting for the background of all temporary warning signs.
- o o Temp. Plastic Drums See TCD Spacing Table for max. spacing.
- • 28" Tubular Markers See TCD Spacing Table for max. spacing.

UNDER TRAFFIC

UNDER CONSTRUCTION

- All diamond shaped warning signs mounted on barrier sign supports shall be 36" by 36".
   All other signs mounted on barrier sign supports shall not exceed 12 sq. ft. in total sign area.
- Low speed highways have a pre-construction posted speed of 40 mph or less.
   High speed highways have a pre-construction posted speed of 45 mph or higher.
- Do not locate sign supports in locations designated for bicycle or pedestrian traffic.
- Combine drawing details to complete temporary traffic control for each work activity.
- Coordinate and control pedestrian movements through a Temporary Accessible Route using Flaggers, Traffic Control Measures, or as directed.
- To be accompanied by Dwg. Nos. TM820 & TM821.

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

#### OREGON STANDARD DRAWINGS

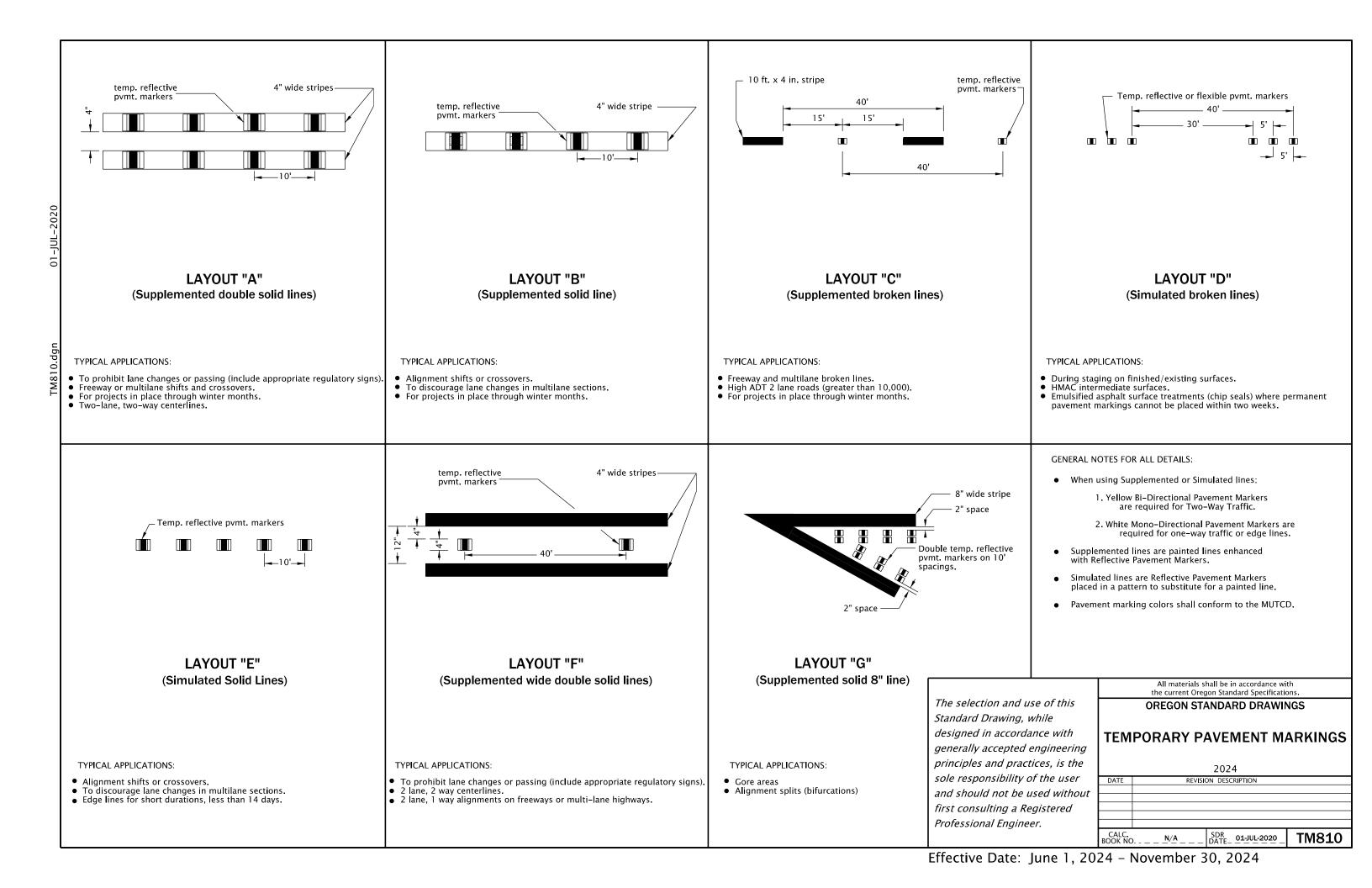
# TABLES, ABRUPT EDGE AND PCMS DETAILS

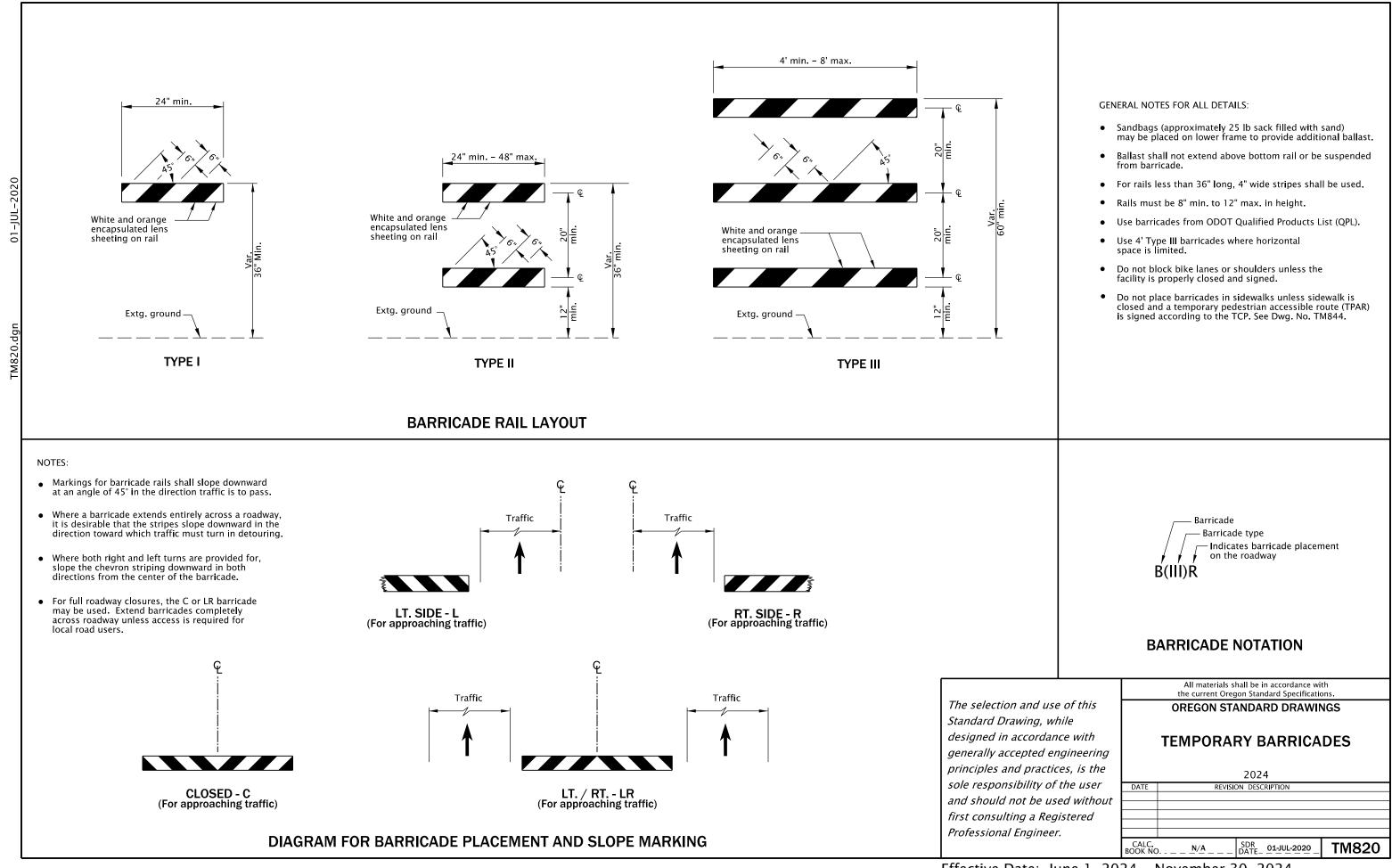
2024

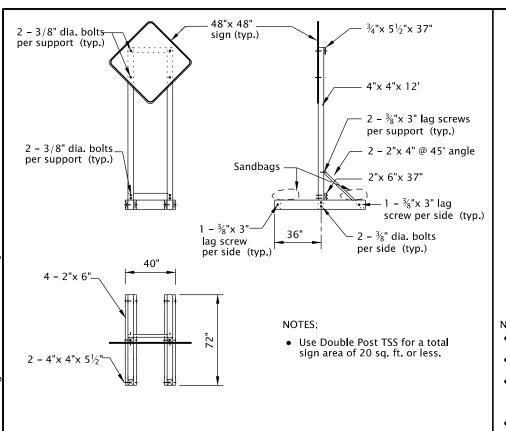
DATE REVISION DESCRIPTION

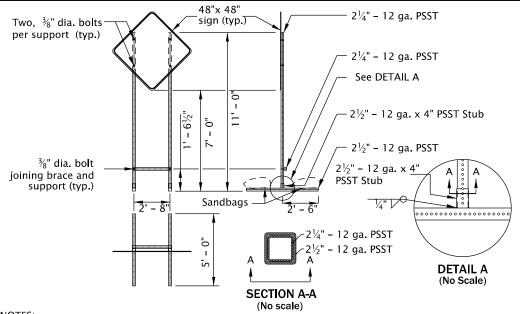
07-2022 Added a note for TPARS

CALC. BOOK NO. \_ N/A \_ DATE 01-JUL-2022 TM800





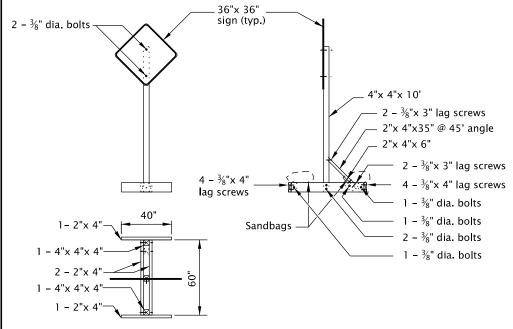




PERFORATED STEEL SQUARE TUBE (PSST) DETAIL

- Use PSST TSS's for a total sign area of 16 sq. ft. or less.
- All members shall have a minimum yield stress of 50 ksi.
- Galvanize steel according to ASTM A653 with coating designation G90. Remove Galvanizing from steel before welding. Repair Galvanizing according to ASTM A780.
- Use A325 Bolts or equivalent.

- $2\frac{1}{4}$ " 12 ga. PSST to extend entire length inside of the  $2\frac{1}{2}$ " - 12 ga. x 4" PSST Stub.
- Do not use bolt to secure 21/4" PSST inside of the  $2\frac{1}{2}$ " - 12 ga. x 4" PSST Stub.
- Weld steel according to American Welding Society (AWS) D.1.1.

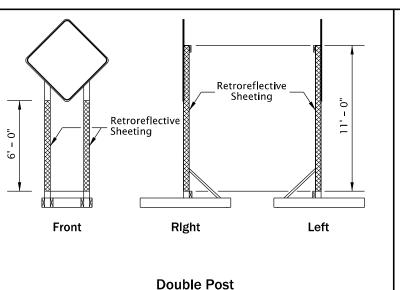


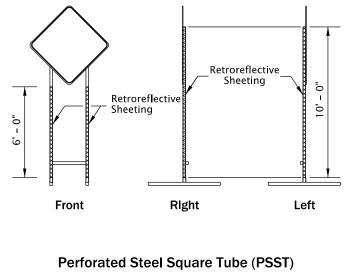
#### NOTES:

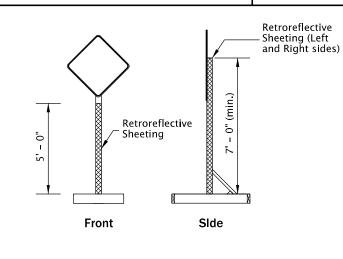
- Use Single Post TSS for a total sign area of 12 sq. ft. or less.
- Use Single Post TSS for mounting "Business Access" (CG20–11) signs. Do not mount signs on Type II or III Barricades.

#### **SINGLE POST DETAIL**

#### **DOUBLE POST DETAIL**







#### **Single Post**

TEMPORARY SIGN SUPPORT GENERAL NOTES:

- Do not tip over TSS at any time.
- Do not locate TSS's in locations that block pedestrian or bicycle traffic.
- For wooden TSS's, use either Douglas Fir or Hem Fir, which is surfaced four sides (S4S) and free of heart center (FOHC).
- See "Temporary Sign Placement" detail on TM822 for sign installation heights.
- Do not place or stack ballast more than 24" above the ground.
- When not in use, locate TSS as far from Public Traffic as practicable and turn away from traffic, or cover the sign. Do not cover reflective sheeting on the
- Place a minimum of 50 lbs of sandbags on each of the four TSS supports legs. (25 lb. max per bag) (min. 100 lbs per side of each TSS).
- See Dwg. No. TM204 for flag board mounting detail.

NOTES:

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

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

# **OREGON STANDARD DRAWINGS TEMPORARY SIGN SUPPORTS**

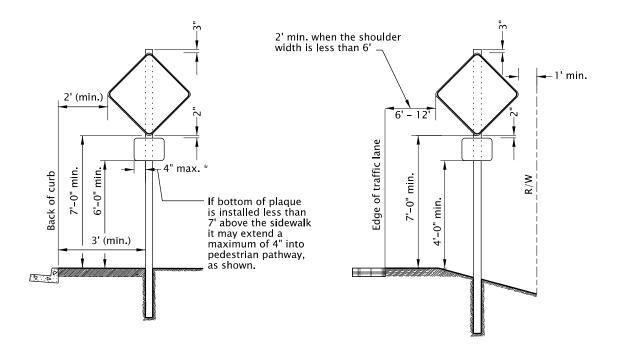
All materials shall be in accordance with the current Oregon Standard Specifications.

2024 REVISION DESCRIPTION CALC BOOK NO SDR DATE\_ 14-JUL-2023 TM821

#### SIGN POST REFLECTIVE SHEETING PLACEMENT

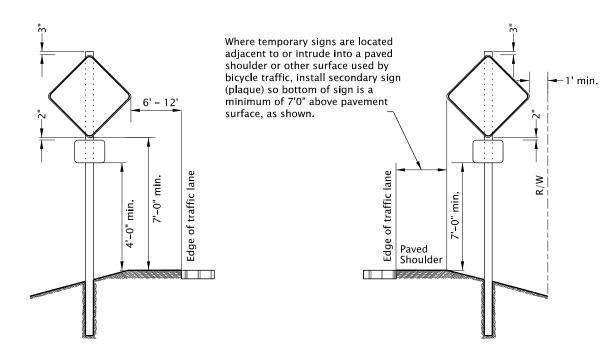
#### NOTES:

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



#### **Urban Areas With Curb/Sidewalk**

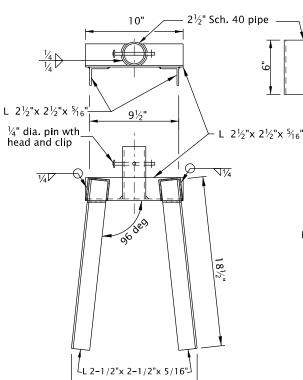
**Rural Areas** 



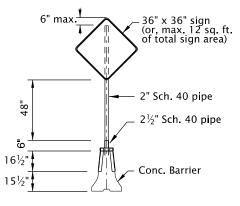
Divided Highway/Freeway Medians No Curb/Sidewalk

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

#### **TEMPORARY SIGN PLACEMENT**



- 131/8"



#### NOTES:

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

#### **CONCRETE BARRIER SIGN SUPPORT**

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

the current Oregon Standard Specifications.

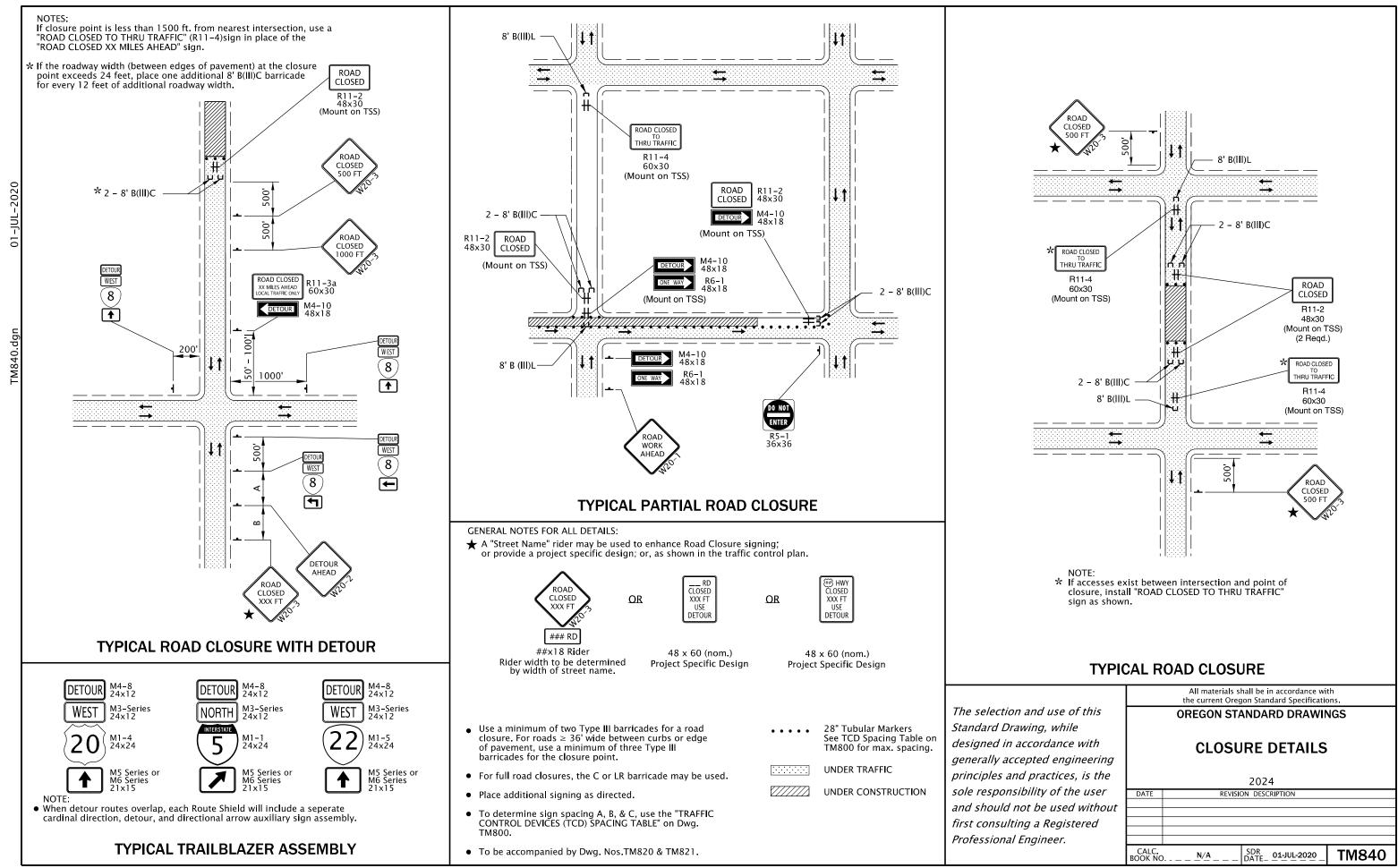
OREGON STANDARD DRAWINGS

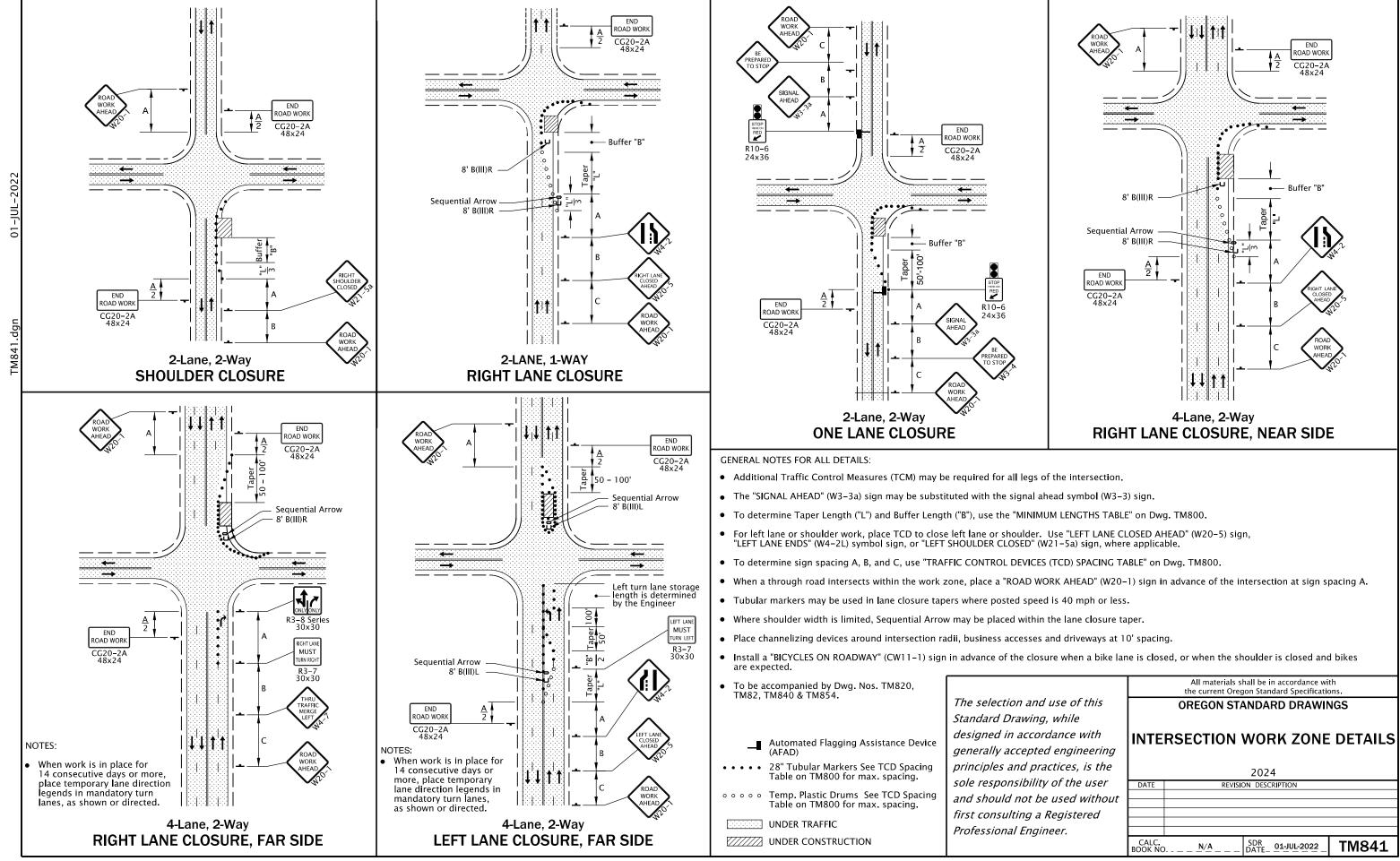
All materials shall be in accordance with

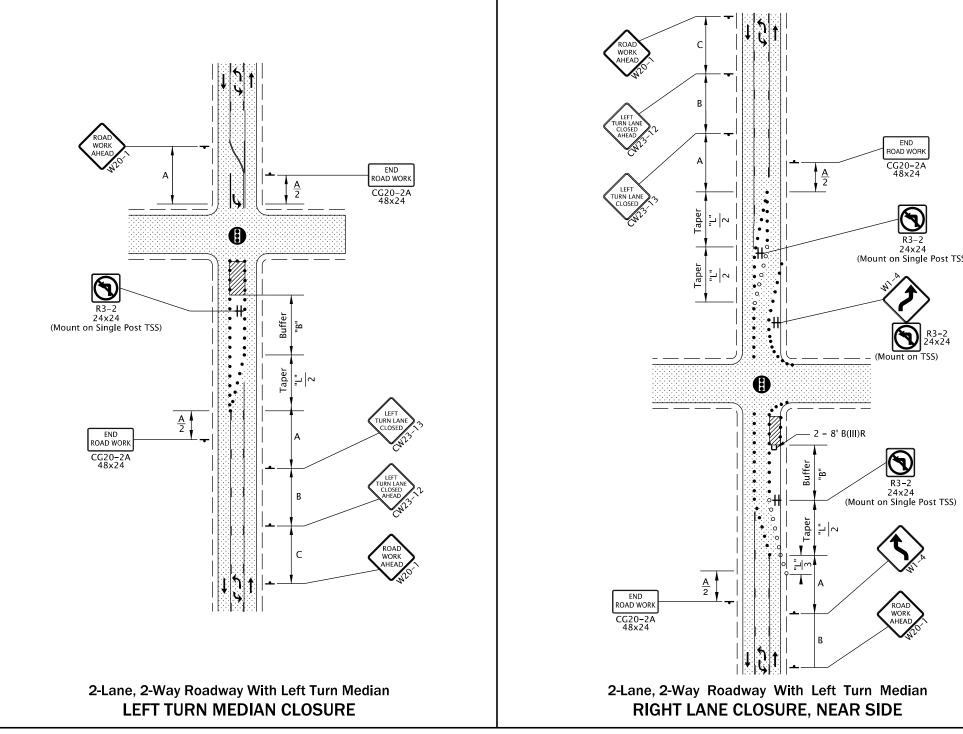
#### **TEMPORARY SIGN SUPPORTS**

DATE REVISION DESCRIPTION

CALC. BOOK NO. \_ N/A \_ DATE 01-JUL-2020 TM822

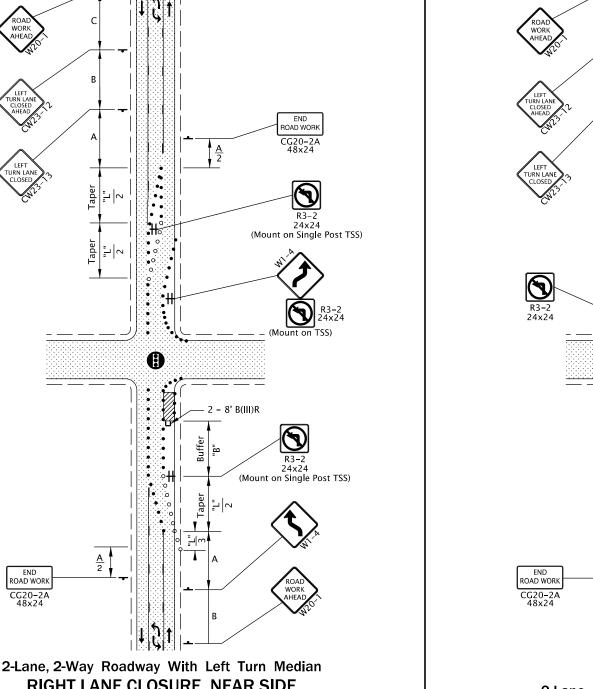






**GENERAL NOTES FOR ALL DETAILS:** 

- Additional Traffic Control Measures (TCM) may be required for all legs of the intersection.
- To determine Taper Length ("L") and Buffer Length ("B") shown on this sheet, use the "MINIMUM LENGTHS TABLE" on Dwg. TM800.
- Taper length of "L" for through lane shifting tapers may be used for higher speed roads.
- Taper length of "L"/2 for center turn lane closure may be used in areas with a high number of accesses within the work zone.
- When a through road intersects within the work zone, place a "ROAD WORK AHEAD" (W20-1) sign in advance of the intersection at sign spacing A.
- To determine sign spacing A, B, and C, use "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Dwg. TM800.
- Place channelizing devices around intersection radii, business accesses, and driveways at 10' spacing.
- Tubular markers may be used in lane closure tapers where the posted speed is 40 mph or less.
- Install a "BICYCLES ON ROADWAY" (CW11-1) sign in advance of the closure when a bike lane is closed, or when the shoulder is closed and bikes are expected.
- Signal timing adjustments determined by Engineer.
- To be accompanied by Dwg. Nos. TM820 & TM821.

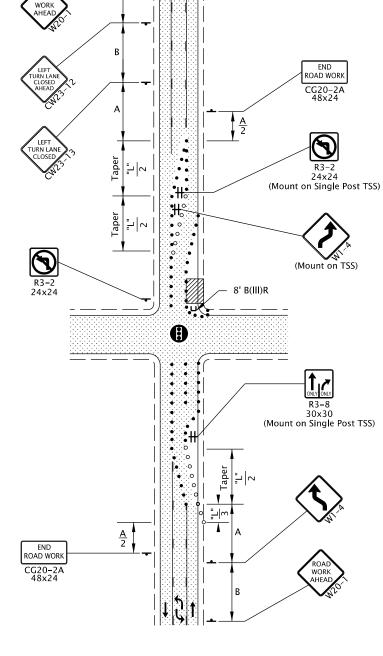


28" Tubular Markers See TCD Spacing Table on TM800 for max. spacing

o o o o o Temp. Plastic Drums See TCD Spacing Table on TM800 for max. spacing

UNDER TRAFFIC

UNDER CONSTRUCTION



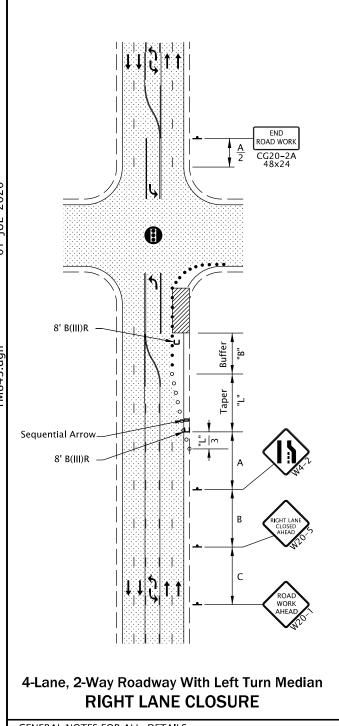
2-Lane, 2-Way Roadway With Left Turn Median RIGHT LANE CLOSURE, FAR SIDE

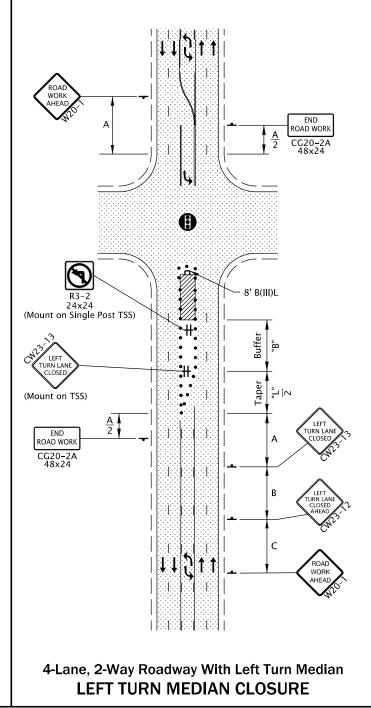
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

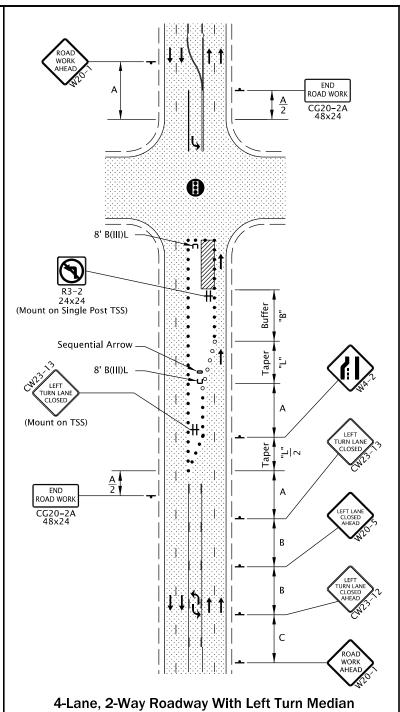
All materials shall be in accordance with the current Oregon Standard Specifications. **OREGON STANDARD DRAWINGS SIGNALIZED INTERSECTION DETAILS** 2024 REVISION DESCRIPTION

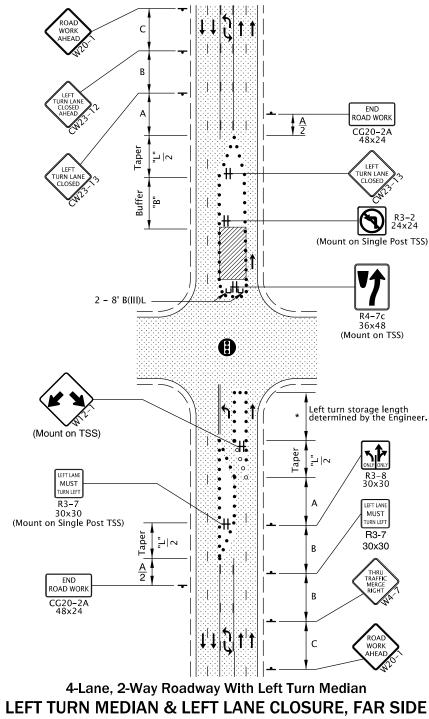
SDR DATE\_ 19-JAN-2024

TM842



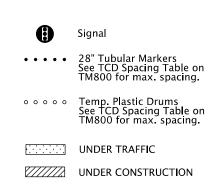




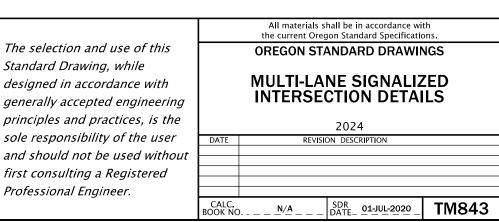


GENERAL NOTES FOR ALL DETAILS:

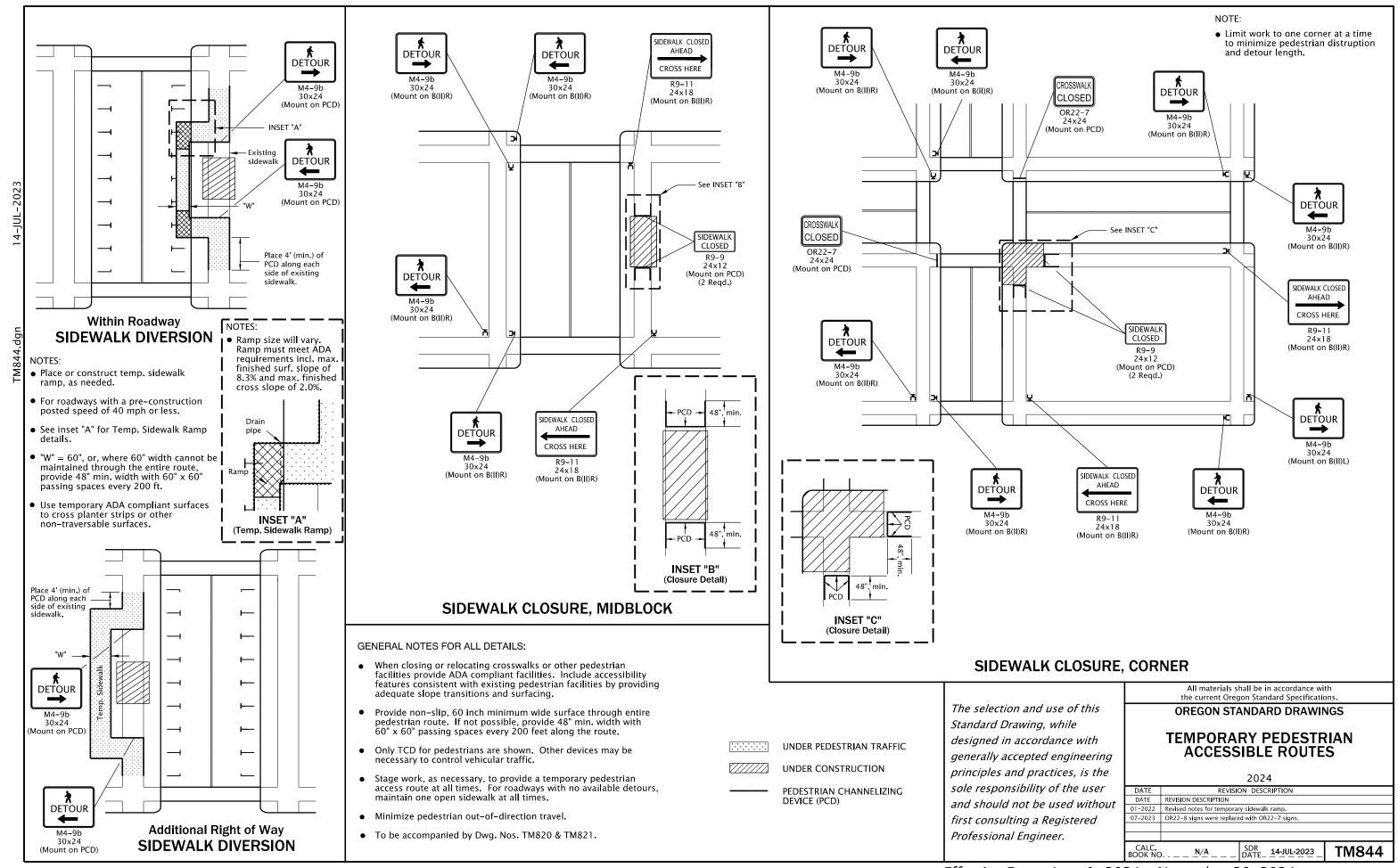
- Additional Traffic Control Measures (TCM) may be required for all legs of the intersection.
- To determine Taper Length ("L") and Buffer Length ("B") shown on this sheet, use the "MIMIMUM LENGTHS TABLE" on Dwg. TM800.
- When a through road intersects within the work zone, place a "ROAD WORK AHEAD" (W20-1) sign in advance of the intersection at sign spacing A.
- To determine sign spacing A, B, and C, use "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Dwg. TM800.
- Tubular markers may be used in lane closure tapers where the posted speed is 40 mph or less.
- Taper Length of "L" for the through-lane shifting tapers may be used for higher speed roads.
- Taper Length of "L"/2 for center turn lane closure may be used in areas with high number of accesses within the work zone.
- Place channelizing devices around intersection radii, business accesses and driveways at 10' spacing.
- Install a "BICYCLES ON ROADWAY" (CW11-1) sign in advance of the closure when a bike lane is closed, or when the shoulder is closed and bikes are expected.
- Signal timing adjustments determined by the Engineer.
- To be accompanied by Dwg. Nos. TM820 & TM821.

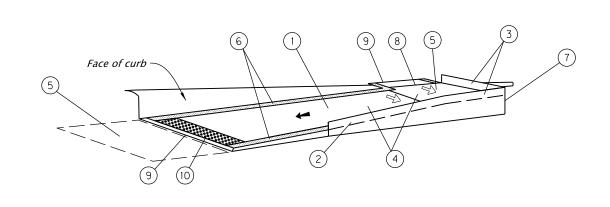


LEFT TURN MEDIAN AND LEFT LANE CLOSURE

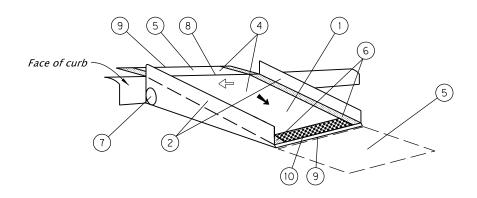


Effective Date: June 1, 2024 - November 30, 2024

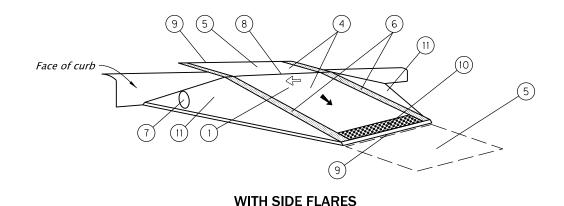




## TEMPORARY CURB RAMP, PARALLEL TO CURB



WITH PROTECTIVE EDGE



TEMPORARY CURB RAMP, PERPENDICULAR TO CURB

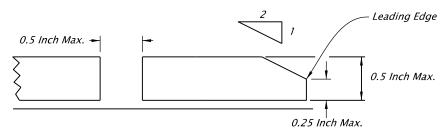
## GENERAL CONSTRUCTION NOTES:

- Clear width shall be greater than or equal to 48 inches. The curb ramp surface shall be firm, stable and slip-resistant. The ramp surface shall have a 8.3% max. finished surface slope.
- Detectable edging with a min. 6 inch height shall be placed along the ramp run when there is a vertical drop exceeding 6 inches or is adjacent to a slope exceeding 1:3 (v:h).
- (3) Detectable edging with 6 inch min. height and contrasting color shall be placed on all turning spaces where the walkway changes direction.
- (4) Curb ramps and turning spaces shall have a 2.0% max. finished cross slope.
- (5) Clear space of 48 inch x 48 inch or greater shall be provided above and below the curb ramp.
- 6 The curb ramp walkway edge shall be marked with a contrasting color, 4 inch wide stripe. The marking is optional where contrasting detectable edging is used.
- (7) Provide an approved means to prevent water from accumulating at the bottom of the ramp, or overflowing onto the ramp surface.
- 8 Lateral joints or gaps between surfaces shall be less than 0.5 inch wide. Surface slopes that meet at grade break shall be flush. See edge treatment detail.
- Changes between surface heights shall not exceed 0.5 inch. Lateral edges should be vertical up to 0.25 inch high, and beveled at 1:2 (v:h) between 0.25 inch and 0.5 inch height. See edge treatment detail.
- Install a min. 2 ft wide detectable warning surface at pedestrian street crossings. Omit detectable warning surfaces at end of sidewalk transitions that are not at a crosswalk.
- 11) Side flares where provided shall have 10% max. slope.
- 12) The curb ramp surface shall be capable of supporting a min. surface load of approximately 800 pounds.
- The curb ramp shall be either self-balasting or include an anchoring system capable of keeping the platform stationary under pedestrians traffic including motorized wheelchairs.
- 14) The curb ramp platform shall be free of sharp or rough edges or abrasive elements that may harm pedestrians.

← Max. 8.3% surface slope

< ├─ Max. 2.0% surface slope

Detectable warning surface



## **EDGE TREATMENT DETAIL**

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

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

OREGON STANDARD DRAWINGS

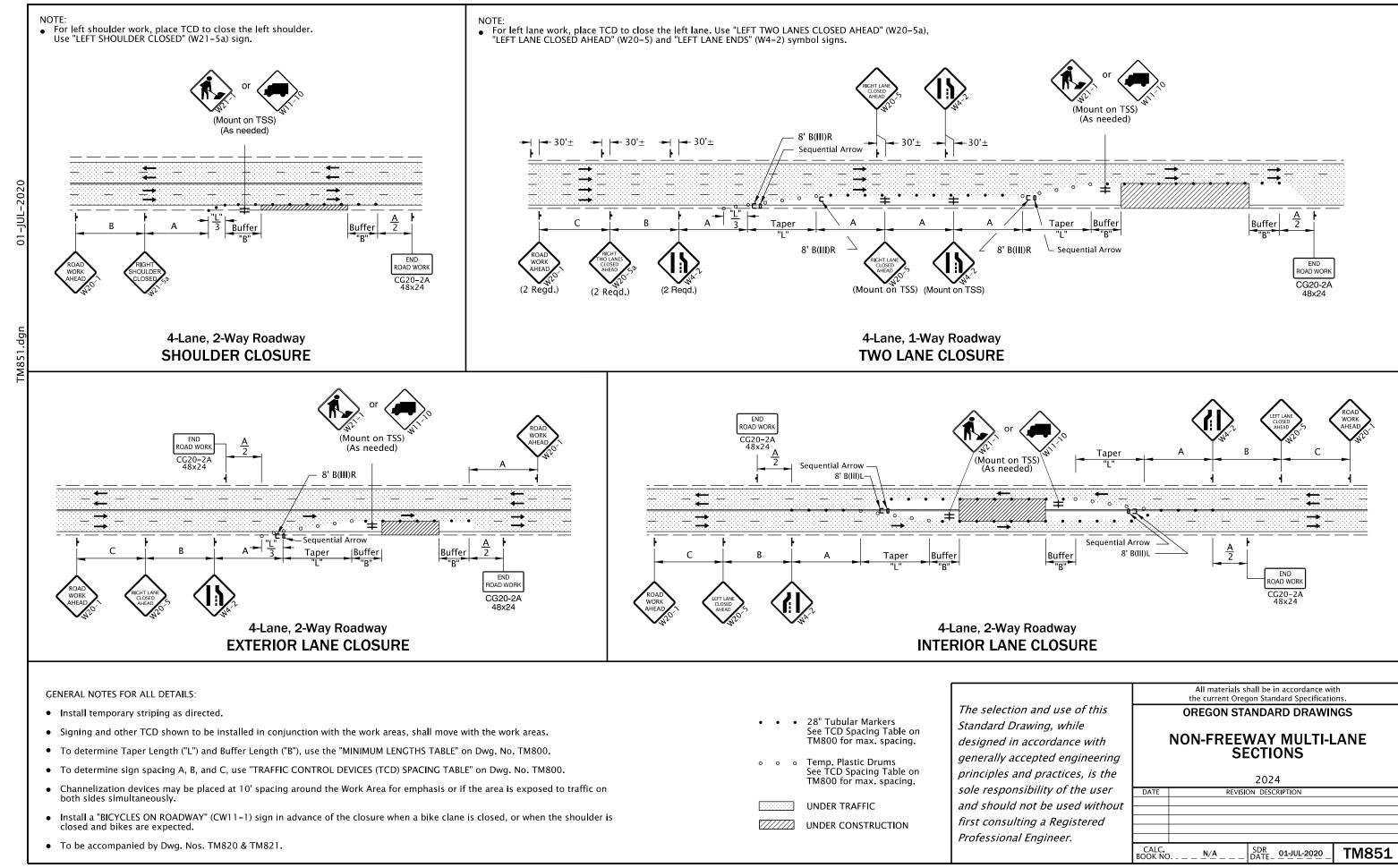
## TEMPORARY SIDEWALK RAMPS

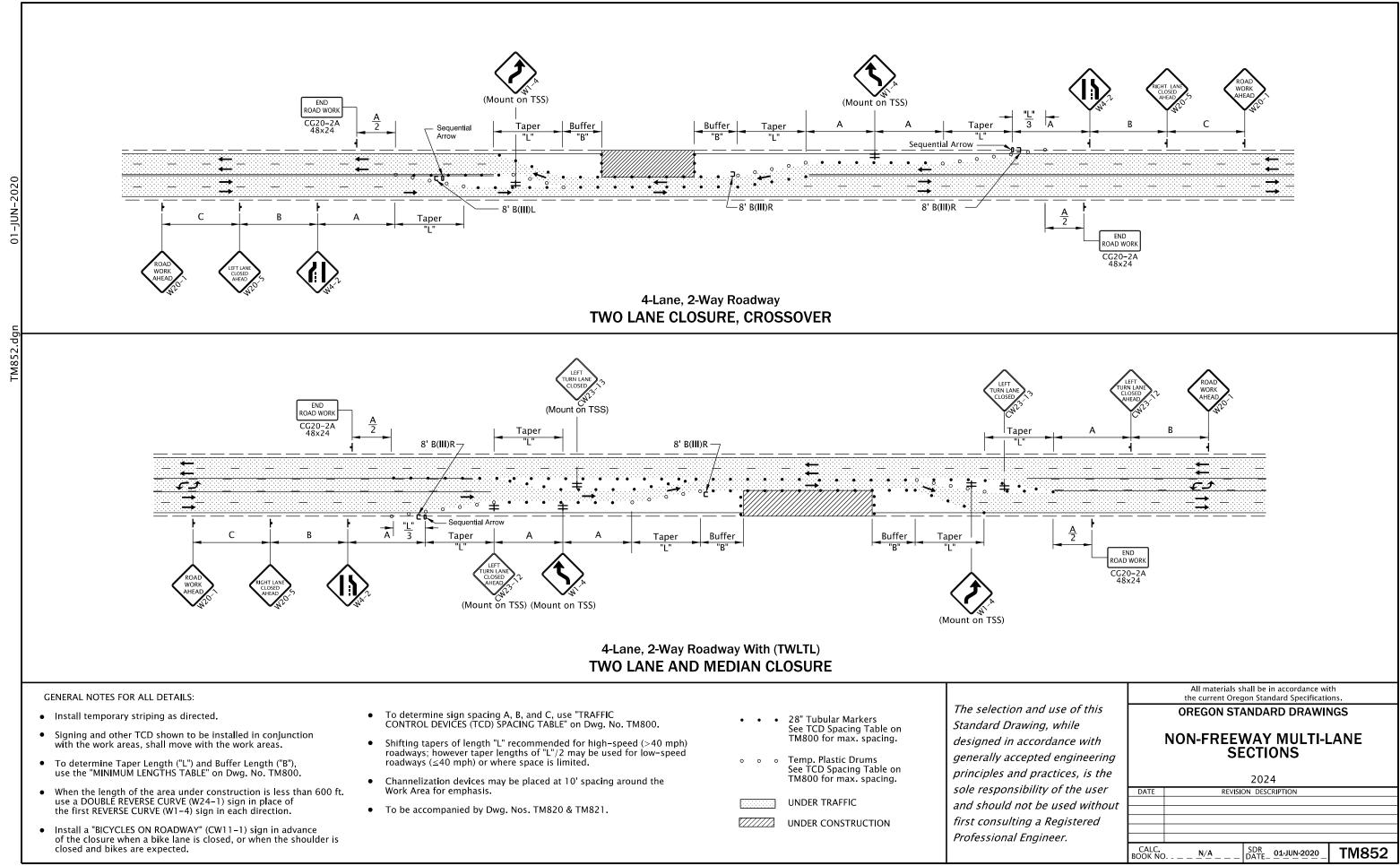
2024

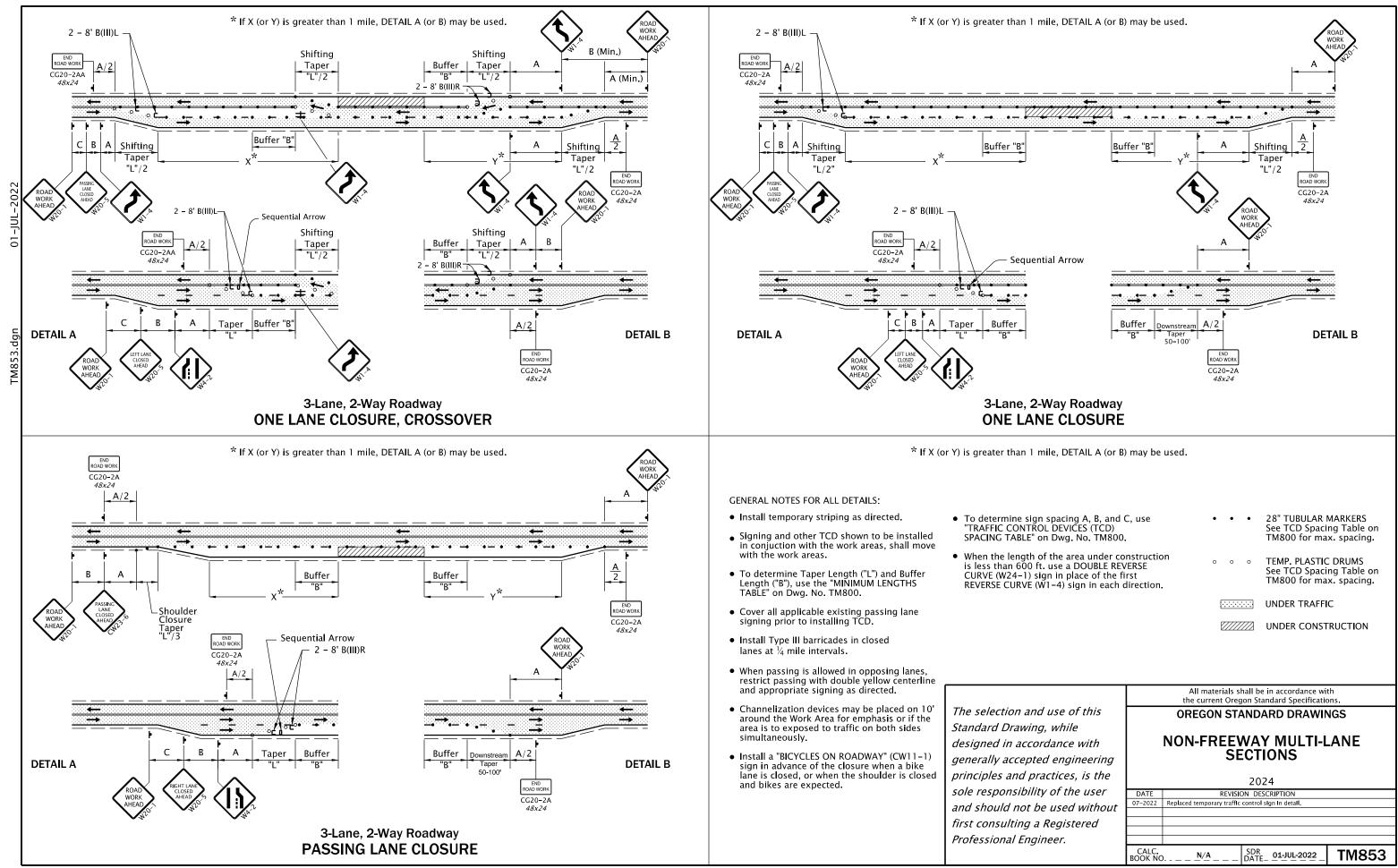
DATE REVISION DESCRIPTION

07-2023 NEW DRAWING CREATED

CALC.
BOOK NO. \_ N/A \_ SDR DATE 14-JUL-2023 TM845

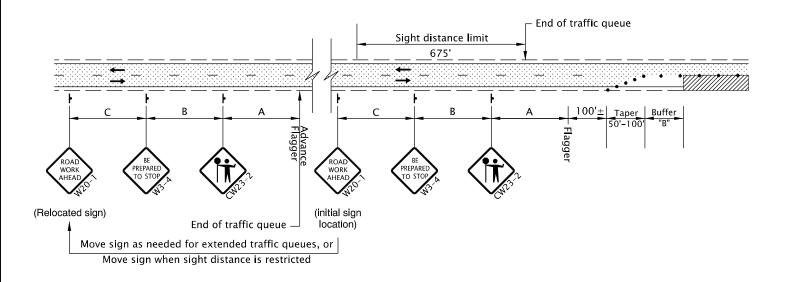






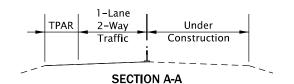


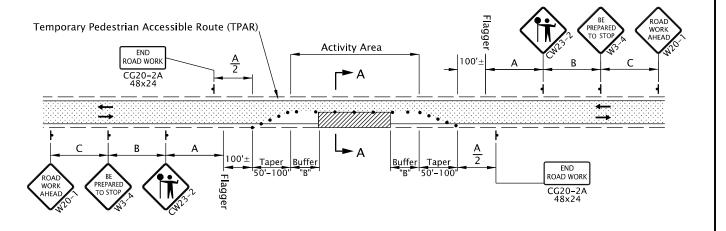
- Place Advance Flagger and additional signing when traffic queues extend beyond initial warning signing OR when sight distance is restricted.
- Place additional Tubular Markers for Flagger and Advance Flagger Stations according to FLAGGER STATION DELINEATION detail.
- Relocate initial "ROAD WORK AHEAD"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



### NOTE:

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





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

## ADVANCE FLAGGER FOR EXTENDED TRAFFIC QUEUES

### GENERAL NOTES FOR ALL DETAILS:

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

••••• 28" Tubular Markers on 10'max. spacing arround intersection radii.

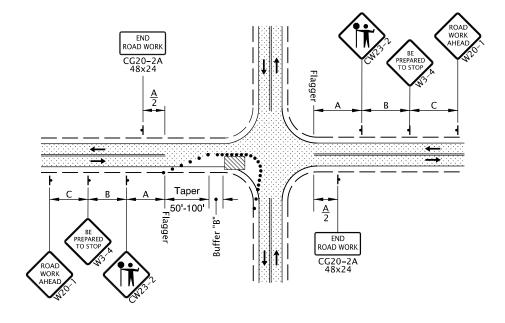
28" Tubular Markers on 20' max. spacing for flagger tapers and stations

• 28" Tubular Markers See TCD Spacing Table on TM800 for max. spacing.

UNDER TRAFFIC

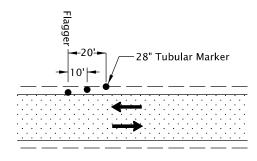
**UNDER CONSTRUCTION** 

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



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

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



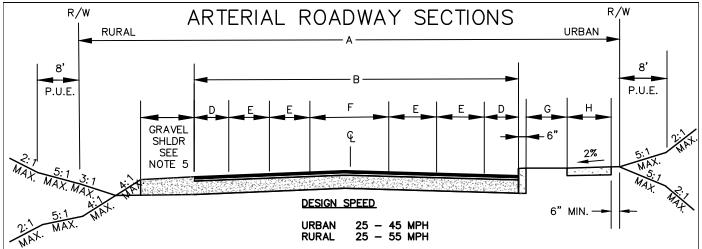
## **FLAGGER STATION DELINEATION**

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

the current Oregon Standard Specifications. **OREGON STANDARD DRAWINGS** 2-LANE, 2-WAY ROADWAYS 2024

All materials shall be in accordance with

REVISION DESCRIPTION CALC. BOOK NO. SDR DATE 13-JAN-2023 TM855



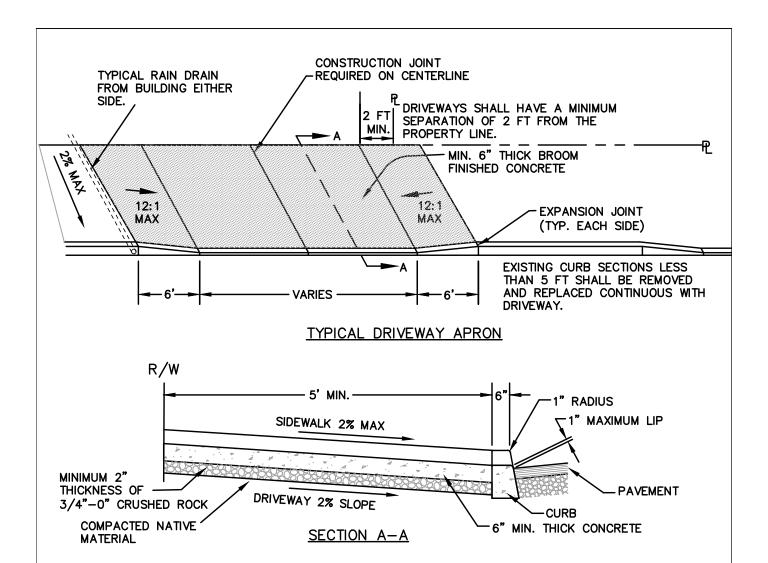
### MINIMUM REQUIREMENTS

ROAD TYPE	RIGHT-OF- WAY (FT)	PAVED WIDTH (FT)	NO. OF LANES	BIKE FACILITY (FT)	TRAVEL LANE (FT)	CENTER TURN LANE (FT)	PARKING (FT)	LANDSCAPE STRIP (FT)	SIDEWALK (FT)
	A	В	С	D	E	F	W ADD'L R/W	G	Н
URBAN	70	40	2	8	12	0	W ADD'L R/W	5	5–7
URBAN	80	40	3	8	12	14	W ADD'L R/W	5	5–7
URBAN	90	64	4	8	12	0	W ADD'L R/W	5	5–7
URBAN	104	78	5	8	12	14	W ADD'L R/W	5	5–7
UNINCORPORATED RURAL COMMUNITY	62	40	2	8	12	0	NONE	5	5–7
UNINCORPORATED RURAL COMMUNITY	78	54	3	8	12	14	NONE	5	5–6
DUDAL	60	40	2	8	12	0	NONE	NONE	NONE
RURAL	78	54	3	8	12	14	NONE	NONE	NONE

## **NOTES**

- 1. SEE DRAWING C100 FOR DETAILS ON THE STRUCTURAL SECTION.
- 2. MAXIMUM GRADE RESIDENTIAL = 12%.
- 3. MAXIMUM GRADE COMMERCIAL/INDUSTRIAL/MULTIFAMILIY = 8%.
- 4. CROSS SLOPE SHALL BE 2-4% (INCLUDING SHOULDER).
- SLOPES SHALL BE RECOVERABLE WITHIN THE CLEAR ZONE PER SECTION 245.
- GRAVEL SHOULDERS ARE ALLOWED FOR RURAL AREAS ONLY (UNLESS REQUIRED. FOR SURFACE WATER MANAGEMENT)
   SHOULDERS SHALL BE FULL DEPTH OF ROAD SECTION AND THE WIDTH SHALL BE BASED ON AASHTO GREEN BOOK TABLE
   6-5.
- 7. AN 8 FOOT WIDE PUBLIC UTILITY EASEMENT (PUE) IN ADDITION TO THE RIGHT OF WAY.
- SEE ZDO SECTION 1007 FOR SIDEWALK WIDTH REQUIREMENTS. IN LOCATIONS WHERE CURB AND SIDEWALK ARE NOT REQUIRED A PAVED OR GRAVEL SHOULDER IS REQUIRED.
- 9. THESE STANDARD SHALL APPLY EXCEPT WHERE COMPREHENSIVE PLAN REQUIREMENTS SPECIFY A DIFFERING SECTION.
- 10. LEFT TURN LANES OR RIGHT TURN LANES SHALL BE PROVIDED PER THE COMPREHENSIVE PLAN, CIP OR AS WARRANTED BY SECTION 295. RIGHT TURN LANE WIDTHS SHALL BE MINIMUM OF 12 FEET WIDE BUT BASED UPON A TRUCK TURNING MOVEMENT ASSESSMENT.
- 11. LANE WIDTHS MAY VARY PER COMPREHENSIVE PLAN CROSS SECTIONS AS WARRANTED BY SECTION 250.6.5.
- 12. THE REQUIREMENT FOR PARKING SHALL BE DETERMINED BY ENGINEERING BASED UPON ADJACENT LANE USE, HEAVY VEHICLE TRAFFIC, EXISTING TRAVEL LANE WIDTH, PARKING NEEDS, DESIGN SPEED AND CRASH HISTORY.
- 13. TURN LANES, PARKING, MEDIANS, PEDESTRIAN REFUGES AND ISLAND SHALL BE PROVIDED AS DETERMINE BY ENGINEERING AND MAY REQUIRE ADDITIONAL RIGHT OF WAY. RAISED MEDIANS AREA REQUIRED ON FIVE LANE ROADWAYS
- 14. BICYCLE FACILITIES SHALL BE CONSISTENT WITH THE ACTIVE TRANSPORTATION PLAN AND TRANSPORTATION SYSTEM PLAN.

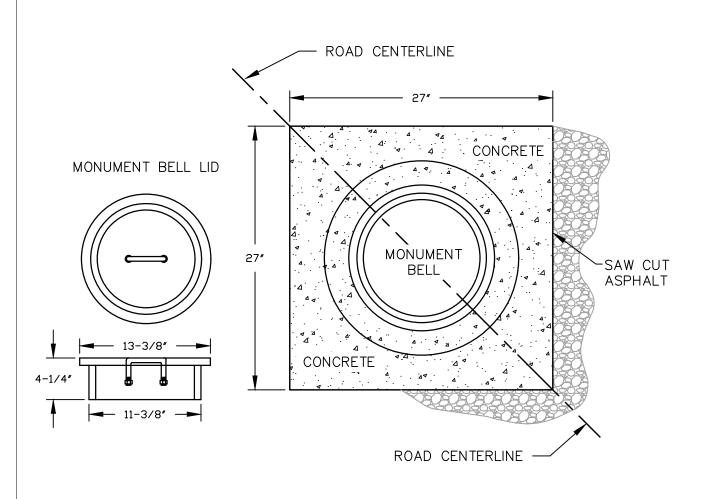
REVISION	DATE	_		_	APPROVAL DATE: 6/1/2020	SCALE: N.T.S.	STANDARD
REVISION	11/20	RM	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT		ARTERIAL		DRAWING
			150 BEAVERCREEK ROAD OREGON CITY, OR 97045	CLACKAMAS	ROADWAY SEC	TION	C140
			CHESSIN SINI, SIN STORE	COUNTY			

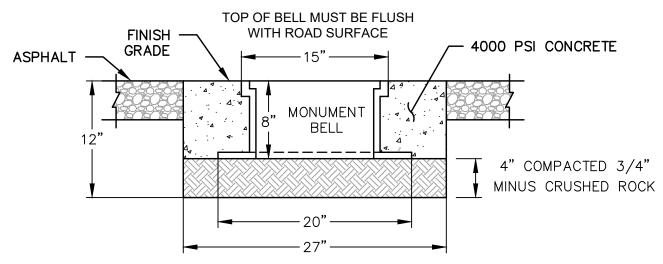


## <u>NOTES</u>

- LOCATION AND WIDTH TO BE APPROVED BY THE COUNTY ON A SITE SPECIFIC BASIS. PLACE A MARKER, AS
  INDICATED, AT THE CENTER OF THE PROPOSED DRIVEWAY FOR INITIAL INSPECTION BY THE COUNTY.
- 2. RESIDENTIAL DRIVEWAY WIDTH SHALL BE MIN. 12' TO 35' MAX.
- 3. COMMERCIAL DRIVEWAY WIDTH SHALL BE MINIMUM 28' FOR TWO LANES AND 42' FOR THREE LANES. THIS DETAIL CAN BE USED FOR COMMERCIAL ACCESS WHETHER OR NOT THE SIDEWALK IS CURB TIGHT. JUST BE SURE TO LOWER THE SIDEWALK PANELS TO THE DRIVEWAY TO MEET ADA STANDARDS.
- 4. MATERIALS USED IN CONSTRUCTION SHALL CONFORM TO CURRENT ODOT/APWA STANDARD SPECIFICATIONS.
- 5. AT CORNER LOTS, DRIVEWAY ENTRANCE SHALL BE PLACED ON THE SECONDARY ROADWAY AND NO PORTION OF THE DRIVEWAY SHALL BE PERMITTED WITHIN 25 FEET OF THE PROPERTY CORNER OR INTERSECTION OF RIGHT-OF-WAY LINES.
- SEE SECTION 220 FOR ACCESS SPACING BETWEEN DRIVEWAYS, TO AN INTERSECTION AND TO A PROPERTY LINE ALSO FOR MULTIPLE ACCESSES TO ON PROPERTY.
- SPECIFICATIONS FOR CONCRETE AND MISC. MATERIALS USED IN CONSTRUCTION SHALL CONFORM TO CURRENT ODOT/APWA STANDARD SPECIFICATIONS. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3300 P.S.I. IN 28 DAYS.
- 8. COMMERCIAL DRIVEWAYS SHALL HAVE 6" MINIMUM THICKNESS CONCRETE WITH #4 REBAR @ 12" O.C., ALL BARS TIED.
- 9. PROVIDE SIGHT DISTANCE PER SECTION 240.

REVISION	DATE	-		_	APPROVAL DATE: 6/1/2020	SCALE: N.T.S.	STANDARD
REVISED	11/19	AAR	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT		STANDARD DRIVEWAY TO	CURBED COUNTY	DRAWING
			150 BEAVERCREEK ROAD OREGON CITY, OR 97045	CLACKAMAS	ROADS WITH NO LAND		D600
			OKEOOK OHT, OK 37040	COUNTY			





NOTE: MONUMENT BOXES TO BE CAST IRON OR ALLOY SUITABLE FOR HEAVY TRAFFIC LOADING. #1036 OR #1033 EAST JORDAN IRON WORKS #3680 OR EQUIVILANT.

REVISION	DATE	BY	Г
REVISION	11/19	RM	1
REVISION	3/20	RM	

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

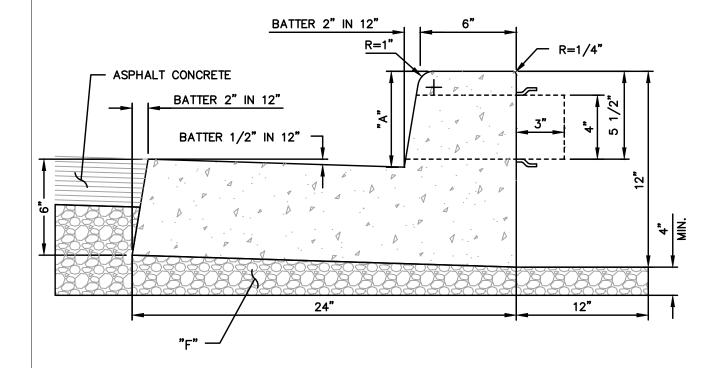


APPROVAL DATE: 6/1/2020 SCALE: N.T.S.

MONUMENT BOX

GREATER THAN 35 MPH

STANDARD DRAWING M150



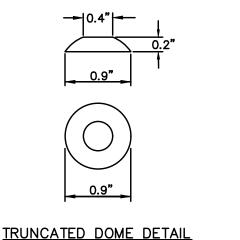
## **NOTES**

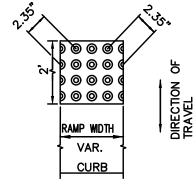
- 1. SPECIFICATIONS FOR CONCRETE AND MISCELLANEOUS MATERIALS USED IN CONSTRUCTION SHALL CONFORM TO CURRENT OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION.
- 2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI IN 28 DAYS, 2" TO 4" SLUMP.
- 3. 4" PLASTIC PIPE SHALL HAVE A BELL OR A 3" EXTENSION, FOR FUTURE HOOK-UP.
- 4. EXPANSION JOINTS, MAX. 45' SPACING AND AT BEGINNING AND END OF CURVES OR AS DIRECTED.
- 5. CONTRACTION JOINTS, MAX. 15' SPACING AND AT LOCATIONS AS DIRECTED.
- 6. USE FROM PC TO PT AT PUBLIC INTERSECTIONS INSIDE THE UGB AND UNINCORPORATED COMMUNITIES. ALSO USE WHEN THE GUTTER SLOPE OR CURB LINE IS LESS THAN 1% ON ALL PUBLIC ROADS.
- 7. SEE NOTES ON DETAIL S100.

REVISION	DATE		
	12/12		C
REVISED	11/19	AAR	

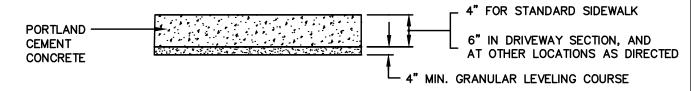
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT 150 BEAVERCREEK ROAD OREGON CITY, OR 97045







RAMP TEXTURE PATTERN (TRUNCATED DOMES) DETAIL



## SIDEWALK SURFACING DETAIL

## **NOTES**

- 1. CONCRETE AND MISC. MATERIALS USED IN CONSTRUCTION SHALL CONFORM TO CURRENT OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION. DETECTABLE WARNINGS ON WALKING SURFACES AS PER ADA REQUIREMENTS.
- 2. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 in (23 mm) A HEIGHT OF NOMINAL 0.2 in (5 mm) AND A CENTER—TO—CENTER SPACING OF NOMINAL 2.35in (60mm) AND YELLOW IN COLOR. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. DETECTABLE WARNINGS USED ON INTERIOR SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND—ON—CANE CONTACT.
- 3. EXPANSION JOINT SPACING EVERY 45' MIN. OR AT EQUAL INTERVALS CORRESPONDING TO CURB LINE. JOINTS SHALL BE PROVIDED PER ODOT STD. DWG. RD722.
- 4. THE SURFACE FINISH SHALL BE CROSS BROOMED.
- 5. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3300 PSI IN 28 DAYS.

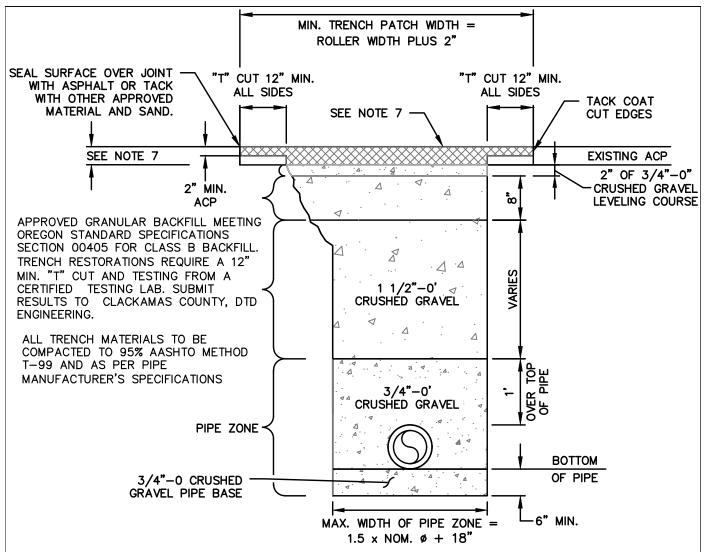
REVISION	DATE	BY
EDIT NOTE 1	12/12	RN
EDIT NOTE 6	12/12	RN
REVISION	11/19	BP
REVISION	3/20	RМ

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

CLACKAMAS COUNTY STANDARD SIDEWALK & CURB
RAMP NOTES & DETAILS

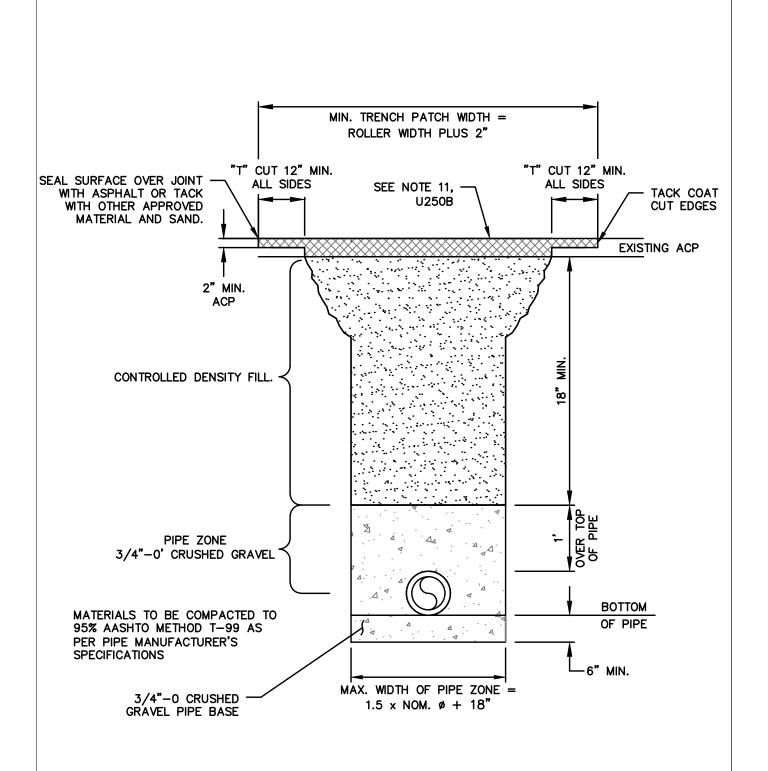
STANDARD DRAWING

S960



- 1. THE USE OF U200 SHALL BE DETERMINED BY SECTION 710.8. THE USE OF CONTROL DENSITY FILL SHALL BE DETERMINED BY SECTION 710.8. WHEN USED, REFER TO STANDARD DRAWING U250A.
- 2. THE EXISTING ACP SHALL BE SAWCUT THROUGH ENTIRE ACP SECTION PRIOR TO EXCAVATION.
- 3. BACKFILL IN PIPE ZONE SHALL BE PLACED IN MAXIMUM 6" LIFTS AND COMPACTED.
- 4. TRENCH BACKFILL SHALL BE PLACED IN MAXIMUM 12" LIFTS TO 95% DENSITY.
- 5. SAWCUT EDGES TO BE TACKED WITH HOT LIQUID ASPHALT.
- 6. WORK RESULTING IN IRREGULAR TRENCH WIDTHS OR INCIDENTAL DAMAGE TO THE ROADWAY SURFACE WILL REQUIRE ANOTHER SAWCUT AND SUBSEQUENT REMOVAL OF ACP. THE SAWCUT LINE SHALL BE APPROVED BY CLACKAMAS COUNTY PRIOR TO THE PERMANENT ACP REPAIR.
- 7. RESTORE ACP SECTION WITH 4" OF HMAC LEVEL 3, PG 64-22, 1/2" DENSE GRADED AGGREGATE OR AN EQUAL THICKNESS OF THAT REMOVED WHICHEVER IS GREATER. ASPHALTIC CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS SEC. 00744.40. ACP TO BE PLACED IN LIFTS BETWEEN 2 INCHES AND 3 INCHES IN THICKNESS.
- 8. ACP JOINTS/SEAMS SHALL BE SEALED WITH HOT LIQUID ASPHALT, OR APPROVED EQUAL, AND SANDED.
- 9. CLACKAMAS COUNTY SHALL BE NOTIFIED FOR INSPECTION.
- 10. TRENCHES SHALL BE PROTECTED WITH STEEL PLATING CAPABLE OF CARRYING A MINIMUM OF H-20 LOADING. EACH PLATE SHALL BE SECURED IN PLACE WITH APPROACH RAMPS OF COLD MIX A.C. LIGHTED BARRICADES SHALL BE MOUNTED WITH BUMP AND CONSTRUCTION AHEAD SIGNS. REFLECTIVE SHEETING FOR NIGHT VISION SHALL BE PLACED AHEAD OF AND ADJACENT TO THE PLATING.
- 11. TRAFFIC SIGNAL DETECTOR LOOPS IN SIGNALIZED INTERSECTIONS, DAMAGED AS A RESULT OF WORK DONE UNDER THE PERMIT, SHALL BE REPLACED IN THEIR ENTIRETY. NO SPLICING OF TRAFFIC LOOPS IS ALLOWED. ANY TRAFFIC LOOP THAT IS TUNNELED UNDER WILL REQUIRE A FULL DEPTH TRENCH BACKFILL WITH FLUID 150 PSI MAXIMUM STRENGTH CDF (CONTROLLED DENSITY FILL) A MINIMUM WIDTH OF 18" ON EACH SIDE OF THE TRAFFIC LOOP WIRE. ANY TRAFFIC LOOP WORK DONE UNDER THIS PERMIT WILL BE WARRANTED FOR A PERIOD OF TWO YEARS FROM THE DATE OF SUCH WORK.
- 12. COMPLY WITH SMOOTHNESS REQUIREMENTS OF ODOT STANDARD SPECIFICATIONS.

DATE BY	•	_	APPROVAL DATE: 6/1/2020	SCALE: N.T.S.	STANDARD
05/18 DC 09/18 RM	DEPARTMENT OF TRANSPORTATION   AND DEVELOPMENT		STANDARD TR	ENCH	DRAWING
12/19 AAR	150 DEAVEDOREEK BOAD				11200
	OREGON CITY, OR 97045	CLACKAMAS	AND BACKF	ILL	0200



TO BE USED WITH STANDARD DRAWING U250B

REVISION	DAIL	BT
TEE-CUT ADDED	05/18	DC
TEE-CUT-MOD.	09/18	RM
REVISED	12/19	AAR
REVISED	3/20	RM

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



APPROVAL DATE: 6/1/2020	SCALE: N.T.S.
STANDARD TRENCH	WITH
CONTROLLED DENSITY	BACKFILL

### **NOTES**

- 1. THE USE OF CONTROL DENSITY FILL SHALL BE DETERMINED BY SECTION 710.8
- 2. THE EXISTING ACP SHALL BE SAWCUT THROUGH ENTIRE ACP SECTION PRIOR TO EXCAVATION.
- 3. BACKFILL IN THE PIPE ZONE SHALL BE PLACED IN MAXIMUM 6" COMPACTED LIFTS.
- 4. CDF SHALL BE A LOW STRENGTH, HIGHLY FLOWABLE MIXTURE OF PORTLAND CEMENT, POZZOLAN (FLY ASH), FINE AGGREGATES, WATER AND ADMIXTURES, IF NECESSSARY, WHICH RESULTS IN A HARDENED, DENSE NON-SETTLING, HAND EXCAVATABLE FILL. THE CDF SHALL NOT CONTAIN AGGREGATE LARGER THAN 3/8" IN TRENCHES LESS THAN 12" WIDE.
- 5. PORTLAND CEMENT, POZZOLAN, FINE AGGREGATES, WATER, AND ADMIXTURES SHALL CONFORM TO OREGON STANDARD SPECIFICATIONS, SECTION 00442, EXCEPT THAT PORTLAND CEMENT SHALL BE TYPE I—II OR II.
- 6. CDF MIX SHALL BE DESIGNED TO ENSURE THAT THE MATERIAL PLACED HAS A 28-DAY COMPRESSIVE STRENGTH OF 100 TO 200 PSI.
- 7. WHEN REQUIRED, THE COMPRESSIVE STRENGTH SHALL BE TESTED USING 4-INCH MORTAR CUBES PER AST C 109.
- 8. WITHIN 24 HOURS THE MATERIAL SHALL BE CAPABLE OF SUPPORTING VEHICULAR TRAFFIC WITH RUTTING PER AST C 109.
- 9. TRENCHES SHALL BE PROTECTED PER SECTION 710.8.E
- 10. WORK RESULTING IN IRREGULAR TRENCH WIDTHS OR INCIDENTAL DAMAGE TO THE ROADWAY SURFACE WILL REQUIRE ANOTHER SAWCUT AND SUBSEQUENT REMOVAL OF THE ACP. THE SAWCUT LINE SHALL BE APPROVED BY THE COUNTY PRIOR TO THE PLACEMENT OF PERMANENT SURFACE REPAIR.
- 11. RESTORE ACP SECTION WITH 4" HMAC LEVEL 3, PG 64—22, 1/2" DENSE GRADED AGGREGATE OR AN EQUAL THICKNESS OF THAT REMOVED WHICHEVER IS GREATER. ASPHALTIC CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS SEC. 00744.40. ACP TO BE PLACED IN LIFTS BETWEEN 2 INCHES AND 3 INCHES IN THICKNESS.
- 12. ALL PAVING SHALL BE COMPLETED WITHIN 24 HOURS OF COMPLETING THE BACKFILL PROCESS UNLESS OTHER ARRANGEMENTS ARE MADE WITH THE INSPECTOR.
- 13. ALL PLATING & SIGNS SHALL REMAIN IN PLACE UNTIL PERMANENT SURFACE REPAIR PAVING OPERATIONS ARE UNDERWAY.
- 14. SUBMIT COPIES OF CDF MATERIAL DELIVERY SLIPS TO UTILITYPERMITS@CLACKAMAS.US WITHIN 10 DAYS OF PLACEMENT. REFERENCE THE PERMIT NUMBER.
- 15. DAMAGED SIGNAL DETECTOR LOOPS SHALL BE REPLACED IN THEIR ENTIRETY. NO SPLICING OF TRAFFIC LOOPS IS ALLOWED. ANY TRAFFIC LOOP THAT IS TUNNELED UNDER WILL REQUIRE A FULL DEPTH TRENCH BACKFILL WITH FLUID 200 PSI MAXIMUM STRENGTH CDF (CONTROLLED DENSITY FILL) A MINIMUM WIDTH OF 18" ON EACH SIDE OF THE TRAFFIC LOOP WIRE.
- 16. TRENCH COMPACTION SHALL BE 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT IN THE UPPER THREE FEET. COMPACTION EQUIPMENT MUST BE ON THE JOB SITE BEFORE EXCAVATION IS STARTED. COMPACTION EQUIPMENT, AS DEFINED IN ODOT SPECIFICATIONS, MUST BE CAPABLE OF COMPACTION WITHIN THE TRENCH WIDTH LIMITS TO PREVENT BRIDGING CAUSED BY STRADDLING THE DITCH.
- 17. A TEMPORARY PATCH OF COLD OR HOT MIX ASPHALT SHALL BE PLACED ON ALL HARD SURFACE CUTS IMMEDIATELY AFTER BACK FILLING HAS BEEN COMPLETED, PRIOR TO ALLOWING TRAFFIC OVER IT. GRAVEL MAY NOT BE USED AS A TEMPORARY PATCH.
- 18. IMMEDIATELY PRIOR TO PLACING THE FINAL ASPHALT WEARING SURFACE, THE EXISTING PAVEMENT SHALL BE CLEANED, CLEARED OF ALL LOOSE MATERIAL, AND COATED WITH HOT LIQUID ASPHALT TO ENSURE A BOND WITH THE NEW ASPHALT SURFACE. THE RESTORED PAVEMENT SHALL BE FINISHED TO A SMOOTH RIDING SURFACE AND TO THE GRADE OF THE SURROUNDING UNDISTURBED PAVEMENT. THE FINAL PAVEMENT JOINTS ARE TO BE SEALED AND SANDED.
- 19. SAWCUT EDGES TO BE TACKED WITH HOT LIQUID ASPHALT.
- 20. COMPLY WITH SMOOTHNESS REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS SECTION 00744.70
- 21. CDF SHALL COMPLY WITH THE ODOT MANUAL OF FIELD TEST PROCEDURES, SECTION 00442.

REVISION	DATE	_		•	APPROVAL DATE: 6/1/2020	SCALE: N.T.S.	STANDARD
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			OREGON CITT, OR 97045	COUNTY	0200.	· •	

## **SPECIAL PROVISIONS**

## **FOR**

## JOHNSON CREEK BLVD (79<sup>TH</sup> PL TO ECM) IMPROVEMENTS PROJECT

## CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

**CLACKAMAS COUNTY, OREGON** 



Earthwork and Drainage, Asphalt Concrete Paving & Oiling, Electrical, Temporary Traffic Control, Pavement Markings, and Miscellaneous

February 2025

# CLACKAMAS COUNTY DEPARTMENT OF TRANSPORATION AND DEVELOPMENT SPECIAL PROVISIONS

**FOR** 

## JOHNSON CREEK BLVD (79<sup>TH</sup> PL TO ECM) IMPROVEMENTS PROJECT

CIP #300320356

**CLACKAMAS COUNTY, OREGON** 

## PROFESSIONAL OF RECORD CERTIFICATION(s):

Seal w/signature

PROFES

Only the electronic version of this document with a digital signature per OAR 820-025 is an original. Contact the Engineer of Record for the electronic file if an authentic document is opposed to contact the Engineer of Record for the electronic file if an authentic document is opposed to contact the Engineer of Record for the electronic file if an authentic document is opposed to the Engineer of Record for the Engineer of

I certify the Special Provisions Sections listed below are applicable to the design for the subject project for roadway improvements. Modified Special Provisions were prepared by me or under my supervision.

Section 00210, 00220, 00221, 00222, 00223, 00224, 00225, 00226, 00228, 00280, 00290, 00305, 00310, 00320, 00330, 00331, 00340, 00350, 00405, 00445, 00470, 00490, 00495, 00503, 00585, 00620, 00640, 00641, 00730, 00744, 00748, 00749, 00759, 00850, 00855, 00856, 00858, 00865, 00867, 00868, 00902, 00905, 00920, 00930, 00940, 01030, 02001, 02020, 02030, 02040, 02050, 02070, 02080, 02440, 02510

Date Signed: 02/18/2025

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

# CLACKAMAS COUNTY DEPARTMENT OF TRANSPORATION AND DEVELOPMENT SPECIAL PROVISIONS

**FOR** 

## JOHNSON CREEK BLVD (79<sup>TH</sup> PL TO ECM) IMPROVEMENTS PROJECT

CIP #300320356

**CLACKAMAS COUNTY, OREGON** 

## PROFESSIONAL OF RECORD CERTIFICATION(s):



Date Signed: 2/17/2025

I certify the Special Provisions Sections listed below are applicable to the design for the subject project for traffic improvements. Modified Special Provisions were prepared by me or under my supervision.

Section 00950, 00960, 00962, 00990, 02560

FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

## SPECIAL PROVISIONS

### **WORK TO BE DONE**

JOHNSON CREEK BLVD (79TH TO ECM) IMPROVEMENTS PROJECT, CLACKAMAS COUNTY, OREGON

The Johnson Creek Blvd (79<sup>th</sup> to ECM) Improvements Project is an asphalt paving and curb ramp retrofit contract. The roadway classifications vary throughout the project and include work on collector, minor arterial, and major arterial roadways.

The curb ramp retrofit aspect of the contract will retrofit three signalized intersections and three unsignalized intersections for ADA compliance and generally includes but is not limited to:

- 1. Furnish, install, and remove temporary traffic control devices and temporary erosion control measures.
- Construct concrete curb ramp retrofits, including a diagonal bicycle crossing at the intersection of SE Bell Avenue and SE Johnson Creek Boulevard for the Springwater Corridor Trail.
- 3. Construct modifications to pedestrian pushbutton facilities for compliance, including temporary pushbuttons.
- 4. Construct modifications to storm sewer facilities.
- 5. Reinstall or install new permanent signing and pavement markings.

The asphalt paving aspect of the contract will resurface SE Johnson Creek Boulevard between the end of the County-maintained portion of the road (ECM) and SE 79<sup>th</sup> Place (approximately 1.7 miles), as well as SE Bell Avenue between SE Johnson Creek Boulevard and SE Alberta Avenue (approximately 0.2 miles). Associated Work generally includes but is not limited to:

- 1. Furnish, install, and remove temporary traffic control devices and temporary erosion control measures.
- Grinding of asphalt, including road surface on existing bridge over Johnson Creek.
- 3. Placement of asphalt, including asphalt wear surface on existing bridge over Johnson Creek.
- 4. Placement of pavement markings and striping.
- 5. Limited widening of SE Johnson Creek Boulevard near the intersection of SE Stanley Avenue, including roadway illumination modifications.

Perform additional and Incidental Work as called for by the Specifications and Plans.

## APPLICABLE SPECIFICATIONS

The Specification that is applicable to the Work on this Project is the 2024 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**

Earthwork and Drainage (EART)
Asphalt Concrete Paving and Oiling (ACP)
Electrical (ELEC)
Temporary Traffic Control (TTC)
Pavement Markings (PAVE)
Miscellaneous (MHA)

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## Clackamas County Special Provisions (2024 version October 11, 2024)

## SECTION 00110 – ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS

Comply with Section 00110 of the Standard Specifications supplemented and/or modified as follows:

## 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
   <a href="https://dochub.clackamas.us/documents/drupal/ef976bc9-14f4-495b-9bd8-c69ee7334685">https://dochub.clackamas.us/documents/drupal/ef976bc9-14f4-495b-9bd8-c69ee7334685</a>
- EquipmentWatch
   www.equipmentwatch.com
- ODOT Construction Section Qualified Products List (QPL) www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx
- ODOT Construction Surveying Manual for Contractors
   www.oregon.gov/ODOT/ETA/Documents Geometronics/Construction-Survey-Manual-Contractors.pdf

## 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 or modify definitions as follows:

**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, 2024 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 Purchasing Department.

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.

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

## **SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES**

Comply with Section 00120 of the Standard Specifications supplemented and/or modified as follows:

**00120.00** Prequalification of Bidders - Delete and replace with the following:

See Instructions to Bidders.

To gain Prequalification of Bidders through ODOT:

• If delivered by electronic mail, the application shall be sent to:

ODOTProcurementOfficeConstruction@odot.oregon.gov

• If delivered by mail or parcel delivery service, the application shall be sent to:

Oregon Department of Transportation Procurement Construction Contracts, MS #33 355 Capitol Street NE Salem, OR 97301

**00120.01 General Bidding Requirements** – Delete and replace with the following:

See Instructions to Bidders.

**00120.05** Request for Plans, Special Provisions, and Bid Booklets: – Delete and replace with the following:

See Notice of Public Improvement Contract and Instructions to Bidders.

Copies of the 2024 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

The Plans, which are applicable to the Work to be performed under the Contract, are included in these Special Provisions.

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

**00120.25 Subsurface Investigations** - Replace the first two sentences of the first paragraph with the following:

The Agency or its consultant has conducted subsurface or geologic investigations of the Project Site, and the geotechnical field results of these investigations are included in the Bid Documents. The full geotechnical report is available at the Engineer's office.

**00120.30** Changes to Plans, Specifications, or Quantities before Opening of Bids - Delete and replace with the following:

See Instructions to Bidders.

**00120.40** Preparation of Bids – Delete and replace this section with the following:

See Instructions to Bidders.

**00120.45** Submittal of Bids - Delete and replace with:

See Instructions to Bidders.

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

**00120.60** Revision or Withdrawal of Bids - Delete and replace with the following:

See Instructions to Bidders.

**00120.70** Rejection of Nonresponsive Bids – Delete and replace with the following:

See Instructions to Bidders.

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

## SECTION 00130 - AWARD AND EXECUTION OF CONTRACT

Comply with Section 00130 of the Standard Specifications supplemented and/or modified as follows:

00130.00 Consideration of Bids - Delete third paragraph.

**00130.10** Award of Contract - Delete and replace with the following:

See Instructions to Bidders.

**00130.15** Right to Protest Award – Delete and replace with the following:

See 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", 2024 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 - Delete and replace with the following:

See Instructions to Bidders.

**00130.70** Release of Bid Guaranties – Delete and replace with the following:

See Instructions to Bidders.

## **SECTION 00140 - SCOPE OF WORK**

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

**O0140.30** 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.

## **"As-Built" Records** - Add the following section:

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.

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

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

**00150.00** Authority of the Engineer – Delete and 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 section.

## 00150.10 Coordination of Contract Documents

(a) Order of Precedence – Delete this section and 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.

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

The Engineer will:

- Provide copies of plans and specifications.
- Perform measurements and calculations for pay quantities.
- Perform final "as constructed" measurements.

• Perform the Agency responsibilities described in the ODOT Construction Surveying Manual for Contractors, Chapter 1.5 (see Section 00305)

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

The Contractor shall perform the Contractor responsibilities described in the ODOT Construction Surveying Manual for Contractors, Chapter 1.6 (see Section 00305) and the following:

- Perform earthwork slope staking including intersections and matchlines and set stakes defining limits for clearing which approximate right-of-way and easements.
- Inform the Engineer of any property corners monuments and/or survey markers that are not shown on the plans and are found during construction activities prior to disturbing the monuments. Allow the Agency 2 Work days for referencing all found markers before they are removed. Monuments that are noted on the plans to be protected and are disturbed by the Contractor's activities shall be replaced by the Contractor's surveyor at the Contractor's expense.

**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:

- Hold a utility scheduling meeting and monthly utility coordination meetings (see also 00180.42);
- Maintain and re-establish utility location marks according to OAR 952-001-0090(3)(a). Coordinate re-establishment of the location marks with the associated Utility;
- Determine the exact location before excavating within the tolerance zone according to OAR 952-001-0090(3)(c);
- 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; and
- In addition to the notification required in OAR 952-001-0090(6), notify the Engineer and the Utility as soon as the Contractor discovers any previously unknown Utility conflicts or issues. Contrary to the OAR, stop excavating until directed by the Engineer and allow the Utility a minimum of two weeks to relocate or resolve the previously unknown utility issues.

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.

Add the following subsection:

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

	Contact Person's Name,
114:11:4.7	Email, and Phone Number
Utility	
Northwest Natural (NWN)	Jerry Vaughn
	idv@nwnatural.com
	503-703-6842
Clackamas Water	Kyle Bean
Environmental Services	kbean@clackamas.us
(WES)	971-284-7199
	T. 12
	Tim Kay
	timkay@clackamas.us
	971-804-1003
City of Portland Sewer-Storm	Daniel Jenkins
	daniel.jenkins@portlandoregon.gov
	503-823-8736
Clackamas River Water	Jon Sleight
(CRW)	jsleight@crwater.com
	503-793-2494
	Reese Foxworthy
	rfoxworthy@crwater.com
	503-793-1096
	Josh Nyseth
	jnyseth@crwater.com
	503-793-2482
City of Milwaukie (water)	Jeff Tolentino
	tolentinoj@milwaukieoregon.gov
	503-786-7544

The Contractor shall notify, in writing, the Utilities listed above, with a copy to the Engineer, at least 14 Calendar Days before beginning Work on the Project.

## (Northwest Natural Gas) - Gas Utilities -

The Gas Utility operates a high-pressure gas pipeline within the Project limits and requires an On-Site safety watcher, at no cost to the Contractor.

When operating equipment directly above the high-pressure gas pipeline, the Contractor shall keep equipment on the paved surfaces only.

In the immediate area of the high-pressure gas lines, when moving any equipment, excavating, driving piles, pounding guardrail posts, boring, or other road construction activities, the Contractor shall increase the Reasonable Accuracy Zone from 24 inches, as defined in OAR 952-001-010, to 10 feet. Exceptions require written approval from the Gas Utility. The Contractor shall provide the Engineer a copy of the written approval of the exception before beginning Work.

In the event of an emergency, and in addition to the calls required by the Utilities notification system, the Contractor shall call:

□ Northwest Natural Gas 1-800-882-3377

Add the following subsection:

## 00150.50(g) Utility Information (Anticipated Relocations):

The following organizations may be adjusting Utilities within the limits of the Project during the period of the Contract with relocation Work estimated to be completed by the following dates and times:

Subsection	Utility	Contact Person's Name, Email, and Phone Number	Estimated Completion Date
00150.50(g)(1)	PGE	Chris Quines <u>chris.quines@pgn.com</u> 503-522-8103	August 2025
00150.50(g)(2)	Lumen	Scott Larson (Pearce Services LLC) scott.larson@pearce- services.com 612-916-4339	August 2025
00150.50(g)(3)	Comcast	Todd Royer todd royer@comcast.com 971-801-5610	August 2025

## (1) (PGE) - "Power Supplier":

The Contractor shall notify the Power Supplier(s) in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the power line(s).

The Contractor shall notify the Power Supplier in writing, with a copy to the Engineer, 7 Calendar Days before the Contractor is scheduled to begin performing roadway

widening at Stanley Avenue. After the Power Supplier receives the notification, the Contractor shall then allow the Power Supplier 10 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing roadway earthwork, paving, and aggregate shoulder work.

Energized power lines overhang portions of the Work with a minimum vertical clearance of 18 feet. The Contractor shall maintain at least 10 feet of safety clearance. Exceptions require written approval from the Power Supplier(s) and may require an On-Site safety watcher, at no cost to the Contractor. The Contractor shall provide the Engineer a copy of the written approval of exception before beginning work.

## (2) (Lumen) - "Telecommunication Utility":

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Telecommunication Utility facilities.

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 7 Calendar Days before the Contractor is scheduled to begin performing roadway widening at Stanley Avenue. After the Telecommunication Utility receives the notification, the Contractor shall then allow the Telecommunication Utility 10 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing roadway earthwork, paving, and aggregate shoulder work.

## (3) (Comcast) - "Telecommunication Utility":

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, at least 14 Calendar Days before beginning Work within 10 feet of the Telecommunication Utility facilities.

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 7 Calendar Days before the Contractor is scheduled to begin performing roadway widening at Stanley Avenue. After the Telecommunication Utility receives the notification, the Contractor shall then allow the Telecommunication Utility 10 Calendar Days to schedule and complete the relocation and adjustment work before the Contractor begins performing roadway earthwork, paving, and aggregate shoulder work.

**00150.55 Cooperation with Other Contractors** - Add the following to the end of this subsection:

The following contract work will be ongoing within the Project site during the following times:

## **Contract Name (Contractor's Name)**

Estimated Times (From - To)

SE Johnson Creek Blvd. - 79<sup>th</sup> Place to 82<sup>nd</sup> Ave.(TBD)
Intersection Improvements

Feb 2025 to Dec 31, 2025

Contractor: TBD

County Contact: Joel Howie, 503-742-4658

**00150.60(a) Load and Speed Restrictions for Construction Vehicles and Equipment** - Add the following bullet to the end of the bullet list:

• The Contractor shall restrict the combined weights of construction vehicles, Equipment, and Materials on Bridges according to 00220.45.

# **00150.70 Detrimental Operations** – Add the following:

Portions of this project might 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 videotape showing private property, if any, which may be disturbed during construction.

# **SECTION 00160 – SOURCE OF MATERIALS**

Comply with Section 00160 of the Standard Specifications supplemented and/or modified as follows:

**00160.20(a)** Buy America – Delete this section and replace with the following: Federal highway funds are NOT involved on this Project.

## **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 MFTP on its projects:

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

The County follows the NTMAG on its projects.

## SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES

Comply with Section 00170 of the Standard Specifications supplemented and/or modified as follows:

# **00170.02 Permits, Licenses, and Taxes** – Add the following:

This project is to be constructed in City of Milwaukie and Clackamas County road right of way and streets. For portions of the project within the City of Milwaukie, the Contractor shall obtain and pay for a City of Milwaukie Right-of-Way Permit to occupy any portion of City right-of-way, including installing traffic control measures and placement of advance traffic control devices.

A Non-Park Use Permit (NPUP) from Portland Parks & Recreation (PP&R) is required for work within the Springwater Corridor. The Contractor shall contact PP&R to update, obtain, and pay for the NPUP as required. Clackamas County and its contractor will be collectively listed as the "permittee" for access to PP&R property to perform the respective scope of work.

## **00170.03** Furnishing Right-of-Way and Permits – Add the following:

 The Contactor must comply with all special requirements of the written agreements between the County and the Property Owners for work on Private property within the limits of the Temporary Construction Easements (TCE's) or as established by the rightof-entries signed by the property owners. Copies of these agreements are available from Clackamas County upon request.

File No.	Site Address
1	4600 SE Harney Dr, Portland, 97206
2	4600 SE Harney Dr, Portland, 97206
3	5001 SE Johnson Creek Blvd, Milwaukie, 97222
4	5721 SE Johnson Creek Blvd, Portland, 97206
6	6001 SE Johnson Creek Blvd, Portland, 97206
7	6021 SE Johnson Creek Blvd, Portland, 97206
8	9285 SE 58th Dr, Portland, 97206
10	6101 SE Johnson Creek Blvd, Portland, 97206
11	6391 SE Johnson Creek Blvd, Portland, 97206
12	No Situs (Tax Lot No. 12E29BC07400)
13	No Situs (Springwater Corridor, Tax Lot No. 12E29BD07500)
15	9180 SE 74th Ave, Portland, 97206
18	7000 SE Johnson Creek Blvd, Portland, 97206
19	9300 SE Bell Ave, Milwaukie, 97222
21	No Situs (Springwater Corridor, Tax Lot No. 12E29BC00901)
23	No Situs (Springwater Corridor, Tax Lot No. 12E30AC06100)
28	6803 SE Johnson Creek Blvd, Portland, 97206

• The Contractor shall not store materials or equipment within project TCE's unless specifically approved by the County.

**00170.61(a) Workers' Compensation** - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall provide workers' compensation coverage for on-the-job injuries as required by 00170.70(e).

**00170.65(b)(1) Minimum Wage Rates** – Replace the paragraph that begins "The Bureau of Labor and Industries (BOLI) ..." with the following paragraph:

The Bureau of Labor and Industries (BOLI) determines and publishes the existing State prevailing wage rates in the publication *Prevailing Wage Rates for Public Works Contracts*. The Contractor shall pay workers not less than the specified minimum hourly wage rate according to ORS 279C.838 and ORS 279C.840, and shall include this requirement in all subcontracts.

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

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

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

The Contractor shall require that all subcontractors of any tier provide insurance coverage (including additional insured provisions) and limits identical to the insurance required of the Contractor under this contract, unless this requirement is expressly modified or waived by the Agency in writing.

**00170.70(d) Additional Insured** - Replace the paragraph that begins "The liability insurance coverages of 00170.70(a)..." with the following paragraph:

The liability insurance coverages of 00170.70(a) shall include an Additional Insured Endorsement endorsing the "State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation, and their respective officers, members, agents, and employees" as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance. The liability coverages of 00170.70(a) that are permitted

by the Agency to be obtained by an appropriate Subcontractor shall include all of the foregoing as Additional Insureds and shall also include the Contractor and its officers and employees as Additional Insureds.

- Clackamas County and its officers, agents, and employees
- Clackamas County Board of Commissioners
- City of Milwaukie
- Consor North America, Inc.

# **00170.72 Indemnity/Hold Harmless** – Delete and replace with the following:

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
- Consor North America, Inc.

**00170.85(b-1)** Contractor Warranty for Specific Items – This subsection does not apply:

#### **SECTION 00180 – PROSECUTION AND PROGRESS**

Comply with Section 00180 of the Standard Specifications supplemented and/or modified as follows:

**O0180.06** Assignment of Funds Due Under the Contract - Delete first bulleted item.

**Subcontracting** - Add the following to subsection (a):

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.

**00180.40 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 or starting nighttime work.

**00180.40(b) On-Site Work** – Add the following bulleted item:

• Conduct a Traffic Control Meeting per Section 00221.08.

Add the following paragraph to the end of the subsection:

The Contractor shall not begin On-Site Work before April 28, 2025, unless approved by the Engineer.

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
	On-Site Work	00180.40(b)
	Contract Time	00180.50(h)
	Right-of-Way and Access Delays	00180.65
Closed Lanes	00220.40(e)(1)	
	Special Events	00220.40(e)(2)(b)
	Limited Duration Road Closure	00220.40(f)
	Noise Control	00290.32
	Maintenance Under Traffic	00620.43
	Opening Sections to Traffic	00744.51

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

# **00180.41** Project Work Schedules – 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.

After the paragraph that begins "The Contractor shall submit a Project Work schedule meeting the requirements..." add the following paragraphs:

Submit an overall sequencing and phasing plan showing the timeline for construction of all curb ramps. Submit a list of individual curb ramps or groups of curb ramps to include in the schedule for approval by the Engineer.

The Contractor shall include the following curb ramp tasks in the Project Work schedule:

- Contractor initial site visit(s) for ramp existing conditions;
- Submittal of Working Drawings for each ramp, submitted to the Agency according to 00759.03(c);
- Submittal of Curb Ramp Plan(s); and
- Preplacement Conference(s).

In the paragraph that begins "The Contractor shall submit a supplemental "look ahead" Project Work schedule each week to the Engineer." add the following bullets to the end of the bullet list:

- Identify date of curb ramp site visit to include Contractor and Agency, to review Working Drawings;
- Identify curb ramp resubmittal of Working Drawings, as required according to 00759.03;
- Identify the anticipated date of curb ramp closure;
- Identify the field markings for excavation limits for curb ramps;
- Identify when the curb ramp formwork begins;
- · Identify when the curb ramp Concrete placement begins; and
- Identify the anticipated opening curb ramp date.

#### **00180.42** Preconstruction Conference - Add the following:

Following the Preconstruction Conference, before beginning On-Site Work, Contractor shall prepare for and attend a traffic control meeting per Section 00221.

The Contractor shall conduct a group Utilities scheduling meeting with representatives from the Utility companies involved with this Project and the Engineer before the preconstruction

conference. The Contractor shall incorporate the Utilities time needs into the Contractor's schedule submitted at the preconstruction 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.

Add the following subsection:

00180.50(h) Contract Time - There is one Contract Time on this Project as follows:

The Contractor shall complete all Work to be done under the Contract, except for seeding establishment, not later than June 30, 2026.

## **00180.65** Right-of-Way and Access Delays - Add the following paragraph:

There are possible Right-of-Way delays on this project. Files 1, 2, and 3 are not currently available. Refer to 00170.03 for corresponding addresses for each file. Contractor to assume these properties will not be available until August 1, 2025.

## **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)(1) Single Contract Time - Replace this subsection, except for the subsection number and title, with the following:

The Liquidated Damages per Calendar Day\* are 15.0 percent of C divided by T as defined in this Section.

C = The Contractor's Bid amount for the Contract.

T = The total Calendar Days between the latest completion date or time listed under 00180.50(h) in the Solicitation Documents and the Bid Opening that will result in the greatest value for T.

\* 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 - Lane closures 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 Lanes are closed beyond the limits listed in 00220.40(e) or 00220.40(f). 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) or 00220.40(f).

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).

Add the following subsection:

**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.

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).

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

**00180.95 Payment** – Payment for workplace harassment prevention plan will be paid for at the Contract lump sum amount for the item "Workplace Harassment Prevention Plan". Payment will be in-full for developing and implementing the plan during construction of the project, in-person training, developing meaningful policies, and investigating incidents.

# **SECTION 00190 - MEASUREMENT OF PAY QUANTITIES**

Comply with Section 00190 of the Standard Specifications supplemented and/or modified as follows:

**00190.20(g)** Agency-Provided Weigh Technician: Delete and replace subsection (g) with the following:

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

## **SECTION 00195 - PAYMENT**

Comply with Section 00195 of the Standard Specifications supplemented and/or modified as follows:

**O0195.12** 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** – Add the following:

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(a)(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 Delete the section and replace with the following:
- (2) Value of Material on Hand The Contractor will make an estimate of the amount and value of acceptable material to be incorporated in the completed work which has been delivered and stored as given in 00195.60(a) for review and approval.
- **(4) Limitations on Value of Work Accomplished** In the first sentence, change "Engineer's estimate" to "Contractor's reviewed estimate".
- **00195.50 (b) Retainage** Delete the first paragraph and replace with:

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)(1) Cash, Alternate A** – Replace this subsection, except for the subsection number and title, with the following:

Retainage will be deducted from progress payments and held by the Agency until final payment is made according to 00195.90, unless otherwise specified in the Contract.

Except as otherwise provided, the Agency will deposit the cash retainage withheld in an interest bearing account, established through the State Treasurer for the benefit of the Agency, as required by ORS 279C.560(5). Interest earned on the account shall accrue to the Contractor. Amounts retained and interest earned will be included in the final payment made according to 00195.90, unless otherwise specified in the Contract.

Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

**00195.50(c)(2) Cash, Alternate B (Retainage Surety Bond)** - Replace this subsection, except for the subsection number and title, with the following:

The Contractor may submit a Surety bond in lieu of all or a portion of the retainage required under the Contract. The Agency will accept this Surety bond unless the Agency first finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560(1)(c).

The Surety bond must be in substantially the form specified in ORS 701.435 (4) (Oregon House Bill 4006, 2024), and executed by a Surety bonding company that is authorized to transact Surety business in the State of Oregon and may not be a Surety obligation of an individual. The Surety bond and any proceeds of the Surety bond must be made subject to all claims and liens and in the same manner and priority specified for retainage under ORS 279C.550 to 279C.570 and ORS 279C.600 to 279C.625. Agency will reduce the cash retainage held by an amount equal to the value of the Surety bond and pay the amount of the reduction to Contractor according to ORS 279C.570. Any retainage withheld on Work performed by a Subcontractor will be released to the Contractor according to 00195.50(d).

When the Agency accepts a Surety bond in lieu of retainage from the Contractor, the Contractor shall accept Surety bonds from Subcontractors or Suppliers from which the Contractor has withheld retainage. At any time before final payment a Subcontractor may submit a Surety bond to the Contractor and request that the Contractor submit a Surety bond as described above for the portion of the Contractor's retainage that pertains to the Subcontractor. The Surety bond the Subcontractor provides to the Contractor must meet the Agency requirements specified in the paragraph above. When a Contractor at a Subcontractor's request obtains and submits a Surety bond under this subsection, the Contractor may withhold from payments to the Subcontractor an amount equivalent to the portion of the Contractor's Surety bond premium for which the Subcontractor is responsible in accordance with ORS 279C.560 (Oregon House Bill 4006, 2024).

Within 30 Days after a Subcontractor's request the Contractor shall provide a Surety bond as described above, and the Agency will accept the Surety bond unless:

- the Agency finds in writing good cause for rejection based on unique project circumstances in accordance with ORS 279C.560;
- a Surety bond is not commercially available;
- the Subcontractor refuses to pay to the Contractor the Subcontractor's portion of the Surety bond premium; or

• the Subcontractor refuses to provide the Contractor with a Surety bond that meets the requirements of ORS 279C.560(1)(b).

Notwithstanding 00195.50(d), within 30 Days of receiving a Surety bond from Contractor at a Subcontractor's or Supplier's request, Agency will release to the Contractor the amount held as retainage that is equivalent to the amount the Contractor submitted as a Surety bond. Contractor shall, within 30 Days after receiving a Surety bond from a Subcontractor or Supplier, release to the Subcontractor or Supplier the amount the Contractor holds as retainage that is equivalent to the amount of the Surety bond submitted, in accordance with ORS 279C.560(8).

**00195.50(c)(3) Bonds, Securities, and Other Instruments** - Replace this subsection, except for the subsection number and title, with the following:

Contractor may deposit bonds, securities or other instruments with the Agency or in a bank or other financial institution, to be held by Agency instead of cash retainage for the benefit of the Agency, which the Agency will accept unless the Agency first finds in writing good cause for rejection based on unique project circumstances, in accordance with ORS 279C.560(1)(c).

If the Contractor deposits bonds, securities or other instruments, and Agency does not reject the bonds, securities or other instruments as permitted by ORS 279C.560(1)(c), the Agency will reduce the cash retainage by an amount equal to the value of the bonds, securities and other instruments. Interest or earnings on the bonds, securities and other instruments accrue to the Contractor.

Bonds, securities and other instruments deposited instead of cash retainage shall be of a character approved by the Director of the Oregon Department of Administrative Services, including, but not limited to:

- Bills, certificates, notes or bonds of the United States;
- Other obligations of the United States or agencies of the United States:
- Obligations of a corporation wholly owned by the federal government;
- Indebtedness of the Federal National Mortgage Association;
- General obligation bonds of the State of Oregon or a political subdivision of the State of Oregon;
- Irrevocable letters of credit issued by an insured institution, as defined in ORS 706.008.

**00195.50(f) Prompt Payment Policy** - Replace this subsection, except for the subsection number and title, with the following:

Payments shall be made promptly according to ORS 279C.560, ORS 279C.570, ORS 279C.580 and other applicable legal requirements.

# SECTION 00196 - PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the Standard Specifications supplemented and/or modified as follows:

# **00196.91** Extra Work Allowance – Add the following new 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.

# SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK

Comply with Section 00197 of the Standard Specifications.

# SECTION 00199 - DISAGREEMENTS, PROTESTS AND CLAIMS

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

**O0199.40** Claim Decision; Review; Exhaustion of Administrative Remedies - Delete the entire section and replace 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.

#### **SECTION 00210 - MOBILIZATION**

Comply with Section 00210 of the Standard Specifications.

#### SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

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

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

- When 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 500-foot spacings. Install a "BUMP" (W8-1) sign 100 feet prior to the transverse paving edge.
- Protect pedestrians in pole base excavation areas by placing approved covers over all
  pole base excavations. Place a minimum of two B(II)LR barricades adjacent to and on
  either side of the excavated area, facing pedestrian traffic, or place covers and
  barricades as directed.
- Allow unrestricted vehicle and pedestrian access to all properties outside the allowable working hours.
- Open all lanes and adjacent asphalt surfaces (including shoulders and bike lanes) on all streets outside of allowable working or lane restriction hours with temporary or permanent pavement surfacing.
- Provide and maintain access to garbage containers and garbage pick-up, mail and other regularly scheduled deliveries. Coordinate with school districts and with public transit to minimize impacts and delays for any school and public bus routes. Coordinate Work with delivery schedules for business with driveway access along SE Johnson Creek Boulevard and SE Bell Avenue.
- Notify all emergency services of all changes to the traffic control prior to completing the change. Notify the Police and Fire of all lane closures.
- When paving operation Work requires signal shutoffs, do not shutoff the signal at the adjacent intersection upstream or downstream of the Work.

 Provide Precision Cast Parts advance notification of no less than 2 weeks prior to temporary impacts or closures of access points.

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

 Refer to Permit of Entry for Park Property between the Portland Parks & Recreation and Clackamas County for Temporary Pedestrian Accessible Routes within the Springwater Corridor.

Add the following subsections:

**00220.03 (c) Work Zone Notifications** - The County will provide an electronic door-hanger template for the Contractor to add schedule information. The Contractor shall provide and deliver door-hanger notifications to properties surrounding the street to be paved. The County will provide a map showing the specific properties where door hangers are to be hung. Door-hangers shall be marked with the dates and times that the street and/or its traffic would be significantly affected. Door-hangers shall be delivered 72 hours before traffic would be significantly impacted on that street. In the event of a significant schedule change, door-hangers shall be redelivered with the revised work dates/times 24 hours before significant street impacts. Work may be suspended if timely notification has not been provided.

Provide Precision Cast Parts advance notification of no less than 2 weeks prior to temporary impacts or closures of access points.

# 00220.03 (d) Traffic Signals -

- Traffic signal outages/turn-offs are not allowed weekdays between the hours of 7:00 a.m. and 9:00 a.m. and between 3:00 p.m. and 6:00 p.m.
- Provide a minimum 48-business hours notification before any signal shutoff. Contact Aaron Gooderham, Clackamas County Lead Signal Electrician at 971-413-1552 and agooderham@clackamas.us.
- Provide a minimum two-week notification before any temporary traffic control requiring signal operational changes. Contact Carl Olson, Clackamas County Traffic Engineer at 503-742-4684 and colson@clackamas.us.
- Existing vehicle detection shall be operational to the fullest extent possible at all times during construction. Vehicle detection downtime is limited to maximum 48 hours at a time unless otherwise approved. Contact Carl Olson, Clackamas County Traffic Engineer at 503-742-4684 and <a href="mailto:colson@clackamas.us">colson@clackamas.us</a> a minimum of two-weeks prior to any traffic signal impacts requiring vehicle detection downtime.
- Provide minimum two weeks notification before any disruption to any existing fiber optic
  communications systems. Contact Carl Olson, Clackamas County Traffic Engineer at
  503-742-4684 and colson@clackamas.us for disruptions to the existing Clackamas
  County network. Contact Duke Dexter, Clackamas Broadband Exchange at 503-7226663 and dexter@clackamas.us for disruptions to the existing Clackamas Broadband
  Exchange (CBX) network. Fiber optic systems downtime is limited to a maximum of 8
  hours unless otherwise approved.

- Provide minimum two weeks notification before any disruption to any pan-tilt-zoom camera and associated equipment. Contact Carl Olson, Clackamas County Traffic Engineer at 503-742-4684 and <u>colson@clackamas.us</u>, and Aaron Gooderham, <u>agooderham@clackamas.us</u>, at least two weeks prior to starting any work that impacts existing pan-tilt-zoom cameras and associated equipment.
- Provide a minimum of two weeks notification before any disruption to any existing roadway illumination systems. Contact Wendi Coryell at Clackamas County, 503-742-4657 and <a href="wendicor@clackamas.us">wendicor@clackamas.us</a> prior to starting any work impacting existing roadway illumination systems.

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

Traffic Lanes and respective adjacent roadway approaches may be closed when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2):

#### SE Bell Ave:

- One-lane, 2-way flagging not allowed weekdays between the hours of 7:00 a.m. and 9:00 a.m. and between 3:00 p.m. and 6:00 p.m.
- SE Johnson Creek Blvd (west of and including intersection of SE Stanley Ave):
  - o One-lane, 2-way flagging not allowed weekdays between the hours of 7:00 a.m. and 9:00 a.m. and between 3:00 p.m. and 6:00 p.m.
- SE Johnson Creek Blvd (east of intersection of SE Stanley Ave):
  - One-lane, 2-way flagging not allowed weekdays between the hours of 7:00 a.m. and 9:00 a.m. and between 3:00 p.m. and 6:00 p.m.
  - Daytime median lane closure and shifting traffic is allowed for SE Johnson Creek Blvd.

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

The following special events will occur during this Project:

• August 22<sup>nd</sup> and 23<sup>rd</sup>, 2025 – Hood to Coast (utilizes Springwater Corridor Trail)

**00220.40(f)** Limited Duration Road Closure - Unsignalized side streets may be closed to traffic during the periods of time noted in 00220.40(e)(1), as long as a detour plan has been approved by the Engineer and the City of Milwaukie. When a business park or neighborhood has only one street outlet, maintain two-way traffic at all times. Road closures shall not exceed 14 days for each side street to construct improvements.

Add the following subsection:

**00220.41 Bridge Work** - Before starting any grading or Pavement removal at Bridge ends or removal of Pavement from Bridge decks, arrange so that all Equipment, labor, and Materials required to complete the Pavement replacement Work are on hand or are guaranteed to be delivered. Once grading and Pavement removal begins, vigorously prosecute and complete this Work. Complete paving Work in the shortest possible time.

Temporarily taper or bevel longitudinal and transverse grade changes or drop-offs resulting from grading and Pavement removal Work with asphalt concrete mixture to provide a smooth and safe transition. Construct tapers according to 00620.40.

Add the following subsection:

**00220.45** Load Restrictions on Bridges - For Structure No. 20408 (bridge over Johnson Creek near SE 70<sup>th</sup> Ave), limit the combined weight of construction vehicles, Equipment, and daily Material usage to 65,000 pounds for every 1,000 square feet of surface area plus the weight of long term storage of Materials to 25,000 pounds for every 100 square feet of surface area of the Bridge or a total of 200,000 pounds for each span of the Bridge, whichever is less.

The Contractor may request alternate loadings by submitting, 30 Calendar Days before proposed loadings, stamped loading calculations and data according to 00150.35.

**00220.60(a)(1)** Contractor Responsibility - In the paragraph that begins "Do the following at no additional...", add the following bullet to the end of the bullet list:

- Keep surfaces being used by bicycles and pedestrians free of all dirt, mud, gravel and other harmful materials. Surfaces include bike paths, bike lanes, roadway shoulders or the outside 4 feet of the roadway.
- Vacuum sweep loose aggregate, soil and other materials on the roadway out of the travel ways at the end of each day. Swept materials shall be removed by broom, or other means to prevent pollution of the storm sewer system or receiving streams.

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

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

**00221.03 Traffic Safety and Operations** – Add the following bullet:

All work zones exceeding 500 feet in length shall require the use of a pilot car.
During pilot car operations, install a 15-inch by 24-inch "WAIT FOR PILOT CAR:
(CR4-20) sign at each driveway approach within the limits of the pilot car operation.

**00221.06 Traffic Control Plan** - Replace this subsection with the following subsection:

00221.06 Traffic Control Plan and Tourist-Oriented Directional and Business Logo Signs –

(a) Traffic Control Plan - The Contractor is required to submit a site-specific traffic control plan prepared by a TCP company, with additional detail meeting the project requirements for review 5 Calendar Days before the preconstruction conference.

The request shall meet all requirements of the Contract documents and include the following information:

- Stamped Working Drawings according to 00150.35 that include the proposed TCP showing all TCM and quantities of TCD.
- A TPAR plan that includes:
  - Details and features used to provide pedestrian accessibility.
  - Pedestrian staging Plans at a scale no smaller than 1 inch = 50 feet.
  - Temporary alternate facilities (including use of temporary pushbuttons) or detour routes for pedestrian traffic.
- Staging sequences and details for Work affecting vehicular, pedestrian, and bicycle traffic.
- Proposed order and duration of the TCM.
- A detailed temporary striping plan.

Once a TCP has been accepted by the Engineer, any additional modifications must be submitted by the Contractor for Agency review following the procedure described above. The Engineer is not obligated to consider additional modifications to a previously approved TCP.

- **(b) Tourist-Oriented Directional and Business Logo Signs** Submit one of the following for approval, at least 5 Calendar Days before the preconstruction conference:
  - (1) No Signs If there are no tourist-oriented directional (TOD) or business logo signs on the Project, a written notification that no TOD or business logo signs exist within the Project limits or
  - (2) Signs Submit one copy of a sketch map of the Project showing all existing TOD and business logo signs and a written narrative describing how these signs will be kept in service and protected throughout all the construction stages. If modifications are necessary, submit updated information to the Engineer for approval at least 21 Calendar Days before the change is needed.

#### Add the following subsection:

**00221.08 Traffic Control Meeting** - All personnel who will directly supervise the traffic control must attend the traffic control meeting per Section 00180.40(b). Contractor to produce and distribute meeting minutes within seven (7) days following the meeting.

**00221.98 Payment, Method "B" Lump Sum Basis**: Replace this subsection except for the heading and title with the following:

Work zone traffic control will be paid for at the Contract lump sum amounts for the item "Temporary Work Zone Traffic Control, Complete". This Work includes Work specified in the following Sections: 00222, 00223, 00224, 00225, 00226, 00227, and 00228.

When the schedule of items includes both "Temporary Work Zone Traffic Control, Complete" and other unit based pay items described in Payment, Method "A", only the pay items included in the bid item schedule will be paid. All TCD and operations required to safely protect and direct traffic around and through the work zone(s) not listed in the bid

item schedule shall be included in the lump sum price for "Temporary Work Zone Traffic Control, Complete".

Payment includes all traffic control costs including flagging (to the extent deemed necessary by the Engineer) during the course of construction and as needed to complete punchlist items. Payment also includes the removal of existing striping and legends shown to be replaced.

No separate or additional payment will be made for any necessary temporary pedestrian pushbuttons.

## **SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS**

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

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

- Install "BUSINESS OPEN DURING CONSTRUCTION" signs where indicated in Plans.
- At least ten Calendar Days before closing a pedestrian pathway or sidewalks, place a
  "SIDEWALK CLOSED, Full Time" (CW11-4) sign in advance of each future closure
  point. Locate the sign so it is legible from the nearest alternate pedestrian pathway
  facing incoming pedestrian traffic. The sign may be mounted between the panels of a
  Type II barricade or on a single-post TSS. Do not place the sign or sign support such
  that it narrows the pedestrian pathway to a width of less than 4 feet.
- Before opening the TPAR, place TPAR signing and other TCM as shown, or as directed. Maintain the "SIDEWALK CLOSED, Full Time" (CW11-4) signs while the TPAR is open to pedestrian traffic.
- Install "ROAD WORK AHEAD" (W20-1-48) signs with a 36 by 24-inch "FINES DOUBLE" (R2-6aP) rider on SE Johnson Creek Blvd and intersecting side streets, according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans except do not install the "FINES DOUBLE" rider on concrete barrier mounted signs.
- Install beyond each end of the Project, facing outgoing traffic on SE Johnson Creek Blvd and intersecting side streets, an "END ROAD WORK" (CG20-2A-24) sign a distance of (A ÷ 2) according to the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Plans.
- Install two sign flag boards, as shown on the Standard Drawings, above the following detour and road closed advance warning signs, where applicable:
  - "DETOUR AHEAD", "DETOUR XXXX FT", "DETOUR X/X MILE" (W20-2) signs.
  - "ROAD CLOSED AHEAD", "ROAD CLOSED XXXX FT", "ROAD CLOSED X/X MILE" (W20-3) signs.
- Install an 18 by 24-inch "NO PARKING" (R8-3a) sign in every block where on-street parking is prohibited, facing incoming traffic.
- Install a "PAVING SIGN" on a single wood post. Place this Project Information Sign according to sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings or as modified by the Supplemental Drawings, in advance of the "ROAD WORK AHEAD" sign at each end of the Project on SE Johnson Creek Blvd and SE

Bell Ave; and each signalized intersection, facing incoming traffic. See project Plans for sign size and legend.

- All work zones exceeding 500 feet in length shall require the use of a pilot car. During pilot car operations, install a 15-inch by 24-inch "WAIT FOR PILOT CAR: (CR4-20) sign at each driveway approach within the limits of the pilot car operation.
- When construction requires bicycles to use the Traffic Lanes, install a "Bicycle ON ROADWAY" (CW11-1) symbol sign on 1/2 mile spacing through the affected area.
   Keep the signs in place until completion of the Shoulder or bikeway final surface.
- When construction requires bicycles to use the Traffic Lanes on Structures, install a
  "Bicycle ON ROADWAY" (CW11-1) symbol sign according to "Sign Spacing A", from
  the "TRAFFIC CONTROL DEVICES SPACING TABLE" shown on the Standard
  Drawings, in advance of the Structure or the initial point where the bicycle facility is
  impacted by construction. Keep the signs in place until completion of the bikeway final
  surface.
- For each location of the "WAIT FOR PILOT CAR" sign, closely monitor for traffic compliance, operation, and safety at least once per hour during pilot car operations. If operational issues are observed, or if notified of operational issues, at stop-controlled accesses or side roads utilizing the "WAIT FOR PILOT CAR" (CR4-20) sign, remove the sign and replace it with a flagger.

**00222.45(b)** Portable Changeable Message – Add the following bullets to the end of the bullet list:

- Furnish and operate seven (7) PCMS in total:
  - Two (2) for work on SE Johnson Creek Boulevard
  - o Two (2) at Linwood/Flavel intersection with SE Johnson Creek Boulevard
  - One (1) for SE Bell Avenue south approach to Johnson Creek Boulevard
  - Two (2) for SE Alberta Avenue east and west approaches to SE Bell Avenue
- Install PCMS fourteen Calendar Days prior to lane closures.
- Place PCMS at an approved location and displaying an approved message, or as directed.

## **00222.90 Payment -** Add the following pay items:

(e) Temporary Project Information Signs...... Square Foot

Add the following after the sentence that begins "In item (d)":

Item (e) includes installing and removing temporary project information signs shown in the Plans.

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

Comply with Section 00223 of the Standard Specifications.

#### SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES

Comply with Section 00224 of the Standard Specifications.

#### **SECTION 00225 - TEMPORARY PAVEMENT MARKINGS**

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

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

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

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

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

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

### SECTION 00226 - TEMPORARY ROADSIDE BARRIERS AND IMPACT ATTENUATORS

Comply with Section 00226 of the Standard Specifications.

## SECTION 00228 - TEMPORARY PEDESTRIAN AND BICYCLIST ROUTING

Comply with Section 00228 of the Standard Specifications, modified as follows:

**00228.90 Payment**: Add the following to the list of items with no separate or additional payment to be made for:

Temporary pedestrian pushbuttons

#### **SECTION 00280 - EROSION AND SEDIMENT CONTROL**

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

**00280.00 Scope** - Replace the paragraph that begins "This Work also consists of providing temporary ..." with the following paragraph:

This Work also consists of providing temporary erosion and sediment control (ESC) measures and furnishing, installing, moving, operating, maintaining, inspecting, and removing ESC throughout the Project area according to the Standard Drawings, the erosion and sediment control plan (ESCP), the Specifications, or as directed, until the site is permanently stabilized. Included also is the monitoring of weather, of stormwater and receiving waters, the reporting of monitoring observations, the reporting of corrective actions (when necessary) and the updates and revisions of the ESCP, including ESCP cover sheet, necessary to keep it representative of current site conditions and compliant with the 1200-CA permit if applicable.

Delete the paragraph that begins "When contaminants, pollutants or hazardous materials...".

Add the following paragraph to the end of this subsection:

The Agency's NPDES 1200-CA permit is not applicable to this Project. Comply with all applicable conditions of this Section.

**00280.06 Erosion and Sediment Control Manager** - Delete this subsection.

**00280.62 Inspecting and Monitoring** – Delete the paragraph that begins "Inspect the Project Site...".

**00280.62(a) Inspection** - Replace the paragraph that begins "Perform site inspection, complete..." with the following paragraph:

Inspect the Project Site and all ESC devices for Effective Function and potential erosion or sediment movement and complete all applicable parts of the ODOT Erosion Control Monitoring Form, and submit the form to the Agency as follows:

**00280.64(a) Corrective Action Timelines** – Delete the bullet that begins "If completion of corrective action is not feasible..."

Delete the bullet that begins "Provide a schedule for clean-up and corrective actions..."

Delete the bullet that begins "Provide all corrective action documentation and photographs..."

### **SECTION 00290 - ENVIRONMENTAL PROTECTION**

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

Add the following subsection:

# 00290.30(a)(7) Water Quality:

- Do not discharge water contaminated by pollutants including sediment, drilling fluids and waste, concrete, grout, or water contained within a work area isolation, into any waters of the State or U.S. or conveyances draining thereto until it has been treated using Materials such as those listed in 00280.15 or 00280.16 or by pumping to a vegetated upland location. Do not allow Project discharges to increase the concentration of any pollutant in the receiving water to a level that exceeds the limits prescribed by OAR 340-041.
- Do not use permanent stormwater quality treatment facilities to treat construction runoff unless prescribed by an ESCP approved under Section 00280.
- If construction discharge water is released using an outfall or diffuser port, do not exceed velocities more than 4 feet per second, and do not exceed an aperture size of 1 inch.
- Implement containment measures adequate to prevent pollutants from entering waters
  of the State or U.S. Such pollutants include but are not limited to construction and
  demolition materials, waste spoils, fuel or petroleum products, detergents, silt, welding
  slag and grindings, concrete sawcutting by-products and sandblasting abrasives.
- Do not allow curing concrete or grout to be submerged within waters of the State or U.S. less than 24 hours after placement, except within work area isolation. Do not enddump riprap into the waters of the State or U.S. Place riprap from above the ordinary high water line.
- Monitor weather and streamflow forecasts and conditions to anticipate high flows that may unintentionally inundate any portion of the Project Site.
- If high flow conditions occur or are anticipated to occur that may unintentionally inundate any portion of the Project Site, remove all potentially affected Equipment, Materials, and debris from the potential inundation area. Cease Work in the area until water recedes and the risk of further high water events passes. The Engineer retains the authority to temporarily halt or modify the Work in case of excessive turbidity or damage to natural resources.
- If Work in or around waters of the State or U.S. violate permit conditions or any requirement of this subsection, stop such Work and notify the Engineer.

## **00290.32 Noise Control** - Add the following paragraphs to the end of this subsection:

Review City of Milwaukie Title 8 Health (<a href="http://www.qcode.us/codes/milwaukie/">http://www.qcode.us/codes/milwaukie/</a>) and Safety and Clackamas County Code Section 6 which describe noise control regulations. Obtain and be responsible for necessary permits described in City of Milwaukie and Clackamas County. Contractor shall contact City of Milwaukie Police Department (<a href="mailto:police@milwaukieoregon.gov">police@milwaukieoregon.gov</a>) and update the project Noise Variance (<a href="https://www.milwaukieoregon.gov/police/noise-control-variance">https://www.milwaukieoregon.gov/police/noise-control-variance</a>). Comply with the applicable noise control requirements for Project Work.

Provide minimum 14 calendar days of notice to the respective jurisdiction (City of Milwaukie or Clackamas County), Agency, and the Engineer prior to starting nighttime work.

#### **SECTION 00305 - CONSTRUCTION SURVEY WORK**

Comply with Section 00305 of the Standard Specifications modified as follows:

**00305.00 Scope** – Add the following to the end of this subsection:

In addition to the requirements of the ODOT *Construction Surveying Manual for Contractors*, establish Engineering Stationing for the length of the project. Maintain the stationing so it is visible throughout construction of the project.

Project documents were created using Autodesk AutoCAD 2019 and Autodesk Civil 3D 2019. Any reference to MicroStation and InRoads should be understood to refer to Autodesk products.

The Agency will **not** establish control stations, perform measurements and calculations for pay quantities, or perform final "as constructed" measurements, contrary to Section 1.5 of the above referenced manual. The Contractor's surveyor will be responsible for completing this work if deemed necessary by the Contractor.

Make all supporting computations and field notes required for control of the work and as necessary to establish the exact position, orientation, and elevation of the work from control stations, including furnishing and setting construction stakes and marks, reference marks, and additional control stations.

The Engineer will not be responsible for any data translations. An electronic copy of the base drawing, in autocad ".dwg" format is available to the Contractor's surveyor upon request. The electronic drawings shall be used by the Contactor's surveyor as a reference, and it shall be the responsibility of the Contractor to confirm that all data contained within the electronic drawings is consistent with the contract documents.

The Contractor shall reestablish the existing vertical profile of roadways around major adjustment of manhole areas, as shown and specified on the project Plans. The Contractor shall provide existing grade staking for roadways to complete the major manhole adjustment Work, as shown on the project Plans.

## SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

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

Subsection 00310.45 Removal of Existing Surfaces - This subsection is added:

**00310.45** Removal of Existing Surfaces – Remove sidewalk and surfacings as shown on the Plans. Sidewalk and surfacings to be removed shall be cut in neat, straight lines with vertical edges along the limits of removal. The cut lines for removal of asphaltic or cement concrete pavement shall be reviewed and approved by the Engineer in the field before cutting. Demolish and remove concrete curbs, islands and other surfacings as directed by the Engineer or as shown. Make a vertical saw cut between any hard surface that is to remain

and portion that is to be removed. Remove roadway pavement and aggregate base in the street adjacent to curbs and islands as shown on the Plan or as directed by the Engineer. Remove paved and hardscape areas adjacent to the back of walk as shown on the Plan or as directed by the Engineer.

00310.92 Separate Item Basis - Supplement this subsection with the following

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

Item (d) includes but is not limited to sawcutting; removal of asphalt concrete pavement within and adjacent to curb and curb ramp areas, curbs, curb ramps, sidewalks, driveway and driveway connections, barricades, aggregate base material, hardscaping and other surfacings to the limits and grades necessary to construct surfacings indicated in the plans. Backfill for voids left by surfacing removal work will be considered incidental to this bid item. No separate or additional payment will be made for removal of other features inside the removal of surfacings limits as this work is considered incidental. Any additional excavation to subgrade within the limits of Removal of Surfacings is incidental to this bid item.

Supplement the paragraph that begins "Item (g) includes" with the following:

Sawcutting completed as necessary to phase the work within the pavement rehabilitation limits shown on the plans shall be considered incidental and will not be paid separately.

#### **SECTION 00320 - CLEARING AND GRUBBING**

Comply with Section 00320 of the Standard Specifications modified as follows:

**00320.40(c) Tree and Vegetation Trimming** - Replace the bullet that begins "Trim branches obstructing sight..." with the following bullet:

• Trim and remove branches, vegetation, or other materials obstructing sight distance at intersections or impairing visibility of signs, signals, illumination, and other TCD.

#### **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.

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

Unless otherwise specifically allowed and subject to the requirements of Section 00280, dispose of materials, classed as waste materials in 00330.41(a)(3), outside and beyond the

limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on Wetlands, either public or private, or within 300 feet of rivers or streams.

**00330.41(a)(6) Excavation of Existing Surfaces** - Add the following to the end of this subsection:

Refer to 00310.45 for removal of existing surfaces associated with removal of structures and obstructions.

**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...".

#### **SECTION 00331 - SUBGRADE STABILIZATION**

Comply with Section 00331 of the Standard Specifications.

#### **SECTION 00340 - WATERING**

Comply with Section 00340 of the Standard Specifications.

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

Comply with Section 00350 of the Standard Specifications.

# SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

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

**00405.14** Trench Backfill - Add the following:

For all trenches within the roadway use Class E Backfill. For trenches outside of the roadway use Class B 3/4" - 0 crushed Aggregate backfill or Class E Backfill, except when not under structures or pavements the top 2 feet may be Class A Backfill.

**00405.41(a) Within Paved Areas to be Preserved** - Add the following to the end of this subsection:

Do not use the open excavation method for installing pipes transversely.

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

Comply with Section 00445 of the Standard Specifications.

# SECTION 00470 - MANHOLES, CATCH BASINS, AND INLETS

Comply with Section 00470 of the Standard Specifications modified as follows:

**00470.40(b) Pipe Connections** – Add the following to the end of this subsection:

Provide fittings and/or pipe extensions as necessary to connect existing pipe to final inlet location. This Work is incidental and considered part of Pipe Connections.

**00470.90 Payment** – Add the following to the end of this subsection:

Payment shall include sawcutting, removal of the existing inlet, curb and gutter, and any curb height transitions within the inlet pay limits necessary to complete the Work.

# SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES

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

**00490.01 Descriptive Terms** – Supplement the definition of "Adjust" with the following:

Adjusting structures (manhole rims, valves, boxes, and catch basins) shall also include hand removal of existing asphalt pavement around the structure as required to overlay or inlay the proposed pavement section. Adjusting inlets shall also include additional work associated with maintaining or revising the finish grade surrounding the catch basins to maintain or provide positive drainage.

**00490.48** Adjusting Boxes, Cleanout Lids and Similar Structures – Add the following to the end of this subsection:

A pre-construction monument survey was performed by the Engineer's surveyor prior to construction. The Contractor shall protect all monuments from damage to the maximum extent feasible and install new boxes, where shown in the Plans. The Contractor shall be responsible for installing monument boxes at the exact horizontal location of any monument that has been disturbed. The Engineer's surveyor will reset the vertical location of monuments that are disturbed after construction. Coordination with the Engineer's surveyor and protection of existing monuments shall be incidental to other work under this project.

The Contractor may encounter instances where a utility facility (such as a valve box) has been adjusted by the utility owner and cold mix has been placed around the facility (in paving areas where finish grade equals the existing grade). The Contractor shall remove and dispose of this cold mix, replace it with asphalt concrete pavement, and hand-compact it in advance of the pavement Work. This Work is considered incidental to the box adjustment item on the bid schedule.

Water and gas valve access lids shall only be adjusted by raising/lowering the top section of the existing valve can.

# **00490.90 Payment**: Add the following:

Add the following pay items to the pay item list:

Pay Item Unit of Measurement

Add the following to the end of this subsection:

Item (j) includes removing existing monument boxes and furnishing and installing a new monument box in the same location as the existing box or furnishing and installing a new monument box over an existing monument to complete the work as approved by the Engineer. Coordination with the Engineer's surveyor and protection of existing monuments shall be incidental to other bid items and will not be paid separately under this bid item.

Item (k) includes removal of existing cold mix around boxes when present, and replacement with asphalt concrete pavement as required.

Add the following to the list of items with no separate or additional payment to be made for:

- Sawcutting
- Existing manhole step removal
- Procurement and installation of structure steps
- Grouting of voids, joints, etc. stemming from structure modification work
- Collar pour
- Excavation and backfill of structure
- New manhole cone top

## **SECTION 00495 - TRENCH RESURFACING**

Comply with Section 00495 of the Standard Specifications.

# SECTION 00503 - BRIDGE DECK COLD PLANE PAVEMENT REMOVAL

Comply with Section 00503 of the Standard Specifications modified as follows:

**00503.20 Equipment for Grinding on Bridge Decks** - Add the following to the paragraph that begins "To remove Pavement from bridge decks...":

Limit the gross operational weight of machines to comply with the load limitations of 00220.45. Limit machines to a forward speed of 2.5 feet per minute. Operate at a drum speed of at least 120 RPM.

#### **SECTION 00585 - EXPANSION JOINTS**

**00585.80 Measurement** - Add the following to the end of the subsection:

The estimated quantities of joints are:

Structure	Joint Type	Quantity (Foot)
Bridge No. 20408 028 00060	hot applied joint sealant	325 LF

**00585.90 Payment**: Add the following:

Add the following pay items to the pay item list:

Pay Item	Unit of Measurement
(i) Bridge Joint Rehabilitation	Lump Sum

Add the following to the end of this subsection:

Item (i) includes routing of joints for existing bridge (Bridge No. 20408 028 00060) and corresponding approach slabs, sawcutting, and filling of sawcut joint with hot applied joint sealant per the requirements of 000745.48(c).

#### **SECTION 00620 - COLD PLANE PAVEMENT REMOVAL**

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

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

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

Before beginning paving operations, make repairs to the existing pavement surface as directed according to 00748, 00749, and 00331.

#### SECTION 00640 - AGGREGATE BASE AND SHOULDERS

Comply with Section 00640 of the Standard Specifications.

# SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS

Comply with Section 00641 of the Standard Specifications.

# SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

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

**00730.11 Emulsified Asphalt –** Replace the sentence that begins "Furnish CSS-1, CSS-1h..." with the following sentence:

Furnish CSS-1, CSS-1h, CMS-2, CMS-2S, CMS-2h, CRS-1, CRS-2, HFRS-2, HFMS-2 or HPTC as selected by the Contractor.

**00730.22** Asphalt Distributor – Add the following to the end of this subsection:

Apply emulsified asphalt material to vertical surfaces (curb faces, catch basin faces, butt joints, etc.). Avoid excess tack coat overspray being applied to vertical surfaces. Shields protecting vertical faces shall be provided and used during tacking operations. All overspray shall be promptly removed.

**00730.44 Applying Tack Coat** – Replace the sentence beginning with "Apply the Emulsified Asphalt to the prepared..." with the following:

Apply the emulsified asphalt to the prepared surface at a rate between 0.08 and 0.20 gallons per square yard as directed and with the emulsified asphalt temperature between 140 °F and 185 °F as recommend by the manufacture. Additional application of tack may be required, as directed by the Inspector, to obtain the necessary residual asphalt.

**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.

# **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 Level 3, 1/2" dense asphalt concrete pavement with a minimum lift thickness of 2 inches, and a maximum lift thickness of 3 inches.

- Use performance grade PG 70-22ER Asphalt Cement for wearing course on SE Johnson Creek Blvd.
- Use PG 64-22 Asphalt Cement for wearing Surface on SE Bell Ave and for all roadway base courses. Contractor may use PG 70-22ER Asphalt Cement for wearing surface on SE Bell Ave and for all roadway base courses at no additional cost to the Agency.
- Use PG 64-22 for sacrificial top lift of asphalt pavement repairs, see Section 00748.

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

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

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

**00748.44 Asphalt Concrete** - Add the following to the end of this subsection:

Top lift of asphalt concrete pavement repair is temporary until final grinding operations and placement of final PG 70-22ER top lift. Use PG 64-22 for this temporary/sacrificial top lift, see Section 00744.

**00748.90** Payment - Replace the last sentence of this subsection with the following:

No separate or additional payment will be made for excavation, cold plane Pavement removal, geosynthetics, stone embankment, Aggregate, water, or sawcutting.

# SECTION 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES

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

**00749.91 Payment**: Replace description for item (f) with the following:

Item (f) includes sidewalks, footpaths, narrow strips of asphalt concrete abutting curbs, and traversable shoulders not intended for vehicular use. ACP to be PG 64-22.

# SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

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

**00759.00 Scope** - Replace the paragraph that begins "This Work consists of..." with the following paragraph:

This Work consists of furnishing, placing and finishing Commercial Grade Concrete curbs, concrete curb ramps with curbs, islands, traffic separators, driveways, sidewalks, monolithic curb and sidewalks, thickened-edge curb, miscellaneous surfaces, and stairs in close conformity to the lines, grades and dimensions shown or established.

Add the following subsection:

00759.13 Detectable Guide Strips - Furnish cast-in-place detectable guide strips. Use only adhesives recommended or supplied by the manufacturer. Furnish slip-resistant detectable guide strips from one of the following list of pre-approved products:

Manufacturer Material

**ADA Solutions** 149 South Cucumber St. Jefferson, OH 44047 Phone: (978) 262-9900

24"x24" Cast-in-Place Bar Tile Fiberglass Reinforced Polymer Composite Color: Yellow

Or accepted manufacturer

Or accepted substitution

**00759.50(a)** General - Add the following paragraph to the end of this subsection:

Install detectable guide strips where shown in plans. Place according to the manufacturer's recommendation. Place abutting panels within 1/4-inch of each other and install anchors, as specified by manufacturers, along cut edge. Miter adjacent panels at locations where detectable guide strips change direction. Install detectable guide strips on clean and dry concrete surfaces.

**00759.51 Curing** - Add the following paragraph to the end of this subsection:

Concrete Structures may be opened to Public Traffic before 7 Calendar Days if the concrete has reached a minimum compressive strength of 2,000 psi as verified by the rebound number determined according to ASTM C805. Test at locations as directed.

Add the following paragraph to the end of this subsection:

Do not apply curing compounds to areas designated for detectable guide strip installation.

**00759.90** Payment - Add the following Pay Item to the Pay Item list:

- (o) Detectable Guide Strips, Yellow...... Square Foot
- (p) Sidewalk Thickened Edge.....Linear Foot

Item (o) includes installation of yellow detectable guide strips on a concrete surface.

# SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

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

00850.47(c) Retroreflectivity - Replace the sentence that begins "Except for paint applications..." with the following sentence:

Except for paint and colored lane marking applications, evaluate longitudinal and transverse marking retroreflectivity according to ODOT TM 777.

#### **SECTION 00855 - PAVEMENT MARKERS**

Comply with Section 00855 of the Standard Specifications.

# **SECTION 00856 - SURFACE MOUNTED TUBULAR MARKERS**

Comply with Section 00856 of the Standard Specifications modified as follows:

**00856.00** Scope – Add the following sentence at the end of this this subsection:

Scope also includes Tuff Curb traffic separator curb with tubular marker.

**00856.10 Materials** – Add the following to the end of this this subsection:

Also furnish Tuff Curb traffic separator curb from the following manufacturer or furnish an accepted substitution:

Manufacturer Material

ParkingZone 14208 NW 3<sup>rd</sup> Court, Ste 200 Vancouver, WA 98685 Phone: 1-800-292-7275

https://www.parkingzone.com/xlp-tuff-curb-kit.html

# Construction

**00856.40 General** - Replace this subsection, except for the subsection number and title, with the following:

Install surface mounted tubular markers and Tuff Curb traffic separator curbs straight and true to line at the spacings shown. In addition to bolting the base of the surface mounted tubular marker or Tuff Curb to the surface, bond the surface mounted tubular marker or Tuff Curb to the surface using an adhesive according to the manufacturer's recommendations.

# Measurement

**00856.80 Measurement** – Replace this subsection, except for the subsection number and title, with the following:

The quantities of permanent surface mounted tubular markers and Tuff Curb traffic separator curbs will be measured on a unit basis. Each unit consists of an XLP Tuff Curb Kit with (1) White XLP Tuff Curb, (1) 48" H Tuff Post with (2) Diamond Grade Reflective Stripes, and all hardware necessary for complete installation. No separate measurement will be made for removal and disposal of existing traffic separator curbs.

# **Payment**

XLP Tuff Curb Kit

Color: White

**00856.90** Payment – Add the following after the first paragraph:

The accepted quantities of Tuff Curb traffic separator curbs will be paid for at the Contract unit price, per each, for the item "Tuff Curb Traffic Separator Curbs".

# **SECTION 00858 - SURFACE MOUNTED RUBBER SPEED BUMPS**

Section 00858, which is not a Standard Specification, is included for this project by Special Provision.

# **Description**

**00858.00 Scope** - This Work consists of furnishing and installing surface mounted rubber speed bumps and end caps as shown in the contract plans.

# **Materials**

**00858.10 Materials** - Furnish surface mounted rubber speed bumps from the following manufacturer or furnish an accepted substitution:

Manufacturer Material

TreeTop Products
222 State St.
Batavia, IL 60510

Phone: 1-866-734-0605

Safety-Striped Speed Bumps and End Caps Recycled Rubber, Surface Mount Color: Black and Yellow

https://www.speedbumpsandhumps.com/safety-striped-speed-bump

# Construction

**00858.40 General** - Install surface mounted rubber speed bumps and end caps per manufacturer's recommendations.

# Measurement

**00858.80 Measurement** - The quantities of surface mounted rubber speed bumps will be measured on a unit basis. Each unit consists of a 19-foot bolt down speed bump and two end caps (overall dimensions 231.5"L x 14"W x 2"H), and all bolt-down hardware necessary for complete installation. No separate measurement will be made for removal and disposal of existing speed bumps.

# **Payment**

**00858.90 Payment** - The accepted quantities of Work done under this Section will be paid for at the Contract unit price, per each, for the item "Rubber Speed Bumps".

Payment will be payment in full for furnishing and placing all Materials and for furnishing all Equipment, labor, and Incidentals necessary to complete the Work as specified. End caps are considered incidental to Section 00858.

# SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE

Comply with Section 00865 of the Standard Specifications, modified as follows.

**00865.44** Alignment Layout – Add the following subsection:

**00865.44 Alignment Layout** - Place control points for lines every 50 feet on tangent and every 25 feet on a curve. Using these control points, layout a continuous narrow guideline ("dribble line") for each line, along one edge of, or uniformly offset from the intended permanent line location. Dribble lines to be placed along centerline markings. Where center turn lane is present, dribble lines to be placed for both solid yellow lines. Do not proceed with installation until the dribble line until guidelines are approved by the Engineer.

Dribble lines shall consist of marking the pavement with spots of paint no more than 2 inches in width and not more than 5 feet apart using a striping machine. Dribble lines shall be on a straight line between control points on tangent alignment and on a true arc control points on a curved alignment. Paint for dribble lines shall be the same color as the traffic stripe that will be placed. Do not proceed with installation of pavement markings until dribble lines are approved by the Engineer.

**00865.80 Measurement** – Add the following to the end of this subsection:

The quantities of dribble line will be measured on the length basis. Measurement will be the actual dribble line. Gaps between dribble marks will be measured.

**00865.90** Payment - Replace this subsection, except for the subsection number and title, with the following:

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

# 

Payment will be payment in full for furnishing and placing all materials, and for furnishing all equipment, labor, and incidentals necessary to complete the work as specified.

Payment for work under this Section will be limited to 75 percent of the amount due until the Agency has received the signed Warranty.

# SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS

Comply with Section 00867 of the Standard Specifications modified as follows.

**00867.90 Payment** - Add the following pay items to the pay item list:

# Pay Item Unit of Measurement

(t) Pavement Legend, Type B: "STOP AHEAD"......Each

Add the following to the end of this subsection:

Item (t) includes 8-foot height by 8-foot width legend for the word "STOP" and 8-foot height by 9-foot width legend for the word "AHEAD".

# **SECTION 00868 - COLORED LANE MARKINGS**

Section 00868, which is not a Standard Specification, is included in this Project by Special Provision.

# **Description**

**00868.00 Scope** - In addition to the requirements of Section 00850, install colored lane markings according to the following Specifications.

# Labor

**00868.30 Manufacturer's Representative** - Provide a manufacturer's representative according to 00850.30.

**00868.31 Manufacturer-Certified Installers** - Provide certified installers according to 00850.31.

# Construction

**00868.45 Installation** - Place markings only when the manufacturer's representative determines that the Pavement is ready for the Pavement marking material.

Apply the material to the Pavement according to the manufacturer's installation instructions to the full width shown in the Plans. Joints will be allowed with no overlap or gap allowed at the joint.

Do not install reflective elements.

Install the Pavement marking material surface according to the manufacturer's installation instructions to achieve a uniform initial skid resistance greater than or equal to 50 British Pendulum Number (BPN) when tested according to ASTM E303.

Apply one the following marking material type:

• **Preformed, Fused Thermoplastic Film High Skid** - Install preformed, fused thermoplastic film high skid that has factory installed crushed glass or Aggregate on the surface.

**00868.75 Manufacturer's Warranty** - Furnish a manufacturer warranty that unconditionally warrants to the Agency the product(s) and installation under this Section against failure, according to this subsection and 00170.85(c)(1). Use Agency-supplied warranty forms, available from the Engineer.

"Unconditionally warrant" means that the warranty covers all failures, regardless of the source or cause of the failure, including, without limitation, whether the source or cause is or may be related to workmanship, inspection, or choice of materials.

The Agency inspection of any portion of the Work during the Contract and during the product installation, the Agency acceptance of the Work, corrections under the warranty, or expiration of the warranty shall not relieve the obligations under this warranty.

- (a) Warranty Period The warranty period shall be for 18 months.
- **(b) Failure** For purposes of this warranty, failure is defined as one or more of the following:
  - Insufficient Color Stability:
    - Green markings fail to meet the requirements of the Federal Highway Administration Interim Approval for Optional Use of Green Colored Pavement for Bike Lanes (IA-14) tested according to ASTM D6628.
  - Loss of Adhesion Markings show 5 percent or greater loss of marking material due to non-adhesion.
  - Skid Resistance Markings fail to maintain an average skid resistance greater than
    or equal to 50 British Pendulum Number (BPN) when tested in an equal number of
    test locations in both wheel path and non-wheel path locations according to
    ASTM E303.
- **(c) Remedy** Upon notification by the Engineer of a failure, provide the following remedy at no additional cost to the Agency:
  - Repair or replace, at the discretion of the Engineer, all failed Pavement markings within 6 months of the Agency's request to do so.
  - Use Materials and procedures meeting the Specifications.
  - · Match repairs to adjoining Work.
  - Coordinate timing of repair Work with the Engineer.

(d) Agency's Right to Make Repairs - If, in the opinion of the Engineer, a failure causes or may cause a hazard, the failure may be temporarily corrected by Agency or other forces at no additional cost to the Agency. Replace temporary repairs with permanent repairs at no additional cost to the Agency and according to the Specifications and within the time specified in 00868.75(c).

#### Measurement

**00868.80 Measurement** - The quantities of colored lane markings will be measured on the area basis.

# **Payment**

**00868.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item Unit of Measurement

- (a) Green Bicycle Lane, Preformed Thermoplastic Film ...... Square Foot
- (b) Green Bicycle "Wait Here", Preformed Thermoplastic Film .... Square Foot

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

Payment for Work under this Section will be limited to 75 percent of the amount due until the Agency has received the signed warranty.

# **SECTION 00902 - CROSSWALK CLOSURE SUPPORTS**

Section 00902, which is not a Standard Specification, is included in this Project by Special Provision.

# **Description**

**00902.00 Scope** - This Work consists of constructing crosswalk closure supports and associated signs as shown.

# **Materials**

**00902.10 Materials** - Furnish Materials meeting the following requirements:

Commercial Grade Concrete	00440
Steel	01070.10 and 01070.12
Signs	00940

#### Construction

**00902.40 General** – Crosswalk closure signs with surface mount attachment to be hot-dipped galvanized upon complete assembly. Install crosswalk closure supports and associated signs as shown or directed.

#### Measurement

**00902.80 Measurement** - The quantities of crosswalk closure supports will be measured on the unit basis. No separate measurement will be made for signs attached to crosswalk closure supports.

# **Payment**

**00902.90 Payment** - The accepted quantities of Work done under this Section will be paid for at the Contract unit price, per each, for the item "Crosswalk Closure Supports".

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

# SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS

Comply with Section 00905 of the Standard Specifications modified as follows:

**00905.00 Scope** - In the paragraph that begins "This Work consists of..." replace the word "both" with the word "more".

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

• Salvage existing sign(s) and reinstall existing sign(s) on new sign support.

**00905.90 Payment** - Add the following Pay Item to the end of the Pay Item list:

(c) Remove and Reinstall Existing Signs on New Sign Support....Lump Sum

# **SECTION 00920 - SIGN SUPPORT FOOTINGS**

Comply with Section 00920 of the Standard Specifications modified as follows:

**00920.80 Measurement** - Delete the paragraph that begins with "Estimated quantities of concrete...".

**00920.90 Payment** – Replace this subsection, except for the subsection number and title, with the following:

No payment for perforated steel square tube sign support footings will be made. Sign support footings are considered incidental to Section 00905.

# **SECTION 00930 - METAL SIGN SUPPORTS**

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

**00930.80 Measurement** - Delete the paragraph that begins with "Estimated quantities of structural steel...".

**00930.90** Payment - Add the following paragraph to the end of this subsection:

No payment for perforated steel square tube sign supports will be made. Metal sign supports are considered incidental to Section 00905.

# **SECTION 00940 - SIGNS**

Comply with Section 00940 of the Standard Specifications.

# **SECTION 00950 - REMOVAL OF ELECTRICAL SYSTEMS**

Comply with Section 00950 of the Standard Specifications modified as follows:

**00950.42 Salvaging and Stockpiling Materials** - Add the following to the end of this subsection:

All existing traffic signal equipment to be removed that is deemed usable by Clackamas County shall be delivered to 19246 Wacheno Parkway, Oregon City (Transportation Service Building). Contact the Clackamas County Inspector, the Engineer and Carl Olson at (503) 742-4684, 48 hours prior to removal of existing traffic signal equipment. The Project Manager shall inform the Contractor which equipment the Contractor shall deliver to the County and the location of deliveries are to be received. Equipment damaged or missing during removal shall be replaced or paid for by the Contractor.

All equipment deemed unusable shall become the property of the Contractor and be removed from the project site.

# SECTION 00960 - COMMON PROVISIONS FOR ELECTRICAL SYSTEMS

Comply with Section 00960 of the Standard Specifications modified as follows:

**00960.02 Equipment List and Drawing Submittals** – Replace this subsection with the following subsection:

**00960.02 Equipment List and Drawing Submittals** – Within 30 Calendar Days after execution of the Contract, submit electronic PDF copies of the Blue Sheets (see 00160.00 and 001607.07) and the Green Sheets (see 00160.00 and 00160.07) according to 00150.37

for all materials the Contractor proposes to install. Refer to 00990 for exemptions to the Blue Sheets and Green Sheets on Clackamas County operated traffic signals.

Within 14 Calendar Days after receipt of submittals, the Engineer will review the submittals and designate them in writing as "review" or "reviewed with comments". Then within the follow 7 Calendar Days after the Engineer review, Clackamas County Traffic Staff will review the submittals and designate them in writing "approved", "approved as noted", or "revise and resubmit". Do not proceed with the Work before receiving written approval of the submittals from the Engineer or Clackamas County.

**00960.10 Materials** – Add the following to the end of this subsection:

Use only Schedule 80 PVC conduits and fittings for all underground conduits.

**00960.30 Licensed Electricians** – Replace this subsection, except for the subsection number and title, with the following:

According to the Oregon Administrative Rule 918-282-0120(1), no person or Entity shall allow any individual to perform electrical work for which the individual is not properly registered or licensed. Every person who installs electrical systems on the Project shall submit a copy of their electrical license or apprentice registration to the Engineer prior to performing any Work. They must be licensed as an S or a J under Oregon Administrative Rule 918-282-0140 or 918-282-0170.

Add the following subsection:

**00960.42(d) Connecting Non-Metallic Conduit to Metallic Conduit -** Use a nonmetallic female threaded connector to connect nonmetallic conduit to metallic conduit.

Add the following subsection:

**00960.42(e)** Conduit in existing pole foundations – Drill hole in existing signal pole foundation to appropriate size to allow installation of conduit shown in the plans. Locate existing reinforcing bars and anchor bolts. If existing reinforcement or anchor bolts are encountered during drilling, adjust the hole location to avoid conflicts as shown or as directed.

Clean holes with a nonmetallic brush and compressed air. The cleaned hole shall be free of concrete dust and foreign matter. Install conduit as shown or as directed and patch all holes with non-shrink grout according to Section 02080.

# SECTION 00962 - METAL ILLUMINATION AND TRAFFIC SIGNAL SUPPORTS

Comply with Section 00962 of the Standard Specifications.

#### **SECTION 00990 - TRAFFIC SIGNALS**

Comply with Section 00990 of the Standard Specifications modified as follows:

Add the following subsections:

**00990.15 Pedestrian Push Buttons and Mount** - Pedestrian pushbuttons for installation at traffic signals shall be as follows:

Pedestrian push button system shall be a Polara iNavigator 2-Wire (iNS2) Push Button Station (P/N: iNS2-3-T-N-0-B) or approved equal. See the Contract Plans for additional details. The following components make up the push button system:

- (a) Push Button Station (P/N: iNS2 PBS) The main body with pushbutton for installation on the signal or pedestrian pole using 2-Wire push button wired as a 3-Wire system.
- **(b) Ped Head Control Unit (P/N: iPHCU3W)** Interface device for installation in pedestrian signal head. One per Push Button Station.
- (c) Pedestrian Push Button Decal The pedestrian push button sign shall be a Polara option T (Hi-Intensity Retroreflective MUTCD R10-3e) 9"x15" sign.
- (d) Interconnect Cables (iN3-CABLE-X) Pre-cut lengths (12', 25', or 50') of interconnect cable from Push Button Station to Ped Head Control Unit.
- **(e) iNav Bluetooth Dongle (iN-DGL)** Bluetooth dongle to communicate from personal computer with Polar iN3 Push Button Station.

# 00990.17 Traffic Signal Circuits

All high-voltage wiring smaller than #10 AWG shall be IMSA 19-1 cable.

The #14 AWG, multi-conductor cables ran for traffic signal circuits will conform to IMSA Specification 19-1. Color coding of the conductors will be as follows:

# **Traffic Signal Color Code**

# Clackamas County, Oregon #14 AWG IMSA 19-1 Traffic Signal Cable Mast Arms Only

	Function (Phase)	20 Conductor [Feed]	10 Conductor [Branch]	7 Conductor [Branch]	5 Conductor [Branch]	4 Conductor [Branch]
et	Phase Red	Red	Red	Red	Red	Red
Main Street	Phase Yellow	Orange	Orange	Orange	Orange	Orange
Ma	Phase Green	Green	Green	Green	Green	Green
eet	Phase Red	Red/Black	Red/Black	Red	Red	Red
Side Street	Phase Yellow	Orange/Black	Orange	Orange	Orange	Black
Sic	Phase Green	Green/Black	Green/Black	Green	Green	Green
۵	Phase Red	Red/Black	White/Black	White/Black	Red	Red
Left Turn	Phase Yellow	White/Red	Black	Black	Orange	Black
Ĺ	Phase Green	Black/White	Blue	Green	Green	Green
	Phase Red	Red/Green	White/Black	White/Black	Red	Red
Overlap	Yellow/Flashing Yellow Arrow	Orange/Red	Black	Black	Orange	Black
	Phase Green	Blue/Red	Blue	Blue	Green	Green
Street	Phase Don't Walk	Red/White	Red	Red	Red	-
Main Street	Phase Walk	Green/White	Green	Green	Green	
Side Street	Phase Don't Walk	Black	Red/Black	Red	Red	-
Side (	Phase Walk	Blue/White	Green/Black	Green	Green	-
ton	Common	White/Black	ck White/Black White/Bla		Orange	-
Push-Button	Main Street Phase	Blue	Blue	Blue	Black	-
Pu	Side Street Phase	Blue/Black	Black	Black	Black	-
	Spare	White	-	-	-	-
AC Common (Branch Only)		-	Spare	White		

**00990.30 Video/Radar Detector Manufacturer's Representative** - Replace this subsection, except for the subsection number and title, with the following:

When video/radar detection is shown, provide the services of a manufacturer's representative on-site within 1 week in advance of the anticipated electrical installation completion date to set-up devices with Agency electrical crew present.

Add the following subsection:

**00990.40 Work in Existing Controller Cabinets** - Install new field wiring as shown into the existing controller cabinet without terminating.

New control equipment installed as shown in an existing controller cabinet will be tested prior to installation according to 00990.70.

At existing controller cabinets the Agency will be responsible for:

- Storage, delivery, installation, and activation of new control equipment
- Any required modifications to existing control equipment or existing field wiring terminations
- Terminating new field wiring

Prior to the anticipated installation of new control equipment, modification of existing control equipment, or modification of existing field wiring terminations, schedule field testing according to 00990.70(g). Field testing and activation of the new control equipment or modifications will occur within the same work shift. Be present at the Project Site during field testing.

Add the following subsection:

**00990.45** Repair Open Holes In Metal Poles, Pedestals, and Mast Arms – Repair holes in metal poles, pedestals, and mast arms caused by removal of equipment using pipe plugs. For holes larger than 1 inch in diameter or of irregular shape, submit method and materials to be used.

**00990.70 Testing and Turn-On** - Replace this subsection with the following subsection:

**00990.70 Chamber Testing** - This Work includes testing Equipment that requires chamber testing.

- (a) Delivery of Equipment Provide all Equipment requiring chamber testing for the Project according to the cabinet print(s), including all associated manuals, diagrams, and other documents. The cabinet print(s) will be made available to the Contractor by the Engineer. Deliver all Equipment, including wiring diagrams and operation manuals, in one shipment. Partial shipments will not be accepted and will be returned to the Contractor at no additional cost to the Agency. Include the following information with the Equipment shipments:
  - Contractor
  - Location of Equipment on Project (i.e. street names of Intersection or street alignment/name plus station)
  - For controller cabinets, TSSU ID number
  - Contract number
  - Completed Green Sheets

Deliver the Equipment and information for testing to:

Oregon Department of Transportation Traffic Systems Services Unit 2445 Liberty St. NE Salem, Oregon 97303-6738

- **(b) Equipment Requiring Chamber Testing** The following Equipment will be tested by the Agency before being installed:
  - Controller unit
  - Controller cabinet
  - Power supplies
  - · Input devices
  - Output devices
  - Conflict monitors
  - Flasher units
  - Relays
  - · Preemption devices
  - Auxiliary Equipment in the controller cabinet
  - Other Equipment required for the operation of the installation
  - Video/radar/hybrid detection systems
  - Equipment listed as "chamber tested" on the green sheets

Equipment will be tested at no cost to the Contractor.

The Equipment will be tested in three categories: physical, functional, and environmental as specified in the *Standard Specification for Microcomputer Signal Controller*. ODOT will require at least 6 weeks for completion and evaluation of the testing.

(c) Equipment Failure - An Equipment failure is any occurrence that results in non specified operation of the Equipment.

Notification of any Equipment failures will be provided. Make on-site repairs within 5 Days of receiving the notification.

Following repair of the Equipment, the testing will be resumed at the beginning of the test category in which the failure occurred.

- (d) **Equipment Rejection** The Equipment will be rejected under either of the following conditions:
  - (1) Twice Fail The Equipment fails twice in the same testing category.
  - **(2) Failure to Repair** The Contractor fails to repair the Equipment within 5 Days of receiving notification of the failure.

Pick up rejected Equipment within 10 Days of receiving the rejection notice, or it will be returned, at Contractor's cost, to the Contractor.

Replace rejected Equipment with Equipment having a different serial number.

Rejected Equipment will not be accepted for testing or installation on any subsequent project within the State of Oregon.

**(e) Equipment Acceptance** - Equipment that successfully passes the chamber testing procedure will be certified by the Agency as acceptable for installation. Acceptability for installation does not guarantee final acceptance of the completed installation.

The successful completion of the testing does not relieve the Contractor of the responsibility to furnish a complete working electrical installation at the time the Equipment is placed in operation.

The Contractor will be notified when the testing has been completed. Pick up the controller cabinet and video/radar/hybrid detection systems at the test facility.

**(f) Controller Cabinet Control Equipment Installation** - Be responsible for pick-up, delivery and installation of the controller cabinet and video/radar/hybrid detection systems.

The Agency will be responsible for delivery and installation of the other control Equipment, such as controller units, input devices, switch packs, monitor units, miscellaneous plug-in devices and auxiliary devices not physically wired to the controller cabinet.

Equipment that the Agency is to install will be stored at the test facility until the electrical installation is ready to be turned on.

Add the following subsection:

**00990.71 Field Testing** - Field testing of electrical installations will be performed by Agency electrical crews. Notify the Engineer one week in advance of the anticipated electrical installation completion date.

Field testing will be performed within one week following the date of completion. The Engineer will notify the Contractor of the test results.

Information on Agency field testing procedures is available from the Engineer.

Add the following subsection:

**00990.72 Turn-on** - This Work includes turning on completed electrical installations.

(a) **General** - The Engineer will establish the date and time the electrical installation is to be turned on. The Agency will turn on the electrical installation within one week after completion of corrections identified during field testing.

Be present at the Project Site the date of the turn-on, for the duration of the turn-on process.

After electrical installations are turned on and operating as designed, the agency responsible for maintenance will assume operation and maintenance of the electrical installation. Turn-on does not constitute final approval. The Contractor is still obligated to finish any incomplete portion of the electrical installation and correct problems with workmanship or replace material that does not meet Specifications. After turn-on, damage to the electrical installation caused by conditions beyond the Contractor's control will be the responsibility of the maintaining agency.

- **(b) For Traffic Signals, Ramp Meters, and Automatic Traffic Recorders** The Agency will be responsible for providing operating software and timing parameters for traffic signals, ramp meters and automatic traffic recorders. Do not turn on electrical installations without the Agency provided timing parameters.
- **(c)** For Flashing Beacons and Other Electrical Installations The Agency will be responsible for providing the timing and setting parameters for the following flashing beacons and other electric installations as listed in the Green Sheets:
  - 24/7 flashing beacon assembly, yellow + speed feedback
  - Actuated flashing beacon assembly (all subcategories)
  - Rectangular rapid flashing beacon (RRFB) assembly
  - Unintegrated speed feedback assembly

Do not turn on electrical installations without the Agency provided parameters.

# **SECTION 01030 - SEEDING**

Comply with Section 01030 of the Standard Specifications modified as follows:

**01030.00 Scope** – Supplement this section with the following:

This work also consists of all work necessary to restore existing surfacing, including grass, plantings, topsoil, gravel/aggregate materials, mulch and other landscaping or hardscaping, including concrete, asphalt concrete or pavers, located in areas between the edge of proposed walks and match points to existing landscaped or hardscaped areas. Construct topsoil and grass seeding, or bark mulch in areas where existing surfacing is to be removed and replaced with grass or bark mulch. Reinstall existing hardscape surfacings (that are not covered by other specification sections) in areas where existing surfacing is to be removed and reinstalled.

Additionally, all restoration performed on Springwater Corridor property to be submitted to and approved by Portland Parks & Recreation. Restoration requirements will be included in Non-Park Use Permit.

**01030.80 Measurement** – Supplement this section with the following item:

• Lump Sum Basis – All roadside restoration work will be measured on the lump sum basis.

# **01030.90 Payment** – Supplement this section with the following item:

# Pay Item Unit of Measurement

(n) Roadside Restoration ...... Lump Sum

No separate or additional payment will be made for abandoning, relocating, adjusting and/or reconnecting existing irrigation or landscape lighting necessary to construct the proposed Work.

Removal of existing surfacings will be measured according to 00310.90.

# **SECTION 02001 - CONCRETE**

Comply with Section 02001 of the Standard Specifications.

# **SECTION 02020 - WATER**

Comply with Section 02020 of the Standard Specifications.

# SECTION 02030 - SUPPLEMENTARY CEMENTITIOUS MATERIALS

Comply with Section 02030, of the Standard Specifications.

# **SECTION 02040 - CHEMICAL ADMIXTURES**

Comply with Section 02040 of the Standard Specifications.

# **SECTION 02050 - CURING MATERIALS**

Comply with Section 02050 of the Standard Specifications.

# **SECTION 02070 - BONDING AGENTS**

Comply with Section 02070 of the Standard Specifications.

# **SECTION 02080 - GROUT**

Comply with Section 02080 of the Standard Specifications.

# **SECTION 02440 - JOINTING MATERIALS**

Comply with Section 02440 of the Standard Specifications.

# **SECTION 02510 - REINFORCEMENT**

Comply with Section 02510 of the Standard Specifications.

# **SECTION 02560 - FASTENERS**

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

**02560.60(a)(1) Method 1** – Replace the paragraph that begins "Continue to tighten the nut until..." with the following:

Continue to tighten the nut until the nut has turned twice the rotation shown in Table 00560-3 of Section 00560 from its snug-tight position mark for bolt lengths up to 8D ( for greater than 8D up to 12D bolt lengths tighten to 1 1/6 turn from snug-tight).



# **APPENDIX A**

Field Explorations and Laboratory Testing



#### **APPENDIX A**

# FIELD EXPLORATIONS AND LABORATORY TESTING

# A.1 FIELD EXPLORATIONS

# A.1.1 General

GRI completed a total of seven exploration borings within the project limits on June 14, 2023. The approximate locations of the subsurface explorations are shown on the Site Plan (Figure 2). We completed borings through the existing pavement designated as PB-1 through PB-6 to investigate subsurface conditions along SE Johnson Creek Boulevard and boring PB-7 to investigate subsurface conditions along SE Bell Avenue. We advanced the pavement boring explorations (PB-1 through PB-7) through asphalt concrete (AC), aggregate base (AB), where present, and subgrade layers to depths ranging from about 2½ feet to about 5 feet below ground surface (BGS). We conducted dynamic cone penetrometer (DCP) testing at PB-1, PB-3, PB-6, and PB-7.

# A.1.2 Pavement Core Explorations and Geotechnical Borings

We conducted boring explorations for the purposes of evaluating the type, thickness, and condition of subsurface materials present at the site. To complete the borings, we retained Dan J. Fischer Excavating, Inc. (Fischer) out of Forest Grove, Oregon. Fischer used a trailer-mounted drill rig with a core drill attachment to complete the explorations.

For borings through existing pavement, we advanced a 5-inch-diameter diamond-tipped core drill bit through the bound pavement layers using an electric core drill. Thereafter, we advanced the shallow borings into the subgrade soils using a 4-inch solid stem auger. GRI's engineering staff analyzed the explorations and maintained logs of the type, thickness, and condition of cores, and the materials and conditions encountered during the drilling operations.

At the pavement boring locations, we collected disturbed soil samples at select intervals by driving a split-spoon sampler in conjunction with conducting Standard Penetration Tests (SPTs). SPTs were conducted by driving the sampler into the soil a distance of 18 inches using a 140-pound hammer dropped from a height of 30 inches. The number of blows required to drive the hammer the last 12 inches is known as the Standard Penetration Resistance, or SPT N-value, and provides us with a measure of the relative consistency of the soil. Additional grab samples were collected at changes in subgrade material.

Our staff examined the soil samples in the field and retained portions of the materials encountered in zip-top bags for further examination and physical testing in our laboratory.



The terms and symbols used to describe the subsurface materials encountered in the explorations are defined in Table 1A. Logs of the boring explorations are provided on Figures 1A through 7A in this appendix. A summary of pavement thickness and condition at the core locations is provided on the Core Summary Chart (Figure 8A), and photographs of the core locations and core samples are shown on the Boring Location and Pavement Core Photographs (Figures 9A through 15A) in this appendix.

# A.1.3 Dynamic Cone Penetrometer Testing

#### A.1.3.1 Overview

During our boring explorations, we completed dynamic cone penetrometer (DCP) test probes at PB-1, PB-3, PB-6, and PB-7. We advanced the DCP test probes through the aggregate base (AB) layer (where present) and into the subgrade soil, with the exception of PB-7, where the test was terminated within the AB layer due to refusal.

We used our Kessler DCP, manufactured by KSE Testing Equipment, to complete the tests in general accordance with ASTM International (ASTM) D6951 by driving a 5%-inch-diameter steel rod with a cone tip into the soil using a 17.6-pound sliding hammer dropped at a fixed height of 22.6 inches. We recorded the number of hammer drops (blows) required to drive the probe in increments of approximately 2 inches, or the penetration depth for each blow, and terminated testing when at refusal of penetration or end of rod length.

# A.1.3.2 Subgrade Resilient Modulus Approximation

Using the recorded test data, we plotted cumulative blows against cumulative penetration depths and visually assessed the resulting curve to delineate regions with approximately linear slopes. We then used least square regression to calculate the slope of the approximately linear regions along the curve and used the procedures described by Chen et al. (1999) to approximate the resilient modulus for each region. Where a curve exhibited more than one slope, we used Odemark's Method of Equivalent Thickness, described by Ullidtz (1998), to calculate an equivalent modulus value for the entire data set of similar soil types.

# A.1.3.3 Dynamic Cone Penetrometer Test Results

Cumulative blows versus cumulative penetration depths are listed and presented graphically on the Dynamic Cone Penetrometer logs (Figures 16A through 19A) in this appendix. Also shown on the figures are the approximated AB and subgrade resilient modulus values and the equivalent modulus value if the data exhibits more than one approximately linear region for a given soil type. A summary of the approximated resilient modulus values at each test location, as well as the average value for each project street segment, is provided in Table 2A.



# A.1.4 Pavement Distress Survey

We completed a visual survey of the pavement surface along the project street on June 7, 2023. During the survey, our staff measured and recorded the location, length, width, and severity of load-related medium- to high-severity pavement distresses indicative of areas needing full-depth repair. A summary of our findings is listed in Table 3A and shown spatially on the Full-Depth Repair Locations (Figures 21A and 22A) in this appendix.

# A.2 LABORATORY TESTING

# A.2.1 General

We obtained samples from the boring explorations for further examination in our laboratory, where we noted the physical characteristics of the samples and modified the field classifications where necessary. We determined the natural moisture content of each sample and performed #200 grain-size analyses and Atterberg limits determinations on select samples. A summary of the laboratory test results is provided in Table 4A. The following sections describe the testing program in more detail.

# **A.2.2 Natural Moisture Content**

We determined natural moisture contents in conformance with ASTM International D2216. The results are summarized on Figures 1A through 7A and tabulated in Table 4A.

# A.2.3 Grain-Size Analysis

We performed grain size analysis in accordance with ASTM D1140 on select samples to evaluate the percent passing the Number 200 sieve. The results are shown on Figures 1A through 7A and tabulated in Table 4A.

# A.2.4 Atterberg Limits

We performed Atterberg limits determinations on a sample from boring PB-6 in conformance with ASTM D4318. The results are shown on Figures 1A through 7A, on the Plasticity Chart, (Figure 20A), and summarized in Table 4A.



# A.3 REFERENCES

Jianzhou Chen, Mustaque Hossain, and Todd M. LaTorella, "Use of Falling Weight Deflectometer and Dynamic Cone Penetrometer in Pavement Evaluation," Transportation Research Record 1655, pp 145-151, Transportation Research Board, Washington, D.C., 1999.

Per Ullidtz, Modelling Flexible Pavement Response and Performance, Tech Univ. of Denmark Polytekn, 1998.



Table 1A
GUIDELINES FOR CLASSIFICATION OF SOIL

# Description of Relative Density for Granular (Coarse-Grained) Soil

Relative Density	Standard Penetration Resistance (N-values) blows/foot	3-Inch Sampler (140-lb Hammer) (N-values) blows/foot	3-Inch Sampler (300-lb Hammer) (N-values) blows/foot
Very Loose	0 - 4	0 - 11	0 - 4
Loose	4 - 10	11 - 26	4 - 10
Medium Dense	10 - 30	26 - 74	10 - 30
Dense	30 - 50	74 - 120	30 - 47
Very Dense	over 50	over 120	over 47

# **Description of Relative Consistency for Cohesive (Fine-Grained) Soils**

Consistency	Standard Penetration Resistance (N-values) blows per ft	3-Inch Sampler (140-lb Hammer) (N- values) blows/foot	3-Inch Sampler (300-lb Hammer) (N-values) blows/foot	Torvane or Undrained Shear Strength, tsf
Very Soft	0 - 2	0 - 3	0 - 2	less than 0.125
Soft	2 - 4	3 - 6	2 - 5	0.125 - 0.25
Medium Stiff	4 - 8	6 - 12	5 - 9	0.25 - 0.50
Stiff	8 - 15	12 - 25	9 - 19	0.50 - 1.0
Very Stiff	15 - 30	25 - 65	19 - 31	1.0 - 2.0
Hard	over 30	over 65	over 31	over 2.0

Grain-Size Classification		Modifier for Subclassification					
Boulders:		Primary Constituent	Primary Constituent				
>12 inches		SAND or GRAVEL	SILT or CLAY				
Cobbles:	Adjective	Percentage of Other	<sup>r</sup> Material (By Weight)				
3 inches - 12 inches	trace:	5 - 15 (sand, gravel)	5 - 15 (sand, gravel)				
Gravel:  1/4 inch - 3/4 inch (fine)	some:	15 - 30 (sand, gravel)	15 - 30 (sand, gravel)				
1/4 inch - 3/4 inch (fine) 3/4 inch- 3 inches (coarse)	sandy, gravelly:	30 - 50 (sand, gravel)	30 - 50 (sand, gravel)				
Sand:	trace:	<5 (silt, clay)					
No. 200 - No. 40 sieve (fine)	some:	5 - 12 (silt, clay)	Relationship of clay and				
No. 40 - No. 10 sieve (medium) No. 10 - No. 4 sieve (coarse)	silty, clayey:	12 - 50 (silt, clay)	silt determined by plasticity index test				
Silt/Clay:							
Pass No. 200 sieve							



Table 2A: APPROXIMATED AGGREGATE BASE AND SUBGRADE RESILIENT MODULI BASED ON DCP TESTING

Boring ID	Approximate Aggregate Base Modulus, pounds per square inch	Approximate Subgrade Modulus, pounds per square inch
PB-1	18,200	8,480
PB-3	21,030	8,170
PB-6	17,600	7,120
PB-7	19,700	

Table 3A: APPROXIMATE LOCATIONS AND APPROXIMATE DIMENSIONS OF AREAS EXHIBITING LOAD RELATED MEDIUM- TO HIGH-SEVERITY PAVEMENT DISTRESS

Direction	Distress	Severity _	Approximate	e Stationing	Dimensio	Area, square	
	Туре		From	То	Length	Width	yards
Westbound	Fatigue	High	15+60	16+55	95	6	64
Westbound	Fatigue	High	29+48	29+61	13	5	8
Westbound	Fatigue	Medium	31+70	32+40	70	4	32
Westbound	Fatigue	High	42+30	43+23	93	5.5	57
Westbound	Fatigue	High	44+90	44+94	4	5	3
Westbound	Fatigue	Medium	45+80	46+85	105	4.5	53
Westbound	Fatigue	Medium-High	48+05	48+45	40	4.5	20
Westbound	Fatigue	Medium-High	49+40	49+66	26	6	18
Eastbound	Fatigue	Medium	45+25	45+30	5	3	2
Eastbound	Fatigue	Medium	44+85	44+92	7	4	4
Eastbound	Fatigue	Medium	42+95	43+13	18	6	12
Eastbound	Pothole	Medium	28+55	28+58	3	3	1
Eastbound	Fatigue	Medium	23+40	25+38	198	6.5	143
Eastbound	Depression	Medium	19+80	20+10	30	3	10
Westbound Westbound Westbound Westbound Westbound Eastbound Eastbound Eastbound Eastbound Eastbound Eastbound	Fatigue	Medium High High Medium Medium-High Medium-High Medium Medium Medium Medium Medium Medium Medium	31+70 42+30 44+90 45+80 48+05 49+40 45+25 44+85 42+95 28+55 23+40	32+40 43+23 44+94 46+85 48+45 49+66 45+30 44+92 43+13 28+58 25+38	70 93 4 105 40 26 5 7 18 3 198	4 5.5 5 4.5 4.5 6 3 4 6 3 6.5	

Table 4A
SUMMARY OF LABORATORY RESULTS

Sample Information						Atterbe	rg Limits		
Location	Sample	Depth, ft	Elevation, ft	Moisture Content, %	Dry Unit Weight, pcf	Liquid Limit, %	Plasticity Index, %	Fines Content, %	Soil Type
PB-1	S-2	1.5		17					Silty GRAVEL
	S-3	3.5		11					Silty GRAVEL
PB-2	S-2	2.0		6					GRAVEL
PB-3	S-2	1.0		22					SILT
PB-4	S-2	1.6		8					Gravelly SAND
	S-2	2.7		22					SILT
	S-3	3.5		18					Silty GRAVEL
PB-5	S-2	1.5		17					Sandy SILT
	S-3	3.5		23				44	Silty SAND
PB-6	S-2	2.0		17					SILT
	S-3	3.5		36		70	49		CLAY
PB-7	S-2	2.0		7					GRAVEL
	S-3	3.5		6				8	FILL



# **BORING AND TEST PIT LOG LEGEND**

# **SOIL SYMBOLS**

# **Typical Description** Symbol LANDSCAPE MATERIALS FILL GRAVEL; clean to some silt, clay, and sand Sandy GRAVEL; clean to some silt and clay Silty GRAVEL; up to some clay and sand Clayey GRAVEL; up to some silt and sand SAND; clean to some silt, clay, and gravel Gravelly SAND; clean to some silt and clay Silty SAND; up to some clay and gravel Clayey SAND; up to some silt and gravel SILT; up to some clay, sand, and gravel Gravelly SILT; up to some clay and sand Sandy SILT; up to some clay and gravel Clayey SILT; up to some sand and gravel CLAY; up to some silt, sand, and gravel Gravelly CLAY; up to some silt and sand Sandy CLAY; up to some silt and gravel Silty CLAY; up to some sand and gravel **PEAT**

# **BEDROCK SYMBOLS**

Symbol	Typical Description
+ + + + + + + + +	BASALT
	MUDSTONE
	SILTSTONE
	SANDSTONE

# **SURFACE MATERIAL SYMBOLS**

Symbol	Typical Description
	Asphalt concrete PAVEMENT
	Portland cement concrete PAVEMENT
· O.	Crushed rock BASE COURSE

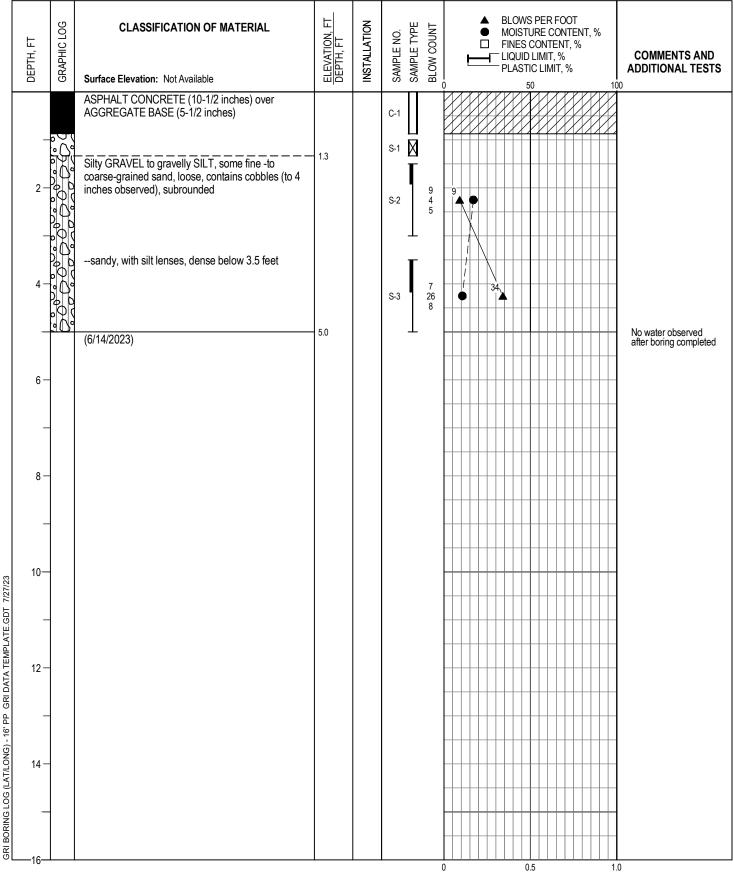
# **SAMPLER SYMBOLS**

Symbol	Sampler Description
I	2.0 in. O.D. split-spoon sampler and Standard Penetration Test with recovery (ASTM D1586)
lacksquare	Shelby tube sampler with recovery (ASTM D1587)
${\rm I\hspace{1em}I}$	3.0 in. O.D. split-spoon sampler with recovery (ASTM D3550)
	Grab Sample
	Rock core sample interval
	Sonic core sample interval
	Push probe sample interval

INSTALLA	ATION SYMBOLS
Symbol	Symbol Description
	Flush-mount monument set in concrete
	Concrete, well casing shown where applicable
	Bentonite seal, well casing shown if applicable
	Filter pack, machine-slotted well casing shown where applicable  Grout, vibrating-wire transducer cable shown where
	applicable  Vibrating-wire pressure transducer
	1-indiameter solid PVC
	1-indiameter hand-slotted PVC
	Grout, inclinometer casing shown where applicable

# **FIELD MEASUREMENTS**

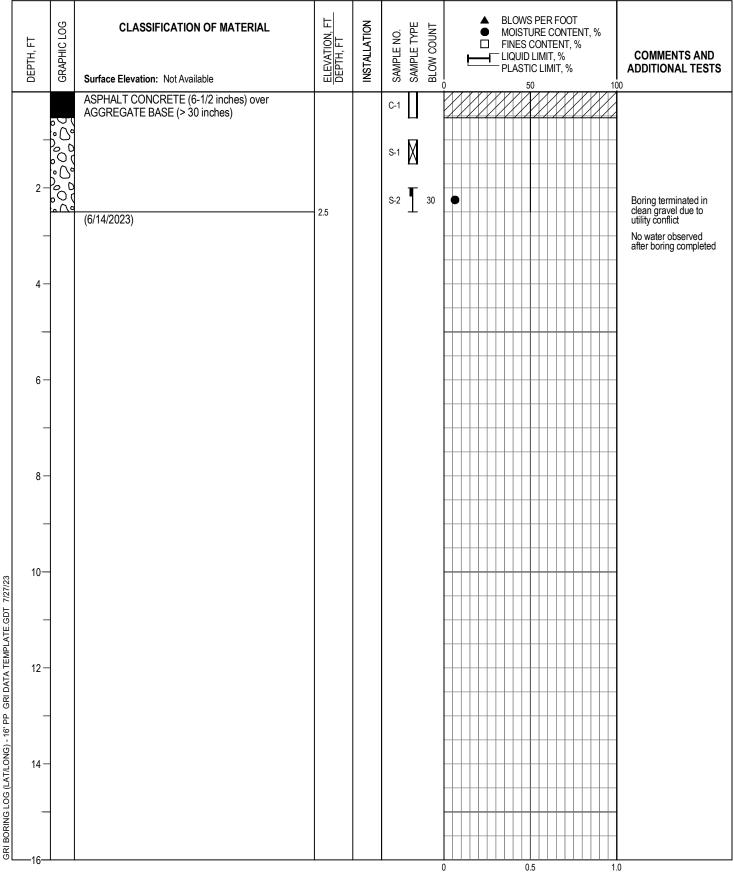
Symbol	Typical Description
$\nabla$	Groundwater level during drilling and date measured
Ā	Groundwater level after drilling and date measured
	Rock/sonic core or push probe recovery (%)
	Rock quality designation (RQD, %)



Logged By: J. Heidgerken	Drilled by: Dan J.	Drilled by: Dan J. Fischer Excavating, Inc.	
Date Started: 6/14/23	Coordinates: Not Available		
Drilling Method: Solid-Ste	Hammer Type: Cat Head		
Equipment: Buck Ro	Weight: 140 lb		
Hole Diameter: 5 in.	<b>Drop:</b> 30 in.		
Note: See Legend for Expla	Energy Ratio: Not Available		

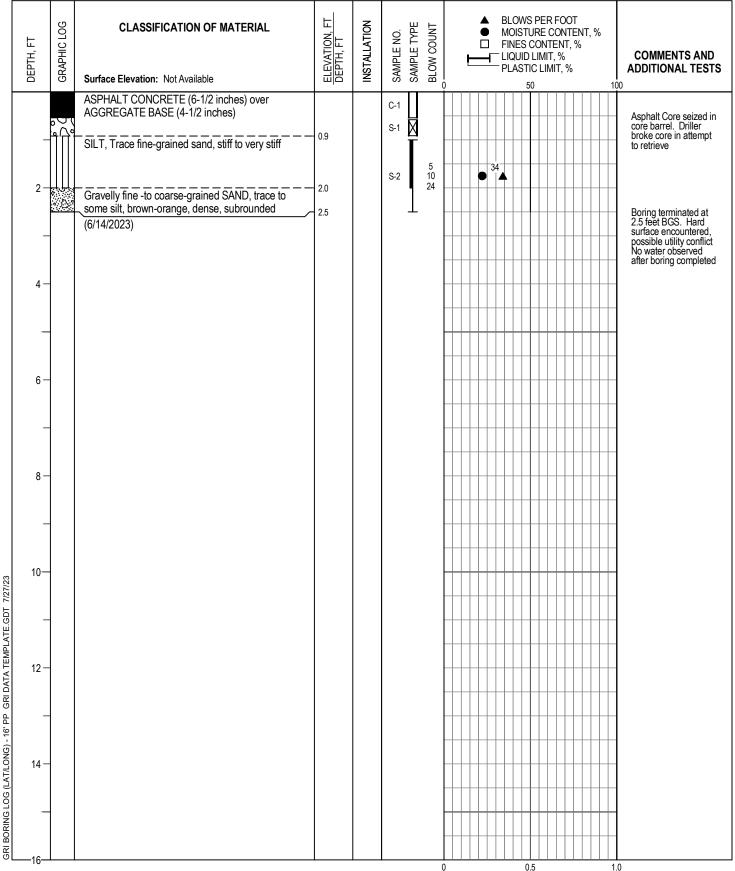
- ◆ TORVANE SHEAR STRENGTH, TSF
- UNDRAINED SHEAR STRENGTH, TSF





Logged By: J. Heidgerken		Drilled by: Dan J. Fis	scher Excavating, Inc.
Date Started: 6/14/23 Coordinates: Not Available			
Drilling Method: Solid-Stem Auger			Hammer Type: Cat Head
Equipment: Buck Rogers 160 Trailer-Mounted Rig Hole Diameter: 5 in.			<b>Weight:</b> 140 lb <b>Drop:</b> 30 in.
Note: See Legend for Explanation of Symbols			Energy Ratio: Not Available

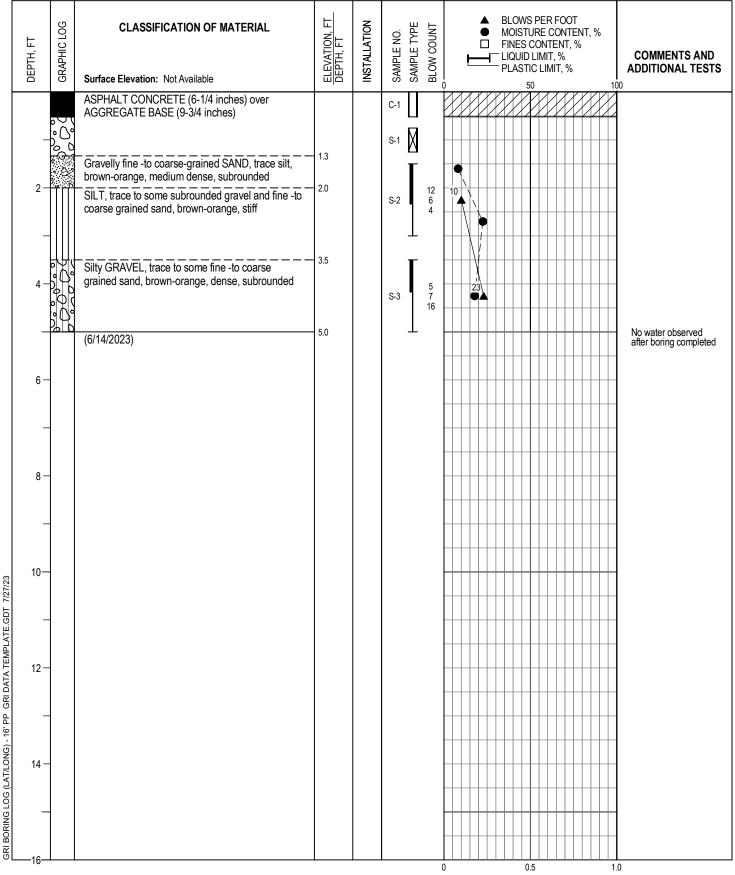
- ◆ TORVANE SHEAR STRENGTH, TSF■ UNDRAINED SHEAR STRENGTH, TSF
- GRI



Logged By: J. Heidgerken	Drilled by: Dan J	. Fischer Excavating, Inc.
Date Started: 6/14/23	Coordinates: Not Available	Э
Drilling Method: Solid-Ste	Hammer Type: Cat Head	
Equipment: Buck Ro	, ,	
Hole Diameter: 5 in.	<b>Drop:</b> 30 in.	
Note: See Legend for Expla	Energy Ratio: Not Available	

- ◆ TORVANE SHEAR STRENGTH, TSF
- UNDRAINED SHEAR STRENGTH, TSF

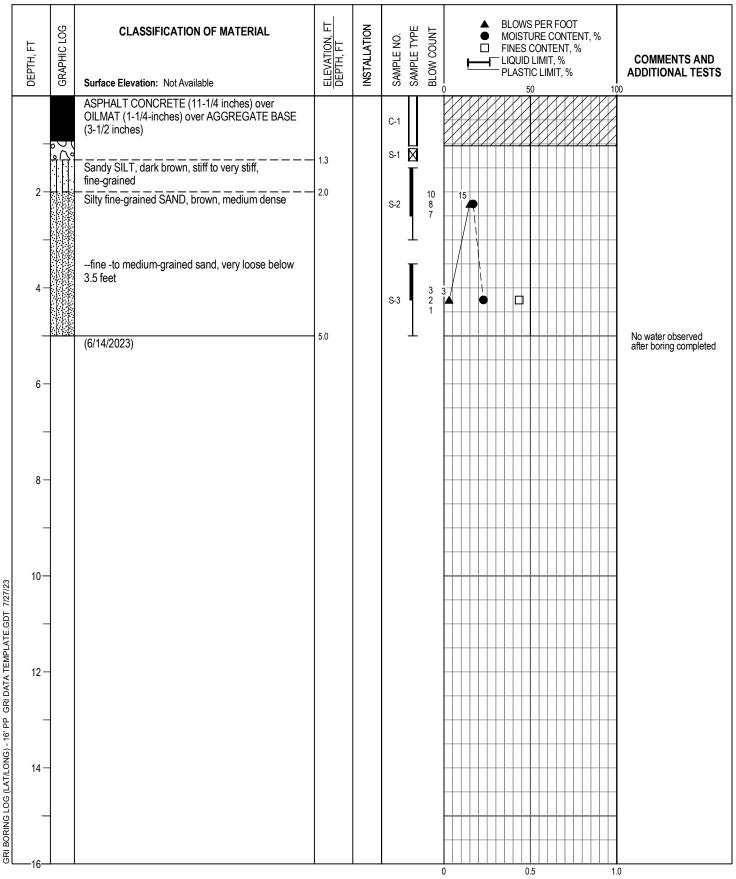




Logged By: J. Heidgerken		Drilled by: Dan J. Fis	scher Excavating, Inc.
Date Started: 6/14/23	Coordi	nates: Not Available	
Drilling Method: Solid-Stem Auger			Hammer Type: Cat Head
Equipment: Buck Rogers 160 Trailer-Mounted Rig			Weight: 140 lb
Hole Diameter: 5 in.			<b>Drop:</b> 30 in.
Note: See Legend for Explanation of Symbols			Energy Ratio: Not Available

- TORVANE SHEAR STRENGTH, TSF
- UNDRAINED SHEAR STRENGTH, TSF

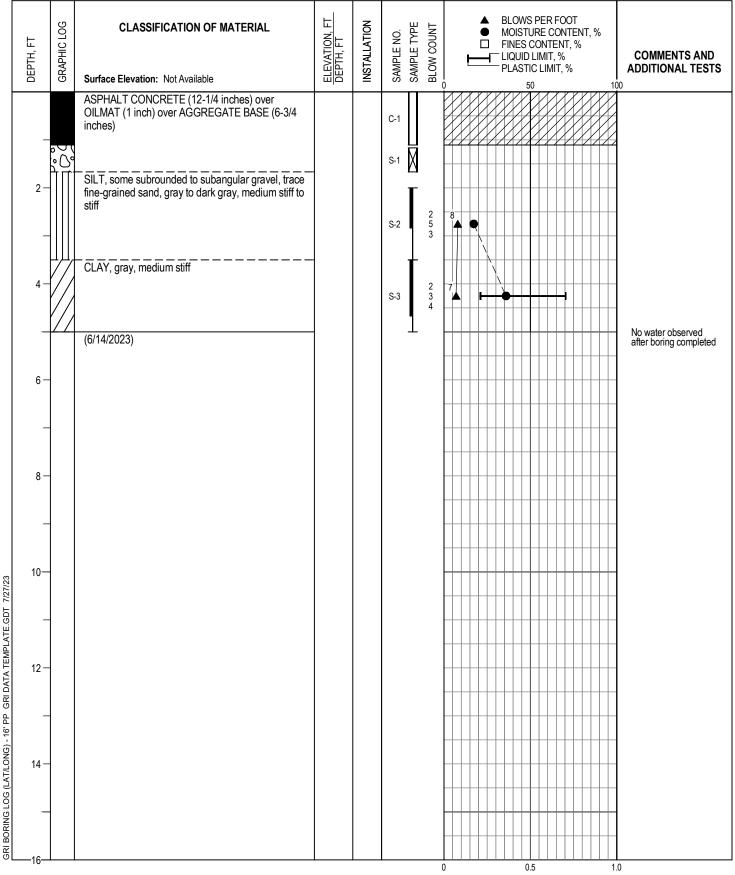




Logged By: J. Heidgerken		Drilled by: Dan J. Fis	scher Excavating, Inc.
Date Started: 6/14/23	Coordi	nates: Not Available	
Drilling Method: Solid-Stem Auger			Hammer Type: Cat Head
Equipment: Buck Rogers 160 Trailer-Mounted Rig			Weight: 140 lb
Hole Diameter: 5 in.			<b>Drop:</b> 30 in.
Note: See Legend for Explanation of Symbols			Energy Ratio: Not Available

◆ TORVANE SHEAR STRENGTH, TSF■ UNDRAINED SHEAR STRENGTH, TSF

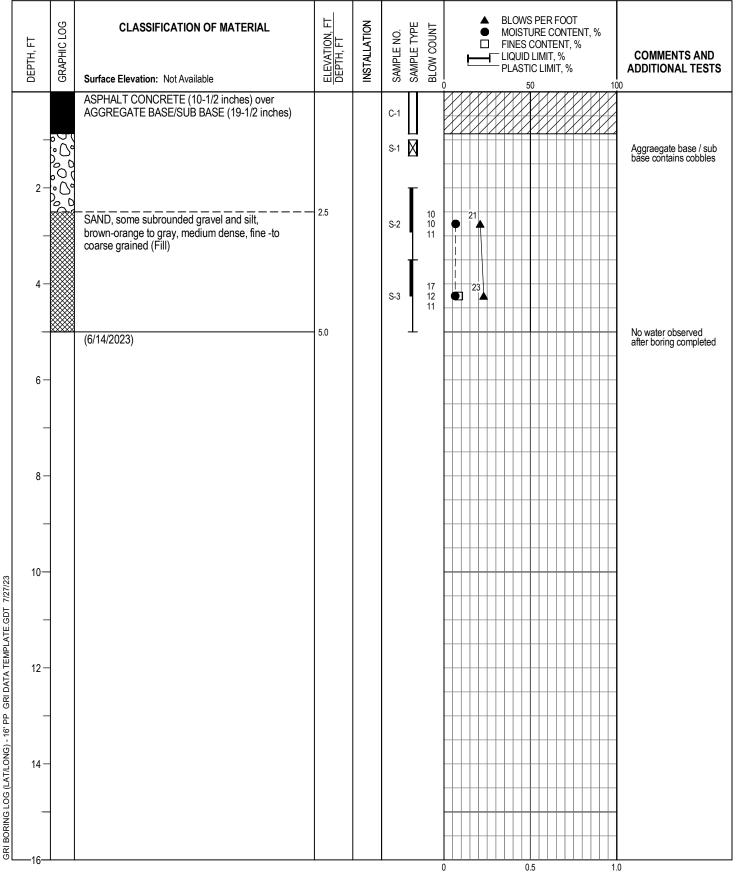




Logged By: J. Heidgerken		Drilled by: Dan J. Fis	scher Excavating, Inc.
Date Started: 6/14/23	Coordi	nates: Not Available	
Drilling Method: Solid-Stem Auger			Hammer Type: Cat Head
Equipment: Buck Rogers 160 Trailer-Mounted Rig			Weight: 140 lb
Hole Diameter: 5 in.			<b>Drop:</b> 30 in.
Note: See Legend for Explanation of Symbols			Energy Ratio: Not Available

- ◆ TORVANE SHEAR STRENGTH, TSF
   UNDRAINED SHEAR STRENGTH, TSF
- **—** GNERT LINES ONE, WOMEN CHIEF, TO

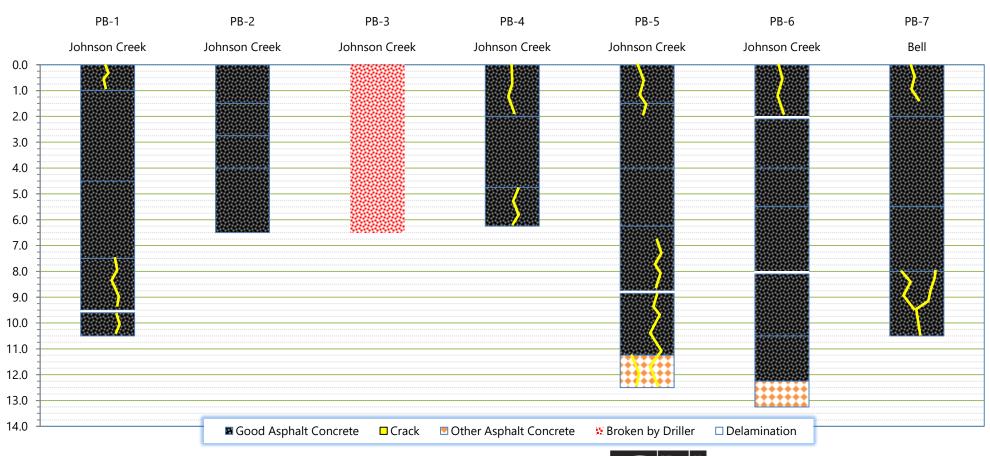




Logged By: J. Heidgerken		Drilled by: Dan J. Fis	scher Excavating, Inc.
Date Started: 6/14/23 Cool		nates: Not Available	
Drilling Method: Solid-Stem Auger			Hammer Type: Cat Head
Equipment: Buck Rogers 160 Trailer-Mounted Rig			Weight: 140 lb
Hole Diameter: 5 in.			<b>Drop:</b> 30 in.
Note: See Legend for Explanation of Symbols			Energy Ratio: Not Available

◆ TORVANE SHEAR STRENGTH, TSF
■ UNDRAINED SHEAR STRENGTH, TSF





G|R|I|

**CORE SUMMARY CHART** 

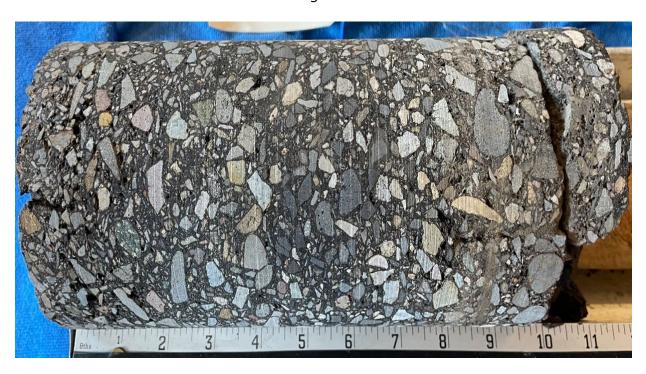
NOV. 2023

JOB NO. 6805-A

FIG. 8A



a. Boring PB-1 Location



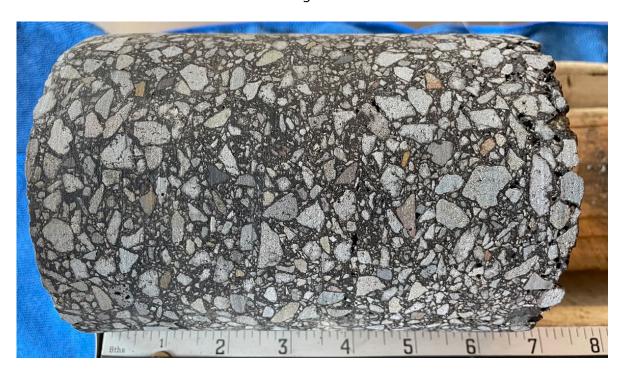
b. Core PB-1 Sample



NOV. 2023 JOB NO. 6805-A FIG. 9A



a. Boring PB-2 Location



b. Core PB-2 Sample



NOV. 2023 JOB NO. 6805-A FIG. 10A



a. Boring PB-3 Location



b. Core PB-3 Sample

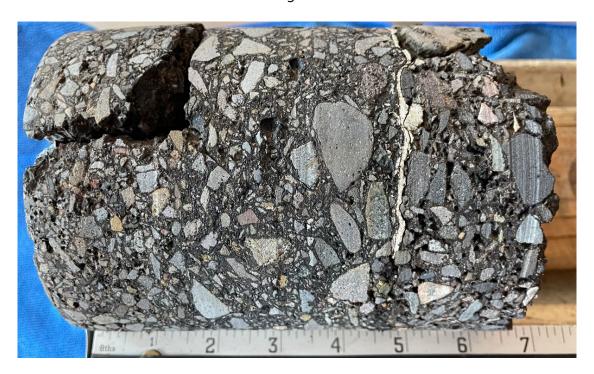


NOV. 2023

JOB NO. 6805-A



a. Boring PB-4 Location



b. Core PB-4 Sample

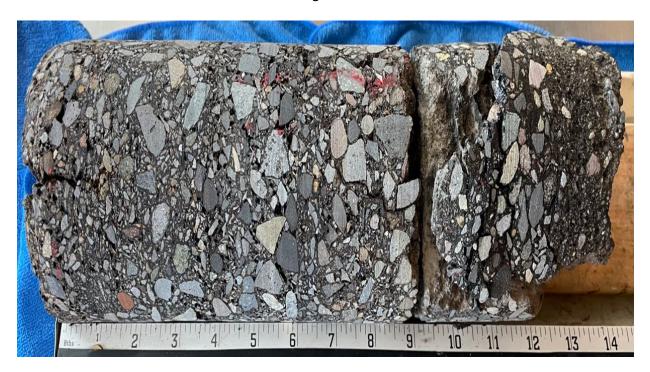


FIG. 12A

NOV. 2023 JOB NO. 6805-A



a. Boring PB-5 Location



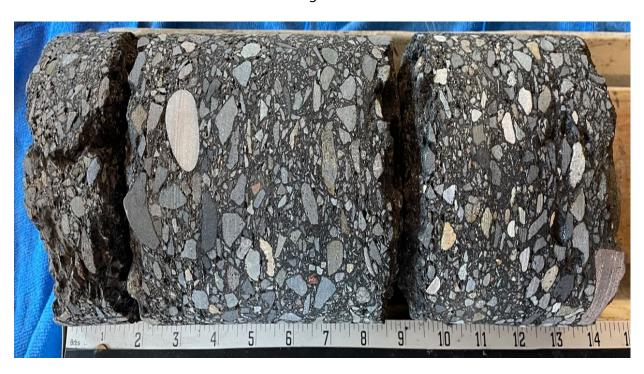
b. Core PB-5 Sample



NOV. 2023 JOB NO. 6805-A FIG. 13A



a. Boring PB-6 Location



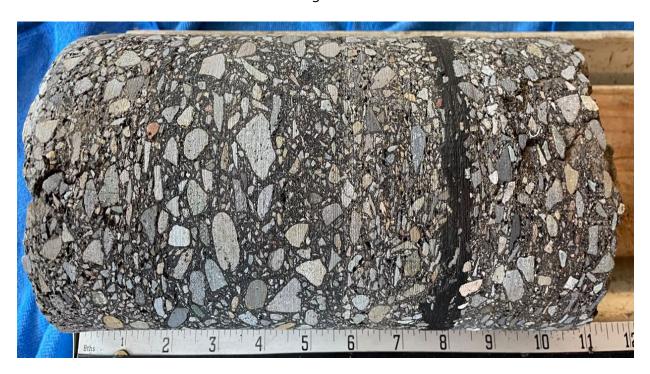
b. Core PB-6 Sample



NOV. 2023 JOB NO. 6805-A FIG. 14A



a. Boring PB-7 Location



b. Core PB-7 Sample

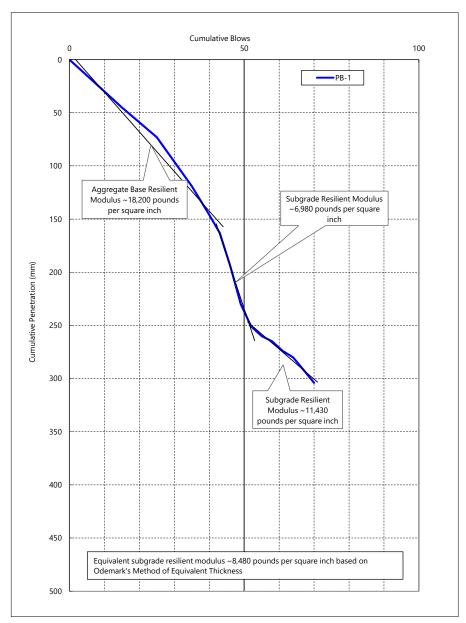


NOV. 2023 JOB NO. 6805-A FIG. 15A

 JOB NO.
 6805-A
 DRAWN BY JGH
 TESTING DATE
 6/14/2023

Test Number	PB-1	Surface Type	Below A/C
Location	SE Johnson Creek Boulevard	Hammer	17.6 pounds

Depth, inches	Depth, millimeters	Cumulative Blows
0.0	0	0
0.6	15	5
1.8	45	15
2.9	73	25
4.7	119	35
5.7	146	40
6.4	163	43
7.6	194	46
9.1	230	49
9.9	251	52
10.2	260	55
10.4	265	58
10.8	274	61
11.0	280	64
11.5	292	67
12.0	304	70
1		



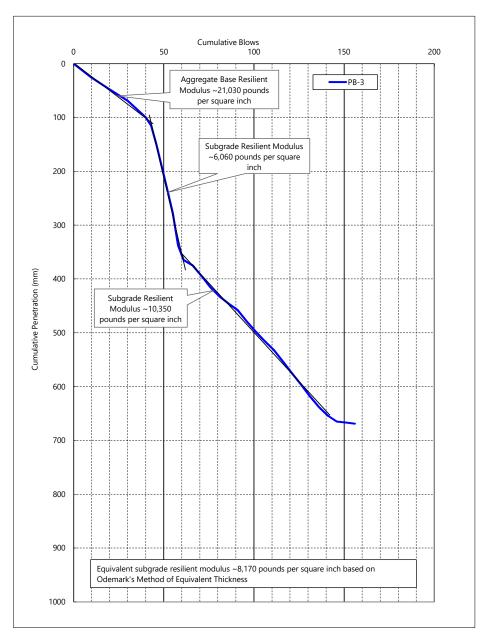


NOV. 2023 JOB NO. 6805-A FIG. 16A

JOB NO. 6805-A DRAWN BY JGH TESTING DATE 6/14/2023

Test Number	PB-3	Surface Type	Below A/C
Location	SE Johnson Creek Boulevard	Hammer	17.6 pounds

Depth, inches	Depth, millimeters	Cumulative Blows
0.0	0	0
1.0	26	10
1.9	48	20
2.7	69	30
3.9	100	40
4.5	115	43
5.9	151	46
7.6	193	49
9.3	235	52
10.9	278	55
13.3	338	58
14.4	365	61
14.8	375	66
15.6	395	71
16.4	416	76
17.0	433	81
17.6	446	86
18.0	458	91
18.9	479	96
19.6	498	101
20.3	516	106
20.9	532	111
21.8	553	116
22.6	575	121
23.5	596	126
24.3	618	131
25.1	638	136
25.7	654	141
26.2	665	146
26.3	667	151
26.3	669	156



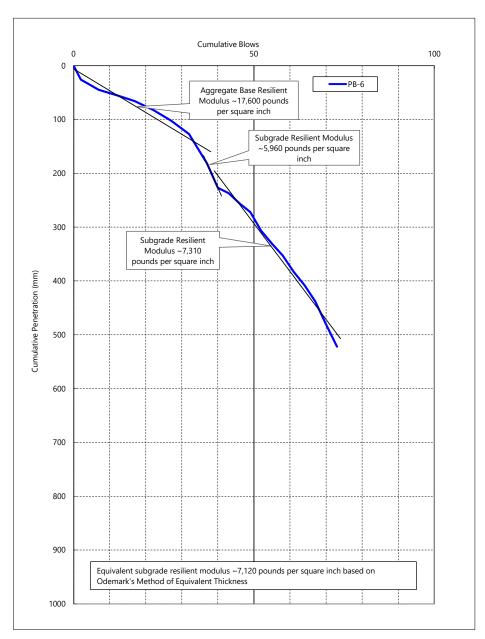


NOV. 2023 JOB NO. 6805-A FIG. 17A

JOB NO. 6805-A DRAWN BY JGH TESTING DATE 6/14/2023

Test Number	PB-6	Surface Type	Below A/C
Location	SE Johnson Creek Boulevard	Hammer	17.6 pounds

Depth, inches	Depth, millimeters	Cumulative Blows
0.0	0	0
1.0	26	2
1.8	45	7
2.2	55	12
2.6	66	17
3.2	82	22
4.0	102	27
5.0	127	32
7.2	182	37
8.9	227	40
9.3	237	43
10.1	256	46
10.7	272	49
12.1	307	52
13.0	331	55
13.9	353	58
15.1	383	61
16.1	408	64
17.2	438	67
18.9	481	70
20.6	522	73



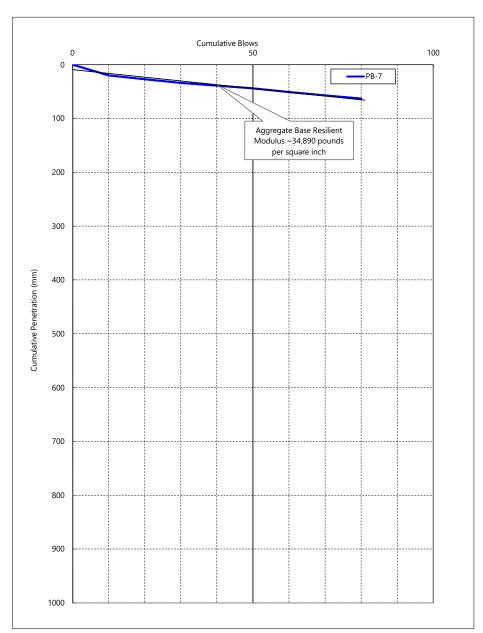


NOV. 2023 JOB NO. 6805-A FIG. 18A

 JOB NO. 6805-A
 DRAWN BY JGH
 TESTING DATE
 6/14/2023

Test Number	PB-7	Surface Type	Below A/C
Location	SE Bell Avenue	Hammer	17.6 pounds

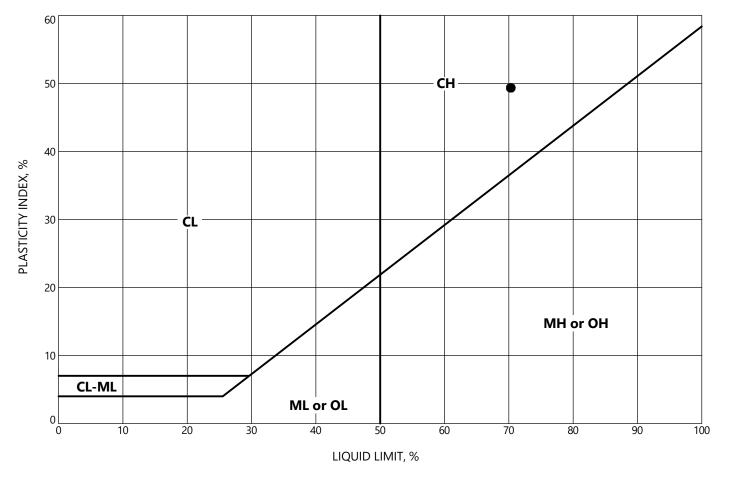
Depth, inches	Depth, millimeters	Cumulative Blows
0.0	0	0
0.8	20	10
1.1	27	20
1.3	34	30
1.5	39	40
1.7	44	50
2.0	51	60
2.2	57	70
2.5	63	80





GROUP SYMBOL	UNIFIED SOIL CLASSIFICATION FINE-GRAINED SOIL GROUPS
OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
ML	INORGANIC CLAYEY SILTS TO VERY FINE SANDS OF SLIGHT PLASTICITY
CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY

GROUP SYMBOL	UNIFIED SOIL CLASSIFICATION FINE-GRAINED SOIL GROUPS
ОН	Organic Clays of Medium to High Plasticity, Organic Silts
МН	INORGANIC SILTS AND CLAYEY SILT
СН	Inorganic clays of high plasticity

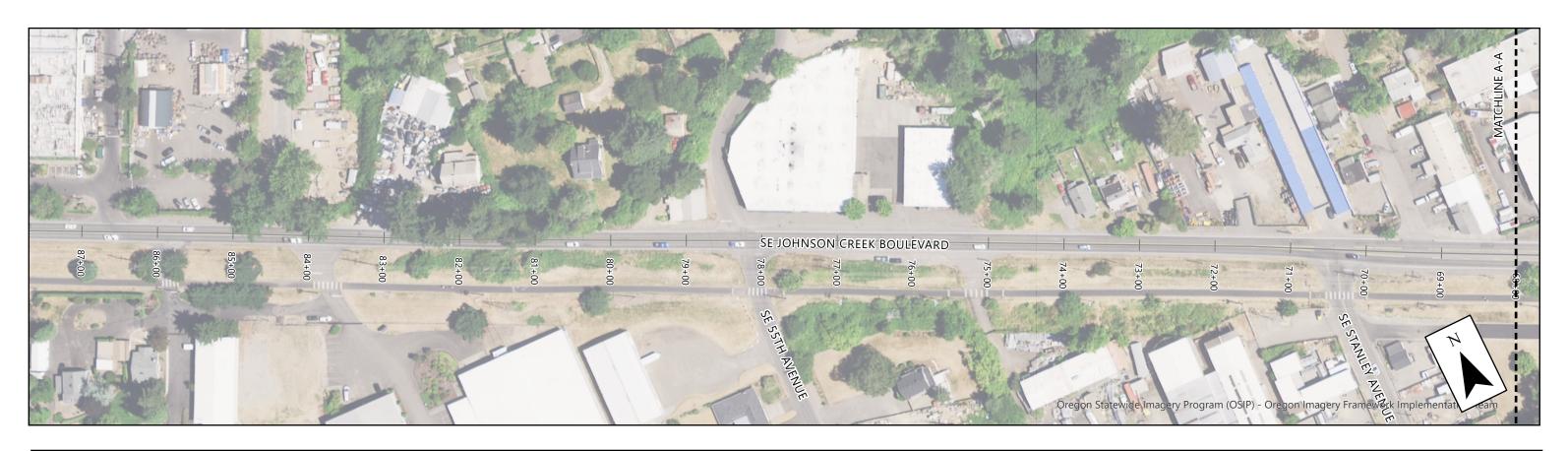


	Location	Sample	Depth, ft	Classification	LL	PL	PI	MC, %
•	PB-6	S-3	3.5	Clay, gray	70	21	49	36



ATTERBERG-PLASTICITY 1 PER PAGE GRI DATA TEMPLATE.GDT 7/27/23

NOV. 2023 JOB NO. 6805-A FIG. 20A





AERIAL IMAGERY OBTAINED FROM 2018 OREGON STATEWIDE IMAGERY PROGRAM: ACCESSED JULY 28, 2023

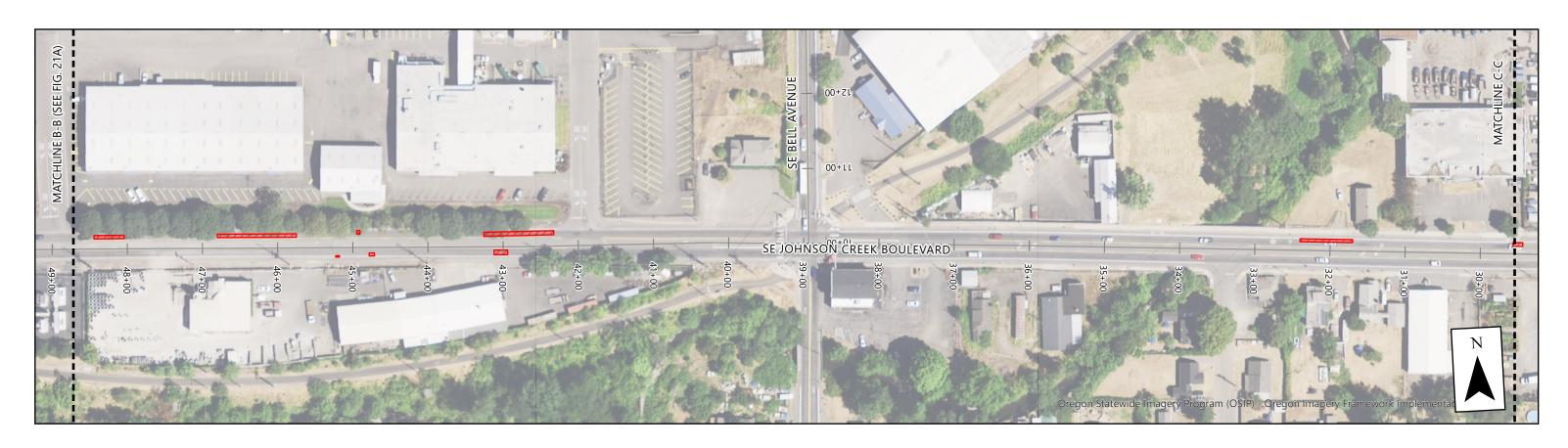
<u>LEGEND</u>

RECOMMENDED APPROXIMATE FULL-DEPTH REPAIR LOCATION



### **FULL-DEPTH REPAIR LOCATIONS**

FIG. 21A





AERIAL IMAGERY OBTAINED FROM 2018 OREGON STATEWIDE IMAGERY PROGRAM: ACCESSED JULY 28, 202.

<u>LEGEND</u>

RECOMMENDED APPROXIMATE FULL-DEPTH REPAIR LOCATION



### **FULL-DEPTH REPAIR LOCATIONS**



# Non-Park Use of Park Property (NPUP) Permits

### **General Requirements for Permittees**

- ➤ Contractor Responsibilities. If you hire a contractor to undertake the permitted work, the contractor is required to follow the terms of this permit. Please provide a copy of all permit documents to your contractor.
- ➤ Notice to Proceed Conditions. Before any work may be performed, you must complete the conditions in your permit to receive the required Notice to Proceed from your assigned PP&R Project Manager. Please see the Notice to Proceed Conditions in your permit.
- Notice of Completion. You must notify your assigned PP&R Project Manager after completing your permitted work. Please see the Close Out Conditions in your permit for additional conditions required to close your permit.
- ➤ **Restricted Dates and Times.** You may only perform your permitted work on the dates and times stated in your permit.
- Additional Permits. You are responsible for determining and obtaining any additional permits needed for the permitted work. Please consult with the City of Portland Bureau of Development Services and the City of Portland Urban Forestry to see if other permits are necessary.
- > Impact Fees. Trail and other property closures from your permitted work may subject you to impact fees in addition to your application fee. Please review the impact fee rate schedule on the NPUP website to estimate your fees.

## Thank you!

If you have any questions about these general requirements, please contact the NPUP Administrator at <a href="https://newsammonto.org/news/news/">NPUP.Parks@PortlandOregon.gov</a> or (503) 201-7817.

For more information, visit <a href="https://www.portland.gov/parks/non-park-use-permits">https://www.portland.gov/parks/non-park-use-permits</a>

#### **NON-PARK USE OF PARK PROPERTY PERMIT**

This Non-Park Use of Park Property Permit ("Permit") is entered into between the City of Portland by and through Portland Parks & Recreation ("PP&R" or "City") and the Permittee defined below (individually a "Party" and collectively the "Parties"). This Permit is effective as of the date that PP&R issues the fully executed Permit to Permittee and consists of sections "A. Permit Special Terms and Conditions", "B. Permit Standard Terms and Conditions", and any referenced attachments.

The Parties agree as follows:

### A. Permit Special Terms and Conditions.

The following *Permit Special Terms and Conditions* are specific to this Permit and define terms that are used throughout the Permit.

1. Permit No.: 2024-74

#### 2. Contact Information:

PP&R Project Manager: Lora Lillard, 503-200-9924, lora.lillard@portlandoregon.gov

**Permittee:** Clackamas County

Permittee Contact: Jordan Cools, 971-288-8136, jcools@clackamas.us, 150 Beavercreek Rd.,

Oregon City, OR 97045

Authorized Contractor: TBD Contractor Contact: TBD

The Permittee Contact must remain the primary contact for Permittee for the performance of the Permitted Work unless otherwise approved in writing by the PP&R Project Manager. PP&R will notify Permittee in writing if the PP&R Project Manager changes.

#### 3. Permitted Work:

This Permit authorizes the following Permitted Work. <u>Please note</u>: Changes to the <u>Permitted Work</u> require written approval as stated in the <u>Permit Standard Terms and Conditions</u>.

Property:	Park: Springwater Corridor
	Address:
	R#: C230646, C230770, C462633
	Management: Owned and managed by PP&R
Work Site(s):	The location of the Permitted Work is shown and attached as "Attachment
	A".
Scope of Work: Please note: Permittee's work must conform to any attached work pla	
	Permittee is authorized to perform the following work subject to the terms
	of this Permit:

	Reconstruct trail connections to the Springwater Corridor and  associated ADA ungrades			
NA/ only NA/ in discour	associated ADA upgrades			
Work Window:	Please note: Permittee must notify the PP&R Project Manager before the			
	<u>expiration of the Work Window if additional time is needed.</u>			
	Permittee may only perform the Scope of Work within the following Work			
	Window and subject to the Workday(s) restrictions:			
	• 5/1/25 – 8/1/25			
Workday(s):	Permittee may only perform the Scope of Work for 30 workdays within the			
	Work Window.			
	Dormitton may only perform the Coope of Work between Mandays			
	Permittee may only perform the Scope of Work between Mondays			
	through Fridays between 9 AM to 4 PM, excluding holidays.			
Trees and Urban	Permittee shall comply with the attached Urban Forestry Tree Protection			
Forestry:	Rules.			
	☐ In addition, Permittee shall:			
	•			
Park and Trail Closures	☐ No park or trail closures or disruptions are authorized.			
or Disruptions:	☐ Park or trail closures or disruptions are authorized as follows:			
	Partial Closure. A partial trail closure is authorized as follows:			
	Duration. TBD			
	Other Conditions:			
	Advance Notice. Permittee shall provide written			
	confirmation of the closure details, including the dates and			
	times, to the PP&R Project Manager at least 1 week before			
	the scheduled closure date to ensure adequate public			
	notice.			
	Permittee shall post advanced notice at least 1 week before			
	the closure.			
	<ul> <li>Advance Notice signage must: (i) be placed at the entry</li> </ul>			
	points to the trail (ii) include the dates, times, and location			
	of trail closure; and (iii) include Permittee contact			
	information for the general public to direct questions.			
	<ul> <li>Traffic Control Plan. Permittee shall implement the</li> </ul>			
	attached Traffic Control Plan and any other traffic or detour			
	controls as directed by the PP&R Project Manager. Traffic			
	control signage must include the following signs <b>placed</b>			
	every 100':			
	Road Work Ahead;			
	■ Be Prepared to Stop;			
	Bicycles Must Dismount; and			
	■ Flagger			
	<ul> <li>Limited Use of Trail. Permittee shall ensure that permitted</li> </ul>			
	vehicles: (i) only drive on the trail to access or exit the Work			
	venicles. (i) only drive on the trail to access or exit the work			

	Site(s); and (ii) do not park on the trail. Permittee	
	acknowledges that vehicles are generally not allowed to drive on paved trail surfaces.	
	<ul> <li>Spotters. Permittee shall use spotters whenever a vehicle is</li> </ul>	
	in motion on the trail.	
	<ul> <li>Flaggers. Permittee shall use flaggers to direct pedestrians</li> </ul>	
	as directed by the PP&R Project Manager.	
	<ul> <li>Cones. Permittee shall place cones to demarcate the Work Site(s).</li> </ul>	
	<ul> <li>Bollards. If bollards need to be removed for trail access,</li> </ul>	
	Permittee must contact the PP&R Project Manager at least	
	2 business days (M-F) prior to the access date to coordinate	
	removal. Permittee shall not force entry or otherwise	
	compromise the structural integrity of bollards or other	
	security equipment to gain access to the Property.	
Overnight Staging:	No evernight staging authorized	
Overnight Stagnig.	<ul><li>☒ No overnight staging authorized.</li><li>☐ Overnight staging is authorized as follows:</li></ul>	
	Overnight stagning is authorized as follows.	
Equipment:	Please note: Vehicles and heavy equipment must remain on paved areas,	
Equipment.	excluding areas containing pavers, or established maintenance paths at all	
	times while on the Property unless Permittee has received prior written	
	approval from the PP&R Project Manager.	
	The following equipment are authorized for use within the Property:	
	Mini-excavator, dump truck, concrete truck, hand tools, concrete	
	forming boards and stakes, concrete hand tools	
	Other equipment TBD	
Restoration	Permittee shall comply with the restoration terms in the Permit Standard	
Requirements:	Terms and Conditions.	
	☑ In addition, Permittee shall:	
	Use a City of Portland pre-approved Asphalt mix:	
	https://www.portlandoregon.gov/transportation/article/510420	
	Ensure that all work installed follows ADA, including transitions,	
	cross-slopes and width	
	Ensure that the depth is 4"      Use the specifications attached for Asphalt Paving and asphalt path.	
	<ul> <li>Use the specifications attached for Asphalt Paving and asphalt path detail.</li> </ul>	
Fire Safety	Permittee shall comply with the attached Fire Safety Restrictions during	
Restrictions:	fire season. Please contact the PP&R Project Manager for current fire	
	season levels.	
	☐ In addition, Permittee shall:	
	•	
· · · · · · · · · · · · · · · · · · ·		

Notice to Proceed	<b>Please note</b> : Permittee must receive written notice to proceed from the	
Conditions:	-	
	Permittee must complete and receive the PP&R Project Manager's	
	approval for the following conditions to be eligible for a Notice to Proceed:	
	☐ Construction Schedule. Provide a construction schedule with dates,	
	times, and duration of access.	
	☑ Traffic Control Plan. Provide a traffic control plan (TCP).	
	oxtime TCP to be approved by applicable jurisdictional road authorities.	
	This condition has been met.	
	☐ Access Route and Staging Areas Plan. Provide an access route and	
	staging area plan, including square footage of all staging areas.	
	☐ <b>Pre-Construction Meeting.</b> Attend or schedule a pre-construction on-	
	site meeting as directed by the PP&R Project Manager. The PP&R	
	Project Manager will coordinate the meeting with the PP&R staff	
	needed to attend.	
	Please note: Scheduling generally requires at least 2 weeks of	
	coordination to accommodate schedules.	
	☐ <b>Title 33 Environmental Overlay Zone.</b> Permittee shall provide	
	documentation verifying Permittee's completion of and compliance	
	with Portland Permitting & Development's permitting requirements	
	for work in an Environmental Zone under Portland City Code 33.430.	
	☐ <b>Other.</b> Permittee shall:	
	•	
Close Out Conditions:	Permittee must complete the following conditions to the PP&R Project	
	Manager's satisfaction to be eligible to close out this Permit:	
	■ Notice of Completion. As required in the Permit Standard Terms and	
	Conditions, the Provide written notice of completion to the PP&R	
	Project Manager within 7 calendar days of completing the Permitted	
	Work.	
	Post-Work Inspection. Schedule a post-work inspection with the	
	PP&R Project Manager and receive written approval of inspection	
	from the PP&R Project Manager. If PP&R determines upon inspection	
	that any restoration work has any deficiency or is not to PP&R	
	specifications, Permittee shall make all necessary corrections within	
	30 calendar days of receiving written notice from PP&R and schedule	
	another inspection.	
	As-Builts. Provide as-builts to the PP&R Project Manager within 60	
	calendar days of completion of work.	
	☐ As-builts must be in CAD file format and conform to any CAD	
	specifications attached to this Permit.	
	☐ <b>Other.</b> Permittee shall:	
	•	

Fees:	Application Fee: Waived for ADA improvements to property	
	Impact Fee: Waived for ADA improvements to property	

### 4. Additional Terms and Conditions.

This Permit is subject to the following Additional Terms and Conditions.

Utility Reference	N/A	
Number(s):		
Other Requirements:	TBD	

### 5. Attachments.

The following are attachments to this Permit:

- Attachment A: Work Plans and Traffic Control
- Attachment B: Urban Forestry Tree Protection Rules
- Attachment C: Asphalt Paving Detail and Specifications
- Attachment D: Fire Safety Restrictions
- Attachment E: CAD Specifications

The Parties, through their authorized representatives, have executed this Permit as of the last date below. <u>Please note:</u> This Permit is not effective until it is fully executed and issued by PP&R to the Permittee.

PERMITTEE Clackamas County	CITY OF PORTLAND Portland Parks & Recreation
Name	
	 Dylan Paul
Title	Manager, Real Estate Services Vibrant Communities Support Services
Signature	Date
Date	APPROVED AS TO FORM
	 City Attorney

#### **B. Permit Standard Terms and Conditions.**

The following are terms and conditions required by the City for all Non-Park Use of Park Property permits. If the *Permit Standard Terms and Conditions* are inconsistent or conflict with the *Permit Special Terms and Conditions*, the *Permit Standard Terms and Conditions* will supersede unless stated otherwise in the *Permit Special Terms and Conditions*. Any change to *the Permit Standard Terms and Conditions* requires Approval as to Form by the City Attorney to take effect.

- **1. Grant of Entry.** This Permit is issued under Portland City Code 20.08.070 Non-Park Use of Park Property and grants Permittee a temporary, revocable right to enter the Property during the Work Window on the Workday(s) solely to perform the Permitted Work at the Work Site(s) subject to the terms of this Permit, including any Additional Terms and Conditions. No other rights or authorizations, such as access to other properties, are granted by this Permit. PP&R reserves the right to enter the Property at any time and for any reason, including inspection. The rights granted by this Permit are revocable by PP&R at any time and for any reason. Permittee shall stop all activities on the Property on revocation or termination. No expenditure of money, lapse of time, or other act or thing will operate as an estoppel against PP&R or give the Permittee any vested or other right.
- 2. Permitted Work. Permittee shall: (i) comply with the terms and conditions of the Permit, including any attachments, amendments, or change orders; (ii) coordinate with the PP&R Project Manager to perform the Permitted Work and comply with any requirements as directed by the PP&R Project Manager; and (iii) perform the Permitted Work in compliance with all applicable laws and regulations, and in a professional manner using industry standard work and safety best practices.
- (a) Changes to the Permitted Work. Permittee must contact the PP&R Project Manager in

- writing to request any changes to the Permitted Work such as extensions to the Work Window or additions to the Scope of Work. Any changes require PP&R's signed, written approval. The PP&R Project Manager may approve limited changes to the Permitted Work through an executed administrative change order. All other Permit changes require an amendment signed by the Parties to take effect.
- **(b) Consent to Improvements.** This section applies if Permittee has a separate agreement with PP&R for use of the Property ("Long-Term Agreement"). By issuing this Permit, PP&R consents to the alterations, additions, or improvements stated in the Permitted Work subject to the terms and conditions of this Permit and those in the Long-Term Agreement. If the Permit Standard Terms and Conditions are inconsistent or in conflict with the terms of the Long-Term Agreement, then PP&R will have the right to determine and clarify priority, precedence, and applicability of the terms of this Permit and the Long-Term Agreement and may apply the more stringent requirements, specifications, standards, criteria, warranty, or obligations to Permittee or interpret any conflict or ambiguity in favor of the City's benefits and interest.
- **3. Other Permits.** Permittee must determine and acquire any other permits, licenses, or approvals that may be required for the Permitted Work separate from this Permit. The PP&R Project Manager may require Permittee to provide or verify any other permits, licenses,

or approvals as a condition to performing the Permitted Work. This Permit does not obligate other City bureaus to take any action with other permit applications that may be necessary for Permittee's use of the Property.

(a) Trees and Urban Forestry. Permittee may be required to submit or obtain additional Portland Urban Forestry tree permits. Please contact Portland Urban Forestry to determine additional requirements: https://www.portland.gov/trees/treepermits

(b) Pesticides. Permittee, or any third-party authorized by Permittee, shall not apply pesticide, herbicide, insecticide, or any similar substance without the PP&R Project Manager's prior written approval and an approved Application for Pesticide Use. Permittee, or any third-party authorized by Permittee, must submit a completed Application for Pesticide Use on PP&R Property to the Integrated Pest Management ("IPM") Program Coordinator for evaluation:

https://www.portlandoregon.gov/parks/article/644082

All uses on the Property must comply with IPM policies:

https://www.portlandoregon.gov/parks/article/116237

4. Notice to Proceed. Permittee must receive a written notice to proceed from the PP&R Project Manager by completing the Notice to Proceed Conditions before beginning any Permitted Work. Permittee's work must conform with all submitted documents required to complete any Notice to Proceed Conditions. All documents are subject to the PP&R Project Manager's approval. Permittee shall provide any additional documents required by the PP&R Project Manager to support a notice to proceed. For documents provided after the Permit is issued, PP&R may

require that Permittee's documents be incorporated into this Permit with a change order or an amendment signed by the Parties.

- **5. Close Out.** Permittee shall: (i) provide written notice of completion to the PP&R Project Manager within 7 calendar days, or as otherwise stated in the Close Out Conditions, of completing the Permitted Work; and (ii) complete any other Close Out Conditions. PP&R will close out the Permit after Permittee has completed the Close Out Conditions as determined by the PP&R Project Manager. Permittee must comply with all terms and conditions of this Permit and follow the direction of PP&R until the Permit is closed out by PP&R. PP&R will notify Permittee in writing when the Permit is closed out.
- 6. Acceptance of Property. PP&R makes no representations or warranties, express or implied, as to the condition of the Property. Permittee accepts the Property "AS IS".

  Permittee accepts the Property subject to any preexisting rights or interests and agrees that any preexisting rights or interests supersede those granted by this Permit. Permittee is solely responsible for researching and complying with any preexisting rights or interests. The City and its officers, directors, agents, and employees are not liable for any latent defect at the Property or any conflicts with this Permit due
- **7. Assumption of Risk and Liability.** Pursuant to PRK-1.02

to preexisting rights or interests.

(https://www.portland.gov/policies/parks-and-recreation/park-uses/prk-102-non-park-use-park-property) and PRK-1.03
(https://www.portland.gov/policies/parks-and-recreation/park-uses/prk-103-springwater-corridor-non-park-uses), Permittee assumes all legal liability and all risks of damage, loss, injury, or death resulting from the interest or

use granted by this Permit. Permittee waives, releases, and discharges the City and its officers, directors, agents, and employees from any claim or cause of action, whether now known or later discovered, arising out of this Permit except for claims or causes of action due to the sole negligence of the City, its officers, directors, agents, and employees. Permittee acknowledges and agrees that the City and its officers, directors, agents, and employees have no liability to Permittee for any damage, loss, injury, or death arising out of this Permit except for liability caused by the sole negligence of the City, its officers, directors, agents, and employees.

- 8. As-Builts; Improvements. Permittee shall follow any as-built specification requirements attached to this Permit or provided by the PP&R Project Manager. If required in the Close Out Conditions, Permittee shall provide asbuilts or any other required documentation to the PP&R Project Manager in a form acceptable to PP&R. Improvements authorized by this Permit may only remain on the Property by a separate written agreement with PP&R such as an easement, license, or permit.
- 9. Park and Trail Closures or Disruptions. Only the Park and Trail Closures or Disruptions stated in the *Permit Special Terms and Conditions* are authorized. Park and trail closures or disruptions require PP&R's prior written approval and may be subject to additional requirements. Permittee shall: (i) take reasonable precautions to avoid conflicts between the Permitted Work and the public's use of any park or trail; (ii) coordinate with the PP&R Project Manager to determine any notification measures; and (iii) follow all requirements provided by the PP&R Project Manager regarding any closure or disruption.

- 10. Locates. At least 3 business days (Monday-Friday excluding City holidays or other closures) prior to any excavation or subsurface activity being performed, Permittee shall call the Oregon Utility Notification Center at 1-800-332-2344 to request locates. Permittee shall identify that the Property is managed by Portland Parks & Recreation. Permittee shall provide the assigned locates ticket number to the PP&R Project Manager in writing prior to any excavation or subsurface activity being performed.
- 11. Application and Impact Fees. The grant of any rights under this Permit is subject to PP&R's receipt of full payment. Permittee shall pay all Fees as directed by PP&R. Fees are due 30 calendar days from invoicing unless stated otherwise on the invoice. Outstanding balances after 30 calendar days may incur interest at up to 1.5% compounded monthly. Outstanding balances after 90 calendar days may be sent to the City's third-party collection agency. PP&R may assess an Impact Fee if it determines that the Permitted Work results in a closure or inability for PP&R staff or members of the public to use any portion of the Property. Please visit the NPUP website for the current impact fee schedule:
- https://www.portland.gov/parks/non-park-usepermits
- **12. Equipment.** Only the Equipment stated in the *Permit Special Terms and Conditions* are authorized for use to perform the Permitted Work and Permittee assumes all risk of any damage or loss to such Equipment. Permittee shall keep any Equipment within the Work Site(s) when on the Property.
- (a) Vehicles and Heavy Equipment. Vehicles and heavy equipment must remain on paved areas, excluding areas containing pavers, at all times while on the Property unless Permittee

has received prior written approval from the PP&R Project Manager. If Permittee receives approval, Permittee shall follow all instructions given by the PP&R Project Manager. Vehicles brought onto the Property must be marked as corporate vehicles belonging to Permittee or its contractors. Personal vehicles belonging to Permittee's employees or contractors are not authorized to be parked or used on the Property while performing the Permitted Work.

13. Maintenance; Restoration. Permittee shall maintain the Work Site(s) and its equipment in good clean order, clear debris promptly, and correct any dangerous, unsafe, or hazardous object or condition. Permittee shall repair or restore, at its own expense and with notice to PP&R, any damage to the Property, surrounding City property, or property under Permittee's control caused by or connected with Permittee's work, entry, or occupancy of the Property under this Permit. Permittee shall restore the Property to conditions equal to or better than those pre-existing Permittee's work and follow any Restoration Requirements in the Permitted Work. Repair and restoration are subject to PP&R's written approval. Permittee shall ensure that its repair and restoration work is performed by qualified professionals using industry standard work and safety best practices and in compliance with all applicable laws and regulations. If deficiencies resulting from Permittee's work are found by PP&R at any time, including after close out of this Permit, and if Permittee does not repair the deficiencies caused by Permittee within 30 calendar days after notice from PP&R of the issue or sooner if determined by PP&R for any health and life safety reason, PP&R may correct the repair or restoration and Permittee will be liable for the costs.

**14. Security.** Permittee shall use appropriate safety measures, such as signage, coning, or

fencing, to keep people away from Equipment or Work Site(s) and to warn people of any hazards. Permittee's safety measures are subject to PP&R's approval. Permittee acknowledges that PP&R's approval of safety measures does not reduce Permittee's assumption of any risk or liability. Permittee shall give the PP&R Project Manager immediate notice of and take all reasonable action to mitigate or resolve any damage caused by any hazardous condition, disturbance, accident, or occurrence related to Permittee's access to or use of the Property.

**15. Bureau Permittee.** If the Permittee includes a bureau of the City ("Bureau Permittee"), then the indemnification and insurance sections of this Permit do not apply to the Permittee. If there are any claims or damages arising from this Permit involving a Bureau Permittee, the Bureau Permittee will be the lead city bureau to work with the City of Portland's Risk Manager or PP&R to manage and resolve claims, which may include charging Bureau Permittee accounts.

**16. Indemnification.** If Permittee is an Oregon governmental entity, its indemnity is subject to the limits of the Oregon Constitution and the Oregon Tort Claims Act. Permittee shall indemnify, defend, and hold harmless the City and its officers, directors, agents, and employees from any and all liability, damages, expenses, attorney's fees, causes of action, suits, claims or judgments, arising out of or connected with: (i) Permittee's entry, use, or occupancy of the Property; (ii) any failure of Permittee to comply with the terms of this Permit or any violation of law or ordinance associated with this Permit; (iii) the acts or omissions of Permittee or its officers, directors, agents, employees, or invitees in association with this Permit; or (iv) Permittee's handling, storage, discharge, transportation, or disposal

of hazardous or toxic wastes or substances, pollutants, oils, materials, or contaminants as those terms are defined by federal, state, or local law or regulation as amended from time to time in association with this Permit. Permittee shall not be liable for claims caused by the sole negligence of the City, its officers, directors, agents, and employees. Permittee shall, at their own cost and expense, defend (with counsel acceptable to City) any and all suits which may be brought against Permittee or City, their officers, directors, agents, and employees, either alone or in conjunction with others upon any such above mentioned cause or claim, and shall satisfy, pay, and discharge any and all judgments, including attorney fees and costs, that may be recovered against City or Permittee, their officers, directors, agents, and employees in any such action or actions, including any appeals, in which they may be party defendants. Damages, costs, liabilities, and expenses include any amounts claimed to be owed by any regulating and administering agency.

- 17. Insurance. Unless otherwise approved or waived by PP&R in writing, Permittee shall obtain at its own expense and maintain in full force throughout the term of the Permit insurance that meets PP&R's current standard insurance requirements and the requirements in this section. PP&R may require additional insurance coverage in its discretion. PP&R may require Permittee to provide copies of insurance policies, including endorsements, verifying the coverage required to meet PP&R requirements. Please visit the NPUP website for the current standard insurance requirements: <a href="https://www.portland.gov/parks/non-park-use-permits">https://www.portland.gov/parks/non-park-use-permits</a>
- (a) General Requirements. Commercial general liability insurance coverages must name the City of Portland and its officers, agents, and

employees as additional insureds with respect to Permittee's use of the Property and for its ongoing operations at the Property. All insurance must be: (i) without prejudice to coverage otherwise existing; (ii) primary and not seek contribution from any other insurance available to the additional insured; (iii) protect each insured in the same manner as though a separate policy had been issued to each; and (iv) obtained from insurance companies acceptable to the City.

- (b) Notice of Cancellation. Permittee shall not cancel or terminate the required insurance without providing PP&R with written notice at least thirty (30) calendar days in advance. If the insurance is cancelled or terminated, Permittee shall cease all Permitted Work until a new policy with terms acceptable to the City is obtained.
- 18. Hazardous Materials. Permittee shall not store, use, transport, manufacture, or dispose of, or cause to be stored, used, transported, manufactured, or disposed of, any hazardous substances as defined by ORS 465.200 and implementing regulations of the State of Oregon Department of Environmental Quality within the Property or surrounding City property, or otherwise cause any condition that constitutes a health hazard as defined by the rules of the Oregon State Health Division.
- **19. Compliance with Laws, Rules, and Regulations.** Permittee shall comply with all applicable federal, state, and local laws, rules, and regulations. Permittee shall correct any failure of compliance caused by Permittee or their agents or invitees.
- (a) Public Space. Permittee understands that there are many uses and activities occurring at Portland parks, including recreation and pedestrian traffic during park open hours.

Permittee must manage its behavior, activity, use, and any business allowable under this Permit so that Permittee does not create unreasonable congestion to parks trails or paths for persons with disabilities or for persons wishing to engage in businesses with the City, or unduly interfere with other persons who may wish to use Portland parks. Permittee understands that there may be unexpected crowds, gatherings, and other expressive activities at Portland parks. Permittee understands and assumes potential risks of damages, losses, interruption, or interference to its business or commercial activities, or personal injuries to Permittee, its employees, agents, or invitees that may be caused by any third-parties.

- (b) Park Rules. Permittee is subject to all Parks regulations, City codes, statutes, and laws, including the prohibited conducts under Portland City Code (PCC) Chapter 20.12, such as prohibited conducts relating to permits (PCC 20.08.060), prohibition against weapons (PCC 20.12.050), and emergency access restriction (PCC 14C.30.010), and crowd management and dispersement requirements (ORS 131.675).
- (c) Respectful Workplace. The City is committed to a respectful work environment, free of harassment, discrimination and retaliation, and other inappropriate conduct. Every individual has a right to work in a professional atmosphere where all individuals are treated with respect and dignity. Any Bureau Permittee must follow the City's Human Resources Administrative Rule (HRAR) 2.02 (https://www.portlandoregon.gov/citycode/27 929) in its practices with its employees and contractors while performing the Permitted Work. Any other Permittee must follow rules substantially similar to HRAR 2.02. Permittee shall provide a copy of such rules if requested by PP&R.

**20. Notice.** Notices under this Permit must be in writing (email sufficient except for service of process), sent to the applicable address stated in the *Permit Special Terms and Conditions*, and are effective upon receipt. Mailed general notices to the City must be addressed to:

City of Portland Vibrant Communities Support Services Real Estate Services, Attn: NPUP Administrator 1120 SW 5th Avenue, Room 858 Portland, OR 97204-1933

Service of process must be addressed to:

Portland City Attorney's Office
1221 SW 4th Avenue, Room 430
Portland, Oregon 97204
Attn: Parks Legal Advisor
With a copy to:
CityAttorneysOffice@PortlandOregon.gov

- 21. Performance Guarantee. If required by PP&R, Permittee shall guarantee performance in one of the following forms as approved by the City Attorney: (i) surety bond executed by a company authorized to transact business in the State of Oregon; (ii) irrevocable letter of credit; (iii) set-aside account; (iv) cash bond; or (v) another form acceptable to the City Attorney. Permittee shall maintain the guarantee in place throughout the term of the Permit and for any additional time if required by PP&R. Permittee may request a reduction in the amount of the guarantee provided that any reduction must comply with PP&R administrative policies and be reviewed and approved by the City Attorney's Office.
- **22. Termination.** The rights granted by this Permit terminate when the Permit is closed out by PP&R or as provided in this section. PP&R may terminate this Permit immediately at any time and for any reason, including failure of

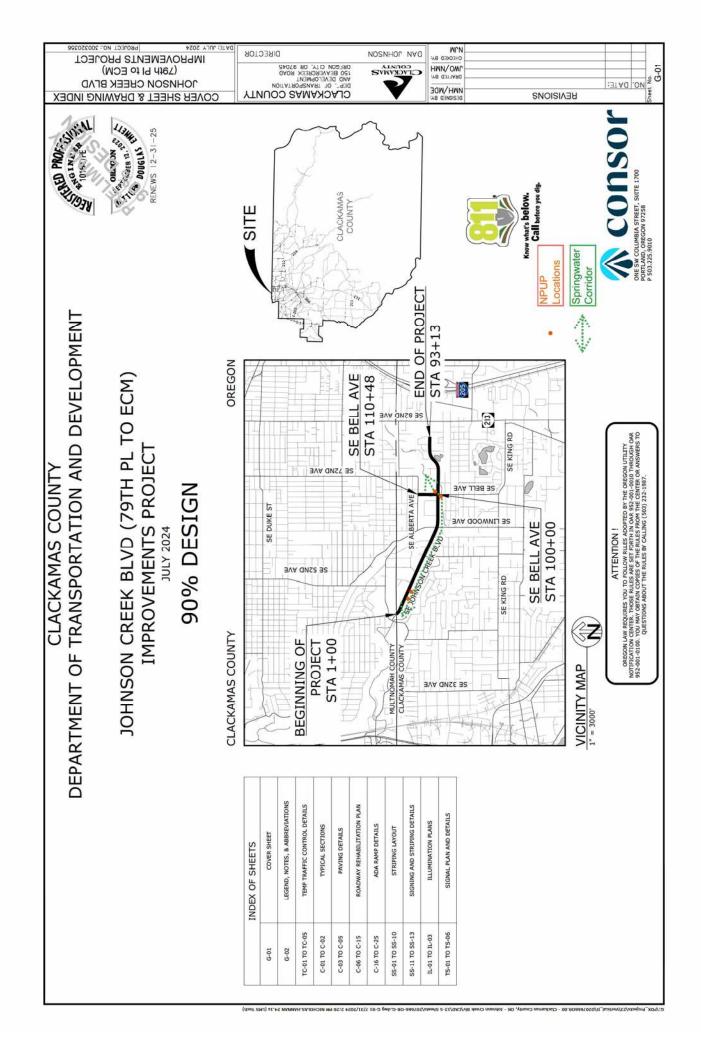
Permittee to comply with the terms and conditions of this Permit, and will provide written confirmation of termination. If PP&R terminates this Permit prior to close out, PP&R's obligation is limited solely to a refund of any unearned and prepaid Impact Fees less any costs for expenses due to Permittee's activities as determined by PP&R. Permittee acknowledges and agrees that some of its obligations under this Permit, including restoration, assumptions of risk, waivers of claims, and indemnification, will continue after the Permit is closed out or otherwise terminated.

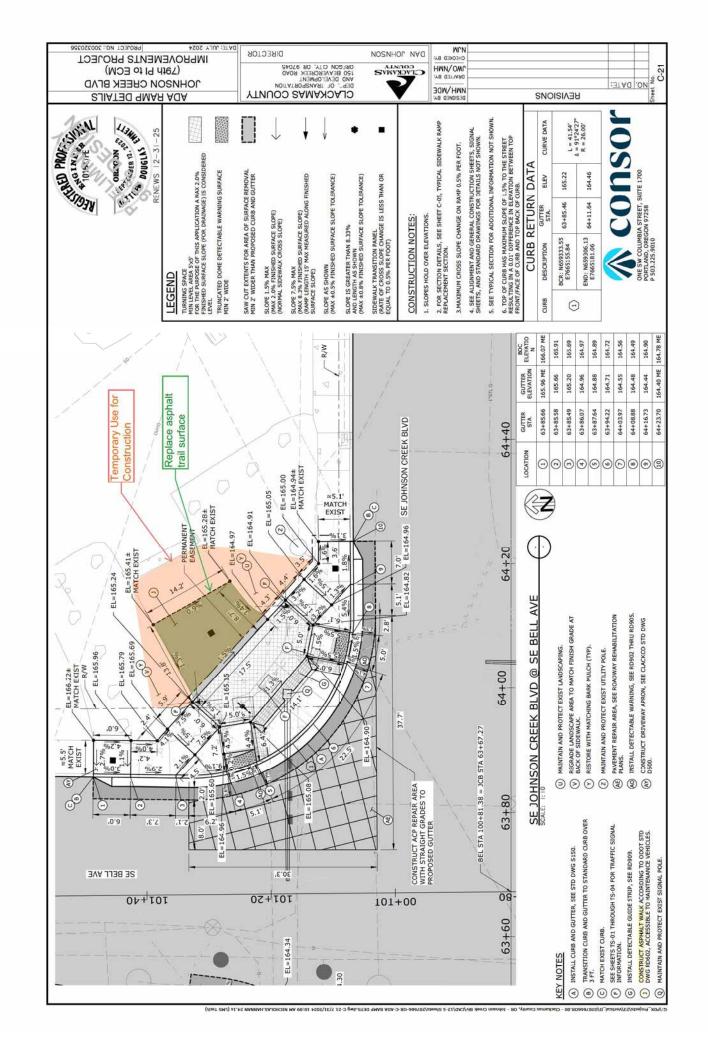
- **23. No Liens.** Permittee shall keep the Property and any adjacent City property used in connection with this Permit free from any liens arising from any work performed, materials furnished, or obligations incurred by or at the request of Permittee.
- **24. No Agency.** This Permit does not authorize either Party to act as an agent of the other Party, and does not create any joint venture, partnership, or formal business entity or organization of any kind between the Parties.
- **25. Contractors; Transferability.** Permittee shall not engage contractors or transfer or assign this Permit or any right or obligation of

this Permit, by operation of law or otherwise, without the prior written approval of PP&R. Permittee shall require contractors or assignees to agree to and follow the requirements of this Permit as if they were the Permittee. PP&R may require any contractor to sign and agree to this Permit. Permittee is solely responsible for any payment to any contractor or subcontractor and for any liability arising from the activities of or due to the use of any contractor or subcontractor in the performance of this Permit.

26. General. This Permit contains the entire agreement between the Parties and supersedes all prior understanding, whether written or oral. Except as otherwise provided in this Permit, no term or condition of this Permit may be amended or considered waived, except by a writing signed by the Parties that refers to this Permit. This Permit may be signed in separate counterparts. If any term or part of a term of this Permit is invalid, illegal, or unenforceable, the rest of the Permit will remain in effect. This Permit is governed by the laws of the State of Oregon, without regards to the conflicts of law provision. Any suit or action arising under this Permit must be filed in the Multnomah County Circuit Court or in the United States District Court for the District of Oregon in Portland.



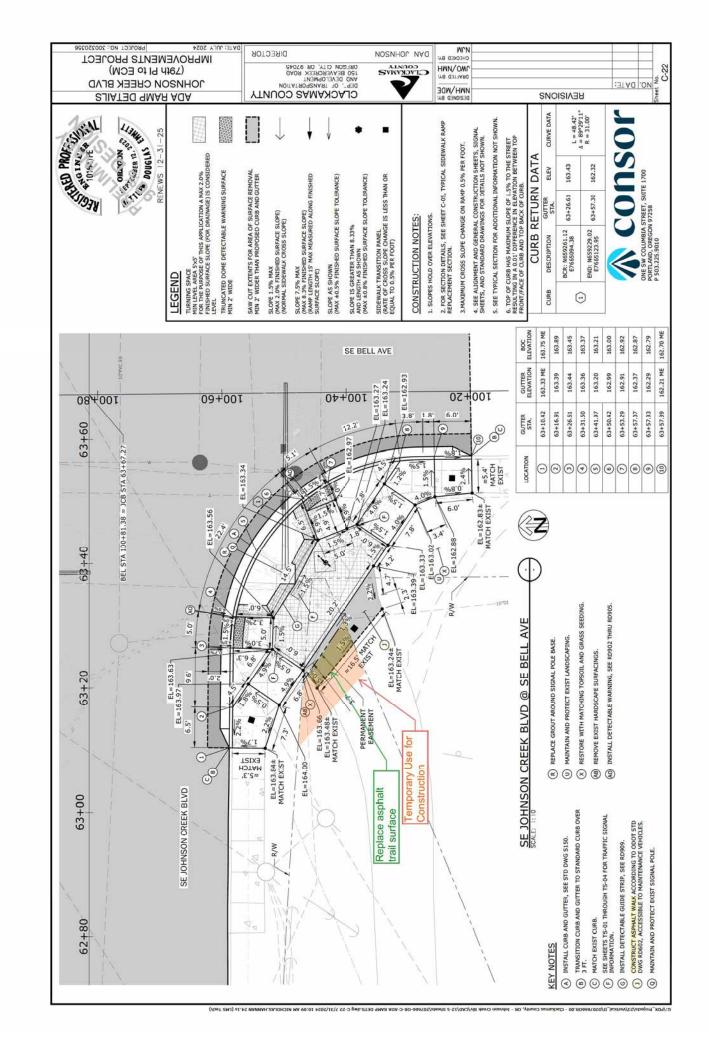




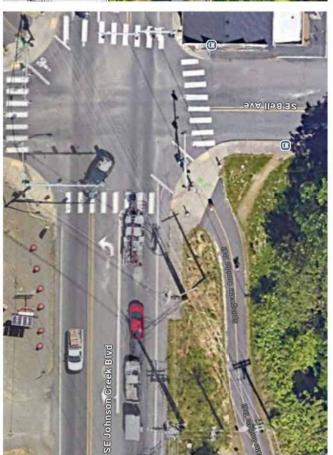




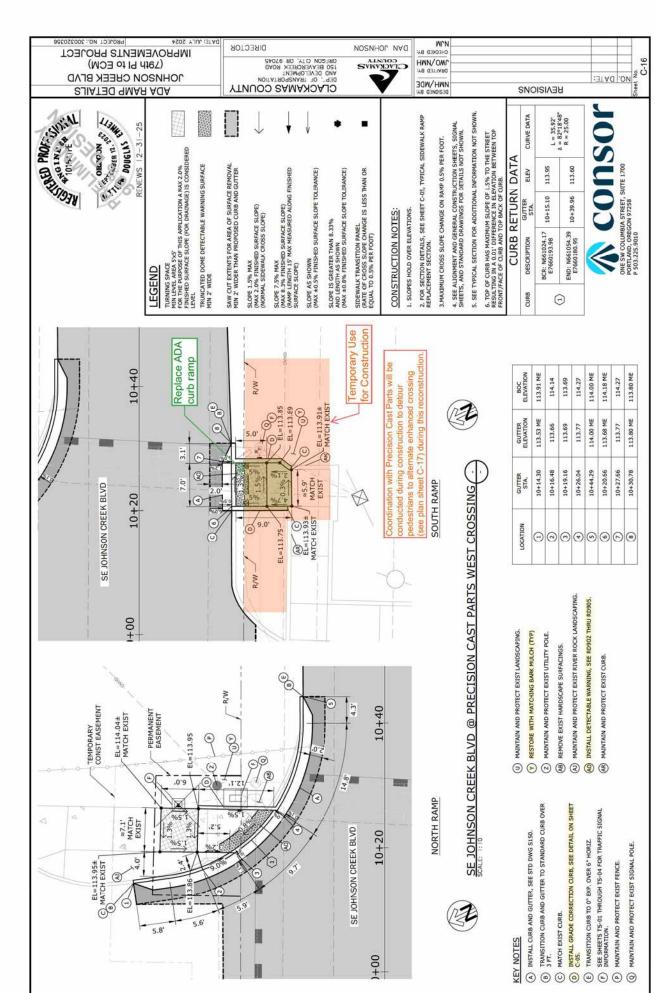
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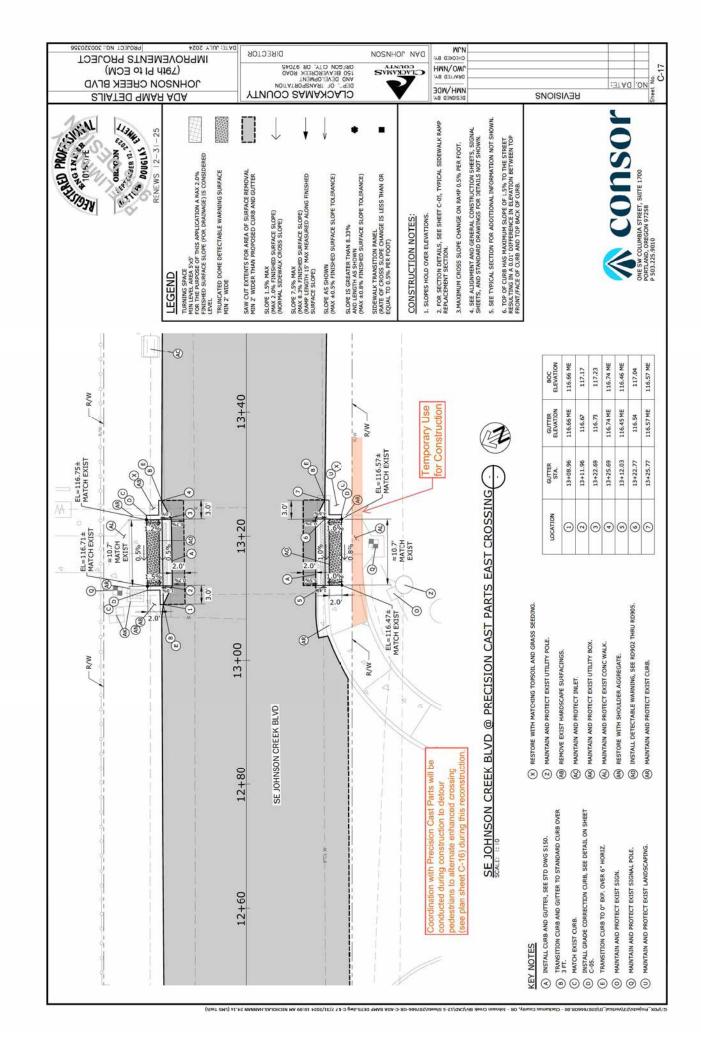
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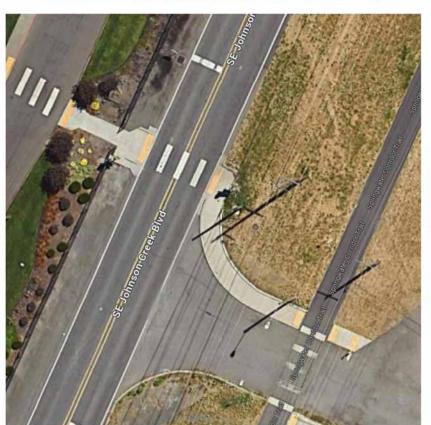




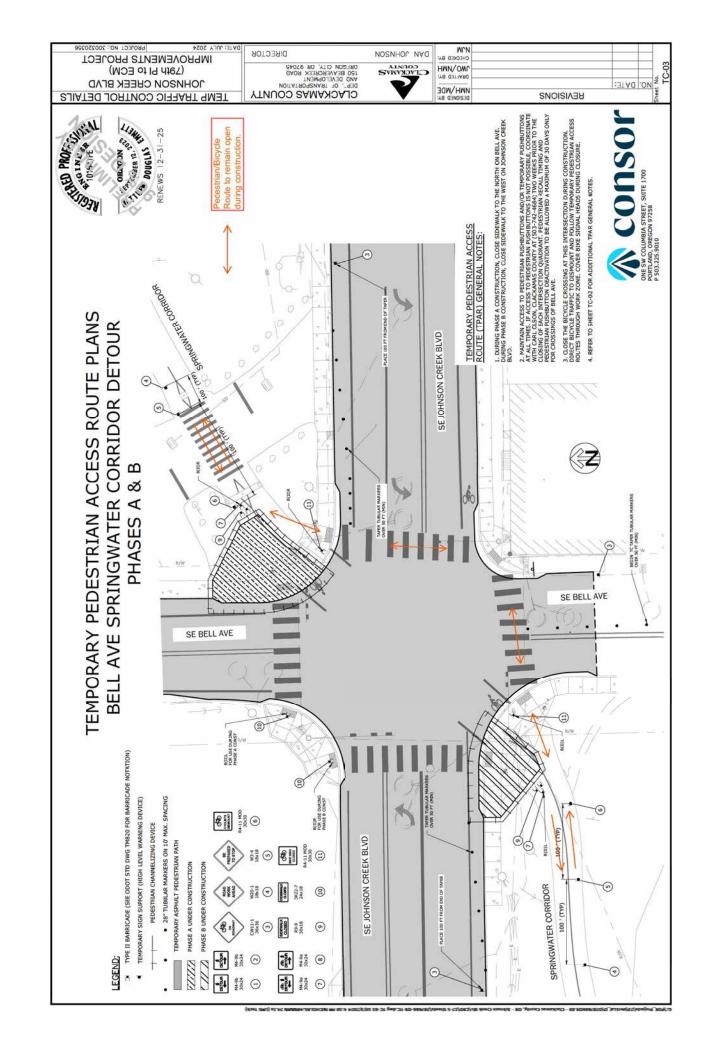
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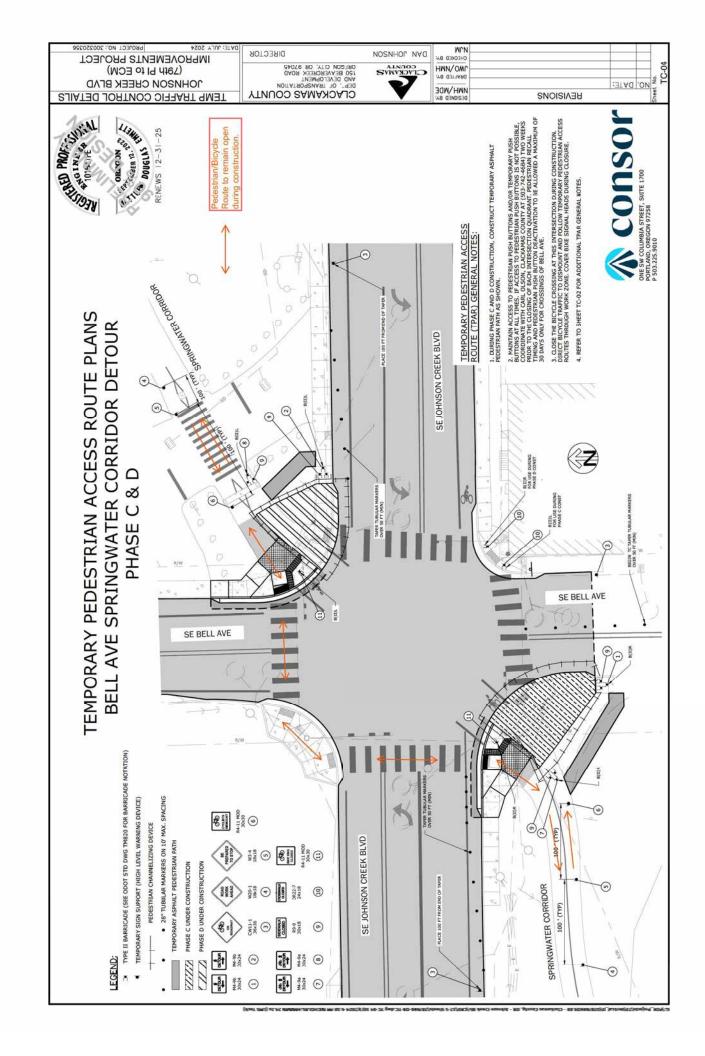






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PROJECT NO.: 300320356	ATE: JULY 2024
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ON CHEEK BLVD	NHOL
FIC CONTROL DETAILS	TEMP TRAF

DIRECTOR CLACKAMAS COUNTY
TO BEALGABER RAND
TO BEARBOREEK ROAD
ORFEON CITY, DR 97045



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TCP AND TPAR APPLICATIONS BY ADA CORNER

RAMP LOCATION NUMBER	CORNER	QUADRANT	TCP	TPAR
PRECISION CAST PARTS,	5	SE	ONE LANE CLOSURE, 2-LANE, 2-WAY (SINGLE FLAGGED BI-DIRECTIONAL LANE), SEE ODGT STD DWG TM855 FOR DETAILS.	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTRIAN ACCESS. COORDINATE WITH PROPERTY OWNER PRECISION CAST PARTS. GPOSSIAN. ENSURE CONSTRUCTION 1S. PHARSED SO EAST CROSSING REMAINS OPEN WHILE WEST CROSSING IS CLOSED.
WESTLOT	2	N.	ONE LANE CLOSURE, 2-LANE, 2-WAY (SINGLE FLACGED BI-DIRECTIONAL LANE), SEE ODCT STD DWG TM855 FOR DETAILS.	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTFIAN ACCESS. COORDINATE WITH PROPERTY OWNER (PRECISION CAST PARTS) TO DETOUR PEDESTRANS TO CROSS AT EAST PRECISION CAST PARTS CROSSING. ENSURE CONSTRUCTION IS PHASED SO EAST CROSSING REMAINS OPEN WHILE WIST CROSSING IS CLOSED.
PRECISION CAST PARTS,	<i>E</i> .	SE	ONE LANE CLOSURE, 2-LANE, 2-WAY (SINGLE FLAGGED BI-DIRECTIONAL LANE), SEE	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTFIAN ACCESS. COORDINATE WITH PROPERTY OWNER (PRECISION ACST PARTS) TO DITIOUR PEDESTRIANS TO CROSS AT WEST PRECISION CAST PARTS CROSSING. ENSURE CONSTRUCTION IS PHASED SO WEST CROSSING RAMAINS OPEN WHILE FAST CROSSING IS CLOSED.
EASTLOT	2	NE	ONE LANE CLOSURE, 2-LANE, 2-WAY (SINGLE FLAGGED BI-DIRECTIONAL LANE), SEE ODGT STD DWG TM855 FOR DETAILS.	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTRIAN ACCESS. COORDINATE WITH PROPERTY OWNER PRECISION ACST PARTS GEOSSING. ENSURE CONSTRUCTION IS PHASED SO WEST CROSSING REMAINS OPEN WHILE EAST CROSSING IS CLOSED.
	2	Ä	2—LANE, 2—WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE NERR SIDE (LANE SHIFT), SEE GDOT STD DWG TMB42 FOR DETMLS, SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TO IS IN PLACE DURING WORK HOURS.	UTILIZE TYPICAL DETAIL ON SHEET TG-02 AND WODIFY AS NEEDED, USE APPROPRATE TEMPORARY TRAFFIC CONTROL WARNING SIGNS WHERE IT IS NECESSARY TO CLOSE THE BIKE LANE.
SE FLAVEL DR	ъ	MN	2-JANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE FAR SDE (LANE SHET). SEE COOT STD DWG TM842 FOR DETAILS, SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TO IS IN PLACE DURING WORK HOURS.	UTILIZE TYPICAL DETAIL ON SHEET TC-OZ AND MODIFY AS NEEDED. USE THE LEFT TURN MEDIAN CLOUGHE AS SHOWN ON THAZA F! NECESSARY TO PROVUDE ADSCUARTE LAND THAT TEAPORARY TRAFFIC CONTROL MARNING SIGNS WHERE IT IS NECESSARY TO CLOSE THE BIKE LANE.
	se .	SE	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE FAR SIDE (LANE SHIFT). SEE GDOT STD DNG TM842 FOR DETAILS, SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TO IS IN PLACE DURING WCRK HOURS.	UTILIZE TYPICAL DETAIL ON SHEET TC-OZ AND MODIFY AS NEEDED. USE THE LEFT TURN MEDIAN LOCADEA. IS NEEDESSARY TO PROVUDE ASCUARE, LANE WIDHS, USE APPROPRATE TRAPPRARY TRAFFIC CONTROL MARNING SIGNS WHERE IT IS NECESSARY TO CLOSE THE BIKE LANE.
טר פבון אינב	2	NE	2—LANE, 2—WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE NEAR SIDE (LANE SHIFT). SEE GDOT STD DNO TMA42 FOR DETAILS, SHUIT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TO IS IN PLACE DURING WORK HOURS.	CONSTRUCT IN MULTIPLE PHASES TO MANYAN ACCESS TO SPRINGWATER CORRIDOR AND PROVIDE TPAR BEHIND WORK ZONE, SEE DETAIL ON SHEETS TC-03 AND TC-04.
34.6	3	WN	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE FAR SIDE (LANE SHIFT). SEE ODOT STD DWG TMB42 FOR DETMLS, SHUT DOWN SIGNAL AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TO IS IN PLACE DURING WORK HOURS.	CLOSE CURB RAMPS AND CROSSWALK TO PEDESTRIAN ACCESS. PHASE CONSTRUCTION SO THESE RAMPS ARE OPEN TO PEDESTRIAN ACCESS DURING CONSTRUCTION OF CORNERS 2 AND 4 AF SE BELL AVE.
	4	MS	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE NEAR SIDE (LANE SHIFT). SEE GOOT STD DWG TMB42 FOR DETAILS, SHUT DOWN SIGNAL, AND USE FLAGGERS TO DIRECT TRAFFIC WHILE TO IS IN PLACE DURING WORK HOURS.	CONSTRUCT IN MULTIPLE PHASES TO MANTAN ACCESS TO SPRINGWATER CORRIDOR AND PROVIDE TPAR BEHIND WORK ZONE, SEE DETAIL ON SHEETS TC-03. AND TC-04.
SE 70TH AVE	55	SE	2-LANE, 2-WAY ROADWAY WITH LEFT TURN MEDIAN RIGHT LANE CLOSURE NEAR SIDE (LANE SHIFT)	UNILEZ TPEQA. DETA, ON SHETE TO-CR AND MODIFY AS RECEDO, USE MEDIAN FOR THRU TRAFFIC IF NECESSARY TO PROVIDE ADEQUATE LANE WIDHAL SAPROPRANT TO CLOSE THE BIRE, LANE, WO PEDSIRAM ACCESS ROUTE REQUIRED ON SE 70TH ARE.
SE 74TH AVE	ю	MN	2-LANE, 2-WAY ROADWAY WITH SHOULDER CLOSURE (F NECESSARY, USE LANE SHIFT TO PROVIDE 11 FT MINMUM LANE WIDTHS). SEE ODDI 5TD DWG TM841 FOR DETAILS.	UTILIZE TIPPOLA, DELIA, ON SHEET TO-CA AND MODIFY AS WEEDED, USE MEDIAN FOR THRU TRAFFIC IF NECESSARY TO PROVIDE ADEQUATE LANE WIDHS, USE APPROPANTE TRAFFIC ONNIROL WIRANDE SIGNS WHERE IT IS NECESSARY TO CLOSE THE BIRE LANE, NO PEDESTRAIA ACCESS ROUTE REQUIRED ON SE "ATH AN".



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**ІМРЯОУЕМЕИТЅ РЯОЈЕСТ** (79th PI to ECM) **TOHINSON CHEEK BLVD** PAVING DETAILS

ALGENTAL PROPERTY OF THE PROPE

DIRECTOR CLACKAMAS COUNTY
TO BEAVERORER ROAD
ORFEON CITY, OR 97045 иогиног ила COUNTY

MUN WB 033 HMN/OWI NWH/WDE

RE-USE OF THE EXIST AGGREGATE BASE UNDER THE SIDEWALK, MAY BE ALLOWED AT THE SOLE DISCRETION OF THE ENGINEER.

# AMERICANS WITH DISABILITIES ACT (ADA) NOTES

1. WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE PROPOSED GUIDBLINGS FOR PEDESTILAN ACCULITIES IN THE PUBLIC BROAT-OF-WAY CAGESBULLTY GUIDBLINGS (PROWAG), AS PUBLISHED BY THE UNITED STATES ACCESS BOARD.

2. UNLESS OTHERWISE SPECITED ON THE PLANS, OR DIRECTED BY THE INSPECTOR, CROSS SLOPES OF SIDEWALKS SHALL BE A MOMINAL 1.5%, CROSS SLOPES SHALL NOT BE LESS THAN 1.9% NOR EXCEED 2.9%, S.DEWALK TRANSTITIONS SHALL BE REPLACED TO THE NEXT NEAREST JOINT.

3. MAXIMUM SLOPES SHOWN ON THE PLANS REPRESENT THE MAXIMUM ALLOWABLE SLOPES PERMITTED BY CLUBREM THE REQUISEDHENTS. THE CONTRACTOR SHALL TAKE INTO TO STRUCTION CONSTRUCTION YOLGEANCES WHEN PLACING SIDEWALKS AND RAMPS TO ENSURE MAXIMUM SLOPES ARE NOT EXCEEDED.

4. SURVEY HAS BEEN COMPLETED FOR ALL CURB RAMPS SHOWN AND WAS USED TO CREATE THE PROJECT PLAN SHEETS.

5. COMPLETE ALL SURVEY STAKING AS NEEDED USING INFORMATION PROVIDED.

6. THE CURB RAMP DEMOLITION LIMITS SHALL BE REVIEWED BY THE INSPECTOR FOR GENERAL CONFRANTY PRIOR TO DEMOLITION. CONTRACTOR SHALL PROVIDE 24 HOUR NOTICE TO INSPECTOR to DEMOLITION LIMITS BEING STAKED AS WELL AS NOTIFY INSPECTOR AT THE THE THE THE THINTS ARE ESTABLISHED.

7, THE PRIME CONTRACTOR AND CONCRETE SUBCONTRACTOR SHALL ATTEND A PRE-POUR METING ON SITE WITH THE INSPECTOR TO DISCUSS THE CURB RAMP CONSTRUCTION PROCESS.

8. FIELD LAYOUT SHALL BE REVIEWED BY THE ENGINEER PRIOR TO CONCRETE PLACEMENT. CONCRETE FOR SUBSKAULS, OAMS SHALL BE PLACED FOR DEALER THAN HOUSE STEPLES. ALLOW POR INSPECTION PRIOR TO AUGUST AND ALLOW FOR INSPECTION PRIOR TO POUR AND ADJUSTMENT BY CONTRACTOR IS NEEDED. CONTRACTOR SHALL PROVIDE 24 HOUR PRIOR TO THE CONTRACTOR SHALL PROVIDE 24 HOUR PRIOR TO AUGUST O INSPECTIOR OF FORWANDER BRING PLACED AS WELL AS NOTIFY INSPECTOR AT THE TIME FORWANDER. HAS BEEN FILLY COMPLETED.

9. INSPECTOR'S PRE-DEMOLITION AND PRE-POUR REVIEW DOES NOT CONSTITUTE ACCEPTANCE OF FINAL GRADES; THE CONTRACTOR REMAINS RESPONSIBLE FOR THE FINAL GRADES.

10. SLOPES SHALL BE MEASURED BY THE INSPECTOR BY USING A 2 FOOT DIGITAL LEVEL, WHICH SHALL BE THE PECKLY, RECORD OF THE SLOPES, IN THE EVENT THAT DIFFERENT SEEDINGS ARE TAKEN BETWEN THE INSPECTOR'S LEVEL AND THE CONTRACTOR'S, THE INSPECTOR'S SHALL GOVERN.

MEASUREMENT OF SLOPES SHALL BE PERFORMED ON THE WALKABLE SURFACE AND SHALL NOT TAKE INTO CONSIDERATION THE TOP OF THE CURB.

12. COMPLETED SIDEWALKS CR OTHER HARDSCAPE ELPHENTS THAT EXCEED MAXIMUM SPECTIFED SLOPES OR ARE LESS THAN MINIMUM SPECTIFED SLOPES SHALL BE REMOVED AND REPLACED BY THE COMPRACTOR AT THE COMPRACTOR'S BYRENSE.

13. THE MAXIMUM CLOSURE TIME, BETWEEN DEMOLITION AND COMPLETION, FOR ANY CURB RAME OR COMPICE SHALL PROVIDE PEDESTRIAN TRAFFIC CONTROL PLAN FOR GUBR RAMP & SIDEWALK CLOSURES AS A PART OF THE OVERALL PROJECT TRAFFIC CONTROL PANNS.

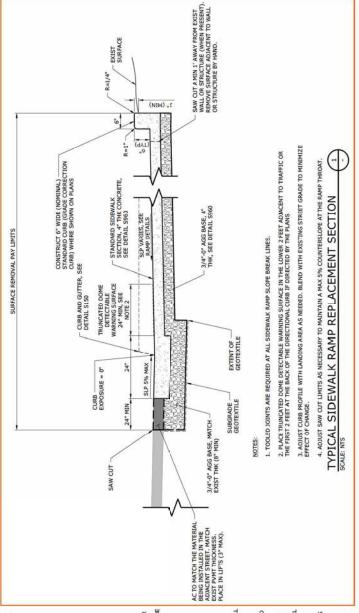
14. PROTECT FRESHLY POURED CONCRETE FROM VANDALISM OR OTHER DAMAGE FOR A MINIMUM OF 24 HOURSO BY UNTL CURED ENOUGH TO SUPPORT TYPICAL USE WHICHEVER IS LOWGES. ANY CONCRETE DAWAGED BY VANDALISM OR OTHER CAUSES SHALL BE REPLACED AT NO COST TO THE PROJECT.

15. ALL AREAS DISTURBED THROUGH THE CONSTRUCTION OF THE SIDEWALLK RAMPS SHALL BE RETURNED TO THEIR ORIGINAL, CONDITION PROJECT COMPLETION. THIS THICLUDES, BUT IS NOT LIMITED TO, LANDSCAPE RESTORATION AROUND NEW RAMPS AT NO COST TO THE PROJECT.

16. CONTRACTOR SHALL TAKEEXTRA CARE TO AVOID DAMAGING ANY IRRIGATION, WIRING, OR OTHER FACILITIES IN THE AREA OF THE NEW PANH, ANY RGALLITIES INTERCOUNTERED SHALL BELOCATED BY THE CONTRACTOR WITHOUT DAMAGE TO AN APPROPRIATE LOCATION OF UNSIDE THE RAMPIWALK AREA, IF DAMAGE OCCURS, REPAIRS WILL BE MADE WITHIN MADURS.

ALL SIDEWALK PANELS IMPACTED BY CONSTRUCTION SHALL BE REPLACED FROM JOINT JOINT, PATCHING OF SIDEWALK PANELS SHALL NOT BE ALLOWED.





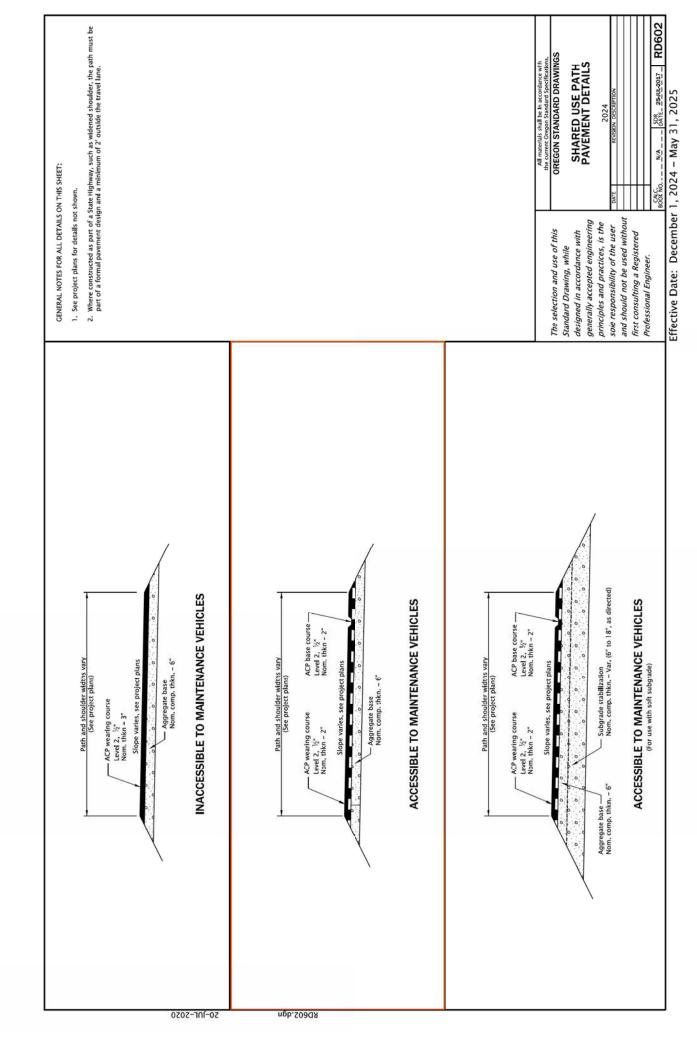


HO. DATE:

BEVISIONS

C-05

Sheet







### **Urban Forestry Tree Protection Rules**

**Tree Plans.** You must follow the tree plan stated in your Permit. If your Permit does not have an approved tree plan but will occur adjacent to or under the branches of any tree on PP&R property, you must contact an Urban Forestry Inspector for advice by calling 503-823-TREE.

Please visit Urban Forestry's website for tree plan requirements: https://www.portlandoregon.gov/trees/article/497210

**Basic Tree Protection Rules.** The following activities ("Basic Tree Protection Rules") are prohibited without the approval of an Urban Forestry Inspector:

- Cutting or pruning any tree trunk, branch, or root.
- Driving or parking any vehicles or machinery under the branches of any tree.
- Leaning or attaching any item to any tree.
- Storing or staging any material or equipment under or adjacent to any tree.
- Discharging water or any effluent in the vicinity of any tree.

You must notify an Urban Forestry Inspector within 24-hours by calling 503-823-TREE if you: (i) cut, damage, or injure a tree; (ii) breach an approved tree plan; or (iii) violate the Basic Tree Protection Rules.

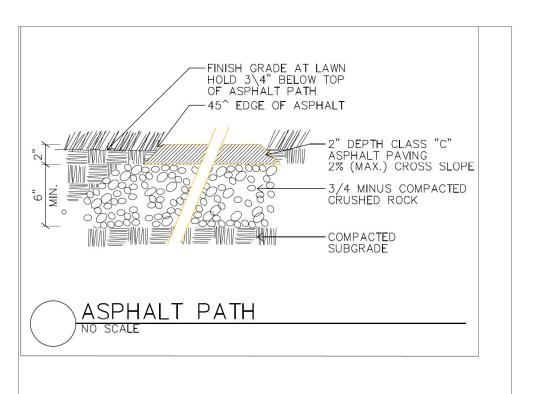
**Remedies.** An Urban Forester may require that you remedy any tree damage or injury, or any breach of an approved tree plan or the Basic Tree Protection Requirements. As detailed under Chapter 11.70 of the Portland City Code, remedies may include: (i) contracting for a qualified person to undertake remedial tree work or treatment; (ii) tree removal and replacement; or (iii) payment of a Restoration Fee.

The standards and provisions in an Urban Forestry Permit are controlling as to any activities under your Permit, including:

- (1) General Tree Protection Standards;
- (2) Prohibited Activities within the Root Protection Zone;
- (3) Tree Protection Fencing Prescribed Path;
- (4) Tree Protection Fencing Performance Path; and
- (5) Heritage Trees.

If you have any uncertainty or question about the applicability of any of above-noted provisions to any work done under your Permit, an Urban Forestry Inspector should be contacted immediately at 503-823-TREE to provide clarification.





### **SECTION 32 1216**

### **ASPHALT PAVING**

### **PART 1 - EXECUTION**

### 1.1 COLD MILLING

- A. Clean existing pavement surface of loose and deleterious material immediately before cold milling. Remove existing asphalt pavement by cold milling to grades and cross sections indicated.
  - 1. Mill to a depth of **2 inches**.
  - 2. Patch surface depressions deeper than 1 inch after milling, before wearing course is laid.

### 1.2 PATCHING

- A. Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing unbound-aggregate base course to form new subgrade.
- B. Portland Cement Concrete Pavement: Break cracked slabs and roll as required to reseat concrete pieces firmly.
  - 1. Remove disintegrated or badly cracked pavement. Excavate rectangular or trapezoidal patches, extending into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Recompact existing unbound-aggregate base course to form new subgrade.
- C. Tack Coat: Before placing patch material, apply tack coat uniformly to vertical asphalt surfaces abutting the patch. Apply at a rate of 0.05 to 0.15 gal./sq. yd..
  - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
  - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
- D. Placing Patch Material: Fill excavated pavement areas with hot-mix asphalt base mix for full thickness of patch and, while still hot, compact flush with adjacent surface.

### 1.3 SURFACE PREPARATION

- A. Ensure that prepared subgrade is ready to receive paving. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces.
- B. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd..
  - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
  - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

### 1.4 HOT-MIX ASPHALT PLACEMENT

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
  - 1. Place hot-mix asphalt base course and binder course in number of lifts and thicknesses indicated.
  - 2. Place hot-mix asphalt surface course in single lift.
  - 3. Spread mix at temperature specified by mix design.
  - 4. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.
- B. Place paving in consecutive strips not less than 10 feet wide unless infill edge strips of a lesser width are required.
- C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hotmix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

### 1.5 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.
  - 1. Clean contact surfaces and apply tack coat to joints.
  - 2. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
  - 3. Offset transverse joints, in successive courses, a minimum of 24 inches.

4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method in accordance with AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations.

### 1.6 COMPACTION

- A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.
  - 1. Complete compaction before mix temperature cools to 185 deg F.
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
  - 1. Average Density, Rice Test Method: 92 percent of reference maximum theoretical density in accordance with ASTM D2041/D2041M, but not less than 90 percent or greater than 96 percent.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- G. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

### 1.7 ASPHALT CURBS

A. Construct hot-mix asphalt curbs over compacted pavement surfaces. Apply a light tack coat unless pavement surface is still tacky and free from dust. Spread hot-mix asphalt at a minimum temperature of 250 deg F.

- 1. Hot-Mix Asphalt: Same as pavement surface-course mix.
- B. Place hot-mix asphalt to curb cross section indicated or, if not indicated, to PBOT standard shapes, by machine or by hand in wood or metal forms. Tamp hand-placed materials and screed to smooth finish. Remove forms after hot-mix asphalt has cooled.

### 1.8 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce thickness indicated within the following tolerances:
  - 1. Base Course and Binder Course: Plus or minus 1/2 inch.
  - 2. Surface Course: Plus 1/4 inch, no minus.
- B. Pavement Surface Smoothness: Compact each course to produce surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:
  - 1. Base Course and Binder Course: 1/4 inch.
  - 2. Surface Course: 1/8 inch.
  - 3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

### 1.9 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Replace and compact hot-mix asphalt where core tests were taken.
- C. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

### 1.10 WASTE HANDLING

A. General: Handle asphalt-paving waste in accordance with approved waste management plan required in Section 01 7419 "Construction Waste Management and Disposal."



# City of Portland Parks and Recreation Fire Safety Restrictions for Staff, Contractors, and Non-Park Use Permittees Working in Natural Areas



			Fire Danger Level		
luly 2024	Low	Moderate	High	Very High	Extreme
Smoking is <u>Prohibited</u> Smoking is prohibited on all PP&R property per City Code 20.12.110.	Prohibited	Prohibited	Prohibited	Prohibited	Prohibited
Fires are <u>Prohibited</u> .  Fires, including debris burning are prohibited per City Code 20.12.110.	Prohibited	Prohibited	Prohibited	Prohibited	Prohibited
The Following A	ctivities have Vari	ous Restrictions - Se	ee additional notes b	elow.	
Chainsaws and Other Power Saws  When allowed, each saw must have one shovel and one fire extinguisher of at least 8 ounce capacity, and be equipped with a spark arresting screen (0.23"). These must be taken to the work location and may not be left on a vehicle if the vehicle is not adjacent to the work location. When a fire watch is required, it is required for one hour following the use of a saw.	Allowed	Allowed	Allowed Before 1 pm - fire watch required	Allowed Before 1 pm - fire watch required	Prohibited
Motor Vehicles on Improved Roads Improved roads have a concrete, asphalt, or gravel surface, and include hard-surfaced trails that are wide enough to accomodate a vehicle. A road that was once graveled but now has vegetation growing in the road bed is not considered improved for the purpose of these requirements. A list of specific roads is below this table for reference. Any vehicle traveling within PP&R natural areas must have one shovel and one gallon of water or a 2.5 lb. or larger ABC fire extinguisher.	Allowed	Allowed	Allowed	Allowed	Allowed
Motor Vehicles on Unimproved Roads  Unimproved roads are all roads that are not surfaced with concrete, asphalt, or gravel, including formerly graveled roads with vegetation growing in the roadbed. A list of specific roads is below this table for reference. Any vehicle traveling within PP&R natural areas must have one shovel and one gallon of water or a 2.5 lb. or larger ABC fire extinguisher.	Allowed	Allowed	Prohibited	Prohibited	Prohibited
All Terrain Vehicles  Must have a 2.5 lb. or larger ABC fire extinguisher.	Allowed	Allowed	Only on Improved Roads	Only on Improved Roads	Prohibited
Powered Equipment  Powered equipment includes power wheelbarrows, UTV side by sides, skidsteers, and similar equipment. Equipment must stay on trails and may not travel across vegetated areas. Must have a 2.5 lb. or larger ABC fire extinguisher.	Allowed	Allowed	Allowed	Allowed	Prohibited

Hand-Held Powered Equipment Hand-held powered equipment includes weed whips, brush cutters, and similar equipment powered by combustion engines. Battery-powered equipment is not restricted. Must have a 2.5 lb. or larger ABC fire extinguisher.	Allowed	Allowed	Allowed	Allowed Before 1 pm	Prohibited
Construction Equipment  Must have a 2.5 lb. or larger ABC fire extinguisher.	Allowed	Allowed	Only on Improved Roads	Only on Improved Roads	Prohibited
Cutting, Grinding, or Welding of Metal  When allowed, is restricted to areas that are cleared of flammable materials and have either a charged hose or 2.5 lb. or larger ABC fire extinguisher.	Allowed	Allowed Before 1 pm	Allowed Before 10 am	Allowed Before 10 am	Prohibited
Pruning and Clearing of Woody Material Brush piles are always prohibited within 200 feet of a building. Brush piles in other locations must be removed when work on the site is completed.	Allowed	Alllowed	Allowed - No Brush Piles	Allowed - No Brush Piles	Prohibited
Tall Grass Mowing  Trucks used to trailer mowers must be equipped with a 2.5 lb. or larger ABC fire extinguisher, and mowers that do not require a truck and trailer must carry a 2.5 lb. or larger ABC fire extinguisher on the mower.	Allowed	Allowed	Allowed Before 1 pm	Allowed Before 1 pm	Prohibited

Notes: Emergency response personnel and vehicles, including PP&R staff responding to emergency situations, are exempt from these restrictions. These restrictions do not apply to work on existing hard surfaces (concrete, asphalt, or gravel), public roads, or large non-vegetated areas such as parking lots. These guidelines apply to all other work in PP&R natural areas unless a Fire Risk Mitigation Plan is submitted and approved by PP&R in consultation with Portland Fire and Rescue.

### Contacts

In an emergency or if you see a fire, call 911.

Park Rangers: 503-823-1637

West side natural areas supervisor: Jill Van Winkle (interim), 971-235-5469
East side natural areas supervisor: Tonia Williamson, 503-320-7963
City Nature citywide supervisor: Michael Oliver, 823-2763
Regional trails supervisor: Bill Alley, 971-645-1329

For Current Public Fire Dancer Level: https://www.orecon.cov/odf/fire/pages/restrictions.aspx

Road types: Improved roads are surfaced with concrete, asphalt, or gravel, and include concrete, asphalt, or gravel trails that are wide enough to accomodate a vehicle. A road that was once Improved Roads:

Leif Erickson Road Saltzman Road Water Bureau Access Road in Marquam Nature Park Springville Road BPA Road Holman Lane All firelanes in Forest Park

Newton Road





March 7, 2023

## Requirements of the Work Final deliverable Construction CAD Documents

- 1. Each drawing sheet shall be individual document files. This also includes separate base (existing condition) and design (proposed condition) files.
- 2. The final format for each map shall be either <u>Microstation's ". dgn" format</u>, Version 7 or later or <u>AutoCAD</u> ".dwg" format, Release 2015 or later.
- 3. Each drawing sheet shall have the base scaled to fit the standard border in paper space in AutoCAD or View Group in MicroStation.
- 4. Information on each drawing shall be separated into distinct 'levels' according to the level standards provided. Level tables, Seed (proto type) files, and color table will be provided in electronic format.
  - a. Information on each drawing will be separated into distinct DGN/DWG files according to the Level Standards provided; Base\_Existing & Base\_Proposed. Level tables are provided for each of the required files.
  - b. These files shall be separated into distinct directories that indicate the category of information being stored. For example, all existing condition information shall be in a directory called base. All proposed design information should be in a directory called design. And all construction documents should be in a directory called sheets.
  - c. Contour elements, fence lines, retaining walls, tree and shrub lines, etc. must be connected strings or chains and not individual lines. Buildings must be closed shapes and not individual lines. Patterns must be 'associated' with closed shapes. All cell libraries or custom line styles created for this work shall be submitted with final drawing files.
- 5. Symbols shall be either cells (MicroStation) or blocks (AutoCAD). No shape files will be accepted for symbol representation. **No proxy entities (3<sup>rd</sup> Party Software) should be present in final deliverables**.
- 6. Acceptable fonts for AutoCAD and MicroStation drawings shall be **Calibri**.
- 7. Final products are to be delivered via e-mail/FTP/CD-Rom or DVD. Each CAD document should be delivered in a ZIP file including all xref, fonts, symbols, and other supporting documents used to create each sheet. eTransmit in AutoCAD works best for this delivery. Also include all supporting documents used during the project design, and also include full size PDF documents of permitted construction document. No third party dependent or proxy elements are to be delivered in the final set of drawings.
- 8. For questions regarding format, content, standards or other requirements call Michael Van Yserloo at 823-1611.

**Assets and Development** 1120 SW Fifth Avenue, Suite 858 Portland, Oregon 97204 971-940-5538

PORTLANDPARKS.ORG
Commissioner Dan Ryan
Director Adena Long





# INVITATION TO BID #2025-48 Johnson Creek Blvd (79th Pl to ECM) Improvements Project ADDENDUM NUMBER 1 June 4, 2025

On May 20, 2025, Clackamas County ("County") published Invitation to Bid #2025-48 ("BID"). The County has found that it is in its interest to amend the BID through the issuance of this Addendum #1. Except as expressly amended below, all other terms and conditions of the original BID and subsequent Addenda shall remain unchanged.

### The following changes are made to the Project Special Provisions:

1. Subsection 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) is established by the Agency each month. For the actual MACMP, go to the Agency website at:

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

The MACMP is based on selling prices of asphalt cement published by Poten & Partners, Inc. for primarily PG 64-22 paving grades in the Portland, Oregon area and typical non-modified paving grades in the Boise, Idaho area. The MACMP for a given month is the average of the weekly published prices for each area reported each Friday in that month. 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 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 prices of either the Portland, Oregon area or the Boise, Idaho area. If electing to use Boise, Idaho area 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.

If the weekly prices cease to be available from Poten & Partners, Inc. 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 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:

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

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

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

(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:

### **Pav Items**

LEVEL 3, 1/2 INCH, PG 70-22ER ACP MIXTURE

These changes will be included in the Contract for this Project. It is understood that your Bid will be submitted accordingly.