



DAN JOHNSON
DIRECTOR

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

December 5, 2024

BCC Agenda Date/Item: _____

Board of County Commissioners
Clackamas County

Approval of a Contract with Grade Werks Excavating, LLC for the Laurie Avenue drainage improvement project. Total Contract Value is \$361,628 for 1 year. Funding is through County Road Funds. No County General Funds are involved.

Previous Board Action/Review	12/03/24: Request for consent.		
Performance Clackamas	This project will provide strong infrastructure and ensure safe communities by maintaining the County’s existing road infrastructure.		
Counsel Review	10/8/2024, Andrew Naylor	Procurement Review	Yes
Contact Person	Mike Oleson	Contact Phone	503-742-4698

EXECUTIVE SUMMARY: This contract is for the Laurie Avenue Drainage Improvement Project, which includes improving conveyance of the stormwater runoff on Laurie near Courtney Avenue. The project proposes to install 6 stormwater manholes, 6 catch basin inlets, and 930 feet of 12-inch diameter stormwater pipe. The project also will install, maintain, and remove temporary work zone traffic control measures, and performing additional incidental work as called for by the specifications and plans.

Funding for this contract is from County Road Funds. Construction is expected to take five months with substantial completion of the project required by July 25, 2025.

PROCUREMENT PROCESS: This project was advertised in accordance with ORS and LCRB Rules on September 24, 2024, through Invitation to Bid #2024-91. Bids were publicly opened on October 16, 2024, and the County received nineteen (19) bids in response to the Invitation to Bid. The lowest bidder was from Grade Werks Excavating LLC for the amount of \$361,628.00. Upon review of the Bid Proposals, contracting with Grade Werks Excavating LLC was determined to be in the best interest of the County based upon the evaluations of the bids.

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RECOMMENDATION: Staff respectfully recommends that the Board of County Commissioners approve and sign this public improvement contract with Grade Werks Excavating LLC. for the Laurie Avenue Drainage Improvements Project.

Respectfully submitted,

Dan Johnson

Dan Johnson
Director of Transportation & Development



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
Contract #1060

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

Project Name: # 2024-91 Laurie Avenue Drainage Improvement Project

1. Contract Price, Contract Documents and Work.

The Contractor, in consideration of the sum of **Three Hundred Sixty-One Thousand Six Hundred Twenty-Eight Dollars (\$361,628.00)** (the "Contract Price"), to be paid to the Contractor by Owner in the manner and at the time hereinafter provided, and subject to the terms and conditions provided for in the Instructions to Bidders and other Contract Documents (as defined in the project specifications) referenced within the Instructions to Bidders), all of which are incorporated herein by reference, hereby agrees to perform all Work described and reasonably inferred from the Contract Documents. The Contract Price is the amount contemplated by the Base Bid, as indicated in the accepted Bid.

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

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

The Plans, Specifications and Drawings expressly incorporated by reference into this Contract includes, but is not limited to, the Special Provisions for Construction Department of Transportation and Development, Laurie Avenue Drainage Improvements (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 County to exercise any rights and remedies available under this Contract including, but not limited to, termination for default.

2. Representatives.

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

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

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

3. Key Persons.

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

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

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

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

4. Contract Dates.

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

SUBSTANTIAL COMPLETION DATE: July 25, 2025 (see Section 00180.50(h))

FINAL COMPLETION DATE: December 31, 2025

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

5. Insurance Certificates and Required Performance and Payment Bonds.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

6. Responsibility for Damages/Indemnity.

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

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

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

7. Tax Compliance.

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

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

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

8. Confidential Information.

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

9. Counterparts.

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

10. Integration.

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

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

11. Liquidated Damages

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

11.1 \$600 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, for any lane closure beyond the limits listed in 00220.40(e), as set forth in 00180.85(c).

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

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

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

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

Contractor DATA:

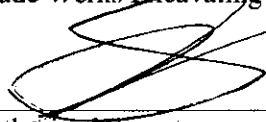
Grade Werks Excavating LLC
31205 NE 142nd Ave
Battle Ground, WA 98604

Contractor CCB # 248324 Expiration Date: 1/22/2026
Oregon Business Registry # 2166843-99 Entity Type: FLLC State of Formation: Washington

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.

Grade Werks Excavating LLC

Clackamas County



11-20-24

Authorized Signature

Date

Chair

Date

Ali Abunawwas, Owner
Name / Title Printed

Recording Secretary

APPROVED AS TO FORM



11/20/2024

County Counsel

Date



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY**

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CLACKAMAS COUNTY
NOTICE OF PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

INVITATION TO BID #2024-91
Laurie Avenue Drainage Improvement Project
September 24, 2024

Clackamas County (“County”) through its Board of County Commissioners is accepting sealed bids for the **Laurie Avenue Drainage Improvement Project** until **October 16, 2024, 2:00 PM**, Pacific Time, (“Bid Closing”) at the following location:

Bidding Documents can be downloaded from the state of Oregon procurement website (“OregonBuys”) at the following address: <https://oregonbuys.gov/bsv/view/login/login.xhtml>, Document No.S-C01010-00011612.

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

Submitting Proposals: Bid Locker

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

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

Engineers Estimate: \$475,000.00

Contact Information

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

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

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

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, July 5, 2024, which can be downloaded at the following web address: http://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx
The Work will take place in Clackamas County, Oregon.

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



CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT

INSTRUCTIONS TO BIDDERS

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

Article 1. Scope of Work

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

Article 2. Examination of Site and Conditions

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

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

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

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

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

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

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

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

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

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

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

Article 4. Security to Be Furnished by Each Bidder

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

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

Article 5. Execution of Bid Bond

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

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

Article 6. Execution of the Bid Form

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

The Bid Form relates to Bids on a specific Project

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

Article 7. Prohibition of Alterations to Bid

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

Article 8. Submission of Bid

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

Article 9. Bid Closing and Opening of Bids

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

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

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

Article 10. Acceptance or Rejection of Bids by Owner

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

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

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

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

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

Article 11. Withdrawal of Bid

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

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

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

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

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

Article 13. Recyclable Products

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

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

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

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

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

Article 15. Protest of Intent to Award

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

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

Article 16. Disclosure of First-Tier Subcontractors

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

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



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT**

SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

Project Name: # 2024-91 Laurie Avenue Drainage Improvement 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.
1. **Electronic Submissions: The County is requiring all bids for this project be electronically submitted. Complete Bids (including all attachments) will only be accepted electronically thru a secure online bid submission service, Bid Locker. Email submissions to Clackamas County email addresses will no longer be accepted. <https://bidlocker.us/a/clackamascounty/BidLocker>.**

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

ZOOM LINKS.

Join Zoom Meeting

<https://clackamascounty.zoom.us/j/86350308167>

Meeting ID: 863 5030 8167

One tap mobile

+14086380968,,86350308167# US (San Jose) 16694449171,,86350308167# 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)

- +1 646 931 3860 US
- +1 689 278 1000 US
- +1 301 715 8592 US (Washington DC)
- +1 305 224 1968 US
- +1 309 205 3325 US
- +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)

Meeting ID: 863 5030 8167

Find your local number: <https://clackamascounty.zoom.us/j/86350308167>

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

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

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

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

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

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

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

Prime Contractor Name: **Grade Werks Excavating LLC**
 Project Name: # 2024-91 Laurie Avenue Drainage Improvement Project

Total Contract Amount: **361,628**

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

DOW BIDDER WILL SELF-PERFORM (GFE not required)
<p style="font-size: 24px; font-weight: bold;">All work self performed besides survey</p>

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

LIST ALL SUBCONTRACTORS BELOW Use <u>correct legal name</u> of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reporting MBE/WBE/ESB Subcontractor		
			Check box <input checked="" type="checkbox"/>		
Name Address City/St/Zip Phone# OCCB#			MBE	WBE	ESB
<p>Re Corp LLC 2050 Beavercreek Rd Suite 101 Oregon City OR 503 310 1098 Survey or</p>	<p style="font-size: 24px; font-weight: bold;">Survey</p>	<p style="font-size: 24px; font-weight: bold;">4,500</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Name Address City/St/Zip Phone# OCCB#</p>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Name Address City/St/Zip Phone# OCCB#</p>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Name Address City/St/Zip Phone# OCCB#</p>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

GFE SUBCONTRACTOR AND SELF-PERFORMED WORK LIST (FORM 1) cont'd

Prime Contractor Name:
 Project Name: # 2024-91 Laurie Avenue Drainage
 Improvement Project

Total Contract Amount: **361,628**

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	If Certified or self-reporting MBE/WBE/ESB Subcontractor Check box <input checked="" type="checkbox"/>		
			MBE	WBE	ESB
Name Address City/St/Zip Phone# OCCB#	All work Self performed Besides survey		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip Phone# OCCB#			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

Prime Contractor: **Grade Werks Excavating LLC**
Project: # 2024-91 Laurie Avenue Drainage Improvement 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 SUBCONTRACTOR	Divisions of Work (Painting, electrical, landscaping, etc.)	Date Solicitation Letter / Fax Sent	PHONE CONTACT		BID ACTIVITY Check Yes or No			REJECTED BIDS (if bid received & not used)		Notes
			Date of Call	Person Receiving Call	Will Bid	Bid Received	Bid Used	Bid Amount	Reason Not Used (Price, Scope or Other. If Other, explain in Notes>>)	
Re Corp LLC	Survey	10/14/24			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	\$1500		Bid used
Obunco Eng	Survey	10/14/24			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
W.R. Coates Surveying		10/14/24			<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			
					<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No			



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID BOND

Project Name: # 2024-91 Laurie Avenue Drainage Improvement Project

We, Grade Werks Excavating LLC, as "Principal,"
(Name of Principal)

and United Fire & Casualty Company, an Iowa Corporation,
(Name of Surety)

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

---Ten Percent (10%) of the Total Amount Bid--- dollars.

WHEREAS, the condition of the obligation of this bond is that Principal has submitted its proposal or bid to an agency of the Obligee in response to Obligee's procurement document (No.) for the project identified above which proposal or bid is made a part of this bond by reference, and Principal is required to furnish bid security in an amount equal to ten (10%) percent of the total amount of the bid pursuant to the procurement document.
*S-C01010-00011612

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

IN WITNESS WHEREOF, we have caused this instrument to be executed and sealed by our duly authorized legal representatives this 16th day of October, 2024.

Principal: Grade Werks Excavating LLC

Surety: United Fire & Casualty Company

By: [Signature]
Signature

By: Attorney-In-Fact [Signature]

owner
Official Capacity

Chris Larson, Attorney-in-Fact
Name

Attest: [Signature]
Corporation Secretary

2233 112th Avenue NE
Address

Bellevue WA 98004
City State Zip

425-709-3600 425-709-7460
Phone Fax





UNITED FIRE & CASUALTY COMPANY, CEDAR RAPIDS, IA
 UNITED FIRE & INDEMNITY COMPANY, WEBSTER, TX
 FINANCIAL PACIFIC INSURANCE COMPANY, LOS ANGELES, CA
 CERTIFIED COPY OF POWER OF ATTORNEY

Inquiries: Surety Department
 118 Second Ave SE
 Cedar Rapids, IA 52401

(original on file at Home Office of Company – See Certification)

KNOW ALL PERSONS BY THESE PRESENTS, That United Fire & Casualty Company, a corporation duly organized and existing under the laws of the State of Iowa; United Fire & Indemnity Company, a corporation duly organized and existing under the laws of the State of Texas; and Financial Pacific Insurance Company, a corporation duly organized and existing under the laws of the State of California (herein collectively called the Companies), and having their corporate headquarters in Cedar Rapids, State of Iowa, does make, constitute and appoint

NICHOLAS FREDRICKSON, ANDREW KERSLAKE, GUY P. ARMFIELD, ROGER KALTENBACH, ELIZABETH R. HAHN, SCOTT MCGILVRAI, ALEC GUMPFER, GREG LAGREID, DEANNA M. FRENCH, JANA M. ROY, KATELYN COOPER, RONALD J. LANGE, SCOTT FISHER, SCOTT GARCIA, SUSAN B. LARSON, MINDEE L. RANKIN, FRANCIS WIRT, JOHN N. BUSTARD, ROLAND R. EUGENIO, SHIRLEY J. PACE, LAUREN ZAKARIAN, REBECCA SARMIENTO, CHRIS LARSON, KYLE DOZIER, ABBIE A. BONNEY, SANDY L. BOSWELL, JANIE MA, BRENDA S. NOLIN, SHARON POPE, EACH INDIVIDUALLY

their true and lawful Attorney(s)-in-Fact with power and authority hereby conferred to sign, seal and execute in its behalf all lawful bonds, undertakings and other obligatory instruments of similar nature provided that no single obligation shall exceed \$50,000,000.00 and to bind the Companies thereby as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Companies and all of the acts of said Attorney, pursuant to the authority hereby given and hereby ratified and confirmed.

The Authority hereby granted is continuous and shall remain in full force and effect until revoked by United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

This Power of Attorney is made and executed pursuant to and by authority of the following bylaw duly adopted by the Boards of Directors of United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

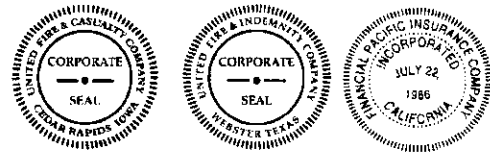
“Article VI – Surety Bonds and Undertakings”

Section 2, Appointment of Attorney-in-Fact. “The President or any Vice President, or any other officer of the Companies may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Companies in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. The signature of any officer authorized hereby, and the Corporate seal, may be affixed by facsimile to any power of attorney or special power of attorney or certification of either authorized hereby; such signature and seal, when so used, being adopted by the Companies as the original signature of such officer and the original seal of the Companies, to be valid and binding upon the Companies with the same force and effect as though manually affixed. Such attorneys-in-fact, subject to the limitations set forth in their respective certificates of authority shall have full power to bind the Companies by their signature and execution of any such instruments and to attach the seal the Companies thereto. The President or any Vice President, the Board of Directors or any other officer of the Companies may at any time revoke all power and authority previously given to any attorney-in-fact.

IN WITNESS WHEREOF, the COMPANIES have each caused these presents to be signed by its vice president and its corporate seal to be hereto affixed this 1st day of April, 2024

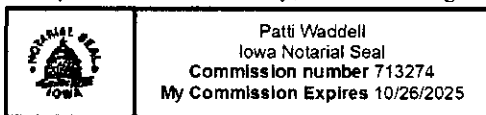
UNITED FIRE & CASUALTY COMPANY
 UNITED FIRE & INDEMNITY COMPANY
 FINANCIAL PACIFIC INSURANCE COMPANY

By: *Kyanna M. Saylor*
 Vice President



State of Iowa, County of Linn, ss:

On 1st day of April, 2024, before me personally came Kyanna M. Saylor to me known, who being by me duly sworn, did depose and say; that she resides in Cedar Rapids, State of Iowa; that she is a Vice President of United Fire & Casualty Company, a Vice President of United Fire & Indemnity Company, and a Vice President of Financial Pacific Insurance Company the corporations described in and which executed the above instrument; that she knows the seal of said corporations; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporations and that she signed her name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporations.



Patti Waddell
 Notary Public
 My commission expires: 10/26/2025

I, Mary A. Bertsch, Assistant Secretary of United Fire & Casualty Company and Assistant Secretary of United Fire & Indemnity Company, and Assistant Secretary of Financial Pacific Insurance Company, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the bylaws and resolutions of said Corporations as set forth in said Power of Attorney, with the ORIGINALS ON FILE IN THE HOME OFFICE OF SAID CORPORATIONS, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

In testimony whereof I have hereunto subscribed my name and affixed the corporate seal of the said Corporations this 16th day of October, 2024.



By: *Mary A. Bertsch*
 Assistant Secretary,
 UF&C & UF&I & FPIC



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID FORM

PROJECT: # 2024-91 Laurie Avenue Drainage Improvement Project
BID CLOSING: October 16, 2024, 2:00 PM, Pacific Time
BID OPENING: October 16, 2024, 2:05 PM, Pacific Time

FROM: Grade Werks Excavating LLC
Bidder's Name (must be full legal name, not ABN/DBA)

TO: <https://bidlocker.us/a/clackamascounty/BidLocker>

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

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

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

Three hundred sixtyone thousand Six hundred twenty eight Dollars (\$ 361,628.00)

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

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

• ADDENDA numbered 1 through 3, inclusive (fill in blanks)

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

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

4. The work shall be completed within the time stipulated and specified in 00180.50(h) of the Special Provisions for **Construction Laurie Avenue Drainage Improvements.**

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:

United Fire and Casualty Co.
(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 248324. As a condition to submitting a bid, a Contractor must be registered with the Oregon Construction Contractors Board in accordance with ORS 701.035 to 701.055, and disclose the registration number. Failure to register and disclose the number will make the bid unresponsive and it will be rejected, unless contrary to federal law.

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

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 Washington State Labor & Industries.

Policy No. 696,021-00, and that Contractor shall submit Certificates of Insurance as required.

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

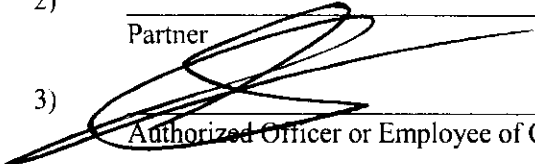
Project Executive: <u>Ali Abu Nawwas</u>	Cell Phone: <u>360 888 5805</u>
Project Manager: <u>Ali Abu Nawwas</u>	Cell Phone: <u>360 888 5805</u>
Job Superintendent: <u>Austin W.</u>	Cell Phone: <u>360 949 0813</u>
Project Engineer: <u>County</u>	Cell Phone: <u>County</u>

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

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

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

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

NAME OF FIRM Grade Werks Excavating LLC
ADDRESS 31205 NE 142nd Ave
Battle Ground, WA 98604
TELEPHONE NO (360) 888-5805
EMAIL info.gwe@yahoo.com
SIGNATURE 1) _____
Sole Individual
or 2) _____
Partner
or 3)  _____
Authorized Officer or Employee of Corporation

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

LAURIE AVENUE DRAINAGE IMPROVEMENTS
Bid Schedule


August 9, 2024

ITEM	SECTION	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
General Conditions						
1	00180	WORKPLACE HARASSMENT PREVENTION PLAN	LS	ALL	550	550
2	00196	EXTRA WORK AS AUTHORIZED	FA	ALL	\$25,000.00	\$25,000.00
Temporary Features and Appurtenances						
3	00210	MOBILIZATION	LS	ALL	27000	27000
4	00221	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLE	LS	ALL	5000	5000
5	00260	EROSION CONTROL	LS	ALL	1,500	1,500
6	00280	CONSTRUCTION ENTRANCE, TYPE 1	EACH	1	500	500
7	00280	CONCRETE WASHOUT FACILITY	EACH	1	1000	1000
8	00280	INLET PROTECTION, TYPE 4	EACH	7	65	455
9	00280	SEDIMENT BARRIER, TYPE 2	FOOT	25	10	250
10	00290	POLLUTION CONTROL PLAN	LS	ALL	400	400
Roadwork						
11	00305	CONSTRUCTION SURVEY WORK	LS	ALL	4800	4800
12	00310	REMOVAL OF SURFACINGS	SQYD	31	45	1395
13	00310	ASPHALT PAVEMENT SAW CUTTING	FOOT	2,000	3.50	7000
14	00350	SUBGRADE GEOTEXTILE	SQYD	55	10	550
Drainage and Sewers						
15	00405	ROCK EXCAVATION (00405)	CUYD	150	100	15,000
16	00445	12 INCH STORM SEWER PIPE, 5.0 FT DEPTH	FOOT	219	140	30,660
17	00445	12 INCH STORM SEWER PIPE, 10.0 FT DEPTH	FOOT	711	168	119,448
18	00470	CONCRETE MANHOLES, 48 INCH STANDARD	EACH	6	6500	39,000
19	00470	CONCRETE INLETS, TYPE G-2MA (MODIFIED)	EACH	6	7000	42,000
20	00490	CONNECTION TO EXISTING STRUCTURES	EACH	1	900	900
21	00495	TRENCH RESURFACING	SQYD	310	72	22320
Bases						
22	00640	AGGREGATE SHOULDERS	TON	20	85	1700
23	00640	AGGREGATE BASE	TON	20	85	1700
Wearing Surfaces						
24	00744	LEVEL 2, 1/2 INCH ACP MIXTURE	TON	60	225	13,500

Proposed Cost Bid Schedule (Numerically): \$361,628.00

Proposed Cost Bid Schedule (written in Words): Three hundred sixty one thousand six hundred Twenty eight dollars

Company Name: Grade Works Excavating LLC

Authorized Signature:  date: 10/16/2024

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM
PROJECT: #2024-91

BID OPENING: October 16, 2024, 2:00 PM, Pacific Time

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

INSTRUCTIONS:

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

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

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

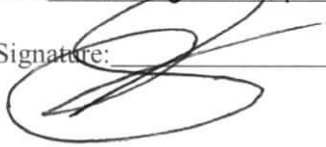
List below the name of each subcontractor that will be furnishing labor, or labor and materials, for which disclosure is required, the category of work that the subcontractor will be performing, and the dollar value of the subcontract. Enter "**NONE**" if the value of the project bid is less than \$100,000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

	SUBCONTRACTOR NAME	DOLLAR VALUE	CATEGORY OF WORK
1.	<u>None</u>	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

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

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

Firm Name: Grade WORKS Excavating LLC

Bidder Signature:  Phone # (360) 888-5805



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PERFORMANCE BOND

Bond No.: 54261821
Solicitation: #2024-91
Project Name: Laurie Avenue Drainage Improvement Project

United Fire & Casualty Company (Surety #1) Bond Amount No. 1: \$361,328.00
(Surety #2)* Bond Amount No. 2:* \$
* If using multiple sureties Total Penal Sum of Bond: \$

We, Grade Werks Excavating LLC 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) Three Hundred Sixty-one Thousand Three Hundred Twenty-eight and No/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.

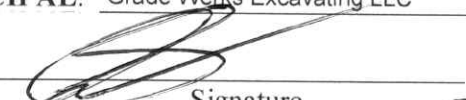
This bond is given and received under authority of Oregon Revised Statutes Chapter 279C and the Clackamas County Local Contractor Review Board Rules, the provisions of which hereby are incorporated into this bond and made a part hereof.

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

Dated this 19 day of November, 2024

PRINCIPAL: Grade Werks Excavating LLC

By: _____


Signature
A. Abu Nawwas - owner

Attest: _____


Official Capacity
Corporation Secretary

SURETY: United Fire & Casualty Company

[Add signatures for each if using multiple bonds]

BY ATTORNEY-IN-FACT:

[Power-of-Attorney must accompany each bond]

Chris Larson

Name

Signature

2233 112th Avenue NE

_____ Address	
<u>Bellevue</u>	<u>WA 98004</u>
<u>City</u>	<u>State Zip</u>
<u>425-709-3600</u>	<u>425-709-7460</u>
<u>Phone</u>	<u>Fax</u>



RETAINAGE SURETY BOND

KNOW ALL BY THESE PRESENTS: That Grade Werks Excavating LLC, a Limited Liability Company authorized to do business in the State of Oregon, a Principal, and United Fire & Casualty Company, a corporation organized and existing under the laws of the State of Iowa and authorized to transact the business of surety in the State of Oregon, as Surety, are jointly and severally held and bound to Clackamas County ("Obligee") and Clackamas County ("Owner"), and their lenders, heirs, executors, administrators, successors and assigns in the penal sum of \$ 18,066.40, plus Five (5) % (not more than five percent) of any increases in the contract amount that may occur because of change orders or increases in the quantities of or that addition of any new item of work.

WHEREAS the Principal has executed a contract for Laural Avenue Drainage Improvement Project with the Obligee; and

WHEREAS Oregon law allows the Obligee to withhold from the Principal a sum equivalent to Five (5) % (not more than five percent) from moneys the Principal earns on estimates or progress payments during the progress of the work ("Earned Retained Funds"); and

WHEREAS the Principal has requested that the Obligee or Owner accept a surety bond in lieu of Earned Retained Funds as allowed under ORS279C.560 or 701.435;

NOW, THEREFORE, this obligation is such that the Surety and the Surety's successors and assigns are held and bound to Obligee, Owner and any lender, and to all beneficiaries for the sum set forth in the first paragraph of this retainage surety bond. This surety bond and any proceeds from this surety bond are subject to all claims and liens by the Obligee against the Principal in the same manner and priority as specified for retainage under ORS 279C.550 to 279C.570, 279C.600 to 279C.625 and 701.420, as applicable. The condition of this obligation is such that if the Principal satisfies all payment obligations to any Obligee that may lawfully claim against project sums due to the Principal and indemnify and hold the Obligee harmless from any and all loss, costs and damages that the Obligee may sustain by release of the retainage to the Principal or Surety, this obligation is null and void if the Obligee notifies the Surety that the Obligee released the obligation. The obligation otherwise remains in full force and effect.

IT IS HEREBY DECLARED AND AGREED that the Surety is liable under this obligation in the same manner and to the same extent as is Principal. The Surety will not be discharged or released from liability for any act, omission or defense of any kind or nature that would not also discharge the Principal.

IT IS HEREBY FURTHER DECLARED AND AGREED that this obligation is binding upon and inures to the benefit of the Principal, the Surety, the Obligee, the Owner, any lender and the beneficiaries of this obligation and their respective heirs, executors, administrators, successors and assigns.

SIGNED AND SEALED this 19 day of November, 2024

Principal <u>Grade Werks Excavating LLC</u>	Surety <u>United Fire & Casualty Company</u>
Name <u>Ali Abu Nawwa</u>	Name <u>Chris Larson</u>
Title <u>Owner</u>	Title <u>Chris Larson, Attorney-in-Fact</u>
Address <u>PO BOX 1349</u>	Address <u>2233 112th Avenue NE</u>
City/State/Zip <u>Patterson, CA 95204</u>	City/State/Zip <u>Bellevue, WA 98004</u>
Phone <u>360 888 5805</u>	Phone <u>425-709-3600</u>





UNITED FIRE & CASUALTY COMPANY, CEDAR RAPIDS, IA
 UNITED FIRE & INDEMNITY COMPANY, WEBSTER, TX
 FINANCIAL PACIFIC INSURANCE COMPANY, LOS ANGELES, CA
 CERTIFIED COPY OF POWER OF ATTORNEY

Inquiries: Surety Department
 118 Second Ave SE
 Cedar Rapids, IA 52401

(original on file at Home Office of Company – See Certification)

KNOW ALL PERSONS BY THESE PRESENTS, That United Fire & Casualty Company, a corporation duly organized and existing under the laws of the State of Iowa; United Fire & Indemnity Company, a corporation duly organized and existing under the laws of the State of Texas; and Financial Pacific Insurance Company, a corporation duly organized and existing under the laws of the State of California (herein collectively called the Companies), and having their corporate headquarters in Cedar Rapids, State of Iowa, does make, constitute and appoint

NICHOLAS FREDRICKSON, ANDREW KERSLAKE, GUY P. ARMFIELD, ROGER KALTENBACH, ELIZABETH R. HAHN, SCOTT MCGILVRAY, ALEC GUMPFER, GREG LAGREID, DEANNA M. FRENCH, JANA M. ROY, KATELYN COOPER, RONALD J. LANGE, SCOTT FISHER, SCOTT GARCIA, SUSAN B. LARSON, MINDEE L. RANKIN, FRANCIS WIRT, JOHN N. BUSTARD, ROLAND R. EUGENIO, SHIRLEY J. PACE, LAUREN ZAKARIAN, REBECCA SARMIENTO, CHRIS LARSON, KYLE DOZIER, ABBIE A. BONNEY, SANDY L. BOSWELL, JANIE MA, BRENDA S. NOLIN, SHARON POPE, EACH INDIVIDUALLY

their true and lawful Attorney(s)-in-Fact with power and authority hereby conferred to sign, seal and execute in its behalf all lawful bonds, undertakings and other obligatory instruments of similar nature provided that no single obligation shall exceed \$50,000,000.00 and to bind the Companies thereby as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Companies and all of the acts of said Attorney, pursuant to the authority hereby given and hereby ratified and confirmed.

The Authority hereby granted is continuous and shall remain in full force and effect until revoked by United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

This Power of Attorney is made and executed pursuant to and by authority of the following bylaw duly adopted by the Boards of Directors of United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

“Article VI – Surety Bonds and Undertakings”

Section 2, Appointment of Attorney-in-Fact. “The President or any Vice President, or any other officer of the Companies may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Companies in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. The signature of any officer authorized hereby, and the Corporate seal, may be affixed by facsimile to any power of attorney or special power of attorney or certification of either authorized hereby; such signature and seal, when so used, being adopted by the Companies as the original signature of such officer and the original seal of the Companies, to be valid and binding upon the Companies with the same force and effect as though manually affixed. Such attorneys-in-fact, subject to the limitations set forth in their respective certificates of authority shall have full power to bind the Companies by their signature and execution of any such instruments and to attach the seal the Companies thereto. The President or any Vice President, the Board of Directors or any other officer of the Companies may at any time revoke all power and authority previously given to any attorney-in-fact.

IN WITNESS WHEREOF, the COMPANIES have each caused these presents to be signed by its vice president and its corporate seal to be hereto affixed this 1st day of April, 2024

UNITED FIRE & CASUALTY COMPANY
 UNITED FIRE & INDEMNITY COMPANY
 FINANCIAL PACIFIC INSURANCE COMPANY

By: *Kyanna M. Saylor*
 Vice President



State of Iowa, County of Linn, ss:

On 1st day of April, 2024, before me personally came Kyanna M. Saylor to me known, who being by me duly sworn, did depose and say; that she resides in Cedar Rapids, State of Iowa; that she is a Vice President of United Fire & Casualty Company, a Vice President of United Fire & Indemnity Company, and a Vice President of Financial Pacific Insurance Company the corporations described in and which executed the above instrument; that she knows the seal of said corporations; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporations and that she signed her name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporations.



Patti Waddell
 Notary Public
 My commission expires: 10/26/2025

I, Mary A. Bertsch, Assistant Secretary of United Fire & Casualty Company and Assistant Secretary of United Fire & Indemnity Company, and Assistant Secretary of Financial Pacific Insurance Company, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the bylaws and resolutions of said Corporations as set forth in said Power of Attorney, with the ORIGINALS ON FILE IN THE HOME OFFICE OF SAID CORPORATIONS, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

In testimony whereof I have hereunto subscribed my name and affixed the corporate seal of the said Corporations this _____ day of _____, 20_____.



By: *Mary A Bertsch*
 Assistant Secretary,
 UF&C & UF&I & FPIC



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

PAYMENT BOND

Bond No.: 54261821
Solicitation: #2024-91
Project Name: Laurie Avenue Drainage Improvement Project

Table with 4 columns: Surety Name, Surety #, Bond Amount No., and Amount. Includes entries for United Fire & Casualty Company and Total Penal Sum of Bond.

* If using multiple sureties

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

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

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

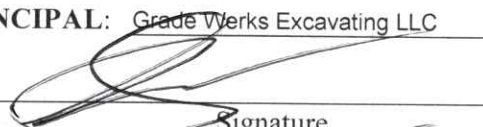
This bond is given and received under authority of Oregon Revised Statutes Chapter 279C and the Clackamas County Local Contractor Review Board Rules, the provisions of which hereby are incorporated into this bond and made a part hereof.

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

Dated this 19 day of November, 2021

PRINCIPAL: Grade Werks Excavating LLC

By: _____


Signature
Ali AbuNawas - owner

Attest: _____

Jennifer Walsh
Official Capacity
Corporation Secretary

SURETY: United Fire & Casualty Company

[Add signatures for each if using multiple bonds]

BY ATTORNEY-IN-FACT:

[Power-of-Attorney must accompany each bond]

Chris Larson

Name


Signature

2233 112th Avenue NE
Address

Bellevue WA 98004

City State Zip

425-709-3600 425-709-7460

Phone Fax





UNITED FIRE & CASUALTY COMPANY, CEDAR RAPIDS, IA
 UNITED FIRE & INDEMNITY COMPANY, WEBSTER, TX
 FINANCIAL PACIFIC INSURANCE COMPANY, LOS ANGELES, CA
 CERTIFIED COPY OF POWER OF ATTORNEY

Inquiries: Surety Department
 118 Second Ave SE
 Cedar Rapids, IA 52401

(original on file at Home Office of Company – See Certification)

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their true and lawful Attorney(s)-in-Fact with power and authority hereby conferred to sign, seal and execute in its behalf all lawful bonds, undertakings and other obligatory instruments of similar nature provided that no single obligation shall exceed \$50,000,000.00 and to bind the Companies thereby as fully and to the same extent as if such instruments were signed by the duly authorized officers of the Companies and all of the acts of said Attorney, pursuant to the authority hereby given and hereby ratified and confirmed.

The Authority hereby granted is continuous and shall remain in full force and effect until revoked by United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

This Power of Attorney is made and executed pursuant to and by authority of the following bylaw duly adopted by the Boards of Directors of United Fire & Casualty Company, United Fire & Indemnity Company, and Financial Pacific Insurance Company.

“Article VI – Surety Bonds and Undertakings”

Section 2, Appointment of Attorney-in-Fact. “The President or any Vice President, or any other officer of the Companies may, from time to time, appoint by written certificates attorneys-in-fact to act in behalf of the Companies in the execution of policies of insurance, bonds, undertakings and other obligatory instruments of like nature. The signature of any officer authorized hereby, and the Corporate seal, may be affixed by facsimile to any power of attorney or special power of attorney or certification of either authorized hereby; such signature and seal, when so used, being adopted by the Companies as the original signature of such officer and the original seal of the Companies, to be valid and binding upon the Companies with the same force and effect as though manually affixed. Such attorneys-in-fact, subject to the limitations set of forth in their respective certificates of authority shall have full power to bind the Companies by their signature and execution of any such instruments and to attach the seal the Companies thereto. The President or any Vice President, the Board of Directors or any other officer of the Companies may at any time revoke all power and authority previously given to any attorney-in-fact.

IN WITNESS WHEREOF, the COMPANIES have each caused these presents to be signed by its vice president and its corporate seal to be hereto affixed this 1st day of April, 2024

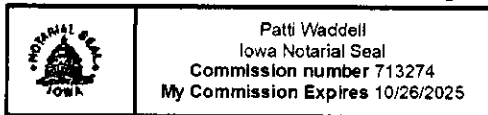
UNITED FIRE & CASUALTY COMPANY
 UNITED FIRE & INDEMNITY COMPANY
 FINANCIAL PACIFIC INSURANCE COMPANY

By: *Kyanna M. Saylor*
 Vice President



State of Iowa, County of Linn, ss:

On 1st day of April, 2024, before me personally came Kyanna M. Saylor to me known, who being by me duly sworn, did depose and say; that she resides in Cedar Rapids, State of Iowa; that she is a Vice President of United Fire & Casualty Company, a Vice President of United Fire & Indemnity Company, and a Vice President of Financial Pacific Insurance Company the corporations described in and which executed the above instrument; that she knows the seal of said corporations; that the seal affixed to the said instrument is such corporate seal; that it was so affixed pursuant to authority given by the Board of Directors of said corporations and that she signed her name thereto pursuant to like authority, and acknowledges same to be the act and deed of said corporations.



Patti Waddell
 Notary Public
 My commission expires: 10/26/2025

I, Mary A. Bertsch, Assistant Secretary of United Fire & Casualty Company and Assistant Secretary of United Fire & Indemnity Company, and Assistant Secretary of Financial Pacific Insurance Company, do hereby certify that I have compared the foregoing copy of the Power of Attorney and affidavit, and the copy of the Section of the bylaws and resolutions of said Corporations as set forth in said Power of Attorney, with the ORIGINALS ON FILE IN THE HOME OFFICE OF SAID CORPORATIONS, and that the same are correct transcripts thereof, and of the whole of the said originals, and that the said Power of Attorney has not been revoked and is now in full force and effect.

In testimony whereof I have hereunto subscribed my name and affixed the corporate seal of the said Corporations this _____ day of _____, 20_____.



By: *Mary A. Bertsch*
 Assistant Secretary,
 UF&C & UF&I & FPIC



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

PROJECT: #2024-91 Laurie Avenue Drainage Improvement Project

Project Background:

SE Laurie Avenue near the block of 14004 has experienced poor drainage and flooding and a installing 930 linear feet of 12-inch diameter stormwater pipe, 6 manholes, and 6 catch basins to capture and route stormwater runoff.

The drainage improvements will also include mobilization, erosion control, temporary traffic control, construction survey work, removal of surfacings, rock excavation, storm sewer work, concrete manholes and inlets, trench resurfacing, aggregate base work, and Level 2, ½ inch asphalt concrete mixture wearing surface.

Engineers Estimate: \$475,000.00

Key Dates:

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

Substantial Completion: July 25, 2025

Final Completion: December 31, 2025

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, Drawings, and Reports:

SPECIAL PROVISIONS FOR CONSTRUCTION- DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT-CLACKAMAS COUNTY, Laurie Avenue Drainage Improvements-dated Fall 2024 (85 Pages)

Laurie Avenue Drainage Improvement Drawing Set, Sheets No. A01-A02, C01-C07, D01, C100, SWM25, SWM29, SWM33-SWM35, SWM38, RD364-RD365, RD1015, RD1070, TM840-TM841, TM850 (21 Pages)

CENTRAL GEOTECHNICAL SERVICES LETTER REPORT FOR CGS PROJECT: CLACKCO-3-01, LAURIE AVENUE ROCK EXCAVATION-dated May 22, 2024 (15 pages)

**SPECIAL PROVISIONS
FOR CONSTRUCTION**

**DEPARTMENT OF TRANSPORTATION AND
DEVELOPMENT
CLACKAMAS COUNTY, OREGON**

Fall 2024

Class of Work:
Earthwork and Drainage

Laurie Avenue Drainage Improvements

SPECIAL PROVISIONS

WORK TO BE DONE

The Work to be done under this Contract consists of the installation of a new storm drainage system with the following elements:

1. Construct approximately 930 lineal feet of new storm line.
2. Construct 6 manholes, 6 catch basins, and other structures as required.
3. Perform additional and incidental Work, as called for by the Specifications and Plans.

APPLICABLE SPECIFICATIONS

The Specifications that are applicable to the Work on this Project are the General Conditions for Construction for Clackamas County published by the Agency, which contain Part 00100 General Conditions and the 2021 "Oregon Standard Specifications for Construction," Parts 00200 through 03020, published by the Oregon Department of Transportation which contain the detailed "Technical Specifications".

All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the General Conditions or Standard 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 funded Project.

CLASS OF WORK

The Class of Work for this Project is: Earthwork and Drainage (EART).

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 <https://dochub.clackamas.us/documents/drupal/ef976bc9-14f4-495b-9bd8-c69ee7334685>

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, 2021 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.

END OF SECTION

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.

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 2021 Oregon Standard Specifications for Construction and Supplements might be found on the Oregon Department of Transportation website at:
http://www.oregon.gov/ODOT/Business/Pages/Standard_Specifications.aspx

00120.15 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 results of these investigations are included in the Bid Documents and 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.

END OF 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", 2021 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.

END OF SECTION

Section 00140 – Scope of Work

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

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

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

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

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

END OF SECTION

Section 00150 – Control of Work

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

00150.00 Authority of the Engineer – 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.

00150.50 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.

00150.50 Cooperation with Utilities - Add the following subsection:

(f) Utility Information:

There are no anticipated conflicts with the Utilities listed below. Contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

Utility	Contact Person's Name and Phone Number
1. NW Natural	Brock Inman, 971-378-2448 Brock.inman@nwnatural.com
2. PGE	Deanna Kaneshiro, 503-201-2713 Deanna.kaneshiro@pgn.com

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 (times):

Utility	Estimated Completion Date (Time)
1. Oak Lodge Water Services Ryan Hunter, 503-206-9573	During Construction (2 weeks)

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

Notify, in writing, PGE at least 30 Calendar Days before beginning Work on the Project.

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.

END OF SECTION

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.

00160.40 Agency-Furnished Sources - Replace this subsection, except for the subsection number and title, with the following:

Agency-Furnished Sources for this Project are listed in Section 00235 of these Special Provisions.

END OF SECTION

Section 00165 – Quality of Materials

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

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

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

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

The County follows the NTMAG on its projects.

END OF SECTION

Section 00170 – Legal Relations and Responsibilities

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

00170.00 General - Replace the first sentence of the first paragraph in this section with the following:

The Contractor shall comply with all laws, ordinances, codes, regulations, executive orders, and administrative rules (collectively referred to as "Laws" in this Section) that relate to the Work or to those engaged in the Work.

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

This project is to be constructed in Clackamas County road right of way and streets. There are no separate road opening permits required from Clackamas County to perform the work required under this contract.

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

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	\$1,000,000	(aggregate limit not required)

00170.70(d) Additional Insured - Add the following paragraph at the beginning of the section and add the bullets to the end of this subsection:

The liability insurance coverages of 00170.70(a) shall include the Agency, the Agency's governing body, board, or Commission and its members, and their respective officers, agents, and employees as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract.

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

00170.70(h) Agency Acceptance – Delete the paragraph in this section and replace with the following:

All insurance and insurance providers are subject to Agency acceptance. In addition, all of the following are subject to Agency acceptance and, if requested by Agency, the Contractor shall provide complete copies of the following to Agency’s representatives responsible for verification of the insurance coverages required by the Contract: insurance policies, endorsements, self-insurance documents and related insurance documents.

00170.70(k) Builder’s Risk Installation Floater – Delete the paragraph in this section and replace with the following:

If specified by Special Provision, the Contractor shall obtain, at its expense, and keep in effect during the term of the Contract, Builder’s Risk Installation Floater Insurance covering the Contractor’s 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 Contractor’s Equipment, Materials, or fixtures to be installed, in-transit, or stored off-site during the performance of the Contract. This insurance shall include as loss payees the Agency, State of Oregon, the building or structure owner, the Contractor and Subcontractors as their interests may appear.

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

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

END OF SECTION

Section 00180 – Prosecution and Progress

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

00180.06 Assignment of Funds Due Under the Contract - Delete first bulleted item.

00180.21 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.

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
Contract Completion Time	00180.50(h)
Traffic Lane Restrictions	00220.40(e)
Noise Control	00290.32
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.

00180.42 Preconstruction Conference - Add the following:

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

Submit the following during the preconstruction conference unless otherwise directed:

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

A representative of each subcontractor shall be required to attend the pre-construction conference.

During the monthly Utility coordination meetings, the Utilities will provide Utility drawings and discuss the scope, extent, locations, and significance of all Utility facilities before the Contractor begins work in a new activity area. The Contractor shall incorporate this information into the Project schedules and furnish the Utilities copies of the updated Project schedules.

The Contractor shall plan and schedule all Utility adjustment operations well in advance of On-Site Work. When the Contractor becomes aware of Utility conflicts not previously identified, the Contractor shall notify the applicable Utilities in writing the same Calendar Day. The Contractor shall allow Utilities at least 2 weeks (14 Calendar Days) to relocate (adjust) the Utility conflicts not previously identified.

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 - Complete all Work to be done under the Contract not later than July 25, 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) Liquidated Damages - Add the following paragraph:

The liquidated damages for failure to complete the Work on time required by 00180.50(h) will be \$600 per Calendar Day *.

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

Add the following subsection:

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

(1) Lane Closures - It is impractical to determine the actual damages the Agency will sustain in the event traffic lanes are closed beyond the limits listed in 00220.40(e). Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per 15 minutes, or for a portion of 15 minutes, per lane, for any lane closure beyond the limits listed in 00220.40(e). In addition to the liquidated damages, all added cost for traffic control measures, including flagging, required to maintain the lane closures beyond the allowed time limits, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

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

00180.88 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 for developing and implementing the plan during construction of the project, in-person training, developing meaningful policies, and investigating incidents.

END OF SECTION

Section 00190 – Measurement of Pay Quantities

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

00190.20(a) Contractor to Provide Vehicle Weigh Scales: Delete and replace the last paragraph in this section with the following:

Unless otherwise provided in the Contract, Pay Items to be measured by weight shall include all Contractor costs for providing, maintaining, inspecting, and testing scales; for furnishing appropriate weigh tickets; for self-printing scales; for electronic weigh memo system(s); and for transporting Materials to the scales or to check weighing.

00190.20(f)(1) Scale with Automatic Printer: Delete and replace the first sentence in this section with the following:

If the scales have an automatic weigh memo printer or an approved electronic weigh memo system that does not require manual entry of gross weight information, the Agency may periodically have a representative at the scales to observe the weighing procedures.

00190.20(f)(1) Scale with Automatic Printer: Delete and replace the last bullet in this section with the following:

- Furnish a legible, serially numbered weigh memo for each load of Materials to the Agency's Materials receiver at the point of delivery, or as directed by the Engineer. The memo shall identify the Project, the Materials, the date, net weight (gross and tare as appropriate), and identification of the vehicle and weigh technician. If approved by the Engineer an electronic weigh memo system may be used. Requests to use an electronic weigh memo system shall be submitted to the Engineer according to 00150.37, providing sufficient detail for the Engineer to perform an evaluation. If approved, the Contractor shall provide training, technical support, reports, and weigh memo information to the Engineer at no additional cost to the Agency. The electronic weigh memo system shall be:
 - Capable of recording and securely retaining the same required "weigh memo" information identified above. For retention see 00170.07(c).
 - Fully integrated with the provided weigh scale system.
 - Designed in such a way that the data electronically read from scales cannot be altered by the Contractor, Subcontractor, Supplier, Engineer, or other system users.
 - Designed to allow the Engineer remote access to all the weigh memo data in real-time and allow the Engineer to add comments to the individual weigh memo regarding waste, temperature, stations, yield or other information. The system shall identify the system user or individual that adds comments to the electronic weigh memo or otherwise access the system. The Contractor shall provide the Engineer a means to access the data if the Engineer cannot use an Agency provided hand held device for access.
 - Capable of providing all the weigh memo information, including any added comments, in an electronic data file the Engineer can easily access without proprietary software.

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.

00190.30 Plant Scales: Add the following sentence after the bulleted list:

If approved by the Engineer an electronic weigh memo system may be used in place of a printer system. See 00190.20(f)(3).

END OF SECTION

Section 00195 – Payment

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

00195.10 Payment for Changes in Material Costs - Delete and replace with the following:

No asphalt cement cost adjustment shall be used on this project.

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

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

00195.20(b) Significant Changed Work – 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) Progress Payments - Delete and replace the last sentence in the second paragraph as follows:

All estimated quantities are subject to correction in the final estimate. If the Contractor uses these estimates as a basis for making payments to Subcontractors and Suppliers, the Contractor assumes all risk and bears any losses that result.

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) Forms of Retainage – Delete first paragraph and replace with:

Forms of acceptable retainage are set forth below in Subsections (1) through (3). “Cash, Alternate A” or “Cash, Alternate B” (Retainage Surety Bond) are the Agency-preferred forms of retainage. Unless the Contractor notifies the County otherwise in writing, the County will automatically hold retainage per paragraph (2) “Cash, Alternate B (No Interest Earned). If the Agency incurs additional costs as a result of the Contractor’s election to use “Bonds and Securities”, the Agency may recover such costs from the Contractor by a reduction of the final payment.

Delete and replace paragraph (2) with the following:

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

00195.50(d) Release of Retainage – Delete this section and replace with the following:

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

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

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

END OF SECTION

Section 00196 – Payment for Extra Work

Comply with Section 00196 of the Standard Specifications modified as follows: **00196.91
Extra Work Allowance** – Add the following 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.

END OF SECTION

Section 00197 – Payment for Force Account Work

Comply with Section 00197 of the Standard Specifications.

END OF SECTION

Section 00199 – Disagreements, Protests and Claims

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

00199.40 Claim Decision; Review; Exhaustion of Administrative Remedies - 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.

END OF SECTION


CLACKAMAS COUNTY DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

SPECIAL PROVISIONS

FOR

LAURIE AVENUE DRAINAGE IMPROVEMENTS

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature</p>  <p>REGISTERED PROFESSIONAL ENGINEER 91442PE DIGITALLY SIGNED 2024.08.13 OREGON MARCH 10, 2020 KENNETH DEAN OTA</p> <p>EXPIRES: 12/31/2024</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for drainage and stormwater control . Modified Special Provisions were prepared by me or under my supervision.</p> <p>Section(s) 00220, 00221, 00280, 00305, 00310, 00330, 00331, 00350, 00405, 00445, 00470, 00490, 00495, 00640, 00730, and 00744</p>
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FINAL ELECTRONIC DOCUMENT AVAILABLE UPON REQUEST

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 <https://dochub.clackamas.us/documents/drupal/ef976bc9-14f4-495b-9bd8-c69ee7334685>

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, 2021 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.

END OF SECTION

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.

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 2021 Oregon Standard Specifications for Construction and Supplements might be found on the Oregon Department of Transportation website at:

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

00120.15 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 results of these investigations are included in the Bid Documents and 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.

END OF 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", 2021 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.

END OF SECTION

Section 00140 – Scope of Work

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

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

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

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

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

END OF SECTION

Section 00150 – Control of Work

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

00150.00 Authority of the Engineer – 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.

00150.50 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.

00150.50 Cooperation with Utilities - Add the following subsection:

(f) Utility Information:

There are no anticipated conflicts with the Utilities listed below. Contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

Utility	Contact Person's Name and Phone Number
1. NW Natural	Brock Inman, 971-378-2448 Brock.inman@nwnatural.com
2. PGE	Deanna Kaneshiro, 503-201-2713 Deanna.kaneshiro@pgn.com

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 (times):

Utility	Estimated Completion Date (Time)
1. Oak Lodge Water Services Ryan Hunter, 503-206-9573	During Construction (2 weeks)

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

Notify, in writing, PGE at least 30 Calendar Days before beginning Work on the Project.

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.

END OF SECTION

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.

00160.40 Agency-Furnished Sources - Replace this subsection, except for the subsection number and title, with the following:

Agency-Furnished Sources for this Project are listed in Section 00235 of these Special Provisions.

END OF SECTION

Section 00165 – Quality of Materials

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

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

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

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

The County follows the NTMAG on its projects.

END OF SECTION

Section 00170 – Legal Relations and Responsibilities

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

00170.00 General - Replace the first sentence of the first paragraph in this section with the following:

The Contractor shall comply with all laws, ordinances, codes, regulations, executive orders, and administrative rules (collectively referred to as "Laws" in this Section) that relate to the Work or to those engaged in the Work.

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

This project is to be constructed in Clackamas County road right of way and streets. There are no separate road opening permits required from Clackamas County to perform the work required under this contract.

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

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	\$1,000,000	(aggregate limit not required)

00170.70(d) Additional Insured - Add the following paragraph at the beginning of the section and add the bullets to the end of this subsection:

The liability insurance coverages of 00170.70(a) shall include the Agency, the Agency's governing body, board, or Commission and its members, and their respective officers, agents, and employees as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract.

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

00170.70(h) Agency Acceptance – Delete the paragraph in this section and replace with the following:

All insurance and insurance providers are subject to Agency acceptance. In addition, all of the following are subject to Agency acceptance and, if requested by Agency, the Contractor shall provide complete copies of the following to Agency’s representatives responsible for verification of the insurance coverages required by the Contract: insurance policies, endorsements, self-insurance documents and related insurance documents.

00170.70(k) Builder’s Risk Installation Floater – Delete the paragraph in this section and replace with the following:

If specified by Special Provision, the Contractor shall obtain, at its expense, and keep in effect during the term of the Contract, Builder’s Risk Installation Floater Insurance covering the Contractor’s 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 Contractor’s Equipment, Materials, or fixtures to be installed, in-transit, or stored off-site during the performance of the Contract. This insurance shall include as loss payees the Agency, State of Oregon, the building or structure owner, the Contractor and Subcontractors as their interests may appear.

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

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

END OF SECTION

Section 00180 – Prosecution and Progress

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

00180.06 Assignment of Funds Due Under the Contract - Delete first bulleted item.

00180.21 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.

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
Contract Completion Time	00180.50(h)
Traffic Lane Restrictions	00220.40(e)
Noise Control	00290.32
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.

00180.42 Preconstruction Conference - Add the following:

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

Submit the following during the preconstruction conference unless otherwise directed:

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

A representative of each subcontractor shall be required to attend the pre-construction conference.

During the monthly Utility coordination meetings, the Utilities will provide Utility drawings and discuss the scope, extent, locations, and significance of all Utility facilities before the Contractor begins work in a new activity area. The Contractor shall incorporate this information into the Project schedules and furnish the Utilities copies of the updated Project schedules.

The Contractor shall plan and schedule all Utility adjustment operations well in advance of On-Site Work. When the Contractor becomes aware of Utility conflicts not previously identified, the Contractor shall notify the applicable Utilities in writing the same Calendar Day. The Contractor shall allow Utilities at least 2 weeks (14 Calendar Days) to relocate (adjust) the Utility conflicts not previously identified.

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 - Complete all Work to be done under the Contract not later than July 25, 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) Liquidated Damages - Add the following paragraph:

The liquidated damages for failure to complete the Work on time required by 00180.50(h) will be \$600 per Calendar Day *.

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

Add the following subsection:

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

(1) Lane Closures - It is impractical to determine the actual damages the Agency will sustain in the event traffic lanes are closed beyond the limits listed in 00220.40(e). Therefore, the Contractor shall pay to the Agency, not as a penalty, but as liquidated damages, \$500 per 15 minutes, or for a portion of 15 minutes, per lane, for any lane closure beyond the limits listed in 00220.40(e). In addition to the liquidated damages, all added cost for traffic control measures, including flagging, required to maintain the lane closures beyond the allowed time limits, will be at no additional cost to the Agency. The required traffic control measures will be as determined by the Engineer.

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

00180.88 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 for developing and implementing the plan during construction of the project, in-person training, developing meaningful policies, and investigating incidents.

END OF SECTION

Section 00190 – Measurement of Pay Quantities

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

00190.20(a) Contractor to Provide Vehicle Weigh Scales: Delete and replace the last paragraph in this section with the following:

Unless otherwise provided in the Contract, Pay Items to be measured by weight shall include all Contractor costs for providing, maintaining, inspecting, and testing scales; for furnishing appropriate weigh tickets; for self-printing scales; for electronic weigh memo system(s); and for transporting Materials to the scales or to check weighing.

00190.20(f)(1) Scale with Automatic Printer: Delete and replace the first sentence in this section with the following:

If the scales have an automatic weigh memo printer or an approved electronic weigh memo system that does not require manual entry of gross weight information, the Agency may periodically have a representative at the scales to observe the weighing procedures.

00190.20(f)(1) Scale with Automatic Printer: Delete and replace the last bullet in this section with the following:

- Furnish a legible, serially numbered weigh memo for each load of Materials to the Agency's Materials receiver at the point of delivery, or as directed by the Engineer. The memo shall identify the Project, the Materials, the date, net weight (gross and tare as appropriate), and identification of the vehicle and weigh technician. If approved by the Engineer an electronic weigh memo system may be used. Requests to use an electronic weigh memo system shall be submitted to the Engineer according to 00150.37, providing sufficient detail for the Engineer to perform an evaluation. If approved, the Contractor shall provide training, technical support, reports, and weigh memo information to the Engineer at no additional cost to the Agency. The electronic weigh memo system shall be:
 - Capable of recording and securely retaining the same required "weigh memo" information identified above. For retention see 00170.07(c).
 - Fully integrated with the provided weigh scale system.
 - Designed in such a way that the data electronically read from scales cannot be altered by the Contractor, Subcontractor, Supplier, Engineer, or other system users.
 - Designed to allow the Engineer remote access to all the weigh memo data in real-time and allow the Engineer to add comments to the individual weigh memo regarding waste, temperature, stations, yield or other information. The system shall identify the system user or individual that adds comments to the electronic weigh memo or otherwise access the system. The Contractor shall provide the Engineer a means to access the data if the Engineer cannot use an Agency provided hand held device for access.
 - Capable of providing all the weigh memo information, including any added comments, in an electronic data file the Engineer can easily access without proprietary software.

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.

00190.30 Plant Scales: Add the following sentence after the bulleted list:

If approved by the Engineer an electronic weigh memo system may be used in place of a printer system. See 00190.20(f)(3).

END OF SECTION

Section 00195 – Payment

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

00195.10 Payment for Changes in Material Costs - Delete and replace with the following:

No asphalt cement cost adjustment shall be used on this project.

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

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

00195.20(b) Significant Changed Work – 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) Progress Payments - Delete and replace the last sentence in the second paragraph as follows:

All estimated quantities are subject to correction in the final estimate. If the Contractor uses these estimates as a basis for making payments to Subcontractors and Suppliers, the Contractor assumes all risk and bears any losses that result.

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) Forms of Retainage – Delete first paragraph and replace with:

Forms of acceptable retainage are set forth below in Subsections (1) through (3). "Cash, Alternate A" or "Cash, Alternate B" (Retainage Surety Bond) are the Agency-preferred forms of retainage. Unless the Contractor notifies the County otherwise in writing, the County will automatically hold retainage per paragraph (2) "Cash, Alternate B (No Interest Earned)". If the Agency incurs additional costs as a result of the Contractor's election to use "Bonds and Securities", the Agency may recover such costs from the Contractor by a reduction of the final payment.

Delete and replace paragraph (2) with the following:

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

00195.50(d) Release of Retainage – Delete this section and replace with the following:

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

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

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

END OF SECTION

Section 00196 – Payment for Extra Work

Comply with Section 00196 of the Standard Specifications modified as follows: **00196.91**
Extra Work Allowance – Add the following 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.

END OF SECTION

Section 00197 – Payment for Force Account Work

Comply with Section 00197 of the Standard Specifications.

END OF SECTION

Section 00199 – Disagreements, Protests and Claims

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

00199.40 Claim Decision; Review; Exhaustion of Administrative Remedies - 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.

END OF 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:

- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings.

00220.03(a) Over-Dimensional Vehicle Restrictions - Replace this subsection, except subsection number and title, with the following:

When the Project restricts the width, length, height, or weight of vehicles through a work zone or detours trucks around a work zone, fill out and submit a completed copy of the "Highway Restriction Notice - Size and/or Weight" form (Form No. 734-2357), available from the ODOT Oregon Trucking Online website (see 00110.05(e)), at least 35 Calendar Days before the restriction or detour takes effect.

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

Traffic Lanes may be closed on the SE Laurie Avenue when allowed, shown, or directed during the following periods of time except as specified in 00220.40(e)(2):

Single Lane Closures – One equivalent Traffic Lane on the **Laurie Avenue** may be closed during the following times:

- Daily, Monday through Thursday, between 7:00 a.m. and 7:00 p.m.
- Friday between 7:00 a.m. and 4:00 p.m.

SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

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

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

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

00221.06 (c) Tourist-Oriented Directional and Business Logo Signs - Replace this subsection, except for the subsection number and title, with the following:

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.

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

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

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

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

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

SECTION 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 paragraphs:

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.

When contaminants, pollutants or hazardous materials are discovered in the Project location in soils or groundwater comply with 00290.30(f) and, provide an environmental management plan (EMP) as required by the 1200-CA permit.

Add the following paragraph to the end of this subsection:

Clackamas County's NPDES 1200-CA permit is applicable to the Project.

00280.04 Erosion and Sediment Control Plan on Agency Controlled Lands - Replace the bullets with the following bullets:

- When using the Agency's ESCP with only modifications required to keep the ESCP current during construction, submit a written notification indicating the Agency's ESCP is used without modifications prior to construction.
 - Prior to beginning construction, edit the ESCP to provide a list of all contractors working on the site.
 - Prior to beginning construction edit the ESCP cover sheet to list all personnel by name and position who are responsible for the installation and maintenance of stormwater control measures including their individual responsibilities and certifications. Keep list current for the duration of the project.
- When using a Contractor modified version of the Agency's ESCP, include the following:
 - Proposed ESCP showing all ESC Work, and quantities of Work.
 - An EMP that addresses pollution prevention and control of potentially contaminated sites or Materials when pollutants are known to be present.
 - Implementation schedules for the ESCP
 - Plans for each phase of Contractor's Work
 - Names and positions of all personnel engaged in construction activities.
 - Names and positions of all personnel responsible for the installation and maintenance of stormwater control measures.
 - Information required under 1200-CA permit.
- When using a Contractor developed ESCP, develop and stamp the ESCP by a professional with one of the following credentials. Include their name and credentials in the ESCP. The ESCP preparer shall be one of the following:

- Oregon Registered Professional Engineer,
- Oregon Registered Landscape Architect; or
- Oregon Certified Engineering Geologist
- When using a Contractor developed ESCP where engineered facilities such as sedimentation basins or diversion structures for erosion and sediment control are required, prepare and stamp the ESCP by one of the following:
 - Oregon Registered Professional Engineer; or
 - Oregon Registered Landscape Architect.
- When using a Contractor developed ESCP, provide plans for each phase of Contractor's work implementation schedule and information required under the 1200-CA permit and as directed in ODOT's Erosion Control Manual.

00280.06 Erosion and Sediment Control Manager - Delete this subsection.

00280.30 Erosion and Sediment Control Manager - Replace this subsection, except for the subsection number and title, with the following:

If the Agency's NPDES 1200-CA permit is applicable to the Project, designate and provide an ESCM who possesses a valid ODOT ESCM certificate or who has successfully completed an erosion control training that is acceptable to the Engineer.

The ESCM duties include:

- Manage and ensure proper implementation of the ESCP.
- Accompany the Engineer during field review of the ESCP prior to construction activities.
- Monitor rainfall, snow melt and runoff at the Project Site.
- Monitor water quality in receiving streams in the vicinity of the Project Site.
- Monitor water in sediment traps receiving runoff from soils amended with cementitious material for acidity or alkalinity.
- Monitor locations identified in Section 00294 for compliance.
- Inspect ESC and monitor receiving waters on active construction site on initial date and every 14 Days for effective functioning.
- Inspect ESC on inactive sites every 14 Days for effective functioning.
- Inspect ESC for effective functioning and monitor receiving waters, on all active and inactive sites at least within 24 hours of rainfall events sufficient to result in runoff from the Project Site.
 - West of the Cascades, after 0.1 inch of rainfall, inspect conveyances for runoff and monitor site if runoff is observed.
- Fill out and provide monitoring report for each site inspection and include the following:
 - Photographs of any BMP that is not providing effective functioning or requires maintenance.
 - Provide sufficient photographic documentation of all BMPs that are providing Effective Functioning.
- Ensure that ESC are regularly cleaned and maintained.

- Mobilize crews to make immediate repairs to ESC or install additional ESC during working and non-working hours when ESC is not effectively functioning.
- Record actions taken to clean up discharged sediment.
- Report potential permit violations to the Agency immediately upon discovery.
- Repair conditions that caused permit violations and prepare submittals for corrective actions according to 00280.64.
- Update the ESCP monthly and within 7 Days after changes or major ESC modifications are implemented in the field.
- Submit ESCP revisions in electronic format, to Engineer within 30 Days after making revisions.
- Prepare for wet weather during the periods between October 1 and May 31 according to 00280.41(c).
- Accompany the Engineer on inspections and, if required, on inspections by representatives of regulating agencies. If any of the following occur, revise the ESCP to reflect the change(s) within 7 Days.
 - Changes to the construction plans that impact erosion and sediment control measures;
 - Changes to the stormwater control BMPs, their location, maintenance required, and any other revisions necessary to prevent erosion and control sediment runoff;
 - An increase in the area impacted by construction activities;
 - Other activities at the site that are no longer accurately reflected in the ESCP. This includes changes made in response to corrective actions triggered;
 - To reflect areas on the site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;
 - If inspections by DEQ determine that ESCP revisions are necessary for compliance with the 1200-CA permit;
 - Where DEQ determines it is necessary to install or implement additional controls at the site in order to meet the requirements of the 1200-CA permit. Include the following in the ESCP:
 - A copy of any correspondence describing such measures and requirements; and
 - A description of the controls to be used to meet such requirements.
 - Change of Subcontractors that engage in construction activities on site, and the areas of the site where the Subcontractor(s) engage in construction activities;
 - Change of any personnel (by name and position) that are responsible for the design, installation and maintenance of stormwater control measures;
 - Change of the certified erosion and sediment control inspector, or of their contact information and any applicable certification and training experience;
 - To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater controls implemented at the site; and
 - If a change in chemical treatment systems or chemically enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application as applicable. Furnish temporary sediment trap as shown on drawings, stamped and signed by licensed engineer.

When Work on Project or portion of Project is temporarily suspended and those portions of the site are stabilized to eliminate risk of sediment discharge, reduce monitoring frequency as follows:

- Twice a month, not less than 14 days apart, after work in that area has stopped.
- After this first month, and the site remains stabilized, monitoring frequency can be reduced to once per month;
- Upon resumption of work, return to the standard monitoring frequency.
- Document the beginning and end dates of area's work suspension on monitoring form and identify area(s) of work suspension on ESCP revision.

Submit revised ESCP to Engineer for signature by licensed professional (see 00280.04) and submission to DEQ when changes are made for the following reasons:

- Part of a corrective action requirement;
- An increase or decrease in project size;
- An increase or decrease in size or location of disturbed areas;
- Changes to BMPs, such as type, design or location;
- Change of the ESCM.

00280.41(a) Disturbance Limits - Replace this subsection, except for the subsection number and title, with the following:

Prior to any ground disturbing activity, delineate all construction site clearing limits with high visibility markings and do not disturb areas outside the clearing limits. Prior to beginning construction activities, delineate and protect riparian areas including trees, root zones and vegetation to be preserved and delineate and protect vegetated buffer zones according to 00280.41(e). Protect post-construction stormwater facilities, unless used during construction as sediment trap, in which case, repair according to 00280.46(h).

Add the following subsection:

00280.41(e) Buffers - Retain and preserve buffer zones of natural, undisturbed vegetation, 50 feet in width between Work and Waters of the State and sensitive areas including water bodies, wetlands, springs and seeps. Where 50 foot buffers are not attainable, provide erosion, runoff and sediment control BMPs as shown or directed.

Add the following subsection:

00280.41(f) Hauling Material - Cover loads carrying soil or sediment when leaving Project Site. Drain saturated loads on site or haul in water tight beds.

Add the following subsection:

00280.41(g) Underground Injection Controls (UIC) - Do not allow storm water from work area to enter Underground Injection Control (UIC) inlets, catch basins or wells.

00280.46(a) Construction Entrances - Add the following to the end of this subsection:

Construct the construction entrances as shown or directed.

00280.46(h) Temporary Sediment Trap - Add the following paragraph to the end of this subsection:

Where location of Temporary Sediment Trap is used post-construction for water quality treatment, storage or infiltration, remove sediment and soil to a depth of 18" and replace to finish grade with material approved by engineer.

00280.46(i) Concrete Washout - Add the following paragraph to the end of this subsection:

Locate concrete wash basins and concrete waste disposal to prevent stormwater that has been in contact with concrete wash or waste concrete from contaminating Waters of the State or stormwater inlets or conveyances. Handle wash water as waste. Do not dispose of concrete wash water or wash out concrete trucks or tools onto the ground, or into storm drains, open ditches, streets, or streams.

Add the following subsection:

00280.46(j) Access Routes - Stabilize unpaved access and haul routes within the Project Site with Aggregate or as approved by Engineer.

00280.48 Emergency Materials - Add the following paragraphs after the paragraph that begins "Provide, stockpile, and protect...":

Provide and stockpile the following emergency Materials on the Project site:

Item	Quantity
Sediment Barrier, Type 2 (Biofilter Bags)	25 LF

00280.62 Inspection and Monitoring - Replace the paragraph that begins "Ensure that regular site inspection ..." with the following paragraphs:

Inspect the Project Site and all ESC devices for potential erosion or sediment movement on a weekly basis and when 1/2 inch or more of rainfall occurs within a 24 hour period, including weekend and holidays.

If a significant noncompliance or serious water quality issue occurs that could endanger health or the environment, verbally report it to the Engineer within 24 hours.

The closest on-line rain gauge is located at:

https://or.water.usgs.gov/non-usgs/bes/collins_view.html

lat = 45.440000 long = -122.655730**00280.63(c) Paved Areas** - Replace this subsection, except for the subsection number and title, with the following subsection:

Keep all paved areas clean for the duration of the Project. Use cleaning methods that do not transport sediment-laden water to receiving streams. Remove sediment that has been tracked-out from the Project Site by the end of the same business day. If the sediment track-out occurs on a non-business day, remove the sediment by the end of the next business day.

Add the following subsection:

00280.64 Corrective Actions - Initiate corrective actions when the following noncompliance occur:

- A discharge from the Project Site causes an exceedance of applicable water quality standards,
- Sediment or turbidity are visible in discharge from the Project site in conveyance system leading to surface water or at the discharge point within surface water,
- BMP needs repair or replacement, beyond routine maintenance,
- BMP shown on ESCP was not installed or installed incorrectly,
- A prohibited discharge has occurred,
- When required by DEQ,
- As directed by Engineer

(a) Corrective Action Timelines - Immediately initiate corrective actions to address noncompliance, including removing discharged material and repairing or replacing BMPs that do not provide Effective Functioning according to the following:

- Mobilize resources to clean contaminated surfaces and address cause of discharge,

- Complete corrective actions by the close of the next business day for discharge clean-up and to restore Effective Functioning of installed BMPs,
- For more significant noncompliance of which require additional, replacement or modified BMPs to restore Effective Functioning, complete corrective action(s) no later than 24 hours after the discovery
 - If completion of corrective action is not feasible within 24 hours, document the reasons why the time line cannot be met.
 - Provide a schedule for clean-up and corrective actions that restores Effective Functioning as soon as feasible. If schedule cannot be met document the reasons for the delay.
 - Provide all corrective action documentation and photographs to Agency within 24 hours of completion of corrective actions.

(b) Corrective Action Documentation - Document corrective actions within 24 hours of implementations to provide:

- The Project Site's common name and 1200-CA permit identification number when applicable,
- Conveyance system discharge location(s) and outfalls that were out of compliance,
- Photographs of the discharge(s) before and after the implementation of corrective actions, or before and after NTU readings of the discharge,
- The period of noncompliance,
- Name(s), titles and contact information of personnel conducting inspections,
- The specific condition and the date and time the noncompliance was identified,
- Description of the noncompliance and BMP failure(s) that caused the noncompliance,
- Description of the actions taken to address the noncompliance and prevent a reoccurrence of the noncompliance,
- Where corrective actions change site conditions from what is shown on ESCP, revise the ESCP to represent the site conditions,
- Immediately upon completion of corrective action documentation, provide to Agency for signature and submittal to DEQ.

00280.90 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:

Pay Item	Unit of Measurement
(a) Erosion Control.....	Lump Sum

Item (a) includes:

- mobilization
- furnishing, stockpiling, protecting, restocking, and removing emergency Materials
- preparing Project for a period of extended non-activity

- inspecting, maintaining, and removing erosion control devices
- restoring, mulching, tacking, and seeding all disturbed ground, Work, and storage areas not otherwise covered

Partial payment for items (a) will be made as follows:

- When the initial Contractor developed ESCP, narrative, and schedule are complete and accepted, and the initial erosion control devices are installed 25%
- When 50 percent of the Contract is complete, excluding advances on Materials 25%
- When 75 percent of the Contract is complete, excluding advances on Materials 25%
- At completion of the Work covered by this Section 25%

In item (f), the word "Hydromulch", "Straw", or "Compost" will be inserted in the blank.

SECTION 00290 - ENVIRONMENTAL PROTECTION

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

00290.36(a) Migratory Birds - Add the following to the end of this subsection:

Do not disturb migratory bird nesting habitat (shrubs, trees, and structures), or clear vegetation from March 1 to September 1 of each year without prior written approval from the Engineer. Notify the Engineer, in writing, a minimum of 10 Calendar Days prior to starting activities that could harm nesting birds.

(1) Bird Management - Bird management activities to comply with the Migratory Bird Treaty Act will be performed by **APHIS** and its permitted agents, as documented in the **Clackamas County** MBTA permit. Ensure that **APHIS** and its permitted agents have access to the project area as needed to prevent migratory bird nesting. Nesting prevention may include daily bird harassment and the installation and maintenance of devices that exclude birds.

Do not disturb migratory bird nesting habitat (shrubs, trees and structures) or clear vegetation from March 1 to September 1 each calendar year without prior written approval from the Engineer. Notify the Engineer, in writing, a minimum of 10 Calendar Days prior to starting activities that could harm nesting birds.

SECTION 00305 - CONSTRUCTION SURVEY WORK

Comply with Section 00305 of the Standard Specifications.

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

Comply with Section 00310 of the Standard Specifications.

SECTION 00330 - EARTHWORK

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

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

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

00330.41(a)(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 00350 - GEOSYNTHETIC INSTALLATION

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

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

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

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

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

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

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

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

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

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

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

SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

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

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

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

00445.70 General - Replace this subsection, except for the subsection number and title, with the following:

(a) Culvert Installations - Inspect culverts to ensure that the lines are free of obstructions and leakage. Perform video and deflection testing.

(b) Storm Sewer, Siphon, Irrigation and Sanitary Sewer Installations - After laying and joining pipe for storm sewer, siphons, irrigation, sanitary sewers, and backfilling trenches, test the installations for watertightness, including inlet and outlet connections. Perform video, deflection, hydrostatic, and low-pressure air testing.

00445.71(a) General - Replace the paragraph that begins "All sanitary gravity systems, siphon systems..." with the following paragraph:

All storm gravity sewer systems, sanitary gravity systems, siphon systems and irrigation systems and appurtenances shall successfully pass a hydrostatic or air test prior to acceptance and shall be free of visible infiltration of water. Test manholes as specified in Section 00470.

00445.72(b) Hydrostatic Testing - Replace this subsection with the following subsection:

00445.72(b) Exfiltration Leakage Testing - Prior to the exfiltration leakage test, the pipe test section may be filled with clear water to permit normal absorption into the pipe walls. Keep the test pipe section saturated for a minimum of 4 hours. After the absorption period, refill the pipe to the required test head.

Exfiltration leakage shall not sustain losses of more than 0.04 gallons per hour per inch diameter per 100 feet of pipe, except 0.3 gallons per hour, per inch per 100 feet may be used in arid climate zones if approved by the Engineer. The hydrostatic head shall be a minimum 6-foot water column above the crown of the highest section of pipe including service connections, or exceed the maximum estimated groundwater level. The Engineer will make the final decisions regarding test height for the water in the pipe section.

The length of pipe tested by exfiltration shall be limited so that the pressure on the invert of the lower end of the section shall not exceed 16 feet of water column. Account for all service connection footage for computing allowable leakage.

00445.72(c)(3) - Replace this subsection, except for the subsection number and title, with the following:

Add air slowly to the test section until the internal air pressure is raised to 4 psi greater than the average back pressure due to groundwater.

00445.72(c)(6) - Replace this subsection, except for the subsection number and title, with the following:

Record the time in seconds that is required for the internal air pressure to drop from 3.5 psi to 2.5 psi greater than the average backpressure due to groundwater.

For air permeable Materials (concrete & clay) the tested section will be acceptable if the time recorded in paragraph (6) above is not less than the time in seconds (T) computed by the formula:

$$T = K/C$$

Where:

K = the sum of the computations (0.011 d²L) for each size of pipe and its length in the section

C = the sum of the computations (0.0003882 dL) for each size of pipe and its length in the section, except that the minimum value for C shall be 1

d = inside diameter of the pipe in inches

L = length of pipe in feet

For non-air permeable pipe (Metal, PVC, HDPE, ABS composite), the section tested shall be accepted if the time recorded in (6) above is not less than the time determined by the following equation.

$$T = 0.085 (DK/Q)$$

Where:

T = shortest time allowed for air pressure to drop 1.0 psig (seconds)

K = 0.000419 DL but not less than 1.0

Q = leak rate in cubic feet/minute/square feet of internal surface = 0.0015 CFM/SF

D = measured average inside diameter of pipe (inches)

L = length of tested section (feet)

00445.73 Deflection Testing for Flexible Pipe - Replace this subsection, except for the subsection number and title, with the following:

Prior to wearing surface paving, conduct deflection tests of culverts, sanitary sewers, and storm sewers constructed of flexible pipe. Perform the deflection testing using one of the following methods.

(a) Remote Video with Laser Profiler - Conduct remote video with laser profiler testing according to 00415.42.

(b) Manual Deflection Test - Conduct manual inspection deflection testing according to 00415.42.

(c) Mandrel Deflection Test - Conduct the testing by pulling an approved mandrel through the completed pipeline. Use a mandrel having at least 9 vanes and a diameter 95 percent of the pipe's initial inside diameter.

Conduct testing on a manhole-to-manhole basis after the line has been completely flushed out with water. Conduct the tests not less than 30 Days after the trench backfill and compaction have been completed. Tests may be conducted sooner if approved by the Engineer. Conduct the test concurrently with video inspection. Pull the mandrel in front of the camera so that the deflection testing is clearly recorded on the video tape unless approved by the Engineer. Provide a water depth gauge, located on the video camera side of the mandrel with the following characteristics:

- Graduated with marks at 0.50 inch increments clearly visible during video inspection.
- Capable of measuring water depth in 0.50 inch increments from 0.50 inch to 2.50 inches.
- Designed so that it will remain plumb regardless of the rotation of the mandrel or video camera.

00445.74 Video Inspection of Sanitary and Storm Sewers - Replace this subsection with the following subsection:

00445.74 Video Inspection of Culverts, Sanitary and Storm Sewers:

(a) Pre-Construction Video Inspection - For all existing culverts being extended or repaired perform video pipe inspection according to Section 00415.

For all existing sanitary sewer and storm sewers being altered or repaired, perform video pipe inspection, according to Section 00415. Video the sewer system between the nearest upstream manhole where Work is not being performed and the nearest downstream manhole where Work is not being performed, including all lateral runs between end manholes.

When replacing entire pipe sections or runs a video pipe inspection is not required prior to replacement.

(b) Post-Construction Video Inspection - When constructing a new run, an extension, or a repair of sanitary sewer, storm sewer, or culvert pipe, perform video pipe inspection, according to Section 00415, including the locations where new pipe meets existing pipe.

00445.80(f) Pipe Slope Anchors - The quantities of pipe slope anchors will be measured on the unit basis.

SECTION 00470 - MANHOLES, CATCH BASINS, AND INLETS

Comply with Section 00470 of the Standard Specifications modified as follows:

00470.41(c) Grates, Frames, Covers and Fittings - Replace this subsection, except for the subsection number and title, with the following:

Set metal frames for manholes on full non-shrink grout beds to prevent infiltration of surface water or groundwater between the frame and the concrete of the manhole section. If concrete is to be poured around the frames, coat the portion of the frame that will contact the concrete with hot asphalt before placing the concrete. Set frames, covers and grates true to the locations and grades established. Clean bearing surfaces and provide uniform contact. The use of a bolt adjustment system for frames from the QPL is allowed. Secure all fastenings. Construct all mortared, sanitary sewer manhole necks and all riser ring joints made with non-shrink grout using an approved commercial concrete bonding agent applied to all cured concrete surfaces being grouted.

00470.42 Precast Concrete Catch Basins and Inlets - Add the following sentence to the end of this subsection:

Grade adjustments using a bolt system from the QPL is allowed.

SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications.

SECTION 00495 - TRENCH RESURFACING

Comply with Section 00495 of the Standard Specifications.

SECTION 00640 - AGGREGATE BASE AND SHOULDERS

Comply with Section 00640 of the Standard Specifications.

SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

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

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

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

No separate or additional payment will be made for Emulsified Asphalt tack coat. Approximately 0.25 Tons of Emulsified Asphalt in tack coat will be required on this Project.

SECTION 00744 - ASPHALT CONCRETE PAVEMENT

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

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

Provide PG 74-22 grade asphalt cement for this Project.

00744.44(a)(2) Wearing Course - Replace the paragraph that begins "Construct longitudinal joints ..." with the following paragraph:

Construct longitudinal joints six inches from permanent lane markings, or as shown or directed.

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

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

Add the following subsection:

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

LAURIE AVENUE DRAINAGE IMPROVEMENTS

PREPARED FOR
**CLACKAMAS COUNTY DEPT. OF
TRANSPORTATION AND DEVELOPMENT**

REGISTERED PROFESSIONAL
ENGINEER
91442PE
DIGITALLY SIGNED
2024.08.01
OREGON
MARCH 10, 2020
KENNETH DEAN O.T.A.

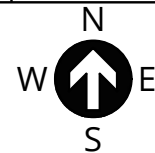
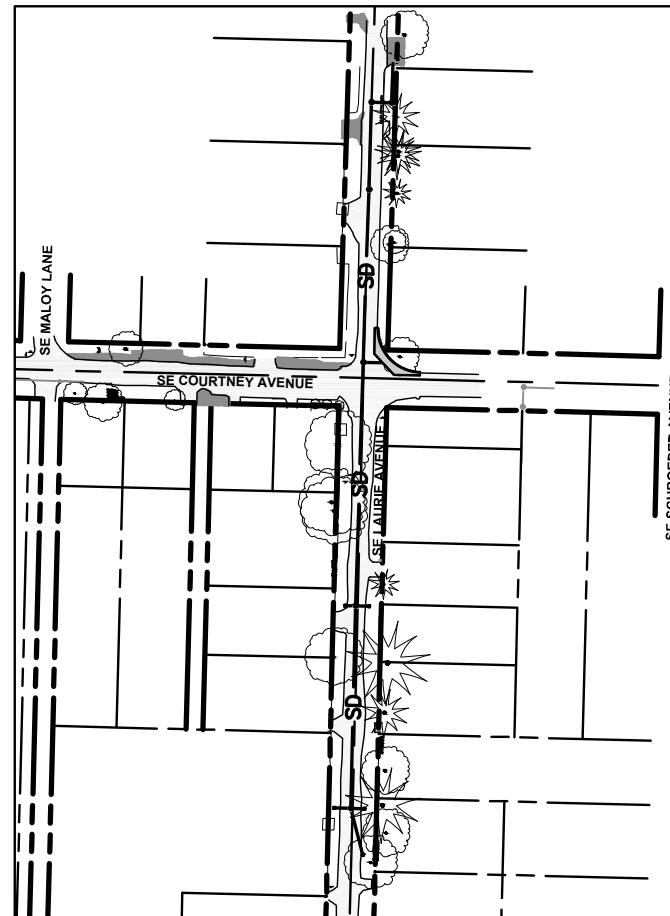
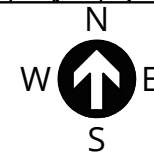
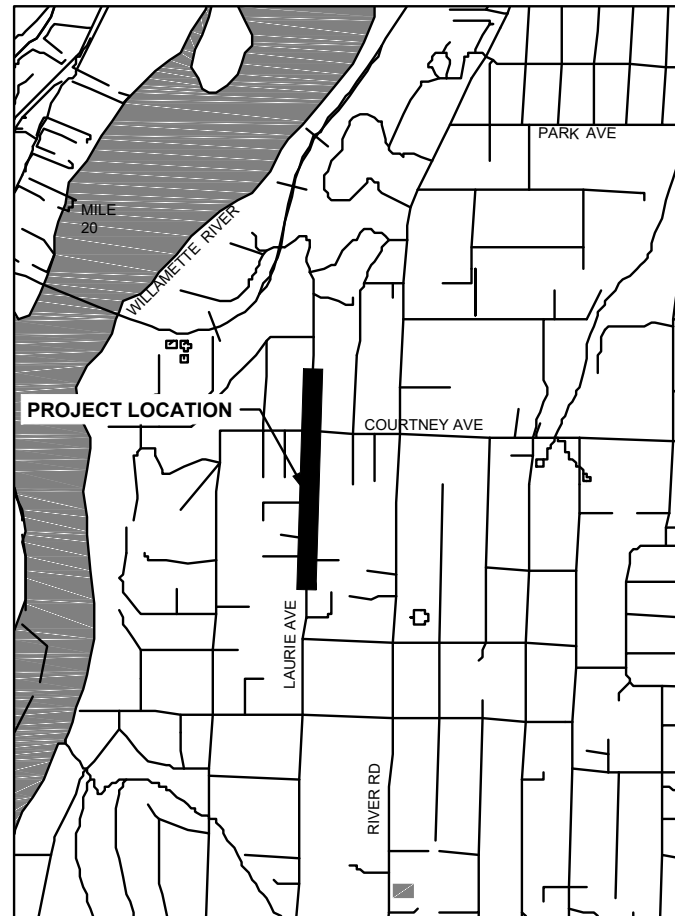
EXPIRES: 12/31/2024

3J CONSULTING
CIVIL ENGINEERING
WATER RESOURCES
COMMUNITY PLANNING

9600 SW NIMBUS AVE., SUITE 100; BEAVERTON, OR 97008

COVER SHEET
LAURIE AVENUE
DRAINAGE IMPROVEMENTS

DATE: AUG 01, 2024 PROJECT NO.: 23322



PROJECT INFORMATION

LOCATION

S. 2, T. 2 S., R. 1 E., W.M.
CITY OF OAK GROVE
CLACKAMAS COUNTY, OR

FLOOD HAZARD

MAP NUMBER(S): 41005C0017D
ZONE X (UNSHADED)

HORIZONTAL DATUM

OREGON STATE PLANE COORDINATE SYSTEM NORTH ZONE '83 (91).

ELEVATION DATUM

NAVD '88 UTILIZING GPS POSITIONING TIED TO THE ORGN WITH REAL TIME CORRECTORS REFERENCED TO DATUM NAD '83 (2011) EPOCH 2010.00. THIS DATUM REALIZATION WAS VERIFIED THROUGH DIRECT OBSERVATION TO NGS CONTROL POINT Q723 HAVING A POINT IDENTIFICATION OF RD1491. THIS POINT IS DESCRIBED AS A STAINLESS STEEL ROD WITH SLEEVE NEAR THE INTERSECTION OF STATE HIGHWAY 224 AND LAKE ROAD. THE ELEVATION OF THIS POINT IS PUBLISHED AS 31.131 AND WAS ESTABLISHED BY NGS THROUGH DIFFERENTIAL LEVELING AND ADJUSTED BY THE NATIONAL GEODETIC SURVEY IN JUNE, 1991, AND HAS A VERTICAL ORDER OF FIRST CLASS II.

UTILITIES & SERVICES

STORM WATER

OAK LODGE WATER
14496 SE RIVER ROAD
OAK GROVE, OR 97267
PHONE: (503)-654-7765

SANITARY SEWER

OAK LODGE WATER
14496 SE RIVER ROAD
OAK GROVE, OR 97267
PHONE: (503)-654-7765

WATER

OAK LODGE WATER
14496 SE RIVER ROAD
OAK GROVE, OR 97267
PHONE: (503)-654-7765

POWER

PORTLAND GENERAL ELECTRIC
SUNSET LINE CENTER
4678 NE 59TH AVENUE #4600
HILLSBORO, OR 97124
PHONE: (971) 371-6899

GAS

NORTHWEST NATURAL
NW AMBERWOOD DRIVE
HILLSBORO, OR 97124
PHONE: (800) 422-4012

ROADS

CLACKAMAS COUNTY
TRANSPORTATION MAINTENANCE
DIVISION
19246 WACHENO PARKWAY
OREGON CITY, OR 97045
PHONE: (503) 557-6391

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



DIRECTOR
DAN JOHNSON

DESIGNED BY: KDO
DRAFTED BY: SMT
CHECKED BY: CKW

REVISIONS

NO.	DATE:	DESCRIPTION

Sheet No.
A01

PROJECT TEAM

OWNER

CLACKAMAS COUNTY
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PHONE: (503) 742-4658
EMAIL: jhowie@clackamas.us

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PHONE: (503) 946-9365
EMAIL: ken.ota@3j-consulting.com

LAND SURVEYOR

COMPASS LAND SURVEYORS
4107 SE INTERNATIONAL WAY,
SUITE 705 MILWAUKIE, OR 97222
CONTACT: DON DEVLAMINCK, PLS
PHONE: (503) 653-9093
EMAIL:
dond@compass-landsurveyors.com

INDEX OF SHEETS

SHT. NO.	DESCRIPTION
A01	COVER SHEET
A02	LEGEND AND GENERAL NOTES
C01 THRU C07	GENERAL CONSTRUCTION
D01	CONSTRUCTION DETAILS

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GENERAL NOTES

1. CONTRACTOR MUST PROVIDE A TEMPORARY TRAFFIC CONTROL PLAN. CONTRACTOR MAY ELECT TO USE ODOT STANDARD DRAWINGS TM840, TM841, TM850, OR A COMBINATION THEREOF. THE TEMPORARY TRAFFIC CONTROL PLAN WILL BE PAID UNDER THE "TEMPORARY PROTECTION AND DIRECTION OF TRAFFIC" BID ITEM.
2. CONTRACTOR TO RAISE OR LOWER ROADWAY ELEMENTS, SUCH AS LIDS OR COVERS, TO HAVE A TOP ELEVATION FLUSH WITH THE SURROUNDING SURFACE. COORDINATE WITH FRANCHISE UTILITY PROVIDERS AS NEEDED.
3. ALL NEW INLETS SHALL BE SUMPED.
4. CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE DRILLED.
5. EXISTING GAS, TELECOMMUNICATION, UNDERGROUND POWER, SANITARY SEWER, AND WATER LATERALS ARE SHOWN AT ASSUMED DEPTHS AND SHALL BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.

STANDARD DRAWINGS REFERENCE LIST

CLACKAMAS COUNTY

C100 STREET STRUCTURAL SECTION

WATER ENVIRONMENT SERVICES

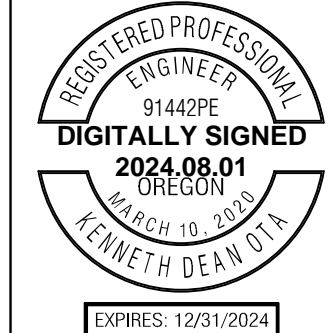
SWM-25 MANHOLE BASE
 SWM-29 MH FLEXIBLE CONNECTION
 SWM-33 MH STANDARD
 SWM-34 MH STEP
 SWM-35 MH STANDARD FRAME & COVER
 SWM-38 TRENCH RESTORATION

OREGON DEPARTMENT OF TRANSPORTATION

RD364 CONCRETE INLETS TYPE G-1, G-2, G-2M, & G-2MA
 RD365 FRAMES & GRATES FOR CONCRETE INLETS
 RD1015 INLET PROTECTION TYPE 4
 RD1070 CONCRETE WASH OUT
 TM840 CLOSURE DETAILS
 TM841 INTERSECTION WORK ZONE DETAILS
 TM850 2-LANE, 2-WAY ROADWAYS

LEGEND

	RIGHT-OF-WAY LINE
	RIGHT-OF-WAY CENTERLINE
	EXISTING ADJACENT PROPERTY LINE
	EXISTING CONCRETE
	EXISTING GRAVEL
	EXISTING ASPHALT
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING UNDERGROUND STORM DRAIN LINE
	EXISTING UNDERGROUND SANITARY SEWER LINE
	EXISTING UNDERGROUND TELECOMMUNICATION LINE
	EXISTING UNDERGROUND WATER LINE
	EXISTING UNDERGROUND NATURAL GAS LINE
	EXISTING UNDERGROUND POWER LINE
	EXISTING OVERHEAD POWER LINE
	EXISTING FENCE LINE
	EXISTING CATCH BASIN
	EXISTING AREA DRAIN
	EXISTING SANITARY SEWER CLEANOUT
	EXISTING SANITARY SEWER MANHOLE
	EXISTING WATER VALVE
	EXISTING WATER METER
	EXISTING FIRE HYDRANT
	EXISTING GAS VALVE
	EXISTING LUMINAIRE
	EXISTING UTILITY POLE
	EXISTING SIGNAGE
	EXISTING MAILBOX
	EXISTING DECIDUOUS TREE
	EXISTING CONIFEROUS TREE
	PROPOSED GRAVEL SHOULDER
	PROPOSED ASPHALT
	PROPOSED UNDERGROUND STORM DRAIN LINE
	PROPOSED CATCH BASIN
	PROPOSED STORM DRAIN MANHOLE



LEGEND AND GENERAL NOTES

**LAURIE AVENUE
DRAINAGE IMPROVEMENTS**

DATE: AUG 01, 2024 PROJECT NO.: 23322

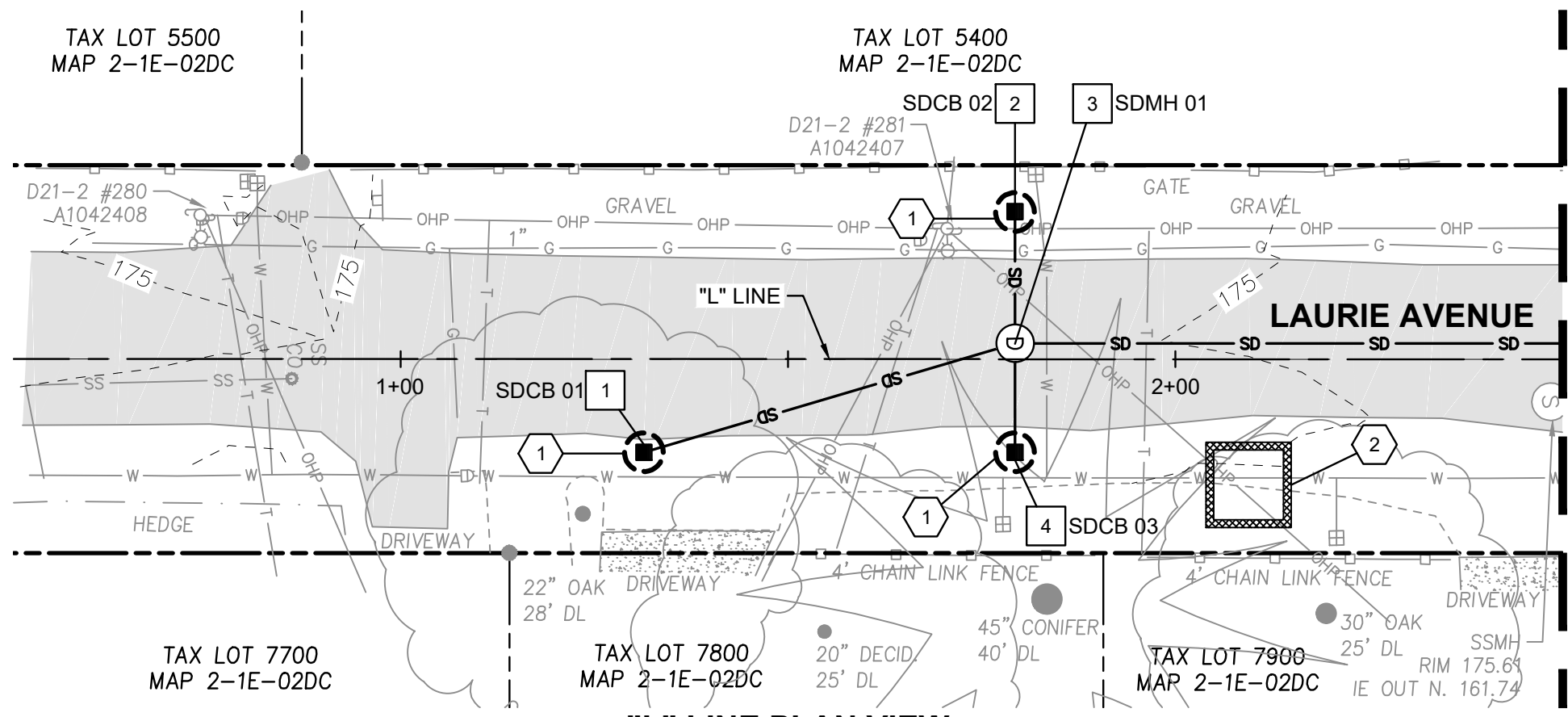
CLACKAMAS COUNTY
 DEPT. OF TRANSPORTATION
 AND DEVELOPMENT
 150 BEAVERCREEK ROAD
 OREGON CITY, OR 97045

DAN JOHNSON
 DIRECTOR

DESIGNED BY: KDO	DRAFTED BY: SMT	CHECKED BY: CKW
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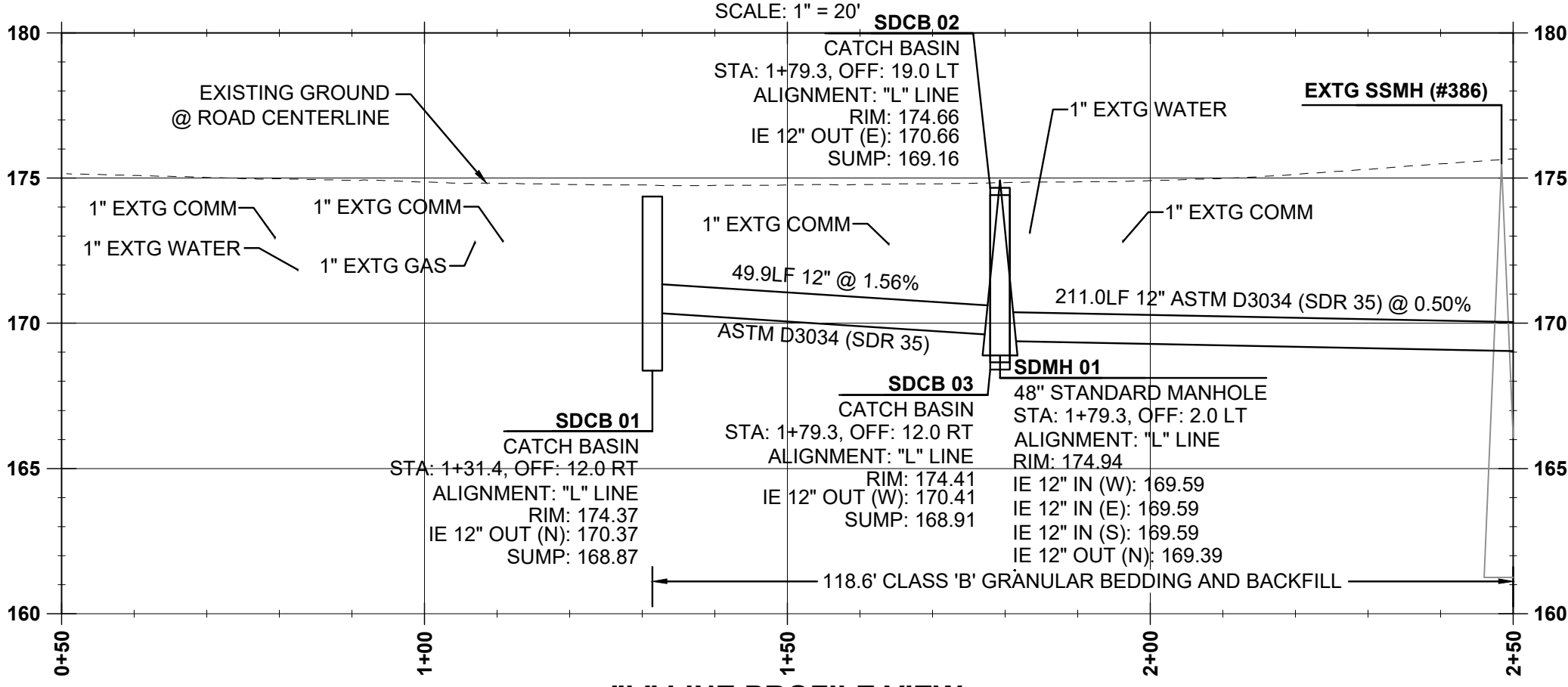
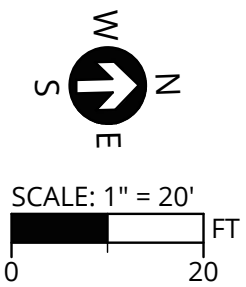


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REGISTERED PROFESSIONAL ENGINEER
91442PE
DIGITALLY SIGNED
2024.08.01
OREGON
MARCH 10, 2020
KENNETH DEAN O.T.A.
EXPIRES: 12/31/2024

3J CONSULTING
CIVIL ENGINEERING
WATER RESOURCES
COMMUNITY PLANNING
9600 SW NIMBUS AVE., SUITE 100, BEAVERTON, OR 97008



STORM DRAIN KEY NOTES

- 1 CONSTRUCT CONC. INLET, TYPE G-2MA, MODIFIED WITH 4'x4' REINFORCED CONCRETE APRON. INSTALL 12" STORM SEW. PIPE (FOR PIPE DATA, SEE PROFILE THIS SHT.) (SEE ODOT STD. DWG. RD364)
- 2 CONSTRUCT CONC. INLET, TYPE G-2MA, MODIFIED WITH 4'x4' REINFORCED CONCRETE APRON. INSTALL 12" STORM SEW. PIPE (FOR PIPE DATA, SEE PROFILE SD-01 ON SHT. C06) (SEE ODOT STD. DWG. RD364)
- 3 CONSTRUCT 48" STANDARD MANHOLE. INSTALL 12" STORM SEW. PIPE (FOR PIPE DATA, SEE PROFILE THIS SHT.) (SEE WATER ENVIRONMENT SERVICES STD. DWG. SWM-33)
- 4 CONSTRUCT CONC. INLET, TYPE G-2MA, MODIFIED WITH 4'x4' REINFORCED CONCRETE APRON. INSTALL 12" STORM SEW. PIPE (FOR PIPE DATA, SEE PROFILE SD-01 ON SHT. C06) (SEE ODOT STD. DWG. RD364)

EROSION CONTROL KEY NOTES

- 1 INSTALL INLET PROTECTION, TYPE 4 (SEE ODOT STD. DWG. RD1015)
- 2 INSTALL CONCRETE WASHOUT FACILITY (SEE ODOT STD. DWG. RD1070)

GENERAL CONSTRUCTION
LAURIE AVENUE
DRAINAGE IMPROVEMENTS

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

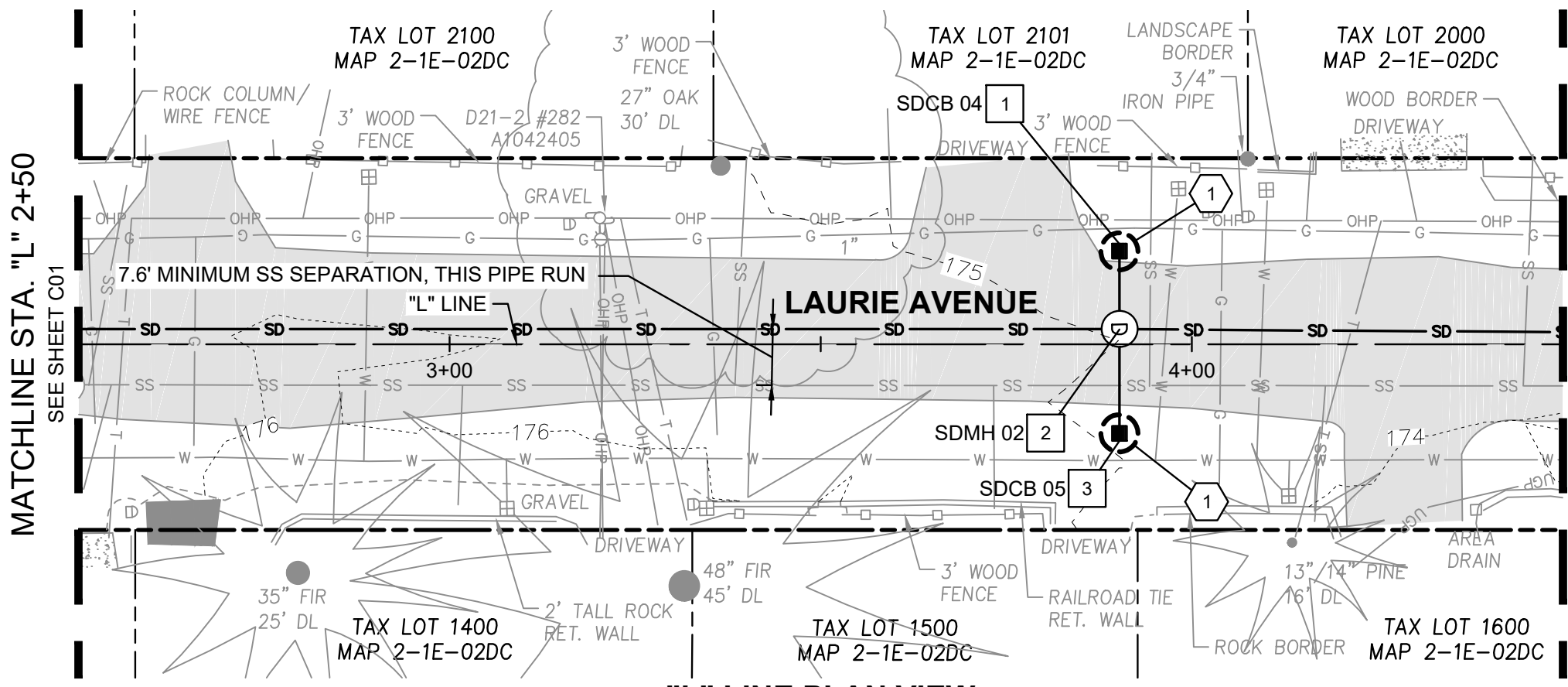
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DRAFTED BY: SMT
CHECKED BY: CKW

DIRECTOR: DAN JOHNSON

DATE: AUG 01, 2024 PROJECT NO.: 23322

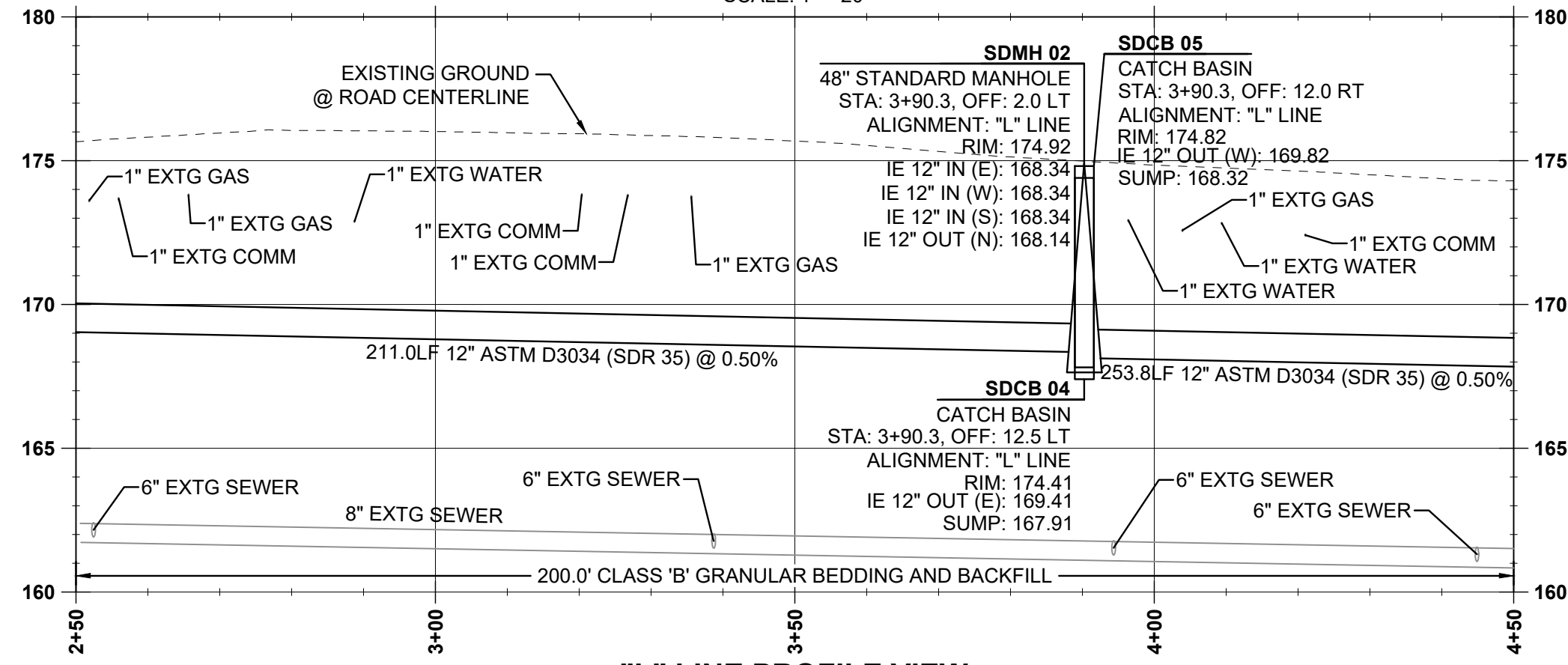
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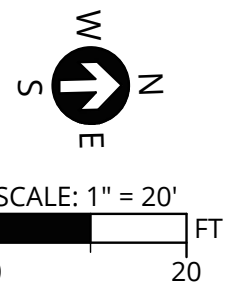
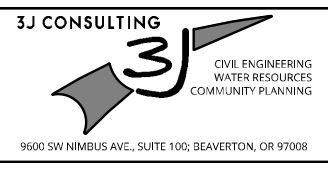
"L" LINE PLAN VIEW

SCALE: 1" = 20'



"L" LINE PROFILE VIEW

HORIZ. SCALE: 1" = 20' | VERT. SCALE: 1" = 5'



STORM DRAIN KEY NOTES

- 1 CONSTRUCT CONC. INLET, TYPE G-2MA, MODIFIED WITH 4'x4' REINFORCED CONCRETE APRON
INSTALL 12" STORM SEW. PIPE
(FOR PIPE DATA, SEE PROFILE SD-02 ON SHT. C06)
(SEE ODOT STD. DWG. RD364)
- 2 CONSTRUCT 48" STANDARD MANHOLE
INSTALL 12" STORM SEW. PIPE
(FOR PIPE DATA, SEE PROFILE ON SHT. C02)
(SEE WATER ENVIRONMENT SERVICES STD. DWG. SWM-33)
- 3 CONSTRUCT CONC. INLET, TYPE G-2MA, MODIFIED WITH 4'x4' REINFORCED CONCRETE APRON
INSTALL 12" STORM SEW. PIPE
(FOR PIPE DATA, SEE PROFILE SD-02 ON SHT. C06)
(SEE ODOT STD. DWG. RD364)

EROSION CONTROL KEY NOTES

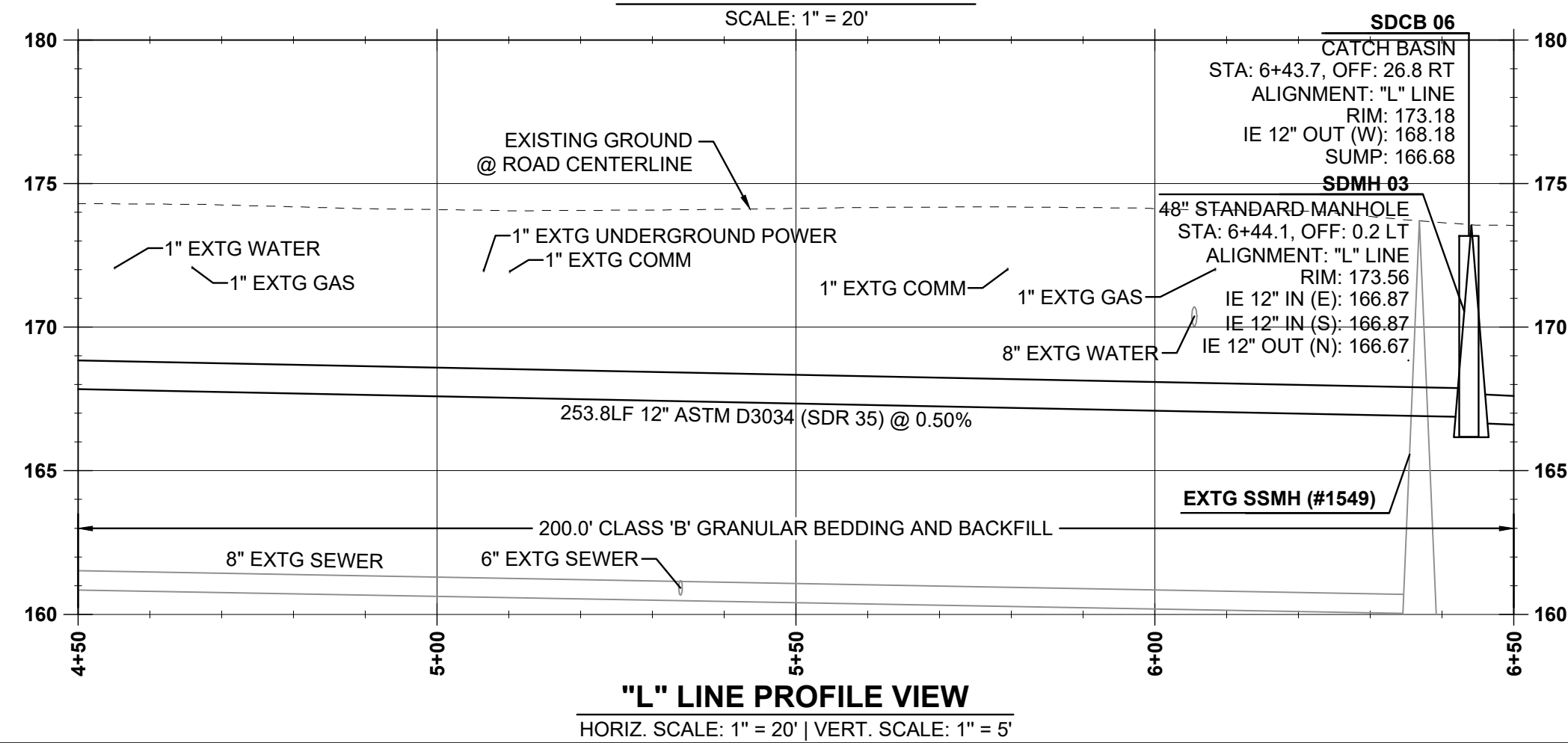
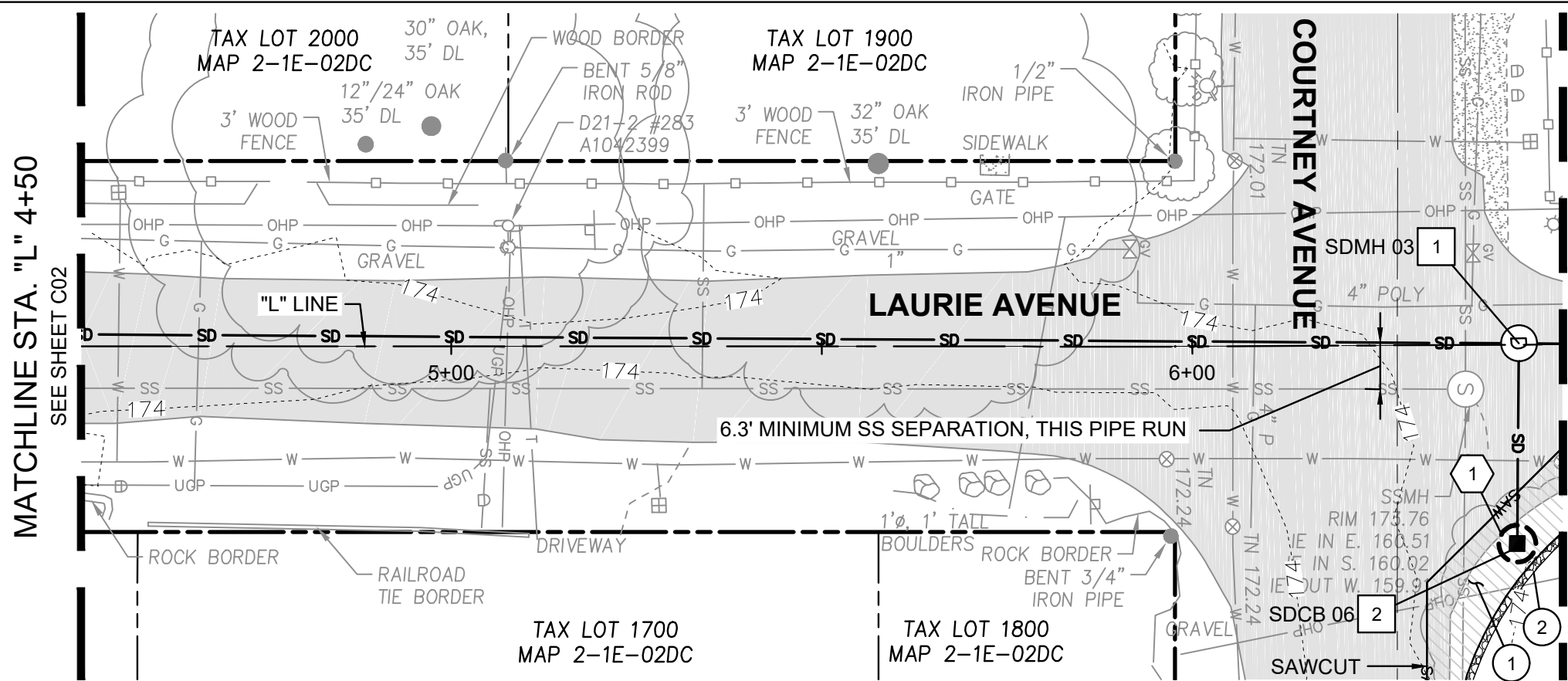
- 1 INSTALL INLET PROTECTION, TYPE 4
(SEE ODOT STD. DWG. RD1015)

GENERAL CONSTRUCTION
LAURIE AVENUE
DRAINAGE IMPROVEMENTS
DATE: AUG 01, 2024 PROJECT NO.: 23322

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

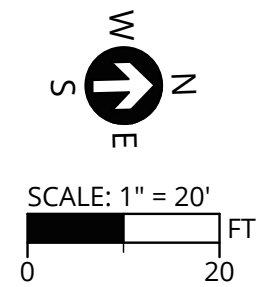
DESIGNED BY:	KDO
DRAFTED BY:	SMT
CHECKED BY:	CKW
REVISIONS	
NO.	DATE:

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REGISTERED PROFESSIONAL ENGINEER
91442PE
DIGITALLY SIGNED
2024.08.01
OREGON
MARCH 10, 2020
KENNETH DEAN O.T.A.
EXPIRES: 12/31/2024

3J CONSULTING
CIVIL ENGINEERING
WATER RESOURCES
COMMUNITY PLANNING
9600 SW NIMBUS AVE., SUITE 100, BEAVERTON, OR 97008



STORM DRAIN KEY NOTES

- 1 CONSTRUCT 48" STANDARD MANHOLE
INSTALL 12" STORM SEW. PIPE
(FOR PIPE DATA, SEE PROFILE ON SHT. C03)
(SEE WATER ENVIRONMENT SERVICES STD. DWG. SWM-33)
- 2 CONSTRUCT CONC. INLET, TYPE G-2MA, MODIFIED WITH 4'x4' REINFORCED CONCRETE APRON
INSTALL 12" STORM SEW. PIPE
(FOR PIPE DATA, SEE PROFILE SD-03 ON SHT. C07)
(SEE ODOT STD. DWG. RD364)

CONSTRUCTION KEY NOTES

- 1 CONSTRUCT LOCAL ROAD ASPHALTIC CONCRETE PAVEMENT SECTION
(FOR SAWCUT AND PAVING LIMITS, SEE DETAIL 1 ON SHT. D01)
(SEE CLACKAMAS COUNTY STD. DWG. C100)
- 2 CONSTRUCT 12" WIDE SHOULDER ROCK ALONG NEW ASPHALT PAVEMENT EDGE TO FULL DEPTH OF LOCAL ROAD ASPHALTIC CONCRETE PAVEMENT SECTION
(FOR PAVING AND SHOULDER LIMITS, SEE DETAIL 1 ON SHT. D01)
(SEE CLACKAMAS COUNTY STD. DWG. C100)

EROSION CONTROL KEY NOTES

- 1 INSTALL INLET PROTECTION, TYPE 4
(SEE ODOT STD. DWG. RD1015)

GENERAL CONSTRUCTION
LAURIE AVENUE
DRAINAGE IMPROVEMENTS

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

DESIGNED BY: KDO
DRAFTED BY: SMT
CHECKED BY: CKW

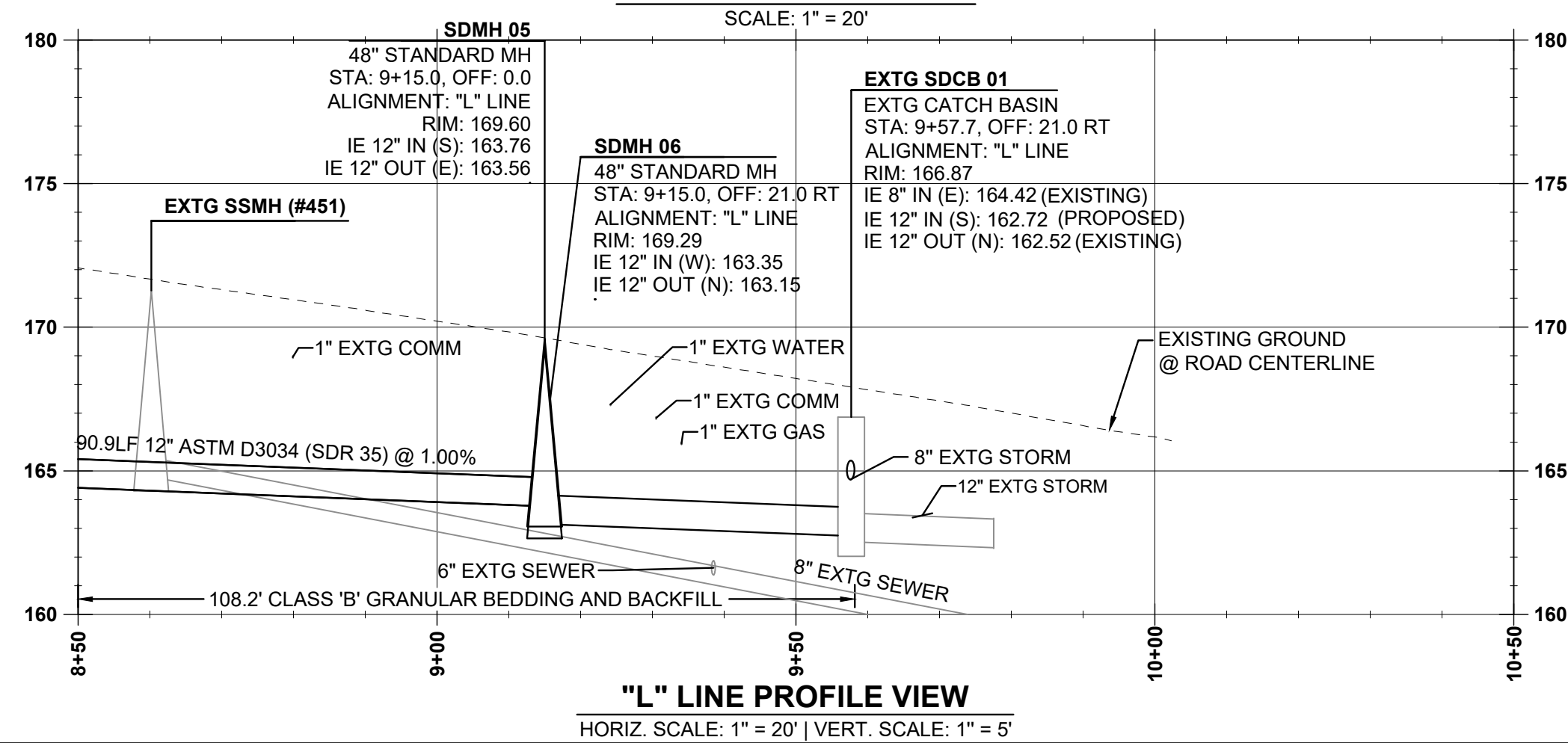
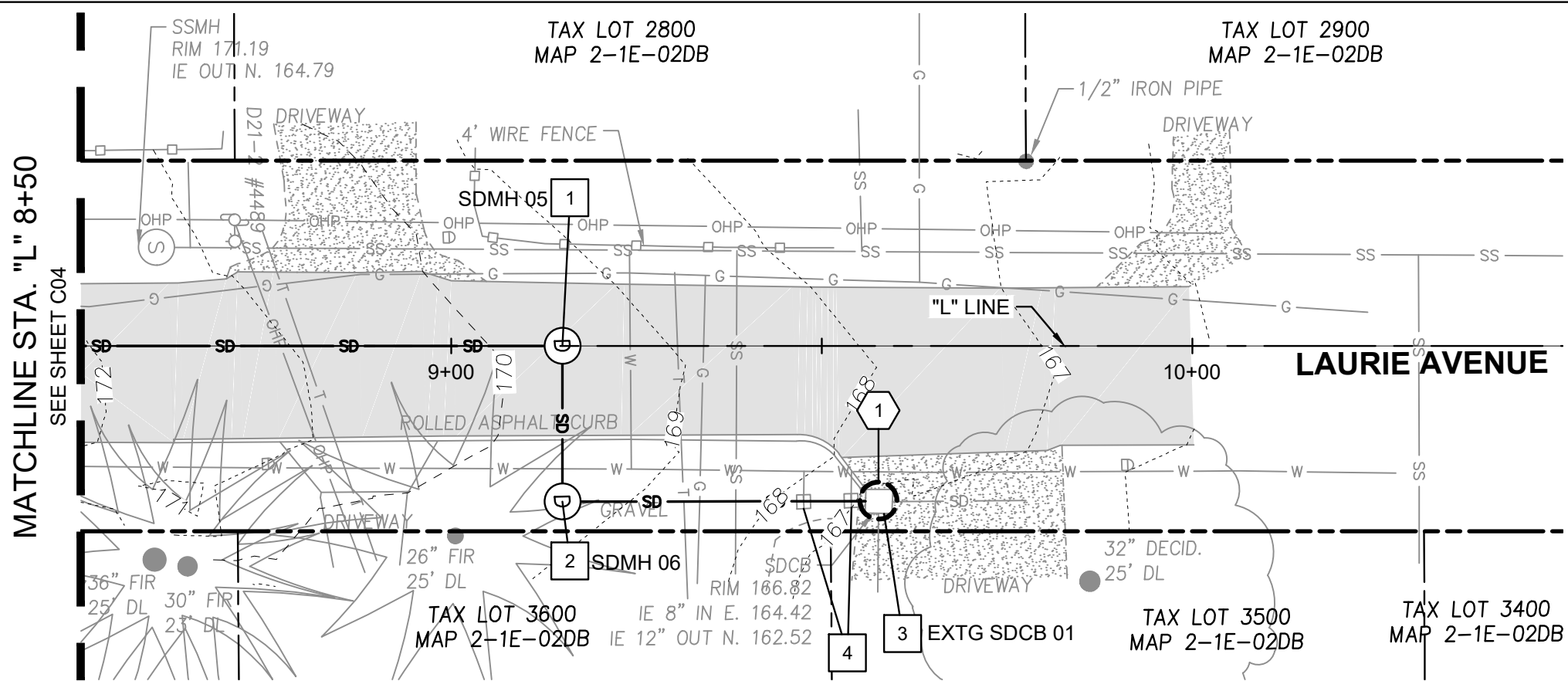
DIRECTOR: DAN JOHNSON

DATE: AUG 01, 2024 PROJECT NO.: 23322

NO.	DATE:	REVISIONS

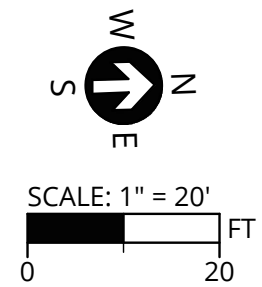
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COMMUNITY PLANNING
9600 SW NIMBUS AVE., SUITE 100; BEAVERTON, OR 97008



- STORM DRAIN KEY NOTES**
- CONSTRUCT 48" STANDARD MANHOLE
INSTALL 12" STORM SEW. PIPE
(FOR PIPE DATA, SEE PROFILE SD-04 ON SHT. C07)
(SEE WATER ENVIRONMENT SERVICES STD. DWG. SWM-33)
 - CONSTRUCT 48" STANDARD MANHOLE
INSTALL 12" STORM SEW. PIPE
(SEE WATER ENVIRONMENT SERVICES STD. DWG. SWM-33)
 - CONNECT PROPOSED 12" STORM SEW. PIPE TO EXISTING CATCH BASIN WITH NEW CORED HOLE.
 - WATER METER TO BE RELOCATED BY OTHERS (OLWS) PRIOR TO CONSTRUCTION. CONTRACTOR TO VERIFY WATER METER RELOCATION PRIOR TO STORM INSTALLATION.

- EROSION CONTROL KEY NOTES**
- INSTALL INLET PROTECTION, TYPE 4
(SEE ODOT STD. DWG. RD1015)

GENERAL CONSTRUCTION
LAURIE AVENUE DRAINAGE IMPROVEMENTS

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

DIRECTOR
DAN JOHNSON

DESIGNED BY:	DRAFTED BY:	CHECKED BY:
KDO	SMT	CKW

NO.	DATE:	REVISIONS

Sheet No. C05

DATE: AUG 01, 2024 PROJECT NO.: 23322

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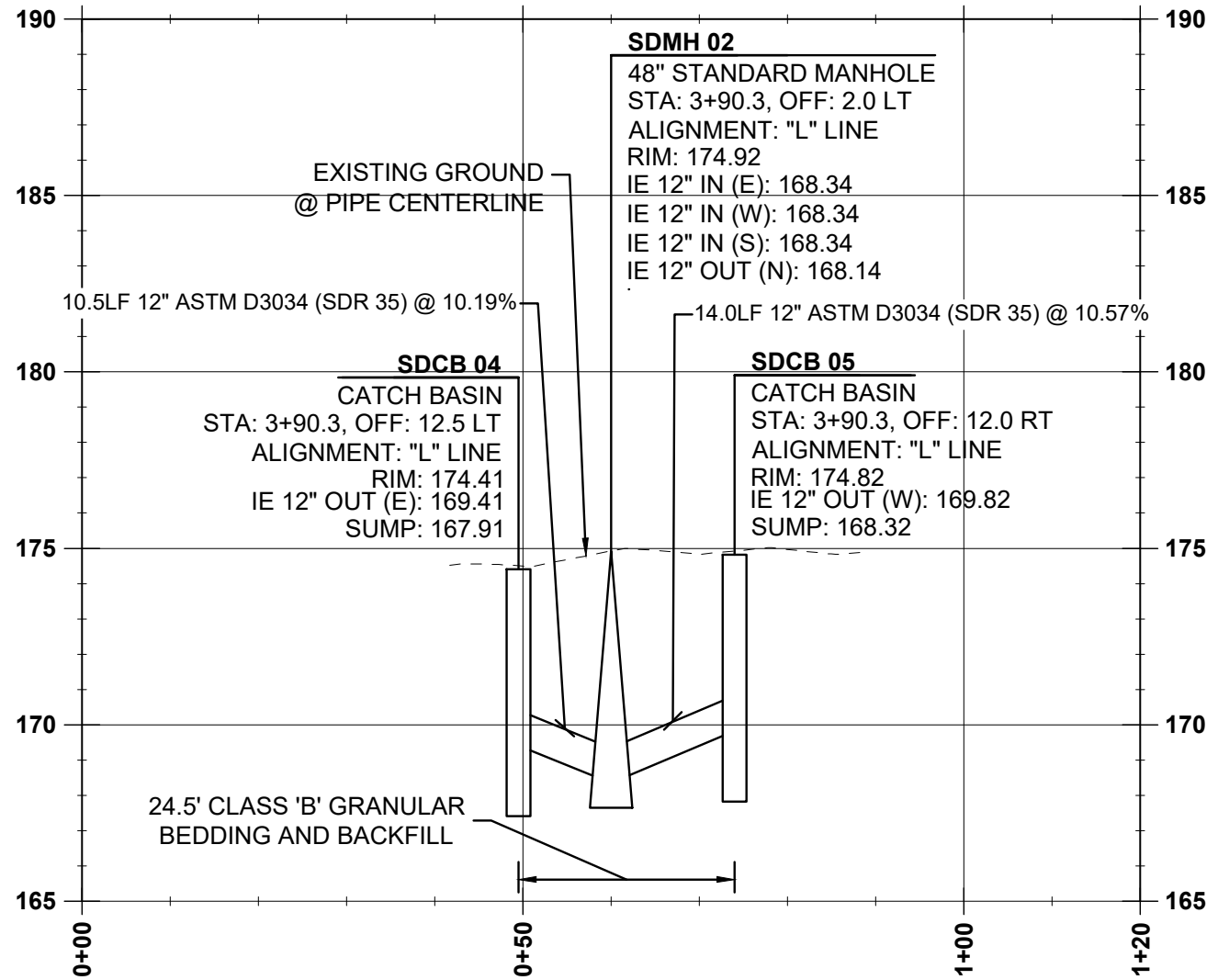
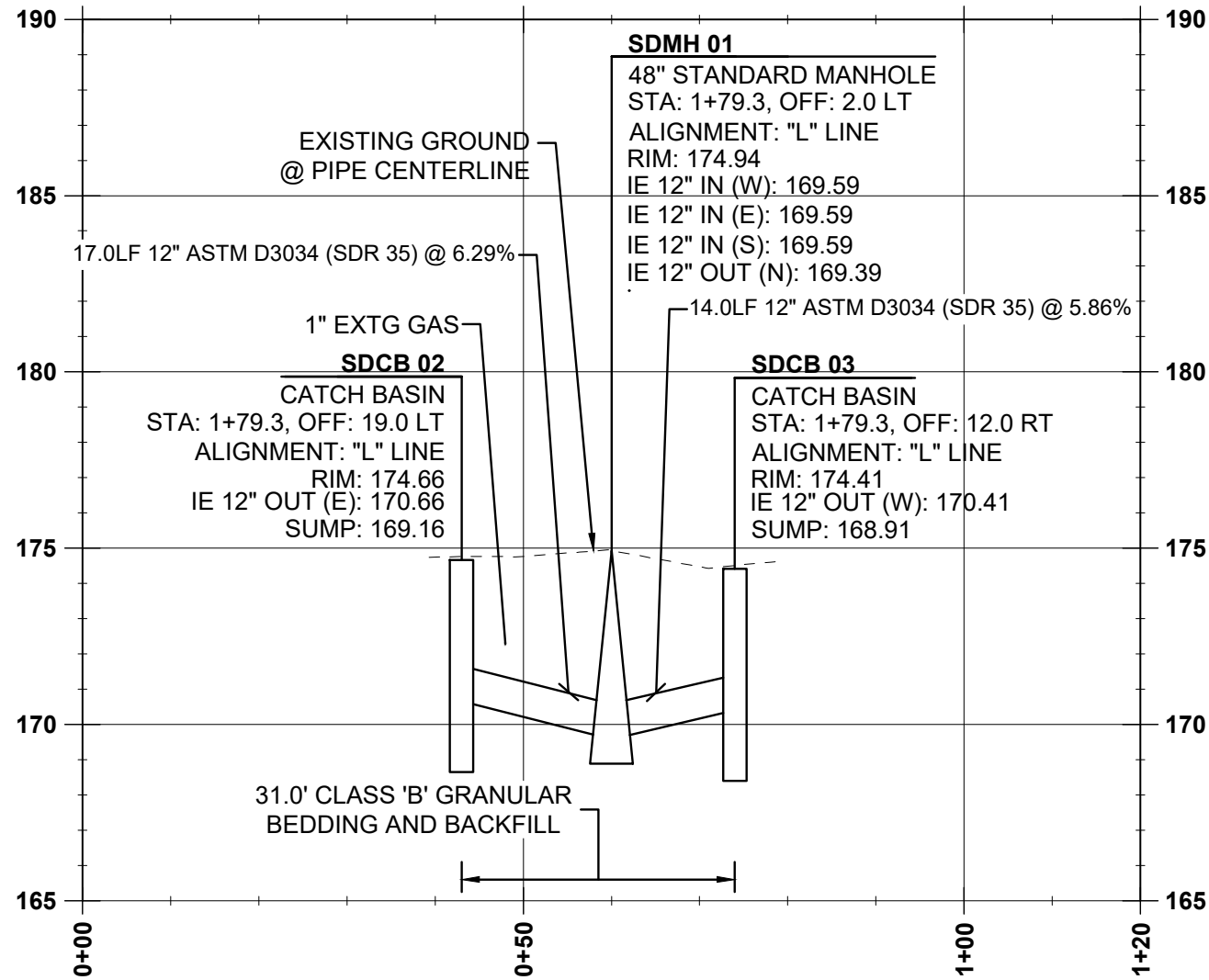
NOTES:

- EXISTING GAS, TELECOMMUNICATION, UNDERGROUND POWER, SANITARY SEWER, AND WATER LATERALS ARE SHOWN AT ASSUMED DEPTHS AND SHALL BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.

REGISTERED PROFESSIONAL ENGINEER
 91442PE
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 2024.08.01
 OREGON
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 WATER RESOURCES
 COMMUNITY PLANNING
 9600 SW NIMBUS AVE., SUITE 100; BEAVERTON, OR 97008



GENERAL CONSTRUCTION
 LAURIE AVENUE
 DRAINAGE IMPROVEMENTS

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

DESIGNED BY: KDO
 DRAFTED BY: SMT
 CHECKED BY: CKW



NO.	DATE

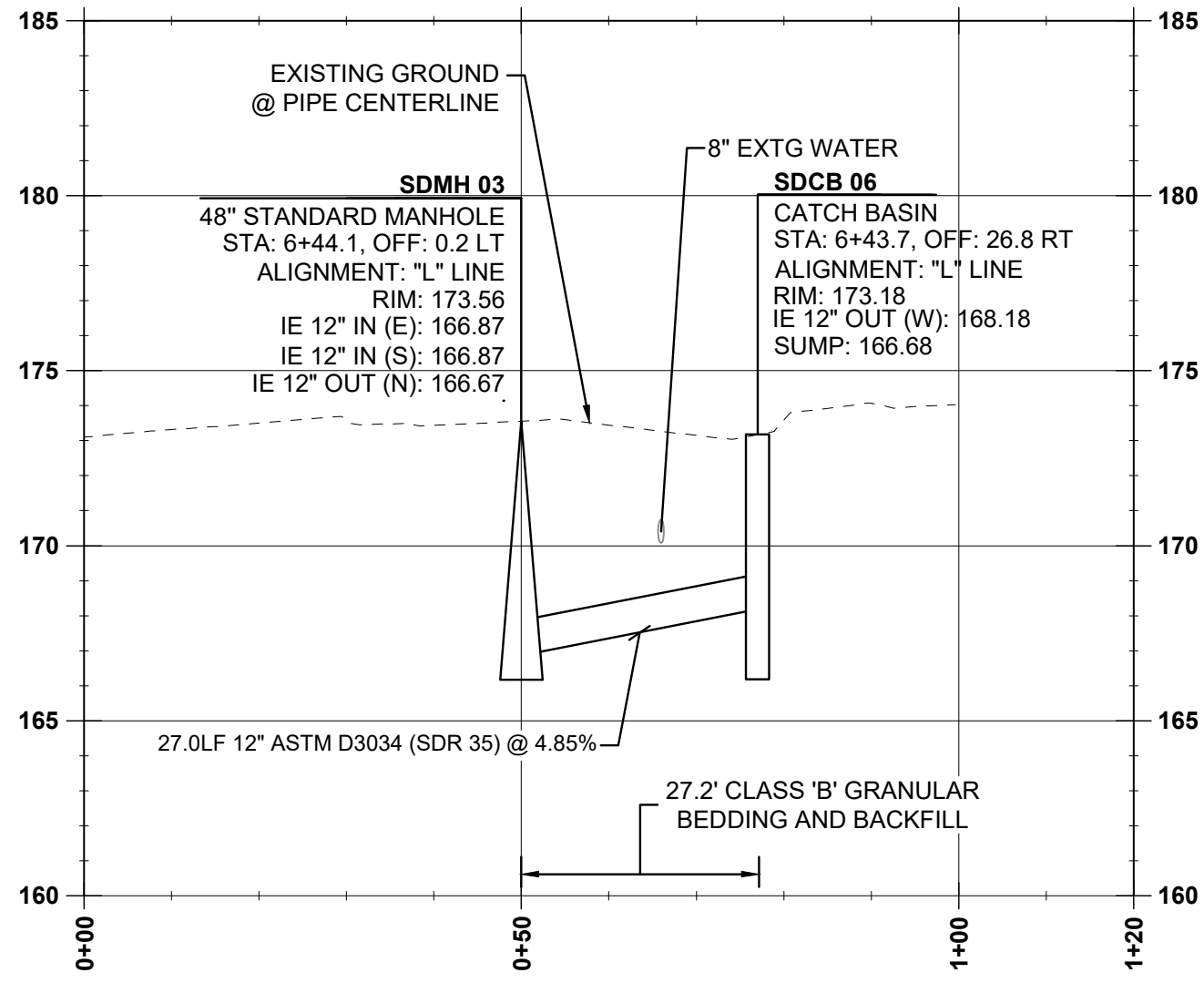
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DATE: AUG 01, 2024 PROJECT NO.: 23322

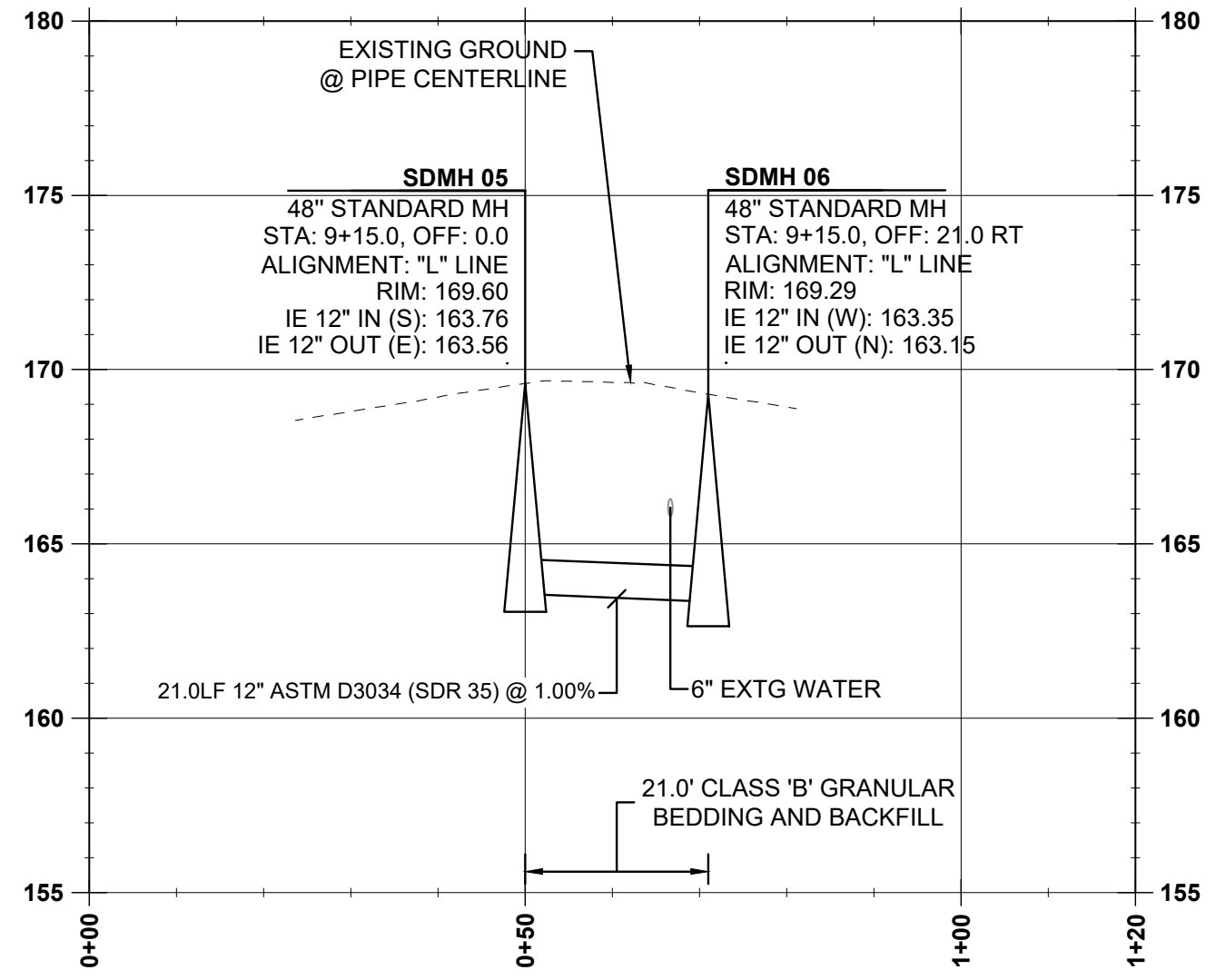
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NOTES:
 1. EXISTING GAS, TELECOMMUNICATION, UNDERGROUND POWER, SANITARY SEWER, AND WATER LATERALS ARE SHOWN AT ASSUMED DEPTHS AND SHALL BE FIELD VERIFIED PRIOR TO THE START OF CONSTRUCTION.


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 WATER RESOURCES
 COMMUNITY PLANNING
 9600 SW NIMBUS AVE., SUITE 100; BEAVERTON, OR 97008



SD-03 PROFILE
 (STA: 0+00 - STA: 1+20)
 SCALE: 1" = 20' H; 1" = 5' V



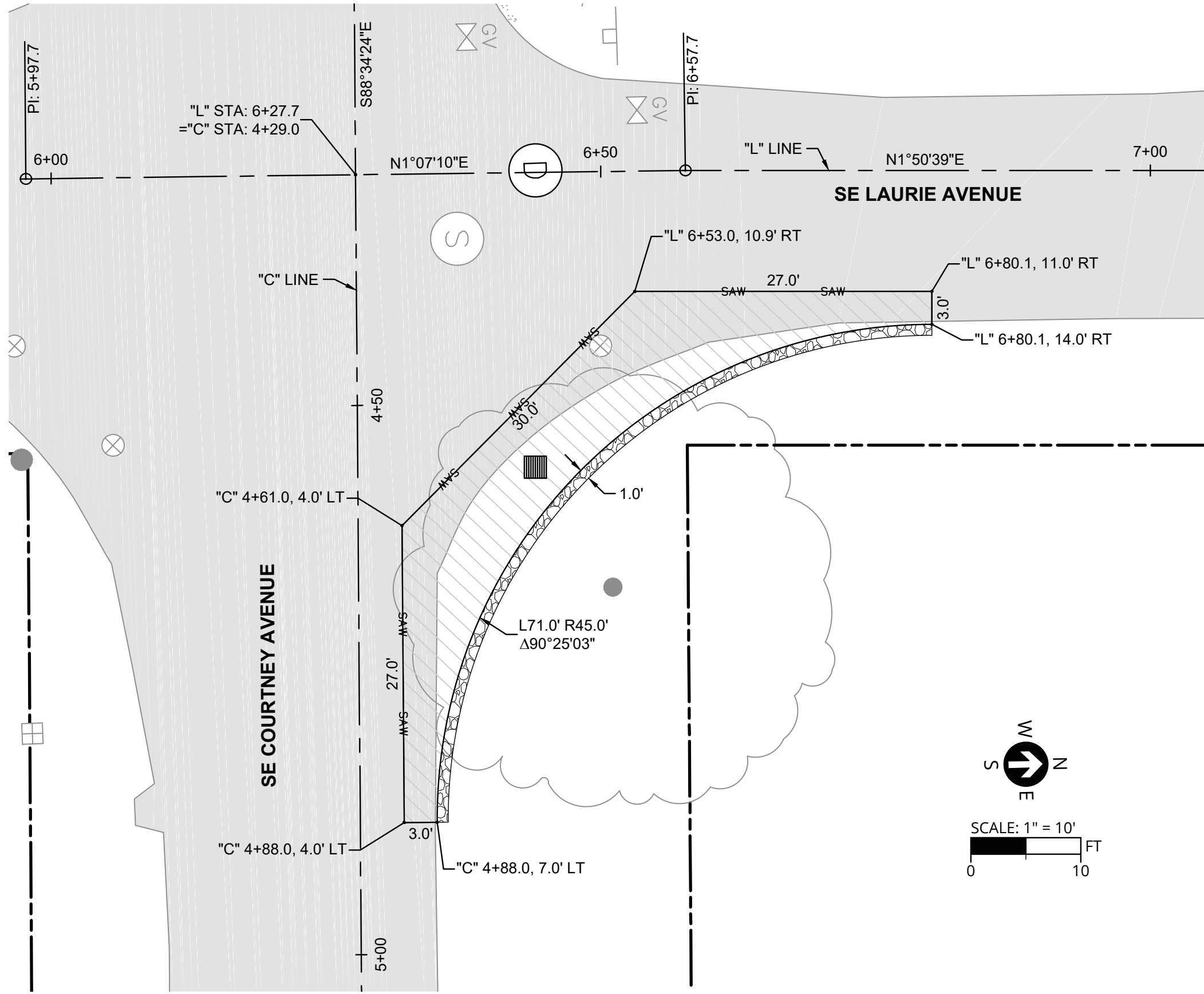
SD-04 PROFILE
 (STA: 0+00 - STA: 1+20)
 SCALE: 1" = 20' H; 1" = 5' V

GENERAL CONSTRUCTION
 LAURIE AVENUE
 DRAINAGE IMPROVEMENTS
 DATE: AUG 01, 2024 PROJECT NO.: 23322

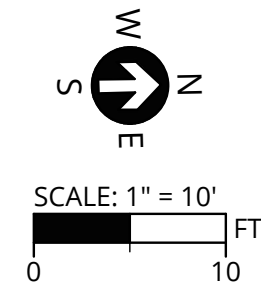
CLACKAMAS COUNTY
 DEPT. OF TRANSPORTATION
 AND DEVELOPMENT
 150 BEAVERCREEK ROAD
 OREGON CITY, OR 97045
 DIRECTOR
 DAN JOHNSON

DESIGNED BY: KDO
 DRAFTED BY: SMT
 CHECKED BY: CKW

REVISIONS	NO. DATE:



1
D01 **SAWCUT AND PAVING LIMITS**
SCALE: 1" = 10'



REGISTERED PROFESSIONAL ENGINEER
91442PE
DIGITALLY SIGNED
2024.08.01
OREGON
MARCH 10, 2020
KENNETH DEAN O.T.A.
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CIVIL ENGINEERING
WATER RESOURCES
COMMUNITY PLANNING
9600 SW NIMBUS AVE., SUITE 100; BEAVERTON, OR 97008

CONSTRUCTION DETAILS

**LAURIE AVENUE
DRAINAGE IMPROVEMENTS**

DATE: AUG 01, 2024 PROJECT NO.: 23322

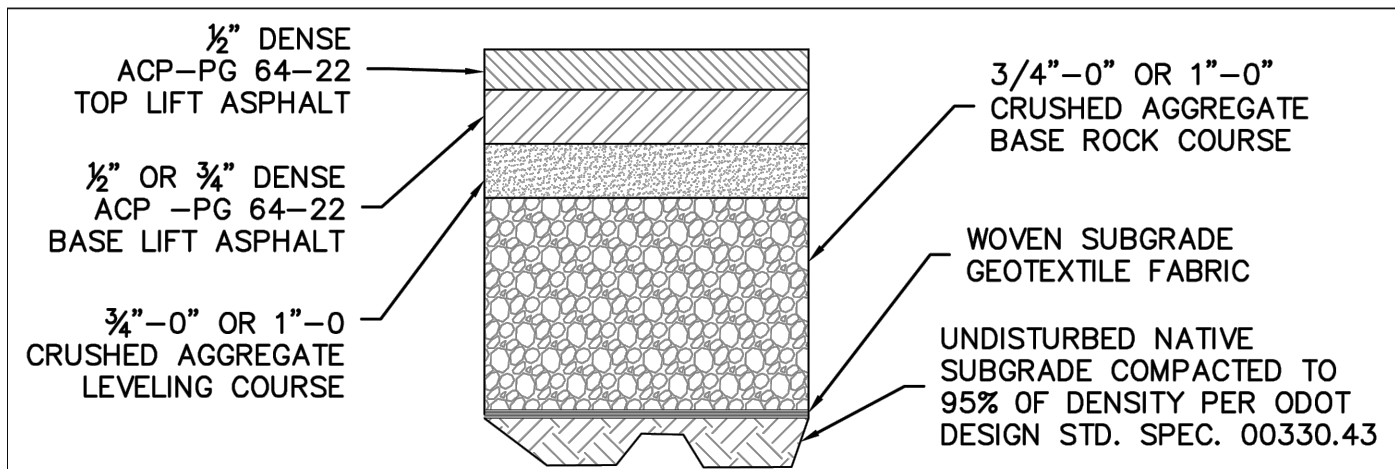
CLACKAMAS COUNTY
DEPT. OF TRANSPORTATION
AND DEVELOPMENT
150 BEAVERCREEK ROAD
OREGON CITY, OR 97045

DAN JOHNSON
DIRECTOR

REVISIONS	
NO.	DATE:

DESIGNED BY: KDO
DRAFTED BY: SMT
CHECKED BY: CKW

Sheet No. **D01**




ASPHALTIC CONCRETE STANDARD STRUCTURAL SECTION

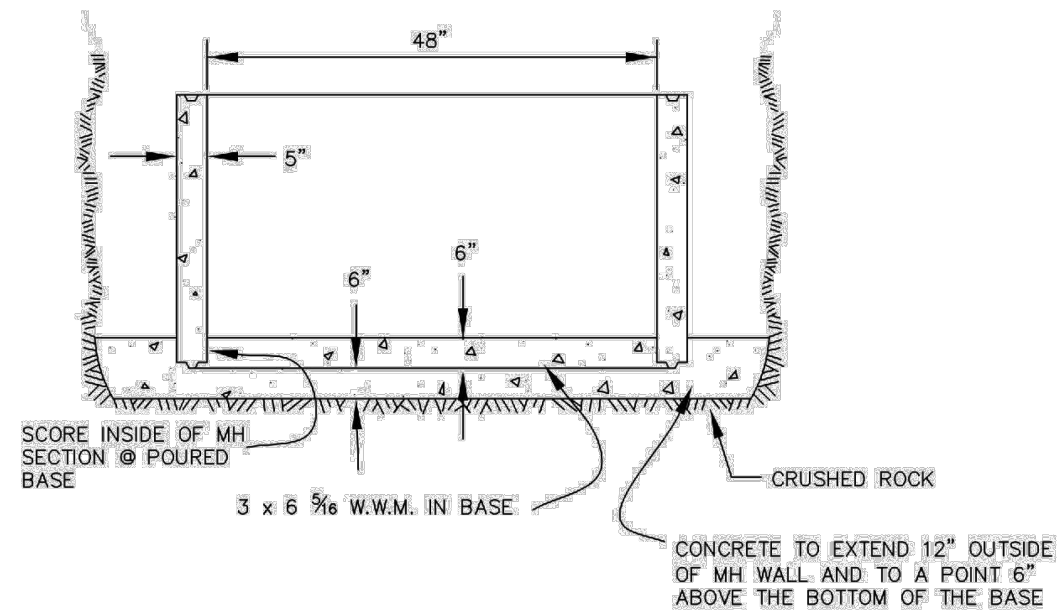
FUNTIONAL CLASSIFICATION	LEVEL ACP	ACP DEPTH (IN.)	AGGREGATE LEVELING COURSE DEPTH (IN.)	AGGREGATE BASE COURSE DEPTH (IN.)
LOCAL	2	4	3	6
CONNECTOR	2	4	3	6
COLLECTOR	3	6	4	10
LOCAL, CONNECTOR, OR COLLECTOR SERVING COMMERCIAL	3	7-1/2	4	10
MINOR/MAJOR ARTERIALS	3	7-1/2	4	10

NOTES

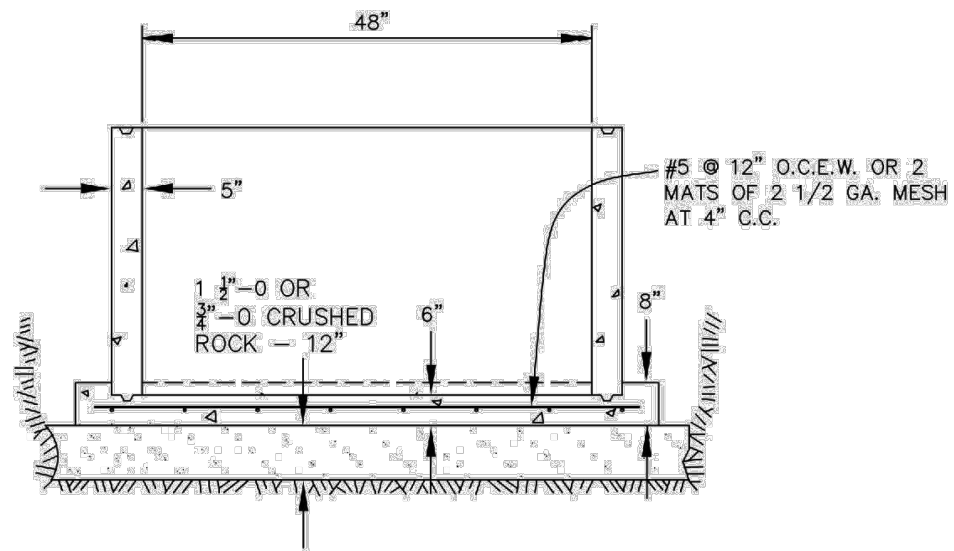
1. THE STREET SECTIONS ARE A MINIMUM. IF THE EXISTING STREET SECTION IS GREATER THAN THE MINIMUM REQUIRED, THE PROPOSED STREET SECTION SHALL BE CONSTRUCTED IN KIND. THE ENGINEER OF RECORD IS RESPONSIBLE FOR AN ADEQUATE STRUCTURAL SECTION.
2. FOR IMPROVEMENTS TO EXISTING STREETS, SAW CUT LINE SHALL BE APPROVED BY COUNTY ENGINEERING STAFF PRIOR TO COMMENCEMENT OF WORK, AND MAY BE REQUIRED TO EXCEED CENTERLINE. THE SAWCUT LOCATION SHALL NOT BE LOCATED IN A WHEEL TRACK.
3. 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.
4. WITHIN A DEVELOPMENT, THE FINAL LIFT OF ASPHALTIC CONCRETE SHALL NOT BE PLACED ON LOCAL STREETS UNTIL ALL UTILITIES WITHIN THE ROADWAY HAVE BEEN ACCEPTED AND ALL CURB REPAIRS COMPLETED.
5. MATERIAL AND INSTALLATION SHALL CONFORM TO CURRENT OREGON STANDARD SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
6. THE WIDTH AND EXTENT OF THE IMPROVEMENT SHALL BE DETERMINED BY ENGINEERING ACCORDING TO STREET CLASSIFICATION.
7. CRUSHED AGGREGATE USED FOR BASE ROCK AND LEVELING COURSE SHALL CONFORM TO THE REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS SEC. 02630.

<table border="1"> <thead> <tr> <th>REVISION</th> <th>DATE</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>REVISED</td> <td>11/19</td> <td>BP</td> </tr> <tr> <td>REVISED</td> <td>12/19</td> <td>SC</td> </tr> <tr> <td>REVISED</td> <td>3/20</td> <td>RM</td> </tr> </tbody> </table>	REVISION	DATE	BY	REVISED	11/19	BP	REVISED	12/19	SC	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 DRAWING C100
REVISION	DATE	BY														
REVISED	11/19	BP														
REVISED	12/19	SC														
REVISED	3/20	RM														

STREET STRUCTURAL SECTION



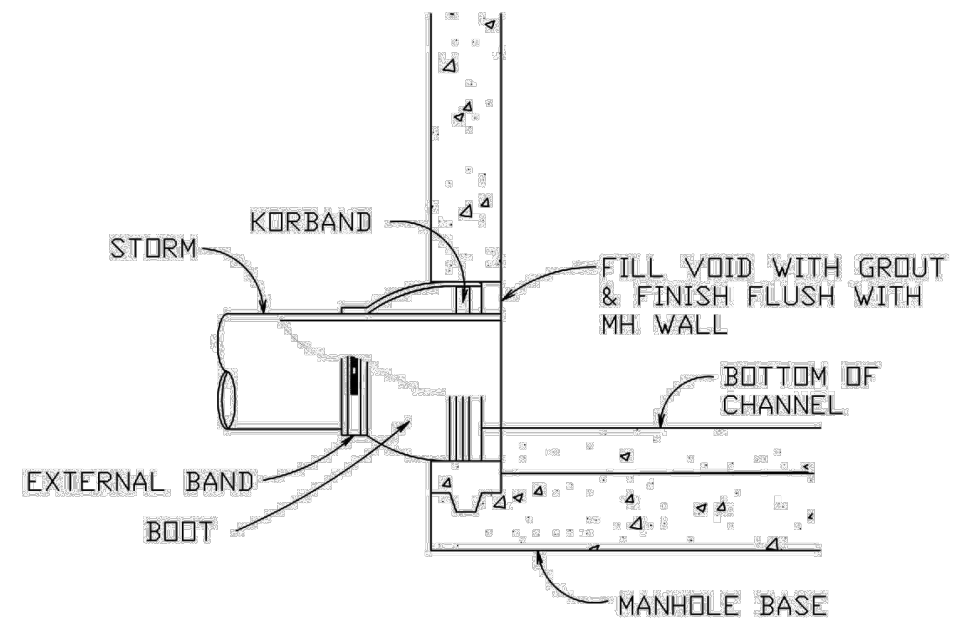
POURED IN PLACE MANHOLE BASE



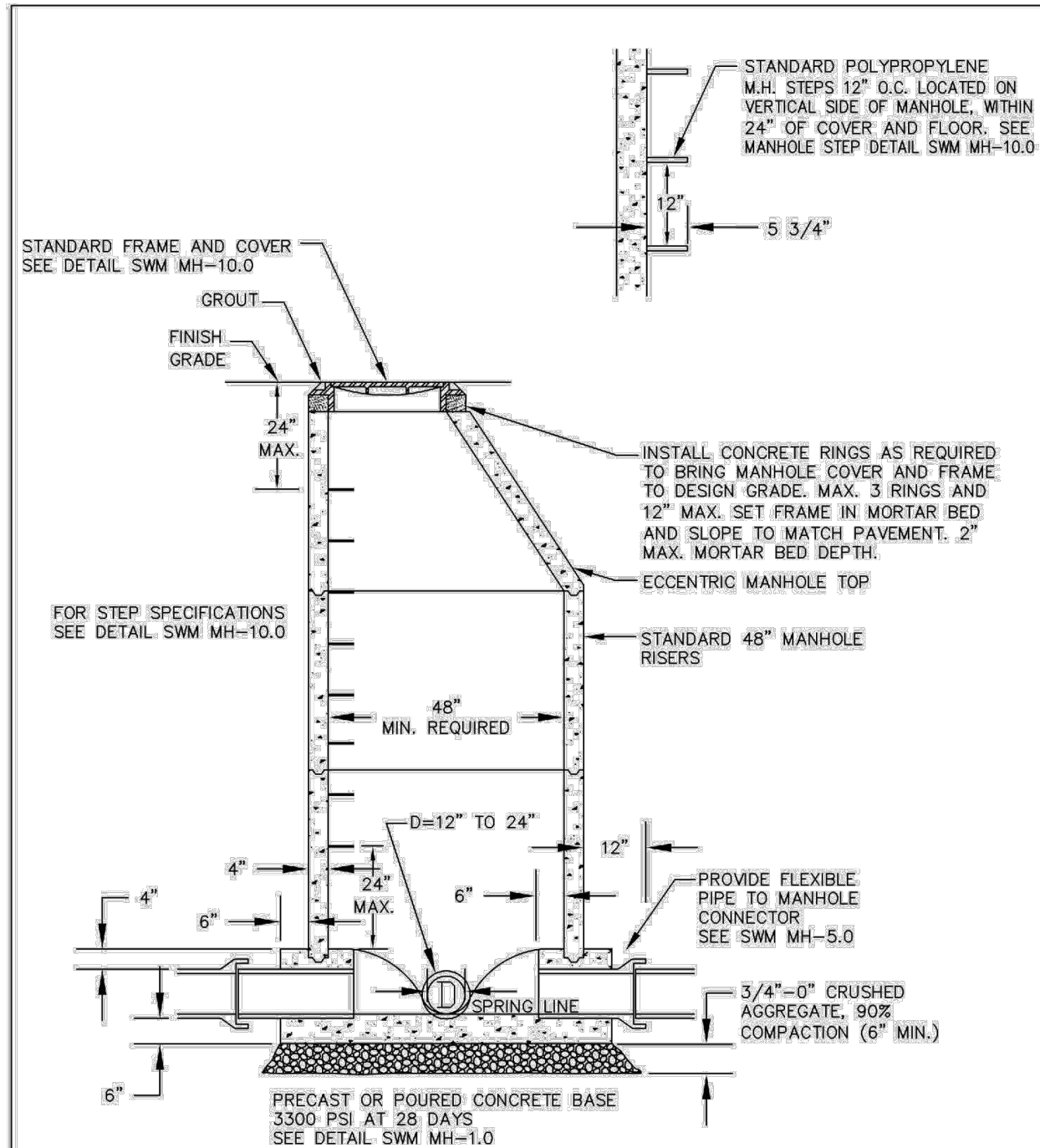
PRE-CAST MANHOLE BASE

NOTES

1. SPECIFICATIONS FOR CONCRETE AND MISCELLANEOUS MATERIALS USED IN CONSTRUCTION SHALL CONFORM TO CURRENT ODOT/APWA STANDARD SPECIFICATIONS.



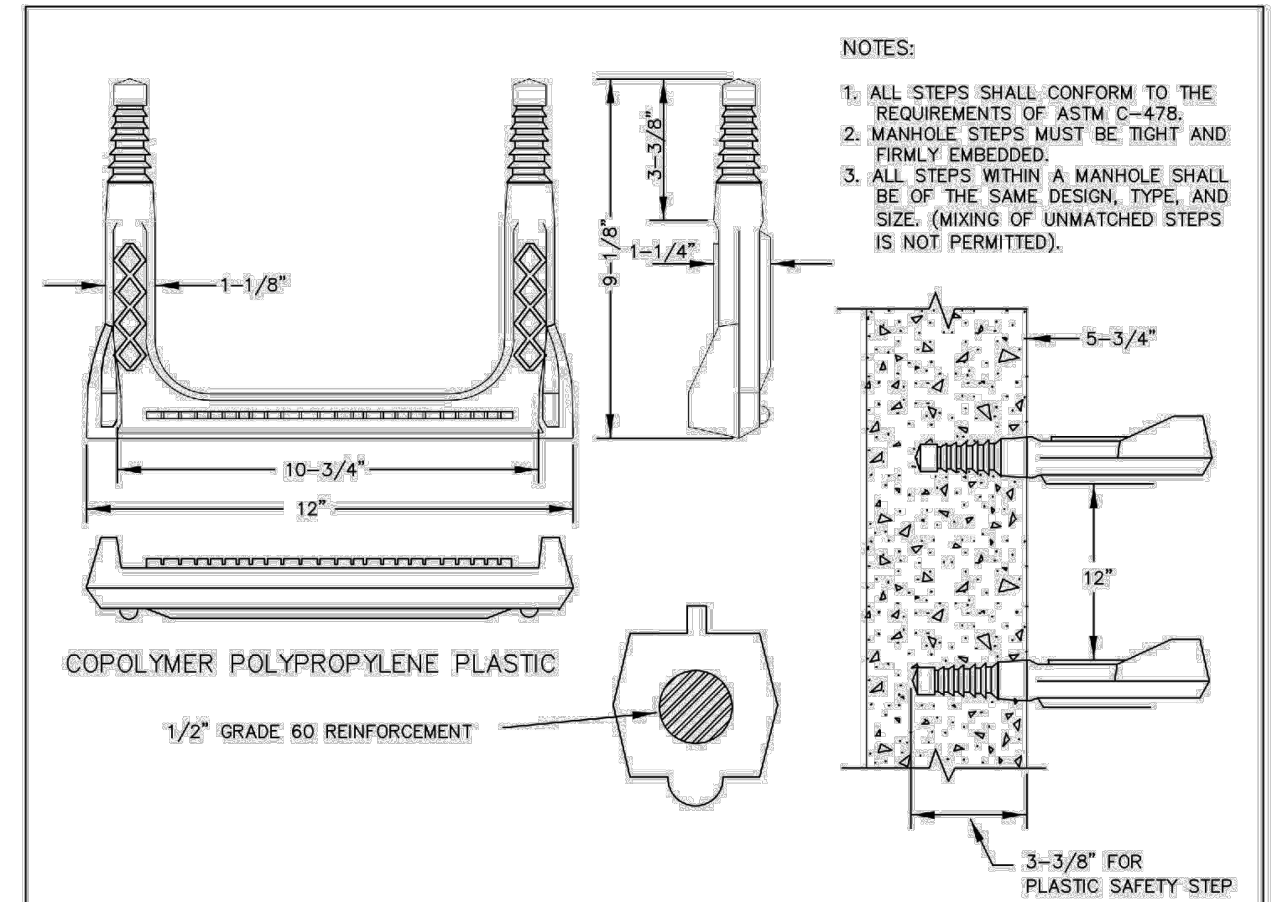
FLEXIBLE MANHOLE CONNECTION (KOR-N-SEAL OR EQUAL)



NOTE

- SPECIFICATIONS FOR CONCRETE AND MISCELLANEOUS MATERIALS USED IN CONSTRUCTION SHALL CONFORM TO CURRENT APWA STANDARD SPECIFICATIONS.

	CLACKAMAS WES 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	APPROVAL DATE: July, 2021 SCALE: N.T.S.	STANDARD DRAWING SWM -33
	MH STANDARD		



NOTES:

- STEPS LOCATED AT 12" O.C. LOCATED ON VERTICAL SIDE OF MANHOLE.
- STEPS A MAXIMUM OF 24" FROM RIM AND 6" FROM TOP OF CONE TO FIRST STEP.
- REFERENCE DETAILS SWM MH-2.0, MH-8.0, AND MH-9.0.

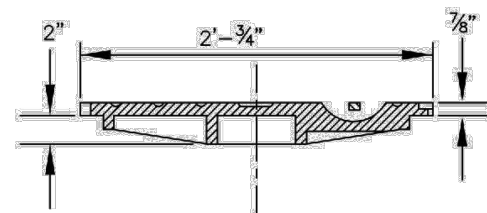
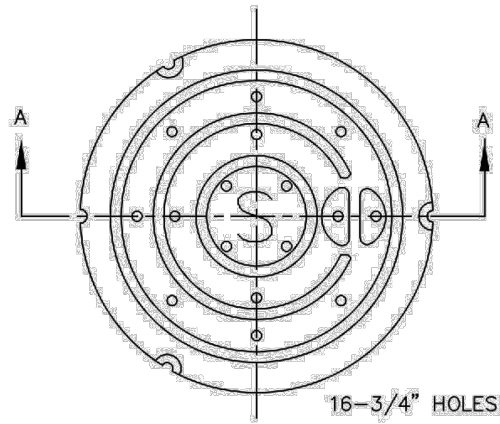
MATERIALS:

PLASTIC:

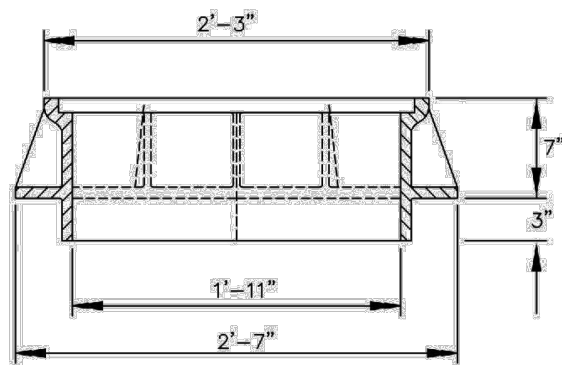
MUST CONFORM WITH ASTM C-478.
 STEEL REINFORCING BAR MINIMUM 1/2" GRADE 60.
 MEETING REQUIREMENTS OF ASTM A615 ENCAPSULATED
 WITH INJECTION MOLDED COPOLYMER POLYPROPYLENE
 WITH SERRATED SURFACES.

	CLACKAMAS WES 150 BEAVERCREEK ROAD OREGON CITY, OR 97045	APPROVAL DATE: July, 2022 SCALE: N.T.S.	STANDARD DRAWING SWM -34
	MH STEP		

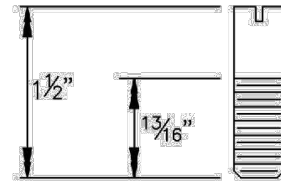
STANDARD MANHOLE



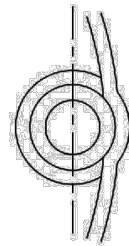
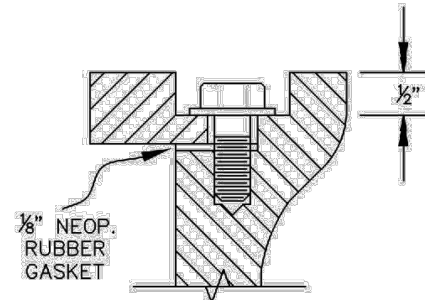
SECTION A-A



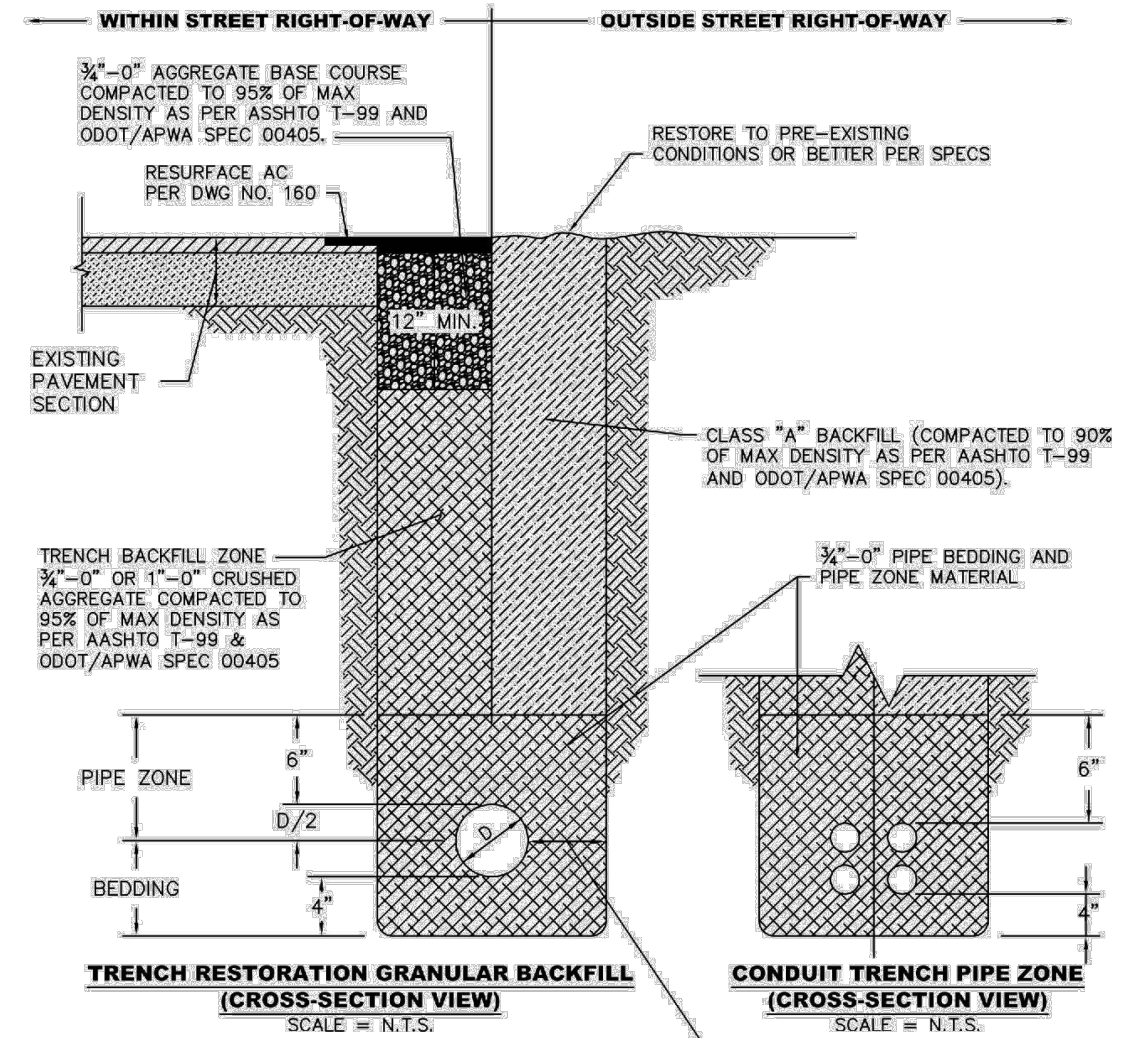
**WATER TIGHT DETAILS
TAMPERPROOF**



LOCATING STUD
(1) REQUIRED PER COVER



CAP SCREW
(3) REQUIRED 1/2" x 1 1/4"
PENT OR HEX HEAD
BRONZE OR CAD PL.

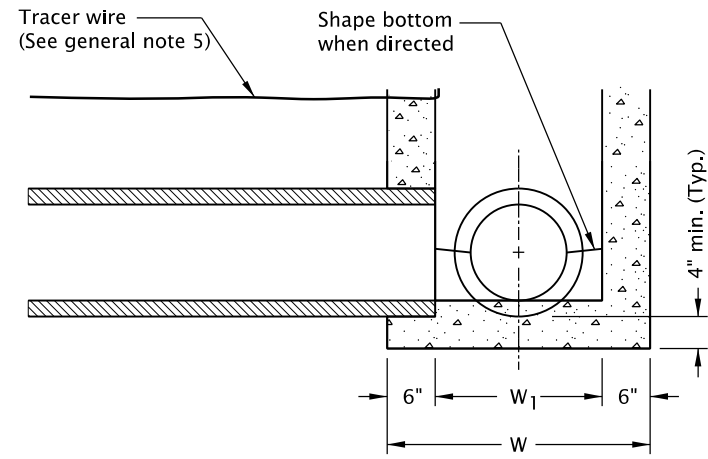


- NOTES:**
- PAVEMENT SHALL BE CUT PER STANDARD DRAWING 200.
 - PROVIDE COMPACT TEST RESULTS FOR TRENCH BACKFILL TO THE CITY FOR VERIFICATION.
 - CONTROL DENSITY FILL SHALL BE USED ON COLLECTOR AND ARTERIAL STREETS. REFER TO STANDARD DRAWING 210.

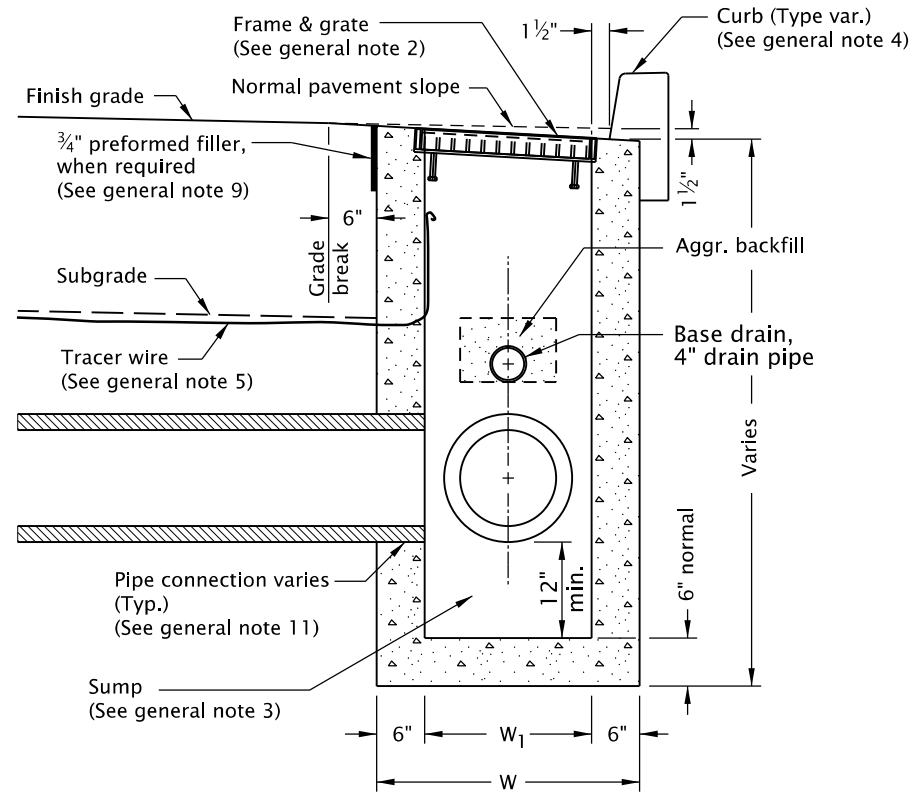
SHORING TRENCH CLEARANCE WIDTH	
D (IN.)	TRENCH (IN.)
4-10	9
12-16	12
18-21	16
24-30	18
36-72	24

20-JUL-2020

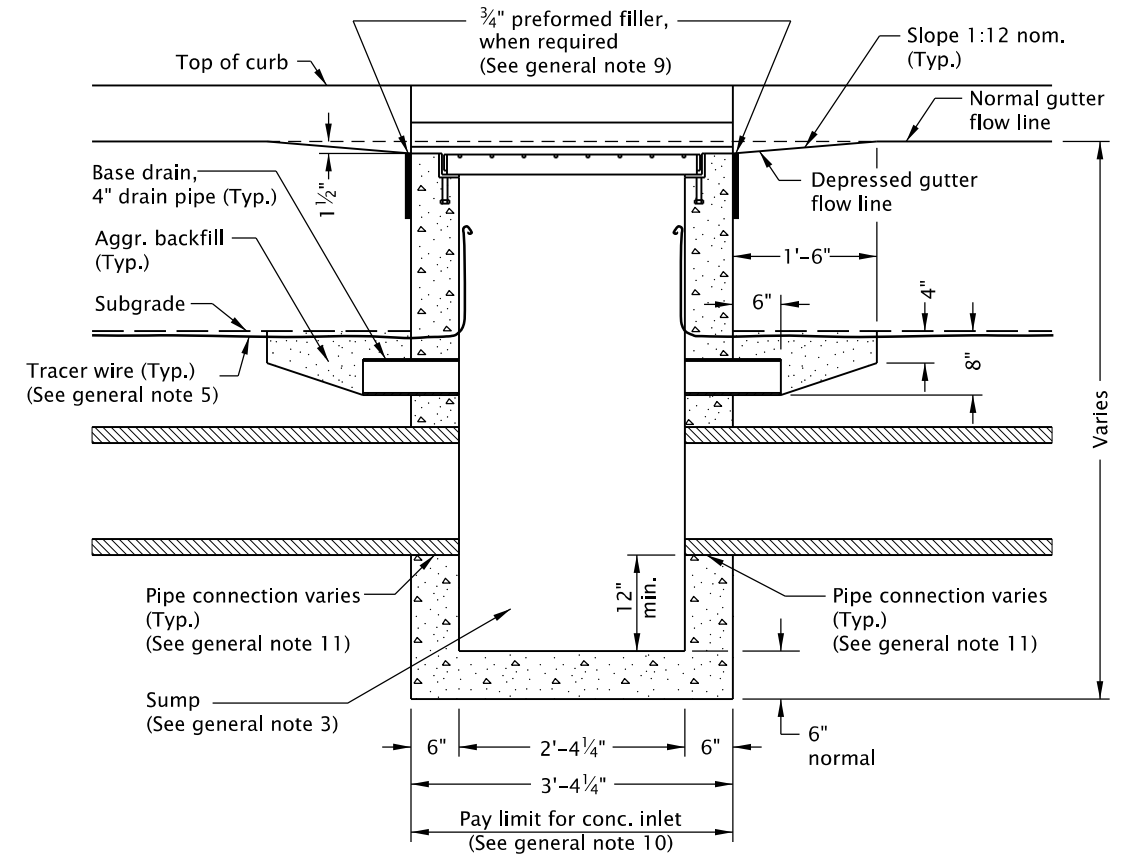
RD364.dgn



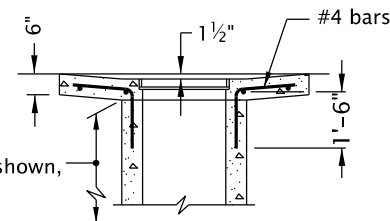
**DETAIL A
WITHOUT SUMP**



SECTION B - B



SECTION A - A

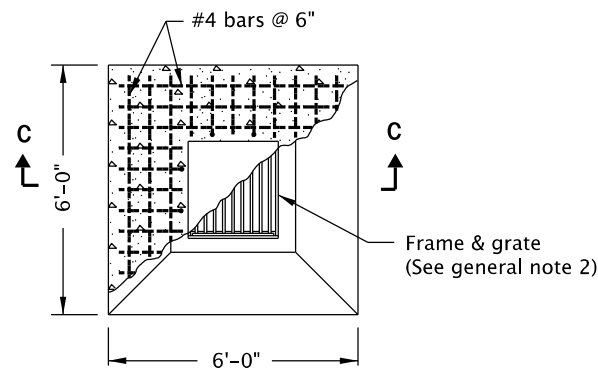


SECTION C - C

For details not shown, see inlet G-2

NOTE:

All reinforcement to be placed 2" clear of nearest face of concrete unless shown or noted otherwise

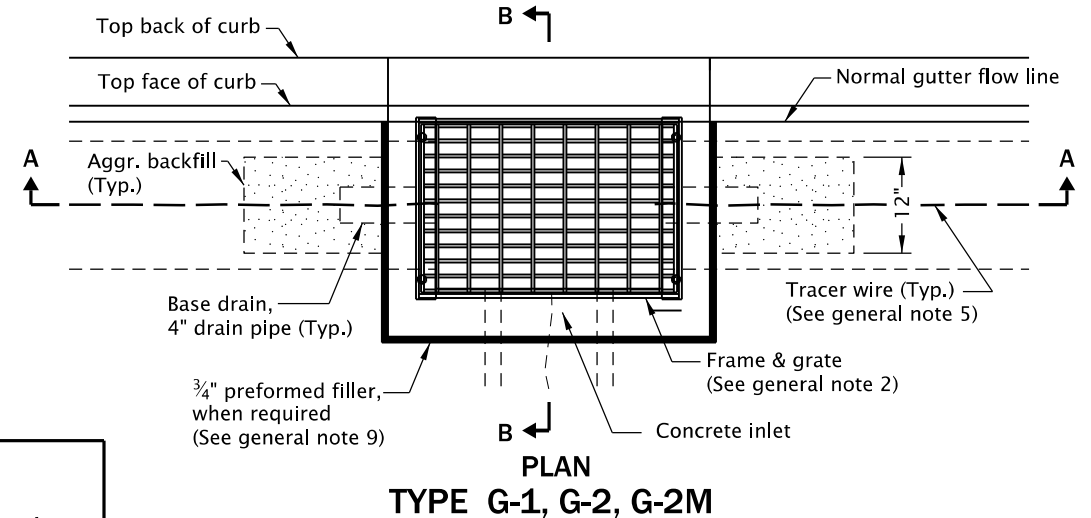


**PLAN
TYPE G-2MA**

TABLE A		
INLET TYPE	W	W ₁
G-1	2'-8 ⁷ / ₈ "	1'-8 ⁷ / ₈ "
G-2, G-2M, G-2MA	3'-3 ³ / ₈ "	2'-3 ³ / ₈ "

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

- Where precast inlets are used as an alternate to cast-in-place inlets, a 4" compacted leveling bed of sand or 1/4"-0 crushed aggregate shall be provided. All precast inlets shall conform to requirements of ASTM C913.
- Graphics show G-1 inlet with Type 2 grate. See Table A for inlet dimensions.
Type 1 grate allowed only in locations not subject to bicycle or pedestrian use.
For frame and grate details, see Std. Dwg. RD365.
- Provide sump only where shown on plans, and allowed by jurisdiction. See Detail A for inlet without sump.
- For curb details, see Std. Dwgs. RD700 & RD701.
- See Std. Dwg. RD336 for tracer wire details, or approved alternate.
- Max. pipe diameter varies with pipe material.
- Location, elevation, diameter, slope, and number of pipe(s) varies, see project plans.
- All concrete shall be commercial grade concrete.
- 3/4" preformed filler (in concrete pavement or gutter only) to extend through thickness of concrete.
- See Std. Dwg. RD363 for gutter transition section, when curb and gutter are required.
- See Std. Dwg. RD339 for pipe to structure connections.



**PLAN
TYPE G-1, G-2, G-2M**

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

**CONCRETE INLETS
TYPE G-1, G-2, G-2M, & G-2MA**

2024

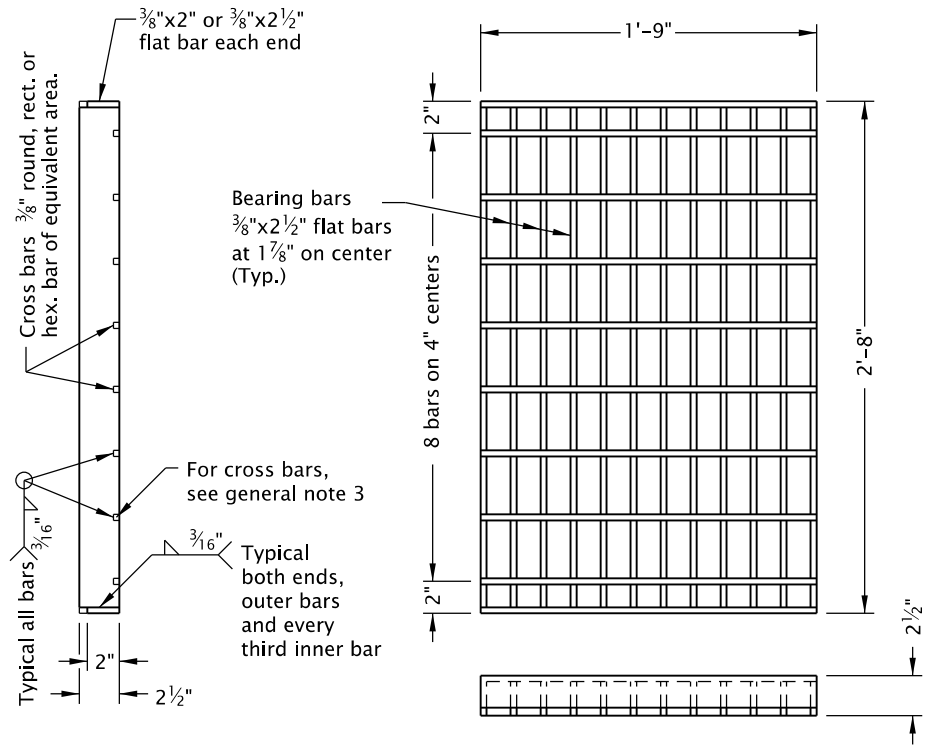
DATE	REVISION	DESCRIPTION
CALC. BOOK NO.	N/A	SDR DATE

RD364

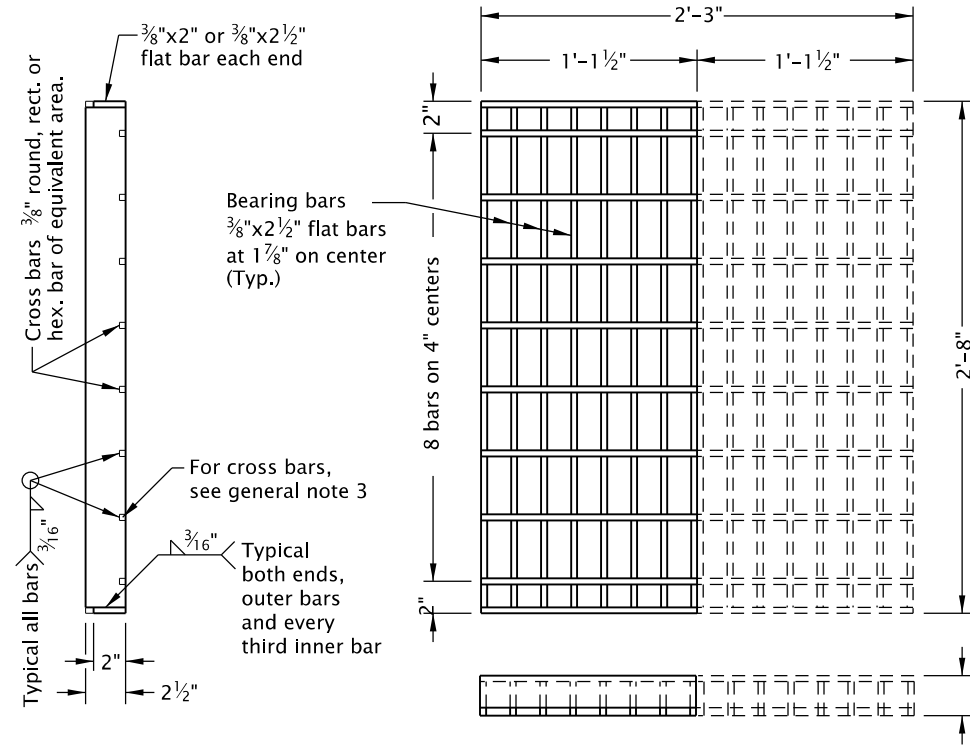
Effective Date: June 1, 2024 - November 30, 2024

20-JUL-2020

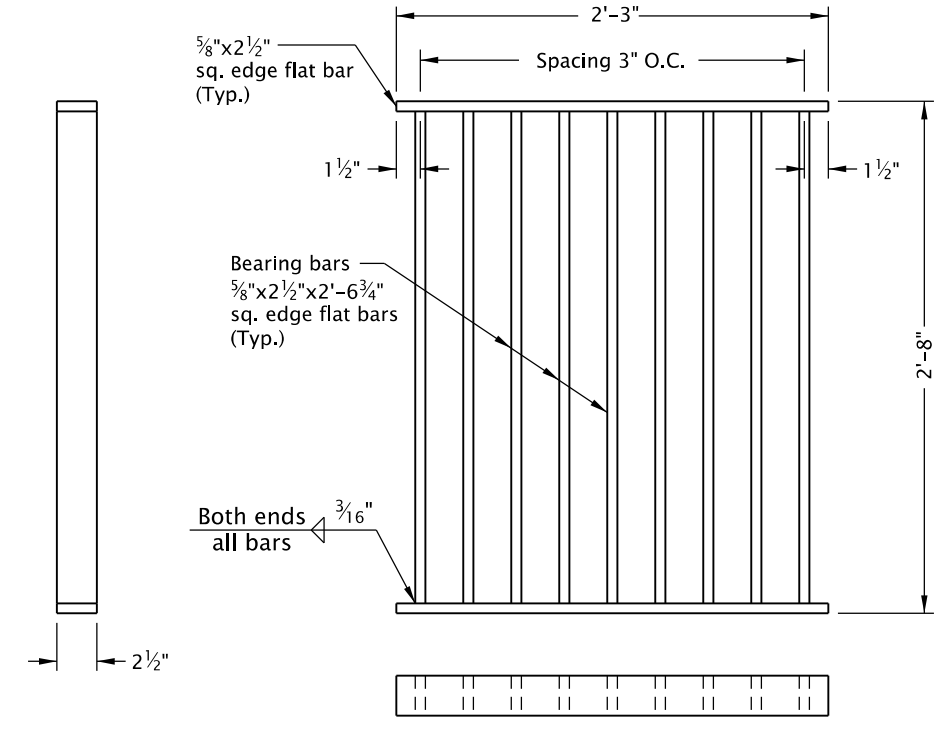
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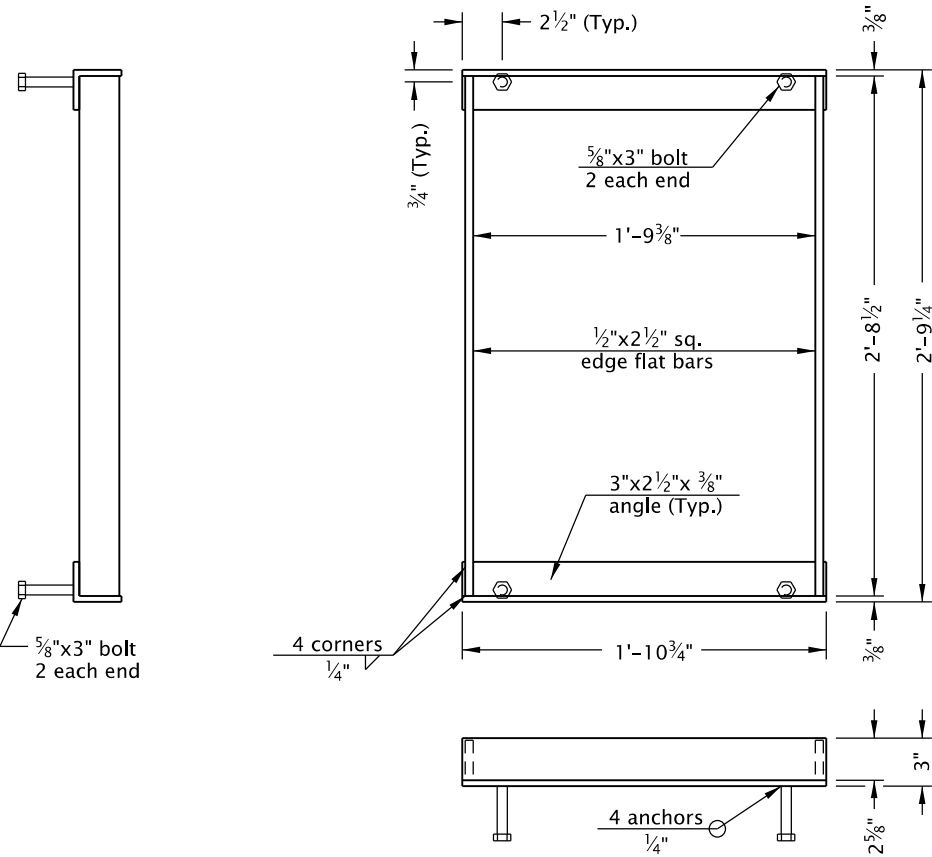
**G-1, CG-1 GRATE
(TYPE 2)**
(Bicycle-safe)



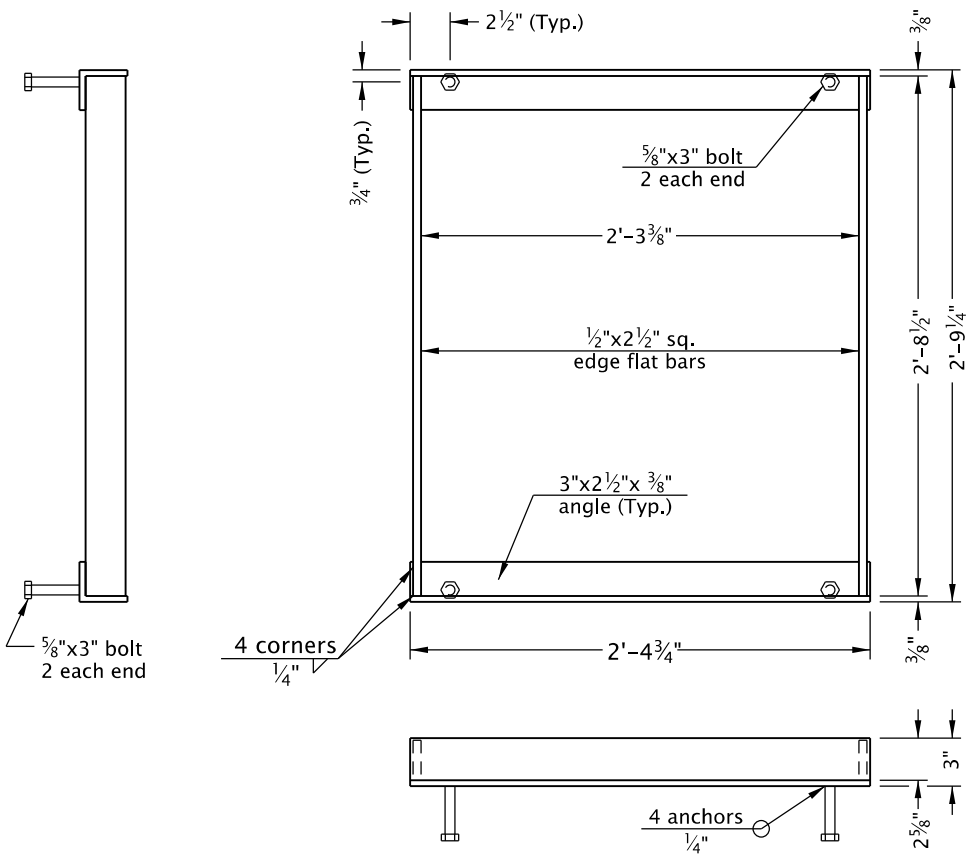
**G-2, G-2M, G-2MA, CG-2 GRATE
(TYPE 2)**
(Bicycle-safe)
(2 grates required per inlet, as shown)



**G-2, G-2M, G-2MA, CG-2 GRATE
(TYPE 1)**
(See general note 2)



G-1, CG-1 FRAME



G-2, G-2M, G-2MA, CG-2 FRAME

GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

1. For inlet details, see appropriate inlet standard drawing(s).
2. Type 1 grate allowed only in locations not subject to bicycle or pedestrian use.
3. 3/8" cross bars shall be flush with the top of grate surface and may be fillet welded, resistance welded or electroforged to bearing bars.
4. Hot dip galvanize after fabrication.
5. Cast iron grate and frame are acceptable alternates. See ODOT's QPL.

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

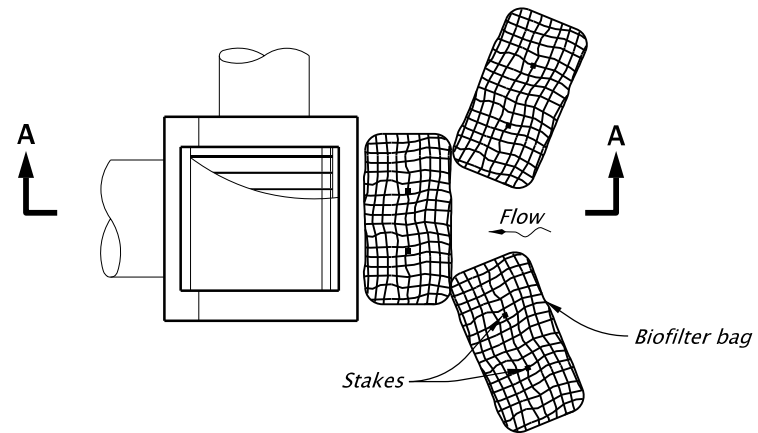
**FRAMES & GRATES
FOR CONCRETE INLETS**

2024

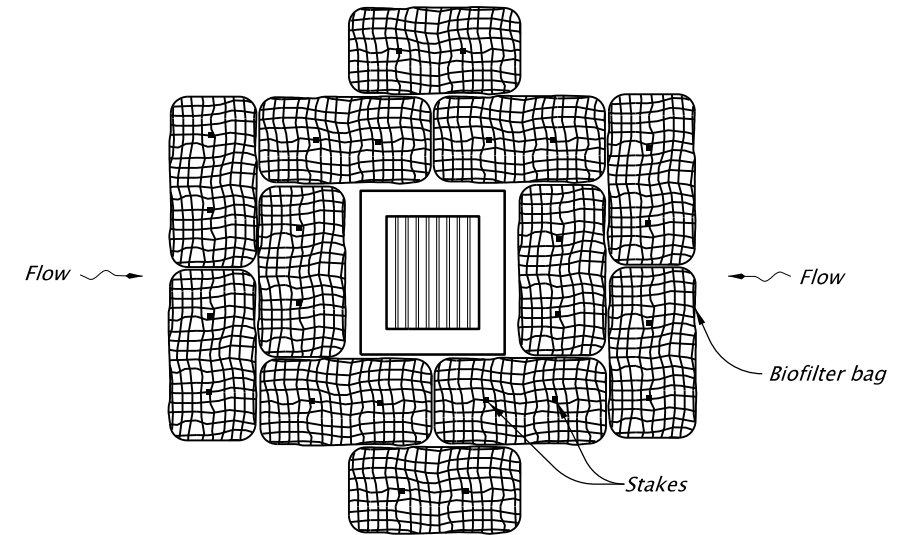
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CALC. BOOK NO. --- N/A ---	SDR DATE-- 14-JUL-2014	RD365
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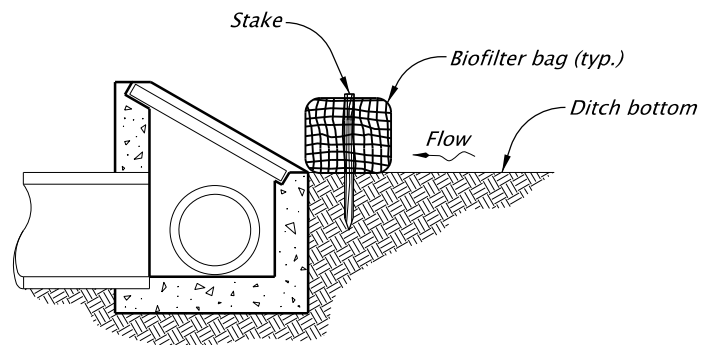
Effective Date: June 1, 2024 – November 30, 2024



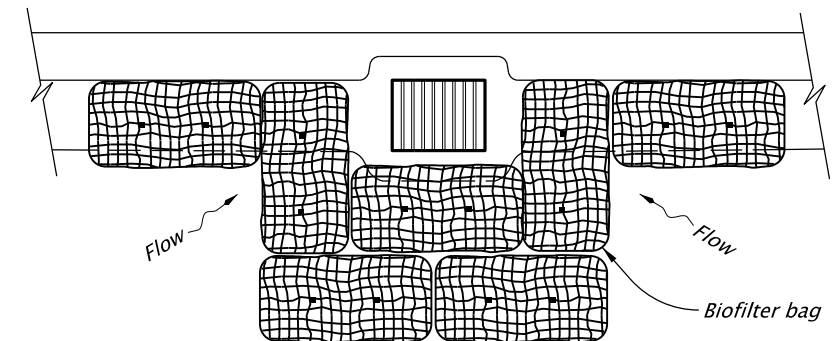
PLAN DITCH INLET



PLAN AREA DRAIN



SECTION A-A DITCH INLET



PLAN CATCH BASIN

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

OREGON STANDARD DRAWINGS

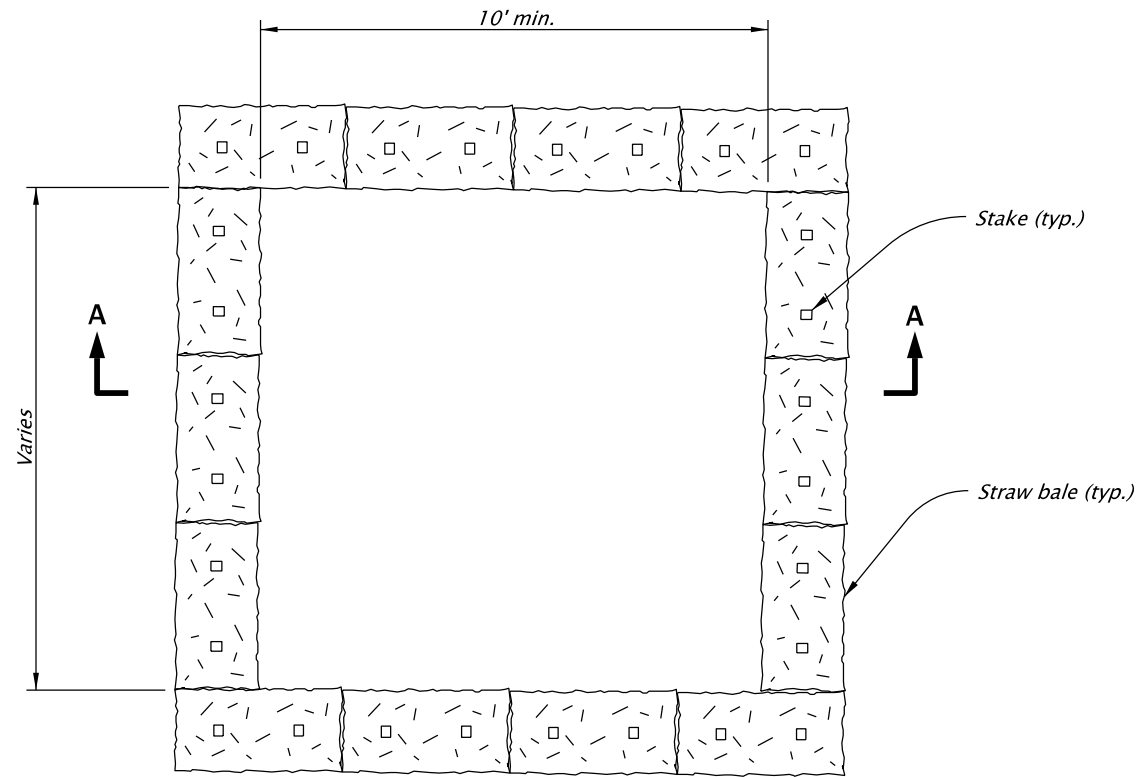
INLET PROTECTION TYPE 4

2024

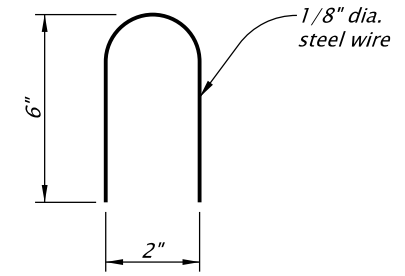
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01-2021	REMOVED CALC BOOK NUMBERS	
CALC. BOOK NO.	N/A	SDR DATE

20-JAN-2021 **RD1015**

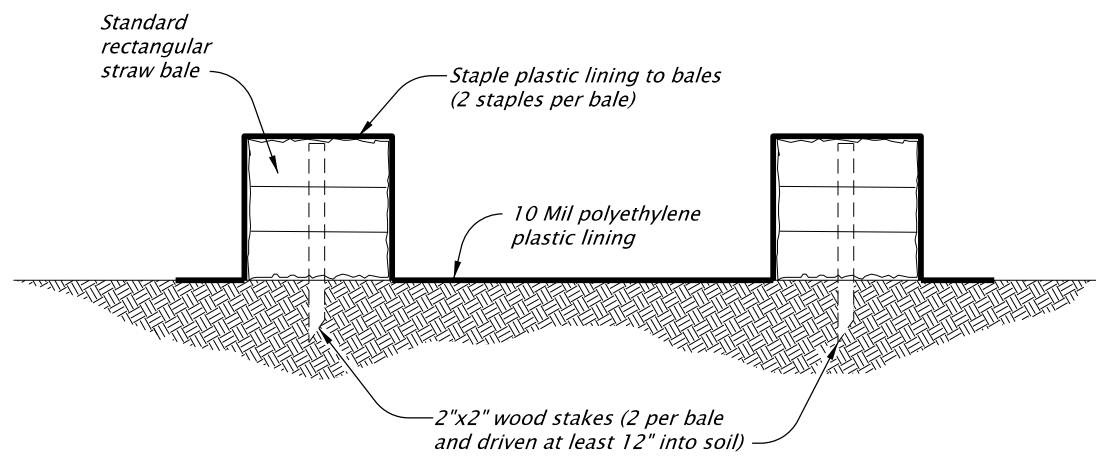
Effective Date: June 1, 2024 – November 30, 2024



PLAN



STAPLE DETAIL
NOT TO SCALE



SECTION A-A

CONCRETE TRUCK WASH OUT FACILITY
NOT TO SCALE

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

CONCRETE TRUCK WASH OUT

2024

DATE	REVISION DESCRIPTION

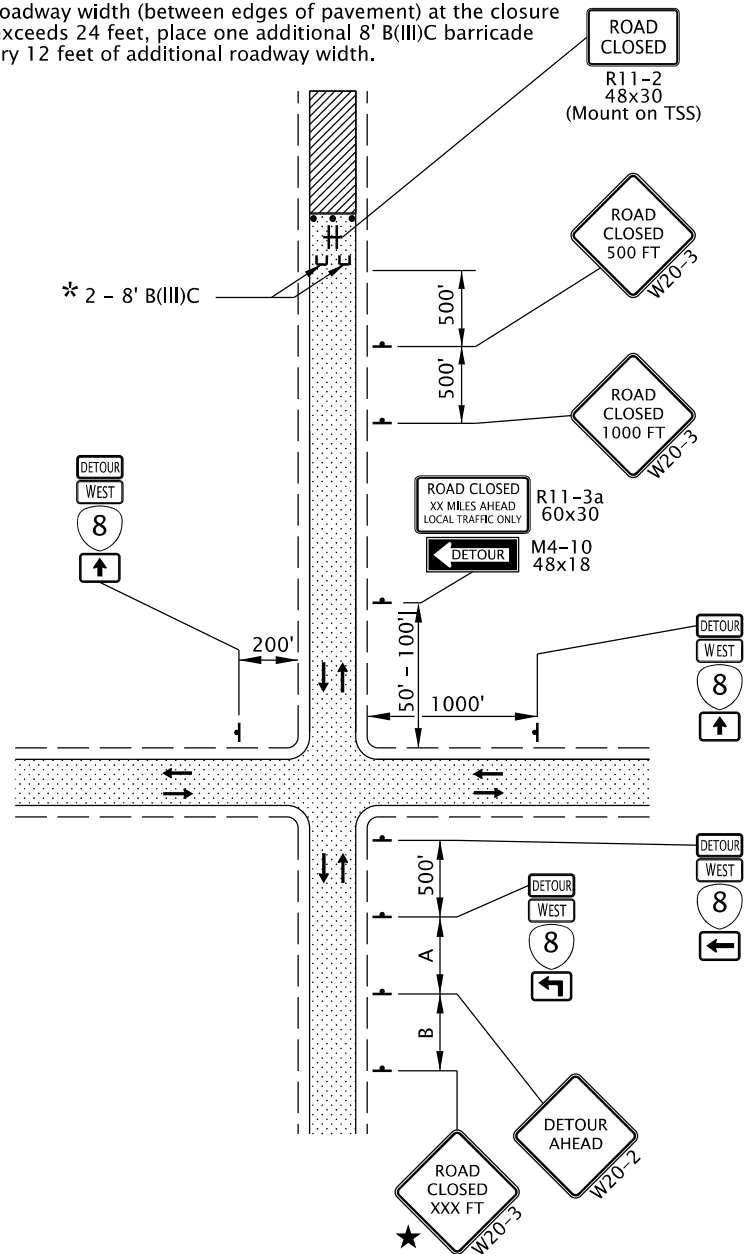
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Effective Date: June 1, 2024 – November 30, 2024

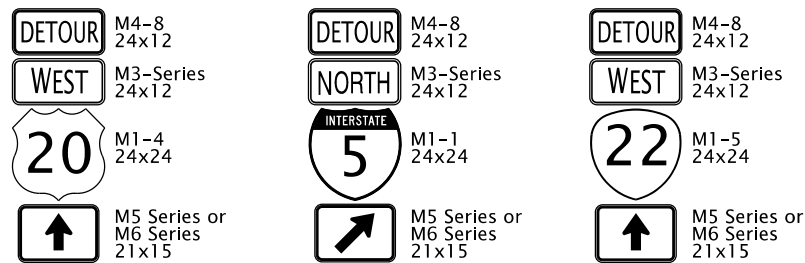
01-JUL-2020
TM840.dgn

NOTES:
If closure point is less than 1500 ft. from nearest intersection, use a "ROAD CLOSED TO THRU TRAFFIC" (R11-4) sign in place of the "ROAD CLOSED XX MILES AHEAD" sign.

* If the roadway width (between edges of pavement) at the closure point exceeds 24 feet, place one additional 8' B(III)C barricade for every 12 feet of additional roadway width.

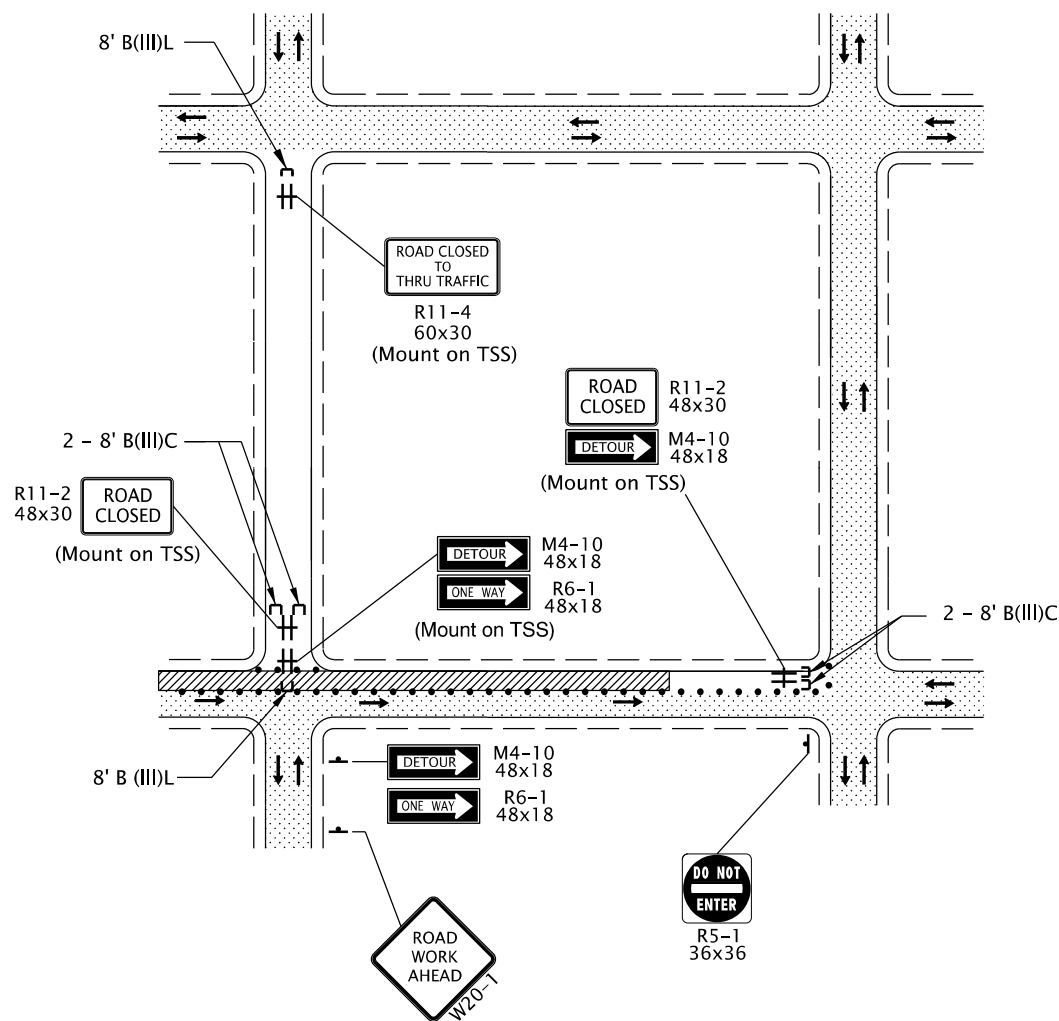


TYPICAL ROAD CLOSURE WITH DETOUR



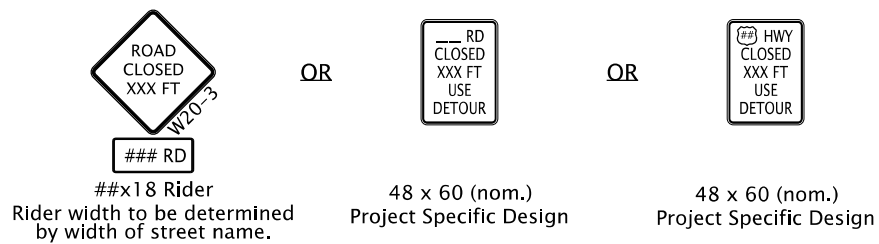
NOTE:
• When detour routes overlap, each Route Shield will include a separate cardinal direction, detour, and directional arrow auxiliary sign assembly.

TYPICAL TRAILBLAZER ASSEMBLY

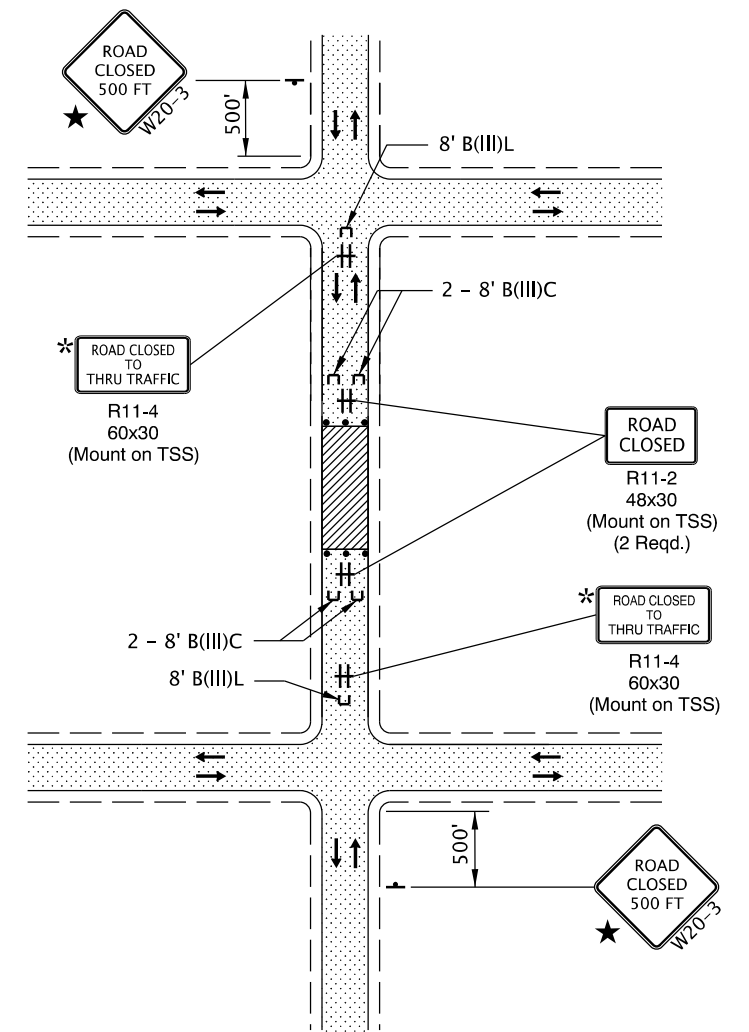


TYPICAL PARTIAL ROAD CLOSURE

GENERAL NOTES FOR ALL DETAILS:
★ A "Street Name" rider may be used to enhance Road Closure signing; or provide a project specific design; or, as shown in the traffic control plan.



- Use a minimum of two Type III barricades for a road closure. For roads $\geq 36'$ wide between curbs or edge of pavement, use a minimum of three Type III barricades for the closure point.
- For full road closures, the C or LR barricade may be used.
- Place additional signing as directed.
- To determine sign spacing A, B, & C, use the "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" on Dwg. TM800.
- To be accompanied by Dwg. Nos. TM820 & TM821.
- 28" Tubular Markers See TCD Spacing Table on TM800 for max. spacing.
- [Dotted pattern] UNDER TRAFFIC
- [Hatched pattern] UNDER CONSTRUCTION

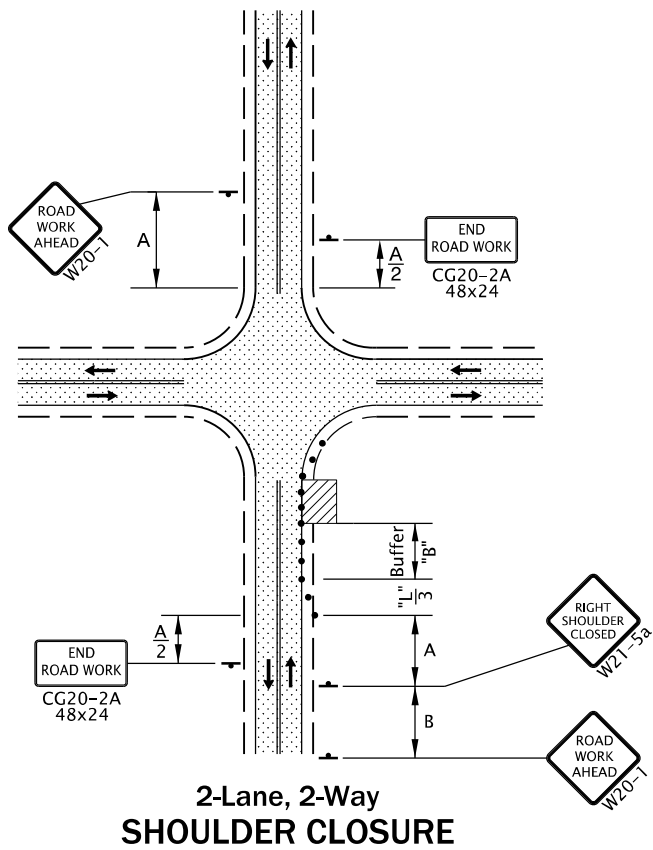


NOTE:
* If accesses exist between intersection and point of closure, install "ROAD CLOSED TO THRU TRAFFIC" sign as shown.

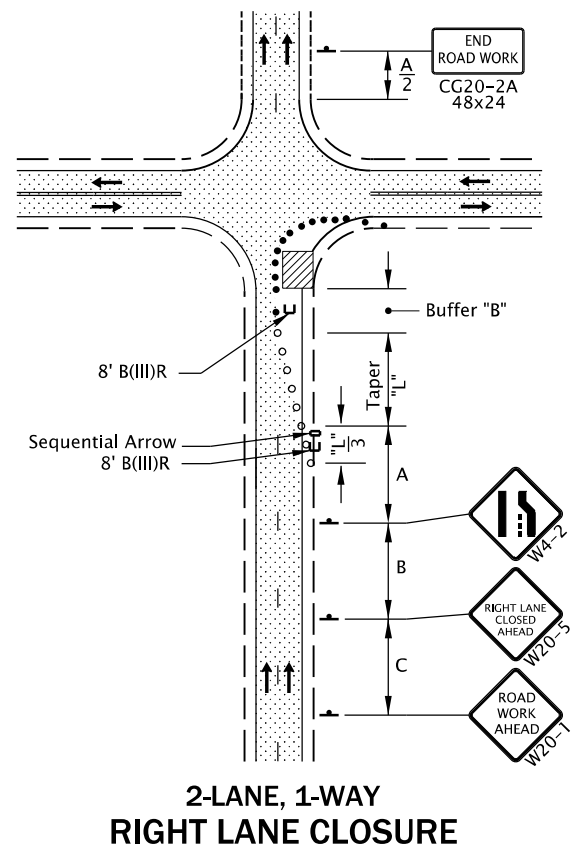
TYPICAL ROAD CLOSURE

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.

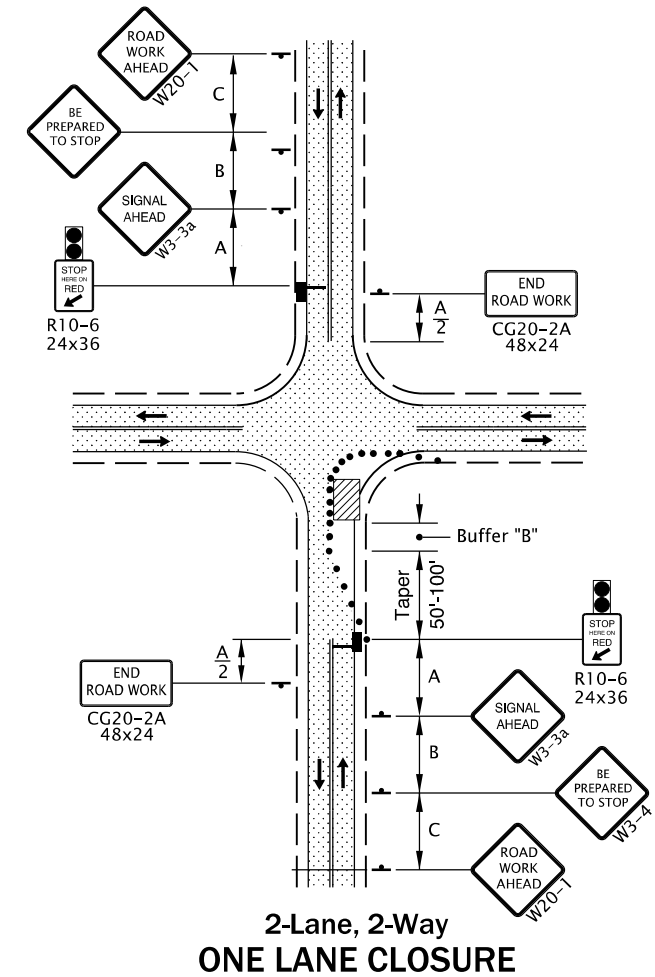
All materials shall be in accordance with the current Oregon Standard Specifications.			
OREGON STANDARD DRAWINGS			
CLOSURE DETAILS			
2024			
DATE	REVISION DESCRIPTION		
CALC. BOOK NO.	N/A	SDR DATE	01-JUL-2020
			TM840



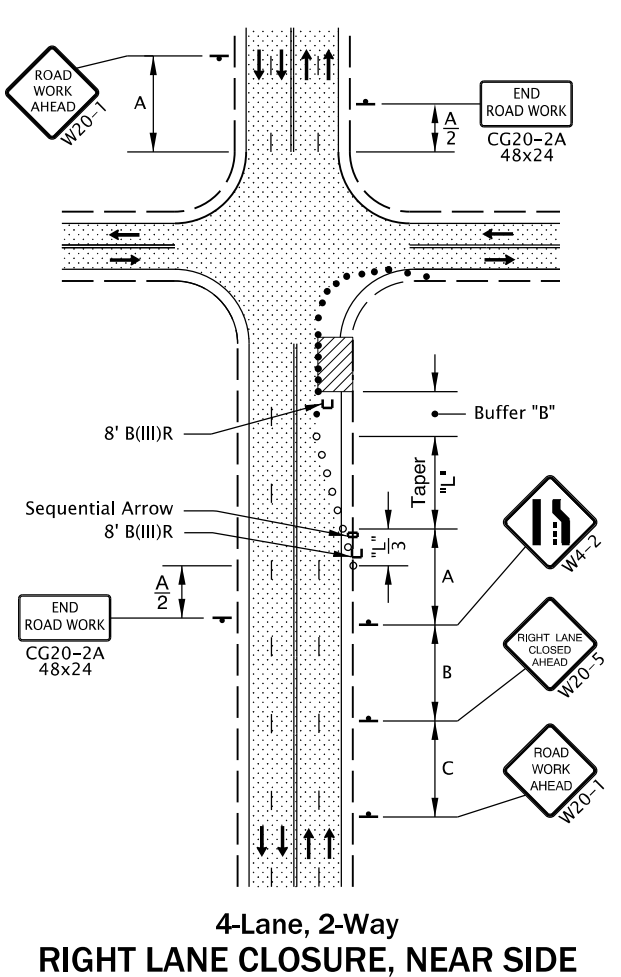
**2-Lane, 2-Way
SHOULDER CLOSURE**



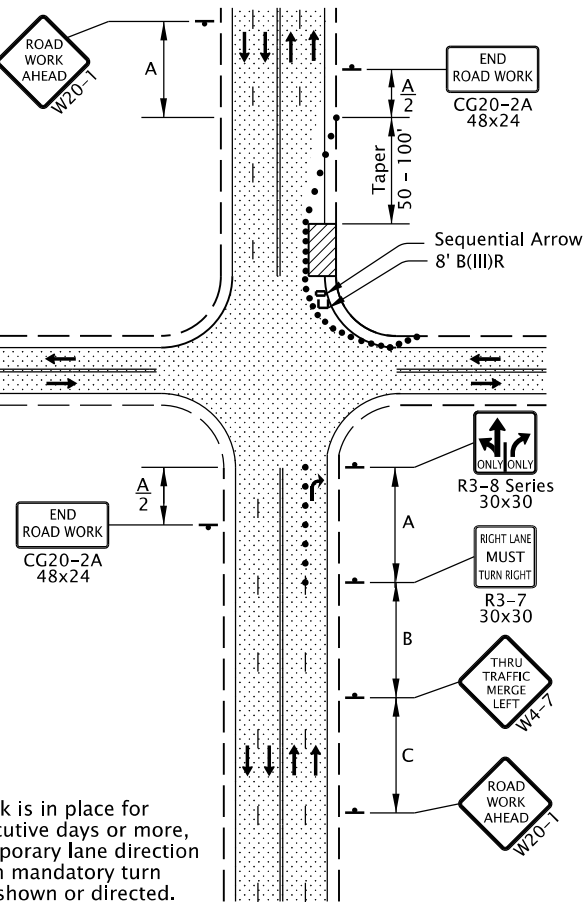
**2-LANE, 1-WAY
RIGHT LANE CLOSURE**



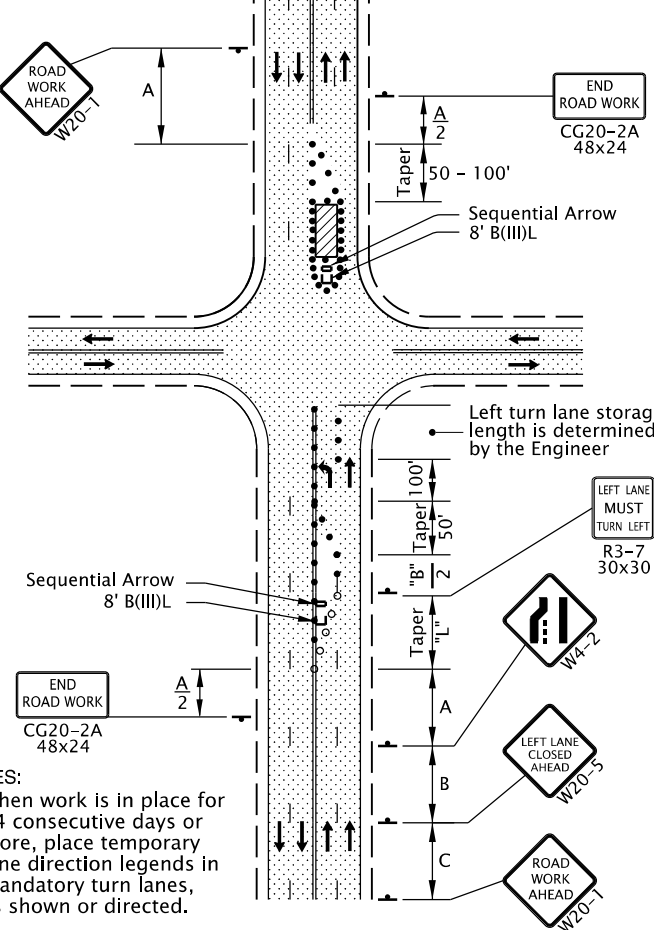
**2-Lane, 2-Way
ONE LANE CLOSURE**



**4-Lane, 2-Way
RIGHT LANE CLOSURE, NEAR SIDE**



**4-Lane, 2-Way
RIGHT LANE CLOSURE, FAR SIDE**



**4-Lane, 2-Way
LEFT LANE CLOSURE, FAR SIDE**

NOTES:
• When work is in place for 14 consecutive days or more, place temporary lane direction legends in mandatory turn lanes, as shown or directed.

NOTES:
• When work is in place for 14 consecutive days or more, place temporary lane direction legends in mandatory turn lanes, as shown or directed.

GENERAL NOTES FOR ALL DETAILS:

- Additional Traffic Control Measures (TCM) may be required for all legs of the intersection.
- The "SIGNAL AHEAD" (W3-3a) sign may be substituted with the signal ahead symbol (W3-3) sign.
- To determine Taper Length ("L") and Buffer Length ("B"), use the "MINIMUM LENGTHS TABLE" on Dwg. TM800.
- For left lane or shoulder work, place TCD to close left lane or shoulder. Use "LEFT LANE CLOSED AHEAD" (W20-5) sign, "LEFT LANE ENDS" (W4-2L) symbol sign, or "LEFT SHOULDER CLOSED" (W21-5a) sign, where applicable.
- To determine sign spacing A, B, and C, use "TRAFFIC CONTROL DEVICES (TCD) SPACING 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.
- Tubular markers may be used in lane closure tapers where posted speed is 40 mph or less.
- Where shoulder width is limited, Sequential Arrow may be placed within the lane closure taper.
- 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.
- To be accompanied by Dwg. Nos. TM820, TM82, TM840 & TM854.

- Automated Flagging Assistance Device (AFAD)
- 28" Tubular Markers See TCD Spacing Table on TM800 for max. spacing.
- ○ ○ ○ ○ Temp. Plastic Drums See TCD Spacing Table on TM800 for max. spacing.
- ▨ UNDER TRAFFIC
- ▩ UNDER CONSTRUCTION

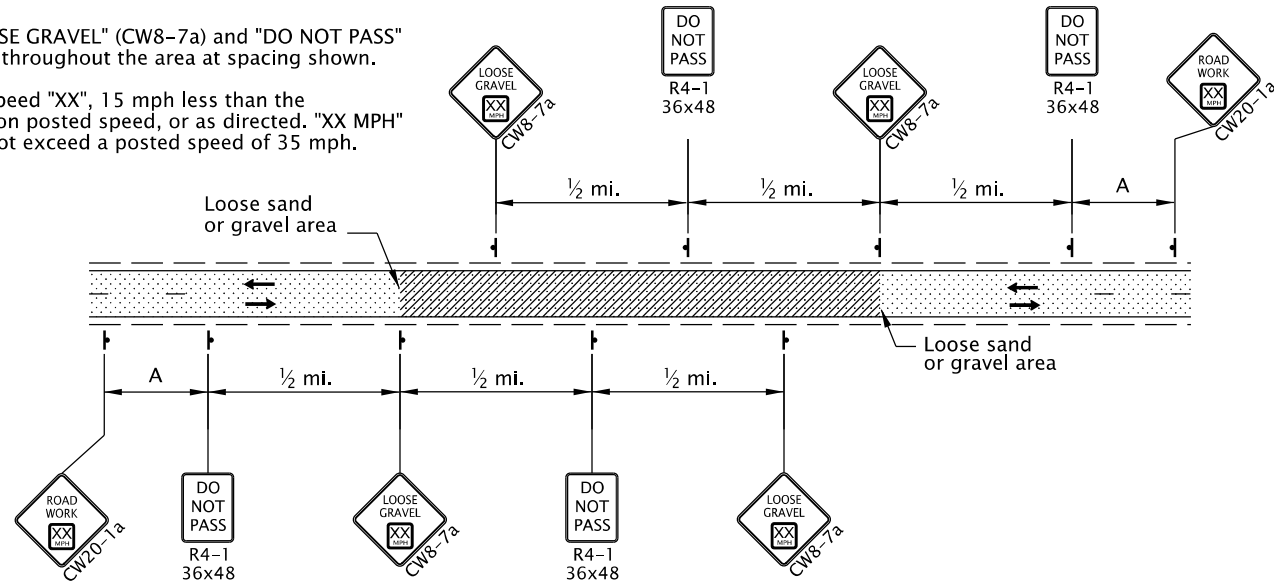
The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.			
OREGON STANDARD DRAWINGS			
INTERSECTION WORK ZONE DETAILS			
2024			
DATE	REVISION DESCRIPTION		
CALC. BOOK NO.	N/A	SDR DATE	01-JUL-2022
			TM841

01-JUL-2022

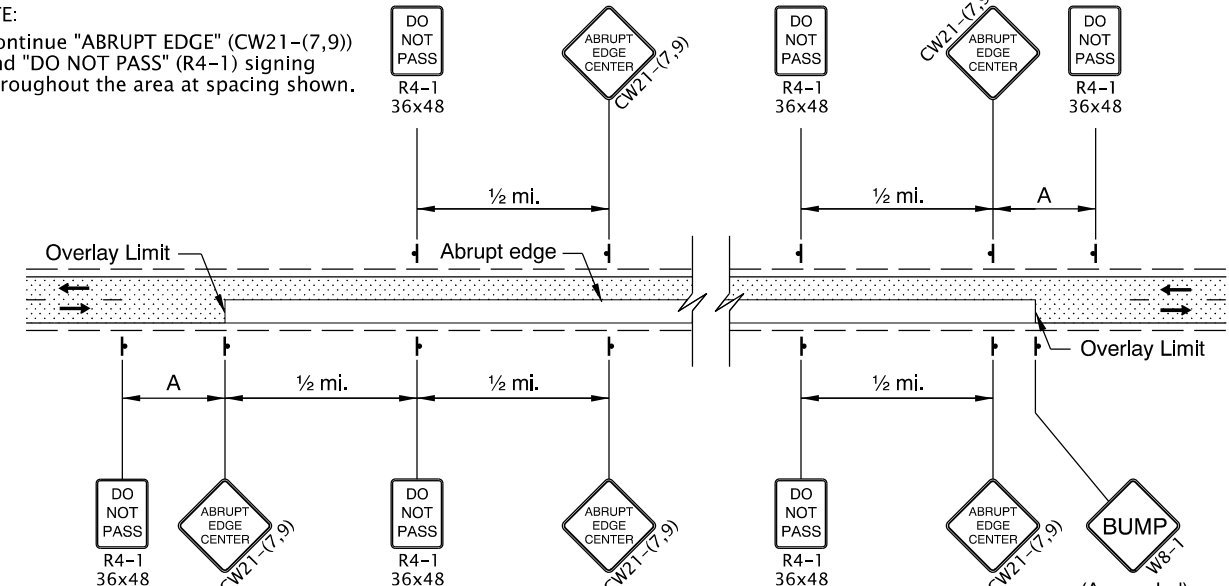
TM850.dgn

- NOTE:
- Continue "LOOSE GRAVEL" (CW8-7a) and "DO NOT PASS" (R4-1) signing throughout the area at spacing shown.
 - Use advisory speed "XX", 15 mph less than the pre-construction posted speed, or as directed. "XX MPH" placard shall not exceed a posted speed of 35 mph.



2-Lane, 2-Way Roadway
LOOSE GRAVEL IN ROADWAY SIGNING

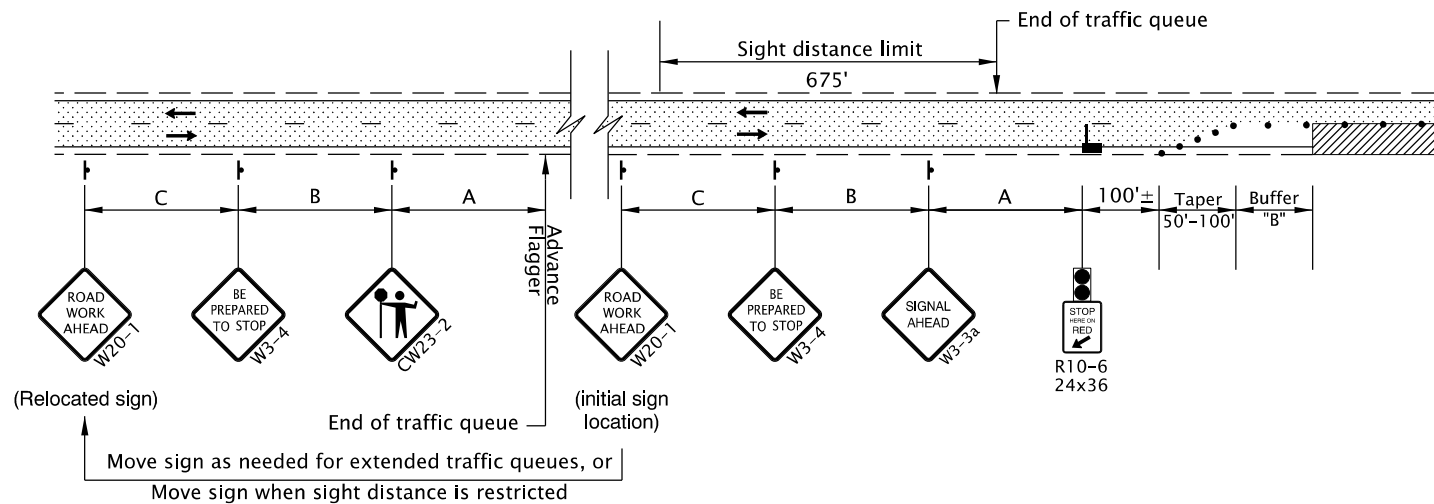
- NOTE:
- Continue "ABRUPT EDGE" (CW21-(7,9)) and "DO NOT PASS" (R4-1) signing throughout the area at spacing shown.



2-Lane, 2-Way Roadway
OVERLAY AREA SIGNING

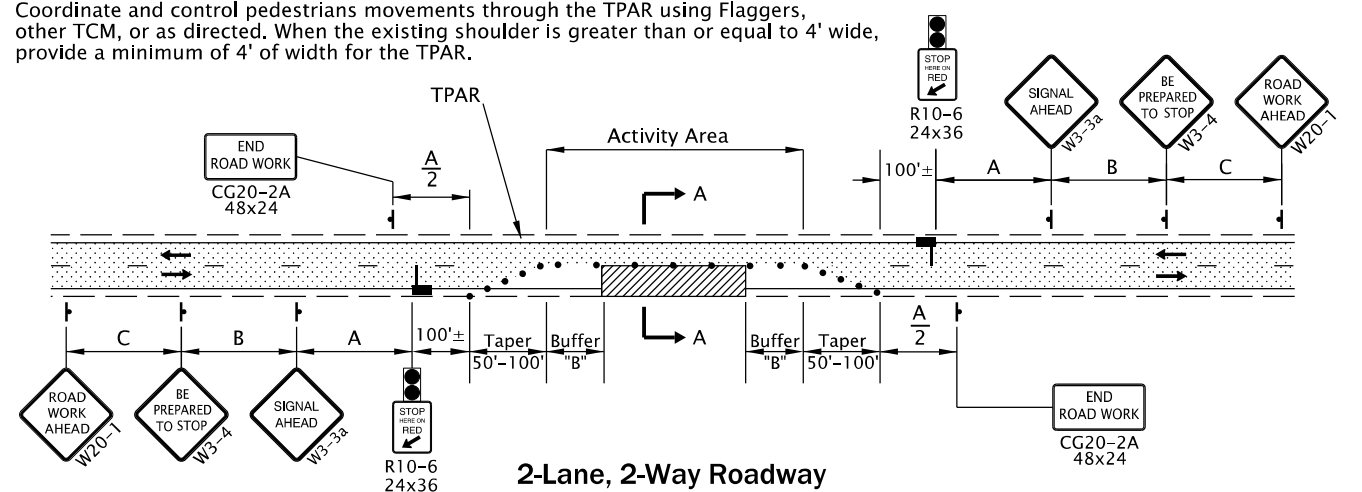
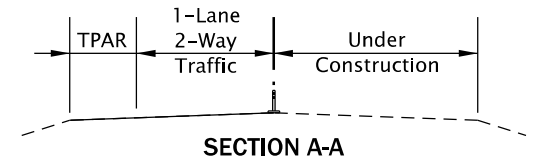
- NOTES:
- Place Advance Flagger and additional signing when traffic queues extend beyond initial warning signing OR when sight distance is restricted.
 - Relocate initial "ROAD WORK AHEAD" (W20-1) sign in advance of additional "BE PREPARED TO STOP" (W3-4) and Flagger Ahead (CW23-2) signs, as shown.

- Place additional Tubular Markers for Flagger and Advance Flagger Stations according to FLAGGER STATION DELINEATION detail.



ADVANCE FLAGGER FOR EXTENDED TRAFFIC QUEUES

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



2-Lane, 2-Way Roadway
ONE LANE CLOSURE

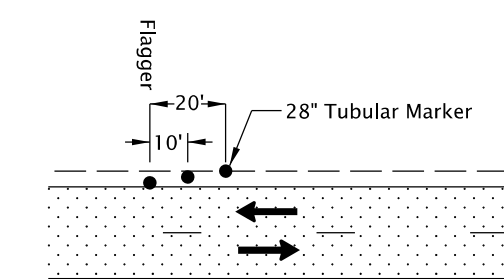
GENERAL NOTES FOR ALL DETAILS:

- The "SIGNAL AHEAD" (W3-3a) sign may be substituted with the Signal Ahead (W3-3) symbol 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 & TM854.

- Automated Flagging Assistance Device (AFAD)
- 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 (dotted)
- UNDER CONSTRUCTION (hatched)
- CONSTRUCTION UNDER TRAFFIC (cross-hatched)

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



FLAGGER STATION DELINEATION

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

All materials shall be in accordance with the current Oregon Standard Specifications.	
OREGON STANDARD DRAWINGS	
2-LANE, 2-WAY ROADWAYS	
2024	
DATE	REVISION DESCRIPTION
01-2022	Added AFADs to drawing.
CALC. BOOK NO.	SDR DATE
	01-JUL-2022
	TM850

May 22, 2024

3J Consulting, Inc.
9600 SW Nimbus, #100
Beaverton, Oregon 97008

Attention: Chase Welborn (chase.welborn@3j-consulting.com)

Subject: Geotechnical Engineering Services Letter Report
CGS Project: Clackco-3-01
Laurie Avenue Rock Excavation
Milwaukie, Oregon

Mr. Welborn,

Central Geotechnical Services, LLC (CGS) is pleased to submit this letter geotechnical investigation and report for the Clackamas County Stormwater Improvement project located at the intersection of Courtney Avenue and Laurie Avenue in Milwaukie, Oregon. At your request, this letter is a summary of our explorations and general recommendations.

INTRODUCTION

The project involves the installation of a new stormwater line extending approximately 330 feet north and 420 feet south along Laurie Avenue from the intersection with Courtney Avenue. Based on conversations with 3J, we understand that the proposed storm line will be less than 6 feet below the ground surface. The purpose of this report is to provide the results of our explorations and provide recommendations with respect to construction of storm trenches with respect to general practices and excavation considerations.

SUBSURFACE CONDITIONS

We completed six (6) drilled borings to depths of 9.0 to 11.5 feet below ground surface (BGS) on May 22 and May 25, 2024 at locations requested by 3J Consulting Inc. (3J). The explorations were completed using a CME 55 track mounted drill rig on March 22 and a CME 75 truck mounted drill rig on March 25, 2024. A site vicinity plan is attached as Figure 1 and the approximate exploration locations are shown on Figure 2.

In general, the surface conditions at the site generally consist of 4.5 to 6.0 inches of asphalt concrete (AC) over 2.0 to 12.0 inches of aggregate base. Below the aggregate base, we observed soft to medium-stiff silt fill in borings B-3 and B-5. The fill or aggregate base is underlain by native, medium-stiff to hard, silt to clay characterized as decomposed basalt to the maximum depth of our explorations, except for B-2. In B-2, we observed basalt below the decomposed basalt at 5 feet BGS, extending to the depth of exploration. The basalt is fractured, blocky, and weak (R-1 or R-2). A summary of the explorations is presented in Table 1, on the following page.

Table 1. Existing Pavement Thickness with Depth of Material Encountered

Exploration	AC Thickness (inches)	Aggregate Base Thickness (inches)	Depth Material Encountered [Thickness of Layer] (feet)		
			Fill	Decomposed Basalt	Basalt
B-1	5.5	12.0	NP ¹	1.5 [DOE]	NP
B-2	5.5	12.0	NP	1.5 [3.5]	5.0 [DOE]
B-3	4.5	2.0	0.5 [1.5]	2.0 [DOE]	NP
B-4	5.0	4.0	NP	0.8 [DOE]	NP
B-5	6.0	4.0	0.8 [1.2]	2.0 [DOE]	NP
B-6	6.0	5.0	NP	3.7 [DOE]	NP

Note 1: NP = Not Present

Note 2: DOE = Soil unit encountered to the "Depth of Exploration"

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our geotechnical explorations on the site, we consider the site suitable for the proposed development. The primary geotechnical construction considerations are described below.

EXCAVATION CONSIDERATIONS

Stiff to hard decomposed basalt was encountered to the maximum depth of explorations (9.0 to 11.5 feet BGS) in five out of the six explorations. The decomposed basalt in B-2 was underlain by weak basalt (R2) to the depth of exploration (11.5 feet). Accordingly, excavations within the hard decomposed basalt or within the basalt may require large excavating equipment with ripper teeth. Additionally, a hydraulic rock-chipper attachment may be required if intact basalt is encountered.

SHORING

All trench excavations should be in accordance with applicable Occupational Safety and Health Administration (OSHA) and state regulations. Site soils within expected excavation depths typically range from pavement materials underlain by medium stiff to hard decomposed basalt. In our opinion, native soils below the fill and pavement layers, are generally OSHA Type B, provided there is no seepage and excavations occur during periods of dry weather, and where there are no vibrations. Excavations deeper than 4 feet should be shored or laid back at an inclination of 1H:1V (horizontal to vertical) for Type B soils. Flatter slopes may be necessary if workers are required to enter. Excavations made to construct footings or other structural elements should be laid back or shored at the surface as necessary to prevent soil from falling into excavations.

Shoring for trenches less than 6 feet deep that are above the effects of groundwater should be possible with a conventional box system. Minor to moderate sloughing should be expected outside the box. Shoring deeper than 6 feet or below the groundwater table should be designed by a registered engineer before installation. Further, the shoring design engineer should be provided with a copy of this report.

In our opinion, the contractor will be in the best position to observe subsurface conditions continuously throughout the construction process and to respond to the soil and groundwater conditions. Construction site safety is generally the sole responsibility of the contractor, who also is solely responsible for the means, methods and sequencing of the construction operations and choices regarding excavations and shoring. Under no circumstances should the information provided by CGS be interpreted to mean that CGS is assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

STRUCTURAL FILL AND BACKFILL

General

Materials used to support building foundations, floor slabs, hardscape, pavements and any other areas intended to support structures or within the influence zone of structures are classified as structural fill for the purposes of this report.

All structural fill soils should be free of debris, clay balls, roots, organic matter, frozen soil, man-made contaminants, particles with greatest dimension exceeding 4 inches and other deleterious materials. The suitability of soil for use as structural fill will depend on the gradation and moisture content of the soil. As the amount of fines in the soil matrix increases, the soil becomes increasingly more sensitive to small changes in moisture content and achieving the required degree of compaction becomes more difficult or impossible in wet weather conditions. Recommendations for suitable fill material are provided in the following sections.

Imported Select Structural Fill

Imported Select Structural Fill may be used as structural fill and should consist of pit or quarry run rock, crushed rock, or crushed gravel and sand that is fairly well-graded between coarse and fine sizes (approximately 25 to 65 percent passing the U.S. No. 4 sieve). It should have less than 5 percent passing the U.S. No. 200 sieve and have a minimum of 75 percent fractured particles according to American Association of State Highway and Transportation Officials (AASHTO) TP-335.

Trench Backfill

Backfill for pipe bedding and in the pipe zone should consist of well-graded granular material with a maximum particle size of 1½ inch and less than 5 percent passing the U.S. No. 200 sieve. The material should be free of organic matter and other deleterious materials. Further, the backfill should meet the project plan specifications and pipe manufacturer's recommendations. Above the pipe zone backfill, Imported Select Structural Fill may be used as described above.

FILL PLACEMENT AND COMPACTION

Structural fill should be compacted at moisture contents that are within 3 percent of the optimum moisture content as determined by ASTM International (ASTM) Test Method D 1557 (Modified Proctor). The optimum moisture content varies with gradation and should be evaluated during construction. Fill material that is not near the optimum moisture content should be moisture conditioned prior to compaction.

Fill and backfill material should be placed in uniform, horizontal lifts and compacted with appropriate equipment. The appropriate lift thickness will vary depending on the material and compaction equipment used. Fill material should be compacted in accordance with Table 2. It is the contractor's responsibility to select appropriate compaction equipment and place the material in lifts that are thin enough to meet these criteria. However, in no case should the loose lift thickness exceed 18 inches. Initial lift thickness over pipe may need to be thicker than 18 inches to prevent damage to the pipe during the application of compactive effort.

A representative from CGS should evaluate the compaction of every two vertical feet (or less) and 500 cubic yards of fill material placed. Compaction should be evaluated by compaction testing unless other methods are proposed for oversized materials and are approved by CGS during construction. These other methods typically involve procedural placement and compaction specifications together with verification requirements such as proof-rolling.

DESIGN REVIEW AND CONSTRUCTION SERVICES

Recommendations provided in this letter report are based on the assumptions and design information stated herein. We welcome the opportunity to review and discuss construction plans and specifications for this project as they are being developed. In addition, CGS should be retained to review the geotechnical-related portions of the plans and specifications to evaluate whether they are in conformance with the recommendations provided in this report.

Satisfactory foundation and earthwork performance depend to a large degree on quality of construction. Sufficient monitoring of the contractor's activities is a key part of determining that the work is completed in accordance with the construction drawings and specifications. Subsurface conditions observed during construction should be compared with those encountered during the subsurface explorations. Recognition of changed conditions often requires experience; therefore, qualified personnel should visit the site with sufficient frequency to detect whether subsurface conditions change significantly from those anticipated.

We recommend that the geotechnical engineer-of-record (GER) be retained to observe construction at the site to confirm that subsurface conditions are consistent with the site explorations, and to confirm that the intent of project plans and specifications relating to earthwork, pavement, and foundation construction.

LIMITATIONS

We have prepared this letter report for the exclusive use of 3J Consulting, Inc. and the members of the design team, for this specific project only. The report should be provided in its entirety to prospective contractors for bidding and estimating purposes; however, the conclusions and interpretations presented should not be construed as a warranty of the subsurface conditions. Experience has shown that soil and groundwater conditions can vary significantly over small distances. Inconsistent conditions can occur between explorations

that may not be detected by a geotechnical study. If, during future site operations, subsurface conditions are encountered which vary appreciably from those described herein, CGS should be notified for review of the recommendations of this report, and revision of such if necessary.

We recommend that CGS be retained to review the plans and specifications and verify that our recommendations have been interpreted and implemented as intended. Sufficient geotechnical monitoring, testing and consultation should be provided during construction to confirm that the conditions encountered are consistent with those indicated by explorations. Recommendations for design changes will be provided should conditions revealed during construction differ from those anticipated.

Within the limitations of scope, schedule and budget, the analysis, conclusions, and recommendations presented in this report were prepared in accordance with generally accepted professional principles and practices in the fields of geotechnical engineering and engineering geology in this area at the time the report was prepared. No warranty, express or implied, is made. The scope of our work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water, or groundwater at this site.

Within the limitations of scope, schedule, and budget, our services were executed in accordance with generally accepted practices in this area at the time this report was prepared. No warranty, express or implied, should be understood.

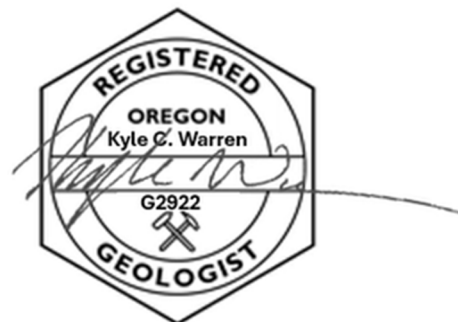
Please feel free to call our office with questions regarding this letter.

Respectfully,

Central Geotechnical Services, LLC



Krey Younger, P.E., G.E.
Principal Engineer

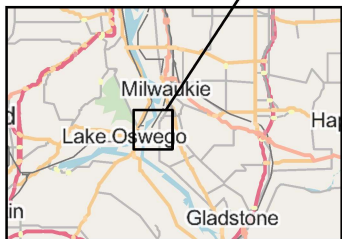


Renews: 4-30-25

Kyle Warren, RG
Project Manager

Attachments:

- Site Vicinity Map (Figure 1)
- Plan Showing Exploration Locations (Figure 2)
- Boring Logs (B-1 through B-6)



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ClackCo-3-01- Laurie Avenue

Project Vicinity



Figure-1

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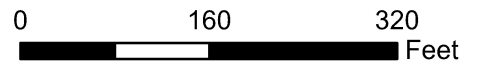
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Legend

Points

Exploration Designation and Approximate Location

 Boring



Sources:Maxar, Microsoft

ClackCo-3-01- Laurie Avenue	
Site Plan	
	Figure-2

Relative Density - Coarse-Grained Soil						GEOTECHNICAL TESTING EXPLANATIONS		
Term	SPT (140-lb Hammer)*	D&M Sampler (140-lb Hammer)*		D&M Sampler (300-lb Hammer)*	ATT	Atterberg Limits		
Very-loose	0-4	0-11		0-4	CBR	California Bearing Ratio		
Loose	4-10	11-26		4-10	CON	Consolidation		
Medium-dense	10-30	26-74		10-30	DD	Dry Density		
Dense	30-50	74-120		30-47	DS	Direct Shear		
Very-dense	>50	>120		>47	HYD	Hydrometer Gradation		
Consistency - Fine-Grained Soil						LL	Liquid Limit	
Term	SPT (140-lb Hammer)*	Sampler (140-lb Hammer)*	Sampler (300-lb Hammer)*	Pocket Pen (tsf)	Torvane (tsf)	PL	Plastic Limit	
						PI	Plasticity Index	
Very-soft	0-2	0-3	0-2	<0.25	<0.13	MC	Moisture Content	
Soft	2-4	3-6	2-5	0.25-0.5	0.13-0.25	MD	Moisture-Density	
Medium-stiff	4-8	6-12	5-9	0.5-1	0.25-0.5	NP	Non-Plastic	
Stiff	8-15	12-25	9-19	1.0-2.0	0.5-1.0	OC	Organic Content	
Very-stiff	15-30	25-65	19-31	2.0-4.0	1.0-2.0	P	Pushed Sample	
Hard	>30	>65	>31	>4.0	>2.0	PP	Pocket Penetrometer	
SPT N-value correlation based off ASTM D1586						RES	Resilient Modulus	
Unified Soil Classification System (USCS)						SIEV	Sieve Gradation	
USCS Symbols	Graph	Typical Descriptions				TOR	Torvane	
GP		Poorly graded GRAVEL, <5% fines				UC	Unconfined Compressive Strength	
GP-GM/GP-GC		Poorly graded GRAVEL w/ silt/clay, 5 to 12% fines				VS	Vane Shear	
GM		silty GRAVEL, over 12% fines				CONTACT LINES		
GC		clayey GRAVEL, over 12% fines				Distinct contact between soil strata (approximate location)		
GW		well graded GRAVEL, <5% fines				Approximate contact between soil strata		
SP		poorly graded SAND, <5% fines						
SP-SM/SP-SC		poorly graded SAND w/ silt/clay, 5 to 12% fines						
SM		silty SAND, over 12% fines				WATER LEVELS		
SC		clayey SAND, over 12% fines					Water Level at Time of Drilling, or as labeled	
SW		well graded SAND, <5% fines					Water Level at End of Drilling, or as labeled	
ML		SILT, low plasticity					Static Water Level, or as labeled	
MH		SILT, high plasticity						
CL		CLAY, low plasticity						
CH		CLAY, high plasticity						
OL		ORGANIC SILT, low plasticity				Moisture (ASTM D2488)		
OH		ORGANIC CLAY, medium to high plasticity				Dry	Very low moisture, dry to touch	
PT		PEAT				Moist	Damp, without visible moisture	
						Wet	Visible free water, usually saturated	
ADDITIONAL CONSTITUENTS						ADDITIONAL MATERIALS		
Silt/Clay in:			Sand/Gravel in:					
Percent*	Fine-Grained	Coarse-Grained	Percent*	Fine-Grained	Coarse-Grained	AC		ASPHALT CONCRETE
<5	trace	trace	<5	trace	trace	CC		CEMENT CONCRETE
5-12	minor	with	5-15	minor	minor	CR		CRUSHED ROCK
>12	some	silty/clayey	15-30	with	with	SOD		SOD/FOREST DUFF
			>30	sandy/gravelly	with	FILL		FILL
SYMBOL	SAMPLER DESCRIPTIONS				SYMBOL	SAMPLER DESCRIPTIONS		
	Location of grab sample (GS)					Location of sample collected using Standard Penetration Test with recovery (SS)		
	No Recovery					Location of sample collected using Shelby tube/Geoprobe sample with recovery (ST)		
	Location of rock coring interval (RC)					Location of sample collected using Dames & Moore sampler or pushed with recovery (D&M)		

ROCK HARDNESS			
Designation	Term	Field Classification	Uniaxial Compressive Strength (psi)
R0	Extremely-Weak	Idented by thumbnail	< 145
R1	Very-Weak	Can be peeled by pocket knife	145 - 725
R2	Weak	Difficult to peel with pocket knife	725 - 3,600
R3	Medium-Strong	Broken by single rock hammer blow	3,600 - 7,250
R4	Strong	More than one rock hammer blow	7,250 - 14,500
R5	Very-Strong	Many rock hammer blows to break	14,500 - 36,250
R6	Extremely-Strong	Can only be chipped by repeated blows	> 36,250
ROCK WEATHERING			
Fresh		No discoloration or oxidation. Crystals bright.	
Slightly Weathered		Generally fresh. Discoloration or oxidation limited to surface or short distance from fractures.	
Moderately Weathered		Significant portion show discoloration and weathering effects. Crystals are dull and show alteration.	
Predominately Decomposed		More than 50% decomposed. Rock mass is largely discolored or oxidized. All fracture surfaces discolored or oxidized and friable.	
Decomposed		Original rock fabric may be evident. May be reduced to soil with hand pressure.	
FRACTURING			
Very intensely fractured		Chips and fragments with a few scattered short core lengths	
Intensely fractured		0.1 foot to 0.3 foot with scattered fragments intervals	
Moderately fractured		0.3 foot to 1 foot with most lengths 0.6 foot	
Slightly fractured		1 foot to 3 feet	
Very slightly fractured		Greater than 3 feet	
Unfractured		No fractures	
HEALING			
Not healed		Discontinuity surface, fractured zone, sheared material or filling not re-cemented	
Partly healed		Less than 50% of fractured or sheared material	
Moderately Healed		Greater than 50% of fractured or sheared material	
Totally Healed		All fragments bonded	
ROCK QUALITY DESIGNATION (RQD)			

$$RQD = \frac{\sum \text{Length of Core Pieces} > 2x \text{ core diameter}}{\text{Total Core Run Length}} \times 100 \%$$

CORE LOG TEMPLATE V05-07.24 - GINT STD US LAB.GDT - 5/20/24 10:00 - C:\USERS\CGS\USER\CENTRAL GEOTECHNICAL SERVICES\CGS - PROJECTS\A-H\CLACKCO-3\CLACKCO-3-01\FIELD EXPLORATION\2 - FIELD AND DRAFT LOGS\CLACK



Central Geotechnical Services
 10240 SW Nimbus Ave, Suite L6
 Portland, OR 97223
 Telephone: (503) 616-9419

Project No:
ClackCo-3-01

BORING LOG B-1

PAGE 1 OF 1

Project: Laurie Avenue Sewer	Date Started: 3/22/24	Approximate Ground Elevation: 172ft
Location: Laurie Avenue, Portland, Oregon	Date Completed: 3/22/24	Groundwater first encountered: ---
Client: 3J Consulting		Groundwater at end of drilling: ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY (in.)	RQD (%)	MOISTURE (%)	BLOW COUNTS	LAB RESULTS
0								
0.5		ASPHALT CONCRETE (5.5 inches)						
1		Dense, gray and brown, silty GRAVEL with sand (GM), moist (12.0 inches of AGGREGATE BASE)						
1.5		Medium-stiff, dark-brown to brown with orange and black mottles, gravelly CLAY with sand (CL), moist, gravel is angular fragments of weathered rock, gravel is friable, sand is fine to coarse (DECOMPOSED BASALT)						
3			SS S-1	12			6-4-4	
5		Grades to hard at 5 feet bgs						
6			SS S-2	4			7-20-33	
8			SS S-3	12			35-50/2"	
11			SS S-4	12			28-37-50/5"	
11.5								

Boring completed at 11.5 feet bgs.
 No groundwater observed.

Hammer efficiency factor is 84.1%.

Operator: Western States Soil Conservation, Inc.	Logged By: Adrian C.	Notes: Ground elevation based on Google Earth Pro.
Equipment: CME 75 HT Truck Rig Rig Number: Truck #5	Checked By: Kyle W.	
Drilling Method: 6.25" HSA	Approximate Location Coordinates:	
	Lat: Long:	

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Project No:
ClackCo-3-01

BORING LOG B-2

Project: Laurie Avenue Sewer	Date Started: 3/22/24	Approximate Ground Elevation: 172ft
Location: Laurie Avenue, Portland, Oregon	Date Completed: 3/22/24	Groundwater first encountered: ---
Client: 3J Consulting		Groundwater at end of drilling: ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY (in.)	RQD (%)	MOISTURE (%)	BLOW COUNTS	LAB RESULTS
0								
0.5		ASPHALT CONCRETE (5.5 inches)						
1		Dense, gray and brown, silty GRAVEL with sand (GM), moist (12.0 inches of AGGREGATE BASE)	GS S-1					
1.5		Very-dense, dark gray to brown GRAVEL with silt (GP-GM), moist (DECOMPOSED BASALT)						
2								
3			SS S-2	12			50/4"	
4								
5		Switched to rock coring at 5 feet bgs						
5.0		Extremely-weak (R0) to weak (R2), dark-gray to brown, BASALT with silt, moist, moderately weathered, fractured, blocky	RC S-4	18	0			
6								
7								
8								
9			RC S-5	28	0			
10								
11								
11.5								

Boring completed at 11.5 feet bgs.
 No groundwater observed.

Hammer efficiency factor is 84.1%.

Operator: Western States Soil Conservation, Inc.	Logged By: Adrian C.	Notes: Ground elevation based on Google Earth Pro.
Equipment: CME 75 HT Truck Rig Rig Number: Truck #5	Checked By: Kyle W.	
Drilling Method: 6.25" HSA	Approximate Location Coordinates: Lat: Long:	

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Project No:
ClackCo-3-01

BORING LOG B-3

Project: Laurie Avenue Sewer	Date Started: 3/22/24	Approximate Ground Elevation: 171 ft
Location: Laurie Avenue, Portland, Oregon	Date Completed: 3/22/24	Groundwater first encountered: ---
Client: 3J Consulting		Groundwater at end of drilling: ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE NUMBER	RECOVERY (in.)	RQD (%)	MOISTURE (%)	BLOW COUNTS	LAB RESULTS
0								
0.4		ASPHALT CONCRETE (4.5 inches)						
0.5		Dense, gray and brown, silty GRAVEL with sand (GM), moist (2.0 inches of AGGREGATE BASE)						
2.0		Soft to medium-stiff, brown SILT with gravel (ML), moist, gravel is angular (FILL)						
3.0		Stiff, gray to brown with orange and black streaks, gravelly CLAY with sand (CL), moist, gravel is angular fragements of weathered rock, sand is fine to coarse, gravel is friable (DECOMPOSED BASALT)	SS S-1	12			7-10-4	
5.0		Grades to hard at 5 feet bgs						
6.0			SS S-2	12			25-50/6"	
8.0			SS S-3	12			22-50/5"	
9.0								

Boring completed at 9.0 feet bgs.
 No groundwater observed.

Hammer efficiency factor is 84.1%.

Operator: Western States Soil Conservation, Inc.	Logged By: Adrian C.	Notes: Ground elevation based on Google Earth Pro.
Equipment: CME 75 HT Truck Rig Rig Number: Truck #5	Checked By: Kyle W.	
Drilling Method: 6.25" HSA	Approximate Location Coordinates: Lat: Long:	

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Project No:
ClackCo-3-01

BORING LOG B-4

PAGE 1 OF 1

Project: Laurie Avenue Sewer	Date Started: 3/25/24	Approximate Ground Elevation: 174ft
Location: Laurie Avenue, Portland, Oregon	Date Completed: 3/25/24	Groundwater first encountered: ---
Client: 3J Consulting		Groundwater at end of drilling: ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY (in.)	RQD (%)	MOISTURE (%)	BLOW COUNTS	LAB RESULTS
0								
0.4		ASPHALT CONCRETE (5.0 inches)						
0.8		Dense, gray and brown, silty GRAVEL with sand (GM), moist (4.0 inches of AGGREGATE BASE)						
1		Very-stiff, dark-brown to brown with orange and black streaks, gravelly SILT with sand (ML), moist, gravel is angular fragements of weathered rock, sand is fine to coarse, gravel is friable (DECOMPOSED BASALT)	SS S-1	16			8-9-20	
2								
3								
4								
5		Grades to hard at 5.0 feet	SS S-2	16			16-18-39	
6								
7								
8		Grades to dark gray at 7.5 feet bgs	SS S-3	17			22-34-50/2"	
9								
10								
11			SS S-4	18			27-36-50/3"	
11.5								

Boring completed at 11.5 feet bgs.
 No groundwater observed.

Hammer efficiency factor is 80.4%.

Operator: Western States Soil Conservation, Inc.	Logged By: Ruslan P.	Notes: Ground elevation based on Google Earth Pro.
Equipment: CME 55 HT Track Rig Rig Number: Track #2	Checked By: Kyle W.	
Drilling Method: 6.25" HSA	Approximate Location Coordinates: Lat: Long:	

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Telephone: (503) 616-9419

Project No:
ClackCo-3-01

BORING LOG B-5

PAGE 1 OF 1

Project: Laurie Avenue Sewer	Date Started: 3/25/24	Approximate Ground Elevation: 174ft
Location: Laurie Avenue, Portland, Oregon	Date Completed: 3/25/24	Groundwater first encountered: ---
Client: 3J Consulting		Groundwater at end of drilling: ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY (in.)	RQD (%)	MOISTURE (%)	BLOW COUNTS	LAB RESULTS
0								
0.4		ASPHALT CONCRETE (5.0 inches)						
0.8		Dense, gray and brown, silty GRAVEL with sand (GM), moist (4.0 inches of AGGREGATE BASE)	GS S-1					
2.0		Soft to medium-stiff, brown SILT with gravel (ML), moist, gravel is angular (FILL)						
3.0		Very-stiff, brown with orange and black streaks, gravelly CLAY with sand (CL), moist, gravel is angular fragements of weathered rock, sand is fine to coarse, gravel is friable (DECOMPOSED BASALT)	SS S-2	12			5-5-13	
5.0		Grades to hard at 5.0 feet bgs						
6.0			SS S-3	12			30-50/5"	
8.0		Very-dense, dark-gray to gray, GRAVEL with clay and sand (GP-GC), moist, sand is fine to medium, sand and gravel are weathered rock fragments (DECOMPOSED BASALT)	SS S-4	4			50/4"	
11.5			SS S-5	3			50/3"	

Boring completed at 11.5 feet bgs.
No groundwater observed.

Hammer efficiency factor is 80.4%.

Operator: Western States Soil Conservation, Inc.	Logged By: Ruslan P.	Notes: Ground elevation based on Google Earth Pro.
Equipment: CME 55 HT Track Rig Rig Number: Track #2	Checked By: Kyle W.	
Drilling Method: 6.25" HSA	Approximate Location Coordinates: Lat: Long:	

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Telephone: (503) 616-9419

Project No:
ClackCo-3-01

BORING LOG B-6

PAGE 1 OF 1

Project: Laurie Avenue Sewer	Date Started: 3/25/24	Approximate Ground Elevation: 176ft
Location: Laurie Avenue, Portland, Oregon	Date Completed: 3/25/24	Groundwater first encountered: ---
Client: 3J Consulting		Groundwater at end of drilling: ---

DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY (in.)	RQD (%)	MOISTURE (%)	BLOW COUNTS	LAB RESULTS
0								
0.5		ASPHALT CONCRETE (6.0 inches)						
0.9		Dense, gray and brown, silty GRAVEL with sand (GM), moist (5.0 inches of AGGREGATE BASE)	GS S-1					
2		Very-stiff, red-brown, sandy SILT (ML), moist, sand is fine to coarse						
3.7		Very-stiff, light-brown to dark-brown with orange and black streaks, gravelly CLAY with sand (CL), moist, gravel is angular fragments of weathered rock at 5.0 feet bgs, (DECOMPOSED BASALT)	SS S-2	16			7-7-10	
5								
6			SS S-3	16			5-7-15	
8			SS S-4	7			50/5"	
11.5			SS S-5	7			50/5"	

Boring completed at 11.5 feet bgs.
No groundwater observed.

Hammer efficiency factor is 80.4%.

Operator: Western States Soil Conservation, Inc.	Logged By: Ruslan P.	Notes: Ground elevation based on Google Earth Pro.
Equipment: CME 55 HT Track Rig Rig Number: Track #2	Checked By: Kyle W.	
Drilling Method: 6.25" HSA	Approximate Location Coordinates: Lat: Long:	