



May 15, 2025

BCC Agenda Date/Item: _____

Board of County Commissioners
Acting as the governing body of Water Environment Services
Clackamas County

Approval of a Public Improvement Contract with Trench Line Excavation for construction services during rehabilitation of the Mt. Talbert Interceptor. Contract Value is \$638,656.19 for 4 months. Funding is through the WES Sanitary Sewer Construction Fund. No County General Funds are involved.

Previous Board Action/Review	N/A		
Performance Clackamas	1. This project supports the WES Strategic Plan goal that WES strategically plan and upgrade WES' infrastructure to ensure the sustainable delivery of reliable, high-quality, and climate-resilient clean water services that support the growth and vitality of our communities, natural environment, and economy. 2. This project supports the County's Strategic Plan of building a strong infrastructure.		
Counsel Review	Yes	Procurement Review	Yes
Contact Person	Jeff Stallard	Contact Phone	503-742-4694

EXECUTIVE SUMMARY: The Mt. Talbert Interceptor was constructed in 1974 to convey flows from portions of Happy Valley to WES' Kellogg Creek Water Resource Recovery Facility. Near the intersection of SE Sunnybrook Blvd. and SE 97th Ave., an existing sanitary sewer pipe, constructed in 1980, crosses Mt. Scott Creek and connects to the Mt. Talbert Interceptor. Mt. Scott Creek has eroded and shifted over the years such that a manhole and a significant portion of the sanitary sewer pipe was exposed in the creek. In 2022, a short section of the pipe broke allowing untreated sewerage to enter the creek. WES implemented an emergency repair to the pipe at that time. The emergency repair was a temporary solution until WES could design and construct a permanent solution to mitigate the risk of future pipe breaks due to ongoing creek erosion.

The design of the permanent realignment of the sewer has been completed, and this contract supports the construction of approximately 815 feet of new pipe to divert flows to a downstream connection to the Mt. Talbert Interceptor.

For Filing Use Only

RECOMMENDATION: Staff recommends that the Board of County Commissioners of Clackamas County, acting as the governing body of Water Environment Services, approve Contract #1291 with Trench Line Excavation Inc. for construction services for the Mt. Talbert Interceptor rehabilitation project.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Greg Geist", with a stylized flourish extending to the right.

Greg Geist
Director, WES

Attachment: Contract #1291 Trench Line Excavation Inc.



**WATER ENVIRONMENT SERVICES
PUBLIC IMPROVEMENT CONTRACT**
Contract #1291

This Public Improvement Contract (the "Contract") is made by and between Water Environment Services, an intergovernmental entity formed pursuant to ORS Chapter 190 ("Owner"), and Trench Line Excavation, Inc. (the "Contractor"), both collectively the "Parties". This Contract shall become effective on the date this Contract has been signed by all the Parties and shall expire upon completion the completion of all obligations under the terms of this Contract unless terminated earlier by the Parties.

All capitalized terms in this Contract shall have the meanings identified in the Clackamas County General Conditions for Public Improvement Contracts (11/21/2024) ("General Conditions") referenced within the Instructions to Bidders.

Project Name: **BID #2025-25 Mt. Talbert MTA Pipe Rehabilitation**

1. Contract Price, Contract Documents and Work.

The Contractor hereby agrees to perform all Work described in, and reasonably inferred from, the Contract Documents. In consideration of the Contractor performing the Work in accordance with the terms of the Contract, the Owner agrees to pay the Contractor an amount not to exceed **six hundred thirty-eight thousand six hundred fifty-six dollars and nineteen cents (\$638,656.19)** (the "Contract Price"). Payment will be made in accordance with the terms and conditions provided in the Contract Documents. The Contract Price is the amount contemplated by the Base Bid.

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
- Clackamas County General Conditions
- Prevailing Wage Rates
- Plans, Specifications and Drawings
- Instructions to Bidders
- Bid Bond
- Performance Bond and Payment Bond
- Supplemental General Conditions
- Payroll and Certified Statement Form

2. Representatives.

Contractor has named Christopher Stoddard 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 Rice 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: Christopher Stoddard shall be the Contractor's project executive, and will provide oversight and guidance throughout the project term.

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

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

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

4. Contract Dates.

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

COMMENCEMENT DATE: Upon Issuance of Notice to Proceed

SUBSTANTIAL COMPLETION DATE: 90 calendar days of Notice-To-Proceed

FINAL COMPLETION DATE: 120 calendar days of Notice-To-Proceed

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. Liquidated Damages

The Owner and the Contractor acknowledge and agree that if the Contractor fails to reach Substantial Completion of the entire Work by the Substantial Completion Date identified in Section 4 above, the Owner will suffer damages, which are both extremely difficult and impracticable to ascertain, and on that basis agree to the assessment by Owner of liquidated damages as provided in this Section. These damages may include, but are not limited to, use of the Project, costs associated with Contract administration, and use of temporary facilities. The liquidated damages amount is not a penalty, but a reasonable estimate of the amount of losses the Owner will suffer. The Owner may deduct such liquidated damages as are payable under this Section from money due or to become due to the Contractor, or pursue any other legal remedy to collect such liquidated damages from the Contractor and/or its Surety.

If the Contractor fails to achieve Substantial Completion of the entire Work by the Substantial Completion Date identified in Section 4, the Contractor shall pay the Owner as liquidated damages the amount of **\$385/day for each day** occurring after the expiration of the date for Substantial Completion until the Contractor achieves Substantial Completion of the entire Work.

6. Change Order Authorization.

Throughout the performance of the Work under this Agreement, the Owner's Authorized Representative is hereby granted the authority to verbally authorize change orders in the field for an amount up to \$10,000. As soon as possible following the authorization, the Owner's Authorized Representative shall complete the change order form provided by Clackamas County Procurement ("Procurement"), obtain the signature of Owner's Director or other authorized signatory, and submit the form to Procurement for processing. As soon as the Director signs off on the change order form, the Authorized Representative may then authorize another change order in the future for up to \$10,000 following the same procedure above. Each change order should include the cumulative cost of the entire change and may not be artificially broken up into multiple change orders to fall under the dollar threshold listed above. The authority granted to the Authorized Representative is limited by the Director's authorization to amend the Agreement under Clackamas County's Local Contract

Review Board Rules and is subject to the discretion of the Director, who may suspend or restrict the Authorized Representative ability to authorize change orders at any time for any reason.

7. Insurance Certificates.

In accordance with Section G.3.5 of the General Conditions, Contractor shall furnish proof of the required insurance naming Clackamas County and Water Environment Services as additional insureds. Insurance certificates may be returned with the signed Contract or may emailed to Procurement@clackamas.us.

8. Tax Compliance.

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

9. 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.

10. 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.

11. 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.

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.

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

Contractor DATA:

Trench Line Excavation, Inc.
33871 SE Eastgate Circle
Corvallis, Oregon 97333

Contractor CCB # 105905 Expiration Date: 1/19/2026

Oregon Business Registry # 701203-82 Entity Type: DBC

State of Formation: Oregon

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.

Trench Line Excavation, Inc.

Water Environment Services



4/22/2025

Signature

Date

Chair

Date

Christopher Stoddard / President

Name / Title Printed

Recording Secretary

APPROVED AS TO FORM



County Counsel

4/29/2025

Date



CLACKAMAS COUNTY PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

Table of Contents

Section B-1	Notice of Public Improvement Contract Opportunity
Section B-2	Instructions to Bidders
Section B-3	Supplemental Instructions to Bidders
Section B-4	Bid Bond
Section B-5	Bid Form
Section B-6	Public Improvement Contract
Section B-7	Supplemental General Conditions
Section B-8	General Conditions
Section B-9	Performance Bond
Section B-10	Payment Bond
Section B-11	Project Information, Plans, Specifications and Drawings



CLACKAMAS COUNTY
NOTICE OF PUBLIC IMPROVEMENT CONTRACT OPPORTUNITY

INVITATION TO BID #2025-25
Mt. Talbert MTA Pipe Rehabilitation
March 12, 2025

Clackamas County ("County") on behalf of Water Environment Services through their Board of County Commissioners is accepting sealed bids for the **Mt. Talbert MTA Pipe Rehabilitation** Project until **April 30, 2025, 2:00 PM, Pacific Time**, ("Bid Closing") at the following location:

Bidding Documents can be downloaded from the state of Oregon procurement website ("OregonBuys") at the following address: <https://oregonbuys.gov/bsa/view/login/login.xhtml>, Document No.S-C01010-00013147.

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/clackamascountry/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: \$790,000.00

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.

Prevailing Wage

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

PREVAILING WAGE RATES for Public Works Contracts in Oregon, January 3, 2025, which can be downloaded at the following web address:, which can be downloaded at the following web address: http://www.oregon.gov/boli/WHDPWR/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, Clackamas County General Conditions for Public Improvement Contracts (10/13/2021), Supplemental General Conditions, 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 BID# 2025-25 Mt. Talbert MTA Pipe Rehabilitation

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. 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/clackamascountry/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://clackamascountry.zoom.us/j/81557566439>

Meeting ID: 815 5756 6439

One tap mobile

+12532158782,,81557566439# US (Tacoma)

+13462487799,,81557566439# US (Houston)

Dial by your location

- +1 253 215 8782 US (Tacoma)
- +1 346 248 7799 US (Houston)
- +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
- +1 312 626 6799 US (Chicago)
- +1 360 209 5623 US
- +1 386 347 5053 US
- +1 507 473 4847 US
- +1 564 217 2000 US
- +1 646 876 9923 US (New York)
- +1 646 931 3860 US
- +1 689 278 1000 US
- +1 301 715 8592 US (Washington DC)

- +1 305 224 1968 US
- +1 309 205 3325 US

Meeting ID: 815 5756 6439

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

****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.

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

Prime Contractor Name: Trench Line Excavation, Inc.
Project Name: BID#2025-25 Mt. Talbert MTA Pipe Rehabilitation

Total Contract Amount: \$ 638,656.19

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)	
<u>Excavating (91244)</u>	<u>Sewer, Water, Storm Drain Work (91345)</u>

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

LIST ALL SUBCONTRACTORS BELOW Use <u>correct legal name</u> of Subcontractor (No Assumed Business Names)	Division of Work (Painting, electrical, landscaping, etc.) List ALL DOW performed by Subcontractors	DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reporting MBE/WBE/ESB Subcontractor Check box <input checked="" type="checkbox"/>		
			MBE	WBE	ESB
Name Eastside Paving, Inc. Address P.O. Box 1049 City/St/Zip Gresham, OR 97030 Phone# 503-492-7563 OCCB# 068962	Asphalt Paving	\$47,375.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Long Horn Geomatics Address 10940 SW Barnes RD #189 City/St/Zip Portland, OR 97225 Phone# 1-403-601-1147 OCCB# N/A	Survey	\$3,800.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Roger Langeliers Address 7145 NE Progress CT. City/St/Zip Hillsboro, OR 97124 Phone# 503-533-5709 OCCB# 106364	Concrete	\$5,418.00	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Name Address City/St/Zip To be determined based on availability of trucks/drivers Phone# OCCB#	Hauling		<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: Trench Line Excavation, Inc.
Project: BID#2025-25 Mt. Talbert MTA Pipe Rehabilitation

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>>)	
Alamo Paving Co.	91395 - Asphalt Paving	3/17/2025	3/25/25	Left Voicemail	<input type="checkbox"/> Yes <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-243-1335 Contact@alamopaving.com
Heffner Paving, LLC.	91395 - Asphalt Paving	3/17/2025	3/25/25	Left Voicemail	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-908-1763 Heffnerpaving@outlook.com
Settje Sons Paving, LLC	91395 - Asphalt Paving	3/17/2025	3/25/25	James Settje	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	971-284-5492 Heather@settjesonspaving.com
Bailey's Construction Unlimited, LLC	96239 - Hauling Services	3/17/2025	3/25/25	Bailey	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-473-7110 Sentabailey@hotmail.com
BJ3 Transport, LLC	96239 - Hauling Services	3/17/2025	3/25/25	Left Voicemail	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-957-1705 Bj3transport@yahoo.com
Eddy Excavation, LLC	96239 - Hauling Services	3/17/2025	3/25/25	Eddy	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-709-8340 Eddyexcavation@yahoo.com
Faison Construction, Inc.	91430 - Concrete	3/17/2025	3/25/25	Kevin	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-493-0684 Joe@faisonconstruction.com

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

Prime Contractor: Trench Line Excavation, Inc.

Project: BID#2025-25 Mt. Talbert MTA Pipe Rehabilitation

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>>)	
Jhonny's Concrete Services, LLC	91430 - Concrete	3/17/2025	3/25/25	Jhonny	<input checked="" type="checkbox"/> Yes <input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	\$9,000	Price to high compared to other bids received	503-421-3129 Johnnysconcreteservicesllc@gmail.com
NW Blueprint Construction, LLC	91430 - Concrete	3/17/2025	3/25/25	Left voicemail	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-715-7411 Rudy.martinez@nwblueprint.com
A&D Flagging, LLC	96884 - Traffic Control Services	3/17/2025	3/25/25	Left voicemail	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-875-1625 Adflagging@gmail.com
D&H Flagging, Inc.	96884 - Traffic Control Services	3/17/2025	3/25/25	Left voicemail	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-232-2488 Estimates@d-hflagging.com
NW Traffic Control, Inc.	96884 - Traffic Control Services	3/17/2025	3/25/25	Curtis	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-262-6500 Curtis@nwtci.com
3 Point Design Group, LLC	96460 - Land Survey	3/17/2025	3/25/25	Attempted to call several times, did not respond	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	509-508-0969 Ihepfner@3pointdg.com
Forty Five North Surveying, LLC	96460 - Land Survey	3/17/2025	3/25/25	Left Voicemail	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	503-558-3330 Showell@ffsurveying.com

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

Prime Contractor: Trench Line Excavation, Inc.

Project: BID#2025-25 Mt. Talbert MTA Pipe Rehabilitation


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>>)	
Paul Engineering & Land Surveying, LLC	96460 - Land Survey	3/17/2025	3/25/25	Andrew	<input type="checkbox"/> Yes <input type="checkbox"/>	<input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>		Did not receive bid	541-363-9083 Paulengsvy@gmail.com
					<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>			
					<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>			
					<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>			
					<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>			
					<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>			

**CLACKAMAS COUNTY
GOOD FAITH EFFORT
PROJECT COMPLETION REPORT
(FORM 3)**

Prime Contractor Name: Trench Line Excavation, Inc. Total Contract Amount: \$
Project Name: BID#2025-25 Mt. Talbert MTA Pipe Rehabilitation

Complete this form and submit with your request for final payment upon the project completion. Please list all subcontractors used for the project. Use additional sheets as necessary.

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	FINAL DOLLAR AMOUNT OF SUBCONTRACT	If Certified or self-reported MBE/WBE/ESB Subcontractor Check box 		
			MBE	WBE	ESB
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"/>

BY SIGNING BELOW, I HEREBY CERTIFY THAT THE ABOVE LISTED FIRMS HAVE BEEN UTILIZED BY OUR COMPANY IN THE AMOUNTS REPRESENTED ABOVE AND THAT THE INFORMATION CONTAINED HEREIN IS COMPLETE AND ACCURATE. .

Authorized Signature of Contractor Representative

Date



PUBLIC IMPROVEMENT CONTRACT

BID BOND

Project Name: # 2025-25 Mt. Talbert MTA Pipe Rehabilitation

We, Trench Line Excavation, Inc, as "Principal,"
(Name of Principal)

and Merchants Bonding Company (Mutual), 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 Water Environment Services ("Obligee") the sum of (\$ 10%)

Ten Percent of Total Amount Bid _____ dollars.

WHEREAS, the condition of the obligation of this bond is that Principal has submitted its proposal or bid to an agency of the Obligee in response to Obligee's procurement document (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.

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 13th day of March, 2025.

Principal: Trench Line Excavation, Inc

Surety: Merchants Bonding Company (Mutual)

By: [Signature]
Signature

By: Attorney-In-Fact

President
Official Capacity

Tracy Stewart
Name

Attest: Kristen Stoddard
Corporation Secretary

1605 Liberty Street SE
Address

Salem, OR 97302

City State Zip
(503) 362-2711 tracy@agsadowski.com
Phone Fax Email

MERCHANTS
BONDING COMPANYTM
POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, d/b/a Merchants National Indemnity Company (in California only) (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

A G Sadowski; Derek A Sadowski; Staci O'Dell; Tracy Stewart; Ty Moffett

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 16th day of July, 2024.



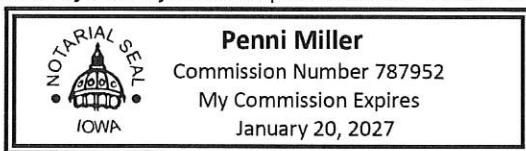
MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
d/b/a MERCHANTS NATIONAL INDEMNITY COMPANY

By

Larry Taylor
President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 16th day of July, 2024, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.



(Expiration of notary's commission does not invalidate this instrument)

[Signature]
Notary Public

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 13th day of March, 2025.



William Warner Jr.
Secretary



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

3/13/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Nick Rusow	
AG Sadowski Company	PHONE (A/C, No, Ext): (503) 362-2711	
1605 Liberty Street SE	FAX (A/C, No):	
	E-MAIL ADDRESS: nick@agsadowski.com	
	INSURER(S) AFFORDING COVERAGE	NAIC #
Salem OR 97302	INSURER A: Union Insurance Co	25844
INSURED	INSURER B: Continental Western Ins Co	10804
Trench Line Excavation, Inc.	INSURER C: SAIF Corporation	36196
Top Grade Plumbing, LLC	INSURER D: Navigators Specialty Insurance Company	36056
33871 SE Eastgate Circle	INSURER E:	
Corvallis 97333	INSURER F:	

COVERAGES

CERTIFICATE NUMBER: 2024-25 PROJECTS

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			CPA 6055870	6/26/2024	6/26/2025	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000
B	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS			CPA 6056113	6/26/2024	6/26/2025	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			CPA 6055870	6/26/2024	6/26/2025	EACH OCCURRENCE \$ 5,000,000 AGGREGATE \$ 5,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/>	N/A	791366 (Trench Line) 100060685 (Top Grade)	7/1/2024 7/1/2024	7/1/2025 7/1/2025	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
D	POLLUTION LIABILITY			SF24ECP000555NC	6/1/2024	6/26/2026	OCCURENCE \$2,000,000 AGGREGATE \$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Mt Talbert MTA Pipe Replacemnt

Certificate Holder and all required entities are Additional Insured when required by written contract and per the terms/conditions of the above policies.

Endorsements attached: CL CG 04 92 10 18, CL CG 05 29 10 18, CL CG 01 14 09 16, CL CG 20 71 09 16, and CL CA 01 49 06 17.

Waivers of Subrogation are applicable when required by written contract and allowable by law.

CERTIFICATE HOLDER

CANCELLATION

Clackamas County
807 Main St
Oregon City, OR 97045

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Nicholas Rusow/NICK

© 1988-2014 ACORD CORPORATION. All rights reserved.



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT

BID FORM

PROJECT: BID#2025-25 Mt. Talbert MTA Pipe Rehabilitation
BID CLOSING: April ~~30~~, 2025, 2:00 PM, Pacific Time
BID OPENING: April ~~30~~₃, 2025, 2:05 PM, Pacific Time

FROM: Christopher Stoddard
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 Oregon; or
- ☐ d. A limited liability corporation organized under the laws of the State of _____;

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

Six hundred thirty-eight thousand six
hundred fifty-six and nineteen cents Dollars (\$ 638,656.19)

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
 - Clackamas County General Conditions
 - Prevailing Wage Rates
 - Plans, Specifications and Drawings
 - Supplemental Instructions to Bidders
 - Bid Form
 - Performance Bond and Payment Bond
 - Supplemental General Conditions
 - Payroll and Certified Statement Form
- ADDENDA numbered 1 through 1, inclusive (fill in blanks)

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

3. The Undersigned proposes to add to or deduct from the Base Bid indicated above the items or work relating to the following Unit Price(s) as designated in the Specifications, for which any adjustments in the Contract amount will be made in accordance with Section D of the Clackamas County General Conditions: **Provide attached bid schedule with Bid.**

4. The work shall be completed within the time stipulated and specified in the Contract documents.

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 all 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:

Merchants Bonding Company (Mutual)
(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 105905. 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 SAIF, Policy No. 791366, and that Contractor shall submit Certificates of Insurance as required.

14. Contractor's Key Individuals for this project (supply information as applicable):
Project Executive: Christopher Stoddard, Cell Phone: 541-760-8741,
Project Manager: Kristen Stoddard, Cell Phone: 541-752-0481,
Job Superintendent: Keith Krueger, Cell Phone: 503-779-4125,
Project Engineer: Samantha Meadows, Cell Phone: 541-752-0481.

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	<u>Trench Line Excavation, Inc.</u>
ADDRESS	<u>33871 SE Eastgate Circle</u> <u>Corvallis, OR 97333</u>
TELEPHONE NO	<u>541-752-0481</u>
EMAIL	<u>Kstoddard@tlxdig.com</u>
SIGNATURE 1)	<u></u> Sole Individual

or 2)

Partner

or 3)



Authorized Officer or Employee of Corporation

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

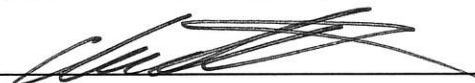
		MT TALBERT MTA PIPE REALIGNMENT					
	Spec Section 01025						
Bid Item	Paragraph	Description		Quantity	Unit Price		Subtotal Price
1	A	Mobilization	Lump Sum	1	\$53,044.63	Lump Sum	\$53,044.63
2	B	Clearing and Removal of Obstructions	Lump Sum	1	\$34,909.02	Lump Sum	\$34,909.02
3	C	Rock Excavation-Stipulated Price	Cubic Yard	20	\$200.00	Cubic Yard	\$4,000.00
4	D	Foundation Material	Cubic Yard	50	\$81.41	Cubic Yard	\$4,070.50
5	E	8-inch Gravity PVC Sewer Pipe with Class A Backfill, All Depths	Linear Foot	102	\$139.02	Linear Foot	\$14,180.04
6	E	8-inch Gravity PVC Sewer Pipe with Class C Backfill, All Depths	Linear Foot	590	\$176.59	Linear Foot	\$104,188.10
7	F	8-inch Gravity Restrained Joint DI Sewer Pipe with Class A Backfill, All Depths	Linear Foot	123	\$190.23	Linear Foot	\$23,398.29
8	H	Manholes	Each	12	\$10,948.57	Each	\$131,382.84
9	I	Inside Drop-Manhole Assembly	Each	1	\$1,971.36	Each	\$1,971.36
10	J	Anchor Blocks	Each	4	\$870.34	Each	\$3,481.36
11	K	Temporary AC Pavement Trench Restoration, 2-inches Thick	Square Foot	2,400	\$3.26	Square Foot	\$7,824.00
12	L	AC Pavement Trench Restoration	Ton	85	\$331.52	Ton	\$28,179.20
13	M	AC Pavement Grinding, 0 to 2-inches Thick	Square Yard	1,900	\$10.02	Square Yard	\$19,038.00
14	N	AC Pavement Overlay, 2-inches thick	Ton	250	\$147.20	Ton	\$36,800.00
15	O	Manhole Coatings	Each	1	\$2,586.28	Each	\$2,586.28
16	P	Traffic Control	Lump Sum	1	\$72,451.65	Lump Sum	\$72,451.65
17	Q	Temporary Rigid Signs	Square Foot	140	\$13.16	Square Foot	\$1,842.40
18	R	Temporary Sign Supports	Each	5	\$709.83	Each	\$3,549.15
19	V	Erosion Control	Lump Sum	1	\$41,465.47	Lump Sum	\$41,465.47
20	W	Shrubs	Each	398	\$16.45	Each	\$6,547.10
21	X	Trees	Each	62	\$109.70	Each	\$6,801.40
22	Y	Seeding	Square Foot	5,400	\$0.55	Square Foot	\$2,970.00
23	Z	Bark Mulch	Cubic Yard	10	\$87.76	Cubic Yard	\$877.60
24	AA	Three Year Planting Area Maintenance Program (Lump sum that covers all three years, not a per year value)	Lump Sum	1	\$19,745.60	Lump Sum	\$19,745.60
25	BB	Sidewalk Replacement, 4-inches thick	Square Foot	120	\$35.55	Square Foot	\$4,266.00
26	CC	Type "C" Curb	Linear Foot	40	\$90.22	Linear Foot	\$3,608.80
27	DD	Filling Abandoned Existing 8-inch Pipe	Linear Foot	510	\$10.74	Linear Foot	\$5,477.40
					Total Project Construction Cost		\$638,656.19

Total Project cost in \$ 638,656.19

Total Project cost (written) Six hundred thirty-eight thousand six hundred fifty-six and nineteen cents

Name of Firm: Trench Line Excavation, Inc.

Authorized Print Name and Signature: Christopher Stoddard



FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM
PROJECT: 2025-25 Mt. Talbert MTA Pipe Rehabilitation

BID OPENING: April 30, 2025, 2:00 PM, Pacific Time

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

INSTRUCTIONS:

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

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>.

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.	Eastside Paving, Inc.	\$47,375	Paving
2.	Fox Erosion Control & Landscape Inc.	\$42,776.90	Erosion Control
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: Trench Line Excavation, Inc.

Bidder Signature:  Phone # 541-752-0481



**CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
SUPPLEMENTAL GENERAL CONDITIONS**

PROJECT: # 2025-25 Mt. Talbert MTA Pipe Rehabilitation

The following modifies the November 21, 2024 Clackamas County General Conditions for Public Improvement Contracts (“County General Conditions”) for this Contract. Except as modified below, all other terms and conditions of the County General Conditions shall remain in effect.

1. Liquidated Damages

The following sections are added to Section D.2 - Delays:

D.2.3 DAMAGES FOR DELAY – LIQUIDATED DAMAGES

- (a) It is imperative that the Work in this Contract reach Substantial Completion by July 31, 2025, and as further required in the Plans and Specifications and Section 10 of the Contract. The Contractor represents and agrees that the Substantial Completion date is reasonable, that it can meet the Substantial Completion date, and it has taken into account in its Offer the requirements of the Contract Documents, the location, the time allowed for the Work, local conditions, weather, availability of materials, equipment, and labor, and any other factor which may affect performance of the Work.
- (b) If the Contractor fails to achieve Substantial Completion as specified above, then the Contractor and Owner agree that it would be extremely difficult to ascertain the damages incurred by Owner for the Contractor’s failure. Therefore, Owner and the Contractor agree that in lieu of actual damages for delay, the Contractor shall reimburse Owner a stipulated sum of \$385/day per calendar past the Substantial Completion Date. The Contractor further agrees the stipulated sum is not a penalty.

2. Good Faith Effort

As a condition of Contractor being awarded a Contract for this Project, Contractor must complete Good Faith Effort outreach and documentation as described in the Supplemental Instructions to Bidders of the Solicitation Document.

The Contractor may not change who is performing each Division of Work identified in Form 1 of the Good Faith Effort without the express written advance approval of Owner. This includes substituting identified subcontractors, self-performance of a Division of Work that was identified to be performed by a subcontractor, or the Contractor

subcontracting a Division of Work that was identified to be self-performed by the Contractor.

Contractor shall be required to submit the completed Form 3 with its final pay application as a condition of final payment.



CLACKAMAS COUNTY GENERAL CONDITIONS FOR PUBLIC IMPROVEMENT CONTRACTS November 21, 2024

INSTRUCTIONS: The attached **Clackamas County General Conditions for Public Improvement Contracts ("County General Conditions")** apply to all designated Public Improvement contracts. Changes to the County General Conditions (including any additions, deletions or substitutions) should only be made by attaching Public Improvement Supplemental General Conditions. The text of these County General Conditions should not otherwise be altered.

TABLE OF SECTIONS

SECTION A - GENERAL PROVISIONS

- A.1 DEFINITION OF TERMS
- A.2 SCOPE OF WORK
- A.3 INTERPRETATION OF CONTRACT DOCUMENTS
- A.4 EXAMINATION OF PLANS, SPECIFICATIONS, AND PROJECT
- A.5 INDEPENDENT CONTRACTOR STATUS
- A.6 RETIREMENT SYSTEM STATUS AND TAXES
- A.7 GOVERNMENT EMPLOYMENT STATUS

SECTION B - ADMINISTRATION OF THE CONTRACT

- B.1 OWNER'S ADMINISTRATION OF THE CONTRACT
- B.2 CONTRACTOR'S MEANS AND METHODS
- B.3 MATERIALS AND WORKMANSHIP
- B.4 PERMITS
- B.5 COMPLIANCE WITH GOVERNMENT REGULATIONS
- B.6 SUPERINTENDENCE
- B.7 INSPECTION
- B.8 SEVERABILITY
- B.9 ACCESS TO RECORDS
- B.10 WAIVER
- B.11 SUBCONTRACTS AND ASSIGNMENT
- B.12 SUCCESSORS IN INTEREST
- B.13 OWNER'S RIGHT TO DO WORK
- B.14 OTHER CONTRACTS

SECTION C - WAGES AND LABOR

- C.1 MINIMUM WAGES RATES ON PUBLIC WORKS
- C.2 PAYROLL CERTIFICATION AND FEE REQUIREMENTS, ADDITIONAL RETAINAGE
- C.3 PROMPT PAYMENT AND CONTRACT CONDITIONS
- C.4 PAYMENT FOR MEDICAL CARE
- C.5 HOURS OF LABOR

SECTION D - CHANGES IN THE WORK

- D.1 CHANGES IN THE WORK
- D.2 DELAYS
- D.3 CLAIMS REVIEW PROCESS

SECTION E - PAYMENTS

- E.1 SCHEDULE OF VALUES
- E.2 APPLICATIONS FOR PAYMENT
- E.3 PAYROLL CERTIFICATION REQUIREMENT
- E.4 DUAL PAYMENT SOURCES
- E.5 RETAINAGE
- E.6 FINAL PAYMENT

SECTION F - PROJECT SITE CONDITIONS

- F.1 USE OF PREMISES
- F.2 PROTECTION OF WORKERS, PROPERTY, AND THE PUBLIC
- F.3 CUTTING AND PATCHING
- F.4 CLEANING UP
- F.5 ENVIRONMENTAL CONTAMINATION
- F.6 ENVIRONMENTAL CLEAN-UP

SECTION G - INDEMNITY, BONDING AND INSURANCE

- G.1 RESPONSIBILITY FOR DAMAGES/INDEMNITY
- G.2 PERFORMANCE AND PAYMENT SECURITY, PUBLIC WORKS BOND
- G.3 INSURANCE

SECTION H - SCHEDULE OF WORK

- H.1 CONTRACT PERIOD
- H.2 SCHEDULE
- H.3 PARTIAL OCCUPANCY OR USE

SECTION I - CORRECTION OF WORK

- I.1 CORRECTIONS OF WORK BEFORE FINAL PAYMENT
- I.2 WARRANTY WORK

SECTION J - SUSPENSION AND/OR TERMINATION OF THE WORK

- J.1 OWNER'S RIGHT TO SUSPEND THE WORK
- J.2 CONTRACTOR'S RESPONSIBILITIES
- J.3 COMPENSATION FOR SUSPENSION
- J.4 OWNER'S RIGHT TO TERMINATE CONTRACT
- J.5 TERMINATION FOR CONVENIENCE, NON-APPROPRIATION OF FUNDS, OR FORCE MAJEURE
- J.6 ACTION UPON TERMINATION

SECTION K - CONTRACT CLOSE-OUT

- K.1 RECORD DOCUMENTS
- K.2 OPERATION AND MAINTENANCE MANUALS
- K.3 COMPLETION NOTICES
- K.4 TRAINING
- K.5 EXTRA MATERIALS
- K.6 ENVIRONMENTAL CLEAN-UP
- K.7 CERTIFICATE OF OCCUPANCY
- K.8 OTHER CONTRACTOR RESPONSIBILITIES
- K.9 SURVIVAL

SECTION L - GENERAL PROVISIONS

- L.1 NO THIRD PARTY BENEFICIARIES
- L.2 SEVERABILITY
- L.3 ACCESS TO RECORDS
- L.4 WAIVER
- L.5 SUCCESSORS IN INTEREST
- L.6 GOVERNING LAW
- L.7 APPLICABLE LAW
- L.8 NON-EXCLUSIVE RIGHTS & REMEDIES
- L.9 INTERPRETATION
- L.10 DEBT LIMITATION
- L.11 LITIGATION
- L.12 SURVIVAL
- L.13 ACCESS TO RECORDS
- L.14 WAIVER
- L.15 NO ATTORNEY FEES

**CLACKAMAS COUNTY GENERAL CONDITIONS
FOR PUBLIC IMPROVEMENT CONTRACTS
("County General Conditions")**

**SECTION A
GENERAL PROVISIONS**

A.1 DEFINITION OF TERMS

In the Contract Documents the following terms shall be as defined below:

APPLICABLE LAWS, means all federal, state and local laws, codes, rules, regulations and ordinances, as amended applicable to the Work, to the Contract, or to the parties individually.

APPROVED BY CONTRACTING AGENCY, for purposes of ORS 279C.570(2), means the date a progress payment is approved by the Clackamas County Treasurer's office.

ARCHITECT/ENGINEER, means the Person appointed by the Owner to make drawings and specifications and, to provide contract administration of the Work contemplated by the Contract to the extent provided herein or by supplemental instruction of Owner (under which Owner may delegate responsibilities to the Architect/Engineer), in accordance with ORS Chapter 671 (Architects) or ORS Chapter 672 (Engineers) and administrative rules adopted thereunder.

AVOIDABLE DELAYS, mean any delays other than Unavoidable Delays, and include delays that otherwise would be considered Unavoidable Delays but that: (a) Could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or its Subcontractors; (b) Affect only a portion of the Work and do not necessarily prevent or delay the prosecution of other parts of the Work nor the completion of the whole Work within the Contract Time; (c) Do not impact activities on the accepted critical path schedule; and (d) Are associated with the reasonable interference of other contractors employed by the Owner that do not necessarily prevent the completion of the whole Work within the Contract Time.

BIDDER, means a bidder in connection with Instructions to Bidders or a proposer in connection with a Request for Proposals, or Solicitation Document. May also be referenced as "Offeror," "Quoter" or "Proposer" based on the type of Solicitation Document.

CHANGE ORDER, means a written order which, when fully executed by the Parties to the Contract, constitutes a change to the Contract Documents. Change Orders shall be issued in accordance with the changes provisions in Section D and, if applicable, establish a Contract Price or Contract Time adjustment. A Change Order shall not be effective until executed by both parties.

CLAIM, means a demand by Contractor pursuant to Section D.3 for review of the denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, submitted in accordance with the requirements and within the time limits established for review of Claims in these County General Conditions.

CONTRACT, means the written agreement between the Owner and the Contractor comprised of the Contract Documents which describe the Work to be done and the obligations between the parties.

CONTRACT DOCUMENTS, means the Contract, County General Conditions, Supplemental General Conditions if any, Plans, Specifications, the accepted Offer, Solicitation Document and addenda thereto, Instructions to Offerors, and Supplemental Instructions to Offerors.

CONTRACT PERIOD, as set forth in the Contract Documents, means the total period of time beginning with the full execution of a Contract

and, if applicable, the issuance of a Notice to Proceed and concluding upon Final Completion.

CONTRACT PRICE, means the total price reflected in the Contract.

CONTRACT TIME, means any incremental period of time allowed under the Contract to complete any portion of the Work as reflected in the Project schedule.

CONTRACTOR, means the Person awarded the Contract for the Work contemplated.

DAYS, are calendar days, including weekdays, weekends and holidays, unless otherwise specified.

DEFECTIVE WORK, means Work that is not completed in accordance with the Specifications or the requirements of the Contract.

DIRECT COSTS, means, unless otherwise provided in the Contract Documents: the cost of materials, including sales tax and the cost of delivery; cost of labor which shall only include the applicable prevailing wage and fringe benefit (if applicable, and if paid to or on behalf of the employee) rate plus a maximum of a twelve percent (12%) markup on the prevailing wage (but not the fringe benefit) to cover Contractor's labor burden including but not limited to social security, Medicare, unemployment insurance, workers' compensation insurance, sick leave pay; substantiated Project cost increases for specific insurance (including, without limitation, Builder's Risk Insurance and Builder's Risk Installation Floater) or bond premiums; rental cost of equipment, and machinery required for execution of the Work; and the additional costs of field personnel directly attributable to the Work; travel expense reimbursement only if specifically authorized and only to the extent allowable under the County Contractor Travel Reimbursement Policy, hereby incorporated by reference.

FINAL COMPLETION, means the final completion of all requirements under the Contract, including Contract Closeout as described in Section K but excluding Warranty Work as described in Section I.2, and the final payment and release of all retainage, if any.

FORCE MAJEURE, means an act, event or occurrence caused by fire, riot, war, acts of God, terrorism, nature, sovereign, or public enemy, strikes, freight embargoes or any other act, event or occurrence that is beyond the control of the party to the Contract who is asserting Force Majeure.

NOTICE TO PROCEED, means the official written notice from the Owner stating that the Contractor is to proceed with the Work defined in the Contract Documents.

OFFER, means a bid in connection with Instructions to Bidders or a proposal in connection with a Request for Proposals, or Solicitation Document to do the work stated in the Solicitation Document at the price quoted. May also be referenced as "Bid," "Quote," or "Proposal" based on the type of Solicitation Document.

OVERHEAD, means those items which may be included in the Contractor's markup (general and administrative expense and profit) and that shall not be charged as Direct Cost of the Work, including without limitation such Overhead expenses as wages or salary of personnel above the level of foreman (i.e., superintendents and project managers), labor rates and fringe benefits above the applicable prevailing wage and fringe benefit (if applicable, and if paid to or on behalf of the employee), Contractor's labor burden for fringe benefit if paid to the employee, expenses of Contractor's offices and supplies at the Project Site (e.g. job trailer) and at Contractor's principal place of business and including expenses of personnel staffing the Project Site office and Contractor's principal place of business, and Commercial General Liability Insurance and Automobile Liability Insurance.

OWNER, means, Clackamas County or any component unit thereof including Clackamas County Development Agency, Clackamas County Service District No. 1, Surface Water Management Agency of Clackamas County, Tri-City Service District, Water Environment Services, North Clackamas Parks and Recreation District, Clackamas County Extension & 4-H Service District, Library Service District of Clackamas County, Enhanced Law Enforcement District, and Clackamas County Service District No. 5. Owner may elect, by written notice to Contractor, to delegate certain duties to more than one agent, including without limitation, to an Architect/Engineer. However, nothing in these County General Conditions is intended to abrogate the separate design professional responsibilities of Architects under ORS Chapter 671 or of Engineers under ORS Chapter 672.

PERSON, means a natural person or entity doing business as a sole proprietorship, a partnership, a joint venture, a corporation, a limited liability company or partnership, a nonprofit, a trust, or any other entity possessing the legal capacity to contract.

PLANS, means the drawings which show the location, type, dimensions, and details of the Work to be done under the Contract.

PRODUCT DATA, means illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

PROJECT, means the total undertaking to be accomplished for Owner by architects/engineers, contractors, and other others, including planning, study, design, construction, testing, commissioning, start-up, of which the Work to be performed under the Contract Documents is a part.

PROJECT SITE, means the specific real property on which the Work is to be performed, including designated contiguous staging areas, that is identified in the Plans, Specifications and Drawings.

PUNCH LIST, means the list of Work yet to be completed or deficiencies which need to be corrected in order to achieve Final Completion of the Contract.

RECORD DOCUMENT, means the as-built Plans, Specifications, testing and inspection records, product data, samples, manufacturer and distributor/supplier warranties evidencing transfer of ownership to Owner, operational and maintenance manuals, shop drawings, correspondence, certificate(s) of occupancy, and other documents listed in Subsection B.9.1 of these County General Conditions, recording all Services performed.

SAMPLES, means physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

SHOP DRAWINGS, means drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor (including any subsubcontractor), manufacturer, supplier, or distributor to illustrate some portion of the Work.

SOLICITATION DOCUMENT, means an Invitation to Bid, Request for Proposals, Request for Quotes, or other written document issued by Owner that outlines the required Specifications necessary to submit an Offer.

SPECIFICATION, means any description of the physical or functional characteristics of the Work, or of the nature of a supply, service or construction item included in the Solicitation Document. Specifications may include a description of any requirement for inspecting, testing or preparing a supply, service or construction item for delivery and the quantities or qualities of materials to be furnished under the Contract. Specifications generally will state the results or products to be obtained and may, on occasion, describe the method and manner of doing the

Work to be performed. Specifications may be incorporated by reference and/or may be attached to the Contract.

SUBCONTRACTOR, means a Person having a direct contract with the Contractor, or another Subcontractor of any tier, to perform one or more items of the Work.

SUBSTANTIAL COMPLETION, means the date when the Owner accepts in writing the construction, alteration or repair constituting the Work or any designated portion thereof as having reached that state of completion when it may be used or occupied for its intended purpose. Substantial Completion of facilities with operating systems occurs only after thirty (30) continuous Days of successful, trouble-free operation of the operating systems as provided in Section K.3.2.

SUBSTITUTIONS, means items that in function, performance, reliability, quality, and general configuration are the same or better than the product(s) specified. Substitutions also means the performance of the Work by a labor force other than what is submitted in the Offer.

SUPPLEMENTAL GENERAL CONDITIONS, means those conditions that remove from, add to, or modify these County General Conditions. Public Improvement Supplemental General Conditions may be included in the Solicitation Document or may be a separate attachment to the Contract.

UNAVOIDABLE DELAYS, mean delays other than Avoidable Delays that are: (a) to the extent caused by any actions of the Owner, or any other employee or agent of the Owner, or by a separate contractor employed by the Owner; (b) to the extent caused by any Project Site conditions which differ materially from the conditions that would normally be expected to exist and inherent to the construction activities defined in the Contract Documents; or (c) to the extent caused by Force Majeure acts, or events or occurrences.

WORK, means the furnishing of all materials, equipment, labor, transportation, services, incidentals, those permits and regulatory approvals not provided by the owner necessary to successfully complete any individual item or the entire Contract and the carrying out of duties and obligations imposed by the Contract Documents for the Project.

A.2 SCOPE OF WORK

The Work contemplated under the Contract includes all labor, materials, transportation, equipment and services for, and incidental to, the completion of all work in connection with the Project described in the Contract Documents. The Contractor shall perform all Work necessary so that the Project can be legally occupied and fully used for the intended use as set forth in the Contract Documents.

A.3 INTERPRETATION OF CONTRACT DOCUMENTS

A.3.1 Unless otherwise specifically defined in the Contract Documents, words which have well-known technical meanings or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Contract Documents are intended to be complementary. Whatever is called for in one, is interpreted to be called for in all. However, in the event of conflicts or discrepancies among the Contract Documents, interpretations will be based on the following descending order of precedence:

- (a) The Contract and any amendments thereto, including Change Orders, with those of later date having precedence over those of an earlier date;
- (b) The Supplemental General Conditions;
- (c) County General Conditions;
- (d) Plans and Specifications;
- (e) The Solicitation Document, and any addenda thereto.

A.3.2 In the case of an inconsistency between Plans and Specifications or within either document not clarified by addendum, the better quality or greater quantity of Work shall be provided in accordance with the Owner's interpretation in writing as determined in Owners sole discretion.

A.3.3 If the Contractor finds discrepancies in, or omissions from the Contract Documents, or if the Contractor is in doubt as to their meaning, the Contractor shall at once notify the Owner. Matters concerning and interpretation of requirements of the Contract Documents will be decided by the Owner in the Owner's sole discretion, who may delegate that duty in some instances to the Architect/Engineer. Responses to Contractor's requests for interpretation of Contract Documents will be made in writing by Owner (or the Architect/Engineer) within any time limits agreed upon or otherwise with reasonable promptness. Contractor shall not proceed without direction in writing from the Owner (or Architect/Engineer).

A.3.4 References to standard specifications, manuals, codes of any technical society, organization or association, to the laws or regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, laws or regulations in effect in the jurisdiction where the Project Site is located on the first published date of the Solicitation Document, except as may be otherwise specifically stated.

A.4 EXAMINATION OF PLANS, SPECIFICATIONS, AND PROJECT SITE

A.4.1 It is understood that the Contractor, before submitting an Offer, has made a careful examination of the Contract Documents; has become fully informed as to the quality and quantity of materials and the character of the Work required; and has made a careful examination of the location and conditions of the Work and the sources of supply for materials. The Owner will in no case be responsible for any loss or for any unanticipated costs that may be suffered by the Contractor as a result of the Contractor's failure to acquire full information in advance in regard to all conditions pertaining to the Work. No oral agreement or conversation with any officer, agent, or personnel of the Owner, or with the Architect/Engineer either before or after the execution of the Contract, shall affect or modify any of the terms or obligations herein contained. Contractor shall at all times be responsible for all utility locates regardless of the ownership of such utility infrastructure or service.

A.4.2 Should the Plans or Specifications fail to particularly describe the materials, kind of goods, or details of construction of any aspect of the Work, Contractor shall have the duty to make inquiry of the Owner and Architect/Engineer as to what is required prior to performance of the Work. Absent Specifications to the contrary, the materials or processes that would normally be used to produce first quality finished Work shall be considered a part of the Contract requirements.

A.4.3 Any design errors or omissions noted by the Contractor shall be reported promptly to the Owner, including without limitation, any nonconformity with Applicable Laws.

A.4.4 If the Contractor believes that adjustments to cost or Contract Time are involved because of clarifications or instructions issued by the Owner (or Architect/Engineer) in response to the Contractor's notices or requests for information, the Contractor must submit a written request to the Owner, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt by Contractor of the clarifications or instructions issued. If the Owner denies Contractor's request for additional compensation, additional Contract Time, or other relief

that Contractor believes results from the clarifications or instructions, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process. If the Contractor fails to perform the obligations of Sections A.4.1 to A.4.3, the Contractor shall pay such costs and damages to the Owner as would have been avoided if the Contractor had performed such obligations.

A.4.5 If the Contractor believes that adjustments to cost or Contract Time are involved because of an Unavoidable Delay caused by differing Project Site conditions, the Contractor shall notify the Owner immediately of differing Project Site conditions before the area has been disturbed. The Owner will investigate the area and make a determination as to whether or not the conditions differ materially from either the conditions stated in the Contract Documents or those which could reasonably be expected in execution of this particular Contract. If Contractor and the Owner agrees that a differing Project Site condition exists, any adjustment to compensation or Contract Time will be determined based on the process set forth in Section D.2.2 for adjustments to or deletions from Work. If the Owner disagrees that a differing Project Site condition exists and denies Contractor's request for additional compensation or Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

A.5 INDEPENDENT CONTRACTOR STATUS

The service or services to be performed under the Contract are those of an independent contractor as defined in ORS 670.600. Contractor represents and warrants that it is not an officer, employee or agent of the Owner as those terms are used in ORS 30.265.

A.6 RETIREMENT SYSTEM STATUS AND TAXES

Contractor represents and warrants that it is not a contributing member of the Public Employees' Retirement System and will be responsible for any federal or state taxes applicable to payment received under the Contract. Contractor will not be eligible for any benefits from these Contract payments of federal Social Security, employment insurance, workers' compensation or the Public Employees' Retirement System, except as a self-employed individual. Unless the Contractor is subject to backup withholding, Owner will not withhold from such payments any amount(s) to cover Contractor's federal or state tax obligations.

A.7 GOVERNMENT EMPLOYMENT STATUS

A.7.1 If this payment is to be charged against federal funds, Contractor represents and warrants that it is not currently employed by the Federal Government. This does not preclude the Contractor from holding another contract with the Federal Government.

SECTION B **ADMINISTRATION OF THE CONTRACT**

B.1 OWNER'S ADMINISTRATION OF THE CONTRACT

B.1.1 The Owner shall administer the Contract as described in the Contract Documents throughout the term of the Contract, including the one-year period for correction of Work. The Owner will act as provided in the Contract Documents, unless modified in writing in accordance with other provisions of the Contract. In performing these tasks, the Owner may rely on the Architect/Engineer or other agents to perform some or all of these tasks.

B.1.2 The Owner may visit the Project Site at intervals appropriate to the stage of the Contractor's operations (1) to become generally familiar with and to keep the Owner informed about the progress and quality of the portion of the Work completed, (2) to endeavor to guard the Owner against defects and deficiencies in the Work, and (3) to determine in general if Work is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. The Owner will not

make exhaustive or continuous on-Project Site inspections to check the quality or quantity of the Work. Unless otherwise required in a Change Order, the Owner will neither have control over or charge of, nor be responsible for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work.

B.1.3 Except as otherwise provided in the Contract Documents or when direct communications have been specifically authorized, the Owner and Contractor shall communicate with each other within a reasonable time frame about matters arising out of or relating to the Contract. Communications by and with the Architect/Engineer's consultants shall be through the Architect/Engineer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Owner.

B.1.4 Based upon the Architect/Engineer's evaluations of the Contractor's Application for Payment, or unless otherwise stipulated by the Owner, the Architect/Engineer will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

B.2 CONTRACTOR'S MEANS AND METHODS; MITIGATION OF IMPACTS

B.2.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences or procedures, the Contractor shall evaluate the Project Site safety thereof and, except as stated below, shall be fully and solely responsible for the Project Site safety of such means, methods, techniques, sequences or procedures.

B.2.2 The Contractor is responsible to protect and maintain the Work during the course of construction and to mitigate any adverse impacts to the Project, including those caused by authorized changes, which may affect cost, schedule, or quality.

B.2.3 The Contractor is responsible for the actions of all its personnel, laborers, suppliers, agents, and Subcontractors on the Project. The Contractor shall enforce strict discipline and good order among Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of persons who are unfit or unskilled for the tasks assigned to them.

B.3 MATERIALS AND WORKMANSHIP

B.3.1 The intent of the Contract Documents is to provide for the construction and completion of every detail of the Work described. All Work shall be performed in a professional manner and, unless the means or methods of performing a task are specified elsewhere in the Contract Documents, Contractor shall employ methods that are generally accepted and used by the industry, in accordance with industry standards.

B.3.2 The Contractor is responsible to perform the Work as required by the Contract Documents. Defective Work shall be corrected at the Contractor's sole expense and within a reasonable time frame.

B.3.3 Work done and materials furnished may be subject to inspection and/or observation and testing by the Owner to determine if they conform to the Contract Documents. Inspection of the Work by the Owner does not relieve the Contractor of responsibility for the Work in accordance with the Contract Documents.

B.3.4 Contractor shall furnish adequate facilities, as required, for the Owner to have safe access to the Work including without limitation walkways, railings, ladders, tunnels, and platforms. Producers, suppliers, and fabricators shall also provide proper facilities and access to their facilities.

B.3.5 The Contractor shall furnish Samples of materials for testing by the Owner and include the cost of the Samples in the Contract Price.

B.4 PERMITS

Contractor shall obtain and pay for all necessary permits, licenses and fees, except for those specifically excluded in the Supplemental General Conditions, as required for the project. Contractor shall be responsible for all violations of the law. Contractor shall give all requisite notices to public authorities.

B.5 COMPLIANCE WITH GOVERNMENT REGULATIONS

B.5.1 Contractor shall comply with Applicable Laws, as amended pertaining to the Work and the Contract. Failure to comply with such requirements shall constitute a breach of Contract and shall be grounds for Contract termination. Without limiting the generality of the foregoing, Contractor expressly agrees to comply with the following, as applicable and as may be amended from time to time: (i) Title VI and VII of Civil Rights Act of 1964, as amended; (ii) Section 503 and 504 of the Rehabilitation Act of 1973, as amended; (iii) the Health Insurance Portability and Accountability Act of 1996; (iv) the Americans with Disabilities Act of 1990, as amended; (v) ORS Chapter 659A; as amended; (vi) all regulations and administrative rules established pursuant to any applicable laws; and (vii) all other applicable requirements of federal, state, county or other local government entity statutes, rules and regulations.

B.5.2 Contractor shall comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations, and

(a) Contractor shall not discriminate against Disadvantaged, Minority, Women or Emerging Small Business enterprises, as those terms are defined in ORS 200.005, or a business enterprise that is owned or controlled by or that employs a disabled veteran, as that term is defined in ORS 408.225, in the awarding of subcontracts.

(b) Contractor shall maintain, in current and valid form, all licenses and certificates required by Applicable Laws or the Contract when performing the Work.

B.5.3 Contractor shall certify that it shall not accept a bid from Subcontractors to perform Work unless such Subcontractors are registered with the Construction Contractors Board in accordance with ORS 701.021 at the time they submit their bids to the Contractor.

B.5.4 Contractor shall certify that each landscape contracting business, as defined in ORS 671.520(2), performing Work under the Contract holds a valid landscape construction professional license issued pursuant to ORS 671.560.

B.5.5 The following notice is applicable to Contractors who perform excavation Work. ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0010 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (877) 668-4001.

B.5.6 Failure to comply with any or all of the requirements of B.5.1 through B.5.5 shall be a material breach of Contract and constitute

grounds for Contract termination. Damages or costs resulting from such noncompliance shall be the responsibility of Contractor.

B.5.7 The Contractor shall include in each subcontract those provisions required under ORS 279C.580.

B.5.8 Contractor shall comply with 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.

B.6 SUPERINTENDENCE

Contractor shall keep on the Project Site, during the progress of the Work, a competent superintendent and any necessary assistants who shall be satisfactory to the Owner and who shall represent the Contractor on the Project Site. Directions given to the superintendent by the Owner shall be confirmed in writing to the Contractor.

B.7 INSPECTION

B.7.1 Owner shall have access to the Work at all times.

B.7.2 Inspection of the Work will be made by the Owner at its discretion. The Owner will have authority to reject Work that does not conform to the Contract Documents in the Owner's sole discretion. Any Work found to be not in conformance with the Contract Documents, in the discretion of the Owner, shall be removed and replaced at the Contractor's expense.

B.7.3 Contractor shall make or obtain at the appropriate time all tests, inspections and approvals of portions of the Work required by the Contract Documents or by Applicable Laws or orders of public authorities having jurisdiction. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections and approvals. Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work. The Contractor shall give the Owner timely notice of when and where tests and inspections are to be made so that the Owner may be present for such procedures. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner.

B.7.4 As required by the Contract Documents, Work done or material used without required inspection or testing and/or without providing timely notice to the Owner may be ordered removed at the Contractor's expense.

B.7.5 If directed to do so by Owner or other permitting authority any time before the Work is accepted, the Contractor shall uncover portions of the completed Work for inspection. After inspection, the Contractor shall restore such portions of Work to the standard required by the Contract. If the Work uncovered is unacceptable or was done without required testing or inspection or sufficient notice to the Owner, the uncovering and restoration shall be done at the Contractor's expense. If the Work uncovered is acceptable and was done with sufficient notice to the Owner, the uncovering and restoration will be paid for pursuant to a Change Order.

B.7.6 If any testing or inspection reveals failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's and Architect/Engineer's services and expenses, shall be at the Contractor's expense.

B.7.7 In Owner's sole discretion, it may authorize other interested parties to inspect the Work affecting their interests or property. Their right to inspect shall not make them a party to the Contract and shall not interfere with the rights of the parties of the Contract. Instructions or orders of such parties shall be transmitted to the Contractor, through the Owner.

B.8 SUBCONTRACTS AND ASSIGNMENT

B.8.1 Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound by the terms and conditions of these General Conditions and Supplemental General Conditions, and to assume toward the Contractor all of the obligations and responsibilities which the Contractor assumes toward the Owner thereunder, unless (1) the same are clearly inapplicable to the subcontract at issue because of legal requirements or industry practices, or (2) specific exceptions are requested by Contractor and approved in writing by Owner. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with sub-subcontractors at any level.

B.8.2 At Owner's request, Contractor shall submit to Owner prior to their execution either Contractor's form of subcontract, or the subcontract to be executed with any particular Subcontractor. If Owner disapproves such form, Contractor shall not execute the form until the matters disapproved are resolved to Owner's satisfaction. Owner's review, comment upon or approval of any such form shall not relieve Contractor of its obligations under this Agreement or be deemed a waiver of such obligations of Contractor.

B.8.3 Contractor shall not assign, sell, or transfer its rights, or delegate its responsibilities under the Contract, in whole or in part, without the prior written approval of the Owner. No such written approval shall relieve Contractor of any obligations of the Contract, and any transferee shall be considered the agent of the Contractor and bound to perform in accordance with the Contract Documents. Contractor shall remain liable as between the original parties to the Contract as if no assignment had occurred.

B.9 OWNER'S RIGHT TO DO WORK

Owner reserves the right to perform other or additional work at or near the Project Site with other agents than those of the Contractor. If such work takes place within or next to the Project Site, Contractor shall coordinate work with the other contractors or agents, cooperate with all other contractors or forces, carry out the Work in a way that will minimize interference and delay for all agents involved, place and dispose of materials being used so as not to interfere with the operations of another, and join the Work with the work of the others in an acceptable manner and perform it in proper sequence to that of the others. The Owner will resolve any disagreements that may arise between or among Contractor and the other contractors over the method or order of doing all work (including the Work). In case of unavoidable interference, the Owner will establish work priority (including the Work) in the Owner's sole discretion.

B.10 OTHER CONTRACTS

In all cases and at any time, the Owner has the right to execute other contracts related to or unrelated to the Work of the Contract. The Contractor of the Contract shall fully cooperate with any and all other contractors without additional cost to the Owner in the manner described in Section B.13.

B.11 ALLOWANCES

B.11.1 The Contractor shall include in the Contract Price all allowances stated in the Contract Documents. Items covered by allowances

shall be supplied for such amounts and by such persons or entities as the Owner may direct.

B.11.2 Unless otherwise provided in the Contract Documents:

- (a) when finally reconciled, allowances shall cover the cost of the Contractor's materials and equipment delivered at the Project Site and all required taxes, less applicable trade discounts;
- (b) Contractor's costs for unloading and handling at the Project Site, labor, installation costs, Overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Price but not in the allowances;
- (c) whenever costs are more than or less than allowances, the Contract Price shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (i) the difference between actual costs and the allowances under Section B.17.2(a) and (ii) changes in Contractor's costs under Section B.17.2(b);
- (d) Unless Owner requests otherwise, Contractor shall provide to Owner a proposed fixed price for any allowance work prior to its performance.

B.12 SUBMITTALS, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

- B.12.1 The Contractor shall prepare and keep current, for the Architect's/Engineer's approval (or for the approval of Owner if approval authority has not been delegated to the Architect/Engineer), a schedule and list of submittals which is coordinated with the Contractor's construction schedule and allows the Architect/Engineer reasonable time to review submittals. Owner reserves the right to finally approve the schedule and list of submittals. Submittals include, without limitation, Shop Drawings, Product Data, and Samples.
- B.12.2 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required by the Contract Documents the way by which the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review of submittals by the Architect/Engineer is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, or for approval of safety precautions or, unless otherwise specifically stated by the Architect/Engineer, of any construction means, methods, techniques, sequences or procedures, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Architect/Engineer's review of the Contractor's submittals shall not relieve the Contractor of its obligations under the Contract Documents. The Architect/Engineer's approval of a specific item shall not indicate approval of an assembly of which the item is a component. Informational submittals upon which the Architect/Engineer is not expected to take responsive action may be so identified in the Contract Documents. Submittals which are not required by the Contract Documents may be returned by the Architect/Engineer without action.
- B.12.3 The Contractor shall review for compliance with the Contract Documents, approve and submit to the Architect/Engineer Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals which are not marked as reviewed for compliance with the Contract Documents

and approved by the Contractor may be returned by the Architect/Engineer without action.

- B.12.4 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- B.12.5 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been approved by the Architect/Engineer.
- B.12.6 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Architect/Engineer's review or approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Architect/Engineer in writing of such deviation at the time of submittal and (i) the Architect/Engineer has given written approval to the specific deviation as a minor change in the Work, or (ii) a Change Order has been executed by Owner authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Architect/Engineer's review or approval thereof.
- B.12.7 In the event that Owner elects not to have the obligations and duties described under this Section B.18 performed by the Architect/Engineer, or in the event no Architect/Engineer is employed by Owner on the Project, all obligations and duties assigned to the Architect/Engineer hereunder shall be performed by the Owner.

B.13 SUBSTITUTIONS

The Contractor may make Substitutions only with the written consent of the Owner, after evaluation by the Owner and only in accordance with a Change Order. Substitutions shall be subject to the requirements of the Solicitation Document. By making requests for Substitutions, the Contractor represents that the Contractor has personally investigated the proposed substitute product; represents that the Contractor will provide the same warranty for the Substitution that the Contractor would for the product originally specified unless approved otherwise; certifies that the cost data presented is complete and includes all related costs under the Contract including redesign costs, and waives all claims for additional costs related to the Substitution which subsequently become apparent; and will coordinate the installation of the accepted Substitution, making such changes as may be required for the Work to be completed in all respects.

B.14 USE OF PLANS AND SPECIFICATIONS

Plans, Specifications and related Contract Documents furnished to Contractor by Owner or Owner's Architect/Engineer shall be used solely for the performance of the Work under the Contract. Contractor and its Subcontractors and suppliers are authorized to use and reproduce applicable portions of such documents appropriate to the execution of the Work, but shall not claim any ownership or other interest in them beyond the scope of the Contract, and no such interest shall attach. Unless otherwise indicated, all common law, statutory and other reserved rights, in addition to copyrights, are retained by Owner.

SECTION C
WAGES AND LABOR

C.1 PREVAILING WAGE RATES ON PUBLIC WORKS

Contractor shall comply fully with the provisions of ORS 279C.800 through 279C.870. Pursuant to ORS 279C.830(1)(d), Contractor shall pay workers at not less than the specified minimum hourly rate of wage, and shall include that requirement in all subcontracts. If the Work is subject to both the state prevailing wage rate law and the federal Davis-Bacon Act, Contractor shall pay the higher of the applicable state or federal prevailing rate of wage. Contractor shall provide written notice to all workers of the number of hours per day and days per week such workers may be required to work.

C.2 PAYROLL CERTIFICATION AND FEE REQUIREMENTS

- C.2.1 In accordance with ORS 279C.845, the Contractor and every Subcontractor shall submit written certified statements to the Owner on the form prescribed by the Commissioner of the Bureau of Labor and Industries ("BOLI"), certifying the hourly rate of wage paid each worker which the Contractor or the Subcontractor has employed on the Project and further certifying that no worker employed on the Project has been paid less than the prevailing rate of wage or less than the minimum hourly rate of wage specified in the Contract, which certificate and statement shall be verified by the oath of the Contractor or the Subcontractor that the Contractor or Subcontractor has read the certified statement, that the Contractor or Subcontractor knows the contents of the certified statement, and, that to the Contractor's or Subcontractor's best knowledge and belief, the certified statement is true. The certified statements shall set out accurately and completely the payroll records for the prior week, including the name and address of each worker, the worker's correct classification, rate of pay, daily and weekly number of hours worked, deductions made, and actual wages paid. Certified statements for each week during which the Contractor or Subcontractor has employed a worker on the Project shall be submitted once a month, by the fifth (5th) business day of the following month. The Contractor and Subcontractors shall preserve the certified statements for a period of ten (10) years from the date of completion of the Contract.
- C.2.2 Pursuant to ORS 279C.845(7), the Owner shall retain 25 percent of any amount earned by the Contractor on the Project until the Contractor has filed the certified statements required by section C.2.1. The Owner shall pay to the Contractor the amount retained under this subsection within 14 days after the Contractor files the required certified statements, regardless of whether a Subcontractor has failed to file certified statements.
- C.2.3 Pursuant to ORS 279C.845(8), the Contractor shall retain 25 percent of any amount earned by a first-tier Subcontractor on this Project until the first-tier Subcontractor has filed with the Owner the certified statements required by C.2.1. Before paying any amount retained under this subsection, the Contractor shall verify that the first-tier Subcontractor has filed the certified statement. Within 14 days after the first-tier Subcontractor files the required certified statement the Contractor shall pay the first-tier Subcontractor any amount retained under this subsection.
- C.2.4 In accordance with statutory requirements and administrative rules promulgated by the Commissioner of the Bureau of Labor and Industries, the fee required by ORS 279C.825(1) will be paid by Owner to the Commissioner.

C.3 PROMPT PAYMENT AND CONTRACT CONDITIONS

- C.3.1 As a condition to Owner's performance hereunder, the Contractor shall:
- C.3.1.1 Make payment promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the Work provided for in the Contract.
- C.3.1.2 Pay all contributions or amounts due the State Industrial Accident Fund or successor program from such Contractor or Subcontractor incurred in the performance of the Contract.
- C.3.1.3 Not permit any lien or claim to be filed or prosecuted against the Owner on account of any labor or material furnished. Contractor will not assign any claims that Contractor has against Owner, or assign any sums due by Owner, to Subcontractors, suppliers, or manufacturers, and will not make any agreement or act in any way to give Subcontractors a claim or standing to make a claim against the Owner.
- C.3.1.4 Pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
- C.3.2 If Contractor fails, neglects or refuses to make prompt payment of any claim for labor or services furnished to the Contractor of a Subcontractor by any person in connection with the Project as such claim becomes due, the proper officer(s) representing the Owner may pay the claim and charge the amount of the payment against funds due or to become due Contractor under the Contract. Payment of claims in this manner shall not relieve the Contractor or the Contractor's surety from obligation with respect to any unpaid claims.
- C.3.3 Contractor shall include in each subcontract for property or services entered into by the Contractor and a first-tier subcontractor, including a material supplier, for the purpose of performing a construction contract, a payment clause that obligates the Contractor to pay the first-tier Subcontractor for satisfactory performance under its subcontract within ten (10) Days out of such amounts as are paid to the Contractor by the Owner under such contract.
- C.3.4 If the Contractor or a first-tier subcontractor fails, neglects or refuses to pay a person that provides labor or materials in connection with the Contract within 30 days after receiving payment from the contracting agency or a contractor, the Contractor or first-tier subcontractor owes the person the amount due plus interest charges that begin at the end of the 10-day period within which payment is due under ORS 279C.580 (4) and that end upon final payment, unless payment is subject to a good faith dispute as defined in ORS 279C.580. The rate of interest on the amount due is nine percent per annum. The amount of interest may not be waived.
- C.3.5 If the Contractor or a subcontractor fails, neglects or refuses to make payment to a person furnishing labor or materials in connection with the Contract, the person may file a complaint with the Construction Contractors Board, unless payment is subject to a good faith dispute as defined in ORS 279C.580.
- C.3.6 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. Contractor shall ensure that each of its Subcontractors complies with these requirements.
- C.3.7 In accordance with ORS 279C.570, for all subcontracts that exceed \$500,000 that the Contractor withholds retainage, the Contractor shall place amounts deducted as retainage into an interest-bearing escrow account. Interest on the retainage amount accrues from the

date the payment request is approved until the date the retainage is paid to the Subcontractor to which it is due.

C.4 PAYMENT FOR MEDICAL CARE

As a condition to Owner's performance hereunder, Contractor shall promptly, as due, make payment to any person, co-partnership, association or corporation furnishing medical, surgical, and hospital care or other needed care and attention, incident to sickness or injury, to the employees of the Contractor, of all sums of which the Contractor agrees to pay for the services and all moneys and sums that the Contractor collected or deducted from the wages of employees under any law, contract or agreement for the purpose of providing or paying for the services.

C.5 HOURS OF LABOR

As a condition to Owner's performance hereunder, no person shall be employed to perform Work under the Contract for more than ten (10) hours in any one day or forty (40) hours in any one week, except in cases of necessity, emergency or where public policy absolutely requires it. In such instances, Contractor shall pay the employee at least time and a half pay:

- (a) For all overtime in excess of eight (8) hours a day or forty (40) hours in any one week when the work week is five consecutive Days, Monday through Friday; or
- (b) For all overtime in excess of ten (10) hours a day or forty (40) hours in any one week when the work week is four consecutive Days, Monday through Friday; and
- (c) For all Work performed on Saturday and on any legal holiday specified in ORS 279C.540.

This Section C.5 will not apply to Contractor's Work under the Contract to the extent Contractor is currently a party to a collective bargaining agreement with any labor organization.

This Section C.5 shall not excuse Contractor from completion of the Work within the time required under the Contract.

SECTION D CHANGES IN THE WORK

D.1 CHANGES IN WORK

D.1.1 The terms of the Contract shall not be waived, altered, modified, supplemented or amended in any manner whatsoever, without prior written agreement and then only after any necessary approvals have been obtained. A Change Order is required to modify the Contract, which shall not be effective until its execution by the parties to the Contract and all approvals required by public contracting laws have been obtained.

D.1.2 It is mutually agreed that changes in Plans, quantities, or details of construction may be necessary or desirable during the course of construction. Within the general scope of the Contract, the Owner may at any time, without notice to the sureties and without impairing the Contract, require changes it deems necessary or desirable within the scope of this Project and consistent with this Section D.1. All changes to the Work shall be documented and Change Orders shall be executed under the conditions of the Contract Documents. Such changes may include, but are not limited to:

- (a) Modification of specifications and design.
- (b) Increases or decreases in quantities.
- (c) Increases or decreases to the amount of Work.
- (d) Addition or elimination of any Work item.
- (e) Change in the duration of the Project.

- (f) Acceleration or delay in performance of Work.
- (g) Deductive changes.

Deductive changes are those that reduce the scope of the Work, and shall be made by mutual agreement whenever feasible. In cases of suspension or partial termination under Section J, Owner reserves the right to unilaterally impose a deductive change and to self-perform such Work, for which the provisions of Section B.13 (Owner's Right to Do Work) shall then apply. Adjustments in compensation shall be made under Section D.1.3, in which costs for deductive changes shall be based upon a Direct Costs adjustment together with the related percentage markup specified for profit, Overhead and other indirect costs, unless otherwise agreed to by Owner.

D.1.3 The Owner and Contractor agree that adjustments to or deletions from the Work shall be administered and compensated according to the following:

- (a) Unit Pricing: Unit pricing may be utilized at the Owner's option when unit prices or solicitation alternates were provided that established the cost for adjustments to Work, and a binding obligation exists under the Contract on the parties covering the terms and conditions of the adjustment to Work.
- (b) Fixed Fee: If the Owner elects not to utilize unit pricing, or in the event that unit pricing is not available or appropriate, fixed pricing may be used for adjustments to or deletions from the Work. In fixed pricing, the basis of payments or total price shall be agreed upon in writing between the parties to the Contract, and shall be established before the Work is done whenever feasible. Notwithstanding the foregoing, the mark-ups set forth in Section D.1.3(c) shall be utilized in establishing fixed pricing, and such mark-ups shall not be exceeded. Cost and price data relating to adjustments to or deletions from the Work shall be supplied by Contractor to Owner upon request, but Owner shall be under no obligation to make such requests.
- (c) Time and Material: In the event that unit pricing and fixed pricing are not utilized, then adjustments to or deletions from the Work shall be performed on a cost reimbursement basis for Direct Costs. Such Work shall be compensated on the basis of the actual, reasonable and allowable cost of labor, equipment, and material furnished on the Work performed. The Contractor or Subcontractor who performs the Work shall be allowed to add up to ten percent (10%) markup to the Direct Costs as full compensation for profit, Overhead and other indirect costs for Work performed with the Contractor's or Subcontractor's own agents

Each ascending tier Subcontractor or the Contractor that did not perform the Work, will be allowed to add up to five percent (5%) supplemental markup on the Direct Costs of the Work (but not the above allowable markups) covered by a Change Order. No additional markup shall be permitted for any third tier or greater descending Subcontractor.

Example: \$20,000 of Direct Costs Work performed by a 2nd Tier Subcontractor

	Markup	Allowed Total Fee Plus Markup
General Contractor	5%	\$1,000.00
1 st Tier Sub Contractor	5%	\$1,000.00
2 nd Tier Sub Contractor	10%	\$22,000.00

- (d) Payments made to the Contractor shall be complete compensation for Overhead, profit, and all costs that were incurred by the Contractor or by other agents furnished by the Contractor, including Subcontractors, for adjustments to or deletions from the Work pursuant to a Change Order. Owner may establish a maximum cost for additional Work under this Section D.1.3, which shall not be exceeded for reimbursement without additional written

authorization from Owner in the form of a Change Order. Contractor shall not be required to complete such additional Work without additional authorization.

- D.1.4 Any necessary adjustment of Contract Time that may be required as a result of adjustments to or deletions from the Work must be agreed upon by the parties before the start of the revised Work unless Owner authorizes Contractor to start the revised Work before agreement on Contract Time adjustment.

Contractor shall submit any request for additional compensation (and additional Contract Time if Contractor was authorized to start Work before an adjustment of Contract Time was approved) as soon as possible but no later than thirty (30) Days after receipt of Owner's request for additional Work. If Contractor's request for additional compensation or adjustment of Contract Time is not made within the thirty (30) Day time limit, Contractor's requests pertaining to that additional Work shall be barred. The thirty (30) Day time limit for making requests shall not be extended for any reason, including without limitation Contractor's claimed inability to determine the amount of additional compensation or adjustment of Contract Time, unless an extension is granted in writing by Owner. If the Owner denies Contractor's request for additional compensation or adjustment of Contract Time, Contractor may proceed to file a Claim under Section D.3, Claims Review Process. No other reimbursement, compensation, or payment will be made, except as provided in Section D.1.5 for impact claims.

- D.1.5 If any adjustment to Work under Section D.1.3 causes an increase or decrease in the Contractor's cost of, or the Contract Time required for the performance of any other part of the Work under the Contract, Contractor shall submit a written request to the Owner, setting forth the nature and specific extent of the request, including all time and cost impacts against the Contract as soon as possible, but no later than thirty (30) Days after receipt of Owner's request for adjustments to or deletions from the Work by Contractor.

The thirty (30) Day time limit applies to claims of Subcontractors, suppliers, or manufacturers who may be affected by Owner's request for adjustments to or deletions from the Work and who request additional compensation or an extension of Contract Time to perform; Contractor has responsibility for contacting its Subcontractors, suppliers, or manufacturers within the thirty (30) Day time limit, and including their requests with Contractor's requests. If the request involves Work to be completed by Subcontractors, or materials to be furnished by suppliers or manufacturers, such requests shall be submitted to the Contractor in writing with full analysis and justification for the adjustments to compensation and Contract Time requested. The Contractor shall analyze and evaluate the merits of the requests submitted by Subcontractors, suppliers, and manufacturers to Contractor prior to including those requests and Contractor's analysis and evaluation of those requests with Contractor's requests for adjustments to compensation or Contract Time that Contractor submits to the Owner. Failure of Subcontractors, suppliers, manufacturers or others to submit their requests to Contractor for inclusion with Contractor's requests submitted to Owner within the time period and by the means described in this section shall constitute a waiver of these Subcontractor claims. The Owner will not consider direct requests or claims from Subcontractors, suppliers, manufacturers or others not a party to the Contract. The consideration of such requests and claims under this section does not give any Person, not a party to the Contract the right to bring a claim against Owner, whether in this claims process, in litigation, or in any dispute resolution process.

If the Owner denies the Contractor's request for adjustment to compensation or Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

- D.1.6 No request or Claim by the Contractor for additional costs or an adjustment of Contract Time shall be allowed if made after receipt of final payment application under the Contract. Final payment application must be made by Contractor within the time required under Section E.6.4.

- D.1.7 It is understood that changes in the Work are inherent in construction of this type. The number of changes, the scope of those changes, and the effect they have on the progress of the original Work cannot be defined at this time. The Contractor agrees that it will work in good faith with Owner to undertake changes, when agreed upon by execution of a Change Order. Each change will be evaluated for extension of Contract Time and increase or decrease in compensation based on its own merit.

D.2 DELAYS

- D.2.1 Contractor shall not be entitled to additional compensation or additional Contract Time for Avoidable Delays.

- D.2.2 In the event of Unavoidable Delays, Contractor may be entitled to the following:

- (a) Contractor may be entitled to additional compensation or additional Contract Time, or both, for Unavoidable Delays described in Section D.2.1.2 (a) and (b).
- (b) Contractor may be entitled to additional Contract Time for Unavoidable Delays described in Section D.2.1.2(c) and (d).

In the event of any requests for additional compensation or additional Contract Time, or both, as applicable, arising under this Section D.2.2 for Unavoidable Delays, other than requests for additional compensation or additional Contract Time for differing Project Site conditions for which a review process is established under Section A.4.5, Contractor shall submit a written notification of the delay to the Owner within two (2) Days of the occurrence of the cause of the delay. This written notification shall state the cause of the potential delay, the Project components impacted by the delay, and the anticipated additional Contract Time extension or the additional compensation, or both, as applicable, resulting from the delay. Within seven (7) Days after the cause of the delay has been mitigated, or in no case more than thirty (30) Days after the initial written notification, the Contractor shall submit to the Owner, a complete and detailed request for additional compensation or additional Contract Time, or both, as applicable, resulting from the delay. If the Owner denies Contractor's request for additional compensation or adjustment of Contract Time, the Contractor may proceed to file a Claim under Section D.3, Claims Review Process.

If Contractor does not timely submit the notices required under this Section D.2, Contractor's Claim shall be barred.

D.3 CLAIMS REVIEW PROCESS

- D.3.1 All Contractor Claims shall be referred to the Owner for review. Contractor's Claims, including Claims for adjustments to compensation or Contract Time, shall be submitted in writing by Contractor to the Owner within five (5) Days after a denial of Contractor's initial request for an adjustment of Contract terms, payment of money, extension of Contract Time or other relief, provided that such initial request has been submitted in accordance with the requirements and within the time limits established in these County General Conditions. Within thirty (30) Days after the initial Claim, Owner shall receive from Contractor a complete and detailed description of the Claim (the "Detailed Notice") that includes all information required by Section D.3.2. Unless the Claim is made in accordance with these time requirements, it shall be barred.

D.3.2 The Detailed Notice of the Claim shall be submitted in writing by Contractor and shall include all information, records and documentation necessary for the Owner to properly and completely evaluate the claim, including, but not limited to a detailed, factual statement of the basis of the Claim, pertinent dates, Contract provisions which support or allow the Claim, reference to or copies of any documents which support the Claim, the dollar value of the Claim, and the Contract Time adjustment requested for the Claim. If the Claim involves Work to be completed by Subcontractors, the Contractor will analyze and evaluate the merits of the Subcontractor claim prior to forwarding it and that analysis and evaluation to the Owner. The Owner will not consider direct claims from Subcontractors, suppliers, manufacturers, or others not a party to the Contract. Contractor agrees that it will make no agreement, covenant, or assignment, nor will it commit any other act that will permit or assist any Subcontractor, supplier, manufacturer, or other to directly or indirectly make a claim against Owner.

D.3.3 The Owner, through the Architect/Engineer (or other employee or agent assigned by the Owner) will review all Claims and take one or more of the following preliminary actions within ten (10) Days of receipt of the Detailed Notice of a Claim: (1) request additional supporting information from the Contractor; (2) inform the Contractor and Owner in writing of the time required for adequate review and response; (3) reject the Claim in whole or in part and identify the reasons for rejection; (4) recommend approval of all or part of the Claim; (5) arrange a meeting with the Contractor for formal review of the Claim; or (6) propose an alternate resolution.

D.3.4 Once the Engineer or Project Manager determines the Owner is in receipt of a properly submitted claim, the Engineer or Project Manager may arrange a meeting, as 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.

D.3.5 The Owner's decision, through the Architect/Engineer (or other employee or agent assigned by the Owner), shall be final and binding on the Contractor unless appealed by written notice to the Owner within fifteen (15) Days of receipt of the decision. The Contractor must present written documentation supporting the Claim within fifteen (15) Days of the notice of appeal. After receiving the appeal documentation, the Owner, through the appropriate department director, shall review the materials and render a decision within thirty (30) Days after receiving the appeal documents.

D.3.6 If, at any step in the claim decision or review process, the Contractor fails to promptly submit requested information or documentation that the Owner 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.

D.3.7 Both parties agree to exercise their best efforts in good faith to resolve all disputes within sixty (60) Days of the issuance of the appeal in Section D. 3.4 above. If the parties are unable to resolve their issues through mediation or otherwise, either party may seek redress through all available remedies in equity or in law.

D.3.8 Unless otherwise directed by Owner, Contractor shall proceed with the Work while any Claim, or mediation or litigation arising from a Claim, is pending. Regardless of the review period or the final decision of the Owner, the Contractor shall continue to diligently pursue the Work as identified in the Contract Documents. In no case is the Contractor justified or allowed to cease or delay Work, in whole or in part, without a written stop work order from the Owner.

SECTION E PAYMENTS

E.1 SCHEDULE OF VALUES

The Contractor shall submit, by or before the pre-construction conference (as described in Section H.1.3), a schedule of values ("Schedule of Values") for the Contract Work. This schedule shall provide a breakdown of values for the Contract Work and will be the basis for progress payments. The breakdown shall demonstrate reasonable, identifiable, and measurable components of the Work. Unless objected to by the Owner, this schedule shall be used as the basis for reviewing Contractor's applications for payment. If objected to by Owner, Contractor shall revise the schedule of values and resubmit the same for approval of Owner.

E.2 APPLICATIONS FOR PAYMENT

E.2.1 Owner shall make progress payments on the Contract monthly as Work progresses, in accordance with the requirements of this Section E.2 and ORS 279C.570. Applications for payment shall be based upon estimates of Work completed and the Schedule of Values. As a condition precedent to Owner's obligation to pay, all applications for payment shall be approved by the Owner. A progress payment shall not be considered acceptance or approval of any Work or waiver of any defects therein. Owner shall pay to Contractor interest in accordance with ORS 279C.570 for overdue invoices, not including retainage, due the Contractor. Overdue invoices will be those that have not been paid within the earlier of:

- (a) Thirty (30) days after receipt of the invoice; or
- (b) Fifteen (15) days after the payment is approved by the County.

Notwithstanding the foregoing, in instances when an application for payment is filled out incorrectly, or when there is any defect or impropriety in any submitted application or when there is a good faith dispute, Owner shall so notify the Contractor within fifteen (15) Days stating the reason or reasons the application for payment is defective or improper or the reasons for the dispute. A defective or improper application for payment, if corrected by the Contractor within seven (7) Days of being notified by the Owner, shall not cause a payment to be made later than specified in this section unless interest is also paid. Payment of interest will be postponed when payment on the principal is delayed because of disagreement between the Owner and the Contractor.

Owner reserves the right, instead of requiring the Contractor to correct or resubmit a defective or improper application for payment, to reject the defective or improper portion of the application for payment and pay the remainder of the application for such amounts which are correct and proper.

Owner, upon written notice to the Contractor, may elect to make payments to the Contractor only by means of Electronic Funds Transfers ("EFT") through Automated Clearing House ("ACH") payments. If Owner makes this election, the Contractor shall arrange for receipt of the EFT/ACH payments.

E.2.2 Contractor shall submit to the Owner an application for each payment and, if required, receipts or other vouchers showing payments for materials and labor including payments to Subcontractors. Contractor shall include in its application for payment a schedule of the percentages of the various parts of the Work completed, based on the Schedule of Values which shall aggregate to the payment application total, and shall include, on the face of each copy thereof, a certificate in substantially the following form:

"I, the undersigned, hereby certify that the above bill is true and correct, and the payment therefore, has not been received.

Signed: _____
Dated: _____"

E.2.3 Generally, applications for payment will be accepted only for materials that have been installed. Under special conditions, applications for payment for stored materials will be accepted at Owner's sole discretion. Such a payment, if made, will be subject to the following conditions:

- (a) The request for stored material shall be submitted at least thirty (30) Days in advance of the application for payment on which it appears. Applications for payment shall be entertained for major equipment, components or expenditures only.
- (b) The Contractor shall submit applications for payment showing the quantity and cost of the material stored.
- (c) The material shall be stored in a bonded warehouse and Owner shall be granted the right to access the material for the purpose of removal or inspection at any time during the Contract Period.
- (d) The Contractor shall name the Owner as co-insured on the insurance policy covering the full value of the property while in the care and custody of the Contractor until it is installed. A certificate noting this coverage shall be issued to the Owner.
- (e) Payments shall be made for materials and equipment only. The submitted amount in the application for payment shall be reduced by the cost of transportation from the storage site to the Project Site and for the cost of an inspector to verify delivery and condition of the goods at the storage site. The cost of storage and inspection shall be borne solely by the Contractor.
- (f) Within sixty (60) Days of the application for payment, the Contractor shall submit evidence of payment covering the material and/or equipment stored and of payment for the storage site.
- (g) Payment for stored materials and/or equipment shall in no way indicate acceptance of the materials and/or equipment or waive any rights under the Contract for the rejection of the Work or materials and/or equipment not in conformance with the Contract Documents.
- (h) All required documentation shall be submitted with the respective application for payment.

E.2.4 The Owner reserves the right to withhold all or part of a payment, or may nullify in whole or part any payment previously made, to such extent as may be necessary in the Owner's opinion to protect the Owner from loss because of:

- (a) Work that is defective and not remedied, or that has been demonstrated or identified as failing to conform with Applicable Laws or the Contract Documents;
- (b) third party claims filed or evidence reasonably indicating that such claims will likely be filed unless security acceptable to the Owner is provided by the Contractor;
- (c) failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment (in which case Owner may issue checks made payable jointly to Contractor and such unpaid persons under this provision, or directly to Subcontractors and suppliers at any level under Section C.3.2);

- (d) reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price;
- (e) damage to the Work, Owner or Owner's agent;
- (f) reasonable evidence that the Work will not be completed within the Contract Time required by the Contract, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;
- (g) failure to carry out the Work in accordance with the Contract Documents; or
- (h) assessment of liquidated damages, when withholding is made for offset purposes.

E.2.5 Subject to the provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

- (a) Take that portion of the Contract Price properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the total Contract Price allocated to that portion of the Work in the Schedule of Values, less retainage as provided in Section E.5. Pending final determination of cost to the Owner of changes in the Work, no amounts for changes in the Work can be included in applications for payment until the Contract Price has been adjusted by a Change Order;
- (b) Add that portion of the Contract Price properly allocable to materials and equipment delivered and suitably stored at the Project Site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner pursuant to Section E.2.3, suitably stored off the Project Site at a location agreed upon in writing), less retainage as provided in Section E.5;
- (c) Subtract the aggregate of previous payments made by the Owner; and
- (d) Subtract any amounts for which the Owner has withheld or nullified payment as provided in the Contract Documents.

E.2.6 Contractor's applications for payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay to a Subcontractor or material supplier.

E.2.7 The Contractor warrants to Owner that title to all Work covered by an application for payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an application for payment all Work for which payments are received from the Owner shall be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided financing, labor, materials and equipment relating to the Work.

E.2.8 If Contractor disputes any determination by Owner with regard to any application for payment, Contractor nevertheless shall continue to expeditiously perform the Work. No payment made hereunder shall be or be construed to be final acceptance or approval of that portion of the Work to which such partial payment relates or shall relieve Contractor of any of its obligations hereunder.

E.3 PAYROLL CERTIFICATION REQUIREMENT

Owner's receipt of payroll certification pursuant to Section C.2 of the Contract shall be a condition precedent to Owner's obligation to pay any progress payments or final payment otherwise due.

E.4 DUAL PAYMENT SOURCES

Contractor shall not be compensated for Work performed under the Contract from any state agency other than the agency that is a party to the Contract.

E.5 RETAINAGE

E.5.1 Retainage shall be withheld and released in accordance with the requirements set forth in Local Contract Review Board Rules or the applicable County standard.

E.5.1.1 Owner may reserve as retainage from any progress payment an amount not to exceed five percent of the payment. As Work progresses, Owner may reduce the amount of retainage on or may eliminate retainage on any remaining monthly Contract payments after fifty (50) percent of the Work under the Contract is completed if, in the Owner's discretion, such Work is progressing satisfactorily. Elimination or reduction of retainage shall be allowed only upon written application by the Contractor, which application shall include written approval of Contractor's surety; except that when the Work is ninety-seven and a half percent (97.5%) completed in Owner's estimation, the Owner may, at its discretion and without application by the Contractor, reduce the retained amount to hundred (100) percent of the value of the Work remaining to be done. Upon receipt of written application by the Contractor, Owner shall respond in writing within a reasonable time.

E.5.1.2 If retainage is withheld, unless the Contractor requests and the Owner accepts a form of retainage described in options (a) or (b) below, the Owner (except as otherwise provided below for a contract of \$500,000 or less), will deposit the retainage in an interest-bearing escrow account as required by ORS 279C.570(2). The Contractor shall execute such documentation and instructions respecting the interest-bearing escrow account as the Owner may require to protect its interests, including but not limited to a provision that no funds may be paid from the account to anyone without the Owner's advance written authorization. For a Contract over \$500,000, if the Contractor requests that the Owner deposit the retainage in an interest-bearing account under ORS 279C.560(5), the Owner will use an interest-bearing escrow account as stated above. For a Contract of \$500,000 or less, if the Contractor requests that the Owner deposit the retainage in an interest-bearing account under ORS 279C.560(5), the Owner will use an interest-bearing account (in a bank, savings bank, trust company or savings association) as provided under ORS 279C.450(5).

In accordance with the provisions of ORS 279C.560, Local Contract Review Board Rules, or the applicable County standard, unless the Owner finds in writing that accepting bonds, securities or other instruments described in option (a) below or a security bond described in option (b) below poses an extraordinary risk that is not typically associated with the bond, security or instrument, the Owner will approve the Contractor's written request:

- a. to be paid amounts which would otherwise have been retained from progress payments where Contractor has deposited acceptable bonds, securities or other instruments of equal value with Owner or in a custodial account or other mutually-agreed account satisfactory to Owner, with an approved bank or trust company to be held in lieu of the cash retainage for the benefit of Owner. Interest or earnings on the bonds, securities or other instruments shall accrue to the Contractor. The Contractor shall execute and provide such documentation and instructions respecting the bonds, securities and other instruments as the Owner may require to protect its interests. To be permissible, the bonds, securities and other instruments must be of a character approved by Owner; or

- b. that the Contractor be allowed, with the approval of the Owner, Owner allow Contractor to deposit a surety bond for the benefit of Owner, in a form acceptable to Owner, in lieu of all or a portion of funds retained, or to be retained. Such bond and any proceeds therefrom shall be made subject to all claims and liens in the manner and priority as set forth for retainage under ORS 279C.550 to ORS 279C.625.

When the Owner has accepted the Contractor's election of option (a) or (b), Owner may recover from Contractor any additional costs incurred through such election by reducing Contractor's final payment. Where the Owner has agreed to Contractor's request for option (b), Contractor shall accept like bonds from Subcontractors and suppliers on the Project from which Contractor has required retainages.

E. 5.1.3 The retainage held by Owner shall be included in and paid to the Contractor as part of the final payment of the Contract Price. The Owner shall pay to Contractor interest at the rate of two thirds of one percent per month on the final payment due Contractor, interest to commence forty-five (45) Days after the date which Owner receives Contractor's final approved application for payment and Work under the Contract has been completed and accepted and to run until the date when final payment is tendered to Contractor. The Contractor shall notify Owner in writing when the Contractor considers the Work complete and deliver to Owner its final application for payment and Owner shall, within fifteen (15) Days after receiving the written notice and the application for payment, either accept the Work or notify the Contractor of Work yet to be performed on the Contract. If Owner does not within the time allowed notify the Contractor of Work yet to be performed to fulfill contractual obligations, the interest provided by this subsection shall commence to run forty-five (45) Days after the end of the fifteen (15) Day period.

E.5.1.4 Owner will reduce the amount of the retainage if the Contractor notifies the Owner that the Contractor has deposited in an escrow account with a bank or trust company, in a manner authorized by the Owner, bonds and securities of equal value of a kind approved by the Owner and such bonds and securities have in fact been deposited.

E.5.1.5 Contractor agrees that if Contractor elects to reserve a retainage from any progress payment due to any Subcontractor or supplier, such retainage shall not exceed five percent of the payment, and such retainage withheld from Subcontractors and suppliers shall be subject to the same terms and conditions stated in Subsection E.5 as apply to Owner's retainage from any progress payment due to Contractor.

E.5.1.6 The Contractor shall comply with all applicable legal requirements for withholding and releasing retainage and for prompt payments, including but not limited to those in ORS Chapters 279C and 701, and 49 CFR 26.29.

E.6 FINAL PAYMENT

E.6.1 Upon completion of all the Work under the Contract, the Contractor shall notify the Owner, in writing, that Contractor has completed Contractor's obligations under the Contract and shall prepare its application requesting final payment. The amount of final payment will be the difference between the total amount due the Contractor pursuant to the Contract Documents and the sum of all payments previously made. Upon receipt of such notice and application for payment, the Owner will inspect the Work, and, if acceptable, submit to Contractor a recommendation as to acceptance of the completed Work and the final estimate of the amount due the Contractor. If the Work is not acceptable, Owner will notify Contractor within fifteen (15) Days of Contractor's request for final payment. Upon approval of this final application for payment by the Owner and compliance by the Contractor with

provisions in Section K, and Contractor's satisfaction of other provisions of the Contract Documents as may be applicable, the Owner shall pay to the Contractor all monies due under the provisions of these Contract Documents.

- E.6.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Owner (1) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least thirty (30) Days' prior written notice has been given to the Owner, (2) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (3) consent of surety, if any, to final payment and (4), if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien.
- E.6.3 Acceptance of final payment by the Contractor, a Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final application for payment.
- E.6.4 Contractor agrees to submit its final payment application within ninety (90) Days after Substantial Completion, unless written extension is granted by Owner. Contractor shall not delay final payment application for any reason, including without limitation nonpayment of Subcontractors, suppliers, manufacturers or others not a party to the Contract, or lack of resolution of a dispute with Owner or any other person of matters arising out of or relating to the Contract. If Contractor fails to submit its final payment application within ninety (90) Days after Substantial Completion, and Contractor has not obtained written extension by Owner, all requests or Claims for additional costs or an extension of Contract Time shall be barred.

SECTION F

PROJECT SITE CONDITIONS

F.1 USE OF PREMISES

Contractor shall confine equipment, storage of materials and operation of Work to the limits indicated by Contract Documents, Applicable Laws, permits or directions of the Owner. Contractor shall follow the Owner's instructions regarding use of premises, if any.

F.2 PROTECTION OF WORKERS, PROPERTY AND THE PUBLIC

- F.2.1 Contractor shall maintain continuous and adequate protection of all of the Work from damage and shall protect the Owner, workers and property from injury or loss arising in connection with the Contract. Contractor shall remedy acceptably to the Owner any damage, injury, or loss, except such as may be directly due to errors in the Contract Documents or caused by authorized representatives or personnel of the Owner. Contractor shall adequately protect adjacent property as provided by law and the Contract Documents.
- F.2.2 Contractor shall take all necessary precautions for the safety of all personnel on the Project Site or otherwise engaged in the undertaking of the Work and shall comply with the Contract Documents, best practices and all applicable provisions of federal, state and municipal safety laws and building codes to prevent

accidents or injury to persons on, about or adjacent to the premises where the Work is being performed. Contractor shall erect and properly maintain at all times, as required by the conditions and progress of the Work, all necessary safeguards for protection of workers and the public against any hazards created by construction. Contractor shall designate a responsible employee or associate on the Project Site, whose duty shall be the prevention of accidents. The name and position of the person designated shall be reported to the Owner. The Owner has no responsibility for Project Site safety. Project Site safety shall be the responsibility of the Contractor.

- F.2.3 Contractor shall not enter upon private property without first obtaining permission from the property owner or its duly authorized representative. Contractor shall be responsible for the preservation of all public and private property along and adjacent to the Work contemplated under the Contract and shall use every precaution necessary to prevent damage thereto. In the event the Contractor damages any property, the Contractor shall at once notify the property owner and make, or arrange to make, full restitution. Contractor shall, immediately and in writing, report to the Owner, all pertinent facts relating to such property damage and the ultimate disposition of the claim for damage.
- F.2.4 Contractor shall be responsible for protection of adjacent work areas including impacts brought about by activities, equipment, labor, utilities, vehicles and materials on the Project Site.
- F.2.5 Contractor shall at all times direct its activities in such a manner as to minimize adverse effects on the environment. Handling of all materials shall be conducted so no release will occur that may pollute or become hazardous.
- F.2.6 In an emergency affecting the safety of life or limb or of the Work or of adjoining property, the Contractor, without special instruction or authorization from the Owner, shall act reasonably to prevent threatened loss or injury, and shall so act, without appeal, if instructed by the Owner. Any compensation claimed by the Contractor on account of emergency work shall be determined in accordance with section D.
- F.2.7 Contractor shall comply with all Owner safety rules and regulations, if applicable. Prior to commencement of any Work, Contractor and Subcontractors shall be required to complete an Owner Contractor Safety Orientation and submit all Owner required safety plans.
- F.2.8 Contractor shall demonstrate that an employee drug testing program is in place.

F.3 CUTTING AND PATCHING

- F.3.1 If applicable, Contractor shall be responsible for coordinating all cutting, fitting, or patching of the Work to make its several parts come together properly and fit to receive or be received by work of other contractors or Subcontractors shown upon, or reasonably implied by, the Contract Documents.
- F.3.2 If applicable, Contractor shall be responsible for restoring all cut, fitted, or patched surfaces to an original condition; provided, however, that if a different condition is specified in the Contract Documents, then Contractor shall be responsible for restoring such surfaces to the condition specified in the Contract Documents.

F.4 CLEANING UP

From time to time as may be prudent or ordered by the Owner and, in any event, immediately after completion of the Work, the Contractor shall, at its own expense, clean up and remove all refuse and unused materials of any kind resulting from the Work. If Contractor fails to do so within twenty-four (24) hours after notification by the Owner the work may be

done by others and the cost charged to the Contractor and deducted from payment due the Contractor.

F.5 ENVIRONMENTAL CONTAMINATION

F.5.1. Contractor shall be held responsible for and shall indemnify, defend (with counsel of Owner's choice), and hold harmless Owner from and against any costs, expenses, damages, claims, and causes of action, or any of them, resulting from all spills, releases, discharges, leaks and disposal of environmental pollution, including storage, transportation, and handling during the performance of the Work or Contractor's obligations under the Contract which occur as a result of, or are contributed by, the negligence or actions of Contractor or its personnel, agents, or Subcontractors or any failure to perform in accordance with the Contract Documents (except to the extent otherwise void under ORS 30.140). Nothing in this section F.5.1 shall limit Contractor's responsibility for obtaining insurance coverages required under Section G.3 of the Contract, and Contractor shall take no action that would void or impair such coverages.

F.5.1.1 Contractor agrees to promptly dispose of such spills, releases, discharge or leaks to the satisfaction of Owner and regulatory agencies having jurisdiction in a manner that complies with Applicable Laws. Cleanup shall be at no cost to the Owner and shall be performed by properly qualified and, if applicable, licensed personnel.

F.5.1.2 Unless otherwise approved in the Solicitation Document, Contractor shall obtain the Owner's written consent prior to bringing onto the Project Site any (i) environmental pollutants or (ii) hazardous substances or materials, as the same or reasonably similar terms are used in any Applicable Laws. In any event, Contractor shall provide prior written notice to Owner when hazardous materials are brought on to the Project Site. The Contractor, at all times, shall:

- (a) properly handle, use and dispose of all environmental pollutants and hazardous substances or materials on the Project Site, in accordance with all Applicable Laws;
- (b) be responsible for any and all spills, releases, discharges, or leaks of (or from) environmental pollutants or hazardous substances or materials which Contractor has brought onto the Project Site; and
- (c) promptly clean up and remediate, without cost to the Owner, such spills, releases, discharges, or leaks to the Owner's satisfaction and in compliance with all Applicable Laws.

F.5.2 Contractor shall report all reportable quantity releases, as such releases are defined in Applicable Laws. Upon discovery, regardless of quantity, Contractor must verbally report all releases to the Owner in a prompt manner. A written follow-up report shall be submitted to Owner within 48 hours of the telephonic report. Such written report shall contain, as a minimum:

- (a) Description of items released (identity, quantity, manifest numbers, and any and all other documentation required by law).
- (b) Whether amount of items released is EPA/DEQ reportable, and, if so, when reported.
- (c) Exact time and location of release, including a description of the area involved.
- (d) Containment procedures initiated.

(e) Summary of communications about the release between Contractor and State, local or federal officials other than Owner. Any communication to the press will be done by Owner and Contractor will defer to Owner.

(f) Description of cleanup procedures employed or to be employed at the Project Site, including disposal location of spill residue.

(g) Personal injuries, if any, resulting from, or aggravated by, the release.

F.6 ENVIRONMENTAL CLEAN-UP

F.6.1 Unless disposition of environmental pollution is specifically a part of the Contract, or was caused by the Contractor (reference F.5 Environmental Contamination), Contractor shall immediately notify Owner of any hazardous substance(s) which Contractor discovers or encounters during performance of the Work required by the Contract. "Hazardous substance(s)" means any hazardous, toxic and radioactive materials and those substances defined as "hazardous substances," "hazardous materials," "hazardous wastes," "toxic substances," or other similar designations in any federal, state, or local law, regulation, or ordinance, including without limitation asbestos, polychlorinated biphenyl ("PCB"), or petroleum, and any substances, materials or wastes regulated by 40 CFR, Part 261 and defined as hazardous in 40 CFR S 261.3. In addition to notifying Owner of any hazardous substance(s) discovered or encountered, Contractor shall immediately cease working in any particular area of the Project where a hazardous substance(s) has been discovered or encountered if continued work in such area would present a risk or danger to the health or wellbeing of Contractor's or any Subcontractor's work force, property or the environment.

F.6.2 Upon being notified by Contractor of the presence of hazardous substance(s) on the Project Site, not brought on to the Project Site by Contractor, Owner shall arrange for the proper disposition of such hazardous substance(s).

F.7 DEMOLITION

F.7.1 For demolition tasks, if any, the Contractor shall salvage or recycle construction and demolition debris, if feasible and cost-effective.

SECTION G INDEMNITY, BONDING, AND INSURANCE

G.1 RESPONSIBILITY FOR DAMAGES / INDEMNITY

G.1.1 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.

G.1.2 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 G.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 G.1.2.

- G.1.3 In claims against any person or entity indemnified under Section G.1.2 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 G.1.2 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.

G.2 PERFORMANCE AND PAYMENT SECURITY; PUBLIC WORKS BOND

- G.2.1 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. If the Contract Price is increased, Contractor shall increase its payment and performance bonds to reflect the amended Contract Price.
- G.2.2 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.
- G.2.3 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.

G.3 INSURANCE

- G.3.1 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.
- G.3.2 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.

G.3.3 Builder's Risk Insurance:

- G.3.3.1 Builder's Risk: 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.

- G.3.3.2 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.

- G.3.3.3 Such insurance shall be maintained until Owner has occupied the facility.

- G.3.3.4 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.

G.3.4 General Liability Insurance:

- G.3.4.1 Commercial General Liability: Upon execution of a Contract, Contractor shall obtain, and keep in effect at Contractor's expense for the term of the Contract, Commercial General Liability Insurance ("CGL") covering bodily injury and property damage in the amount of not less than \$1,000,000 per claim and \$2,000,000 per occurrence in a form satisfactory to Owner. This insurance shall include personal injury liability, products and completed operations, and contractual liability coverage for the indemnities provided under the Contract (to the extent contractual liability coverage for the indemnity is available in the marketplace), and shall be issued on an occurrence basis written on ISO Form GC 00 01 (12 04 or later) or an equivalent form approved in advance by Owner. The CGL shall provide separation of insured language. The policy or policies obtained by Contractor for purposes of fulfilling the requirements of this section shall be primary insurance with respect to the Owner. Any insurance or self-insurance maintained by the County shall be excess and shall not contribute to it.

- G.3.4.2 Automobile Liability: Contractor shall obtain, at Contractor's expense, and keep in effect during the term of the Contract, Automobile Liability Insurance covering owned, and/or hired

vehicles, as applicable. The coverage may be written in combination with the Commercial General Liability Insurance. Contractor shall provide proof of insurance of not less than \$1,000,000 per claim and \$2,000,000 per occurrence. Contractor and its Subcontractors shall be responsible for ensuring that all non-owned vehicles maintain adequate Automobile Liability insurance while on Project Site.

G.3.4.3 Owner may adjust the insurance amounts required in Section G.3.4.1 and G.3.4.2 based upon institution specific risk assessments through the issuance of Supplemental General Conditions and a Contract.

G.3.4.4 To the extent that the Contract Documents require the Contractor to provide professional design services, design-build, or certifications related to systems, materials, or equipment, the Contractor shall (1) purchase and maintain professional liability/errors-and-omissions insurance with limits of not less than \$1,000,000 for each claim and \$2,000,000 general annual aggregate and (2) cause those Subcontractors (of any tier) who are providing professional design services including any design-build services to procure and maintain professional liability/errors-and-omissions insurance with limits of not less than \$1,000,000 for each claim and \$2,000,000 general annual aggregate. This policy shall be for the protection of the Owner, its elected officials, officers, agents and employees against liability for damages because of personal injury, bodily injury, death, or damage to property, including loss of use thereof, and damages because of negligent acts, errors and omissions in any way related to the Contract. The Owner, at its option, may require a complete copy of the above policy.

G.3.4.5 "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).

G.3.4.6 Umbrella Liability (if required by Owner through issuance of Supplemental General Conditions): Contractor shall obtain, at Contractor's expense, and keep in effect during the term of the Contract, Umbrella liability Insurance over and above the general liability, automobile liability and workers' compensation coverage if required by Owner in specified limits at time of requirement.

G.3.4.7 Pollution Liability may be required by Owner through issuance of Supplemental General Conditions.

G.3.5 Additional Insured: The general liability insurance coverage, automobile liability, umbrella, and pollution liability if required, shall include the Owner as additional insureds but only with respect to the Contractor's activities to be performed under the Contract. The additional-insured endorsement for CGL insurance must be written on ISO Form CG 20 10 (10 01) and CG 20 37 (10 01), or their equivalent, but shall not use either of the following forms: CG 20 10 (10 93) or CG 20 10 (03 94). Proof of insurance must include a copy of the endorsement showing "Clackamas County, its elected officials, agents, officers, and employees" as scheduled insureds.

If Contractor cannot obtain an insurer to name the Owner as additional insureds, Contractor shall obtain at Contractor's

expense, and keep in effect during the term of the Contract, Owners and Contractors Protective Liability Insurance, naming the Owner as additional insureds with not less than a \$2,000,000 limit per occurrence. This policy must be kept in effect for 36 months following Final Completion. As evidence of coverage, Contractor shall furnish the actual policy to Owner prior to execution of the Contract.

G.3.6 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.

G.3.7 Certificate(s) of Insurance/Insurance Carrier Qualification: As evidence of the insurance coverage required by the Contract, the Contractor shall furnish certificate(s) of insurance to the Owner prior to execution of the Contract. The certificate(s) will specify all of the parties who are additional insureds or loss payees for the Contract. A renewal certificate shall be sent to Owner at least 10 days prior to coverage expiration. Insurance coverage required under the Contract shall be obtained from insurance companies or entities acceptable to the Owner and that are eligible to provide such insurance under Oregon law. Eligible insurers include admitted insurers that have been issued a certificate of authority from the Oregon Department of Consumer and Business Services authorizing them to conduct an insurance business and issue policies of insurance in the state of Oregon, and certain non-admitted surplus lines insurers that satisfy the requirements of applicable Oregon law and which are subject to approval by the Owner. The Contractor shall be financially responsible for all deductibles, self-insured retentions and/or self-insurance included hereunder. Any deductible, self-insured retention and/or self-insurance in excess of \$50,000 shall be subject to approval by the Owner in writing and shall be a condition precedent to the effectiveness of any Contract.

SECTION H

SCHEDULE OF WORK

H.1 CONTRACT PERIOD

H.1.1 Time is of the essence. The Contractor shall at all times carry on the Work diligently, without delay and punctually fulfill all requirements herein.

H.1.2 Notice to Proceed. Unless otherwise directed in the Contract Documents, Contractor shall commence Work on the Project Site within fifteen (15) Days of the Notice to Proceed. Notwithstanding the Notice to Proceed, Contractor shall not be authorized to proceed with the Work until all initial Contract requirements, including the Contract, performance bond and payment bond, and certificates of insurance, have been fully executed and submitted in a form acceptable to Owner.

H.1.3 Unless otherwise not required in the Construction Documents, Contractor shall participate in a pre-construction conference with the Owner's representative and designated design team. The purpose of this pre-construction conference is to review the Contractor's proposed Schedule of Values and to review any other Project logistics to be coordinated between the parties.

H.1.4 Unless specifically extended by a Change Order, all Work shall be complete by the date contained in the Contract Documents. The Owner shall have the right to accelerate the completion date of the Work, which may require the use of overtime. Such accelerated Work schedule shall be an acceleration in performance of Work under Section D.1.2(f) and shall be subject to the provisions of Section D.1.

H.1.5 The Owner shall not waive any rights under the Contract by permitting the Contractor to continue or complete in whole or in part the Work after the date described in Section H.1.2 above.

H.2 SCHEDULE

H.2.1 Contractor shall provide, by or before the pre-construction conference, the initial as-planned schedule for review and acceptance by the Owner. The submitted schedule must illustrate Work by Project components, labor trades, and long lead items broken down by building and/or floor where applicable. If Owner shall so elect, Contractor shall provide the schedule in CPM format showing the graphical network of planned activities, including i) a reasonably detailed list of all activities required to complete the Work; ii) the time and duration that each activity will take to completion; and iii) the dependencies between the activities. Schedules lacking adequate detail, or unreasonably detailed, will be rejected. The schedule shall include the following: Notice to Proceed or the date the Work commences, if no Notice to Proceed is issued by Owner, Substantial Completion, and Final Completion. Schedules shall be updated monthly, unless otherwise required by the Contract Documents, and submitted with the monthly application for payment. Acceptance of the Schedule by the Owner does not constitute agreement by the Owner as to the Contractor's sequencing, means, methods, or durations. Any positive difference between the Contractor's scheduled completion and the Contract completion date is float owned by the Owner. Owner reserves the right to negotiate the float if it is deemed to be in Owner's best interest to do so. In no case shall the Contractor make a claim for delays if the Work is completed within the Contract Time but after Contractor's scheduled completion.

H.2.2 All Work shall be completed during normal weekdays (Monday through Friday) between the hours of 7:00 a.m. and 5:00 p.m. unless otherwise specified in the Contract Documents. Unless otherwise specified in the Contract Documents, no Work shall be performed during the following holidays:

- New Year's Day
- Martin Luther King Day
- Memorial Day
- Independence Day
- Labor Day
- Veterans Day
- Thanksgiving Day
- Christmas Day
- President's Day

When a holiday falls on a Sunday, the following Monday shall be recognized as a legal holiday. When a holiday falls on Saturday, the preceding Friday shall be recognized as a legal holiday.

H.3 PARTIAL OCCUPANCY OR USE

The Owner may occupy or use any completed or partially completed portion of the Work at any stage, provided such occupancy or use is consented to by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have reasonably accepted in writing the responsibilities assigned to each of them. Approval by the Contractor to partial occupancy or use shall not be unreasonably withheld. Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work. Partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

SECTION I **CORRECTION OF WORK**

I.1 CORRECTION OF WORK BEFORE FINAL PAYMENT

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects, and that the Work will conform to the requirements of the Contract Documents. Work failing to conform to these requirements shall be deemed defective. Contractor shall promptly remove from the premises and replace all defective materials and equipment as determined by the Owner, whether incorporated in the Work or not. Removal and replacement shall be without loss or expense to the Owner, and Contractor shall bear the cost of repairing all Work destroyed or damaged by such removal or replacement. Contractor shall be allowed a period of no longer than thirty (30) Days after Substantial Completion for completion of defective (Punch List) work. At the end of the thirty-day period, or earlier if requested by the Contractor, Owner shall arrange for inspection of the Work by the Architect/Engineer. Should the work not be complete, and all corrections made, the costs for all subsequent reinspections shall be borne by the Contractor. If Contractor fails to complete the Punch List work within the thirty (30) Day period, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) Days after demand without affecting Contractor's obligations.

I.2 WARRANTY WORK

I.2.1 Neither the final certificate of payment nor any provision of the Contract Documents shall relieve the Contractor from responsibility for Defective Work and, unless a longer period is specified, Contractor shall correct all defects that appear in the Work within a period of one year from the date of issuance of the written notice of Substantial Completion by the Owner except for latent defects which will be remedied by the Contractor at any time they become apparent. The Owner shall give Contractor notice of defects with reasonable promptness. Contractor shall perform such warranty work within a reasonable time after Owner's demand and at Contractor's sole expense. If Contractor fails to complete the warranty work within such period as Owner determines reasonable, or at any time in the event of warranty work consisting of emergency repairs, Owner may perform such work and Contractor shall reimburse Owner all costs of the same within ten (10) Days after demand, without affecting Contractor's obligations. The Contractor shall perform the warranty Work by correcting defects within twenty-four (24) hours of notification by Owner, unless otherwise specified in the Contract Documents. Should the Contractor fail to respond within the specified response time, the Owner may, at its option, complete the necessary repairs using another contractor or its agents. If Owner completes the repairs using Owner's agent, Contractor shall pay Owner at the rate of one and one-half (1½) times the standard hourly rate of Owner's agent, plus related overhead and any direct non-salary costs. If Owner completes the repairs using another contractor, Contractor shall pay

Owner the amount of Owner's direct costs billed by the other contractor for the work, plus the direct salary costs and related overhead and direct non-salary expenses of Owner's agents who are required to monitor that contractor's work. Work performed by Owner using Owner's own agents or those of another contractor shall not affect the Contractor's contractual duties under these provisions, including warranty provisions.

- I.2.2 Nothing in this Section I.2 provision shall negate guarantees or warranties for periods longer than one year including without limitation, such guarantees or warranties required by other sections of the Contract Documents for specific installations, materials, processes, equipment or fixtures.
- I.2.3 In addition to Contractor's warranty, manufacturer's warranties shall pass to the Owner and shall not take effect until such portion of the Work covered by the applicable warranty has been accepted in writing by the Owner.
- I.2.4 The one-year period for correction of Work shall be extended with respect to portions of Work performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work, and shall be extended by corrective Work performed by the Contractor pursuant to this Section, as to the Work corrected. The Contractor shall remove from the Project Site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
- I.2.5 Nothing contained in this Section I.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the period for correction of Work as described in this Section I.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.
- I.2.6 If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Price will be reduced as appropriate and equitable as determined by Owner. Such adjustment shall be effected whether or not final payment has been made.

SECTION J

SUSPENSION AND/OR TERMINATION OF THE WORK

J.1 OWNER'S RIGHT TO SUSPEND THE WORK

- J.1.1 The Owner has the authority to suspend portions or all of the Work due to the following causes:
- (a) Failure of the Contractor to correct unsafe conditions;
 - (b) Failure of the Contractor to carry out any provision of the Contract;
 - (c) Failure of the Contractor to carry out orders;
 - (d) Conditions, in the opinion of the Owner, which are unsuitable for performing the Work;
 - (e) Time required to investigate differing Project Site conditions; or
 - (f) Any reason considered to be in the public interest.

- J.1.2 The Owner shall notify Contractor and the Contractor's Surety in writing of the effective date and time of the suspension, and Owner shall notify Contractor and Contractor's surety in writing to resume Work.

J.2 CONTRACTOR'S RESPONSIBILITIES

- J.2.1 During the period of the suspension, Contractor is responsible to continue maintenance at the Project just as if the Work were in progress. This includes, but is not limited to, protection of completed Work, maintenance of access, protection of stored materials, temporary facilities, and clean-up.
- J.2.2 When the Work is recommenced after the suspension, the Contractor shall replace or renew any Work damaged during the suspension, remove any materials or facilities used as part of temporary maintenance, and complete the Work in every respect as though its prosecution had been continuous and without suspension.

J.3 COMPENSATION FOR SUSPENSION

Depending on the reason for suspension of the Work, the Contractor or the Owner may be due compensation by the other party. If the suspension was required due to acts or omissions of Contractor, the Owner may assess the Contractor actual costs of the suspension in terms of administration, remedial work by the Owner's agents or another contractor to correct the problem associated with the suspension, rent of temporary facilities, and other actual costs related to the suspension, and any liquidated damages arising from the delay. If the suspension was caused by acts or omissions of the Owner, the Contractor may be due compensation which shall be defined using Section D, Changes in Work. If the suspension was required through no fault of the Contractor or the Owner, neither party shall owe the other for the impact.

J.4 OWNER'S RIGHT TO TERMINATE CONTRACT

- J.4.1 The Owner may, without prejudice to any other right or remedy, and after giving Contractor seven (7) Days' written notice and an opportunity to cure, terminate the Contract in whole or in part under the following conditions:
- (a) If Contractor should, voluntarily or involuntarily, seek protection under the United States Bankruptcy Code and Contractor as debtor-in-possession or the Trustee for the estate fails to assume the Contract within a reasonable time;
 - (b) If Contractor should make a general assignment for the benefit of Contractor's creditors;
 - (c) If a receiver should be appointed on account of Contractor's insolvency;
 - (d) If Contractor should repeatedly refuse or fail to supply an adequate number of skilled workers or proper materials to carry on the Work as required by the Contract Documents, or otherwise fail to perform the Work in a timely manner;
 - (e) If Contractor should repeatedly fail to make prompt payment to Subcontractors or for material or labor, or should disregard laws, ordinances or the instructions of the Owner;
 - (f) If Contractor is otherwise in breach of any part of the Contract; or
 - (g) If Contractor is in violation of Applicable Laws, either in the conduct of its business or in its performance of the Work.

- J.4.2 At any time that any of the above occurs, Owner may exercise all rights and remedies available to Owner at law or in equity, and, in

addition, Owner may take possession of the premises and of all materials and appliances and finish the Work by whatever method it may deem expedient. In such case, the Contractor shall not be entitled to receive further payment until the Work is completed. If the Owner's cost of finishing the Work exceeds the unpaid balance of the Contract Price, Contractor shall pay the difference to the Owner.

J.5 TERMINATION FOR CONVENIENCE, NON-APPROPRIATION OF FUNDS, OR FORCE MAJEURE

- J.5.1 Owner may terminate the Contract in whole or in part whenever Owner determines: (a) that termination of the Contract is in the best interest of Owner or the public; (b) that the Owner failed to receive funding, appropriations, allocations or other expenditure authority as contemplated by Owner's budget and Owner determines, in its sole determination, and its assessment and ranking of the policy objectives explicit or implicit in Owner's budget, Owner may determine it is necessary to and may terminate the Contract; or (c) in the event of Force Majeure.
- J.5.2 The Owner shall provide the Contractor with seven (7) Days prior written notice of a termination for Owner's or for public convenience. After such notice, the Contractor shall provide the Owner with immediate and peaceful possession of the premises and materials located on and off the premises for which the Contractor received progress payment under Section E. Compensation for Work terminated by the Owner under this provision will be according to Section E. In no circumstance shall Contractor be entitled to lost profits for Work not performed due to termination. If the Contract is terminated for public convenience, neither the Contractor nor its Surety shall be relieved of liability for damages or losses suffered by the Owner as a result of defective, unacceptable or unauthorized Work completed or performed.

J.6 ACTION UPON TERMINATION

- J.6.1 Upon receiving a notice of termination, and except as directed otherwise by the Owner, Contractor shall immediately cease placing further subcontracts or orders for materials, services, or facilities. In addition, Contractor shall terminate all subcontracts or orders to the extent they relate to the Work terminated and, with the prior written approval of the Owner, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts and orders.
- J.6.2 As directed by the Owner, Contractor shall, upon termination, transfer title and deliver to the Owner all Record Documents, information, and other property that, if the Contract had been completed, would have been required to be furnished to the Owner.
- J.6.3 Upon Owner's notice of termination pursuant to either Section J.4 or J.5, if Owner shall so elect, Contractor shall assign to the Owner such subcontracts and orders as Owner shall specify. In the event Owner elects to take assignment of any such subcontract or order, Contractor shall take such action and shall execute such documents as Owner shall reasonably require for the effectiveness of such assignment and Contractor shall ensure that no contractual arrangement between it and its subcontractors or suppliers of any tier or sub-tier shall prevent such assignment.

SECTION K **CONTRACT CLOSE OUT**

K.1 RECORD DOCUMENTS

As a condition of final payment (refer also to section E.6), Contractor shall comply with the following: Contractor shall provide Record Documents for the entire Project to Owner. Record Documents shall depict the Project as constructed and shall reflect each and every change, modification, and deletion made during the construction. Record

Documents are part of the Work and shall be provided prior to the Owner's issuance of final payment. Record Documents include all modifications to the Contract Documents unless otherwise directed.

K.2 OPERATION AND MAINTENANCE MANUALS

As part of the Work, Contractor shall submit two completed operation and maintenance manuals ("O & M Manuals") for review by the Owner prior to submission of any pay request for more than 75% of the Work. Owner's receipt of the O & M Manuals shall be a condition precedent to any payment thereafter due. The O & M Manuals shall contain a complete set of all submittals, all product data as required by the specifications, training information, telephone list and contact information for all consultants, manufacturers, installer and suppliers, manufacturer's printed data, record and shop drawings, schematic diagrams of systems, appropriate equipment indices, warranties and bonds. The Owner shall review and return one O & M Manual for any modifications or adjustments required. Prior to submission of its final pay request, Contractor shall deliver two (2) complete and approved sets of O & M Manuals in paper form and one (1) complete and approved set in electronic form to the Owner and Owner's receipt of the O & M Manuals shall be a condition precedent to Owner's obligation to make final payment.

K.3 COMPLETION NOTICES

- K.3.1 Contractor shall provide Owner written notice of both Substantial and Final Completion. The certificate of Substantial Completion shall state the date of Substantial Completion, the responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and the time within which the Contractor shall finish all items on the Punch List accompanying the Certificate. Both completion notices must be signed and notarized by the Contractor and signed by the Architect/Engineer (if applicable) and Owner to be valid. The Owner shall provide the final signature on the notices. The notices shall take effect on the date they are signed by the Owner.
- K.3.2 Substantial Completion of a facility with operating systems (e.g., mechanical, electrical, HVAC) shall be that degree of completion that has provided a minimum of thirty (30) continuous Days of successful, trouble-free operation, which period shall begin after all performance and acceptance testing has been successfully demonstrated to the Owner. All equipment contained in the Work, plus all other components necessary to enable the Owner to operate the facility in the manner that was intended, shall be complete on the Substantial Completion date. The Contractor may request that a Punch List be prepared by the Owner with submission of the request for the Substantial Completion notice.

K.4 TRAINING

As part of the Work, and prior to submission of the final application for payment, the Contractor shall schedule with the Owner training sessions for all equipment and systems as required by the Contract Documents. Contractor shall schedule training sessions at least two weeks in advance of the date of training to allow Owner to provide its personnel with adequate notice. If assignments arise because of termination under Section J.4, then such assignments shall not relieve Contractor of liability hereunder. The O & M Manual shall be used as a basis for training. In addition to any off-Project Site training required by the Contract Documents, training shall include a formal session conducted at the Project Site after the equipment and/or system is completely installed and operational in its normal operating environment.

K.5 EXTRA MATERIALS

As part of the Work, Contractor shall provide spare parts, extra maintenance materials, and other materials or products in the quantities specified in the Contract Documents prior to final payment. Delivery point for extra materials shall be designated by the Owner.

K.6 ENVIRONMENTAL CLEAN-UP

As part of the Final Completion notice, or as a separate written notice submitted with or before the notice of Final Completion, the Contractor shall notify the Owner that all environmental and pollution clean-up, remediation and closure have been completed in accordance with all Applicable Laws and pursuant to the authority of all agencies having jurisdiction, and Contractor shall provide Owner with any and all documentation related to the same, including but not limited to directives, orders, letters, certificates and permits related to or arising from such environmental pollution. The notice shall reaffirm the indemnification given under Section F.5.1 above. Contractor's completion of its obligations under this Section K.6 and Owner's receipt of documents evidencing such completion shall be a condition precedent to Owner's obligation to make final payment.

K.7 CERTIFICATE OF OCCUPANCY

Owner's receipt of an unconditioned certificate of occupancy from the appropriate state and/or local building officials shall be a condition precedent to Owner's obligation to make final payment, except to the extent failure to obtain an unconditional certificate of occupancy is due to the fault or neglect of Owner.

K.8 OTHER CONTRACTOR RESPONSIBILITIES

The Contractor shall be responsible for returning to the Owner all property of Owner issued to Contractor during construction such as keys, security passes, Project Site admittance badges, and all other pertinent items. Upon notice from Owner, Contractor shall be responsible for notifying the appropriate utility companies to transfer utility charges from the Contractor to the Owner. The utility transfer date shall not be before Substantial Completion and may not be until Final Completion, if the Owner does not take beneficial use of the facility and the Contractor's agents continue with the Work.

The Owner's property is drug free and weapons free areas and the use of tobacco products is only allowed in designated areas. Contractor shall be required to ensure that its employees, Subcontractors and agents shall comply with these requirements.

SECTION L GENERAL PROVISIONS

L.1 NO THIRD PARTY BENEFICIARIES

Owner and Contractor are the only parties to the Contract and are the only parties entitled to enforce its terms. Nothing in the Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly, or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of the Contract.

L.2 SEVERABILITY

If any provision of the Contract is declared by a court to be unenforceable, illegal, or in conflict with any law, the validity of the remaining terms and provisions shall not be affected and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular provision held to be invalid.

L.3 ACCESS TO RECORDS

L.3.1 Contractor shall keep, at all times on the Project Site, one record copy of the complete Contract Documents, including the Plans, Specifications, addenda, and Change Orders (if any) in good order and marked currently to record field changes and selections made during construction, and one record copy of Shop Drawings, Product Data, Samples and similar submittals, and shall at all times give the Owner access thereto.

L.3.2 Contractor shall retain and the Owner and its duly authorized representatives shall have access, for a period not less than ten (10) years, to all Record Documents, financial and accounting records, and other books, documents, papers and records of Contractor which are pertinent to the Contract, including records pertaining to Overhead and indirect costs, for the purpose of making audit, examination, excerpts and transcripts. If for any reason, any part of the Work or the Contract shall be subject to litigation, Contractor shall retain all such records until all litigation is resolved and Contractor shall continue to provide Owner and/or its agents with full access to such records until such time as all litigation is complete and all periods for appeal have expired and full and final satisfaction of any judgment, order or decree is recorded and Owner receives a record copy of documentation from Contractor.

L.4 WAIVER

Failure of the Owner to enforce any provision of the Contract shall not constitute a waiver or relinquishment by the Owner of the right to such performance in the future nor of the right to enforce any other provision of the Contract.

L.5 SUCCESSORS IN INTEREST

The provisions of the Contract shall be binding upon and shall accrue to the benefit of the parties to the Contract and their respective permitted successors and assigns.

L.6 GOVERNING LAW

The Contract shall be governed by and construed in accordance with the laws of the State of Oregon without giving effect to the conflict of law provisions thereof.

L.7 APPLICABLE LAW

Contractor hereto agrees to comply in all ways with applicable local, state and federal ordinances, statutes, laws and regulations.

L.8 NON-EXCLUSIVE RIGHTS AND REMEDIES

Except as otherwise expressly provided herein, the rights and remedies expressly afforded under the provisions of the Contract shall not be deemed exclusive, and shall be in addition to and cumulative with any and all rights and remedies otherwise available at law or in equity. The exercise by either Party of any one or more of such remedies shall not preclude the exercise by it, at the same or different times, of any other remedies for the same default or breach, or for any other default or breach, by the other Party.

L.9 INTERPRETATION

The titles of the sections of the Contract are inserted for convenience of reference only and shall be disregarded in construing or interpreting any of its provisions.

L.10 DEBT LIMITATION

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

L.11 LITIGATION

Any Claim between Owner and Contractor that arises from or relates to the Contract and that is not resolved through the Claims Review Process in Section D.3 shall be brought and conducted solely and exclusively within the Circuit Court of Clackamas County for the State of Oregon; provided, however, if a Claim must be brought in a federal forum, then it

shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the County of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. CONTRACTOR, BY EXECUTION OF THE CONTRACT, HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF THE COURTS REFERENCED IN THIS SECTION.

L. 12 SURVIVAL

All warranty, indemnification, and record retention provisions of the Contract, and all of Contractor's other obligations under the Contract that are not fully performed by the time of Final Completion or termination, and all other rights and obligations which by their context are intended to survive, shall survive Final Completion or any termination of the Contract.

L.13 ACCESS TO RECORDS

L.13.1. Contractor shall keep, at all times on the Work site, one record copy of the complete Contract Documents, including the Plans, Specifications, Construction Change Directives and addenda, in good order and marked currently to record field changes and selections made during construction, and one copy of Shop Drawings, Project Data, Samples and similar submittals, and shall at all times give the Owner access thereto.

L.13.2 Contractor shall retain and the Owner and its duly authorized representatives shall have access, for a period not less than ten (10) years, to all Record Documents, financial and accounting records, and other books, documents, papers and records of Contractor which are pertinent to the Contract, including records pertaining to Overhead and indirect costs, for the purpose of making audit, examination, excerpts and transcripts. If for any reason, any part of the Work or this Contract shall be subject to litigation, Contractor shall retain all such records until all litigation is resolved and Contractor shall continue to provide Owner and/or its agents with full access to such records until such time as all litigation is complete and all periods for appeal have expired and full and final satisfaction of any judgment, order or decree is recorded and Owner receives a record copy of documentation from Contractor.

L.14 WAIVER

Failure of the Owner to enforce any provision of this Contract shall not constitute a waiver or relinquishment by the Owner of the right to such performance in the future nor of the right to enforce any other provision of this Contract.

L. 15 NO ATTORNEY FEES.

In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Contract, each party shall be responsible for its own attorneys' fees and expenses.



WATER ENVIRONMENT SERVICES PUBLIC IMPROVEMENT CONTRACT

PERFORMANCE BOND

Bond No.: 101171624

Solicitation: 2025-25

Project Name: Mt. Talbert MTA Pipe Rehabilitation

Merchants Bonding Company
(Mutual) (Surety #1)
(Surety #2)*

Bond Amount No. 1:	\$ 638,656.19
Bond Amount No. 2:*	\$
Total Penal Sum of Bond:	\$ 638,656.19

* If using multiple sureties

We, Trench Line Excavation, Inc 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 Water Environment Services ("District"), the sum of (Total Penal Sum of Bond) \$* (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 the District, along with the plans, specifications, terms and conditions of which are contained in the above-referenced Project Contract Documents; 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 the District and Clackamas County and their 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 the District, 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 21st day of April, 20 25.

PRINCIPAL: Trench Line Excavation, Inc

By: [Signature]
Signature
President
Official Capacity

Attest: [Signature]
Corporation Secretary

SURETY: Merchants Bonding Company (Mutual)
[Add signatures for each if using multiple bonds]

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

Tracy Stewart
Name
[Signature]
Signature
1605 Liberty Street SE
Address
Salem, OR 97302
City State Zip
(503) 362-2711 tracy@agsadowski.com
Phone ~~xxx~~ Email



WATER ENVIRONMENT SERVICES
PUBLIC IMPROVEMENT CONTRACT

PAYMENT BOND

Bond No.: 101171624

Solicitation: #2025-25

Project Name: Mt. Talbert MTA Pipe Rehabilitation

Merchants Bonding Company
(Mutual) (Surety #1)
(Surety #2)*

Bond Amount No. 1: \$ 638,656.19

Bond Amount No. 2:* \$

Total Penal Sum of Bond: \$ 638,656.19

* *If using multiple sureties*

We, Trench Line Excavation, Inc, 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 Water Environment Services ("District"), the sum of (Total Penal Sum of Bond) Six Hundred Thirty Eight Thousand Six Hundred Fifty Six Dollars & 19/00 (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 the District, along with the plans, specifications, terms and conditions of which are contained in above-referenced Project Contract Documents; 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 the District and Clackamas County and their 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 the District 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 the District 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 21st day of April, 2025.

PRINCIPAL: Trench Line Excavation, Inc

By: [Signature]
Signature
President
Official Capacity

Attest: [Signature]
Corporation Secretary

SURETY: Merchants Bonding Company (Mutual)
[Add signatures for each if using multiple bonds]

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

Tracy Stewart
Name
[Signature]
Signature

1650 Liberty Street SE
Address

Salem, OR 97302

City State Zip

(503) 362-2711 tracy@agsadowski.com

Phone ~~xxx~~ Email

MERCHANTS
BONDING COMPANYTM
POWER OF ATTORNEY

Know All Persons By These Presents, that MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., both being corporations of the State of Iowa, d/b/a Merchants National Indemnity Company (in California only) (herein collectively called the "Companies") do hereby make, constitute and appoint, individually,

A G Sadowski; Derek A Sadowski; Staci O'Dell; Tracy Stewart; Ty Moffett

their true and lawful Attorney(s)-in-Fact, to sign its name as surety(ies) and to execute, seal and acknowledge any and all bonds, undertakings, contracts and other written instruments in the nature thereof, on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

This Power-of-Attorney is granted and is signed and sealed by facsimile under and by authority of the following By-Laws adopted by the Board of Directors of Merchants Bonding Company (Mutual) on April 23, 2011 and amended August 14, 2015 and adopted by the Board of Directors of Merchants National Bonding, Inc., on October 16, 2015.

"The President, Secretary, Treasurer, or any Assistant Treasurer or any Assistant Secretary or any Vice President shall have power and authority to appoint Attorneys-in-Fact, and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings obligatory in the nature thereof."

"The signature of any authorized officer and the seal of the Company may be affixed by facsimile or electronic transmission to any Power of Attorney or Certification thereof authorizing the execution and delivery of any bond, undertaking, recognizance, or other suretyship obligations of the Company, and such signature and seal when so used shall have the same force and effect as though manually fixed."

In connection with obligations in favor of the Florida Department of Transportation only, it is agreed that the power and authority hereby given to the Attorney-in-Fact includes any and all consents for the release of retained percentages and/or final estimates on engineering and construction contracts required by the State of Florida Department of Transportation. It is fully understood that consenting to the State of Florida Department of Transportation making payment of the final estimate to the Contractor and/or its assignee, shall not relieve this surety company of any of its obligations under its bond.

In connection with obligations in favor of the Kentucky Department of Highways only, it is agreed that the power and authority hereby given to the Attorney-in-Fact cannot be modified or revoked unless prior written personal notice of such intent has been given to the Commissioner-Department of Highways of the Commonwealth of Kentucky at least thirty (30) days prior to the modification or revocation.

In Witness Whereof, the Companies have caused this instrument to be signed and sealed this 16th day of July, 2024.



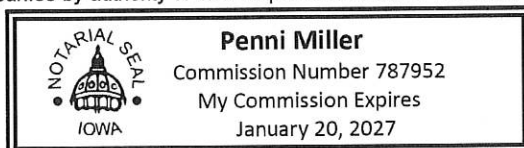
MERCHANTS BONDING COMPANY (MUTUAL)
MERCHANTS NATIONAL BONDING, INC.
d/b/a MERCHANTS NATIONAL INDEMNITY COMPANY

By

Larry Taylor
President

STATE OF IOWA
COUNTY OF DALLAS ss.

On this 16th day of July, 2024, before me appeared Larry Taylor, to me personally known, who being by me duly sworn did say that he is President of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC.; and that the seals affixed to the foregoing instrument are the Corporate Seals of the Companies; and that the said instrument was signed and sealed in behalf of the Companies by authority of their respective Boards of Directors.



(Expiration of notary's commission does not invalidate this instrument)

[Signature]
Notary Public

I, William Warner, Jr., Secretary of MERCHANTS BONDING COMPANY (MUTUAL) and MERCHANTS NATIONAL BONDING, INC., do hereby certify that the above and foregoing is a true and correct copy of the POWER-OF-ATTORNEY executed by said Companies, which is still in full force and effect and has not been amended or revoked.

In Witness Whereof, I have hereunto set my hand and affixed the seal of the Companies on this 21st day of April, 2025.



William Warner Jr.
Secretary



WATER ENVIRONMENT SERVICES PUBLIC IMPROVEMENT CONTRACT

PERFORMANCE BOND

Bond No.: _____
Solicitation: 2025-25
Project Name: Mt. Talbert MTA Pipe Rehabilitation

_____ (Surety #1)	Bond Amount No. 1:	\$ _____
_____ (Surety #2)*	Bond Amount No. 2:*	\$ _____
	Total Penal Sum of Bond:	\$ _____

* If using multiple sureties

We, _____ 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 Water Environment Services ("District"), the sum of (Total Penal Sum of Bond) \$ _____ (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 the District, along with the plans, specifications, terms and conditions of which are contained in the above-referenced Project Contract Documents; 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 the District and Clackamas County and their 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 the District, 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 _____ day of _____, 20____.

PRINCIPAL: _____

By: _____

Signature

Official Capacity

Attest: _____

Corporation Secretary

SURETY: _____

[Add signatures for each if using multiple bonds]

BY ATTORNEY-IN-FACT:

[Power-of-Attorney must accompany each bond]

Name

Signature

Address

City

State

Zip

Phone

Fax



WATER ENVIRONMENT SERVICES
PUBLIC IMPROVEMENT CONTRACT

PAYMENT BOND

Bond No.: _____

Solicitation: #2025-25

Project Name: Mt. Talbert MTA Pipe Rehabilitation

_____ (Surety #1)	Bond Amount No. 1:	\$ _____
_____ (Surety #2)*	Bond Amount No. 2:*	\$ _____
* <i>If using multiple sureties</i>	Total Penal Sum of Bond:	\$ _____

We, _____, 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 Water Environment Services ("District"), the sum of (Total Penal Sum of Bond) _____ (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 the District, along with the plans, specifications, terms and conditions of which are contained in above-referenced Project Contract Documents; 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 the District and Clackamas County and their 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 the District 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 the District 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 _____ day of _____, 20____.

PRINCIPAL: _____

By: _____
Signature

Official Capacity
Attest: _____
Corporation Secretary

SURETY: _____
[Add signatures for each if using multiple bonds]

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

Name

Signature

Address

City State Zip

Phone Fax



CLACKAMAS COUNTY
PUBLIC IMPROVEMENT CONTRACT
PROJECT INFORMATION, PLANS, SPECIFICATIONS AND DRAWINGS
PROJECT: 2025-25 Mt. Talbert MTA Pipe Rehabilitation

Background

Water Environment Services (“WES”) is a special district operating under an ORS 190 Partnership that produces clean water and protects water quality for more than 190,000 people living and working in Clackamas County, Oregon. WES owns and operates five resource recovery facilities, 23 pumping stations and more than 350 miles of pipes. WES serves the Cities of Milwaukie, Happy Valley, Oregon City, West Linn, Gladstone, Johnson City, and unincorporated areas within Clackamas County.

Project Scope:

This contract consists of installing approximately 815 lineal feet of sanitary sewer mainline 8-inches in diameter to divert flows from entering a section of existing pipe beneath Mt. Scott Creek. Construction methods utilized for the improvements will include open-cut installation.

The Project includes the following:

- Excavate and install 815’ of 8” sanitary sewer pipe.
- Installing 12 new 48” diameter concrete manholes with flexible watertight connecting boots to attached pipe.
- Filling and abandoning in-place existing 8” sewer pipe.
- Asphalt pavement replacement in the street and private driveway.
- Additional and incidental work as called for by the specifications and plans.

Engineers Estimate: \$790,000.00

Key Dates:

Most Basic Bid Work may begin as soon as the Notice to Proceed (“NTP”) is issued, though portions of the Work must be completed between July 1, 2025 and July 31, 2025.

Substantial Completion: 120 calendar days of Notice-To-Proceed

Final Completion: 150 calendar days of Notice-To-Proceed

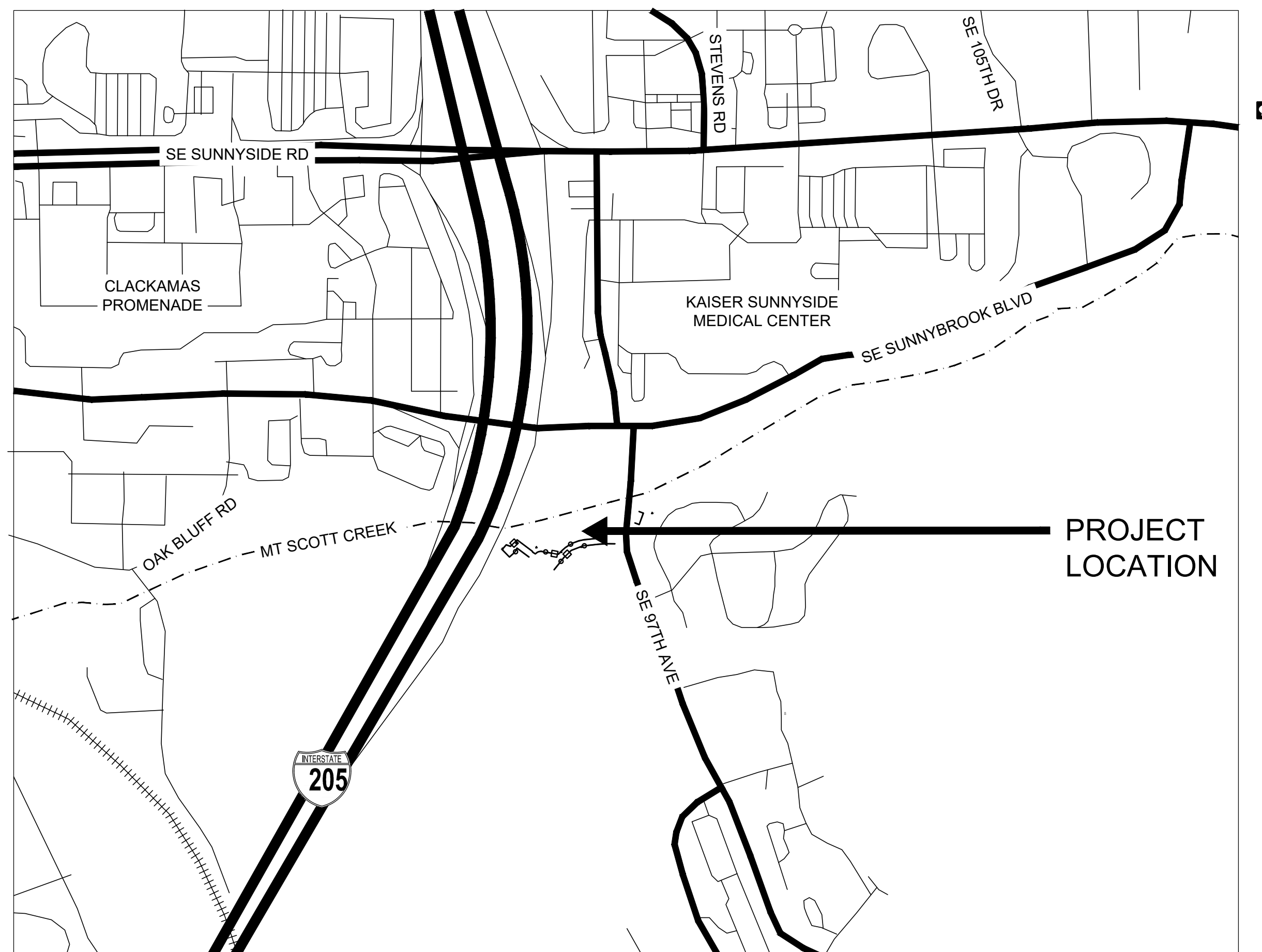
- Milestone 1: **July 31, 2025** for all work within CESD property to be substantially complete.

Time is of the essence for this Project. Note the Liquidated Damages requirements as described in the Supplemental General Conditions.

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

- Drawing Set - Mt. Talbert MTA Pipe Realignment - March 2025 (16 Pages)
- Technical Specifications - Mt. Talbert MTA Pipe Realignment - March 2025 (117 Pages)

MT. TALBERT MTA PIPE REALIGNMENT
WATER ENVIRONMENT SERVICES
CWEC PROJECT NO. 40748045.02
WES PN 700223306
MARCH 2025



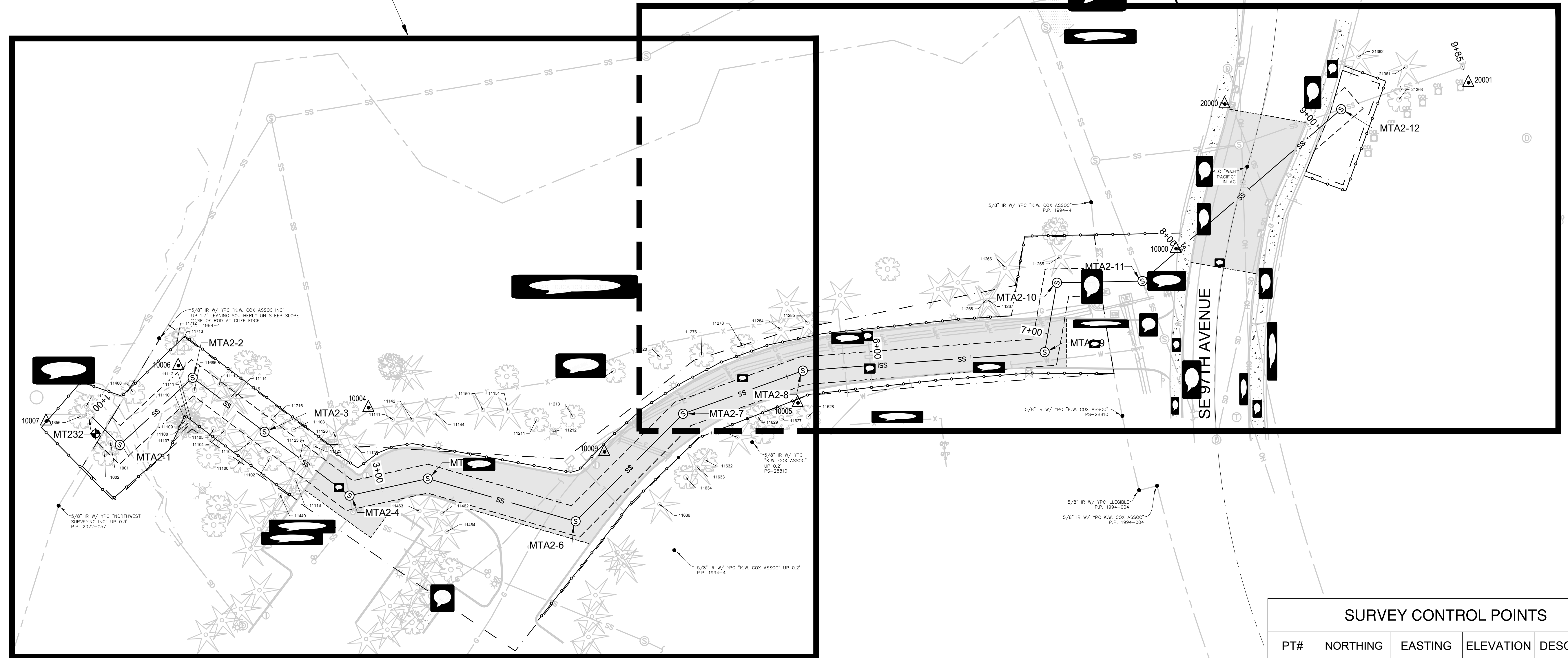
INDEX

SHEET NUMBER	DRAWING NUMBER	SHEET CONTENT
1		COVER SHEET AND INDEX
2	C01	SITE & SURVEY CONTROL PLAN
3	C02	EROSION CONTROL PLAN
4	C03	LATERAL MTA2 PLAN
5	C04	LATERAL MTA2 PROFILE
6	C05	LATERAL MTA2 PLAN & PROFILE
7	C06	DETAILS 1
8	C07	DETAILS 2
9	C08	DETAILS 3
10	C09	TRAFFIC CONTROL PLAN
11	C10	TRAFFIC CONTROL PLAN
12	C11	TEMPORARY PEDESTRIAN ACCESS ROUTE PLAN
13	L01	PLANTING SCHEDULES AND NOTES
14	L02	PLANTING PLAN
15	L03	LANDSCAPE DETAILS
16	L04	LANDSCAPE DETAILS



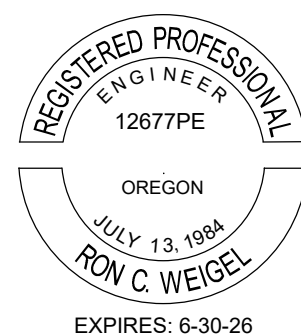
10004 CONTROL POINT

SEE SHEET C05




13455

SURVEY CONTROL POINTS				
PT#	NORTHING	EASTING	ELEVATION	DESCRIPTION
10000	137856.80	376009.60	195.076	S-CP SCRIBE
10004	137771.00	375574.20	173.733	S-CP HUB & MAG
10005	137773.60	375805.70	190.422	S-CP HUB & MAG
10006	137793.70	375471.60	150.996	S-CP HUB & MAG
10007	137763.70	375400.30	141.544	S-CP NAIL
10009	137747.20	375701.40	181.192	S-CP MAG
20000	137934.80	376035.90	193.108	S-CP MAG
20001	137946.30	376167.40	208.479	S-CP NAIL



VERIFY SCALES

BAR IS ONE INCH ON
ORIGINAL DRAWING.
0" 

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY.

[illegible]

PORTLAND OFFICE
5500 MEADOWS RD., #250
LAKE OSWEGO, OR 97035
503.419.2130 OFFICE
503.639.2710 FAX

DESIGNED BY: RW	DRAWN BY: SLK	CHECKED BY: RW	SCALE: 1" = 30'
DATE: MARCH 2025		PROJECT NO: 40748045 02	

WATER ENVIRONMENT SERVICES
MT. TALBERT MTA PIPE REALIGNMENT

SITE & SURVEY CONTROL PLAN

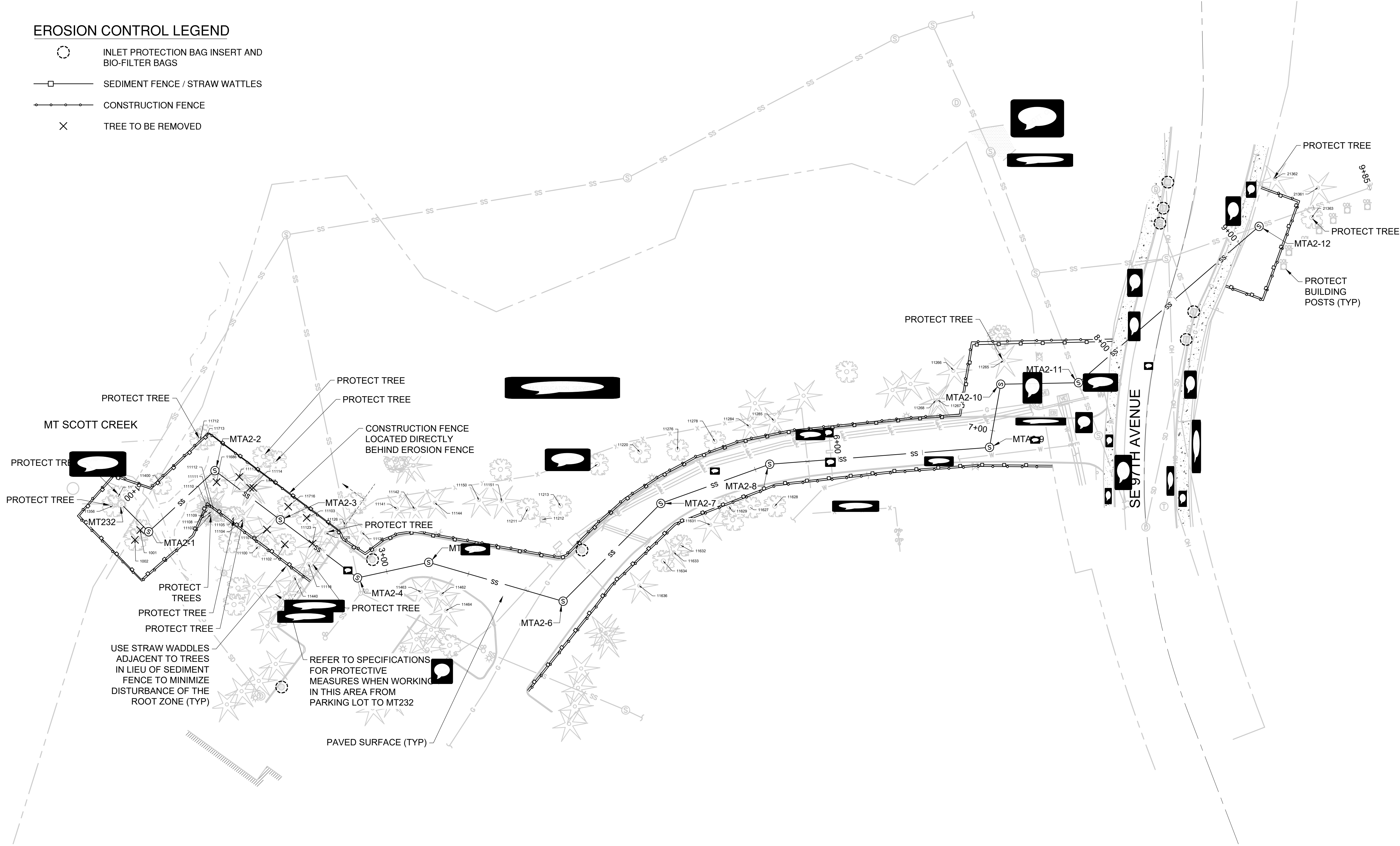
DRAWING NO.

SHEET NO.

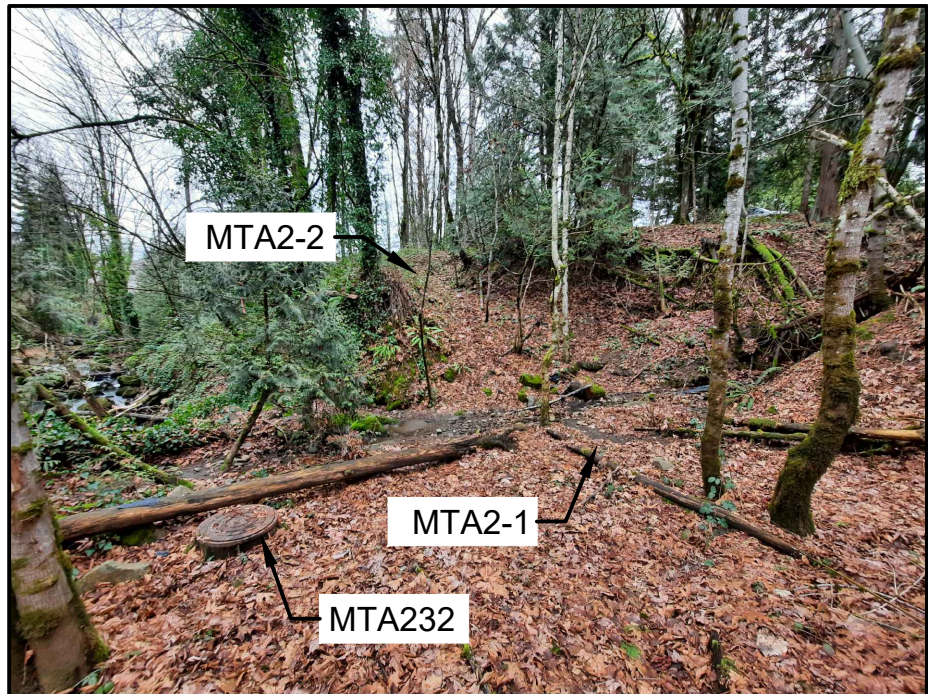
C01

EROSION CONTROL LEGEND

- INLET PROTECTION BAG INSERT AND BIO-FILTER BAGS
- SEDIMENT FENCE / STRAW WATTLES
- CONSTRUCTION FENCE
- TREE TO BE REMOVED



EROSION CONTROL PLAN
SCALE: 1" = 30'



VIEW LOOKING NORTHERLY FROM MTA232
PHOTO TAKEN IN JANUARY, 2023

--- SEE SHEET C.04 FOR PROFILE ---

EXISTING STRUCTURE DATA			
NAME	RIM	IE IN	IE OUT
MT232	134.44	116.60 (21°NE)	115.60 (21°W)
MT231	143.78	LOCKED	LOCKED
MT230	146.93	134.10 (21°E)	127.43 (21°W)
CB #1	166.70	---	164.90 (8°NW)
CB #2	170.90	---	169.10 (8°NW)
CB #3	180.77	---	178.90 (8°SW)
SAMH	187.48	178.90 (8°SE)	178.80 (8°NW)
SDMH1	167.42	161.80 (4°NE)	153.80 (15°NW)
		164.90 (8°NE)	
		154.20 (15°SW)	
		160.10 (4°SE)	

--PROTECT ALL TREES NOT SHOWN FOR REMOVAL--

TREE DATA TABLE			
TREE#	TYPE	TRUNK DIA IN. / DRIP DIA FT.	DESCRIPTION
1001	DECIDUOUS	8" / 6'	REMOVE
1002	DECIDUOUS	13" / 8'	REMOVE
11100	DECIDUOUS	32" / 14'	-
11101	EVERGREEN	40" / 14'	REMOVE
11102	DECIDUOUS	2X6" / 6'	REMOVE
11103	DECIDUOUS	10" / 12'	REMOVE
11104	EVERGREEN	26" / 14'	-
11105	DECIDUOUS	24" / 18'	-
11107	DECIDUOUS	6" / 6'	-
11108	DECIDUOUS	6" / 6'	-
11109	DECIDUOUS	16" / 14'	-
11110	EVERGREEN	12" / 12'	-
11111	DECIDUOUS	26" / 18'	-
11112	EVERGREEN	14" / 12'	-
11113	EVERGREEN	18" / 16'	REMOVE
11114	EVERGREEN	6" / 6'	REMOVE
11115	EVERGREEN	12" / 8'	REMOVE
11118	EVERGREEN	22" / 16'	-
11123	EVERGREEN	6" / 6'	REMOVE
11125	EVERGREEN	16" / 14'	-
11126	EVERGREEN	18" / 14'	-
11128	EVERGREEN	24" / 16'	-
11141	EVERGREEN	6" / 6'	-
11142	EVERGREEN	22" / 16'	-
11144	EVERGREEN	22" / 18'	-
11150	EVERGREEN	14" / 14'	-
11151	EVERGREEN	18" / 14'	-
11211	DECIDUOUS	18" / 16'	-
11212	DEAD	12" / N/A	-
11213	DECIDUOUS	10" / 12'	-
11216	DECIDUOUS	20" / 18'	-
11220	DECIDUOUS	18" / 18'	-
11276	DECIDUOUS	24" / 18'	-
11278	DECIDUOUS	24" / 18'	-
11356	DECIDUOUS	2X8" / 2X6"	-
11357	DECIDUOUS	10" / 16'	-
11400	DECIDUOUS	14" / 18'	-
11440	EVERGREEN	16" / 16'	-
11462	EVERGREEN	12" / 12'	-
11463	EVERGREEN	12" / 12'	-
11464	EVERGREEN	16" / 14'	-
11631	EVERGREEN	6" / 8'	-
11632	DECIDUOUS	12" / 22'	-
11633	EVERGREEN	8" / 10'	-
11634	DECIDUOUS	16" / 24'	-
11636	EVERGREEN	10" / 14'	-
11686	DECIDUOUS	14" / 20'	REMOVE
11712	DECIDUOUS	38" / 26'	-
11713	DECIDUOUS	22" / 20'	-
11716	DECIDUOUS	12" / 16'	REMOVE

MT SCOTT CREEK

5/8" IR W/ YPC "K.W. COX ASSOC INC"
UP 1.3' LEANING SOUTHERLY ON STEEP SLOPE
11712 1994-4

NOTES

- EXPOSE EXISTING 8" SANITARY SEWER PIPE TO MT231. INSTALL "DOG HOUSE" STYLE MTA2-4 OVER PIPE. EXISTING LINE REMAINS IN SERVICE. PLUG DOWNSTREAM PIPE AFTER CHANGEOVER AND PROVIDE GROUTED CHANNEL TO OUTLET PIPE.
- REFER TO TREE TABLE.
- REMOVE/REINSTALL SECTION OF EXISTING CHAIN LINK FENCE FOR CONSTRUCTION EQUIPMENT FROM CORNER POST AT GATE. REPLACE ALL DAMAGED MATERIALS INCLUDING BUT NOT LIMITED TO POSTS, GATES, OR WIRE MESH TO THE SATISFACTION OF THE PROPERTY OWNER. LIMIT REMOVAL TO MAXIMUM WIDTH = 20'. PROVIDE TEMPORARY CHAIN LINK FENCING SECURED AT EACH END TO EXISTING FENCE AFTER DAILY CONSTRUCTION ACTIVITIES.
- CONCRETE COLUMN SUPPORTING I-205 OFF RAMP. DIAMETER IS SHOWN GRAPHICALLY. EDGE OF COLUMN IS APPROXIMATELY 25' FROM MT232.
- STRUCTURE DATA UNABLE TO CONFIRM DURING DESIGN - PIPE LOCATION UNKNOWN.
- REFER TO STRUCTURE TABLE FOR AVAILABLE INFORMATION BASED UPON SURVEY. CONFIRM IN FIELD FOR ADDITIONAL DIRECTION/CONNECTIONS OF PIPE.
- LIMITS OF 15' WIDE PERMANENT EASEMENT.

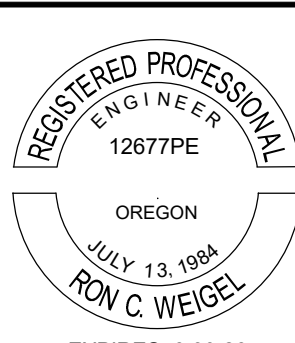
- EXISTING 8" SANITARY SEWER PIPE TO BE ABANDONED. FILL WITH GROUT TO DOWNSTREAM MH.
- EXISTING CLEANOUT.
- REFER TO SPECIFICATIONS SECTION 01560 FOR SPECIAL PROTECTION OF TREE.
- LIMITS OF PAVEMENT RESTORATION INCLUDING AC TRENCH PATCH AND 2" MILL AND INLAY ACROSS EXISTING DRIVEWAY AND PARKING LOT TO CONCRETE CURBS AS SHOWN.

LEGEND

- 15' PERMANENT EASEMENT
- TEMPORARY EASEMENT (TCE)

PLAN

SCALE: 1" = 20'



VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS



PORTLAND OFFICE
5500 MEADOWS RD., #250
LAKE OSWEGO, OR 97035
503.419.2130 OFFICE
503.639.2710 FAX

DESIGNED BY: RW	DRAWN BY: SLK	CHECKED BY: RW	SCALE: 1" = 20'
DATE: MARCH 2025	PROJECT NO: 40748045.02		

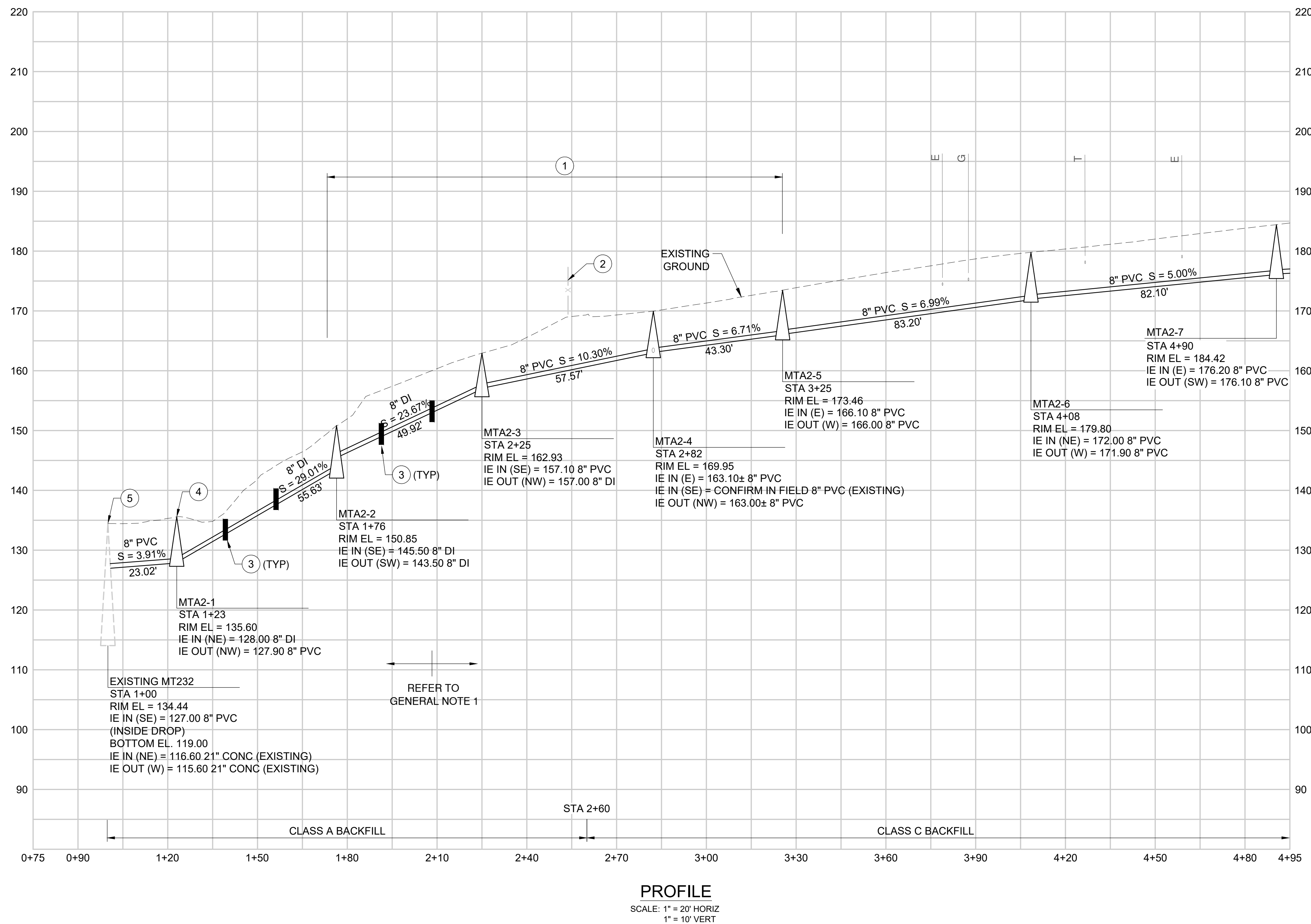
WATER ENVIRONMENT SERVICES
MT. TALBERT MTA PIPE REALIGNMENT

LATERAL MTA2 PLAN

DRAWING NO.

SHEET NO.

C03



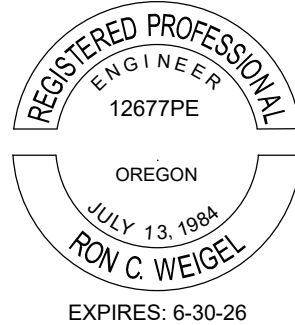
NOTES

1. CONFIRM LOCATION OF 8" SANITARY PIPE TO MT231 BEFORE WORKING IN THIS AREA. ADJUST VERTICAL PROFILE AS NECESSARY TO INTERCEPT AND INSTALL MTA2-4 OVER TOP OF THE PIPE. NEW PIPE INVERT SHALL BE MINIMUM 6" BELOW THE EXISTING PIPE WITH FLOWS TO BE DIVERTED WEST.
2. REMOVE/REINSTALL SECTION OF CHAIN LINK FENCE FOR ACCESS AND CONSTRUCTION. REPLACE ANY DAMAGED FENCE UPON PROJECT COMPLETION. ONE OR TWO STEEL POSTS MAY NEED REMOVAL AND REPLACEMENT ALSO.
3. INSTALL TWO (2) CONCRETE ANCHOR BLOCKS EQUALLY SPACED. REFER TO SHEET C07, DETAIL SAN-017.
4. INSTALL APPROVED INTERIOR PROTECTIVE COATING AFTER VACUUM TESTING HAS PASSED. COATING SHALL COVER ENTIRE SURFACE INCLUDING ALL WALLS, FLOW CHANNEL, SHELF, ETC.
5. INSTALL INSIDE DROP ASSEMBLY. REFER TO DETAIL P-253 ON SHEET C07.

GENERAL NOTE

1. ALL PIPE FROM MTA2-1 TO MTA2-3 SHALL BE CLASS 52 DI WITH FIELD LOCK GASKETS AND COATED WITH PROTECTO 401 ON INTERIOR SURFACE.

--- SEE SHEET C.03 FOR PLAN ---



VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS



DESIGNED BY: RW	DRAWN BY: SLK	CHECKED BY: RW	SCALE: AS SHOWN
DATE: MARCH 2025	PROJECT NO: 40748045.02		

PORTLAND OFFICE
5500 MEADOWS RD., #250
LAKE OSWEGO, OR 97035
503.419.2130 OFFICE
503.639.2710 FAX

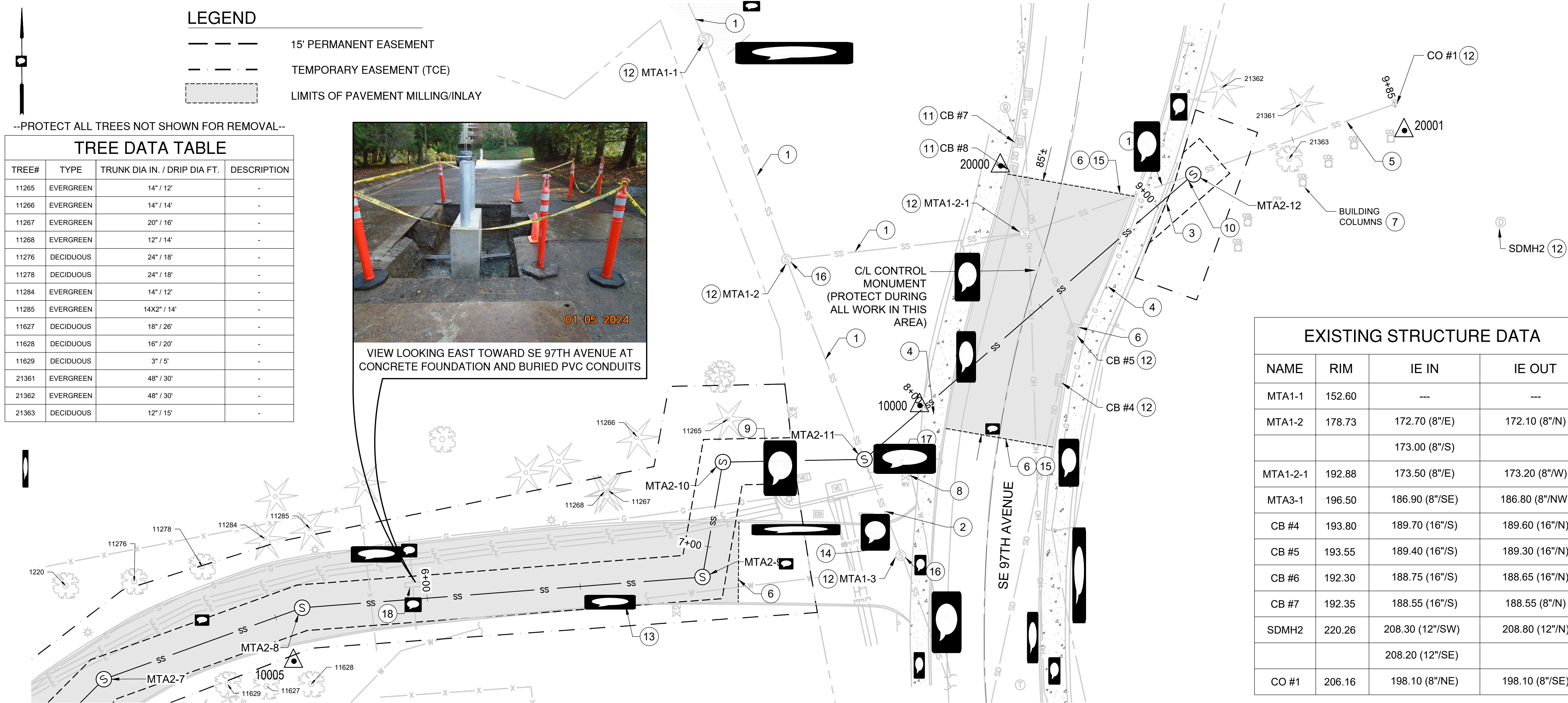
WATER ENVIRONMENT SERVICES
MT. TALBERT MTA PIPE REALIGNMENT

LATERAL MTA2 PROFILE

DRAWING NO.

SHEET NO.

C04

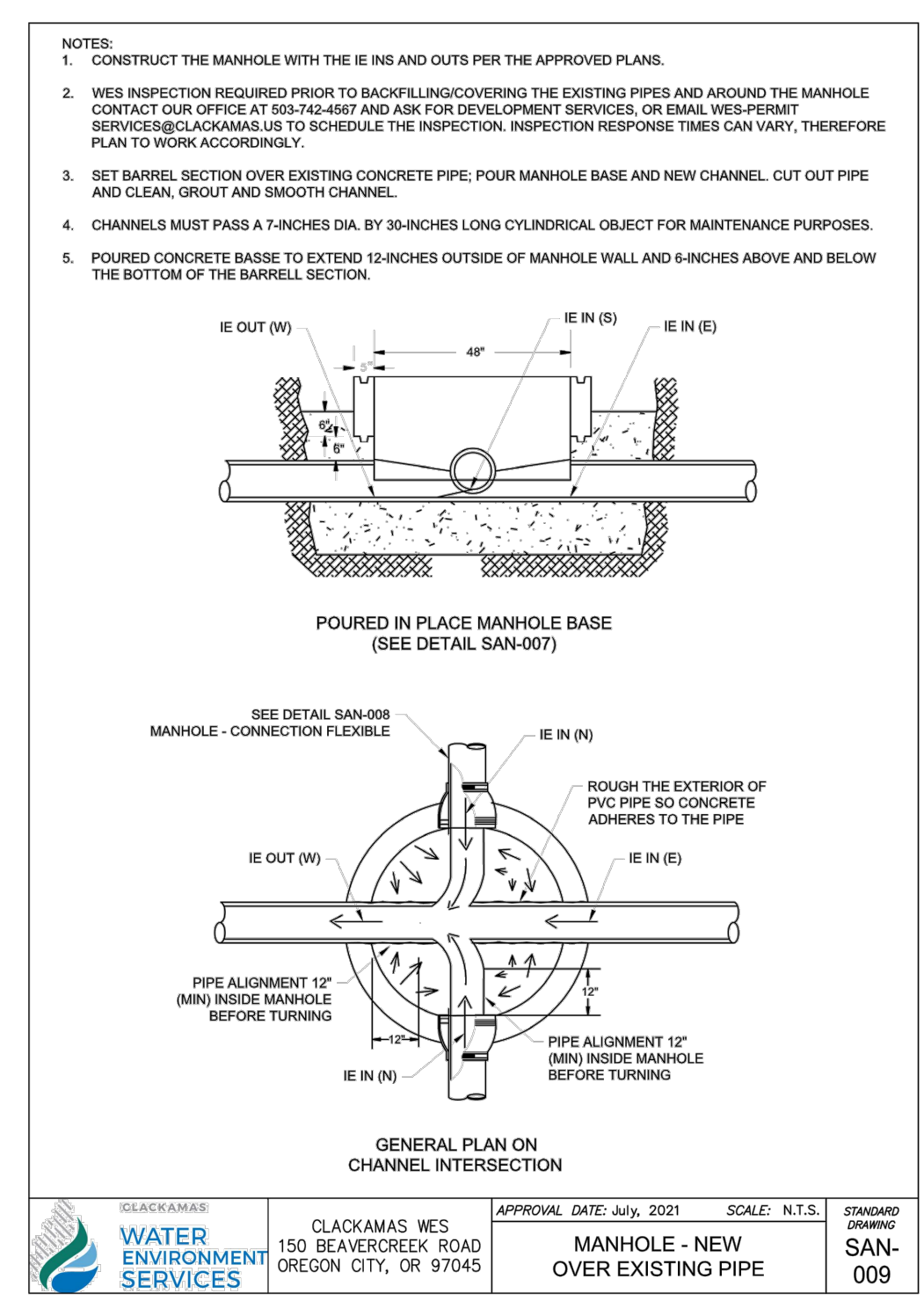
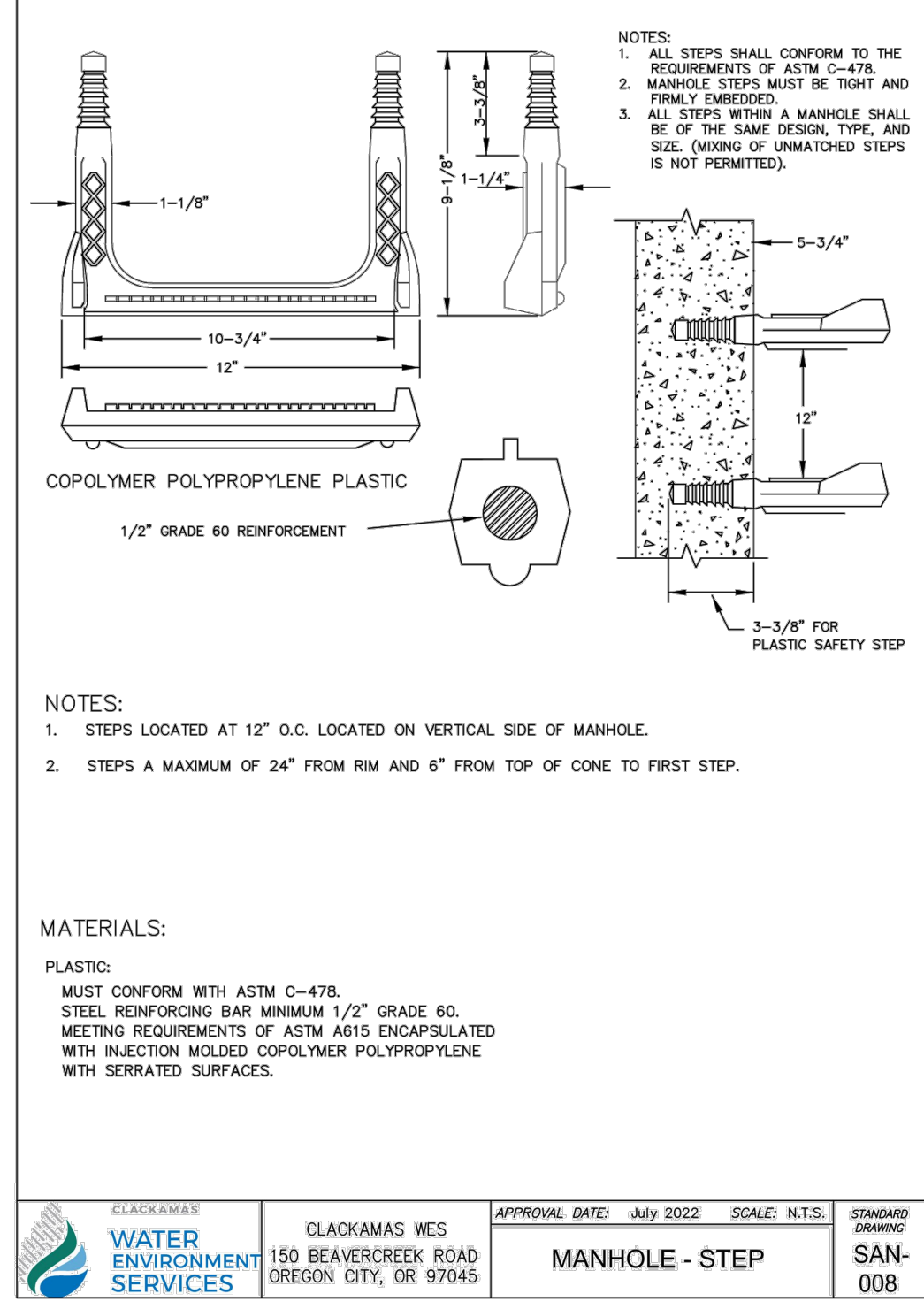
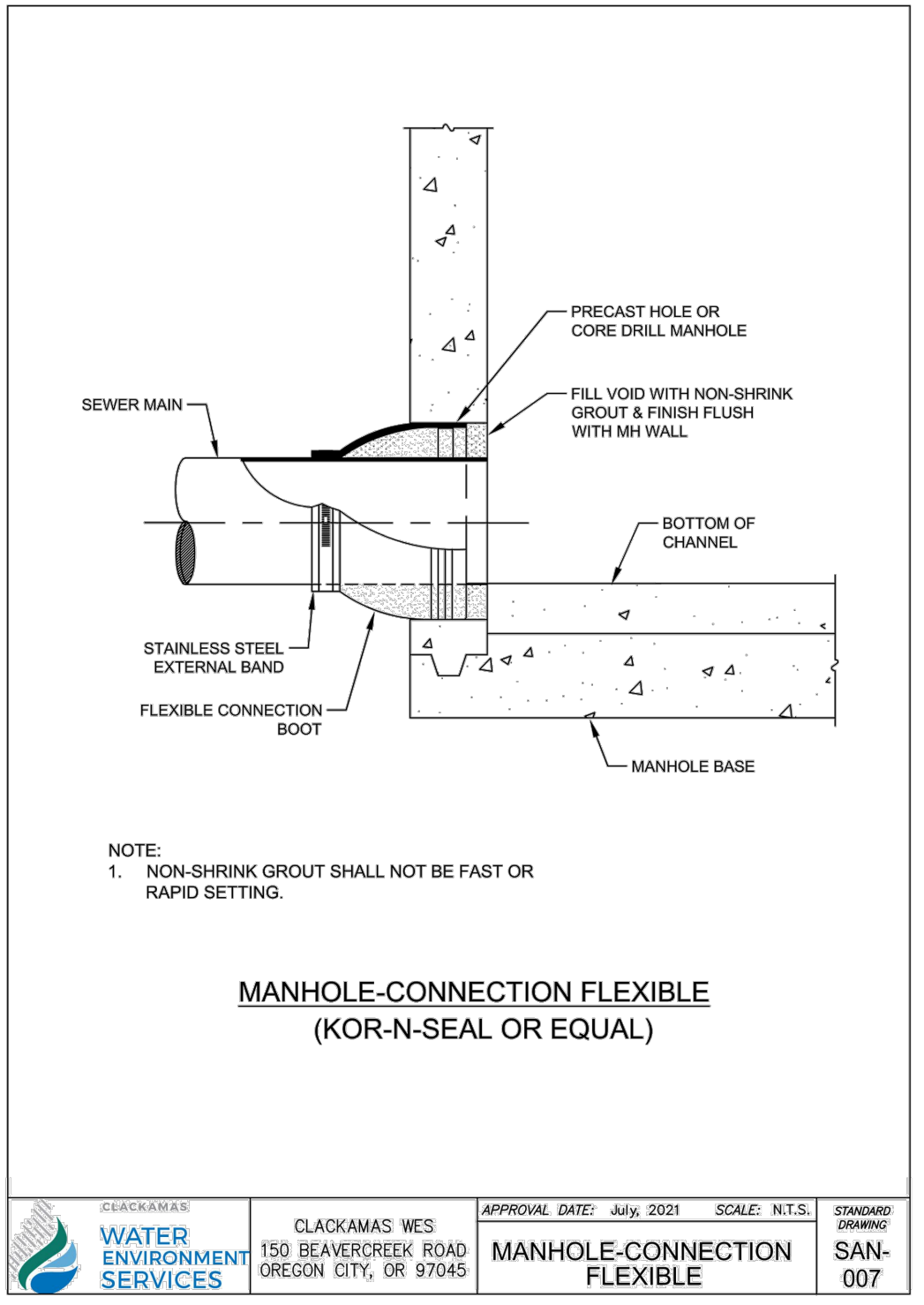
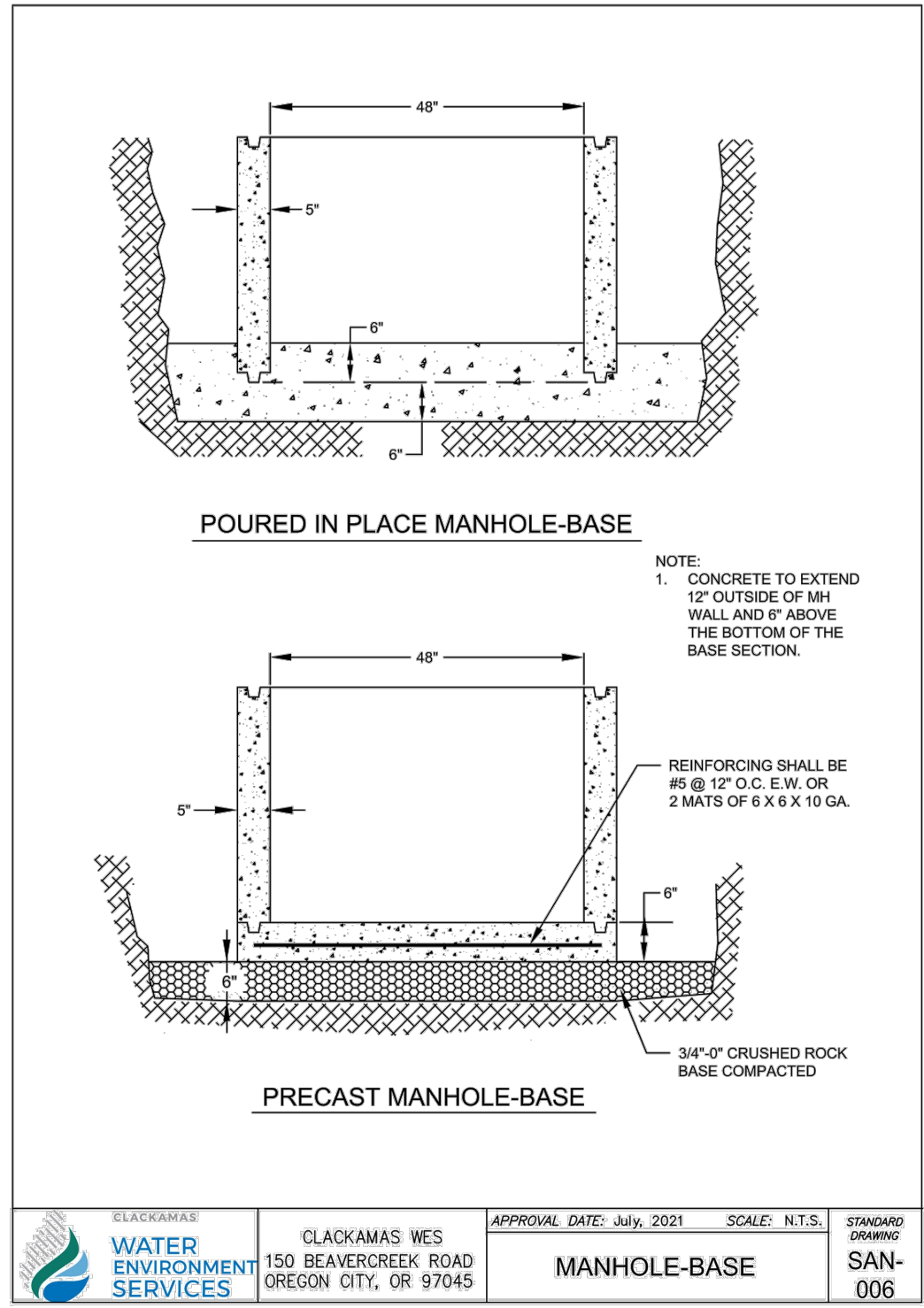
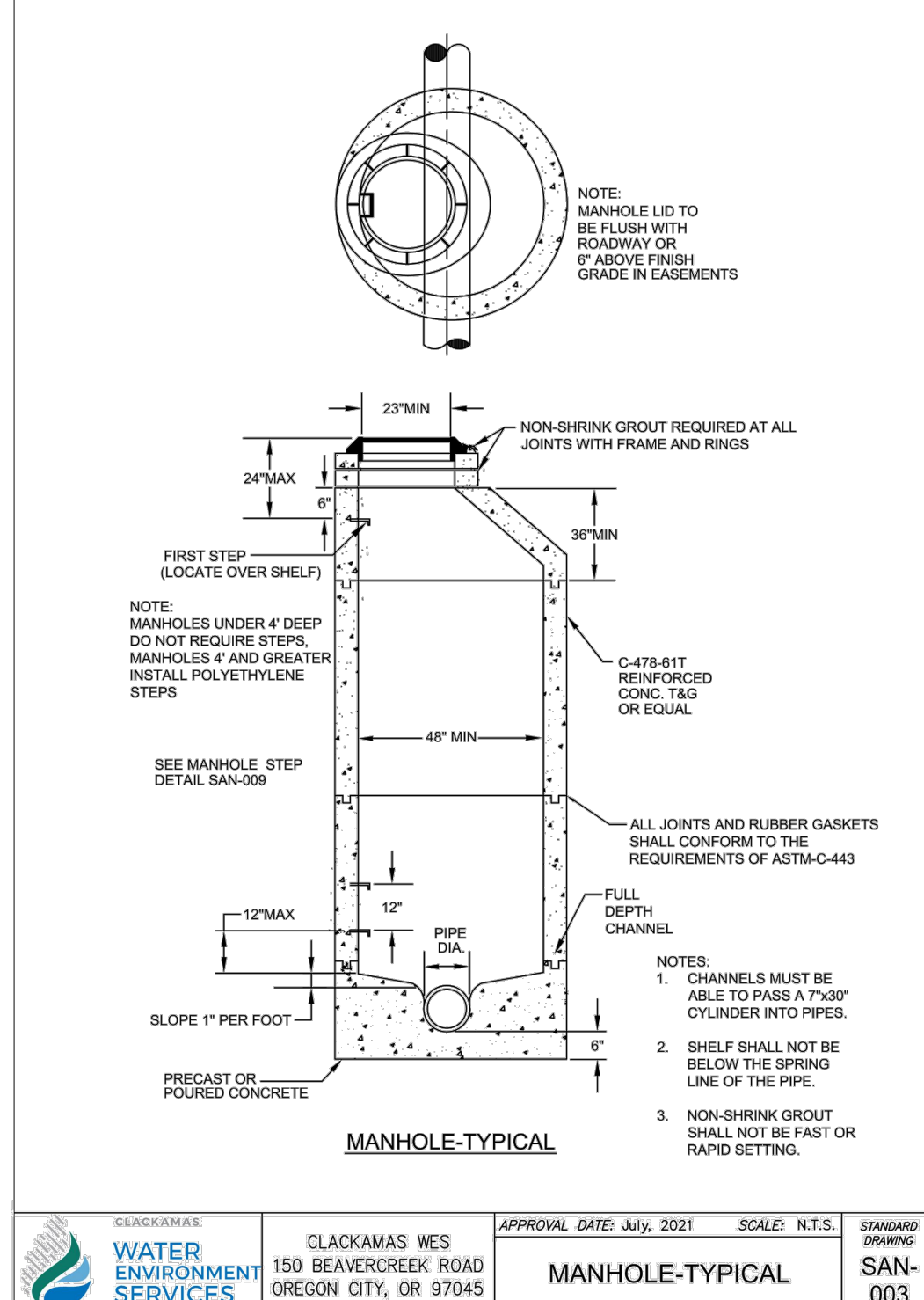
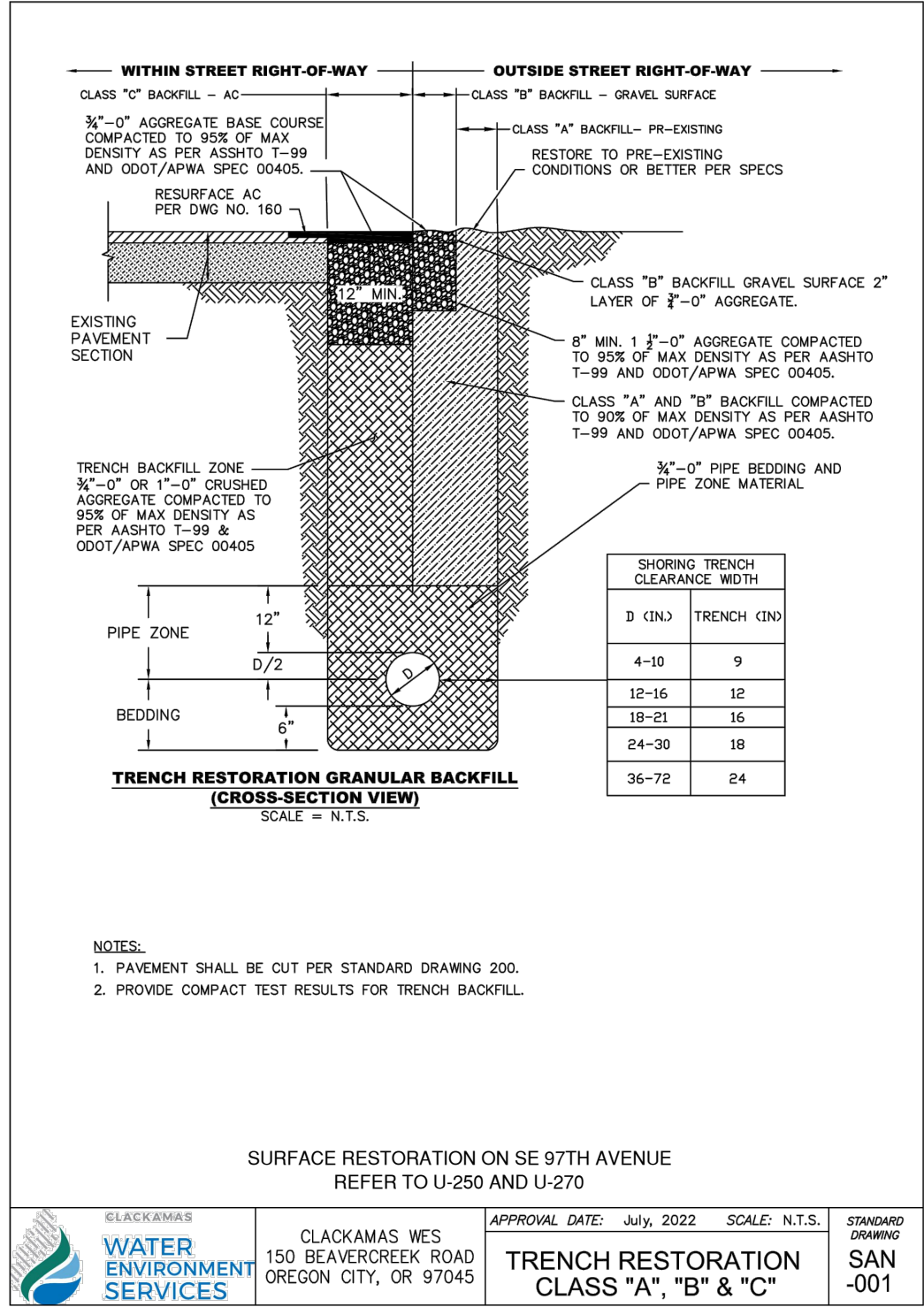


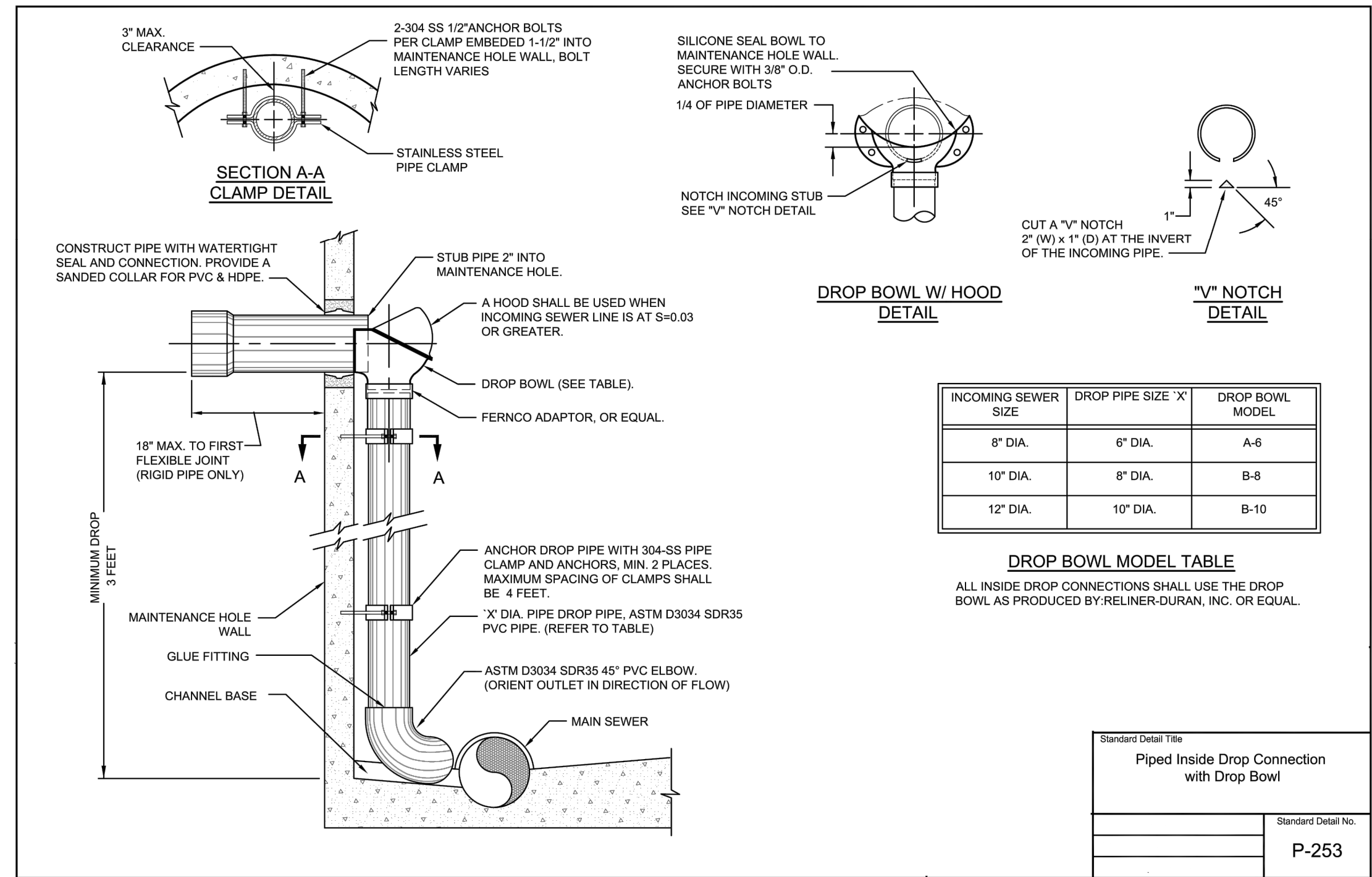
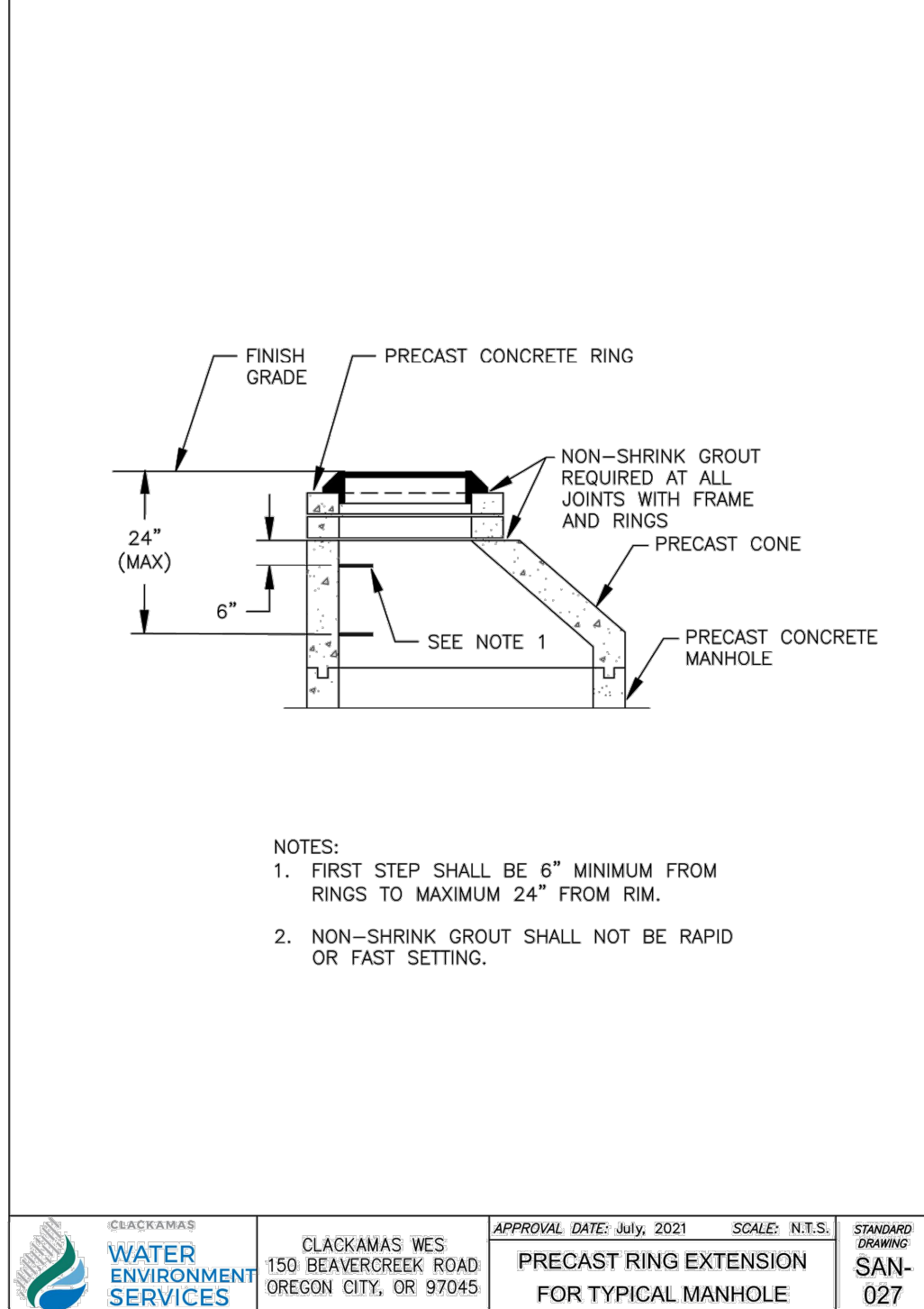
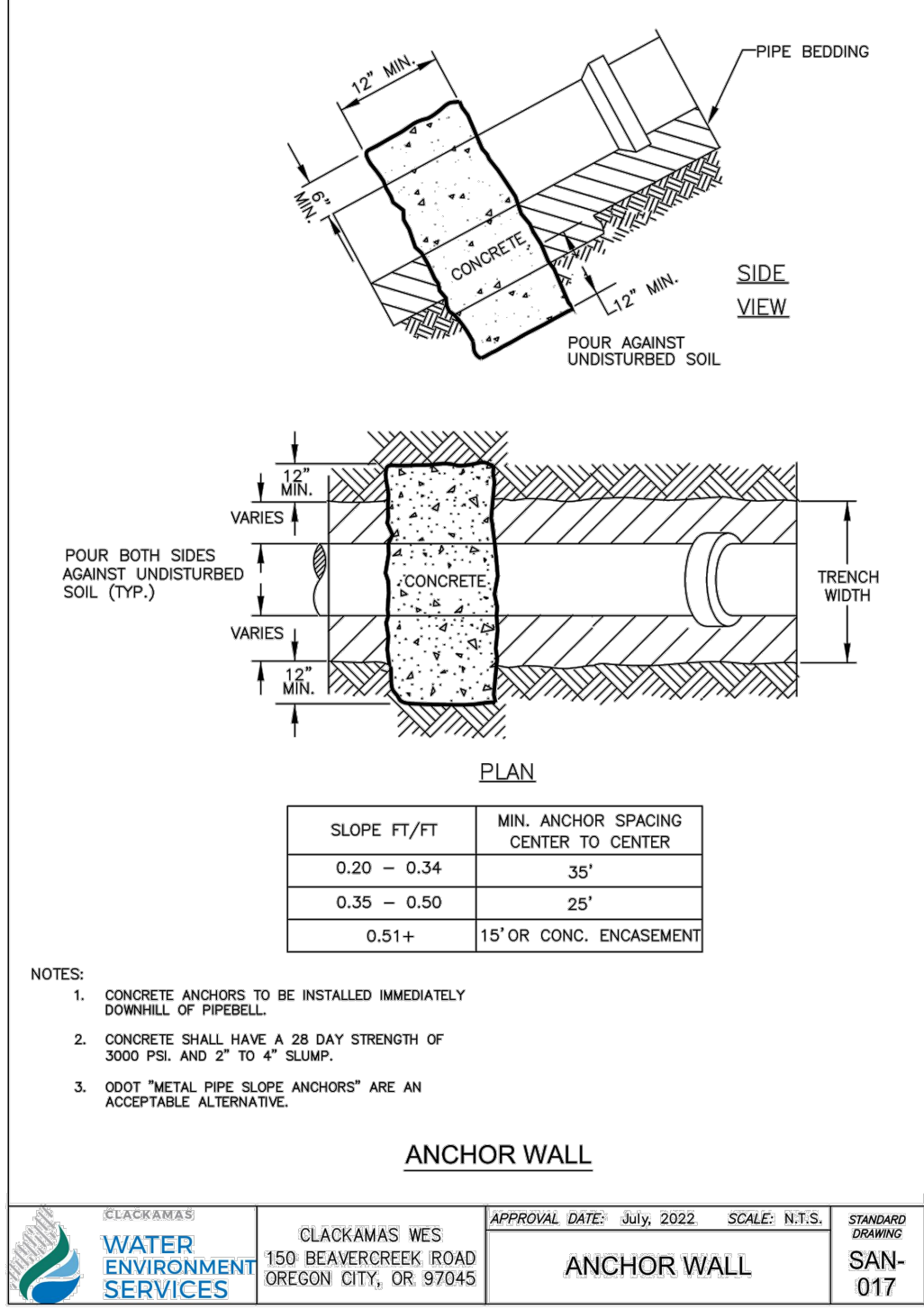
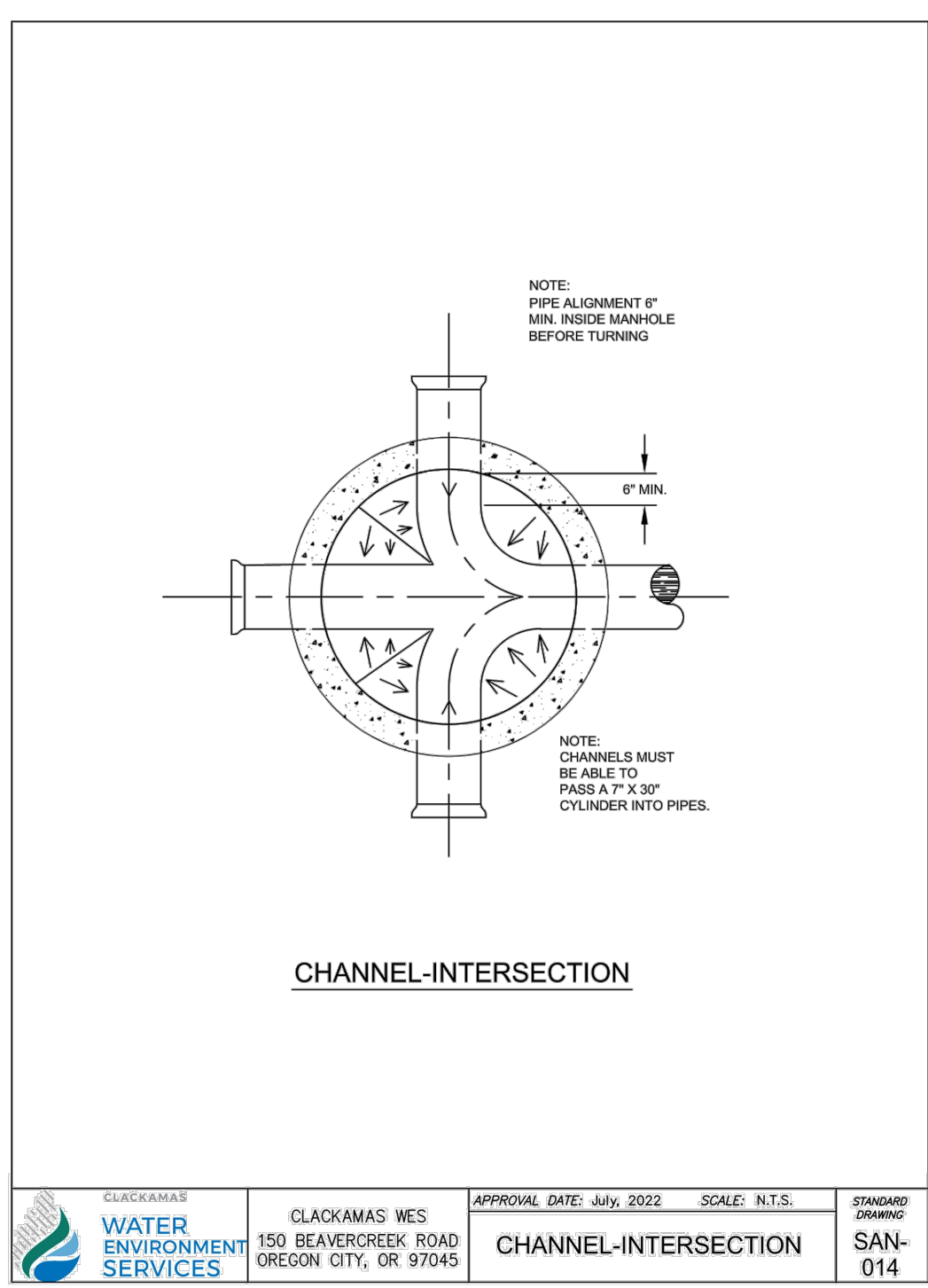
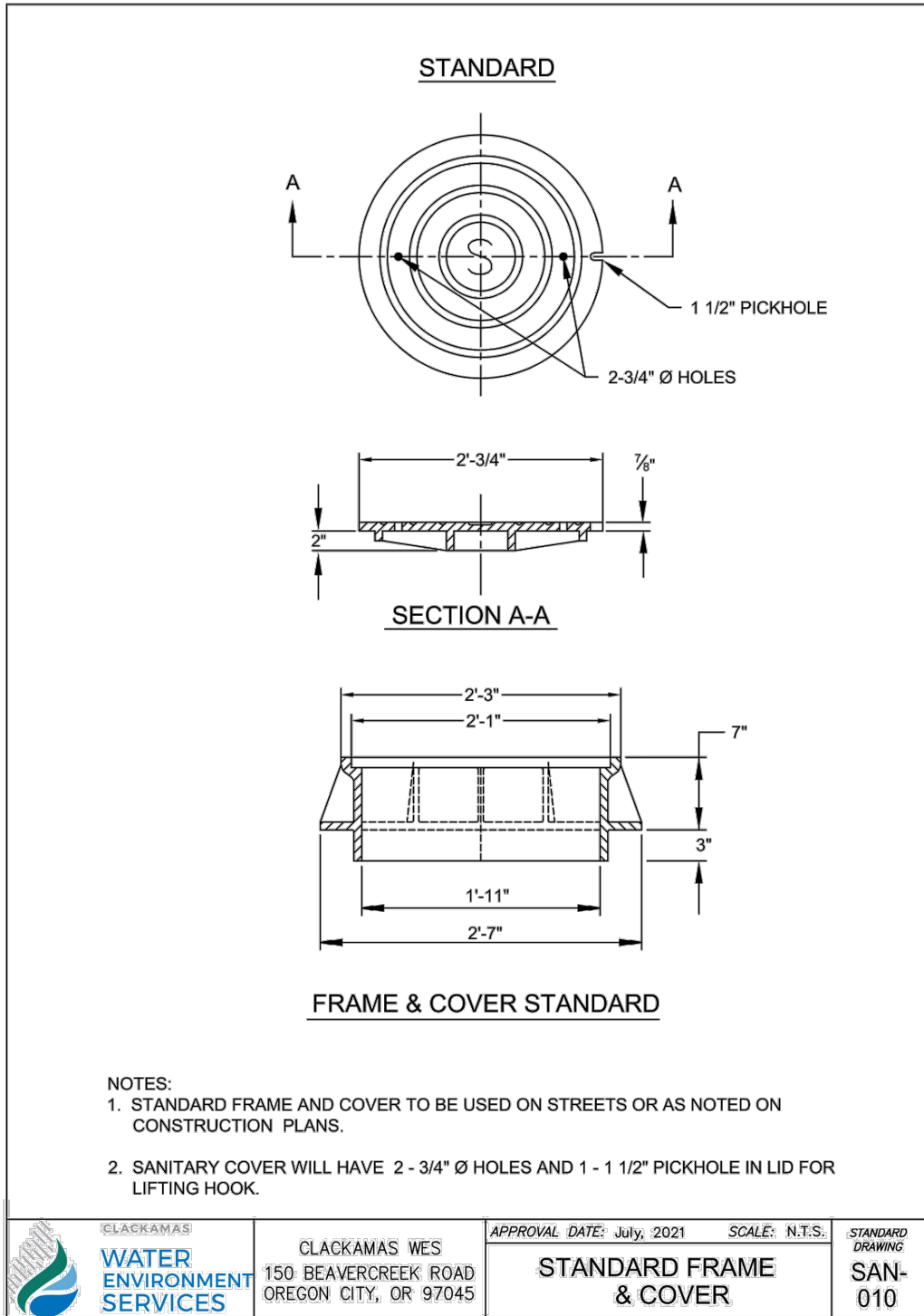
EXISTING STRUCTURE DATA

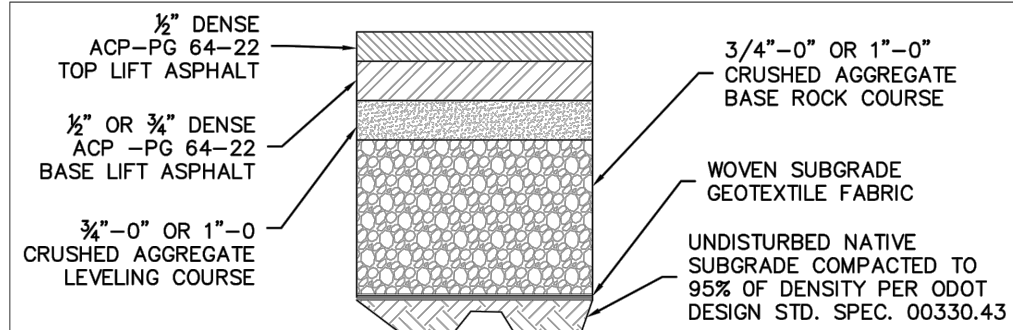
NAME	RIM	IE IN	IE OUT
MTA1-1	152.60	---	---
MTA1-2	178.73	172.70 (8"E)	172.10 (8"N)
		173.00 (8"S)	
MTA1-2-1	192.88	173.50 (8"E)	173.20 (8"W)
MTA3-1	196.50	186.90 (8"SE)	186.80 (8"NW)
CB #4	193.80	189.70 (16"S)	189.60 (16"N)
CB #5	193.55	189.40 (16"S)	189.30 (16"N)
CB #6	192.30	188.75 (16"S)	188.65 (16"N)
CB #7	192.35	188.55 (16"S)	188.55 (8"N)
SDMH2	220.26	208.30 (12"SW)	208.80 (12"N)
		208.20 (12"SE)	
CO #1	206.16	198.10 (8"NE)	198.10 (8"SE)

- NOTES**
- EXISTING 8" SANITARY SEWER PIPE TO BE ABANDONED. FILL WITH GROUT TO DOWNSTREAM MH.
 - INTERCEPT EXISTING 8" PVC AND INSTALL MTA2-11. UPPER SECTION TO MTA1-3 REMAINS IN SERVICE.
 - REMOVE AND REPLACE EXISTING 3' TALL KEYSTONE WALL PARALLEL TO BACK OF SIDEWALK. LENGTH AS REQUIRED TO INSTALL PIPE AND MTA2-13.
 - REPLACE EXISTING SIDEWALK AND CONCRETE CURB REMOVED FOR PIPE INSTALLATION.
 - EXISTING 8" SANITARY SEWER (SEE NOTE 10).
 - LIMITS OF PAVEMENT RESTORATION INCLUDING AC TRENCH PATCH AND 2" MILL AND INLAY ACROSS WIDTH OF SE 97TH AVENUE AND THE PRIVATE DRIVE BETWEEN CONCRETE CURBS AS SHOWN.
 - STEEL BUILDING COLUMNS PLACED ON CONCRETE PADS. PROTECT DURING MOVEMENT OF CONSTRUCTION EQUIPMENT.
 - EXISTING BLOWOFF VALVE ON END OF 36" WATERLINE OWNED BY CLACKAMAS RIVER WATER. NEW SANITARY SEWER TO BE LOCATED BELOW FUTURE EXTENSION OF WATERLINE.
 - REMOVE AND REPLACE EXISTING 3' TALL KEYSTONE WALL. LENGTH AS REQUIRED TO INSTALL PIPE BETWEEN MTA2-10 AND MTA2-11.
 - INTERCEPT EXISTING 8" PVC FROM APARTMENTS AND INSTALL "DOG HOUSE" STYLE MTA2-12 OVER PIPE. UPPER SECTION REMAINS IN SERVICE. PLUG DOWNSTREAM PIPE AFTER CHANGEOVER AND PROVIDE GROUTED CHANNEL TO OUTLET PIPE SOUTH.
 - INVERT ELEVATIONS CALCULATED FROM RECORD DWG.-ODOT SE 97TH AVE - SUNNYBROOK ROAD SECTION. (3/15/05) - CONVERTED METRIC PLANS.
 - REFER TO STRUCTURE DATA TABLE FOR AVAILABLE INFORMATION BASED UPON SURVEY.
 - LIMITS OF 15' WIDE PERMANENT EASEMENT.
 - PRIVATE DRIVEWAY ENTRANCE TO WESTERN ESD BUILDING. COORDINATE WITH CLACKAMAS ESD FOR CLOSURE AND SIGNAGE FOR ROUTING TRAFFIC TO USE MAIN ENTRANCE INTO CAMPUS APPROXIMATELY 200 FEET SOUTH.
 - REPLACE ALL ROADWAY STRIPING AFTER COMPLETION OF PAVING. PROVIDE TEMPORARY MARKERS UNTIL PERMANENT MATERIALS ARE INSTALLED.
 - BYPASS ALL SANITARY SEWER BETWEEN MTA1-2 AND MTA1-3 TO CONSTRUCT NEW MANHOLE (MTA2-11). REFER TO SPECIFICATIONS SECTION 02720 FOR ADDITIONAL INFORMATION.
 - CONTACT NWG FOR PROTECTION OR RELOCATING PIPE.
 - PROTECT EXISTING CONCRETE GATE PEDESTAL 1'-6" x 5' x 4'. MULTIPLE SMALL DIAMETER PVC CONDUITS EXTEND TO STRUCTURE TO CONTROL GATE. REFER TO PHOTO OF CONCRETE PEDESTAL.

- GENERAL NOTES**
- ALL PIPE FROM MTA2-7 TO MTA2-12 SHALL BE PVC ASTM D3034.
 - CLACKAMAS RIVER WATER - EXISTING 36" DI WATER MAIN ENDS AT BLOWOFF. RECORD DRAWINGS DATED 5/19/23 (SE 97TH AVENUE WATERLINE PHASE 3) COMMON VERTICAL DATUM BETWEEN PLANS (184.94 + 3.50 = 188.44 FOR).







ASPHALTIC CONCRETE STANDARD STRUCTURAL SECTION

FUNCTIONAL 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

- 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.
- 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.
- 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.
- 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.
- MATERIAL AND INSTALLATION SHALL CONFORM TO CURRENT OREGON STANDARD SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
- THE WIDTH AND EXTENT OF THE IMPROVEMENT SHALL BE DETERMINED BY ENGINEERING ACCORDING TO STREET CLASSIFICATION.
- CRUSHED AGGREGATE USED FOR BASE ROCK AND LEVELING COURSE SHALL CONFORM TO THE REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS SEC. 02630.

DESIGN	DATE	BY	APPROVAL	DATE	BY	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT	6/7/2020	SP	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	150 BEAVERCREEK ROAD OREGON CITY, OR 97045		SP			
REVISED	11/29/19	SP			SP			

STREET STRUCTURAL SECTION

C100

GENERAL NOTES

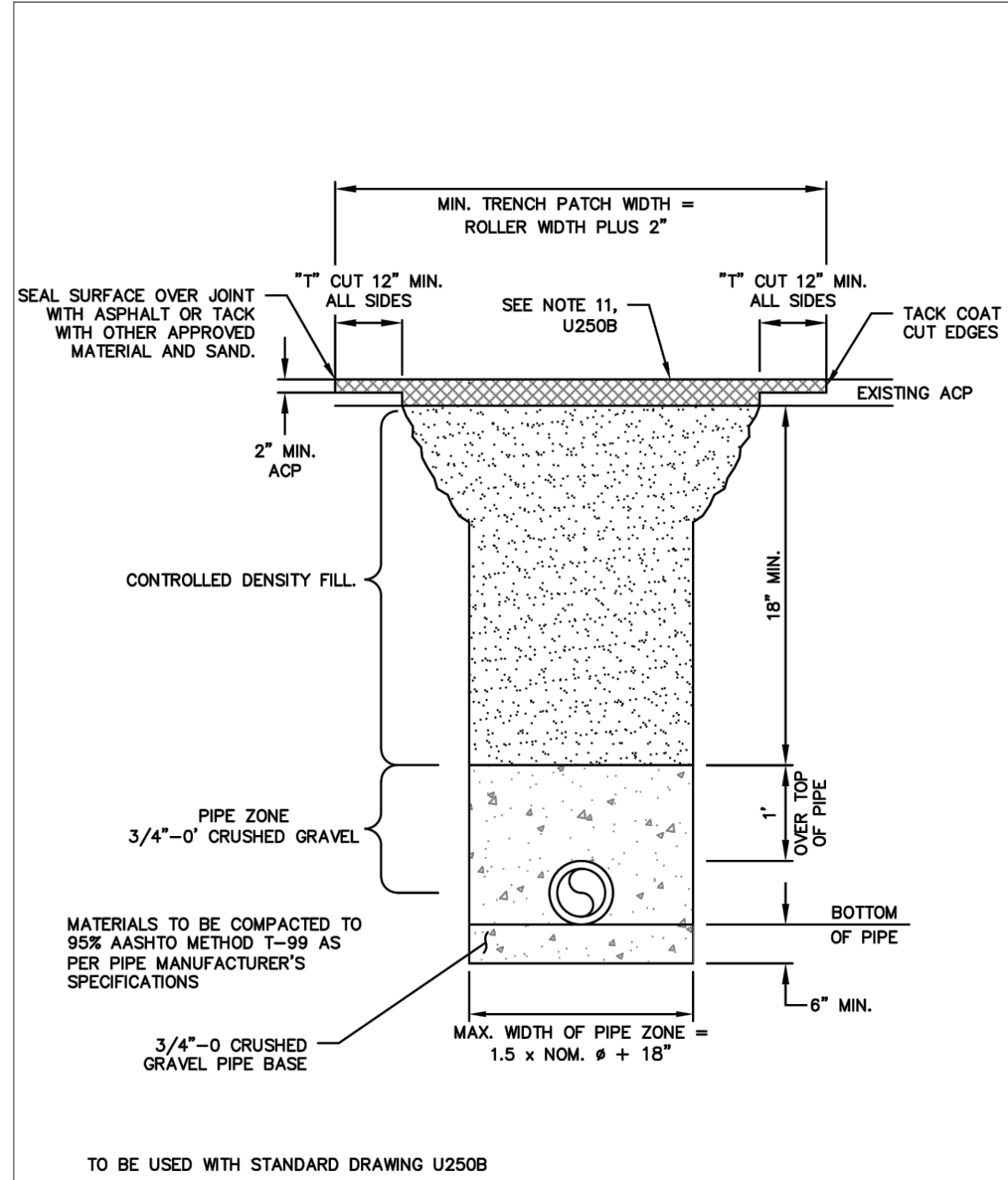
- ALL WORK AND MATERIALS SHALL CONFORM TO THESE PLANS AND THE APPLICABLE PROVISIONS OF THE CLACKAMAS COUNTY ROADWAY STANDARDS. IMPROVEMENTS DEPICTED ON THESE PLANS ARE IN CONFORMANCE WITH COUNTY LAND USE ACTION CASEFILE _____ (INSERT PLANNING FILE NUMBER, EXAMPLE- 20123-03-0).
- IN ORDER TO PROTECT UNDERGROUND FACILITIES, EXCAVATORS PERFORMING THE WORK SET FORTH ON THESE PLANS MUST COMPLY WITH THE PROVISIONS OF ORS 757.557 (REQUIRES CONTRACTOR TO NOTIFY THE OREGON UTILITY NOTIFICATION CENTER AT LEAST TWO, BUT NO MORE THAN 10 BUSINESS DAYS, PRIOR TO ANY EXCAVATION).
- THE LOCATION OF EXISTING UTILITIES SHOWN ON THE PLANS IS APPROXIMATE AND SHOWN FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR SHALL HAVE ALL UTILITIES LOCATED PRIOR TO COMMENCING CONSTRUCTION. NOTIFY ENGINEER AND DTD ENGINEERING OF ANY DISCREPANCIES PRIOR TO INITIATING THE CONSTRUCTION OF THE FACILITIES.
- VERTICAL DATUM: (INSERT A LOCAL BENCH MARK ELEVATION).
- TOPOGRAPHIC SURVEY BY: (INSERT LICENSED SURVEYOR'S OR ENGINEER'S COMPANY AND NAME).
- VEGETATION AND TOPSOIL ARE TO BE STRIPPED TO MINERAL EARTH AND APPROVED BY THE PRIMARY INSPECTOR PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS.
- THE COUNTY REQUIRES A PROOF ROLL TEST WITH A FULLY LOADED 10-YARD DUMP TRUCK (LOAD TICKET TO BE PROVIDED) TO CHECK FOR SOFT SPOTS IN THE SUBGRADE PRIOR TO PLACEMENT OF GEOTEXTILE FABRIC AND GRANULAR BASE ROCK AND AGAIN AT THE COMPLETION OF THE PLACEMENT OF THE BASE ROCK FOLLOWED BY REQUIRED DENSITY TESTING PRIOR TO PAVING THE FIRST LIFT OF ASPHALT CONCRETE.
- ACP MIX IS TO BE BATCHED FROM A MIX FORMULA APPROVED BY OSHD FOR MATERIAL USED. PAVING CONTRACTOR SHALL PROVIDE A CERTIFICATE OF COMPLIANCE FROM ACP PLANT. MIX DESIGN TO BE APPROVED PRIOR TO PAVING.
- SUBSEQUENT SETTLEMENT OR CRACKING OF FINISHED SURFACE WITHIN THE WARRANTY PERIOD SHALL BE CONSIDERED TO BE A FAILURE OF THE SURFACE AND REPAIRED AT NO COST TO THE COUNTY AND IN A MANNER ACCEPTABLE TO THE COUNTY.
- THE CONTRACTOR SHALL CONTROL TRAFFIC THROUGH THE PROJECT SITE IN CONFORMANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND OREGON SUPPLEMENTS. THE CONTRACTOR SHALL, AT ALL TIMES, MAINTAIN LOCAL ACCESS FOR EMERGENCY VEHICLES, BUSINESSES, BUSES, AND HOMEOWNERS ALONG THE PROJECT SITE.
- WHEN TRAFFIC DELAYS ARE TO BE EXPECTED, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE AGENCIES, INCLUDING TRIMET, SCHOOL DISTRICT, EMERGENCY SERVICES, AND LOCAL BUSINESSES.
- THE CONTRACTOR SHALL HAVE A MINIMUM OF ONE (1) SET OF APPROVED CONSTRUCTION PLANS ON THE JOB SITE AT ALL TIMES DURING THE CONSTRUCTION PHASES.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF TREES, STUMPS, BRUSH, ROOTS, TOPSOIL AND OTHER MATERIAL ENCOUNTERED DURING THE CONSTRUCTION PHASES. MATERIALS TO BE REMOVED ON THE PLANS MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH LOCAL, REGIONAL, AND STATE REGULATIONS AT FACILITIES AUTHORIZED TO ACCEPT SUCH MATERIAL. FILL SITES SHALL BE LEVELLED AND GRADED TO DRAIN. THE CONTRACTOR SHALL CORRECT ANY DEFICIENT FILL OR NON PERMITTED DISPOSAL OF MATERIALS.
- CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL EARTHWORK, TRENCH BACKFILL AND ROAD CONSTRUCTION COMPACTION TESTS, AND GEOTECHNICAL REVIEWS WITH THE SOILS TESTING LAB AS REQUIRED FOR ACCEPTANCE OF PROJECT WORK BY CLACKAMAS COUNTY. COUNTY SHALL BE PROVIDED WITH ALL TEST RESULTS.
- PROVIDE A PRE-CONSTRUCTION SURVEY TO CLACKAMAS COUNTY, DTD INDICATING ALL FOUND AND MISSING MONUMENTATION WITHIN THE PROJECT LIMITS PRIOR TO INITIATING CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL CAREFULLY MAINTAIN BENCHMARKS, PROPERTY CORNERS, MONUMENTS, AND OTHER REFERENCE POINTS PURSUANT TO ORS 208.140 AND ORS 208.150. IF SUCH POINTS ARE DISTURBED OR DESTROYED BY CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND PAY FOR THEIR REPLACEMENT BY EMPLOYING A PROFESSIONAL LAND SURVEYOR TO RESET PROPERTY CORNERS & OTHER SUCH MONUMENTS.

DESIGN	DATE	BY	APPROVAL	DATE	BY	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT	6/7/2020	SP	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	150 BEAVERCREEK ROAD OREGON CITY, OR 97045		SP			
REVISED	4/21/19	SP			SP			
REVISED	4/21/19	SP			SP			

STANDARD NOTES

GENERAL

N100



TO BE USED WITH STANDARD DRAWING U250B

DESIGN	DATE	BY	APPROVAL	DATE	BY	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT	6/7/2020	SP	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	150 BEAVERCREEK ROAD OREGON CITY, OR 97045		SP			
REVISED	11/7/19	SP			SP			
REVISED	11/7/19	SP			SP			

STANDARD TRENCH WITH CONTROLLED DENSITY BACKFILL

U250A

NOTES

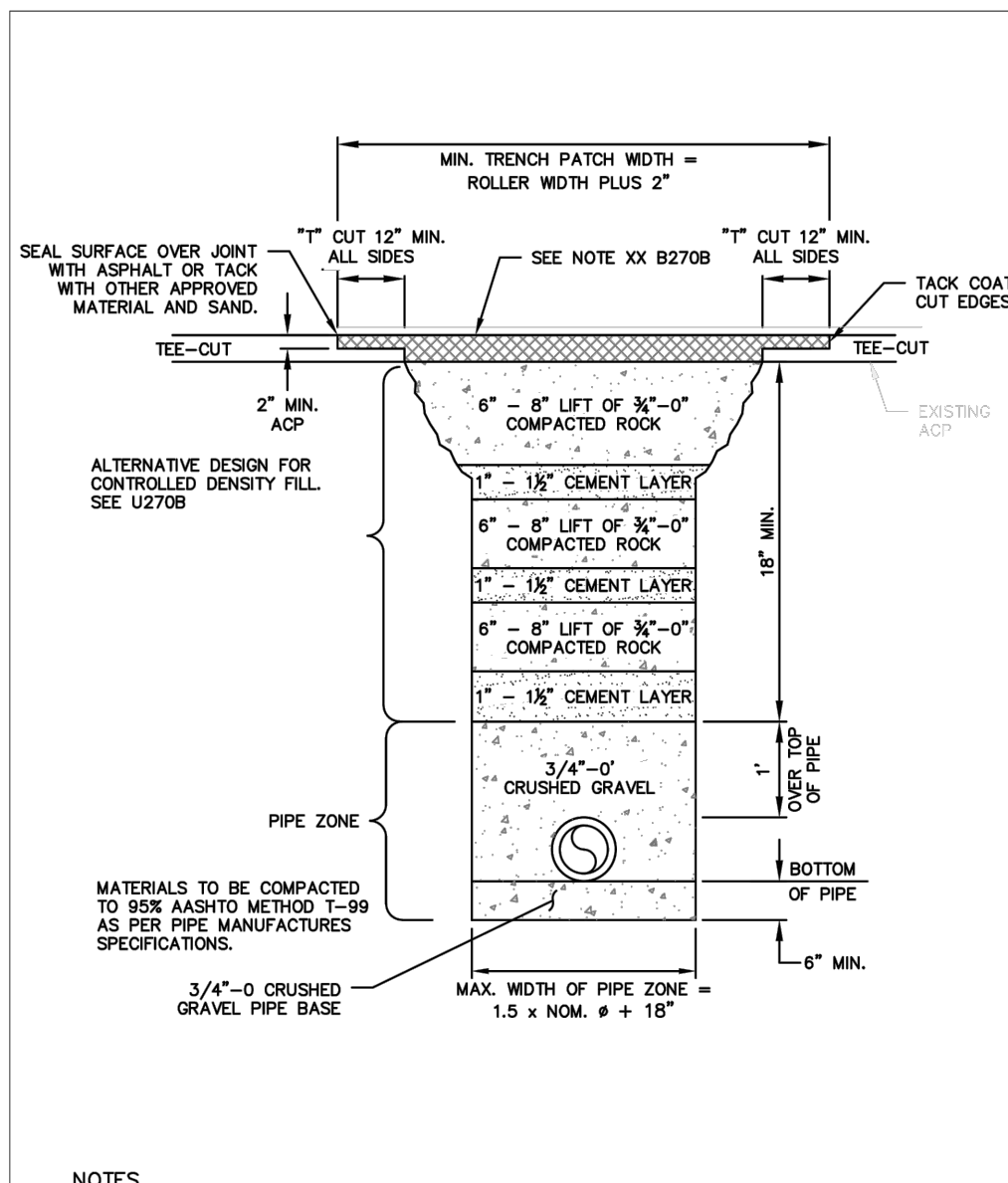
- THE USE OF CONTROL DENSITY FILL SHALL BE DETERMINED BY SECTION 710.8
- THE EXISTING ACP SHALL BE SAWCUT THROUGH ENTIRE ACP SECTION PRIOR TO EXCAVATION.
- BACKFILL IN THE PIPE ZONE SHALL BE PLACED IN MAXIMUM 6" COMPACTED LIFTS.
- COF SHALL BE A LOW STRENGTH, HIGHLY FLOWABLE MIXTURE OF PORTLAND CEMENT,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

DESIGN	DATE	BY	APPROVAL	DATE	BY	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT	6/7/2020	SP	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	150 BEAVERCREEK ROAD OREGON CITY, OR 97045		SP			
REVISED	11/7/19	SP			SP			
REVISED	11/7/19	SP			SP			

NOTES FOR

U250A

U250B



NOTES

- TO BE USED WITH STANDARD DRAWING U270B

DESIGN	DATE	BY	APPROVAL	DATE	BY	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT	6/7/2020	SP	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	150 BEAVERCREEK ROAD OREGON CITY, OR 97045		SP			
REVISED	11/7/19	SP			SP			
REVISED	11/7/19	SP			SP			

ALTERNATIVE TRENCH WITH CONTROLLED DENSITY BACKFILL

U270A

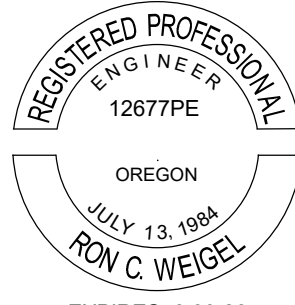
NOTES

- COF MIX SHALL BE DESIGNED TO ENSURE THAT THE MATERIAL PLACED HAS A 28-DAY COMPRESSIVE STRENGTH OF 100 TO 200 PSI.
- RESTORE ACP SECTION WITH 6" OF HMAAC LEVEL 3, PG 65-22, 1/2" DENSE GRADED AGGREGATE.
- RESTORE ACP SECTION WITH 6" OF HMAAC LEVEL 3, PG 64-22, 1/2" DENSE GRADED AGGREGATE OR AN EQUAL THICKNESS OF THAT REMOVED WHICHEVER IS GREATER.
- COMPACTION EQUIPMENT MUST BE ON THE JOB SITE BEFORE EXCAVATION IS STARTED. COMPACTION EQUIPMENT, AS DEFINED IN OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, MUST BE CAPABLE OF COMPACTION WITHIN A TRENCH WIDTH LIMITS TO PREVENT BRIDGING CAUSED BY STRADDLING THE DITCH. 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.
- SAWCUT EDGES TO BE TACKED WITH HOT LIQUID ASPHALT.
- COMPLY WITH SMOOTHNESS REQUIREMENTS OF OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 00744.70
- THE USE OF CONTROL DENSITY FILL SHALL BE DETERMINED BY SECTION 710.8
- TRENCHES SHALL BE PROTECTED PER SECTION 710.8.E
- WORK RESULTING IN IRREGULAR TRENCH WIDTHS OR INCIDENTAL DAMAGE TO THE ROADWAY SURFACE WILL REQUIRE ANOTHER SAWCUT AND SUBSEQUENT REMOVAL OF THE ACP. THE SAWCUT LINE SHALL BE APPROVED BY THE COUNTY PRIOR TO THE PLACEMENT OF PERMANENT SURFACE REPAIR.
- ALL PAVING SHALL BE COMPLETED WITHIN 24 HOURS OF COMPLETING THE BACKFILL PROCESS UNLESS OTHER ARRANGEMENTS ARE MADE WITH THE INSPECTOR.
- SUBMIT COPIES OF COF MATERIAL DELIVERY SLIPS TO UTILITYPERMITS@CLACKAMAS.US WITHIN 10 DAYS OF PLACEMENT, REFERENCE THE PERMIT NUMBER.
- DAMAGED SIGNAL DETECTOR LOOPS SHALL BE REPLACED IN THEIR ENTIRETY. NO SPLICING OF TRAFFIC LOOPS IS ALLOWED. ANY TRAFFIC LOOP THAT IS TUNNELED UNDER WILL REQUIRE A FULL DEPTH TRENCH BACKFILL WITH FLUID 200 PSI MAXIMUM STRENGTH COF (CONTROLLED DENSITY FILL) A MINIMUM WIDTH OF 18" ON EACH SIDE OF THE TRAFFIC LOOP WIRE.
- TRENCH COMPACTION SHALL BE 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT IN THE UPPER THREE FEET. COMPACTION EQUIPMENT MUST BE ON THE JOB SITE BEFORE EXCAVATION IS STARTED. COMPACTION EQUIPMENT, AS DEFINED IN ODOT SPECIFICATIONS, MUST BE CAPABLE OF COMPACTION WITHIN THE TRENCH WIDTH LIMITS TO PREVENT BRIDGING CAUSED BY STRADDLING THE DITCH.
- A TEMPORARY PATCH OF COLD OR HOT MIX ASPHALT SHALL BE PLACED ON ALL HARD SURFACE CUTS IMMEDIATELY AFTER BACK FILLING HAS BEEN COMPLETED, PRIOR TO ALLOWING TRAFFIC OVER IT. GRAVEL MAY NOT BE USED AS A TEMPORARY PATCH.
- IMMEDIATELY PRIOR TO PLACING THE FINAL ASPHALT WEARING SURFACE, THE EXISTING PAVEMENT SHALL BE CLEANED, CLEARED OF ALL LOOSE MATERIAL, AND COATED WITH HOT LIQUID ASPHALT TO ENSURE A BOND WITH THE NEW ASPHALT SURFACE. THE RESTORED PAVEMENT SHALL BE FINISHED TO A SMOOTH RIGID SURFACE AND TO THE GRADE OF THE SURROUNDING UNDISTURBED PAVEMENT. THE FINAL PAVEMENT JOINTS ARE TO BE SEALED AND SANDED.
- RATIO: 1 - BAG DRY CEMENT PER 1 - CY YARD (27 CU FT) OF AGGREGATE.
EXAMPLE: 2'W x 260'L x 3'D = 360 CU FT. 360 DIVIDED BY 27 = 13.3 BAGS.

DESIGN	DATE	BY	APPROVAL	DATE	BY	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT	6/7/2020	SP	SCALE	N.T.S.	STANDARD
REVISED	11/7/19	SP	150 BEAVERCREEK ROAD OREGON CITY, OR 97045		SP			
REVISED	11/7/19	SP			SP			
REVISED	11/7/19	SP			SP			

NOTES FOR U270A

U270B



VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING.
0" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS



DESIGNED BY: RW	DRAWN BY: SLK	CHECKED BY: RW	SCALE: AS SHOWN
DATE: MARCH 2025	PROJECT NO: 40748045.02		

PORTLAND OFFICE
5500 MEADOWS RD., #250
LAKE OSWEGO, OR 97035
503.419.2130 OFFICE
503.639.2710 FAX

WATER ENVIRONMENT SERVICES
MT. TALBERT MTA PIPE REALIGNMENT

DETAILS 3

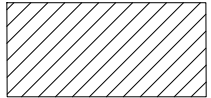
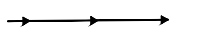
DRAWING NO.

SHEET NO.

C08

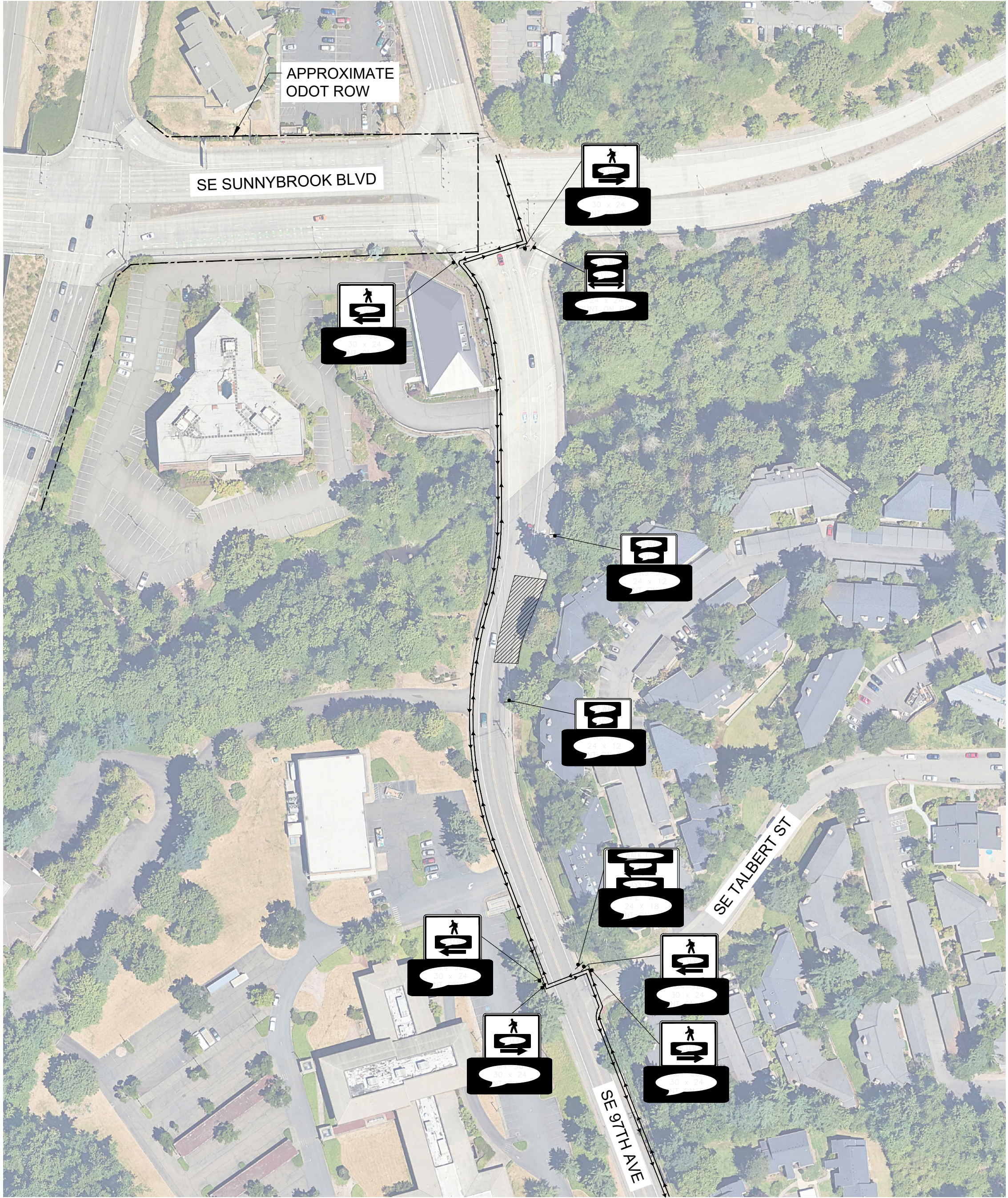


LEGEND

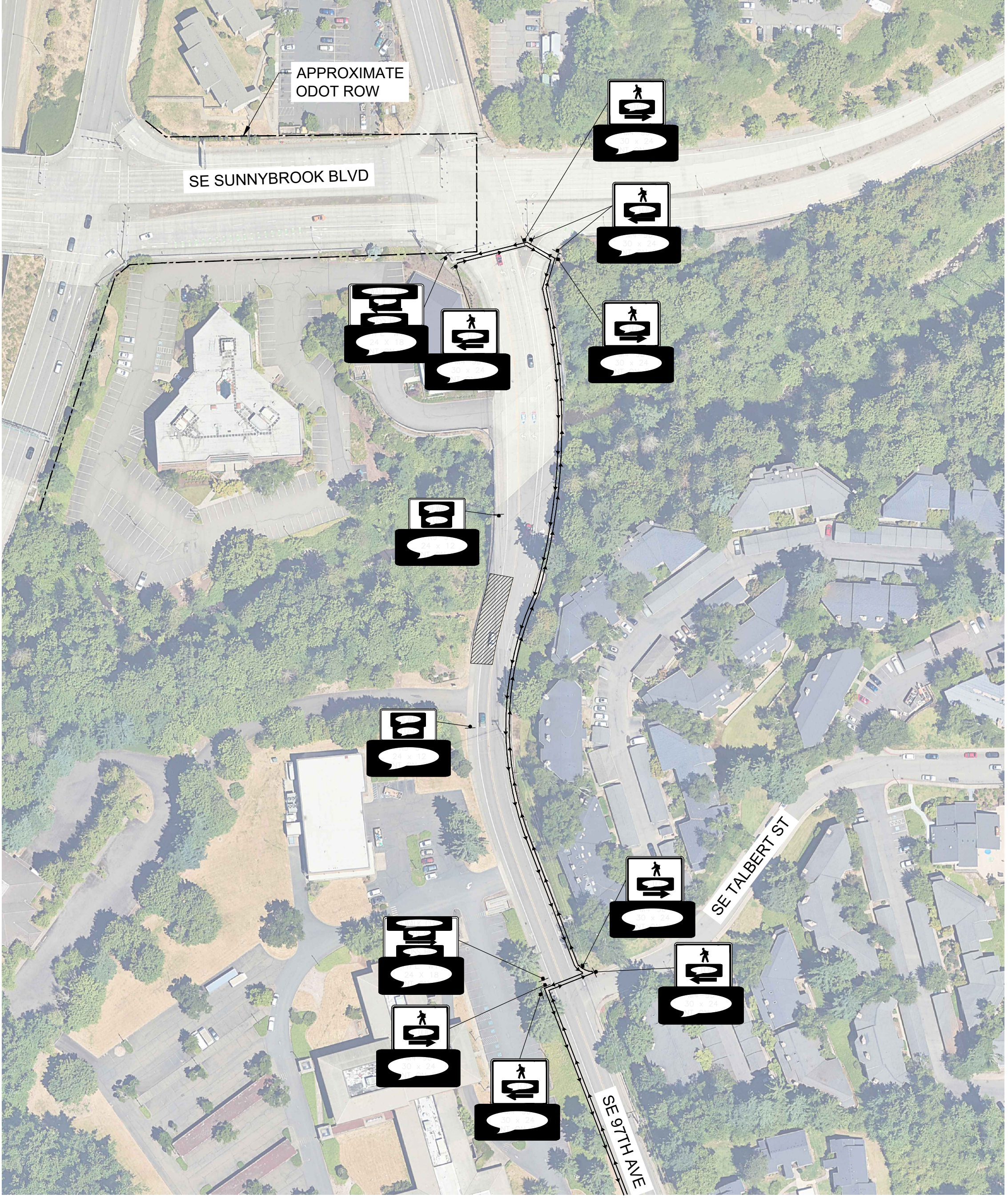
- WORK ZONE 
- PEDESTRIAN ACCESS ROUTE 

GENERAL NOTES

1. SEE ODOT STANDARD DRAWING TM845 FOR TEMPORARY SIDEWALK RAMP DETAILS.
2. SECURE TEMPORARY SIGNS ON TYPE II FOLDING BARRICADES.



TEMPORARY PEDESTRIAN ACCESS ROUTE - EAST SIDEWALK CLOSURE
SCALE: 1" = 100'

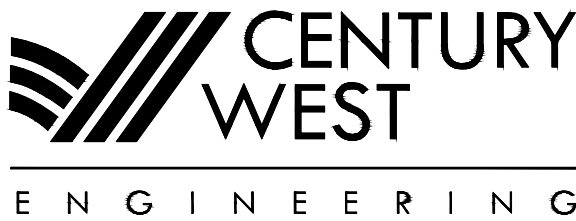


TEMPORARY PEDESTRIAN ACCESS ROUTE - WEST SIDEWALK CLOSURE
SCALE: 1" = 100'



VERIFY SCALES
BAR IS ONE INCH ON
ORIGINAL DRAWING.
0" IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS



PORTLAND OFFICE
5500 MEADOWS RD., #250
LAKE OSWEGO, OR 97035
503.419.2130 OFFICE
503.639.2710 FAX

DESIGNED BY: RW	DRAWN BY: AVF	CHECKED BY: RW	SCALE: 1" = 100'
DATE: MARCH 2025	PROJECT NO: 40748045.02		

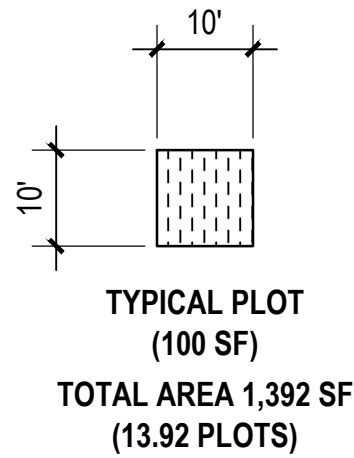
WATER ENVIRONMENT SERVICES
MT. TALBERT MTA PIPE REALIGNMENT

TEMPORARY PEDESTRIAN
ACCESS ROUTE PLAN

DRAWING NO.

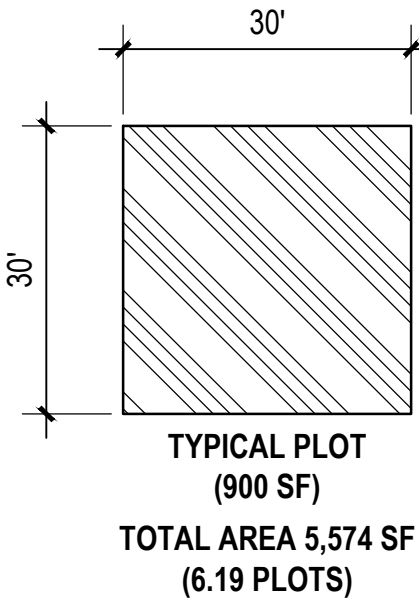
SHEET NO.

C11

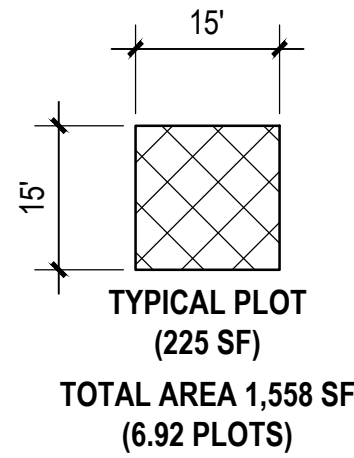


PLANTING ZONE TYPE 1 SCHEDULE							
SHRUBS							
BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	QTY / PLOT	TOTAL QTY	DETAILS	REMARKS
ACER CIRCINATUM	VINE MAPLE	1 GAL CONT; 12" MIN HT	4' TO 5' OC±	2	28	<div>1 L03</div> <div>4 L03</div> <div>2 L04</div>	SEED ZONE WITH SEED MIX TYPE A, PERMANENT SEEDING (APPROX 36 SF OF SEEDING PER PLOT).
HOLODISCUS DISCOLOR	OCEANSPRAY	1 GAL CONT; 12" MIN HT	4' TO 5' OC±; GROUPS OF 1-3	1	14		PROVIDE BARK MULCH RINGS AT EACH PLANT.
MAHONIA NERVOSA	LONGLEAF OREGON GRAPE	1 GAL CONT; 12" MIN HT	2' TO 3' OC±; GROUPS OF 1-3	1	14		
POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL CONT; 12" MIN HT	2' TO 3' OC±; GROUPS OF 1-3	2	28		
ROSA NUTKANA	NOOTKA ROSE	1 GAL CONT; 12" MIN HT	4' TO 5' OC±; GROUPS OF 1-3	1	14		
SAMBUCUS RACEMOSA	NATIVE RED ELDERBERRY	1 GAL CONT; 12" MIN HT	4' TO 5' OC±	1	14		
SYMPHORICARPOS ALBUS	SNOWBERRY	1 GAL CONT; 12" MIN HT	4' TO 5' OC±; GROUPS OF 1-3	2	28		

PLANTING ZONE TYPE 2 SCHEDULE							
TREES							
BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	QTY / PLOT	TOTAL QTY	DETAILS	REMARKS
ACER MACROPHYLLUM	BIG-LEAF MAPLE	0.5" CAL, B&B	8' TO 12' OC±	3	19	<div>2 L03</div> <div>4 L03</div>	SEED ZONE WITH SEED MIX TYPE B, PERMANENT UPLAND SEEDING (APPROX 645 SF OF SEEDING PER PLOT).
CRATAEGUS DOUGLASII	DOUGLAS HAWTHORN	0.5" CAL, B&B	8' TO 12' OC±	3	19		
PSEUDOTSUGA MENZIESII	DOUGLAS-FIR	#5 CONT, 3-4' HT	8' TO 12' OC±	2.75	17	<div>5 L03</div> <div>6 L03</div>	
SHRUBS						<div>1 L04</div> <div>2 L04</div>	PROVIDE BARK MULCH RINGS AT EACH PLANT.
BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	QTY / PLOT	TOTAL QTY		
ACER CIRCINATUM	VINE MAPLE	1 GAL CONT; 12" MIN HT	4' TO 5' OC±	2	12		
HOLODISCUS DISCOLOR	OCEANSPRAY	1 GAL CONT; 12" MIN HT	4' TO 5' OC±; GROUPS OF 1-3	3	19		
MAHONIA NERVOSA	LONGLEAF OREGON GRAPE	1 GAL CONT; 12" MIN HT	2' TO 3' OC±; GROUPS OF 1-3	3	19		
POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL CONT; 12" MIN HT	2' TO 3' OC±; GROUPS OF 1-3	3	19		
ROSA NUTKANA	NOOTKA ROSE	1 GAL CONT; 12" MIN HT	4' TO 5' OC±; GROUPS OF 1-3	5.5	34		
SAMBUCUS RACEMOSA	NATIVE RED ELDERBERRY	1 GAL CONT; 12" MIN HT	4' TO 5' OC±	3	19		
SYMPHORICARPOS ALBUS	SNOWBERRY	1 GAL CONT; 12" MIN HT	4' TO 5' OC±; GROUPS OF 1-3	8	50		



PLANTING ZONE TYPE 3 SCHEDULE							
TREES							
BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	QTY / PLOT	TOTAL QTY	DETAILS	REMARKS
PSEUDOTSUGA MENZIESII	DOUGLAS-FIR	#5 CONT, 3-4' HT	8' TO 12' OC±	1	7	<div>3 L03</div> <div>4 L03</div>	SEED ZONE WITH SEED MIX TYPE B, PERMANENT UPLAND SEEDING (APPROX 130 SF OF SEEDING PER PLOT).
THUJA PLICATA	WESTERN RED CEDAR	#5 CONT, 3-4' HT	8' TO 12' OC±	0.33*	2	<div>5 L03</div> <div>6 L03</div>	
TSUGA HETEROPHYLLA	WESTERN HEMLOCK	#5 CONT, 3-4' HT	8' TO 12' OC±	0.33*	2		
SHRUBS						<div>1 L04</div> <div>2 L04</div>	PROVIDE BARK MULCH RINGS AT EACH PLANT.
BOTANICAL NAME	COMMON NAME	SIZE & TYPE	SPACING	QTY / PLOT	TOTAL QTY		
MAHONIA NERVOSA	LONGLEAF OREGON GRAPE	1 GAL CONT; 12" MIN HT	2' TO 3' OC±; GROUPS OF 1-3	1	7		
POLYSTICHUM MUNITUM	WESTERN SWORD FERN	1 GAL CONT; 12" MIN HT	2' TO 3' OC±; GROUPS OF 1-3	2	14		
ROSA NUTKANA	NOOTKA ROSE	1 GAL CONT; 12" MIN HT	4' TO 5' OC±; GROUPS OF 1-3	3.5	24		
SAMBUCUS RACEMOSA	NATIVE RED ELDERBERRY	1 GAL CONT; 12" MIN HT	4' TO 5' OC±	2.5	17		
SYMPHORICARPOS ALBUS	SNOWBERRY	1 GAL CONT; 12" MIN HT	4' TO 5' OC±; GROUPS OF 1-3	3.5	24		



*QTY PER PLOT LESS THAN 1.0 INDICATES INSTALLING PLANTS LESS FREQUENTLY THAN EVERY TYPICAL PLOT (DISTRIBUTE EVENLY THROUGHOUT PLANTING AREA PLOT ZONE TYPE)

SEED MIX TYPE A SCHEDULE				
PERMANENT SEEDING				
BOTANICAL NAME	COMMON NAME	TYPE	% OF MIX BY WEIGHT	REMARKS
BROMUS CARINATUS	CALIFORNIA BROME	SEED	20	SEEDING TO BE APPLIED THROUGHOUT ENTIRE TYPICAL PLOT. DO NOT SEED MULCH RINGS.
ELYMUS GLAUCUS	BLUE WILDRYE	SEED	25	
HORDEUM BRACHYANTHERUM	MEADOW BARLEY	SEED	40	TRITICUM AESTIVUM X ELYTRIGIA ELONGATA (REGREEN) SEEDING SHALL BE APPLIED AT 30LBS/ACRE FOR EROSION CONTROL.
LUPINUS RIVULARIS	RIVERBANK LUPINE	SEED	15	

SEED MIX TYPE B SCHEDULE				
PERMANENT UPLAND SEEDING				
BOTANICAL NAME	COMMON NAME	TYPE	% OF MIX BY WEIGHT	REMARKS
BROMUS CARINATUS	CALIFORNIA BROME	SEED	30	SEEDING TO BE APPLIED THROUGHOUT ENTIRE TYPICAL PLOT. DO NOT SEED MULCH RINGS.
DANTHONIA CALIFORNICA	CALIFORNIA OATGRASS	SEED	10	
ELYMUS GLAUCUS	BLUE WILDRYE	SEED	40	TRITICUM AESTIVUM X ELYTRIGIA ELONGATA (REGREEN) SEEDING SHALL BE APPLIED AT 30LBS/ACRE FOR EROSION CONTROL.
FESTUCA ROEMERI	ROEMER'S FESCUE	SEED	10	
KOELERIA MACRANTHA	PRAIRIE JUNEGRASS	SEED	10	

PLANTING NOTES

- CLEAR AND GRUB ALL PLANTING AREAS PRIOR TO PLANTING AND SEEDING. REMOVE EXCESS SPOILS FROM SITE AND DISPOSE OF PROPERLY.
- PROVIDE PLANTING BACKFILL SOIL AND BARK MULCH OF THE COMPOSITION AND DEPTHS REQUIRED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
- INSTALL ALL PLANT MATERIALS IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS.
- PLANT QUANTITIES ARE LISTED FOR CONVENIENCE ONLY. ALL COUNTS SHALL BE VERIFIED PRIOR TO INSTALLATION. IN THE CASE OF A DISCREPANCY BETWEEN THE SCHEDULE AND THE AREAS SHOWN ON THE PLANS; PLANT AREAS INDICATED ON THE PLANS SHALL SUPERSEDE QUANTITIES LISTED IN THE SCHEDULE.
- UTILITY LOCATIONS INDICATED MAY DIFFER FROM FIELD CONDITIONS. FIELD VERIFY ALL UTILITIES PRIOR TO INSTALLATION. CONFLICTS BETWEEN EXISTING AND PROPOSED UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE IMMEDIATELY.
- DISTRIBUTE PLANTS EVENLY THROUGHOUT TYPICAL PLOT. PROVIDE AN 18" DIAMETER BARK MULCH RING AT EACH PLANT (DO NOT SEED ONTO BARK MULCH RINGS).
- WHEN PLANTING NEAR EXISTING TREES, THE EDGE OF DRIPLINE SHALL BE THE STARTING POINT FOR PLANT SPACING MEASUREMENTS. DO NOT PLANT TREES UNDER THE DRIPLINE OF ANY EXISTING TREES TO REMAIN.
- PLANT GROUPINGS IN APPROXIMATELY TRIANGULAR SPACING, OFFSETTING PLANTS TO AVOID STRAIGHT ROWS.
- SEED ALL DISTURBED AREAS IMPACTED BY CONSTRUCTION THAT ARE OUTSIDE OF THE PROPOSED PLANTING LIMITS SHOWN.
- ALL PLANTS HAVE A 36-MONTH (3-YEAR) WARRANTY PERIOD. PROVIDE LANDSCAPE MAINTENANCE OF PLANTS AND PLANTING AREAS DURING THAT TIME PERIOD.

REGISTERED
F. Michael Fahn
LANDSCAPE ARCHITECT
242
F. Michael Fahn
OREGON
10/31/1988
EXP. 10/31/2025

VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING.
0"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

NO.	DATE	BY	APPR	REVISIONS

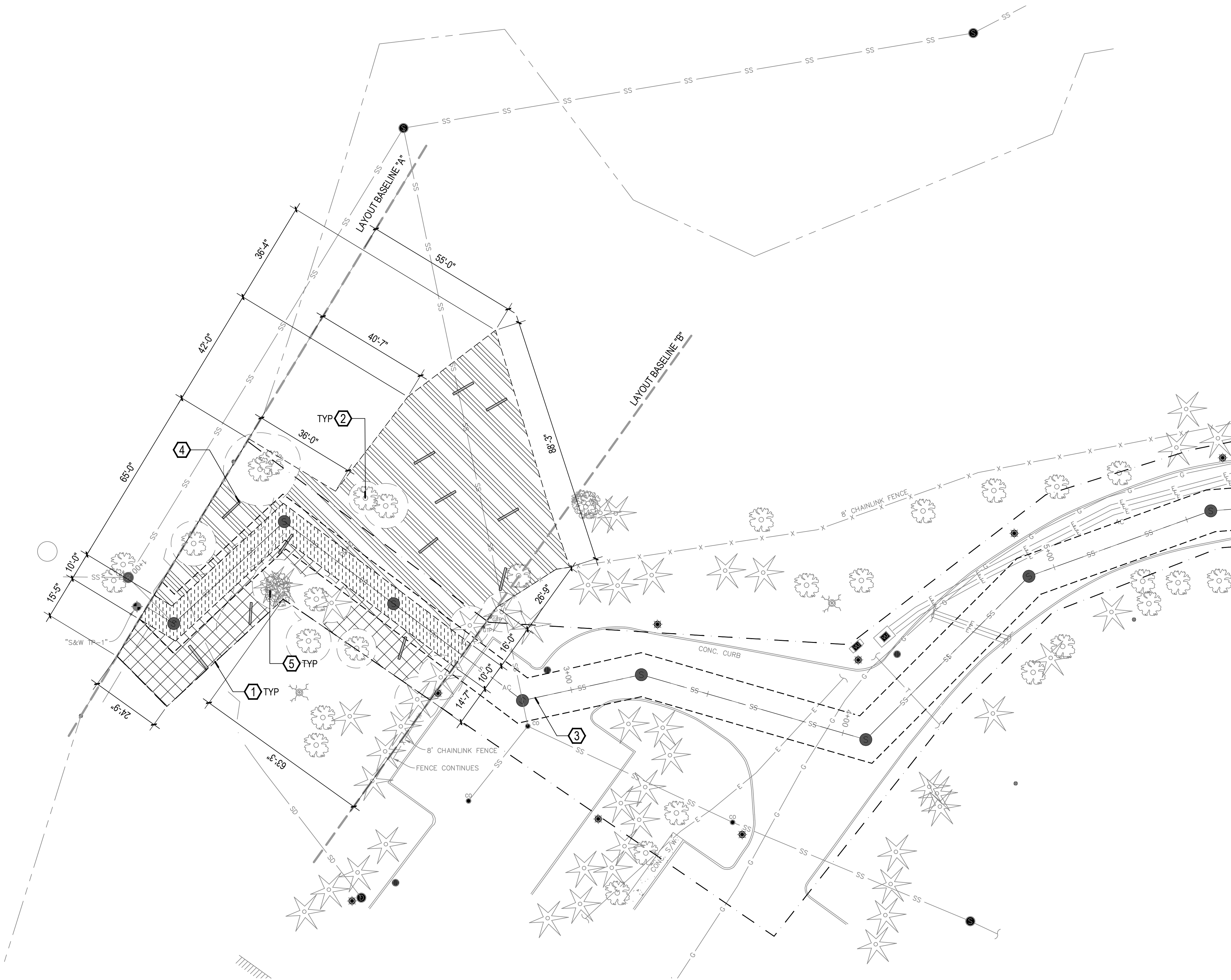
DESIGNED BY: WS	DRAWN BY: MM	CHECKED BY: WS	SCALE: 1" = 20'
DATE: OCTOBER 2024		PROJECT NO: 40748045.02	

WATER ENVIRONMENT SERVICES
MT. TALBERT MTA PIPE REALIGNMENT

PLANTING SCHEDULES AND NOTES

DRAWING NO.

SHEET NO.
L01

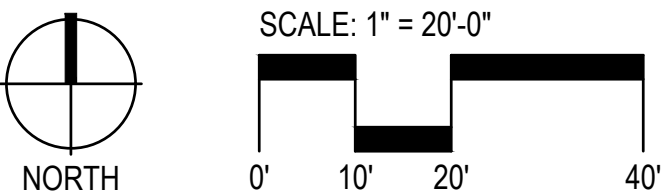


LEGEND

SYMBOL	ITEM
	PLANTING ZONE TYPE 1
	PLANTING ZONE TYPE 2
	PLANTING ZONE TYPE 3
	15' PERMANENT EASEMENT
	TEMPORARY EASEMENT (TCE)
	LAYOUT BASELINE "X"
	DOWNED TREE
	EXISTING TREES AND DRIPLINES

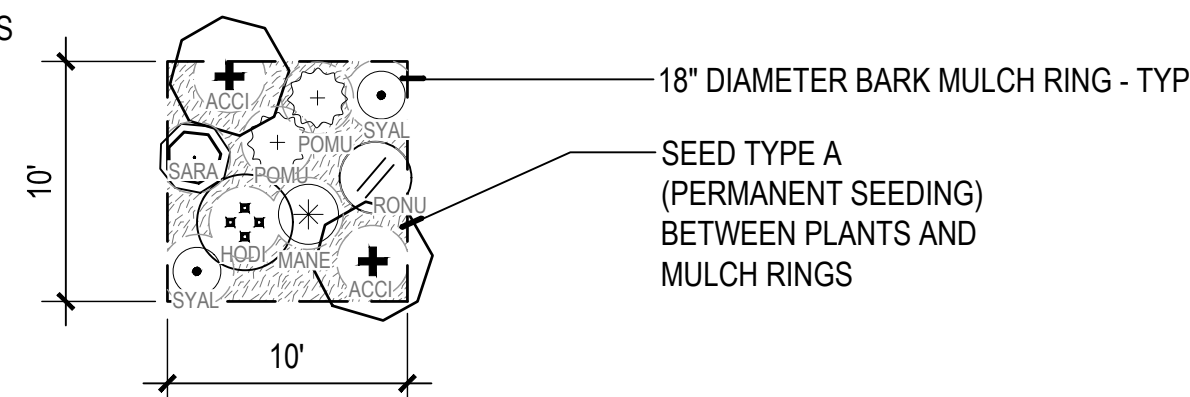
- SHEET NOTES
- SEE SHEET L01 FOR PLANTING SCHEDULES, SEEDING SCHEDULES, AND PLANTING NOTES.
 - VERIFY EASEMENTS AND BOUNDARY LINES ARE LOCATED AND MARKED PRIOR TO PLANTING WORK.
 - LAYOUT BASELINES FOLLOW EXISTING SITE FEATURES OR BOUNDARIES AS SHOWN. ALL DIMENSIONS ARE APPROXIMATED.

- REFERENCE KEYNOTES
- DO NOT PLANT TREES IN STORMWATER OUTFALL.
 - EXISTING TREE TO REMAIN. DO NOT DISTURB MAJOR ROOTS.
 - PROPOSED 8" SANITARY SEWER PIPE. DO NOT PLANT TREES WITHIN 5' FROM OUTSIDE OF PIPE. SEE CIVIL SHEET C03.
 - DO NOT INSTALL DOWNED TREES UNDER DRIPLINE OF EXISTING TREES.
 - PROVIDE SEEDING WITHIN DRIPLINE OF EXISTING TREES. SEE DETAIL 3 ON SHEET L04.

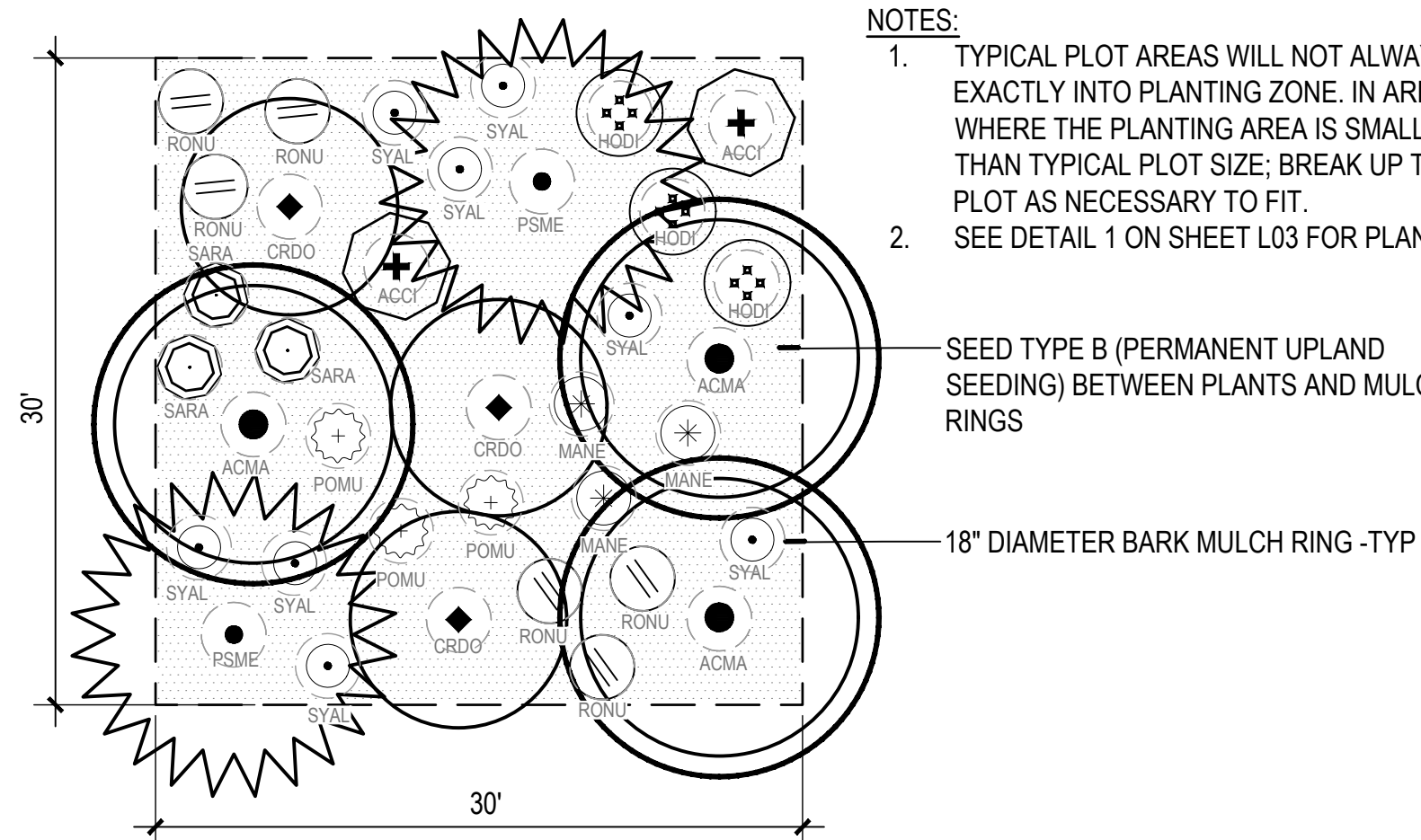


<div>CLACKAMAS WATER ENVIRONMENT SERVICES</div>	<div>REGISTERED 242 <i>F. Michael Fahn</i> F. Michael Fahn OREGON 10/31/1988 EXP. 10/31/2025 LANDSCAPE ARCHITECT</div>	<div>VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING. 0" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.</div>	NO.	DATE	BY	APPR	REVISIONS
<div>CENTURY WEST ENGINEERING</div>	<div>GREEN WORKS</div>	DESIGNED BY:	DRAWN BY:	CHECKED BY:	SCALE:	PROJECT NO:	
		WS	MM	WS	1" = 20'		
		DATE:	OCTOBER 2024		40748045.02		
WATER ENVIRONMENT SERVICES MT. TALBERT MTA PIPE REALIGNMENT							DRAWING NO.
PLANTING PLAN							SHEET NO.
							L02

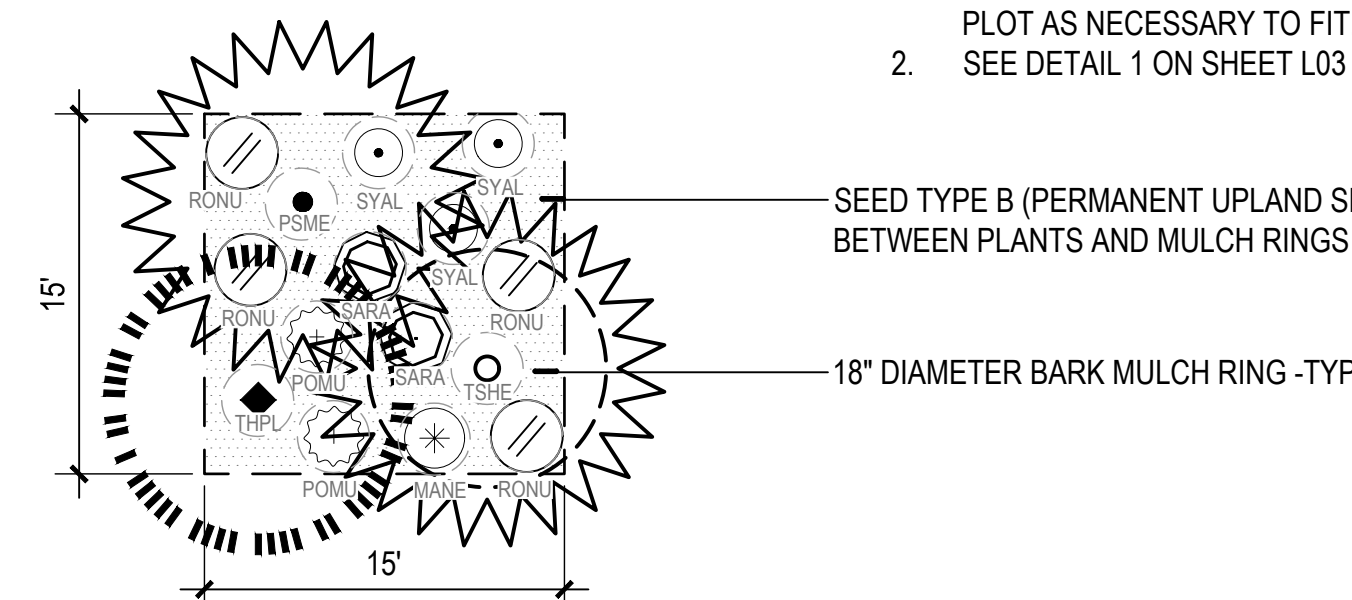
PLANT ID:
ACCI = ACER CIRCINATUM
ACMA = ACER MACROPHYLLUM
CRDO = CRATAEGUS DOUGLASII
HODI = HOLODISCUS DISCOLOR
MANE = MAHONIA NERVOSA
POMU = POLYSTICHUM MUNITUM
PSME = PSEUDOTSUGA MENZIESII
RONU = ROSA NUTKANA
SARA = SAMBUCUS RACEMOSA
SYAL = SYMPHORICARPOS ALBUS
THPL = THUJA PLICATA
TSHE = TSUGA HETEROPHYLLA



NOTE:
TYPICAL PLOT AREAS WILL NOT ALWAYS FIT EXACTLY INTO PLANTING ZONE. IN AREAS WHERE THE PLANTING AREA IS SMALLER THAN TYPICAL PLOT SIZE; BREAK UP THE PLOT AS NECESSARY TO FIT.



NOTES:
1. TYPICAL PLOT AREAS WILL NOT ALWAYS FIT EXACTLY INTO PLANTING ZONE. IN AREAS WHERE THE PLANTING AREA IS SMALLER THAN TYPICAL PLOT SIZE; BREAK UP THE PLOT AS NECESSARY TO FIT.
2. SEE DETAIL 1 ON SHEET L03 FOR PLANT ID



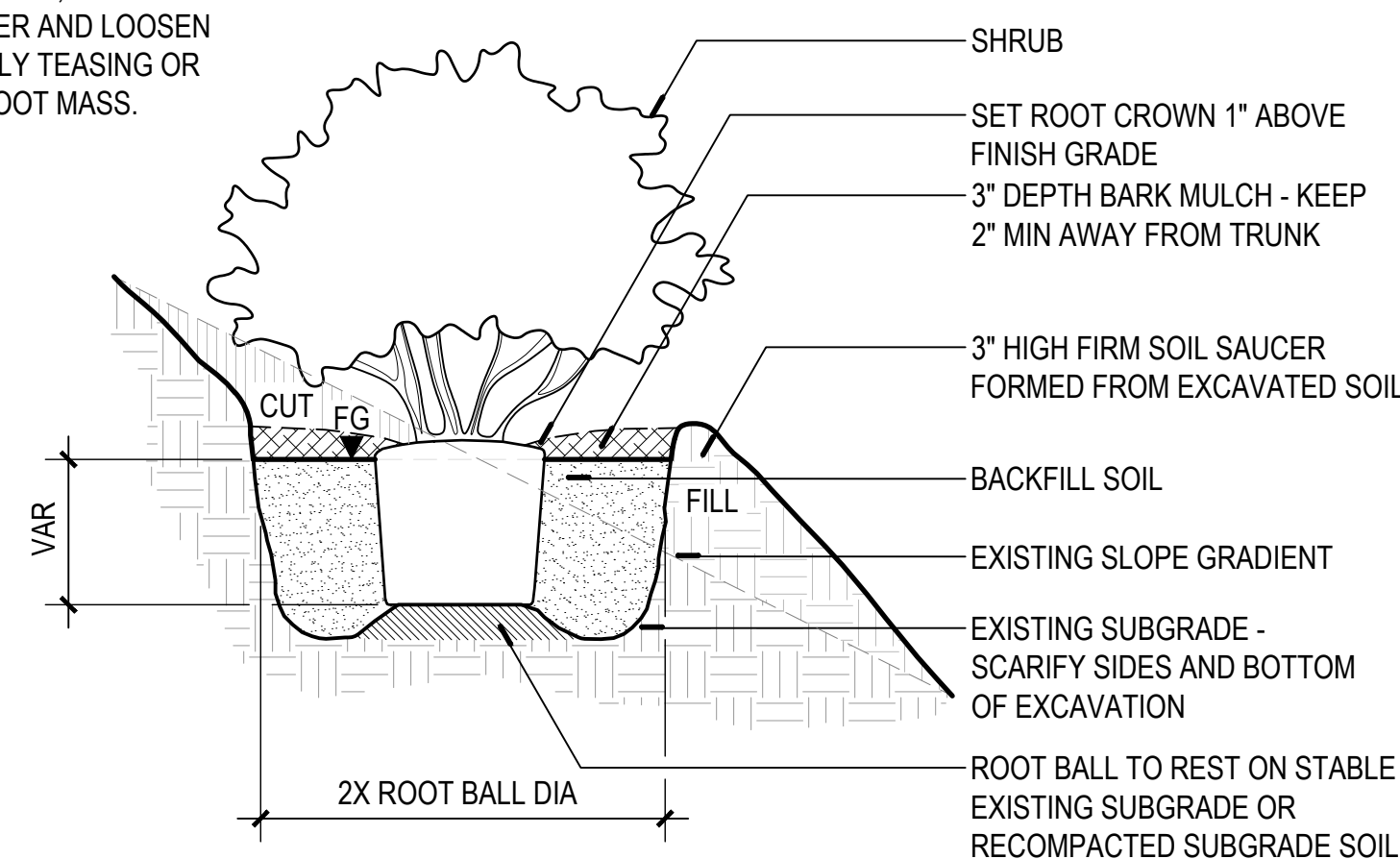
NOTES:
1. TYPICAL PLOT AREAS WILL NOT ALWAYS FIT EXACTLY INTO PLANTING ZONE. IN AREAS WHERE THE PLANTING AREA IS SMALLER THAN TYPICAL PLOT SIZE; BREAK UP THE PLOT AS NECESSARY TO FIT.
2. SEE DETAIL 1 ON SHEET L03 FOR PLANT ID.

1 PLANTING ZONE TYPE 1 - TYPICAL PLOT
SCALE: 1/8" = 1'-0"

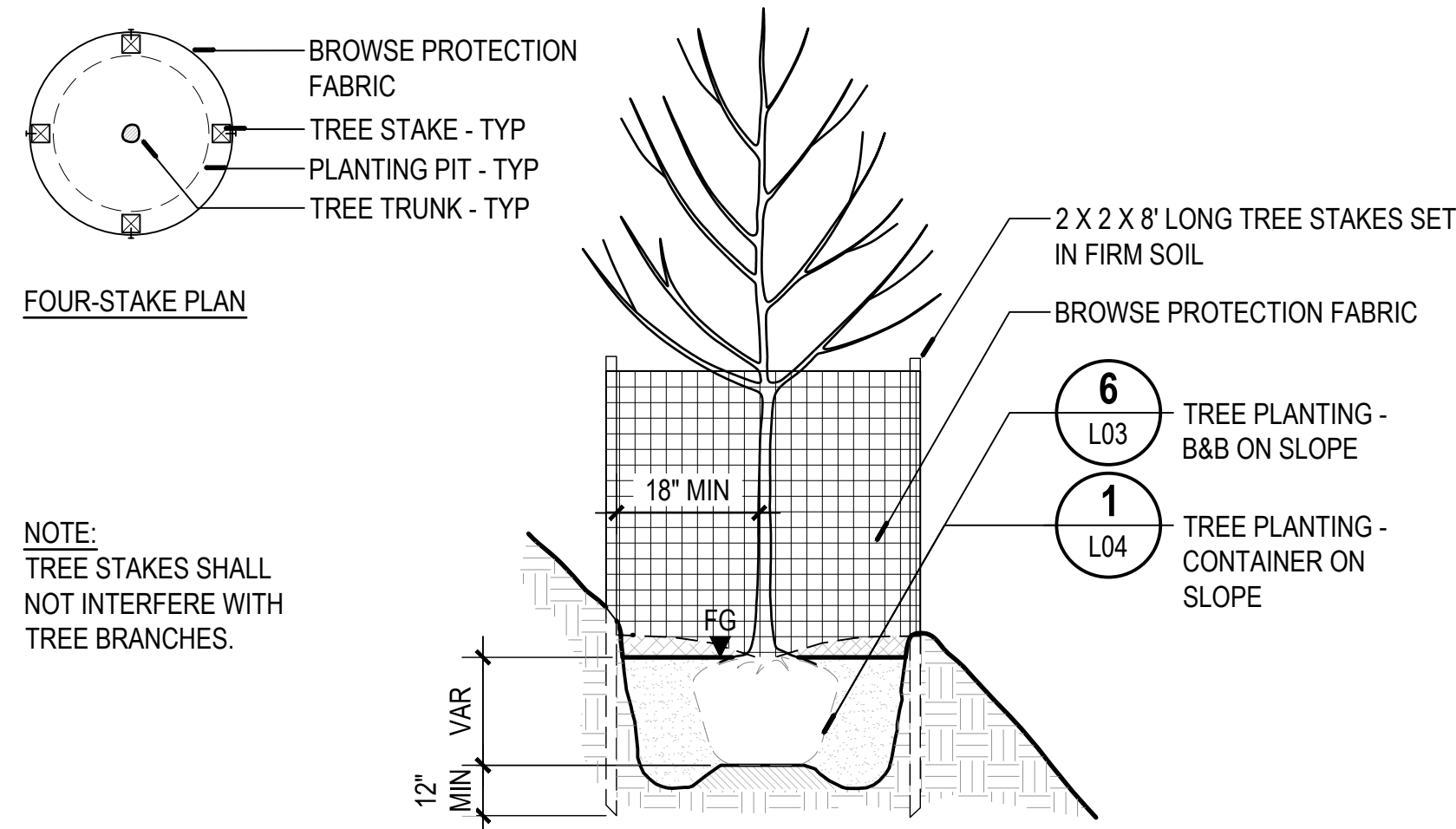
2 PLANTING ZONE TYPE 2 - TYPICAL PLOT
SCALE: 1/8" = 1'-0"

3 PLANTING ZONE TYPE 3 - TYPICAL PLOT
SCALE: 1/8" = 1'-0"

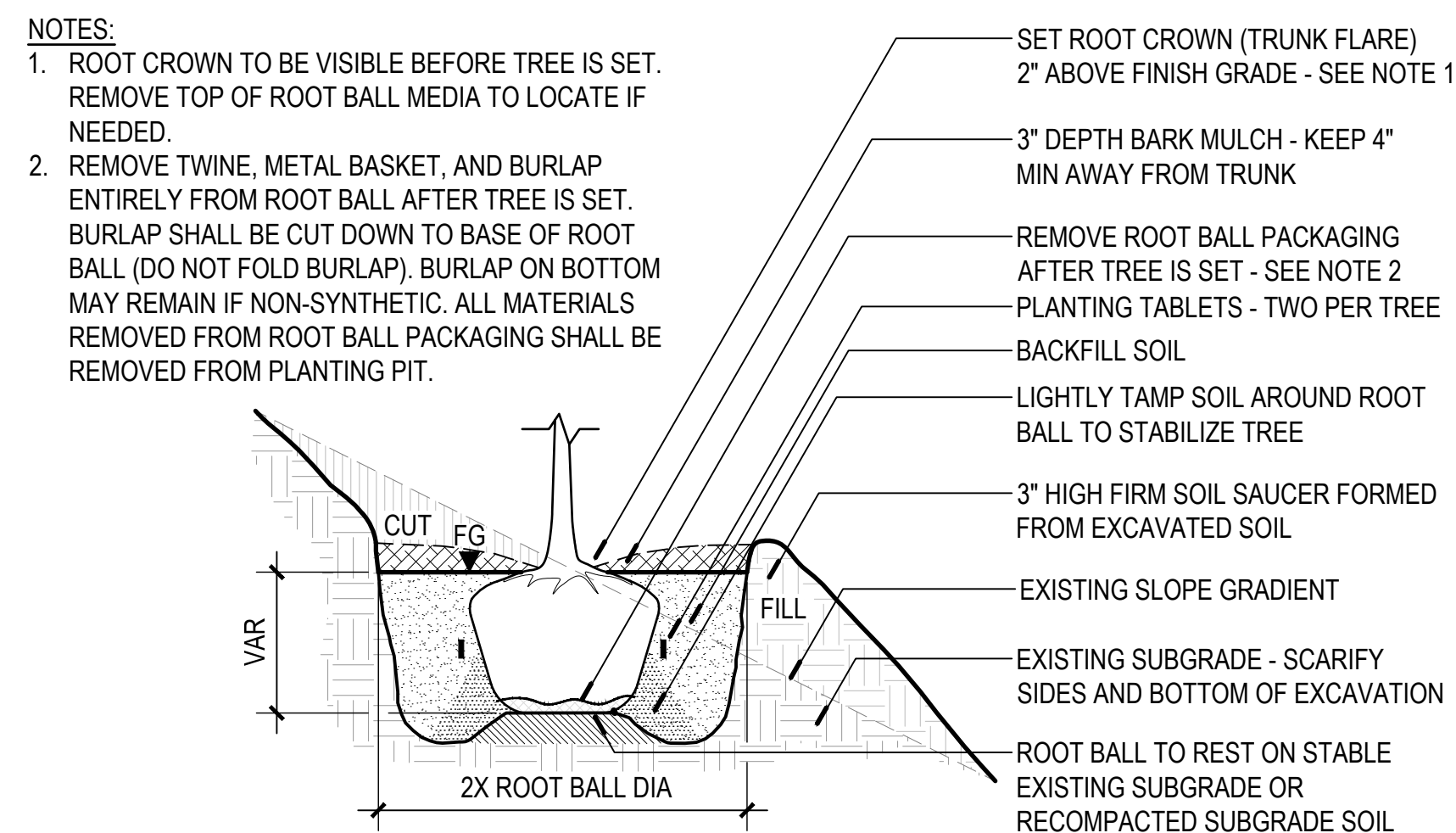
NOTE:
PRIOR TO PLANTING, REMOVE SHRUB FROM CONTAINER AND LOOSEN SIDES BY LIGHTLY TEASING OR SCRATCHING ROOT MASS.



4 SHRUB CONTAINER PLANTING ON SLOPE
SECTION
NOT TO SCALE



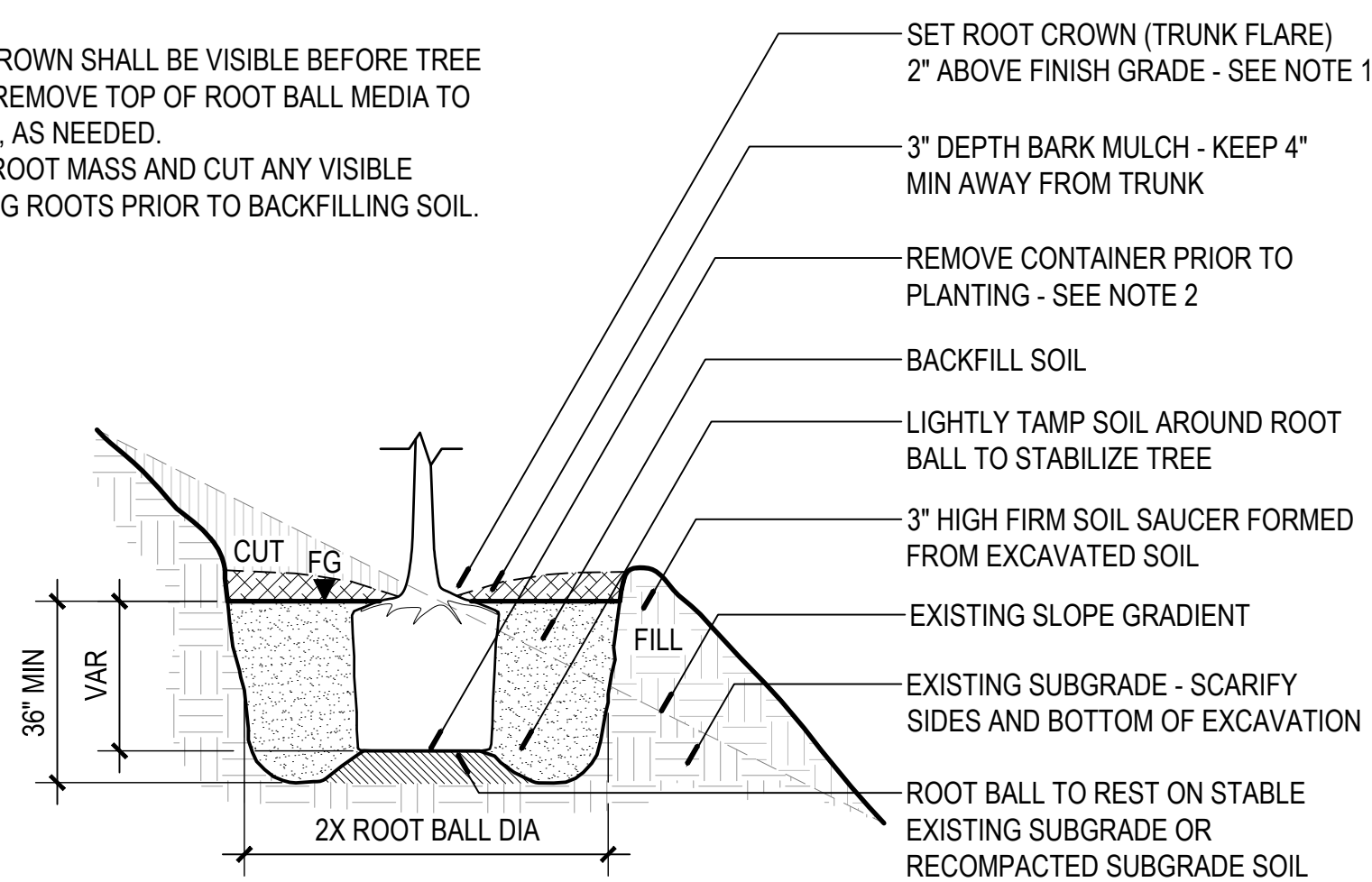
5 TREE STAKING - ON SLOPE
SECTION / PLAN
NOT TO SCALE



6 TREE PLANTING - B&B ON SLOPE
SECTION
NOT TO SCALE

NOTES:

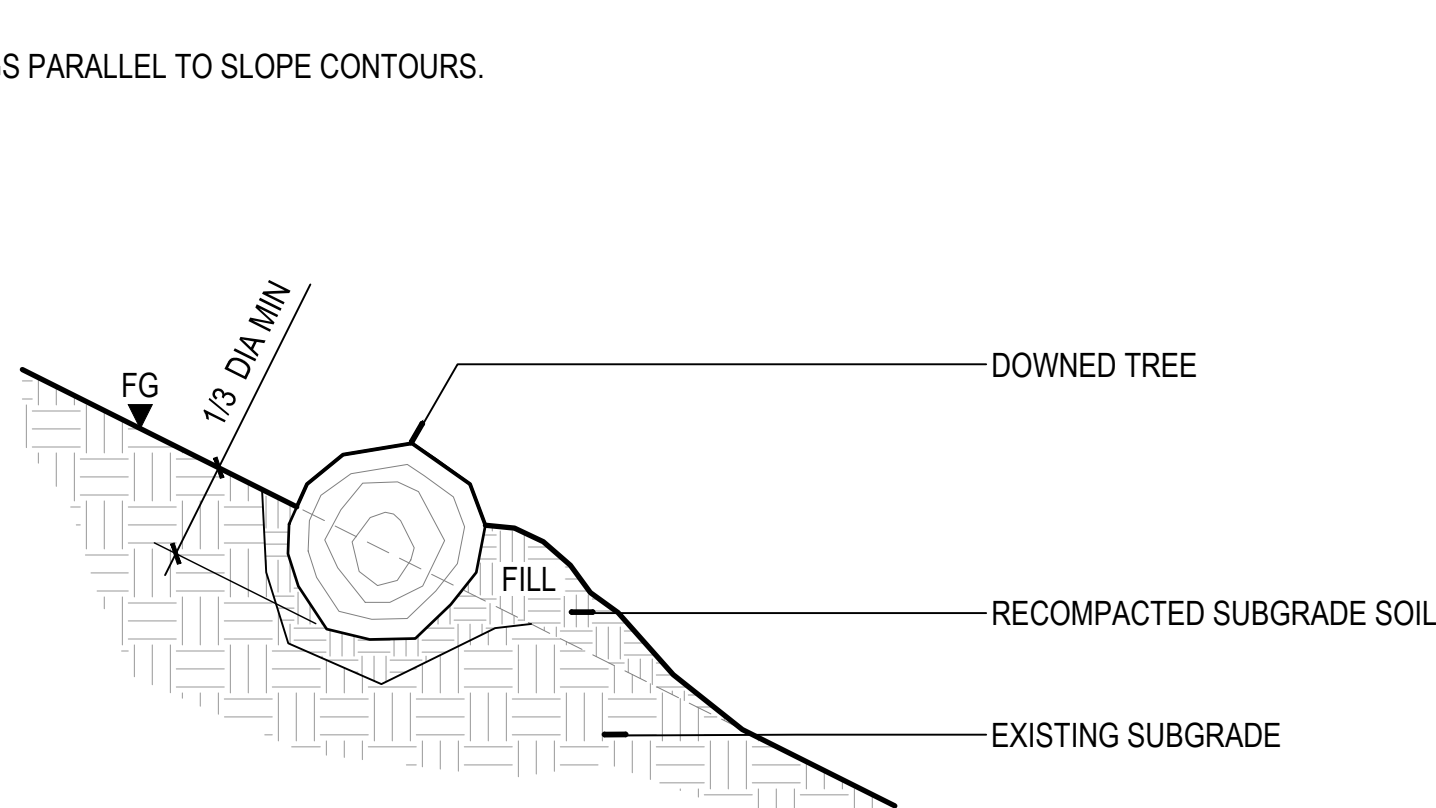
1. ROOT CROWN SHALL BE VISIBLE BEFORE TREE IS SET. REMOVE TOP OF ROOT BALL MEDIA TO LOCATE, AS NEEDED.
2. TEASE ROOT MASS AND CUT ANY VISIBLE GIRDLING ROOTS PRIOR TO BACKFILLING SOIL.



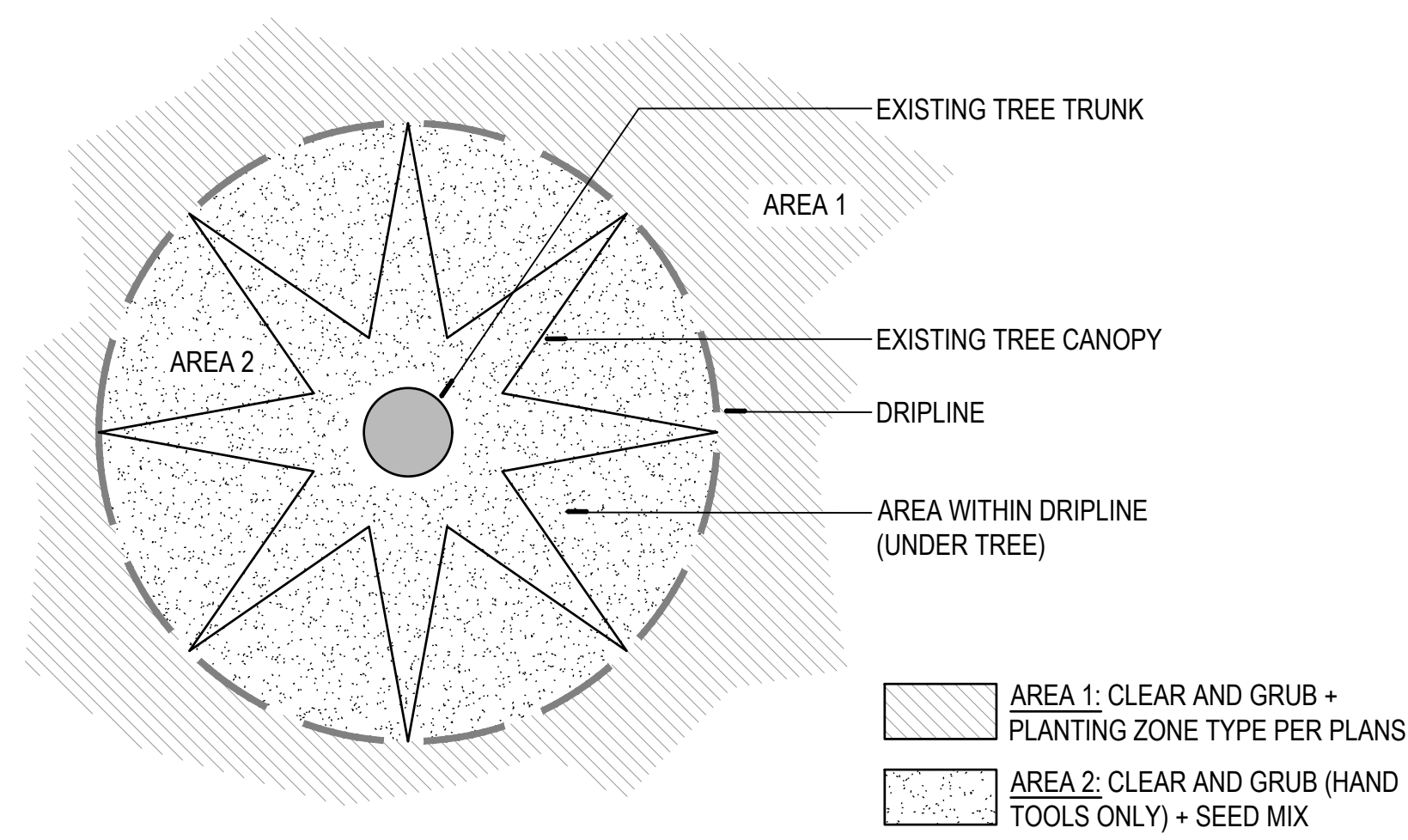
1 TREE PLANTING - CONTAINER ON SLOPE
SECTION NOT TO SCALE

NOTE:

INSTALL LOGS PARALLEL TO SLOPE CONTOURS.



2 DOWNED TREE ON SLOPE
SECTION NOT TO SCALE



3 PLANTING AND SEEDING AT EXISTING TREES DIAGRAM
PLAN NOT TO SCALE

TABLE OF CONTENTS

<u>Section Number</u>	<u>Title</u>
01010	Summary of Work
01025	Measurement and Payment
01040	Coordination and Project Requirements
01062	Permits and Easements
01195	Protection and Maintenance of Work and Property
01560	Environmental Controls
01570	Traffic Control
01700	Contract Closeout
02120	Clearing and Removal of Obstructions
02160	Sheeting, Shoring, and Bracing
02221	Trenching, Backfilling, and Compacting
02500	Street Restoration
02720	Sanitary Sewer Pipe and Manholes
02920	Seeding
02930	Plants
02935	Landscape Maintenance
09600	Protective Coatings – Manhole Structures

Appendices

- A. ODOT Permit – T2BM48000/2BM47995
- B. Clackamas County DTD – Utility Placement Application – UP191824

MT TALBERT MTA PIPE REHABILITATION

CERTIFICATE OF ENGINEER

Century West Engineering
Ron C. Weigel



I certify the Specifications Sections listed below are applicable to the design for the subject project and were prepared by me or under my supervision.

01025, 01040, 01062, 01195, 01300, 01560, 01570, 01700, 02120, 02160, 02221, 02500, 02720, 02920, 02930, 02935, 09600

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 DESCRIPTION

- A. Measurement is described under each proposal item in Paragraph 01025-1.02.
- B. Payment for the various items on the Proposal, as further specified herein, shall be based on measurements of completed work in accordance with United States Standard Measures and shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work all in accordance with the requirements of the Contract Documents, including all appurtenances thereto and including all costs of compliance with the regulations of public agencies having jurisdiction, including safety and health requirements of the Occupational Safety and Health Act of the U.S. Department of Labor (OSHA) and Oregon State Department of Labor and Industries, also for loss or damage arising from the nature of the work, or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the Work until the final acceptance by the Owner. No separate payment will be made for any item that is not specifically set forth in the Proposal Schedule, and all costs therefore shall be included in the prices named in the Proposal Schedule for the various appurtenant items of work.
- C. Quantities listed in the Proposal do not govern final payment. Payments to the Contractor will be made only for actual quantities of Contract items performed in accordance with terms of the Contract and for items of work actually performed under Change Orders.
- D. Indirect costs, such as supervision and overheads, profit, the general conditions specified in the Contract, all shall be allocated to each proposal item as applicable for work defined in the proposal item. No separate payment will be made to the Contractor for these items.

1.02 PROPOSAL ITEM MEASUREMENT AND PAYMENT

- A. Mobilization: Payment for Mobilization will be made on a lump sum basis for each Bid Schedule. The amount to be allowed for Mobilization in the partial payment to be made under the Contract will be as follows:
 - 1. When 5% of the total original contract amount is earned from other proposal items, not including advances on materials, 50% of the amount bid for Mobilization, or 2.5% of the original contract amount, whichever is the least, less normal retainage, will be paid.
 - 2. When 10% of the total original contract amount is earned from other proposal items, not including advances on materials, 100% of the amount bid for Mobilization, or 5% of the original contract amount, whichever is the least, less normal retainage, will be paid.

3. Upon completion of all work on the project, payment of any amount bid for Mobilization in excess of 5% of the total original contract amount will be paid.
4. The above schedule of progress payments for Mobilization shall not limit or preclude progress payments otherwise provided by the Contract.
5. ***Mobilization paid under paragraphs 1-4 above shall not exceed 5% of the total original contract amount for bid items 2 through 27. Amounts greater than 5% shall be reimbursed with the Final Pay Request at the end of the construction.***

B. Clearing and Removal of Obstructions

1. Measurement and payment for clearing and removal of obstructions will be on a lump sum basis to remove all objectionable material such as grass, trees, stumps, vegetation, topsoil stripping and other materials within the limits as identified in Section 02120 and the planting plans on Sheets L01 and L02. All trees eligible to be removed within the 15 feet permanent easement shall be removed at the Contractor's expense. Trees outside the permanent easement less than 6" in diameter but also approved for removal are included in the bid item.

Miscellaneous items to be included are all materials and labor to provide protective barrier with heavy duty metal posts using a 4'-0" minimum height orange snow fence for protection of trees adjacent to the pipeline that may be damaged by the construction equipment.

C. Rock Excavation – Open Cut Trenching

1. Measurement for rock excavation shall be in its original position by volume in cubic yards. The quantity measured for payment shall include only the material excavated from within the trench limits which includes a maximum width of up to the pipe O.D. plus 3 feet. Other limits include excavation for manhole construction of O.D. plus 1'-6". Any additional excavation outside of these maximum limits will be considered as having been made for the Contractor's benefit, and at his expense.

The horizontal limits for measuring rock excavation shall be the sides of the trench, except no payments shall be made for material removed outside of these limits. Vertical distances shall be measured from the upper surface of the rock to an elevation 6 inches below the underside of the pipe barrel, or to the lower surface of the rock, whichever is less.

2. The stipulated unit contract price for rock excavation shall be full payment to remove rock from the trench excavation, haul, and dispose of the material.

D. Foundation Material

1. Measurement for foundation material will be by the cubic yard incorporated in the work only upon approval of the Engineer. The volume shall be calculated based on the compacted volume of material in place within the limits authorized by the Engineer. Maximum width of payment shall be limited to the lesser of actual trench width or 4'- 6". Material placed without prior approval of the Engi

neer will not be paid. No separate measurement of the geotextile fabric will be made as it is considered to be included in the total price.

2. The unit price per cubic yard for foundation material shall be full compensation for all materials, equipment and labor necessary to furnish materials at trench side; for placing and compacting it in the trench. This proposal item shall include the extra depth of trench excavation required below pipe bedding grade to provide for a stable foundation for the sewer pipe, geotextile fabric and for the proper disposal of excavated materials.

E. 8-inch Gravity PVC Sewer Pipe: Measurement for gravity sewer pipe, will be computed for each pipe size and material based on the following limits for length and depth of trench:

1. Length: Length of all sewer pipe will be measured horizontally along center of pipe from center-to-center through fittings, to manholes, or to the end of pipe, whichever is applicable.
2. Depth: Depth of mainline sewer pipe for Class A or C backfill will not be measured.
3. Payment per linear foot for 8" pipe and trench excavation intervals (*Class A and Class C includes all depths*) shall be full compensation for all materials, equipment and labor to construct the sewer pipe in place; the pipe bedding required by the Plans and Specifications; all material used to complete the backfill of the pipe zone in accordance with the Specifications; and all work necessary to furnish, place, and compact the bedding, pipe zone backfill materials, and crushed rock for imported backfill to pavement base or to the ground surface as required. The price proposal shall also include: construction staking to establish lines and grades based upon control points supplied on the drawings; dewatering, sawcutting, sheeting, shoring and bracing; backfilling trench with native (Class A) or imported materials (Class C); disposal of excess excavation; the excavation necessary to widen the trench for installation of manholes and appurtenances; the supporting and protection of existing utility crossings; the protection of trees identified on the plans; the plugging or removing of abandoned conduit and structures; the preparation of subgrade; removal of concrete curbs; and all other work necessary to install the pipe in place including testing and plugs. No payment will be made for any section of pipe not yet passing all trench backfill, air and mandrel testing requirements. Surface restoration as described in Section 02500 does not have to be completed in order to process payment for the pipe. Asphalt pavement trench restoration, temporary asphalt concrete trench patching and foundation stabilization if necessary will be paid under separate bid items.

F. 8-inch Gravity Restrained Joint DI Sewer Pipe: Measurement for gravity sewer pipe, will be computed for each pipe size and material based on the following limits for length and depth of trench:

1. Length: Length of all sewer pipe will be measured horizontally along center of pipe from center-to-center through fittings, to manholes, or to the end of pipe, whichever is applicable.
2. Depth: Depth of mainline sewer pipe for Class A backfill will not be measured.

3. Payment per linear foot for 8" pipe and trench excavation intervals (*Class A includes all depths*) shall be full compensation for all materials, equipment and labor to construct the sewer pipe in place; the pipe bedding required by the Plans and Specifications; all material used to complete the backfill of the pipe zone in accordance with the Specifications; and all work necessary to furnish, place, and compact the bedding, pipe zone backfill materials, and native material to the ground surface as required. The price proposal shall also include: construction staking to establish lines and grades based upon control points supplied on the drawings; dewatering, sawcutting, sheeting, shoring and bracing; backfilling trench with native (Class A); disposal of excess excavation; the excavation necessary to widen the trench for installation of manholes and appurtenances; the supporting and protection of existing utility crossings; the protection of all trees identified on the plans; the plugging or removing of abandoned conduit and structures; the preparation of subgrade; removal of concrete curbs; and all other work necessary to install the pipe in place including testing and plugs. No payment will be made for any section of pipe not yet passing all trench backfill, and air testing requirements.
- G. Exploratory Excavation: All exploratory work performed by the Contractor including excavation to verify utility locations and depth, shall be considered incidental to the cost of other items of work and no separate payment will be made.
- H. Manholes
1. Measurement for sanitary sewer manholes 48-inch diameter will be made on a unit price basis as shown in the Proposal for all depths.
 2. Payment per each 48-inch manhole shall include full compensation for: materials, equipment and labor including common excavation; base rock; imported backfill; dewatering; manhole frame and cover; manhole grade rings; testing and constructing the manhole complete in place. No separate payment will be made for flat-top manholes.
- I. Inside Drop – Manhole Assembly
1. Measurement for inside drop manhole assembly will be made on a unit price basis as shown in the Proposal.
 2. Payment per each inside drop manhole assembly shall include full compensation for: materials, equipment and labor necessary to perform the work as specified.
- J. Anchor Blocks
1. Measurement for concrete anchor blocks will be made on a unit price each basis for each type as indicated in the Proposal.
 2. Payment per each shall include all materials, equipment, and labor necessary to perform the work as specified.

- K. Temporary AC Pavement Trench Restoration, 2-inches thick
1. Measurement for temporary AC pavement trench restoration, 2-inches thick will be made on a square foot basis one time only within the area disturbed by trench excavation up to a maximum width of 5 feet. Areas disturbed by potholing will not be subject to the above limitations.
 2. Payment per square foot shall include all materials, equipment, and labor necessary to install hot mixture.
- L. AC Pavement Trench Restoration
1. Measurement for permanent AC pavement trench restoration for mainline trench 3-inches or 4-inches thick will be made on a unit price per ton basis based upon the width of trench disturbed. The work shall include a single lift of three inches or two lifts of two inches depending upon the location (i.e. Private driveway and parking lot shall have 3-inches and SE 97th Avenue shall have 4-inches) covering the area disturbed by construction to a maximum width parallel to the pipe trench of up to 6 feet and around manholes a 12 foot square.
 2. Payment per ton shall include all materials, equipment, and labor necessary to perform the work as specified. This shall also include cutting the existing asphalt concrete on each side of the trench to a neat line prior to excavation for the pipe trench and a second time just prior to permanent pavement installation with a saw along with removal and disposal of any temporary road surface material within the trench prior to paving.
- M. AC Pavement Grinding, 2-inches thick: Measurement and payment for grinding the existing pavement shall be on a square yard basis. The stipulated unit price shall include full compensation for all labor and materials to remove and dispose of the material and to provide temporary pavement striping if present previously. Temporary striping shall be installed and maintained following grinding and shall be considered incidental to the cost of other items of work and no separate payment will be made. Existing valve boxes, catch basins and other utilities shall be protected by this operation.
- N. AC Pavement Overlay, 2-inches thick: Measurement and payment for installing an overlay of 2-inches of Level 2 asphalt concrete across the entire width of roadway of SE 97th after removal of the existing pavement shall be on per ton basis and include full compensation for all labor and materials. Material shall be placed in one lift and also include complete sweeping, tacking the existing surface within the paving limits. Permanent striping necessary to match existing materials and location prior to previously completed grinding shall be considered incidental to the cost of other items of work and no separate payment will be made.
- O. Manhole Coatings
1. Measurement for manhole coatings will be on a unit price per each basis for each manhole, as specified.
 2. Payment shall include compensation for all labor, materials, equipment and incidentals necessary to complete the work as specified.

- P. Traffic Control: Measurement and payment for traffic control shall be made on a lump sum basis. The lump sum price shall include all costs for materials, equipment and labor for: furnishing, erecting and maintaining temporary barricades, tubular markers and other traffic control devices; providing temporary roadways, detours, and other safeguards necessary for orderly flow of traffic; preparing and updating the Traffic Control Plan and Temporary Pedestrian Access Plan for approval by the Owner; notification schedules and notifying property owners, government agencies and businesses at least 14 days in advance of beginning work; and providing all flagging identified in the approved Traffic Control Plan. Payment for temporary signs and sign supports will be paid under separate bid items.
- Q. Temporary Rigid Signs: Measurement and payment for traffic control signs shall be made on a square foot basis and include materials, installation and removal. Mounting of temporary signs on Type II folding barricades shall be incidental to the cost of related items of work and no separate payment will be made.
- R. Temporary Sign Supports: Measurement and payment for temporary sign supports shall be on a unit price basis. Payment shall include materials, installation, reinstallation as needed for control plans and removal. This does not include Type II folding barricades.
- S. Dewatering: All dewatering/ground control measures including materials, equipment and labor unless identified as part of other individual bid items shall be incidental to the cost of related items of work and no separate payment will be made.
- T. Temporary Sewer Bypass Pumping: All work associated with this item which is described in Section 02720, Paragraph 3.04 and not part of a separate bid item shall be considered incidental to the cost of other items of work and no separate payment will be made.
- U. Temporary Removal and Reinstallation of existing Keystone Wall and Chain Link Fence: All work associated with these items which is described in Section 02221, Paragraph 3.01 and not part of a separate bid item shall be considered incidental to the cost of other items of work and no separate payment will be made.
- V. Erosion Control
1. Measurement and payment for erosion control will be made on a lump sum basis. The lump sum price shall include all erosion control measures as specified within the approved Erosion Control Plan including materials, equipment and labor.
 2. The plan should include filter fence located adjacent to each side of the disturbed areas outside paved public right-of-way and other measures to comply with the requirements of the Clackamas County erosion control standards. No additional payment will be made for preparation or updating the Erosion Control Plan.
- W. Shrubs
1. Measurement for shrubs found in the Planting Schedule of the Plans will be made on a unit price basis as shown in the Proposal. No separate measurement will be made for excavation, soil backfill, planting area preparation, weed abatement or any other miscellaneous item necessary to plant the shrubs as shown on the plans.

2. Payment per each shrub shall include full compensation for all labor, materials and equipment necessary to install shrubs complete in place.

X. Trees

1. Measurement for trees found in the Planting Schedule of the Plans will be made on a unit price basis as shown in the Proposal. No separate measurement will be made for excavation, soil backfill, planting area preparation, weed abatement, tree staking, protective fabric, planting tablets, or any other miscellaneous item necessary to plant the trees as shown on the plans.
2. Payment per each tree shall include full compensation for all labor, materials and equipment necessary to install shrubs complete in place.

Y. Seeding

1. Measurement for seeding found in the Seeding Schedules of the Plans will be made on the square foot basis. No separate measurement will be made for seeding area preparation, mulches, weed abatement, or any other miscellaneous item necessary for seeding establishment.
2. Payment of seeding shall include full compensation for all labor, materials and equipment necessary to establish seeding.

Z. Bark Mulch

1. Measurement for bark mulch will be made on the cubic yard basis applied to the area and depth indicated at each plant.
2. Payment of bark mulch shall include full compensation for all labor, materials and equipment necessary to install.

AA. Three Year Planting Area Maintenance Program

1. Measurement and payment for landscape maintenance as described in Section 02935 will be made on a lump sum basis that covers all three years of the maintenance program. The lump sum price shall include all costs for materials and labor to accomplish this task (*Lump sum covers all three years, not a per year value*)
2. One third (33%) of the lump sum payment will be made at the end of each year during the warranty period until the full amount is paid by the end of the third year. In the event the Contractor does not perform this work in a timely manner as determined by the Owner, the Owner reserves the right to have the specified work performed by others. This work will be charged against the Contractor and the cost withheld from Contractor's payments.

BB. Sidewalk Replacement, 4 inches thick

1. Measurement for sidewalk replacement will be made on a square foot basis for length and width to be replaced.

2. Payment per square foot for sidewalk replacement shall be full compensation for all materials (i.e. concrete, 2" layer of sand or gravel for leveling, etc.) labor, and equipment necessary to complete the work in place.

CC. Concrete Curb, Type "C"

1. Measurement for Type "C" curb replacement will be made on a linear foot basis for length to be replaced.
2. Payment per linear foot for concrete curb replacement shall be full compensation for all materials (i.e. concrete, 2" layer of sand or gravel for leveling, etc.) labor, and equipment necessary to complete the work in place.

DD. Filling Abandoned 8-inch Sewer Pipes: Measurement and payment for installing controlled low-strength material (CLSM) within all abandoned pipes where shown on the plans and described below shall be made on a lineal foot basis. No measurement of quantities will be made for CLSM. The lineal foot price shall include all costs for materials, equipment and labor for: furnishing, and placement of the material within the pipe. Insure no CLSM escapes to the surface. Interior of manholes to be abandoned shall not be filled with the material. Protect Mt. Scott Creek from any inadvertent spills or overflows caused by this work.

END OF SECTION

SECTION 01040

COORDINATION AND PROJECT REQUIREMENTS

PART 1 GENERAL

1.01 PROJECT COORDINATION

- A. Coordinate scheduling, submittals and work of various Sections of the Specifications and subcontractors to assure efficient and orderly sequence of interdependent construction.

1.02 CONNECTIONS TO UNDERGROUND UTILITIES, CONDUITS, OR PROCESS PIPING

- A. Obtain best available current information on location, identification and marking of existing utilities, piping and conduits and other underground facilities before beginning any excavation. Contact Oregon Utility Notification center at 800-332-2344 for information at least 48 hours in advance of beginning work. Give Engineer 24 hours notice before beginning work.
- B. The location of existing utilities and underground facilities known to the Engineer are shown in their approximate location based on information available at the time of preparing the Drawings. The actual location, size type and number of utilities and underground facilities may differ from that shown and utilities or underground facilities may be present that are not shown. See General Conditions Article 4.03 and Bid Form Section 00301, Paragraph 3.I for the Contractor's responsibilities working around these facilities.
- C. Where connections to existing utilities or other underground facilities is required or where new piping or conduits may cross or interfere with existing utilities or underground facilities carefully excavate and uncover existing installations to a point 1 foot below the pipe or conduit to determine the actual elevation and alignment. Call the Engineer's attention to differing existing conditions that may require a clarification or change.

1.03 FIELD ENGINEERING AND LAYOUT

- A. See General Conditions, Article 4.05 regarding reference points provided on the plans and responsibilities of the Contractor to accurately layout the Work.

1.04 PRECONSTRUCTION MEETING

- A. Prior to beginning the Work, the Contractor and its key personnel and Subcontractors including the Contractor's Superintendent, Project Manager, and Field Engineer shall attend a meeting with the Owner and the Engineer to discuss the following:
 - 1. Name, Authority, and Responsibilities of Parties Involved
 - 2. Project Procedures:
 - a. Progress meetings
 - b. Correspondence
 - c. Notification
 - d. Submittal of Shop Drawing Samples, and Proposed Equivalents

- e. Requests for Information
- f. Response to Requests for Information
- g. Work Directive Change
- h. Contractor Reporting requirements
- i. Change Orders
- 3. Temporary Schedule and Contractor's Construction Schedule
- 4. Maintenance of Record Drawings
- 5. Punch Lists and Project Closeout Procedures
- 6. Final Deliverables including Record Drawings

1.06 MATERIALS

- A. General:
 - 1. Verify that products delivered meet requirements of Contract Documents and the requirements for approved submittals.
- B. Transportation and Handling:
 - 1. Transport and handle products in accordance with manufacturer's instructions.
 - 2. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.
 - 3. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.
- C. Storage and Protection:
 - 1. Store and protect products in accordance with manufacturer's instructions. Seals and labels shall be intact and legible.
 - 2. Provide offsite storage and protection including insurance coverage when site does not permit onsite storage or protection.

1.07 SAFETY

- A. In accordance with generally accepted construction practice, applicable law and the General Conditions, paragraph 6.13, the Contractor shall be solely and exclusively responsible for:
 - 1. Construction means and methods.
 - 2. Safety of employees engaged in the work while on and off the site.
 - 3. Safety of the Owner, the Engineer, and others who may visit or be affected by the work.
 - 4. Safety of the work itself including material and equipment to be incorporated therein.
 - 5. Safety of other property at the site or adjacent thereto.
 - 6. Safety programs, equipment and protective devices required to assure the safety of persons and property for whom/which the Contractor is responsible.
- B. The duties of the Engineer in conducting review of the Contractor's performance is not intended to include review of the adequacy of the Contractor's work methods, equipment, bracing, scaffolding or safety measures in, on, or near the construction site. See General Conditions, paragraph 6.13.

- C. The Contractor is hereby informed that work on this project could be hazardous. The Contractor shall carefully instruct all personnel working in potentially hazardous work areas as to potential dangers and shall provide such necessary safety equipment and instructions as required to prevent injury to personnel and damage to property, and to comply with all applicable laws and regulations including State OSHA, Federal OSHA, and other regulations referenced in these Contract Documents.
- D. The Contractor shall, at all times, maintain the job in a condition that is safe for the Owner, the Engineer and their Consultants to make site visits and to conduct construction reviews. If the Owner or the Engineer cannot allow personnel to visit the job because it is not safe, the Contractor is not providing required safe access to the Work as required by General Conditions, paragraph 13.02.
- E. The Contractor shall prepare a Safety Plan meeting the requirements of the Clackamas County Safety Officer and applicable regulations. As a minimum, the Contractor's Safety Plan shall set forth definite procedures for informing workers about safety, for instructing workers in safe practices, for assuring that workers are using appropriate safety equipment and safe work practices and for reporting accidents.
- F. Owner Safety Requirements: Before any Work at the site is started, Contractor and Owner safety representatives shall meet and review Owner's Contractor Notification Process document. The parties shall fill out, sign and submit two copies of the document for the Owner's project records. Contractor is responsible to convey the information in the Contractor Notification Process document to Contractor employees and subcontractors. All Contractor employees, subcontractors and manufacturer representatives shall view the Owner's "contractor orientation video" before starting work at the site.
- G. The Contractor shall acquire a "Hot-Work Permit" in accordance with the Hot Work Permit Policy of the Water Environment Services, a department of Clackamas County when engaged in an activity that may produce sparks, flame, heat or other ignition source.

1.08 CONTRACTOR'S QUALITY CONTROL

- A. The Contractor shall be fully responsible for inspecting the work of its suppliers and Subcontractors to assure that the work when completed will comply with the standards for materials and workmanship required by the Contract Documents. See General Conditions paragraph 6.06.
- B. Inspections, periodic observations and testing performed by the Owner or the Engineer are for the Owner's benefit and information only and shall not be construed as partial or incremental acceptance of the work and shall not be deemed to establish any duty on the part of the Owner or the Engineer to the Contractor, its subcontractors or suppliers. See General Conditions paragraphs 9.02 and 9.10.
- C. The Contractor shall:
 - 1. Monitor quality control over suppliers, manufacturer, products, services, site conditions, and workmanship, to produce work of specified quality.
 - 2. Comply fully with manufacturer's installation instructions, including performing each step in sequence as recommended by the manufacturer.

3. Submit a Request for Information to Engineer before proceeding with work when manufacturers' instructions or reference standards conflict with Contract Documents.
 4. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
 5. Perform work by persons specializing in the specific trade and class of work required and qualified to produce workmanship of specified quality.
- D. If reference standards or manufacturers' instructions contain provisions that would alter or are at variance with relationships between the parties to the Contract set forth in the Contract Documents, the provisions in the Contract Documents shall take precedence.
- E. The Contractor shall provide assistance required by the Engineer to adequately inspect the Work including ladders, scaffolding, lighting, ventilation and other aids to facilitate access and provide a safe working environment.

END OF SECTION

SECTION 01062

PERMITS AND EASEMENTS

PART 1 GENERAL

1.01 PERMITS

- A. Contractor shall complete 48-hour work notice for Oregon Department of Transportation (ODOT) as part of Permit T2BM48000 and 2BM47995 found in Appendix A. Refer to permit for all requirements to perform operations within the ODOT right-of-way. Contractor shall also follow requirements of Clackamas County Department of Transportation & Development Permit UP191824 for all work within SE 97th Avenue found in Appendix B. Traffic control measures shown in the plans shall be used as a guideline for working within the busy street. The final efforts may vary depending upon efficient movement of traffic through the site with minimal disruptions. If night work to complete the sanitary sewer installation on SE 97th Avenue is proposed as a more efficient option by the Contractor, it must be approved by ODOT and DTD and shall be provided at no additional cost to the Owner. This will specifically include but not be limited to modifications to the TCP to provide approved lighting, etc. to meet MUTCD standards.

1.02 EASEMENTS

- A. Owner has acquired or will acquire the easements needed for construction. A copy of each easement will be provided to the Contractor prior to the bid opening.
- B. Comply with applicable terms and conditions contained in such easements.

1.03 RESTORATION OF PROPERTY/MISCELLANEOUS

- A. Owner has acquired the easements identified in this Section 01062. Comply with property restoration requirements contained in such permits and easements. Known underground utility replacements within certain easements have been identified with the best available information after meeting with individual property owners. It is expected that additional items requiring protection and/or replacement will be encountered as a general construction practice and the Contractor shall assume responsibility thereof at no additional cost. These items would generally include, but not be limited to: removal and reinstallation of short retaining walls, removal and replacement of shrubs/flower beds/bark mulch, removal and replacement of subsurface structures including drain pipes and sumps, underground irrigation systems, individual utility services, fencing, etc.
- B. Restoration: See Section 02935
- C. Coordinate all work within the Clackamas Education Service District (CESD) with Mark Dodge at (503) 341-9650 and all work within the Apartments with Tim Miller at (503) 224-1460.
- D. Submit signed release Form 01062-A from each property owner affected by construction prior to final payment by Owner.

**01062-A
EASEMENT RELEASE FORM**

EASEMENT NO._____

OWNER'S CONTRACT NO._____

PROPERTY OWNER'S APPROVAL OF EASEMENT RESTORATION

I/We, the Owner(s) of property identified as

(Address or Property Description)

do hereby approve and accept the restoration work done by

(Contractor Name)

the Contractor on the construction of pipelines on easements over and across my/our property.

SIGNED_____ **DATE**_____

SIGNED_____ **DATE**_____

DATE CONTRACTOR ON SITE:_____

DATE CONTRACTOR OFF SITE:_____

SECTION 01195

PROTECTION AND MAINTENANCE OF WORK AND PROPERTY

PART 1 GENERAL

1.01 DESCRIPTION

This section specifies the protection and maintenance of work and property as they are affected by the work.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

- A. Section 01560, *Environmental Controls*

1.03 PUBLIC AND PRIVATE PROPERTY

- A. Protect all public and private property, insofar as it may be endangered by Contractors' operations and take every reasonable precaution to avoid damage to such property.
- B. Restore and bear the cost of any public or private improvement facility, structure or land and landscaping within the Right-of-Way or all temporary and permanent easements where shown on the plans which are damaged or injured directly or indirectly by or on account of an act, omission, or neglect in the execution of the Work. Restore to a condition substantially equivalent to that existing before such damage or injury occurred, by repairing, rebuilding, or otherwise affecting restoration thereof, or if this is not feasible, make a suitable settlement with the owner of the damaged property.
- C. Work Zone Time Limits within the easement for CESD property outside of SE 97th Avenue shall be as follows:

All work from Sta 2+55 (Parking Lot fencing) through MTA2-9 shall be completed from July 1, 2025 through July 31, 2025. This will include the final lift of AC trench patching of the driveway. 2-inch AC mill and inlay within limits shown on plans may be completed after the July 31st deadline but within the overall time of completion for the project. 2-inch AC mill and inlay within limits shown on plans performed outside of the July 1-31, 2025 window must be coordinated with the Owner and CESD to limit impacts to CESD operations.

All work from MT232 to the parking lot fence at Sta 2+55 may be completed outside the previously described July 1-31, 2025 timeline.

Refer to Section 02935 for specific requirements in this area during the three year warrenty period to maintain the newly planted trees and shrubs.

- D. Temporarily remove a short section of chain link fencing at approximate Sta 2+55 for access to pipe installation. Provide secure temporary chain link fencing across opening during non-working hours to prevent access inside CESD property.
- E. Protect entrance access gate and mechanism at Sta 6+00 during all construction activities. Contractor shall obtain access code from CESD representative during contract duration.

1.04 LOCATION OF EXISTING FACILITIES

- A. Pothole locations ahead of pipeline construction to verify locations so as not to affect main pipeline installation.
- B. In general, the locations of existing major utilities are indicated on the Drawings. This information has been obtained from utility maps and field surveys. Owner does not guarantee the accuracy or completeness of this information, and it is to be understood that other aboveground or underground utilities not shown on the Drawings may be encountered during the course of the work.
- C. Use a pipe locator or hand excavation to determine the exact location of underground facilities in the interest of avoiding unnecessary damage, maintenance costs, and to ensure continuity of customer service.
- D. Contact all utility companies and departments having underground facilities within the construction area and request they locate and mark their utilities. In addition, verify the location of all buried utilities in the construction area 48 hours before contractor digs by calling the one-call locator service at 1-800-332-2344. The contractor shall comply with Oregon “locate law” ORS 757.541 to ORS 757.571.

END OF SECTION

SECTION 01300

SUBMITTALS PROCEDURE

PART 1 GENERAL

1.01 DESCRIPTION

This Section specifies procedures for Contractor submittals. Where required by the Specifications, submit descriptive information that will enable the Engineer to assess whether the Contractor's proposed materials, equipment or methods of work are in general conformance to the design concept and in compliance with the Drawings and Specifications. The information to be submitted shall consist of drawings, specifications, descriptive data, certificates, samples, test results and such other information, all as specifically required in the Specifications.

PART 2 PRODUCTS

2.01 CONTRACTOR RESPONSIBILITIES

- A. Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall ensure that the material, equipment or method of work shall be as described in the submittal. Verify that the material and equipment described in each submittal conforms to the requirements of the Specifications and Drawings prior to transmittal to the Engineer. Ensure that there is no conflict with other submittals and notify the Engineer in each case where such submittal may affect the work of another contractor or Owner.
- B. If the Contractor's review determines that the information shows deviations from the Specifications or Drawings, submit a request for substitution.

PART 3 EXECUTION

3.01 TRANSMITTAL PROCEDURE

- A. General:
 - 1. Submittals regarding material and equipment shall be accompanied by Submittal/Transmittal Form. A separate form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections for which the submittal is required. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.
 - 2. A unique number, sequentially assigned, shall be noted on the transmittal form accompanying each item submitted. Original submittal numbers shall have the following format: "XXX"; where "XXX" is the sequential number assigned by the Contractor. Resubmittals shall have the following format: "XXX-Y"; where "XXX" is the originally assigned submittal number and "Y" is a sequential letter assigned for resubmittals, i.e., A, B or C being the 1st, 2nd and 3rd resubmittals,

respectively. Submittal 25B, for example, is the second resubmittal of Submittal 25.

- B. Deviation from Contract: Submit a request for substitution for deviations from the Specifications or Drawings. Include the reason for the deviation and cost differential for the deviation. Deviations from the Contract shall be authorized by change order only.
- C. Submittal Completeness: Submittals which do not have all the information required to be submitted are not acceptable and will be returned without review.
- D. Submit to the Engineer the following items for review:
 - 1. Construction Schedule
 - 2. List of employees to be contacted in an emergency with their home phone numbers and cell numbers (available 24 hrs/day)
 - 3. List of subcontractors that will work on the project
 - 4. Traffic Control Plan (allow for up to a 14 day review period).
 - 5. Dewatering Plan
 - 6. Erosion control plan
 - 7. Safety Plan
 - 8. Drug Testing Plan
 - 9. Shoring Plan, including a plan stamped by a professional civil or structural engineer for shoring when the excavation is greater than 20 feet deep
 - 10. Imported granular materials: supplier and location of pit, gradation
 - 11. Flow diversion and bypass pumping plan
 - 12. Manholes
 - 13. Castings
 - 14. Manhole steps
 - 15. Precast concrete structures: design, materials (when applicable)
 - 16. PVC and Ductile Iron pipe and fittings
 - 17. Copy of confined space entry plan.
 - 18. Protective Manhole Coatings

The Engineer reserves the right to ask for additional SUBMITTALS that are not included on the above list. Review by the Engineer shall not relieve the Contractor from responsibility for error of omission. Obtain the Engineer's approval prior to beginning any fabrication or other work. No deviation from the reviewed drawings shall be allowed without approval from the Owner or Engineer.

3.02 REVIEW PROCEDURE

- A. Submit electronic copy of all materials.
- B. Unless otherwise specified, within 10 days after receipt of the submittal/resubmittal, the Engineer will review and return it to the Contractor. The returned submittal will indicate one of the following actions:
 - 1. If the review indicates that the material, equipment or work method is in general conformance with the Contract Drawings/Specifications, the submittal shall be marked "Approved." In this event, the Contractor may begin to incorporate the material/equipment/work method covered in the submittal.

2. If the review indicates that the submittal is insufficient or that limited corrections are required, the submittal may be marked “Approved as Noted.” The Contractor may begin to implement the work method or incorporate materials/comments covered in the submittal in accordance with the corrections/comments noted.
3. If the review reveals the submittal is insufficient or contains incorrect data and the comments require revision and resubmittal, the submittal shall be marked “Not Approved, Resubmit.” In this case, the Contractor shall not then undertake work covered by this submittal until the submittal has been revised, resubmitted and returned to the Contractor with a marking of “Approved” or “Approved as Noted.”
4. If the review indicates that the submittal is incomplete or that additional information is required, the submittal copies may be marked “Submit Specified Item”. In this case the Contractor shall not undertake work covered by this item until the submittal has been revised and returned to the Contractor with a marking of “Approved” or “Approved as Noted.”
5. If the review reveals the material, equipment, or work does not require submittal, then the submitted shall be marked “Review Not Required Per Contract Documents.” In this event, the Contractors may begin to incorporate the material/equipment/work covered by the submittal and no further action is required.

3.03 EFFECT OF REVIEW OF CONTRACTOR’S SUBMITTALS

Review of drawings, methods of work or information regarding materials or equipment the Contractor proposes to provide shall not relieve the Contractor of his responsibility for errors therein, nor shall it be regarded as an assumption of risks or liability by the Engineer on behalf of Owner, or by any officer or employee of Owner. The Contractor shall have no claim under the Contract on account of the failure, or partial failure, of the method of work, material or equipment so reviewed. A mark of “Approved” or “Approved as Noted” shall mean the Owner has no objection to the Contractor, upon the Contractor’s own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

END OF SECTION

SECTION 01560

ENVIRONMENTAL CONTROLS

PART 1 GENERAL

1.01 DESCRIPTION

- A. This section specifies environmental mitigation and temporary environmental controls required to be maintained during construction. Nothing in this section shall relieve any person from the obligation to comply with the regulations or permits of any federal, state, or local authority.
- B. Related Sections: A list of sections most closely related to this section is provided for the convenience of the Contractor.
 - 1. Section 01500, *Temporary Construction Facilities*

1.02 SUBMITTALS

- A. Procedures: see Section 01300.
- B. Erosion Control Plan: Develop and maintain for the duration of the contract an Erosion Control Plan that will effectively incorporate and implement environmental protection precautions. The Contractor's Erosion Control Plan shall include methods and interim facilities to be constructed and/or used concurrently during construction to control erosion in such a manner as to ensure that sediment and sediment laden water does not enter any drainage system, roadways, or violate applicable water quality standards. Visible or measurable erosion which enters, or is likely to enter, a public storm and surface water system, wetland or stream is prohibited. The plan shall include the name of the Contractor's employee authorized to supervise and enforce compliance with the Erosion Control Plan and telephone number(s) to contact that person at any time.
- C. The Erosion Control Plan shall be submitted and approved in accordance with Section 01300 prior to initiating work within the public right-of-way.
- D. In the event a regulatory agency or jurisdiction determines the Erosion Control Plan to be inadequate to protect environment:
 - 1. The Contractor shall stop immediately the affected work in progress until adequate environmental protection measures are implemented.
 - 2. The Contractor shall modify the Erosion Control Plan to meet the requirements of said regulatory agencies, jurisdictions and provide the Engineer with the revisions to the Plan within five (5) calendar days of the notice of deficiency. Plan resubmittal will be in accordance with Section 01300.

PART 2 PRODUCTS

2.01 EROSION CONTROL

- A. Provide inlet protection consisting of bio-filter bags or other approved measures.

PART 3 EXECUTION

3.01 NOISE CONTROL

- A. Comply with all local controls and noise level rules, regulations and ordinances.
- B. Each internal combustion engine, used on the job or related to the job, shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.
- C. Noise levels for all equipment shall not exceed 85 dBA. Equipment that cannot meet these levels shall be quieted by use of improved exhaust mufflers, noise attenuation barriers or other means.
- D. If special circumstances or emergency conditions require work beyond the hours as specified, the Contractor shall:
 - 1. Notify the Engineer and Owner 72 hours in advance of any proposed extended work hours for preauthorization. The Contractor's written request shall specify the work to be performed and the circumstances that warrant the request. The request shall include any additional measures to mitigate noise generated by this construction activity if deemed necessary by the Engineer.
 - 2. If an emergency situation occurs that warrants immediate extended hours, the Contractor shall notify the Engineer immediately upon determining the need for this work.

3.02 WATER QUALITY PROTECTION AND STORMWATER CONTROL

- A. All construction activities shall comply with all conditions contained in applicable Federal, State, and Local permits.
- B. Provide approved inlet protection for all structures within or immediately downstream of all pipe bursting efforts within the project limits.

3.03 EROSION CONTROL

- A. Execute the approved Erosion Control Plan.

- B. The Contractor shall not drag, drop, track, or otherwise place or deposit, or permit to be deposited, mud, dirt, rock or other such debris into any part of the public storm or surface water system, or any part of a private storm or surface water system. Any such deposit of material shall be immediately removed by the Contractor at the Contractor's expense. No material shall be washed or flushed into any part of the storm or surface water system without erosion control measures installed to the satisfaction of the Engineer.
- C. The Contractor shall maintain the facilities and techniques contained in the approved Erosion Control Plan so as to continue to be effective during the construction or other permitted activity. If the facilities and techniques approved in an Erosion Control Plan are not effective or sufficient as determined by the Engineer, the Contractor shall revise the plan immediately upon notification by the Engineer. Upon approval of the revised plan by the Owner, the Contractor shall immediately implement the additional facilities and techniques. In cases where erosion is occurring, the Engineer may require the Contractor to install interim control measures prior to submittal of the revised Erosion Control Plan.
- D. The Contractor shall ensure that all necessary pollution control equipment, supplies, or materials are available to implement the Plan.

3.04 TREE PROTECTION

- A. Avoid tracking heavy machinery and storage near the protected trees shown on Sheet C03. Provide full time Certified Arborist oversight when excavating in the near vicinity as determined by the Engineer of four (4) trees on the plans including #11118, #11125, #113565 and #11712. Furthermore, set machinery on steel plates when excavating between trees #11118 and #11125 to avoid excessive soil compaction. Plates shall remain in place until the new sewer pipe has been installed to MT232 and no further use of the area by heavy equipment is necessary.

3.05 FINES

- A. Contractor shall be responsible for all fines incurred from non-compliance with regulations of governing authorities.

END OF SECTION

SECTION 01570

TRAFFIC CONTROL

PART 1 GENERAL

1.01 DESCRIPTION

- A. This work consists of furnishing, erecting, and maintaining temporary barricades, signs, and other traffic control devices, and provision of temporary roadways, detours, flagging and other safeguards necessary for orderly flow of traffic during performance of the work.
- B. The Contractor shall submit a Traffic Control Plan (TCP) which addresses public service building access, emergency services, mail delivery, property owner access, school bus service, and Tri-Met bus service, to the Engineer for approval. Affected permitting agencies including Oregon Department of Transportation (ODOT) and Clackamas County Department of Transportation and Development (DTD) will review the plan and have input that must be complied with. The input may include placement of signs or flagging needs for specific working conditions proposed by the Contractor. The Contractor shall update the TCP as required during the progress of the work.
- C. A Traffic Control Plan (TCP) and Temporary Pedestrian Access Route Plan (TPAR) are included in the Contract Documents and should be used as a guide for the Contractor to submit to each agency for approval. The Contractor shall expect there to be minor changes necessary at the time of submittal for approval. This may specifically include but not be limited to additional temporary signs for the left turn lane from SE Sunnybrook Blvd onto SE 97th Avenue along with travel south on SE 97th Avenue at the SE Sunnybrook intersection. Refer to sheets C09 and C10 for additional information.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

- A. Section 01300, *Submittals Procedure*.
- B. Section 01560, *Environmental Controls*.

1.03 QUALITY ASSURANCE

- A. Traffic Control Devices shall be in conformance with the current edition of the *Manual on Uniform Traffic Control Devices* (MUTCD), as published by the U.S. Department of Transportation – Federal Highway Administration; the Oregon Supplements to the MUTCD as published by the State of Oregon Department of Transportation; and as approved by the Engineer through the Traffic Control Plan. Copies of the MUTCD are available at the United States Government Book Store, 1304 SW 1st Avenue, Portland, Oregon.

B. Minimum Requirements for Labor and Equipment:

1. Ensure flaggers are certified in the state of Oregon.
2. Labor under these provisions applies particularly to flaggers, all of whom shall be physically and mentally qualified, trained in their duties, efficient, and courteous. Each flagger on duty, except uniformed law enforcement officers, shall wear an orange or yellow colored hard hat and an orange colored or fluorescent red-orange or fluorescent yellow-orange vest, and shall be equipped with a highly visible, reflectorized "Stop-Slow" hand sign conforming to current standards for daylight use; and with illuminated stand area, of high visibility for night use.
3. When work on the project requires closure of a travel lane resulting in one-way traffic, the Contractor shall have flaggers equipped with two-way radios, whenever, in the opinion of the Engineer, radios are required.

1.04 SUBMITTALS

- A. The Contractor shall provide the following to the Owner and the Engineer in accordance with Section 01300 at least fourteen (14) calendar days in advance of the time the traffic control will be required or haul routes employed:
- B. The TCP shall as a minimum address the following:
1. Annotate proposed location of barricades, lighting, signing, temporary striping and other traffic control devices.
 2. Full closure of SE 97th Avenue will not be allowed.
 3. Maintain emergency access to the nearby Kaiser Sunnyside Medical Center at all times during the work.
 4. Channel traffic flow through the work zone per approved Traffic Control Plan.
 5. Ensure the plan addresses all modes of transportation, including vehicles, bicycles, pedestrians, transit, and adjacent property access.
 6. Ensure the plan shows pertinent roadway features that will be obstructed by construction activity, such as fire hydrants.
 7. Provide TCP for all road closure and detours. Include details of detour traffic control plans for each proposed closure.
 8. Maintain a minimum of one lane of traffic on SE 97th open at all times unless otherwise approved in the Traffic Control Plan.
 9. Indicate size, shape, color, location, and type of mounting for all proposed temporary pavement markings. Indicate any existing pavement markings that conflict with the TCP; describe method to be used for removing conflicting pavement markings.

10. Full closure of the private driveway for construction of the sanitary sewer will be allowed for a limited time as described in Section 01195, Paragraph 1.03.C.

1.05 REQUIREMENTS

- A. The TCP must be approved in writing by the Owner before any work commences.
- B. Emergency vehicle, pedestrian and bicycle access shall be maintained at all times on SE 97th Avenue.
- C. Vehicular and pedestrian routing on streets where the work is not being performed shall not be revised without approval of a supplemental Traffic Control Plan by the Owner.
- D. Work hours within the project are generally from 7 AM to 6 PM Monday through Friday otherwise approved by the Engineer and Owner. Sunday work is not allowed.
- E. Public Streets:
 1. Property owner, emergency vehicle, mail delivery, pedestrian, and bicycle access shall be maintained at all times.
 2. Maintain 2-way traffic flow on all streets during non-working hours.
 3. The Contractor is responsible for identifying bus routes in the project area. On routes where two-way traffic cannot be maintained, the Contractor is responsible for working with Tri-Met and/or the Public/Private School to determine an acceptable alternate route.
 4. Traffic diversion plans must be approved prior to this work starting. No more than one half of the street may be excavated at one time in the event emergency vehicles are required to pass. Traffic must be allowed to use streets at the end of each shift by backfilling the trench and installing temporary asphalt concrete on SE 97th at the end of each shift.
 5. Comply with ODOT permit requirements for placement of temporary sign posts within SE Sunnybrook Blvd. shown on Sheet C09 of the plans.
- F. Signs:
 1. Standard construction zone warning signs shall be in accordance with documents referenced in Section 01570 - 1.03.

1.06 COORDINATION

- A. The Contractor shall coordinate all construction to offer the least possible obstruction and inconvenience to the public. The Contractor shall have under construction no greater length or amount of work than can be executed properly with due regards to the rights of the public. Refer to Section 02221- 3.08, Work Limits.

- B. The Contractor shall coordinate with public property owners and public and private school property owners in order to maintain convenient access for local traffic to private properties along the line of work at all times.
- C. The Contractor shall coordinate all revisions to the existing traffic control with the Owner. Traffic controls are to remain in operation unless determined to be unnecessary and confusing under the approved Traffic Control Plan. As work progresses and as conditions permit, relocated or removed traffic and street name signs shall be reset by the Contractor with new signs in their permanent location. All damaged or lost traffic control devices shall be immediately replaced by the Contractor.

1.07 NOTIFICATIONS

- A. Written approval of the Traffic Control Plan and/or supplemental Traffic Control Plan shall be obtained from the Owner at least thirty (30) days prior to initiating work.
- B. Written approval shall be obtained from the Owner before scheduling closure of any street. The notification shall give the time of commencement and completion of the work, names of streets to be closed, schedule of operation, routes of detours, etc.
- C. To accommodate emergency vehicle rerouting, notification shall be given to Owner in writing, not less than 72 hours prior to construction operations that modify existing traffic flow conditions.
- D. Individual property owners or businesses shall be notified at least 48 hours in advance of beginning work that restricts the use of the property.

PART 2 PRODUCTS

2.01 TRAFFIC CONTROL PLAN

Traffic Control Plan shall be completed in accordance with Sections 01570-1.04 through 1.06.

2.02 SPECIAL SIGNS

Signs with special or non-standard messages may be necessary to properly convey information to the motorist or pedestrian. The Contractor shall be responsible for installing and maintaining these signs. Signs shall be in accordance with the documents referenced in Section 01570 - 1.03.

PART 3 EXECUTION

3.01 TRAFFIC MAINTENANCE

- A. The Contractor shall maintain a normal flow of vehicular and pedestrian traffic, to prevent accidents and to protect the work throughout the construction stages until completion of the work. The Contractor shall make all necessary arrangements to reroute traffic, provide and maintain barriers, cones, guards, barricades, and construction warning and regulatory signs. Regulatory devices provided by the Contractor shall be suitable for nighttime operation. The Contractor shall protect other portions of the work during con-

struction and until completion. This includes providing and maintaining barricade lights, construction signs, guards, temporary crossovers, and flaggers in accordance with documents referenced in Section 01570-1.03.

- B. Rerouting of traffic by the Contractor shall be limited to the shortest time necessary to provide effective construction operations. Required travel lanes shall not be blocked by the Contractor's activities, including trucks delivering materials unless pre-approved by the Owner. Material deliveries and other related trucking activities shall occur in the Contractor's protected work or staging areas. Upon completion of a segment of work in streets, the Contractor shall restore traffic operations to normal flow as soon as possible.
- C. The Contractor shall provide Emergency vehicle access at all times throughout the project.
- D. The Contractor shall provide for safe pedestrian movements to the best of their ability through construction areas at all times on SE 97th Avenue. Temporary signs directing pedestrians for access route shall be mounted on Type II folding barricades. Barricades shall remain in place during work requiring either west or east side sidewalk closures until the work area has shifted to the opposite side.

3.02 ACCESS

- A. The Contractor shall maintain access through private driveway on an as-needed basis for an occasional driver during the full closure described in Section 01195.
- B. If during some urgent stages of construction the Engineer and Owner concur that temporary closure of an access to a property is unavoidable, the closure shall be coordinated with the property owners and approved by the Engineer at least 48 hours in advance of closure.

3.03 SAFETY

- A. The Contractor shall provide adequate safeguards, safety devices and protective equipment and take all necessary actions to protect life, health and safety of the public and construction crew and to protect property in connection with the performance of work covered by the Contract. This action shall include the provision of adequate safeguards, safety devices and protective equipment.
- B. The Contractor shall provide and erect all necessary standard construction signs, warning signs, portable message signs and detour signs to warn and protect the public at all times from injury or damage as a result of the Contractor's operations.
- C. Where flaggers are employed by the Contractor to safeguard traffic, the flagger's equipment shall be in accordance with documents referenced in Section 01570 - 1.03. Flaggers while flagging traffic must use this equipment.
- D. The Contractor shall furnish standard signs as well as other appropriate signs prescribed by the Owner as applicable and necessary for the work. Signs on posts and supports shall be erected and maintained by the Contractor in a neat and presentable condition until they are no longer necessary. When a sign is no longer necessary, the Contractor, upon approval by the Owner, shall take down such sign. Signs necessary for nighttime traffic control, or that remain in place during hours of darkness shall be fully reflectorized.

- E. The Contractor shall safeguard and direct traffic after the existing signs have been removed. Preservation and maintenance of traffic control and street name signs shall be the sole responsibility of the Contractor. Signs and other traffic control devices damaged or lost by the Contractor, shall be replaced by the Contractor at the Contractor's expense.
- F. Areas under work zone traffic control shall be monitored at least two (2) times daily. Disturbed signs and traffic control devices shall be reset immediately. Non applicable signs shall be removed or covered.
- G. Upon failure of the Contractor to provide necessary traffic control when ordered to do so by the Engineer, the Engineer can, without further notice to the Contractor, provide the necessary traffic control. The cost of the traffic control shall be deducted from any payment due the Contractor.
- H. The Contractor shall provide adequate traffic control for protection of the work and the public at all times. The Contractor shall be liable for injuries and damages to persons and property suffered by reason of the Contractor's operations or negligence.

3.04 CONSTRUCTION AND MAINTENANCE OF DETOURS

- A. The Contractor shall provide for all on-site and off-site detours required or necessitated by the work, including side street crossings and temporary bridges over excavation or freshly placed concrete.
- B. Detours shall be constructed and maintained in a safe condition per the approved Traffic Control Plan and documents referenced in Section 01570 - 1.03.
- C. Detours shall be removed by the Contractor when no longer required.
- D. Work zone traffic control shall be checked by the Contractor at least two (2) times per day. The Contractor shall clean, restore or replace traffic control devices that are dirty, damaged or are not functioning per the approved Traffic Control Plan.
- E. The Contractor shall keep all roadways clean to the satisfaction of the Engineer to assure the safe passage of pedestrians and vehicles through the work site.

END OF SECTION

SECTION 01700

CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 SUMMARY

This Section includes a description of procedures to be followed and related work required to accomplish an orderly transfer of Project deliverables from the Contractor to the Owner.

1.02 DEFINITIONS

- A. Punch List: The stated qualification accompanying either the Engineer's Certificate of Substantial Completion or the Certificate of Final Payment, or any list of construction items found to be deficient or incomplete through review of the Work by Engineer and communicated in writing to Contractor at any time during the Contract Period.
- B. Substantial Completion: When the work is ready for its intended use.
- C. Record Drawings: Drawings showing changes made during actual construction.

1.03 SUBMITTALS

A. SUBSTANTIAL COMPLETION

- 1. Contractor to notify Engineer in writing that the Contractor considers the Work as a whole to be in Substantial Completion and request for a Substantial Completion inspection.
- 2. Record Drawings submitted to Engineer with accurate representation of all changes, as approved.

B. FINAL COMPLETION

- 1. Contractor to notify Engineer in writing that the Contractor considers the Work to have progressed to final completion.
- 2. Certification that all subcontractors and suppliers have been paid.
- 3. Submit to Engineer letter(s) from Contractor's bonding agent(s) authorizing Owner to make final payment to the Contractor indentifying the bonding agent's full approval for such actions.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 SUBSTANTIAL COMPLETION, ADJUSTMENT AND RELEASE OF RETAINAGE

- A. When the Work is found to be in a state of Substantial Completion with stated qualifications:

1. Engineer will determine the value of the punch list work using either Project approved schedule of values or other method at its discretion.
 2. The value of incomplete work will be multiplied by two (2) and retainage reduced to that amount.
- B. No partial payments of the Substantial Completion retainage will be allowed.
- C. The Substantial Completion retainage will be released with final payment.

3.02 INSPECTION FOR FINAL ACCEPTANCE AND PAYMENT

- A. When the Work on the Punch List(s) have been completed, and Contractor considers the Work of the entire Project is complete, he shall submit written certification that:
1. Contract Documents have been reviewed.
 2. Work has been inspected for compliance with Contract Documents.
 3. Work has been completed in accordance with Contract Documents.
 4. Work is completed and ready for final inspection.
 5. Certification that all subcontractor and suppliers have been paid.
- B. Engineer will make an inspection with the Contractor to verify the status of completion within 5 calendar days after receipt of such certification.
- C. Should Engineer consider that the Work is incomplete or defective the following actions will occur:
1. Engineer: Notify the Contractor in writing within 5 calendar days, listing the incomplete or defective work.
 2. Contractor: Remedy the stated deficiencies, and send a second written certification to Engineer that the Work is complete.
 3. Engineer will reinspect the Work.
- D. When Engineer finds the Work acceptable in accordance with the Contract Documents: Engineer requests Contractor to make closeout submittals.

3.03 FINAL APPLICATION FOR PAYMENT

- A. Complete demobilization prior to submitting final application for payment.
- B. Submit final application for payment in accordance with procedures and requirements stated in the Conditions of the Contract.
- C. Submit Certificate of Compliance Form 1700-A.
- D. Engineer will review application and if approved recommend final payment within 5 calendar days of receipt of application.

1700-A
CERTIFICATE OF COMPLIANCE FORM

Mt Talbert MTA Pipe Realignment

TO: Clackamas Water Environment Services

PROJECT NO: P700223306

CONTRACT FOR (Revised Total):

CONTRACT DATE:

I (We) hereby certify that all work has been performed and materials supplied in accordance with the Plans, Specifications, and Contract Documents for the above work, and that:

- A. No less than prevailing rates of wages as ascertained by the governing body of the contracting agency have been paid to laborers, workmen, and mechanics employed on this work.
- B. There have been neither unauthorized substitutions of subcontractors nor have any subcontracts been entered into without the name of the subcontractors having been submitted to the Engineer prior to the start of such subcontractor work.
- C. No subcontract was assigned or transferred or performed by any subcontractor other than the original subcontractor, without prior notice having been submitted to the Engineer together with the names of all subcontractors.
- D. All claims for material and labor and other services performed in connection with these Specifications have been paid. No further claims will be made and all liens have been satisfied and lifted.
- E. All monies due the State Industrial Accident Funds, the State Unemployment Compensation Trust Fund, the State Tax Commission, hospital associations, and/or others have been paid.

CERTIFIED BY:

CONTRACTOR

DATE

END OF SECTION

SECTION 02120

CLEARING AND REMOVAL OF OBSTRUCTIONS

PART 1 GENERAL

1.01 SUMMARY

This Section specifies requirements for clearing, stripping, removal of obstructions, and disposal and related work necessary for construction operations.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

- A. Section 01560, *Environmental Controls*
- B. Section 02930, *Plants*

PART 2 PRODUCTS – Not Used

PART 3 EXECUTION

3.01 CLEARING

- A. The Contractor shall protect all trees and other plants from damage incidental to site preparation and construction operation to reach the project site from SE 97th Avenue. If any tree or other type of plants are destroyed, disfigured or damaged so that in the Engineer's opinion removal is required, Contractor will be assessed damages which will be deducted from the payment due the Contractor. Trees which become the property of the Contractor after removal where shown on the plans can be disposed of in a lawful manner.

All trees not removed but requiring branch limbing for construction access shall utilize three separate pruning cuts that provides a cleancut close to the branch bark ridge or collar according to ANSI A300 (Part 1). Remove all pruned limbs from the construction area and dispose of according to Paragraph 3.04. All trimming shall be completed in a timely manner and shall be considered as a legitimate reason to withhold either partial or final payments until the work is deemed acceptable by the Engineer.

The Owner has identified specific trees approximately 6" and larger that will be removed by the Contractor from Station 1+00 to 2+75. All trees will become property of Contractor and must be removed from the site, unless being used as downed tree materials. One large Western Red Cedar approximately 40-inches in diameter shown to be removed is dead. The stump for this tree and all others shown to be removed shall remain in place to protect surrounding trees from disturbance. Cut off 24-inches from surrounding ground surface for trees greater than 18-inches in diameter. Smaller trees shall have a 12-inch stump remaining. A summary of major trees to be removed as shown on the plans including the previously mentioned Western Red Cedar are as follows:

Tree No.	Approx. DBH(in)	Type
1001	5	Bigleaf Maple
1002	8	Bigleaf Maple
11101	38	Western Red Cedar
11102	10	Sweet Cherry
11103	8	Sweet Cherry
11113	16	Sweet Cherry
11114	7	Western Red Cedar
11115	10	Western Red Cedar
11123	7	Douglas Fir
11686	13	Bigleaf Maple
11716	9	Bigleaf Maple

3.02 GRUBBING AND TOPSOIL STRIPPING

- A. Identify and maintain existing native vegetation during grubbing and stripping. Grubbing shall consist of the removal and disposal of excavated stumps, exposed roots larger than 6 inches in diameter, matted roots, and all State of Oregon classified noxious weed vegetation. Strip topsoil after grubbing operations to depth of 1 inch for all areas outside of existing tree driplines, working around vegetation to remain. Refer to Sheet L02 for other clearing and grubbing limits prior to planting and seeding.

Depressions made by grubbing or stripping shall be filled with satisfactory and suitable topsoil material in compacted lifts no greater than 8 inches, conforming to the original adjacent surface of the ground. Do not fill depressions within driplines of existing trees unless approved of by Arborist. Refer to larger Western Redcedar for instructions to keep stump in Paragraph 3.01.

Do not temporarily store materials within driplines of trees. Remove all materials from the construction area and dispose of according to Paragraph 3.04.

3.03 REMOVAL OF OBSTRUCTIONS

- A. This item refers to obstructions that may be removed and do not require replacement. Obstructions to the construction of the trench such as but not limited to abandoned concrete structures, logs, rubbish and debris of all types shall be removed by the Contractor at his own expense without additional compensation from the Owner.

3.04 DISPOSAL OF CLEARED MATERIAL

- A. Material generated by clearing, grubbing, stripping, and removal of obstructions, shall be conveyed to a suitable waste disposal site and disposed of in a lawful manner that will meet all the requirements of the applicable federal, state, and county regulations. The waste disposal shall be provided by the Contractor at his/her expense and approved by the Engineer. Alternative disposal of brush and small limbs may be possible if approved by the Engineer through on-site shredding and dispersal within the limits of the temporary construction easement. Areas for dispersal would be in the immediate vicinity of the vegetation removed.

END OF SECTION

SECTION 02160

SHEETING, SHORING, AND BRACING

PART 1 GENERAL

1.01 SUMMARY

This Section specifies requirements for sheeting, shoring, and bracing of trenches and open excavations greater than 4 feet in depth. Where shoring, sheeting, bracing, or other supports are necessary, they shall be furnished, placed, maintained, and removed by the Contractor. Shoring, sheeting, and bracing are required where necessary to prevent caving, and to protect adjacent structures, property, workers, utilities and the public.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

A. Section 01300, *Submittals Procedure*

1.03 REFERENCES

Oregon Occupational Safety and Health Act (OR-OSHA)

1.04 SYSTEM DESCRIPTION

A. Design Requirements:

1. The design, planning, installation, and removal of all sheeting, shoring, shields sheet piling, lagging, and bracing shall be accomplished in such a manner as to maintain the required excavation or trench section and to maintain the undisturbed state of the soils below and adjacent to the excavation. Shoring shall be designed and constructed to withstand all soil and hydrostatic loading that might occur during various stages of construction and for any surcharge loading caused by equipment loads and loads from material or soil stockpiles.
2. The Contractor shall design sheeting, shoring, and bracing in accordance with OR-OSHA.
3. Horizontal strutting below the barrel of a pipe and the use of the pipe as support for the trench support system are not acceptable.

1.05 SAFETY

- A. The Contractor is solely responsible for protection of personnel and existing facilities and utilities and for ensuring compliance with all applicable laws and regulations.
- B. The Contractor shall have in the shoring work area during all phases of construction, a competent person capable of identifying hazards, anomalies, conditions that differ from

the shoring design assumptions and other factors that would indicate the possibility of hazardous or dangerous conditions in the work area. The responsible person shall have the authority to stop all work when such conditions are identified.

1.06 QUALITY ASSURANCE

- A. The Contractor is solely responsible for quality assurance of shoring. At a minimum, the Contractor shall continually verify that the shoring is planned, executed, and maintained in accordance with applicable codes and regulations and good construction practice.
- B. The Contractor shall institute as a part of shoring construction a quality assurance program at each shoring location. The program shall include, but not be limited to, systematic observation of suitability of shoring materials, installation, excavation, groundwater control adjacent construction activities, and other factors.
- C. The responsible engineer for engineered temporary shoring shall verify at critical stages of shoring construction that the actual construction is in accordance with the Contractor prepared plans.
- D. Contractor is expected to provide all dewatering to install the new pipe and shall be solely responsible for proper design, installation, operation, maintenance, and any failure of any component of the dewatering system for this Contract. Soils data is included in Appendix A of the Contract Documents. Use of this information in no way relieves the Contractor from his responsibility for design, construction, and operation of a properly functioning dewatering system. The Contractor shall treat all discharge water from the trench as required by regulatory agencies.

1.07 EXISTING CONDITIONS

- A. The Contractor shall make its own interpretations, deductions and conclusions as to the nature of the materials to be excavated, the difficulties of making and maintaining the required excavations, and the difficulties of doing any other work affected by geotechnical conditions, and shall accept full responsibility therefore.

1.08 PROTECTION OF EXISTING FACILITIES

- A. Protect existing buildings, structures, streets and active sewer, water, gas, electricity, and other utility services.
- B. Coordinate the nature and extent of such protection with the owners of the building, structures, and utilities.

1.09 RESTORATION OF EXISTING FACILITIES

- A. Contractor shall restore all existing facilities damaged, destroyed, or altered by soil movements resulting from temporary shoring movements or nonperformance, at Contractor's own expense.
- B. Proposal shall be submitted by the Contractor to define the character and extent of the Contractor's proposed restoration work when requested by the Engineer. Actual restoration

work shall be as directed by the Engineer and may or may not include any or all of the Contractor's proposal.

PART 2 PRODUCTS

2.01 GENERAL

All materials for shoring shall conform to the requirements of these Specifications and any specifications, notes, or requirements contained on the Contractor's submittals or Contractor-prepared designs for shoring. Materials may be new or used, but they should be in good serviceable condition, free of defects and other strength reducing deficiencies.

PART 3 EXECUTION

3.01 PROTECTION OF EXISTING FACILITIES

A. Temporary shoring is to be installed for excavation and embankments necessary for construction of facilities. Care must be taken to minimize settlements and displacements of existing facilities and roadways by providing appropriate shoring systems and strict adherence to suitable construction practices for those Contractor proposed shoring systems. Sheeting and shoring systems shall be selected and installed so as to avoid damage to adjacent properties and improvements.

B. Detrimental Movements or Settlements:

Work shall be stopped immediately and the causes of detrimental movements be ascertained if:

1. Damage is noted on adjacent structures, utilities, roadways, or other adjacent improvements.
2. Work is directed to stop by the Engineer due to other detrimental effects or factors.

C. The causes of the detrimental movements or excessive settlements must be identified by the Contractor. Corrective measures must be proposed to and approved by the Engineer before further work.

3.02 OBSTRUCTIONS

A. Obstructions and other impediments to excavation should be considered a possibility within the limits of construction. If, during the course of work, obstructions are encountered, the Engineer should be immediately notified. Corrective measures must be proposed to and approved by the Engineer before further work.

3.03 REMOVAL OF SHORING

A. Shoring may be removed only if public safety is maintained, completed work is protected, existing facilities are protected, and adequate steps are taken to prevent damage to facilities or personnel during removal

B. All trench sheeting, shoring, and bracing shall be removed.

END OF SECTION

SECTION 02221

TRENCHING, BACKFILLING, AND COMPACTING

PART 1 GENERAL

1.01 SUMMARY

This Section specifies requirements for trenching, backfilling, and compacting of trenches for pipeline construction. The work will also include filling abandoned pipe with CLSM.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

- A. Section 02120, *Clearing and Removal of Obstructions*
- B. Section 02160, *Sheeting, Shoring, and Bracing*.
- C. Section 02720, *Sanitary Sewer/Storm Pipe and Manholes*

1.03 REFERENCES

- A. AASHTO T-99
- B. ODOT/APWA, 2021 Standard Specifications for Construction

PART 2 PRODUCTS

2.01 BEDDING AND BACKFILL MATERIALS

- A. Gravel for Trench Foundation Material: 2 ½ inch minus clean pit-run gravel, crushed rock or gravel, having reasonably even gradation from coarse to fine or open graded. Maximum percent passing the ¼ inch screen shall be 20% by weight.
- B. Crushed Gravel Pipe Base and Pipe Zone: ¾ inch minus crushed gravel, having reasonably even gradation from coarse to fine, in accordance with ODOT/APWA, 2021 SCS, Section 02630.10.
- C. Select Material for Trench Backfill and Aggregate Base: ¾-inch minus crushed gravel or rock, reasonably even graded from coarse to fine, in accordance with ODOT/APWA, 2021 SCS, Section 02630.10.
- D. Portland Cement Concrete: PCC shall be composed of cement, pozzolans, fine aggregate, water and admixtures with a 28-day compressive strength of 3,300 psi.
- E. Controlled Low Strength Material (CLSM): CLSM shall be composed of cement, pozzolans, fine aggregate, water and admixtures. CLSM shall have a low cement content, be non-segregating, self consolidating, free-flowing and excavatable material which will re

sult in a hardened, dense, non-settling fill and a compressive strength at 28 days of 100 to 200 psi.

PART 3 EXECUTION

3.01 TRENCHING

- A. Clearing the Right-of-Way or Easements:
 - 1. Existing trees or tree limbs whether on public or private property, are not to be removed without permission from the Engineer or as designated on the plans.
 - 2. The Contractor shall exercise all due care in protecting property along the route of the improvement. This protection shall include, but not be limited to, trees, yard, fences, drainage lines, mailboxes, driveways, shrubs and lawns. If any of the above have been disturbed without Engineer approval, they shall be restored to as near their original condition as possible.
- B. Obstructions: This item refers to obstructions which may be removed and do not require replacement. Obstructions to the construction of the trench such as but not limited to stumps, abandoned waterlines, manholes, logs, rubbish, and debris of all types, shall be removed by the Contractor at his own expense without additional compensation from the Owner.
- C. Trench Width: Trench width at the ground surface shall be kept to a minimum necessary to install the pipe in a safe manner. In all cases, trenches must be of sufficient width to allow for shoring and permit proper joining of pipe and compaction of the backfill material along sides of the pipe. Minimum trench width, in the pipe zone, must provide a clear working space 6 inches on each side of the barrel for sewer pipe. If there is a maximum width shown and said width is exceeded by Contractor without written authorization, Contractor will be required, at no expense to Owner, to provide pipe of a higher strength designation, a higher class of bedding, or both, as approved. In all cases, confine trench operations to dedicated right-of-way for public thoroughfares or within areas for which construction easements have been obtained, unless special arrangements have been made with the affected property owners.
- D. Grade: The bottom of the trench shall be carried to the lines and grades shown on the plans or as established by the Engineer, with proper allowance for pipe thickness and gravel bedding. Correct any part of the trench excavated below grade with material of the type specified in paragraph 2.01 for the full width of the trench; thoroughly compacted in layers not to exceed 6 inches to the established grade.
- E. Shoring, Sheet piling, and Grading of Trenches: Whenever necessary to prevent caving during excavation in gravel, sandy soil, or other unstable material, adequately sheet and brace the trench. Where sheet piling and bracing are used, increase trench widths accordingly. Ensure trench sheet piling remains in place until the pipe has been placed and backfill of the pipe zone is completed. All sheet piling, shoring and bracing of trenches shall conform to the requirements of Section 02160.
- F. Location of Excavated Materials: During trench excavation, locate the excavated material so it will not completely obstruct a traveled roadway or street and, unless otherwise

approved by the Engineer, keep all streets and roadways open to at least one-way traffic. In easement areas, locate excavated materials to minimize erosion and sediment.

- G. Removal of Water: Provide and maintain ample means and devices with which to promptly remove and dispose of all water when trench is being prepared for pipe laying, during laying of pipe, and until backfill has been completed. Dispose of water in accordance with state and local regulations.
- H. Foundation Material: When, in the opinion of the Engineer, the material in the bottom of the trench is unsuitable for supporting the pipe, excavate below the flow line as directed by the Engineer, place 12-ounce non-woven geotextile fabric at bottom and backfill to the required grade with gravel of the type specified in paragraph 2.01.
- I. Trench Backfill at Pipe Zone for PVC and Ductile Iron Pipe: For all classes of backfill, the pipe zone is defined as extending from the bottom of bedding in the trench (6 inches below invert) to a point 12 inches above the outside of the pipe, and for the full width of the trench. Backfill the entire pipe zone with 3/4 inch minus crushed gravel placed and hand-leveled in 6 inch layers. Special effort to properly bed pipe by slicing backfill in pipe haunches up to springline shall be provided.
- J. Bypass Pumping: Provide bypass pumping of all sanitary sewer for installation of new pipe when required by contractor sequence of operation.
- K. Temporary Removal and Reinstallation of existing Keystone Wall: The existing short wall (varies from 1' to 3' in height) shall be removed a sufficient distance in order to install the new sanitary sewer across SE 97th Avenue. Protect existing blocks during removal and reinstall in same location and height behind the sidewalk following completion of work. Blocks shall be installed in accordance with ODOT/APWA, SCS Section 00596B.
- L. Temporary Removal and Reinstallation of existing Chain Link Fencing: The existing chain link fence shall be removed to a maximum opening of 20 feet to install the new sanitary sewer from approximate Sta 1+00 to Sta 2+60 as shown on the plans. Protect adjacent fencing and reinstall the wire without damage. Provide temporary 6-foot high chain link fencing across the opening and secured at the end of each day on each end. Reinstall in same location following completion of work in accordance with ODOT/APWA, SCS Section 01050.

3.02 BACKFILLING AND COMPACTION

- A. Trench Backfill Above Pipe Zone: Use the following types of backfill on the project in the areas shown on the plans. The class of backfill used for service connections will generally be the same as that used for the sewer line to which they are connected.
 - 1. Class A Backfill: Backfill the entire trench above the pipe zone with native excavated material and compact in accordance with the specifications. Contractor shall stockpile top 12-inches of material excavated from trench separate from remaining material and place on top of the finished trench.
 - 2. Class C Backfill: Backfill the entire trench above the pipe zone with ¾ inch minus to the finished ground surface or base of the asphalt concrete trench section and compact according to the specifications.

3.03 EXCESS EXCAVATED MATERIAL

Haul and dispose of all excess excavated material. The Contractor shall make arrangements for the disposal of the excavated material and shall bear all costs and retain any profit incidental to such disposal. The Contractor shall comply with all provisions of any agency having jurisdiction.

3.04 GENERAL COMPACTION REQUIREMENTS

- A. Backfill shall be maintained at proper moisture content so that the material is within 5%± of optimum moisture.
- B. Maximum density and optimum moisture will be determined using Method A of AASHTO T-99. All listed compaction levels are based on the T-99 compaction requirements unless otherwise stated.
- C. Imported trench backfill used for Class C trenches where designated shall be mechanically compacted. The full trench depth shall be compacted to at least 95% of maximum density.
- D. Native backfill used for Class A shall be compacted to at least 90% of maximum density above the pipe zone and to within three feet of the ground surface. The top three feet shall be compacted to 92% of maximum density.
- E. Contractor shall meet compaction testing requirements as stipulated in Section 01410.

3.05 MECHANICAL COMPACTION REQUIREMENT

- A. The method of compaction shall be at the Contractor's option, unless otherwise noted.
- B. Unless otherwise noted, the Contractor shall be responsible to provide the proper size and type of compaction equipment and select the proper method of utilizing said equipment to attain the required compaction density without damage to pipe, adjacent utilities and properties.

3.06 FILL ABANDONED PIPE

- A. Cap and plug watertight all connecting pipe to manholes where shown on the plans with gasketed mechanical plugs or grout seals. Fill with CLSM material described in paragraph 2.01.E of this section.
- B. Material shall be placed inside pipe by gravity flow. Pumping material will not be allowed.

END OF SECTION

SECTION 02500

STREET RESTORATION

PART 1 GENERAL

1.01 DESCRIPTION

This Section specifies gravel surfacing and pavement patching on all streets including both public (SE 97th Avenue) and private (CESD Annex) that are currently paved with asphalt concrete. The work includes construction of aggregate base, sawcutting along trench edges, temporary asphalt concrete pavement, milling additional pavement outside trench limits and permanent asphalt concrete pavement.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

- A. Section 01300, *Submittals Procedure*
- B. Section 02221, *Trenching, Backfilling and Compaction*

1.03 REFERENCES

This Section incorporates by reference the following documents:

- A. ODOT/APWA, 2021 Standard Specifications for Construction.
- B. Clackamas County Department of Transportation and Development Standards

1.04 SUBMITTALS

- A. Procedures: Section 01300.

1.05 GENERAL PAVING REQUIREMENTS

- A. Pavement Restoration Timing:
 - 1. Follow pipe installation operations with pavement restoration as closely as practicable.
- B. Clackamas County Department of Transportation and Development Standard Details: (Trench Restoration on SE 97th Avenue)
 - 1. C100 - Street Structural Section (Local)
 - 2. U250A - Standard Trench with Controlled Density Backfill
 - 3. U270A – Alternative Trench with Controlled Density Backfill

- C. Clackamas Water Environment Services Standard Details:
(Trench Restoration on private driveway for CESD Annex)
 - 1. SAN 001 – Trench Restoration Class “A”, “B”, & “C”
 - 2. C100- Street Structural Section (Local)
- D. Scope of Road Restoration:
 - 1. Includes, but not limited to, sawcutting of trench with tee-cut, proper backfill and compaction of pavement and base, shaping and general restoration of the roadway including pavement, removal of debris and surplus material and all other requirements of this section.
 - 2. Comply with surfacing requirements of Clackamas County Department of Transportation & Development Permit UP191824 found in Appendix B for restoration of SE 97th Avenue.

PART 2 PRODUCTS

2.01 AGGREGATE BASE

- A. Base Course Aggregate. Aggregate for the base course of the street shall be $\frac{3}{4}$ " – 0" and shall conform to the applicable portions ODOT/APWA 2021 Standard Specifications for course aggregate base material.

2.02 TACK COAT

Emulsified asphalt RS-1, CRS-1, or approved equal.

2.03 SURFACE MATERIALS (PERMANENT)

- A. Asphalt Concrete shall be Level 2, $\frac{1}{2}$ -inch Dense graded HMAC conforming to ODOT/APWA 2021 Standard Specifications.

PART 3 EXECUTION

3.01 PAVEMENT REMOVAL

- A. General:
 - 1. Conform to the requirements of the referenced standards.
 - 2. Saw cut edges along trenches prior to pavement removal. Prior to placement of permanent trench patch, Contractor shall T-cut asphalt concrete a second time an additional 12-inches back from original sawcut. Final limits of second sawcutting shall be determined by the Engineer. The second sawcut may be greater than 12-inches in places where the existing edges exhibit pavement failure.

3. Replace all asphalt pavement with equivalent depth of new pavement which is outside work limits or damaged by Contractor's operations at no cost to Owner. This also includes replacement of base course if necessary.
4. Replace all pavement which is outside trench work limits damaged by Contractor's operations at no cost to Owner.

B. Pavement Milling:

1. The existing pavement on SE 97th Avenue and the private driveway into CESD Annex shall be milled as shown on the drawings following final trench patching. The existing pavement shall be milled 2-inches deep from curb to curb as shown on the plans. All milled materials shall be disposed of by the Contractor. Milling and paving shall occur during the same day. Finished grades and slopes following placement of asphalt concrete shall match the existing pavement grades and slopes prior to construction. Following placement of the Level 2 asphalt concrete, temporary pavement markers shall be installed if the street was previously striped. Permanent striping shall be installed by the Contractor in accordance with ODOT Standard Specifications for Highway Construction.

3.02 AGGREGATE BASE PLACEMENT

Base Aggregate Course. Workmanship in manufacturing, placing, compacting, and maintaining base, shall be in conformance with the requirements of the ODOT/APWA 2021 Standard Specifications section 00641.

3.03 ASPHALT PAVEMENT PLACEMENT – (PERMANENT TRENCH PATCH)

- A. Standard Drawing SAN 001 and U250A shall be used for all surface restoration limits for gravity main lines depending upon location within the project.
- B. Asphalt concrete shall not be placed when the atmospheric temperature is 45 degrees Fahrenheit or below, during rainfall, or when the surface is frozen or wet. Exceptions will be permitted only in special cases and only with prior written approval of the Engineer. Air temperature conditions must be at least 45 degrees Fahrenheit and rising. All other conditions previously described remain applicable.
- C. Contractor shall place the asphaltic concrete over the trench to a depth of four inches after removal and disposal of any temporary asphalt pavement or crushed rock. The Contractor shall spread and level the asphaltic concrete and compact it by rolling or by use of hand tampers where rolling is impossible. Power rollers shall be capable of providing compression of 250 pounds per inch of width. The density of asphalt concrete shall be at least 92% of Rice theoretical maximum density.
- D. Meet lines shall be straight and the edges vertical where pavement is sawcut. The edges of all asphalt shall be painted with tack coat at a rate of 0.06 to 0.12 gallons per square yard prior to placing asphalt concrete. Jagged edges from previously sawcut trenches shall be removed through additional cutting in straight lines prior to final patching. Upon completion of patching, all joints shall be sanded.

- E. After completion of the paving, clean the entire roadway surface by brooming.
- F. Sand seal all edges of asphalt concrete patch following installation of final lift.

3.04 ASPHALT PAVEMENT PLACEMENT – (2" OVERLAY AFTER PERMANENT TRENCH PATCH)

- A. Asphalt concrete overlay shall not be placed when the atmospheric temperature is lower than 50 degrees Fahrenheit, during rainfall, or when the surface is frozen or wet. Exceptions will be permitted only in special cases and only with prior written approval of the Engineer.
- B. Coat all surfaces of existing pavement along with edges of manhole and clean out frames, inlet boxes and like items. When rate is not specified, hot liquid asphalt will be applied at the rate of 0.1 gallon per square yard. All utility valves shall be raised to match height of new overlay.
- C. Following placement of the compacted asphalt concrete trench patch within the limit of the trench and including all areas removed for tee-cut, a single 2-inch thick layer of Level 2 asphalt concrete mix shall be placed over the entire width of existing roadway surface.
- D. Manholes shall have been previously adjusted to the height of the final overlay as part of the permanent trench patch effort. Protect manholes as necessary. If manholes do not fit roadway, adjustments will be made between the manhole cone and frame/cover that retain the integrity of the structure.
- E. Following completion of overlay, Contractor shall stripe all streets that currently have striping to match existing paint or plastic removed by trenching. This will also include any stop bars. Striping shall be of same type of material that is presently on the pavement surface. Application of the material shall be as recommended by the manufacturer.

3.05 TEMPORARY TRENCH PATCH

- A. 2-inch-thick temporary asphalt concrete shall be place over all trenches at the end of the day on SE 97th Avenue. Temporary asphalt concrete will not be required for work within the CESD driveway or parking lot.

3.06 FIELD TESTING

Testing will be conducted by the Contractor to determine compliance with the specified degree of compaction for asphalt concrete. Aggregate base compaction testing will be the Contractor's responsibility as described in Section 02221.

3.07 DRAINAGE FACILITIES

After completion of the pipeline installation, clean up catch basins, drainage ditches and miscellaneous drainage facilities and restore all existing drainage structures that may have been damaged during the course of construction.

3.08 BASE ROCK

Place rock surfacing beyond the limits of the main-line AC trench patch prior to placement of the 2-inch-thick asphalt concrete overlay across the entire street section. Installation of this item must be approved by the Engineer. Base rock shall be $\frac{3}{4}$ inch – 0 inches crushed aggregate, as directed. Subgrade shall be graded reasonably smooth prior to placement of the base rock. Compact with mechanical vibratory or impact tamper.

3.09 CONCRETE SIDEWALK AND CURBS

- A. All work shall be done to match existing finish, color, texture and patterns to the maximum extent possible. Saw cut all concrete to be removed the full thickness at an existing joint. Partial depth cuts will not be acceptable. Limits of removal and replacement may be greater than the concrete originally damaged by construction of trench. This will specifically include work on each side of SE 97th Avenue.
- B. Concrete work in accordance with ODOT/APWA, 2021 Standard Specification Section 00759.
- C. Curbs and Sidewalk: ODOT/APWA, 2021 Standard Specification Sections 00759.

END OF SECTION

SECTION 02720

SANITARY SEWER PIPE AND MANHOLES

PART 1 GENERAL

1.01 DESCRIPTION

The work covered by this section consists of furnishing and installing all sanitary sewer pipe and appurtenances. In order to accomplish the work temporary bypass pumping of sanitary sewer may be necessary.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

A. Section 02221, *Trenching, Backfilling, and Compacting.*

1.03 REFERENCES

- A. ASTM A746, *Ductile-Iron Gravity Sewer Pipe*
- B. ASTM A48, *Gray Iron Castings.*
- C. ASTM A304, *Steel Bars, Alloy, Subject to End-Quench Hardenability Requirements.*
- D. ASTM A615, *Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.*
- E. ASTM C478, *Precast Reinforced Concrete Manhole Sections.*
- F. ASTM C924, *Practice for Testing Pipe Sewer Lines by Low-Pressure Air Test Method.*
- G. ASTM C1244, *Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test.*
- H. ASTM D2837, *Long Term Strength (L.T.H.S.) @ 74.4 degrees F, 1600 PSI*

1.04 SUBMITTALS

- A. Submittals: Section 1300
- B. Provide sufficient data for the Engineer to properly evaluate the proposed pipe, manholes and appurtenances.
- C. Product data submittals shall include, as a minimum, test reports. Provide test reports upon request, certifying that the pipe has been tested in accordance with and exceeds minimum requirements.
- D. Bypass pumping procedures.

PART 2 PRODUCTS

2.01 MATERIALS

A. Polyvinylchloride (PVC) Gravity Sanitary Pipe: Of the size and type indicated on the plans, conforming to appropriate specifications detailed below.

1. PVC Sanitary Sewer Fittings: Conform to ASTM D-3034, SDR 35. Fittings shall be injection molded, factory welded, or factory solvent cemented.
2. Minimum Pipe Stiffness: 46 psi.
3. Joint Type: Elastomeric gasket, conforming to the requirements of ASTM D3212.
4. Rubber Gaskets: Conform to ASTM D1869.

B. Ductile Iron Sewer Pipe: Of the size and type indicated on the plans, conforming to appropriate specifications detailed below.

1. Ductile iron pipe shall conform to AWWA Standard C151 and shall be the standard push-on type joint. Push-on joints shall be "TYTON" type with field-lok gaskets. Unless otherwise specified herein or shown on the plans, ductile iron pipe shall be thickness Class 52 or equivalent pressure class pipe.
2. Ductile iron pipe interior shall be lined with an amine cured novalac epoxy containing at least 20% by volume of ceramic quartz pigment – Protecto 401 by U.S. Pipe or approved equal.

C. Anchor Wall:

1. Concrete: Concrete used in the construction of anchor walls as shown in SAN-017 shall be so proportioned and mixed as to meet a minimum 3,000 psi compression test after 28 days. There shall be a minimum of five sacks of cement per cubic yard of concrete.

D. Manholes and Appurtenances:

1. Concrete: Concrete used in the construction of the manhole base and other structures specified shall be so proportioned and mixed as to meet a minimum 3,000 psi compression test after 28 days. There shall be a minimum of five sacks of cement per cubic yard of concrete.
2. Precast Manhole Sections:
 - a. Minimum 48 inches in diameter, reinforced concrete pipe, Class 2, conforming to ASTM C478, with added requirement that the reinforcement be circular and not elliptical. Cones shall be eccentric

with wall thickness and reinforcement similar to that of manhole pipe sections. The tops and bottoms of the cones shall be parallel.

- b. Preformed gaskets may be used in lieu of mortar type joints and shall be RAM-NEK, manufactured by K.T. Snyder Company, Inc., Houston, Texas; Kent-Seal by Hamilton Kent, Kent, Ohio; or as approved.
- c. 48" manholes will be installed full diameter, capped with a flat top lid.

3. Precast Concrete Bases:

- a. Precast base sections or manhole bases shall be approved by the Owner prior to installation. All precast bases shall conform to ASTM C478.
- b. Construct bases per standard details and as noted on the plans. Knockouts for pipe extensions will be based upon the alignment as shown or as directed.
- c. Provide flexible connectors that are designed to produce a positive watertight connection for pipes entering a precast manhole. The connector shall be manufactured by A-lok or an Owner approved equal and shall meet the requirements of ASTM C-923.

4. Nonshrink Grout. Sika 212, Euco N-S, Five Star, or USA approved equal nonmetallic cementitious commercial grout exhibiting zero shrinkage. Grout shall not be amended with cement or sand and shall not be reconditioned with water after initial mixing. Nonshrink grout shall be placed or packed only with the use of an approved commercial concrete bonding agent. Unused grout shall be discarded after 20 minutes and shall not be used.

5. Mortar. Mortar shall conform to the requirements of ASTM C387. Or be proportioned one part Portland cement to two parts clean, well-graded sand, which will pass a 1/8-inch screen. Admixtures may be used not exceeding the following percentages by weight of cement: hydrated lime, 10 percent; diatomaceous earth or other inert materials, five percent. The consistency of the mortar shall be such that it will readily adhere to the precast concrete if using the standard tongue-and-groove type joint. Mortar mixed for longer than 30 minutes shall not be used.

5. Manhole Extensions and Rings. Install rings and covers on top of manholes to positively prevent all infiltration of surface or groundwater into manholes. Rings shall be set in a bed of nonshrink grout with the nonshrink grout carried over the flange or the ring and shall be set so that tops of covers are flush with the surface of adjoining pavement, or 6-inches above natural ground, unless otherwise directed by the Owner. Extensions shall be limited to a maximum height of 27 inches from the center point of the first step to the top of the casting.

6. Manhole Frames and Covers: Provide Standard Frame and Cover; ensure castings are tough, close-grained, gray iron, free from blowholes, shrinkage, and cold shuts, and they conform to ASTM A48, Class 30; ensure they are sound, smooth, clean, and free from blisters and defects. Plane and grind all castings

where necessary to ensure perfectly flat and true surfaces. Covers shall be true and shall seat within the ring at all points. Manhole covers shall have two holes.

7. Manhole Steps:

- a. Steel reinforced polypropylene plastic, Lane International Corp. No. P-13850, or approved equal, in conformance with ASTM C478; aligned vertically. Ensure steps within a manhole are of the same design, type, and size. Mixing of unmatched steps within the same manhole is not permitted.
- b. Prior to delivery to the jobsite, manufacturer is to drive steps into preformed holes in precast concrete manhole cones and sections in conformance with the following: ASTM A615 Grade 60, 1/2" deformed steel rod and ASTM 2146-78 Type II, Polypropylene.
- c. Place steps where there are no incoming or outgoing lines. Loose steps shall be cause for rejection of that manhole cone or section.

PART 3 EXECUTION

3.01 PREPARATION OF TRENCH

- A. Crushed Gravel Pipe Base: Place in trench to a minimum depth of six inches below the flow line of the pipe. Place and level the base to approximate flow line grade in advance of laying pipe. Immediately following the placement of each pipe, place the crushed gravel pipe base to the invert of the ductile iron pipe or spring line of the flexible pipe.
- B. Bell Holes: At the location of each joint, bell holes of ample dimensions shall be dug in the bottom of the trench and at the sides where necessary to permit the joint to be properly fitted; to permit easy inspection of the entire joint; and to provide uniform bearing for the barrel of the pipe for its entire length.
- C. Removal of Water: Provide and maintain ample means and devices to remove and dispose of all water entering the trench excavation during the process of laying pipe. Ensure water and debris does not enter the Owner's sewer system or new pipe.

3.02 PREPARATION OF SEWER PIPE

- A. Carefully inspect pipes and fittings before being laid; no cracked, broken, or defective pipe or fittings shall be used in the work. Clean the ends of the pipe to remove dirt or other foreign material.
- B. Exercise extreme care to ensure the inside surfaces of the bell are smooth and free from any projections which would interfere with the assembly or watertightness of the joint.

3.03 LAYING AND JOINTING PIPE AND FITTINGS

- A. Line and Grade:

1. Lay sewer pipe in full lengths as manufactured; lay on a constant grade and in straight alignment from manhole to manhole or cleanout. Do not install pipe with elbows, bows or bellies. The Contractor shall establish line and grade for pipe by the use of lasers or by transferring the cut from the offset stakes to the trench at whatever intervals necessary to maintain the line and grade. The Contractor shall check line and grade as necessary. In the event that the limits prescribed in this section are not met, the work shall be immediately stopped, the Engineer notified, and the cause remedied before proceeding further with the work. Variance from the established line and grade shall not be greater than 1/32-inch per inch of pipe diameter and shall not exceed 1/2-inch for line and 1/4-inch for grade, providing that such variation does not result in a level or reverse-sloping invert.
- B. Main Sanitary Sewer Installation:
1. Open Cut Trenching:
 - a. The installation of gravity sewer pipe shall commence at the lowest point along the sewer and shall proceed so that the spigot end of the section being laid is placed into the bell end of the pipe already laid. Take every precaution to prevent foreign materials from entering the pipe while it is being placed in the trench. During laying operations, no debris, tools, clothing or other materials shall be placed in the pipe.
 - b. Install sewer pipe in accordance with the manufacturer's recommended installation procedures. Take special care to prevent movement of the pipe after installation when laid within a moveable trench shield.
- C. Waterline Crossings: The sewer pipe shall pass below existing waterlines and there shall have a minimum vertical separation of 18 inches between the outsides of the pipes. Notify the Engineer immediately for directions, if field conditions do not meet this criteria.
- D. Manhole Connections: Connect PVC pipe to concrete manholes by means of an approved Korn-seal gasket or other approved coupling. The use of Portland Cement grout for connecting PVC Pipe to manholes will not be permitted. Manholes shall be cored to insure a watertight connection using the approved coupling.
- E. Manhole Installation:
1. Precast Manhole Concrete Base: Construct so the first section of the precast manhole has a uniform bearing throughout the full circumference of the manhole wall. Deposit sufficient mortar on the concrete base to provide a watertight seal between the base and the manhole wall.
 2. Placing Precast Manhole Sections: The joints for the precast concrete manhole shall be made of nonshrink grout. Construct the walls true to line and grade as established by the Engineer. Place grout on the groove of the lower section of the pipe prior to placing the next section of pipe. Completely fill entire joint with grout and trowel to a smooth surface. Manhole sections with a captive groove rubber gasket need not be grouted between sections. Manhole shelf shall be integrally poured against the wall and over the pipe stub. Construct shelf in such

a manner that when capacity of the pipe is reached, no portion of the shelf surface is used as part of the cross sectional flow channel required for free flow through the manhole.

3. Manhole Inverts: Constructed in conformance with the details shown on the plans. Ensure manhole invert channels provide a smooth flow-through characteristic. No sharp edges or rough sections that will tend to obstruct the flow of sewerage will be permitted. In the event a full section of pipe is laid through the manhole, pour the concrete up to spring line (one-half the diameter of the pipe), then break or cut out the top half of the pipe and mortar smooth all rough edges. Trowel smooth all cement mortar used in the construction of the inverts. The Contractor may, at his option, use precast bases with pre-poured and formed invert channels.
4. Manhole Covers: Set rings so the tops of the covers flush with the existing pavement surface. Manholes located within unimproved areas shall be placed 6 inches above the finished ground surface or as directed by the Engineer.

3.04 SANITARY SEWER BYPASS PUMPING

- A. The Contractor shall submit a "Flow Diversion and By-Pass Pumping Plan" to the Owner prior to the start of construction. Under no circumstances shall sewage be allowed to flow or leak onto the ground surface, into gutters or onto streets, over sidewalks, or into storm inlets. All diverted sanitary sewage from the main shall be discharged back to the existing sanitary system. The Flow Diversion and By-Pass Pumping Plan shall outline the Contractor's proposed method of handling all flows during all elements of construction. The Contractor shall provide complete diversion regardless of flow rate. Peak flow rates from MTA1-3 to MTA1-2 are anticipated to be in the range of 100 to 200 GPM. The diversion plan shall provide equipment capable of meeting these demands. The diversion location shall be from the existing manhole MTA1-3 located within the driveway to lower ESD building. The public shall be protected from direct contact with the diversion setup including pumps, generators, etc. with a temporary fence or other approved measures at all times. Additionally the submittal shall contain at a minimum, a plan view of the diversion on a site map and the individual components of the diversion including but not limited to:
 1. Pumps: type, size and placement
 2. Diversion pipe: size, type, and placement
 3. Power supply to pumps
 4. Method of holding back the flow
 5. Facilities for full redundancy
 6. Driveway from SE 97th Avenue drawn to scale with all diversion equipment.
- B. Diversion of flows will be necessary to properly construct the new pipeline as shown on the plans. The flow shall be diverted by the use of pumps with a temporary pipe lay flat pipe installation across the driveway specifically made for vehicle traffic. The pumping or transportation capacity shall be sufficient to maintain normal flows plus additional flows that may occur during a rainstorm.
- C. Flow diversion piping shall be arranged such that the piping is protected from damage during the Contractor's operation and to insure the well being of the public. All sewage diversion piping shall be water-tight.

- D. The Contractor shall use critically silenced generators and pump units and shall meet or exceed the requirements of any local noise ordinances. Such approved generators and accompanying pumps shall be continuously monitored while in operation and shall be placed to minimize disturbances to residential areas. If necessary to meet noise ordinances, sound baffles and temporary sound walls shall be installed to deflect sound from generators and bypass-pumps away from residential areas or as directed by the Owner. No variance from any local noise ordinances will be allowed unless the Contractor secures a noise variance at no additional expense to the Owner.
- E. Diversion of all flows shall be maintained at all times. The Contractor shall provide a qualified operator who is capable of making emergency repairs or who is able to mobilize forces to handle power, pump or other problems. This operator shall be on call 24/7 while the diversion is in operation. The Contractor shall be responsible for continuity of pumping sewer from this facility at all times during execution of the work. Diversion pipes shall be cleaned and disinfected prior to disassembly and the liquid shall be discharged into an existing sanitary sewer.
- F. Each flow diversion pump shall be powered by a dedicated power generator and shall operate as a single pumping unit. For system redundancy, the Contractor shall have on site an equivalent back-up flow pumping unit set up and fully operational for the pumping operation with capability to automatically switch over in case of failure to the primary system.
- G. Flow diversion piping and pumps shall be free of leaks. Leaking pipes and pumps shall be replaced immediately. Sewage spills shall be cleaned up immediately. If a sewage release occurs during any sewage diversion activity, the Contractor shall be responsible for taking immediate action to cease, contain, and clean up the release, and to notify the proper authorities. The Contractor shall have sufficient equipment and materials at the work site to cease, contain and cleanup any sewage release that occurs during diversion operations and will be responsible for all costs associated with sewage spill cleanup including associated fines. The Contractor shall be responsible for cleanup, repair, property damage costs and claims.
- H. No flow diversion operations may proceed unless the Contractor has, at the work site, the following items:
1. Dry granular lime, of sufficient quantities, to be spread on any release for purposes of disinfectant. A 10% bleach solution may also be used as a disinfectant. Disinfectants may not be directly applied to any surface waters, streams, creeks, etc.
 2. Equipment to secure the area of sewage release and isolate the public from accessing the release site. As a minimum this shall include barricades and caution tape.
 3. The equipment and materials on hand to stop the release and repair the failed item.
 4. Equipment and materials to clean the site, rake up solid debris and to dispose of material properly.
- I. In case of sanitary sewage release during diversion operations, the Contractor shall

immediately contact the Owner notifying them of the release:

The Owner will take appropriate measures within 24 hours to report the sewage spill to the Oregon Department of Environmental Quality and any other appropriate entities if it is determined the spill was of sufficient magnitude. Even if a sewage spill or release is contained within an excavation, the spill or release must be reported to the Owner.

Failure by the Contractor to report a spill or release to the appropriate Owner's representative will result in liquidated damages in the amount of \$500.00 per incident plus an amount sufficient to reimburse the Owner for any civil and administrative penalties paid by the Owner as a result of the Contractor's failure to report as described above.

J. The Contractor shall be responsible for providing the following information to the authorities in case of a spill or release:

1. Release location
2. Date and time release found or started and time stopped
3. Release flow rate and estimated total volume
4. Receiving stream, if any
5. Action taken to stop release
6. Cause of release
7. Clean-up actions taken
8. Any other information as requested by relevant authorities

3.05 TESTING OF GRAVITY SEWER PIPE AND APPURTENANCES

A. General:

1. Test all gravity sewer/storm lines by "low pressure air testing".
2. Air Tests For Gravity Sewers: Ensure all gravity/storm sewers and appurtenances successfully pass the air test prior to acceptance and are free of visible leakage or infiltration.
3. The Contractor may desire to make an air test prior to backfilling for his own purposes; however, the acceptance air test shall be made after backfilling and compaction has been completed to final grade.
4. Furnish all facilities and personnel for conducting the test under the observation of the Engineer. The equipment and personnel shall be subject to the approval of the Engineer.
5. Acceptance testing shall be conducted on all of the manholes.
6. Refer to Appendix C for additional testing information and approved forms.

B. Testing Procedures:

1. The Contractor shall provide all equipment and personnel for the Time-Pressure Drop Method for all air testing. The method, equipment and personnel shall be

subject to the approval of the Engineer. The Engineer may, at any time, require a calibration check of the instrument used. The pressure gauge used shall have minimum divisions of 0.10 psi and have an accuracy of 0.0625 psi (one ounce per square inch).

2. Immediately following the pipe cleaning, test the pipe with low pressure air. Plug all sewer outlets with suitable test plugs. Slowly supply air to the plugged pipe installation until the internal air pressure reaches 4.0 pounds per square inch greater than the average back pressure of any ground water that may submerge the pipe. The test pressure shall be increased 0.433 pounds per square inch for each foot of average water depth over the sewer. This pressure will be in addition to the initial 4.0 pounds per square inch previously identified. Allow at least two minutes for temperature stabilization, adding only the amount of air required to maintain pressure before proceeding further. After the temperature stabilization period, disconnect the air supply. Determine and record the time in seconds that is required for the internal air pressure measured by the gage to drop from 3.5 pounds per square inch to 2.5 pounds per square inch greater than the average back pressure of any ground water that may submerge the pipe.
3. Safety Precautions: All plugs used to close the sewer for the air test must be capable of resisting the internal pressures and must be securely braced, if necessary. All air testing equipment must be placed above ground and no one shall be permitted to enter a manhole or trench where a plugged line is under pressure. All pressure must be released before the plugs are removed. The testing equipment used must include a pressure relief device designed to relieve pressure in the line under test at 10 psi or less and must allow continuous monitoring of the test pressures in order to avoid excessive pressure. The Contractor shall use care to avoid the flooding of the air inlet by infiltrated ground water. The Contractor shall inject the air at the upper plug if possible. Only qualified personnel shall be permitted to conduct the test.

C. Acceptance of Test:

1. The pipeline shall be considered acceptable when tested as described herein before if the section under test does not lose air at a rate greater than 0.0015 cfm per square foot of internal sewer surface. For test sections containing over 625 square feet of surface area, the time measured by this method for 1.00 pounds per square inch pressure drop shall be calculated according to the following formula:

$$T = d^2L/42$$

T = test duration, seconds

D = pipe diameter, inches

L = section length, feet

42 = conversion factor

For test sections containing less than 625 square feet of internal surface area, the time measured by this method for 1.00 pounds per square inch pressure drop shall be calculated according to the following formula:

$$T = 56d$$

The internal surface area of pipeline sections may be calculated using the formula:

$$A = \pi Ld/12$$

The surface areas of lateral lines of differing lengths and diameters may be accommodated in Equations 1 and 2 above by using the sums $d_1^2L_1 + \dots + d_n^2L_n$ and $d_1 + \dots + d_n$ in place of d^2L and d , respectively.

2. If the pipe installation fails to meet these requirements, the Contractor shall determine, at his own expense, the source or sources of leakage, and shall repair or replace all defective materials and correct all faulty workmanship. The type of repairs proposed by the Contractor must be approved by the Engineer before the repair work is begun. The completed pipe installation shall meet the requirements of the air test before being considered acceptable.

D. Manhole Vacuum Test (Adapted from ASTM C1244-93):

1. Summary of Practice: Plug all lift holes and pipes entering the manhole. A vacuum will be drawn and the vacuum drop over a specified period of time is used to determine the acceptability of the manhole.
2. Significance and Use: This is not a routine test. The values recorded are applicable only to the manhole being tested and at the time of testing.
3. Preparation of the Manhole:
 - a. Plug all lift holes with an approved non-shrink grout.
 - b. Plug all pipes entering the manhole, taking care to securely brace the pipes and plugs from being drawn into the manhole. The manhole shall be set to finish grade and all paving (if applicable) completed.
4. Procedure:
 - a. Place the test head at the inside of the top of the frame and the seal inflated in accordance with the manufacturer's recommendations.
 - b. Draw a vacuum of 10 inches of mercury, with the valve on the vacuum line of the test head closed, and the vacuum pump shut off. With the valves closed, measure the time for the vacuum to drop to 9 inches.
 - c. The manhole shall pass if the time for the vacuum reading to drop from 10 inches of mercury to 9 inches meets or exceeds the values indicated below.
 - d. Utilizing the formulas that follow, the comparable times for a successful vacuum test for different size manholes are:

DEPTH (ft) (Length of Manhole)	TIME (sec) (Dia.)		
	<u>48"</u>	<u>60"</u>	<u>72"</u>
8	20	26	33
10	25	33	41
12	30	39	49
14	35	46	57
16	40	52	67
18	45	59	73
20	50	65	81
22	55	72	89
24	59	78	97
26	64	85	105

- e. If the manhole fails the initial test, make necessary repairs with a nonshrink grout after the vacuum has been released. Proceed with retesting until a satisfactory test is obtained.
 - f. Use or failure of this vacuum test shall not preclude acceptance by appropriate water infiltration or exfiltration testing, or other means.
- E. Subsequent Failure: Infiltration of groundwater, in any amount, following a successful hydrostatic vacuum or air test as specified, shall be considered as evidence that the original test was in error or that subsequent failure of the pipeline, manhole or cleanout assembly has occurred. The Contractor will be required to correct such failures should they occur.
- F. Deflection Testing: In addition to hydrostatic or air testing, gravity sanitary sewers constructed of PVC pipe shall be deflection tested not less than 14 days after the trench backfill and compaction has been completed. Conduct the test by pulling an approved solid pointed mandrel through the completed pipeline. Ensure the diameter of the mandrel is 95 percent of the inside diameter of the pipe. Conduct testing on a manhole-to-manhole basis and after the line has been completely cleaned and flushed. Excavate, repair, or realign and retest any portion of the sewer that fails to pass the test for air, leakage or deflection.

3.06 ACCEPTANCE

- A. Thoroughly clean all pipelines after acceptance of all joint testing and after backfilling and restoration of surfaces.
- B. Base acceptance of the pipeline on a final inspection of the entire line conducted jointly by the Contractor and the Engineer. This will also include results from Owner's operations staff which will lamp each individual section between manholes.
- C. Any infiltration evidence in manholes or pipe shall be properly repaired, even if unit passed testing.

END OF SECTION

SECTION 02920

SEEDING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section Includes:

1. Seeding.
2. Hydroseeding.

B. Related Requirements:

1. Section 02120 "Clearing and Removal of Obstructions" for clearing and preparation of planting areas prior to seeding.
2. Section 02930 "Plants" for trees, shrubs, and ground covers.
3. Section 02935 "Landscape Maintenance" for maintenance of turf and grasses.

1.03 DEFINITIONS

A. Finish Grade: Elevation of finished surface of planting soil.

B. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.

C. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.

D. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

1.04 INFORMATIONAL SUBMITTALS

A. Qualification Data: For landscape Installer.

- B. Certification of Seed: From seed vendor for each grass-seed monostand or mixture, stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.
- C. Product Certificates: For fertilizers, from manufacturer.
- D. Herbicides: Product label and manufacturer's application instructions specific to Project.

1.05 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful seeding establishment.
 - 1. Experience: Five years' experience in turf or seeding installation.
 - 2. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 - 3. Pesticide Applicator: State licensed, commercial.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.
- B. Bulk Materials:
 - 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or restoration planting areas.
 - 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 - 3. Accompany each delivery of bulk materials with appropriate certificates.

1.07 FIELD CONDITIONS

- A. Seeding Restrictions: Seed during one of the following periods.
 - 1. Spring Planting: March 1 through May 15.
 - 2. Fall Planting: October 15 through December 1.
- B. Weather Limitations: Proceed with seeding only when existing and forecasted weather conditions permit seeding to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

PART 2 - PRODUCTS

2.01 SEED

- A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Rules for Testing Seeds" for purity and germination tolerances.
- B. Seed Species:
 - 1. Quality, State Certified: State-certified seed of grass species as indicated on the Drawings.

2.02 SEED MIXES

- A. Seed Mix Type 1: As indicated on the Drawings.
- B. Seed Mix Type 2: As indicated on the Drawings.

2.03 MULCHES

- A. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats, or barley.
- B. Compost Mulch: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 2 to 5 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:
 - 1. Organic Matter Content: 50 to 60 percent of dry weight.
 - 2. Feedstock: Agricultural, food, or industrial residuals; yard trimmings.
- C. Fiber Mulch: Biodegradable, dyed-wood, cellulose-fiber mulch; nontoxic and free of plant-growth or germination inhibitors; with a maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.
- D. Nonasphaltic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for slurry application; nontoxic and free of plant-growth or germination inhibitors.

2.04 PESTICIDES

- A. General: Herbicide registered and approved by the EPA and state of Oregon, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted herbicides unless authorized in writing by authorities having jurisdiction. The use of neonicotinoids class of pesticides are prohibited.
- B. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.

- C. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine areas to be planted for compliance with requirements and other conditions affecting installation and performance of the Work.
 - 1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
 - 2. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
 - 3. Uniformly moisten excessively dry soil that is not workable or which is dusty.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Owner's Representative and replace with new planting soil.

3.02 PREPARATION

- A. Protect structures; utilities; sidewalks; pavements; and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
 - 1. Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray.
 - 2. Protect grade stakes set by others until directed to remove them.

3.03 SEEDING AREA PREPARATION

- A. General: Prepare planting area for soil placement according to Section 02120 "Clearing and Removal of Obstructions."
- B. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- C. Before planting, obtain Owner's Representative's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.04 WEED MANAGEMENT AND HERBICIDE APPLICATION

- A. Utilize integrated pest management methods and best practices according to Clean Water Services' "Integrated Pest Management Plan" dated August 2023.
 - 1. Unless approved in writing from the Owner prior, use only hand or light mechanical tools for weed control methods within 50 feet of sensitive areas. Use only hand tools under driplines of existing trees. Light mechanical tools are relegated to carried and operated motorized machinery.
- B. Obtain approval for herbicide application from Owner prior to use. Apply herbicides according to authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
- C. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.

3.05 SEEDING

- A. Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph.
 - 1. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.
 - 2. Do not use wet seed or seed that is moldy or otherwise damaged.
 - 3. Do not seed against existing trees. Limit extent of seed to outside edge of planting saucer.
- B. Sow seed at a total rate as indicated on the Drawings.
- C. Rake seed lightly into top 1/8 inch of soil and water with fine spray.
- D. Protect seeded areas through either of the following methods:
 - 1. Protect seeded areas by spreading straw mulch. Spread uniformly at a minimum rate of 2 tons/acre to form a continuous blanket 1-1/2 inches in loose thickness over seeded areas. Spread by hand, blower, or other suitable equipment.
 - 2. Protect seeded areas from hot, dry weather or drying winds by applying compost mulch within 24 hours after completing seeding operations. Soak areas, scatter mulch uniformly to a thickness of 3/16 inch, and roll surface smooth.

3.06 HYDROSEEDING

- A. Hydroseeding: Mix specified seed and fiber mulch in water, using equipment specifically designed for hydroseed application. Continue mixing until uniformly blended into homogeneous slurry suitable for hydraulic application.
 - 1. Mix slurry with nonasphaltic tackifier.

2. Spray-apply slurry uniformly to all areas to be seeded in a one-step process. Apply slurry at a rate so that mulch component is deposited at not less than 1500-lb/acre dry weight, and seed component is deposited at not less than the specified seed-sowing rate.

3.07 SATISFACTORY SEEDING AREAS

- A. Seed installations shall meet the following criteria as determined by Owner's Representative:
 1. Satisfactory Seeded Areas: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 8 by 8 inches.
- B. Use specified materials to reestablish seeded areas that does not comply with requirements, and continue maintenance until seeding is satisfactory.

3.08 CLEANUP AND PROTECTION

- A. Promptly remove soil and debris from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.
- C. Remove nondegradable erosion-control measures after grass establishment period.

3.09 MAINTENANCE SERVICE

- A. Seeding Maintenance Service: According to Section 02935 "Landscape Maintenance."

END OF SECTION

SECTION 02930

PLANTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section Includes:

1. Plants.
2. Fertilizers.
3. Herbicides.
4. Mulch.
5. Tree stabilization.
6. Bark and root protection.
7. Downed tree materials.

B. Related Requirements:

1. Section 02120 "Clearing and Removal of Obstructions" for clearing and preparation of plant beds prior to planting.
2. Section 02920 "Seeding" for seeding in restoration areas.
3. Section 02935 "Landscape Maintenance" for plant maintenance after Substantial Completion.

1.03 DEFINITIONS

- A. Backfill: The earth used to replace or the act of replacing earth in an excavation.
- B. Balled and Burlapped Stock: Plants established in the ground and dug with firm, natural balls of earth in which they were grown and wrapped with burlap and twine.
- C. Branch: An outgrowing shoot, stem or twig that grows from the main stem or trunk.
- D. Caliper: The measurement of a nursery stock tree as determined in the latest edition of the ANSI Z60.1.
- E. Container-Grown Stock: Plants established above ground grown in a removable tub or pot container filled with growing medium.

- F. Crown: The portion of a tree consisting of leaves and branches.
- G. Defective Plant: Any plant that fails to meet the plant quality requirements of this Section.
- H. Finish Grade: Elevation of finished surface of planting soil.
- I. Healthy: Description of quality related to living plants that are growing in a condition that expresses their leaf size, crown density, color and annual growth rates typical of their horticultural description in the region.
- J. Included Bark: Ingrown bark tissues that develop where two or more stems grow closely together creating weak stem connections prone to breaking.
- K. Integrated Pest Management (IPM): Effective and environmentally sensitive approach to pest management based on the lifecycles of pests and their interactions with the environment.
- L. Kinked Root: A root within the root package that bends more than 90 degrees.
- M. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also include substances or mixtures intended for use as a plant regulator, defoliant, or desiccant. Some sources classify herbicides separately from pesticides.
- N. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
- O. Planting Area: Areas to be planted with any combination of groundcovers, shrubs, trees and installed with mulch.
- P. Plant; Plants; Plant Material: These terms refer to vegetation in general, including trees, shrubs, vines, plugs, tubelings, groundcovers, ornamental grasses, bulbs, corms, tubers, or any herbaceous vegetation.
- Q. Root Crown; Root Flare; Root Collar; Trunk Flare: The area at the base of the plant's stem or trunk where the stem or trunk broadens to form roots and "flares" away from the tree's trunk; the area of transition between the root system and the stem or trunk.
- R. Root Ball: The mass of roots including any soil or substrate that is shipped with the tree within the root ball package.
- S. Sensitive Areas: Defined areas such as wetlands, natural water and riparian resources, special environmental zones, or where certain activities are restricted such as the use of chemicals.
- T. Shrub: Wood plants with mature height approximately less than 15 feet.
- U. Stem: Structure and support of a plant connecting the roots and leaves; may be woody or herbaceous.
- V. Stem Girdling Roots: Roots that encircle the stems (trunks) of trees below the soil surface.

- W. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- X. Tree: Single and multi-stemmed plants with mature height approximately greater than 15 feet.
- Y. Trunk: Portion of woody stem or stems of a tree between the roots and the canopy.

1.04 COORDINATION

- A. Coordination with Seeded Areas: Plant trees, shrubs, and other plants after finish grades are established and before planting seeded areas unless otherwise indicated.
 - 1. When planting trees, shrubs, and other plants after seeding, protect seeded areas and promptly repair damage caused by planting operations.

1.05 SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Plant Materials: Include quantities, sizes, quality, and sources for plant materials. Invoices to be provided a maximum of one month after authorization to proceed. Copies must indicate source of supply by name, address, and phone number.
 - 2. Product Data: For each type of product indicated.
- B. Qualification Data: For landscape Installer. Include list of similar projects completed by Installer demonstrating Installer's capabilities and experience. Include project names, addresses, and year completed, and include names and addresses of owners' contact persons.
- C. Inspection Certificates: For plant materials furnished. Provide to Owner's Representative inspection certificates required by law for each shipment of plant materials.
- D. Product Certificates: For each type of manufactured product, from manufacturer, and complying with the following:
 - 1. Manufacturer's certified analysis of standard products.
 - 2. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.
- E. Herbicides: Product label and manufacturer's application instructions specific to Project.
- F. Sample Warranty: For special warranty.
- G. Planting Work Plan: Indicate and describe the proposed methods that will be utilized for successful planting and establishment. Information may be entirely descriptive or a combination of descriptions on a plan sheet.
 - 1. Sensitive Areas: Determine Project site and off-site sensitive areas that may be impacted by Work of this Section.

2. Identify sensitive areas, permit requirements, jurisdictional regulations or restrictions that may limit the use of pesticides and herbicides for pest control.
3. Confirm understanding of integrated mypest management practices and methods identified in this Section. Identify weed species present that will require removal and control during planting operations. Indicate preferred method of removal and continuing control approach for each weed species.
4. Coordination: Indicate coordination necessary for site clearing, soil preparation, and seeding work as it relates to planting.

1.06 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful establishment of plants.
 1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 2. Pesticide (Herbicide) Applicator: State licensed, commercial.
- B. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSI Z60.1.
- C. Measurements: Measure according to ANSI Z60.1. Do not prune to obtain required sizes.
 1. Trees and Shrubs: Measure with branches and trunks or canes in their normal position. Take height measurements from or near the top of the root flare for field-grown stock and container-grown stock. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip to tip. Take caliper measurements 6 inches above the root flare for trees up to 4-inch caliper size, and 12 inches above the root flare for larger sizes.
 2. Other Plants: Measure with stems, petioles, and foliage in their normal position.
- D. Plant Material Observation: Owner's Representative may observe plant material either at place of growth or at site before planting for compliance with requirements for genus, species, variety, cultivar, size, and quality. Owner's Representative may also observe trees and shrubs further for size and condition of balls and root systems, pests, disease symptoms, injuries, and latent defects and may reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws if applicable.
- B. Bulk Materials:
 1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 2. Store fertilizers in a dry place and protect from moisture.

3. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 4. Accompany each delivery of bulk materials with appropriate certificates.
- C. Do not prune trees and shrubs before delivery. Protect bark, branches, and root systems from sun scald, drying, wind burn, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of plants during shipping and delivery. Do not drop plants during delivery and handling.
- D. Handle planting stock by root ball.
- E. Wrap trees and shrubs with burlap fabric over trunks, branches, stems, twigs, and foliage to protect from wind and other damage during digging, handling, and transportation.
- F. Deliver plants after preparations for planting have been completed and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist. Plant materials showing damage from shipping, storage or handling will be rejected and shall be replaced at the Contractor's expense.
1. Set balled stock on ground and cover ball with soil, peat moss, sawdust, or other acceptable material.
 2. Do not remove container-grown stock from containers before time of planting.
 3. Water root systems of plants stored on-site deeply and thoroughly with a fine-mist spray. Water as often as necessary to maintain root systems in a moist, but not overly wet condition.

1.08 FIELD CONDITIONS

- A. Field Measurements: Verify actual grade elevations, service and utility locations, and dimensions of plantings and construction contiguous with new plantings by field measurements before proceeding with planting work.
- B. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.
1. West of Cascade Mountains: September 1 through May 15.
- C. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions and warranty requirements.

1.09 WARRANTY

- A. Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.

1. Failures include, but are not limited to, the following:
 - a. Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner.
 - b. Visual presence of plant diseases or insect infestations.
 - c. Structural failures including plantings falling or blowing over.
 - d. Faulty performance of tree stabilization.
2. Warranty Periods: From date of Substantial Completion.
 - a. Trees, Shrubs, and Groundcovers: 36 months.
3. General: The warranty period for plantings will include the healthy survival of 95 percent of the trees; the healthy survival of 95 percent of shrubs and groundcovers through each successive 12- month period until the end of the 3- year warranty.
4. Include the following remedial actions as a minimum:
 - a. Immediately remove dead plants and replace unless required to plant in the succeeding planting season.
 - b. Replace plants that do not meet the minimum healthy survival percentage requirements at end of warranty period.
 - c. A limit of one replacement of each plant is required except for losses or replacements due to failure to comply with requirements.
 - d. Provide extended warranty for period equal to original warranty period, for replaced plant material.
5. Warranty Exemptions: After Substantial Completion acceptance and during the warranty period, incidents that exempt replacement include: plants removed by others, plants impacted due to occupancy of project, plants lost or damaged by a third party, plants lost due to vandalism, or any natural disaster impacting plants.
6. Warranty Period Closure: During and by the end of the warranty period, remove all tree protections, ties and stakes. All trees that lack sufficient caliper to remain upright or those requiring further anchorage are to remain staked as approved by the Owner's Representative.
7. End of Warranty and Final Acceptance: Upon written request prior to the end of the warranty period date, the Owner's Representative will observe all warranted Work for final acceptance.

1.10 SUBSTITUTION REQUESTS

- A. Size and species of plants that cannot be obtained due to lack of availability can be requested to be substituted. Submit all requests to Owner's Representative with a list of plant sizes, species, and nursery contact information for approval prior to issuing a formal submittal.

PART 2 - PRODUCTS

2.01 PLANT MATERIAL

- A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated on Drawings.
 - 1. All plant materials furnished, including root ball dimensions or container size to trunk caliper ratio, shall comply with ANSI Z60.1 where applicable.
 - 2. Collected Stock: Do not use plants harvested from the wild, from native stands, from an established landscape planting, or not grown in a nursery unless otherwise indicated.
 - 3. Provide plants of sizes, grades, and ball or container sizes for types and form of plants. Plants of a larger size may be used if acceptable to Owner's Representative, with a proportionate increase in size of roots or balls.
 - 4. Compliance: All plant materials shall comply with state and Federal laws and regulations for plant diseases, pests, and weeds.
 - 5. Cold storage plants are not permitted.
- B. Plant Quality: Furnish plants with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock, densely foliated when in leaf and free of disease, conks, pests, eggs, larvae, and defects such as knots, galls, lesions, sun scald, injuries, abrasions, wood cracks, sap leakage, flush pruning cuts, and disfigurement.
 - 1. Trees: Relatively straight, vertical trunk typical of species, capable of standing upright without supplemental staking, and with a single central leader. Crooked, or multiple leaders; tight vertical branches where bark is squeezed between two branches or between branch and trunk ("included bark"); crossing trunks; cut-off limbs more than 3/4 inch in diameter; or with stem girdling roots are unacceptable conditions.
 - 2. Graft Unions: Unions, where applicable, are completely closed, without signs of rejection, healed, and visible above the root ball soil line.
 - 3. Root-Ball Quality: Measured from top of root ball, which begins at root flare according to ANSI Z60.1. Root flare shall be visible before planting. Root balls with roots favoring one side of the ball or with kinked roots are subject to be rejected.
 - 4. Crown: Form and density typical of species, its stage of growth, and time of year.
 - 5. Leaves: Size, color and appearance typical of species, its stage of growth, and time of year and be absent of wilted, shriveled, or dead leaves.
 - 6. Branches: Even distribution of shoot growth throughout the crown typical of species, time of year, and absent of dead, diseased, broken, distorted or injured stems.
 - 7. Trunk: Relatively straight or typical of species and free of wounds that penetrate to the wood, sunburned areas, conks, wood cracks, sap leakage, signs of boring insects, galls, cankers, girdling ties or lesions. Crooked trunks with wounds, breaks, conks, cracks, lesions, or inadequate pruning scars are unacceptable conditions.
- C. Balled and Burlapped Plants: Furnish field grown plants dug with firm, natural ball of earth in which they were grown in complying with ANSI Z60.1 for type and size of plant required; wrapped with burlap, tied, rigidly supported, and drum laced with twine and optionally accompanied with a wire basket. Root flare to be visible at the surface of the ball as recommended by ANSI Z60.1. Burlap and twine materials to be natural and fully biodegradable.

- D. Container Plants: Furnish healthy, vigorous, well-rooted plants grown in a removable and recyclable container, with a well-established root system reaching sides of container and maintaining a firm ball when removed from container but not root bound. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for type and size of plant required.

2.02 FERTILIZERS

- A. Planting Tablets: Tightly compressed chip-type, long-lasting, slow-release, commercial-grade planting fertilizer in tablet form. Tablets shall break down with soil bacteria, converting nutrients into a form that can be absorbed by plant roots. Fertilizers to meet 0-F-241D, "Federal Specification, Fertilizer, Mixed, Commercial."
 - 1. Size: 10-gram tablets.
 - 2. Nutrient Composition: 20 percent nitrogen, 10 percent phosphorous, and 5 percent potassium, by weight plus micronutrients.

2.03 MULCHES

- A. Bark Mulch: Commercially produced, free from deleterious materials, sawdust, wood shavings, and suitable as a top dressing of trees and shrubs, consisting of one of the following:
 - 1. Type: Ground or shredded bark hemlock or douglas-fir.
 - 2. Size Range: 1-1/2 inch minus, fine to medium texture
 - 3. Color: Natural.

2.04 HERBICIDES

- A. General: Herbicide registered and approved by the EPA and state of Oregon, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted herbicides unless authorized in writing by authorities having jurisdiction. The use of neonicotinoids class of pesticides are prohibited.
- B. Pre-Emergent Herbicide (Selective and Nonselective): Registered and approved by the EPA and state of Oregon. Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.
- C. Post-Emergent Herbicide (Selective and Nonselective): Registered and approved by the EPA and state of Oregon. Effective for controlling weed growth that has already germinated.

2.05 TREE-STABILIZATION MATERIALS

- A. Trunk-Stabilization Materials:

1. Tree Stakes: Straight, square or round, rough-sawn, sound, new softwood with specified wood pressure-preservative treatment, free of knots, holes, cross grain, and other defects, nominal wood sizes and length indicated on Drawings, pointed on below grade end.
2. Tree Ties: UV resistant, flat, broad, flexible and nonabrasive material.
 - a. Products: Subject to compliance with requirements, provide one of the following:
 - 1) Wide, flexible, adjustable, nonabrasive, with appropriate slack for trunk movement and lengths required to reach tree stakes.
 - a) V.I.T. Products, Inc.; "Cinch-Tie."
 - b) Villa Root Barrier, Villa Rubber Tree Tie.
 - c) Webbing tie; 3/4-inch wide, soft woven polypropylene fabric with a 900-pound break strength; green or beige in color; new or reclaimed material.
 - d) Approved equal.

2.06 BARK AND ROOT PROTECTION

- A. Browse Protection Fabric: Plastic construction fencing constructed of high-density extruded and stretched polyethylene fabric with 2-inch maximum opening in pattern and 48 inches in height.

2.07 DOWNED TREE MATERIALS

- A. Cut tree trunks, including bark, from prior demolition and site clearing operations. Trees must be free from disease or insect infestations that may be harmful to existing vegetation and new plantings.
 1. Downed Logs: Trunk material only with limited root mass if present.
 - a. Size: Approximately 8 to 24 inches diameter and 10 to 15 feet in length.

2.08 MISCELLANEOUS PRODUCTS

- A. Burlap: Non-synthetic, biodegradable.
- B. Mycorrhizal Fungi: Suspendable powder mycorrhizal inoculant, dry, granular inoculant containing four species of endomycorrhizae (60,000 propagules per lb) and three genera of ectomycorrhizae (110 million propagules per lb).
 1. Products: Subject to compliance with requirements, provide products by the following:
 - a. Mycorrhizal Applications Inc.; MycoApply Ultrafine Endo/Ecto.
 - 1) Phone: 541-476-3985.
 - 2) Website: www.mycorrhizae.com.

- C. Water: Suitable for planting irrigation and free from oil, acid, alkali, salt or other substances harmful to plant, animal or aquatic life.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine areas to receive plants, with Installer present, for compliance with requirements and conditions affecting installation and performance of the Work.
 - 1. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
 - 2. Verify that plants and vehicles loaded with plants can travel to planting locations with adequate overhead clearance.
 - 3. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
 - 4. Uniformly moisten excessively dry soil that is not workable or which is dusty.
 - 5. Verify the subgrade and planting soils are at appropriate elevations and meet all quality requirements for areas receiving plants.
- B. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by Owner's Representative and replace with new planting soil.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and existing plants from damage caused by planting operations.
- B. Install erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.
- C. Lay out plants at locations indicated on Drawings.

3.03 WEED CONTROL AND HERBICIDE APPLICATION

- A. Utilize integrated pest management methods and best practices according to Clean Water Services' "Integrated Pest Management Plan" dated August 2023.
 - 1. Unless approved in writing from the Owner prior, use only hand or light mechanical tools for weed control methods within 50 feet of sensitive areas. Use only hand tools under driplines of existing trees. Light mechanical tools are relegated to carried and operated motorized machinery.

- B. Obtain approval for herbicide application from Owner prior to use. Apply herbicides according to authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
- C. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.

3.04 PLANTING AREA PREPARATION AND ESTABLISHMENT

- A. Clear and grub all areas to receive plants as indicated in Section 02120 "Clearing and Removal of Obstructions."
- B. If herbicide use is approved, spray any remaining weeds.
- C. Before planting, obtain Owner's Representative's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.05 EXCAVATION FOR TREES AND SHRUBS

- A. Planting Pits and Trenches: Excavate circular planting pits.
 - 1. Excavate planting pits with sides sloping inward at an approximately 60-degree angle. Excavations with vertical sides, unless indicated otherwise, are unacceptable. Trim perimeter of tree pit leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base unless pedestal is overly compact or if additional soil needs to be added to bottom of the tree pit for proper planting elevation. Ensure that root ball will sit on stable base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.
 - 2. Excavate two times as wide as ball diameter, unless indicated otherwise or space does not allow, for balled and burlapped or container-grown stock.
 - 3. If area under the plant was initially dug too deep, add soil to raise it to the correct level and thoroughly tamp the additional soil to prevent settling.
 - 4. Maintain angles of repose of adjacent materials to ensure stability. Do not excavate subgrades of adjacent paving, structures, hardscapes, or other new or existing improvements.
 - 5. Maintain supervision of excavations during working hours.
 - 6. Keep excavations covered or otherwise protected after working hours.
- B. Backfill Soil: Topsoil removed from excavations may be used as backfill soil unless otherwise indicated.
- C. Obstructions: Notify Owner's Representative if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.
- D. Drainage: Notify Owner's Representative if subsoil conditions evidence unexpected water seepage or retention in tree or shrub planting pits.

3.06 TREE AND SHRUB PLANTING

- A. Inspection: At time of planting, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.
- B. Roots: Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.
- C. Balled and Burlapped Stock: Set each plant plumb and in center of planting pit or trench with root flare above adjacent finish grades as indicated on Drawings.
 - 1. Backfill Method: Backfill around root ball with soil excavated from planting pit amended with 1/4 compost mulch by volume.
 - 2. After plant is set in hole, carefully cut and remove burlap, rope, and metal wire baskets as indicated on Drawings. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked, broken, or compromised where the plant cannot stand upright. Root balls that are cracked but not compromised shall have the burlap cut down to depth indicated on Drawings and loosely retied with twine to stabilize root ball before backfilling.
 - 3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets.
 - 4. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 - 5. Place planting tablets equally distributed around each tree planting pit when pit is approximately one-half filled. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
 - a. Quantity: As indicated on Drawings.
 - 6. Continue backfilling process. Apply mycorrhizal inoculant over roots at rates recommended by manufacturer. Water again after placing and tamping final layer of soil.
- D. Container-Grown Stock: Set each plant plumb and in center of planting pit or trench with root flare above adjacent finish grades as indicated on Drawings.
 - 1. Backfill Method: Backfill around root ball with soil excavation from planting pit.
 - 2. Carefully remove root ball from container without damaging root ball or plant. Loosen root mass as indicated on Drawings.
 - 3. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 - 4. Continue backfilling process. Apply mycorrhizal inoculant over roots at rates recommended by manufacturer. Water again after placing and tamping final layer of soil.

3.07 TREE AND SHRUB PRUNING

- A. Remove only dead, dying, or broken branches. Do not prune for shape.
- B. Do not apply pruning paint to wounds.

3.08 TREE STABILIZATION

- A. Trunk Stabilization by Upright Staking and Tying: Install trunk stabilization as follows unless otherwise indicated:
 - 1. Upright Staking and Tying
 - a. Stake trees, penetrating below bottom of backfilled excavation and extending above grade to accept ties as indicated on Drawings. Set vertical stakes and space to avoid penetrating root balls or root masses with dimension indicated.
 - 2. Support trees with bands of flexible tree ties at contact points with tree trunk. Set ties around trunk to provide a minimum two-inch clearance, providing enough slack to avoid rigid restraint of tree and allowing tree to reasonably flex in wind without failing.
 - 3. Wrap browse protection fabric around tree stakes overlapping and tightening ends. Attach with staples or nails as needed to maintain shape.

3.09 PLANTING AREA MULCHING

- A. Mulch backfilled surfaces of planting areas and other areas indicated.
 - 1. Bark Mulch in Planting Areas: Apply 3-inch average thickness and diameter indicated on the Drawings. Finish level with adjacent finish grades. Do not place mulch directly onto trunks or stems of plants and maintain clear distance as indicated.

3.10 DOWNED TREE INSTALLATION

- A. Provide downed trees at general locations indicated, outside of any existing tree driplines. Excavate area surrounding tree. Ensure tree material is in a safe and stable position.
- B. Adjustment to location of trees as shown acceptable based upon clearances and maneuverability of logs to be placed.

3.11 PLANT MAINTENANCE

- A. After installation but prior to Substantial Completion, maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, adjusting and repairing tree-stabilization devices, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings.
- B. Fill in, as necessary, soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.
- C. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices, when possible, to minimize use of herbicides and reduce hazards.

3.12 REPAIR AND REPLACEMENT

- A. General: Repair new trees that are damaged by construction operations, in a manner approved by Owner's Representative.
 - 1. Submit details of proposed pruning and repairs.
 - 2. Perform repairs of damaged trunks, branches, and roots within 24 hours, if approved.
 - 3. Replace trees and other plants that cannot be repaired and restored to full-growth status, as determined by Owner's Representative.
- B. Remove and replace dead or unhealthy plant materials as required in the "Warranty" Article before the end of the corrections period. Replace plants that are damaged during construction operations that the Owner's Representative determines are incapable of restoring to normal growth pattern.
 - 1. Provide new trees of same size as those being replaced to original size specified.
 - 2. Species of Replacement Trees: Same species being replaced or species selected by Owner's Representative.

3.13 CLEANING AND PROTECTION

- A. During planting, keep adjacent paving and construction clean and work area in an orderly condition. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
- B. Remove surplus soil and waste material including excess subsoil, unsuitable soil, trash, and debris and legally dispose of them off Owner's property.
- C. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.
- D. After installation and before Substantial Completion, remove nursery tags, nursery stakes, tie tape, labels, wire, burlap, and other debris from plant material, planting areas, and Project site.

3.14 MAINTENANCE SERVICE

- A. Maintenance Service for Trees and Shrubs: According to Section 02935 "Landscape Maintenance."

END OF SECTION

SECTION 02935

LANDSCAPE MAINTENANCE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes maintenance of installed landscape areas.
- B. Related Requirements:
 - 1. Section 02920 "Seeding" for seeded areas.
 - 2. Section 02930 "Plants" for trees, shrubs, groundcovers, and other plant materials.

1.03 DEFINITIONS

- A. ISA: International Society of Arboriculture.
- B. Herbicide: A type of pesticide that kill weeds and other unwanted plants.
- C. Pesticide: Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest which includes herbicides.
- D. Planting Area: Areas planted with any combination of groundcovers, shrubs, trees, and mulch, including turf and seeded areas.

1.04 LANDSCAPE MAINTENANCE SERVICE

- A. Plant and Seeding Maintenance Period: Services provided during the year, spread out from late winter through fall. The maintenance period shall commence the day after Substantial Completion is achieved.
 - 1. Planting Areas: Provide a 36-month (3-year) maintenance period a minimum of three times a year that occurs within the warranty period for plants according to Section 02930 "Plants."

1.05 ACTION SUBMITTALS

- A. Maintenance Work Plan: Written work plans, scaled plans, and related documents necessary to indicate understanding of areas to be maintained and services to be provided.
 - 1. Schedule: At the beginning of each year, by January 15, submit a complete yearly schedule of maintenance operations indicating timing of scheduled visits and services outlined.
 - 2. Weed Eradication Program: Identify methods of weed eradication. If herbicides are approved for use in weed eradication, identify areas on site anticipated for application in writing with diagrams or pictures as necessary to identify limits of application. Submit herbicide manufacturer product sheets, application rates, and schedule of application. Provide copies of manufacturer's federal registered label and material safety data sheet.
 - 3. Pruning Services: Indicate methods of pruning to be employed, including understanding of acceptable pruning practices in accordance with this Section.
 - 4. Water Source: Identify potential source(s) or water for supplemental irrigation.

1.06 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and personnel.
- B. Pesticide Applicator License: Commercial Pesticide Applicator's License held in the individual's name and license number. Submit a certification each time a new applicator works on project.
- C. Log of maintenance date with activities performed after each visit.
- D. Annual Summary: At the end of each year, by December 1, submit a written summary of the maintenance activities conducted during year including:
 - 1. Herbicides applied, if any, including types and applications.
 - 2. Water level conditions of planting areas.
 - 3. Repair, replacement, or restoration activities.
 - 4. Any conditions addressed outside of the scheduled maintenance tasks outlined this Section.

1.07 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape Installer, including personnel assigned to the Work.
 - 1. Experience: Five years' experience in landscape maintenance in commercial or public settings of similar scope, size, and duration.
 - 2. Personnel Certifications: According to Section 02930 "Plants."
 - 3. Licensed Landscape Contractor in the State of Oregon.
- B. All Work performed shall be done in manner that maintains the original integrity of the landscape design.

1.08 DELIVERY, STORAGE, AND HANDLING

- A. According to 02930 "Plants" and 02920 "Seeding."

1.09 FIELD CONDITIONS

- A. Weather Limitations: Proceed with maintenance only when existing and forecasted weather conditions permit maintenance to be performed and when beneficial and optimum results may be obtained. Do not conduct any portion of the Work in planting areas if existing soil is saturated or has the potential to become compacted.
- B. Plant and Seed Restrictions: Plants and seed may be replaced and installed outside of the planting restriction window, and may require supplemental care for establishment.
 - 1. Adhere to additional requirements according to 02930 "Plants" and 02920 "Seeding."

1.10 WARRANTY

- A. Plants: Warranty for replaced plants shall begin at date of installation and match duration according to Section 02930 "Plants."

PART 2 - PRODUCTS

2.01 GENERAL

- A. All products provided as part of this Section, including replacement products, shall conform to the requirements of Section 02930 "Plants" and 02920 "Seeding."

PART 3 - EXECUTION

3.01 DEBRIS

- A. Trash Removal: Prior to commencing any other maintenance tasks, collect trash, litter, and other debris from planting areas.
- B. Leaf Litter Removal: Rake and remove all leaf litter from site. Do not disturb plant beds or damage plants during leaf litter removal.
- C. Dispose of all trash, debris, and plant waste legally offsite.

3.02 PLANTING AREAS

- A. General: Provide temporary fencing, flags, signage, or other measures as necessary to protect planting areas during establishment, as needed.

3.03 PLANT MAINTENANCE

- A. General: Maintain plants by pruning, watering, weeding, mulching, restoring plant saucers, and performing other operations as required to establish healthy, viable plantings. Replace all damaged, dead, dying plants covered during warranty period within 30 days of initial identification of condition.
- B. Pruning: Design and installation of planting beds including individual plant spacing within beds assumes future plant growth and is planted to achieve a specific design intent. Provide standard professional horticultural and arboricultural practices for pruning techniques, as documented by ISA. Do not excessively prune, top, shear, or otherwise shape plants, and only prune to enhance natural plant form. Conduct major corrective or rejuvenation pruning only during the dormant season, unless otherwise specified. Improper pruning of plants, including harm to plant natural form, will require replacement and installation at cost to Contractor.
 - 1. Tree Pruning: Performed by qualified personnel and conducted in accordance with the American National Standard (ANSI) A300 "Part 1 - Pruning Standard" and ANSI Z133 "Arboricultural Operations - Safety Requirements."
 - a. Remove only dead, dying, crossed limbs, or broken branches.
 - b. Do not apply pruning paint to wounds.
 - 2. Shrub and Groundcover Pruning:
 - a. Prune only dead, dying stems, including those causing visual obstructions, and conflicts with structures and walkways.
- C. Tree Stabilization Materials: Inspect all tree trunks and root balls for any damage caused by tree stabilization materials. Adjust stabilization devices impacting any part of tree including trunk, branches, or roots. Adjust ties around trunk to provide a minimum two inch clearance, providing enough slack to avoid rigid restraint of tree and allowing tree to reasonably flex in wind without failing. Adjust and repair tree-stabilization devices where encountered, resetting to proper grades or vertical position.
- D. Weeding: Maintain clean planting beds by pulling and removing all weeds.
- E. Herbicides: Spraying shall occur only by a licensed pesticide applicator with prior written approval from Owner's Representative. Apply treatments as required to keep planting areas and soils weed free. Use integrated pest management practices, when possible, to minimize use of herbicides.
- F. Mulching: Replenish bark mulch as needed to maintain original installation depth. Rake mulch in early spring before applying new mulch material to break "crust" of old mulch.
- G. Watering: Provide supplemental watering during establishment. Verify balance of watering and adjust schedule if evidence of excess puddling or runoff is encountered, or plants indicate stress. Watering frequencies shall at a minimum match local ET rates of plant or grass species, in addition to requirements specified in "Watering Requirements" Article.

- H. Protect site from erosion and siltation. Utilize approved erosion control methods as required to contain and mitigate erosion. Fill in, as necessary, soil subsidence that may occur because of settling, erosion, or rutting. Monitor runoff conditions and notify Owner's Representative of drainage, erosion, plant diseases, animal browsing, vandalism, or other related issues affecting natural area health.

3.04 NATURAL AREA PLANTING AREA MAINTENANCE

- A. Mowing: Do not mow seeded areas within natural areas.
- B. Weed Eradication: Do not apply herbicide weed control measures unless obtain written approval from Owner. Remove weeds and seed sources manually.
- C. Provide plant care and pruning according to "Plant Maintenance" Article.
- D. Water plants according to "Watering Requirements" Article.
- E. Protect site from erosion and siltation. Utilize approved erosion control methods as required to contain and mitigate erosion. Monitor runoff conditions in natural areas and notify Owner's Representative of drainage, erosion, plant diseases, animal browsing, vandalism, or other related issues affecting natural area health.

3.05 WATERING REQUIREMENTS

- A. General: Watering requirements indicated are guidelines for planting area establishment, including areas receiving automatic irrigation or areas with no irrigation systems. Apply supplemental water as needed during extended dry or warm periods, or where irrigation system is not sufficiently irrigating plants, to maintain planting health and vigor.
 - 1. Trees: Water all coniferous trees and deciduous trees at a frequency of once a week from the beginning of May through June and twice a week from July through October. Slowly apply 10 gallons of water to plant roots at each watering occurrence, allowing water to infiltrate into soil.
 - 2. Shrubs and Groundcovers: Water all container plants at frequency of once a week from the beginning of May through June and twice a week from July through October. Apply two gallons of water to plant roots per installed nursery container size number (gallon) size.

3.06 WEED ERADICATION

- A. Weed Eradication: Shall include eradication by manual, and herbicide if approved, through a weed eradication program as approved. Identify all weeds prior to removal. Planting areas shall be free of noxious weeds and invasive plants as classified by the Oregon Department of Agriculture as type "A" or "B" weeds and not limited to the following: Canada thistle, morning glory, scotch broom, common teasel, English ivy, Himalayan blackberry, velvet grass, purple loosestrife, reed canary grass, kudzu, butterfly bush, bentgrass, Italian arum, spurge laurel,

yellow archangel, false brome, garlic mustard, lesser celandine, pokeweed, giant hogweed, Japanese knotweed, jointed goatgrass, tree of heaven, and tansy ragwort.

- B. Herbicides: Apply herbicides according to city, county, state, and federal requirements including manufacturer's written instructions. Obtain approval and notify Owner's Representative prior to each application, including coordinating with Project operations and adjacent site uses in proximity to the Work. Herbicides in watersheds, waterway and drainage areas, or sensitive lands shall only be conducted after non-herbicide measures prove impractical and strictly applied according to all requirements.
 - 1. Selective manual removal of weeds shall be utilized if herbicide application threatens planting areas. All planting areas indicating damage by herbicide application shall be replaced immediately at no additional cost to the Owner.

3.07 INSPECTIONS

- A. During the maintenance service period, the Owner's Representative will make three inspections jointly with the Contractor at the following times:
 - 1. Spring, early May.
 - 2. Summer, mid-July.
 - 3. Fall, later September.
- B. Depending upon the beginning of the maintenance service and duration, one of these visits will be the final inspection.
- C. After each inspection, the Owner may determine based upon the specified success criteria that corrective Work is required. If so, the Owner will provide the Contractor with a written notice of required corrective Work.

3.08 CORRECTIVE WORK

- A. Provide plant replacements of the same variety, size, and quality as originally installed, unless otherwise approved.
 - 1. Planting outside of planting season window allowed for corrective Work, after each periodic inspection.
- B. Correct deficient items within 30 days after written notification.

3.09 CLEANING AND PROTECTION

- A. According to Section 02930 "Plants."

END OF SECTION

SECTION 09600

PROTECTIVE COATINGS – MANHOLE STRUCTURES

PART 1 GENERAL

1.01 DESCRIPTION

The work described within details a complete program for use on new or existing brick, steel, concrete or fiberglass structures including but not limited to wet wells, manholes, pump stations, digesters, large diameter pipe or other large wastewater structures. This section details the methods, procedures, materials and equipment as required to provide a corrosion resistant coating product that restores walls to original surface smoothness to the greatest extent possible and eliminates water infiltration and exfiltration.

1.02 RELATED SECTIONS

A list of sections of the project specifications that are most closely related to this section is provided for the convenience of the Contractor.

A. Section 02720, *Sanitary Sewer Pipe and Manholes*.

1.03 REFERENCES

- A. ASTM D4541, *Adhesion*
- B. ASTM D412, *Tensile Strength (PSI)*
- C. ASTM D412, *Elongation (%)*
- D. ASTM A624, *Tear Strength (PLI)*
- E. ASTM D2240, *Hardness*
- F. ASTM D522, *Flexibility (1/8" mandrel)*
- G. ASTM D4060, *Taber Abrasion (mg loss)*.
- H. SSPC SP-13 NACE No. 6, *Surface Preparation of Concrete*

1.04 SUBMITTALS

All materials and procedures required to establish compliance with the specifications shall be submitted for review/approval prior to beginning work. Submittals shall include at least the following:

- 1. Technical Data Sheet on each product used.
- 2. Material Safety Data Sheet (MSDS) for each product used.
- 3. ASTM References.
- 4. Descriptive literature, bulletins and or catalogs of materials. Literature shall be adequate to fully define manufacturers recommended specifications, component physical properties and chemical resistance, manufacturers recommendations for

- surface preparation techniques to be followed, environment restrictions and compatibility of materials recommended by manufacturer (and those specified herein or proposed by Contractor) for stopping infiltration prior to coatings
5. Work procedures including flow diversion plan, method of repair, etc.
 6. Material and method for repair of leaks or cracks in manhole structures.
 7. Certification that Contractor will have backup installation equipment on the job site or that can be delivered by morning of next business day.
 8. Certified statement from coatings manufacturer that the contractor/installer is a currently approved installer of the of the proposed coatings system.
 9. Coatings manufacturer approved testing procedure that will be followed, indicating adequacy of surface preparation steps and acceptable environment conditions prior to applying coating system.
 10. Required experience with coating system application. Provide name of projects, date of project, materials applied, approximate square feet of coatings applied on each referenced project and contact information for the referenced projects owner.
 11. Bypass pumping procedures if necessary.

1.01 WARRANTY

Contractor shall provide a two-year warranty bond against failure of the Work and also warrant the coating (in writing, but without formal bond) against failure for a period of 10 years. "Failure" will be deemed to have occurred if the protective lining fails to (a) prevent the internal deterioration or corrosion of the structure (b) protect the manhole substrate from contamination by sanitary sewage flows or (c) prevent groundwater infiltration. If any such failure occurs within warranty period, the damage will be repaired to restore the lining at no cost to the Owner within 60 days after written notification of the failure. "Failure" does not include damage resulting from mechanical or chemical abuse or act of God. Mechanical or chemical abuse means exposing the lined surfaces of the structure to any mechanical force or chemical substance not customarily present or used in connection with structures of the type involved.

1.02 QUALITY ASSURANCE

- A. The manufacturer and applicator of the total coating system of wastewater structures shall be a company that specializes in the design, manufacture and installation of corrosion protection systems for wastewater structures. Applicator shall be competent in leak repair, surface preparation and corrosion materials application, as specified. Corrosion materials/products shall be suitable for installation in a severe hydrogen sulfide environment without any deterioration to the coating product over the lifetime of the warranty period.
- B. The Contractor shall be trained and certified by the manufacturer for the handling, mixing, application and inspection of the liner system as described herein. The Contractor shall have successfully completed projects totaling a minimum of 10,000 square feet in the last 5 years using the specified coating system. In addition, the Contractor's project superintendent shall have a minimum of 5 successfully completed projects totaling a minimum of 5,000 square feet using the specified coating system.
- C. To ensure total unit responsibility and compatibility, all materials and installation thereof shall be furnished and coordinated with/by one supplier/applicator who turnkeys the work and assumes full responsibility for the entire operation.

- D. The prices submitted by the Contractor shall include all costs of labor, materials and equipment for the various bid items necessary for complete manhole rehabilitation. All items of work not specifically mentioned herein which are required to make the product perform as intended and deliver the final product as specified herein shall be included in the respective lump sum and unit prices bid in the Proposal. These specifications include the minimum requirements for the rehabilitation of manholes defined herein and as shown on the plans included as part of these contract documents.
- E. The final manhole coating shall be designed to protect against all corrosive elements found in this sanitary sewer, shall be free of any infiltration, adhesion problems, coating pinholes, or any other elements that could affect the service life or operation of the manhole. Prior application of final coatings, all infiltration shall have been completely stopped with materials fully compatible with the final coatings.

PART 2 PRODUCTS

2.01 MATERIALS

- A. The materials to be utilized in the lining of wastewater structures shall be designed and manufactured to withstand the severe effects of hydrogen sulfide in a wastewater environment.
- B. Equipment for installation of lining materials shall be as recommended by the manufacture.
- C. The coating system to be utilized for these wastewater structures shall be liner system as manufactured by Raven Lining Systems, Inc. Raven 405 system, or approved equal. All systems must meet the performance criteria specified herein.

1. RAVEN 405 SYSTEM

100% solids, solvent-free ultra-high-build epoxy spray applied monolithic liner system conforming to the following minimum physical characteristics

Product Type		Amine Cured Epoxv
VOC Content	ASTM D2584	0%
Compressive Strength	ASTM D695	>16,000 psi
Tensile Strength	ASTM D638	>7,500 psi
Flexural Modulus	ASTM D790	>500,000 psi
Adhesion to Concrete	ASTM D4541	Substrate (concrete) failure
Chemical Resistance	ASTM D534	Municipal sanitary sewer environment

- a) The complete Raven 405 Coating System shall be as recommended by Raven, in conformance with these specifications, and shall be applied only to properly prepared surfaces that will insure the required adhesion. Coating System may need to be modified as needed and as approved to meet the most stringent performance criteria specified in these documents.
- b) Patching, profiling and grouting mix shall be as required and

recommended by the coating system manufacturer for suitability. It shall be mixed and applied according to the manufacturer's recommendations.

- c) Total thickness of Raven coating system shall be a minimum of 125 mils above the fully prepared substrates highest profile point.

- D. Materials specified are those that have been evaluated for the specific service. Products of Raven (along with performance requirements) are listed to establish a standard of performance and quality. Equivalent materials, including warranty, of other manufactures would be considered for "or equal" status by Engineer.

PART 3 EXECUTION

3.01 PRE-APPLICATION INSPECTION

- A. Applicator shall take appropriate action to comply with all local, state and federal regulations including those set forth by OSHA, EPA, the Owner and any other applicable authorities.
- B. Prior to conducting any work, perform inspection of structure to determine need for protection against hazardous gases or oxygen depleted atmosphere.
- C. The new manhole (MTA2-1) shall not require any sewer bypassing as the new sanitary pipe will not be allowed to be used until final acceptance.
- D. New Portland Cement structures shall have cured a minimum of 28 days since manufacture prior to commencing installation of the coating product, or as approved in writing by coatings manufacturer if less.

3.02 SURFACE PREPARATION

- A. Conduct surface preparation program to include monitoring of atmosphere for hydrogen sulfide, methane, low oxygen or other gases, approved flow control equipment, and surface preparation equipment.
- B. Surface preparation methods may include high pressure water cleaning, hydro blasting, abrasive blasting, grinding, detergent water cleaning, hot water blasting and others to meet the latest edition of SSPC-SP13/NACE No. 6 requirements. The finished surface shall be suited to provide a uniform, sound clean neutralized surface suitable for installation of the specified coating product. Surface preparation methods for the new manhole shall meet coating manufacturer's recommendations.
- C. Surface preparation method shall produce a cleaned, abraded and sound surface with no evidence of laitance, loose concrete, brick or mortar, oils, grease, chemical contaminants or debris, and shall display a surface profile suitable for application of coating product. No removed materials shall be allowed to go into sanitary sewer, but shall be captured and properly disposed of off-site.
- D. The presence of any significant defects in the structure will not be acceptable and will be grounds for removal and replacement at no additional cost to the owner. There should be no visible leaks or defects in the structure that require a hydrophobic and/or hydrophilic sealant designed to stop infiltration of ground water by pressure injection.

- E. After completion of surface preparation, inspect all areas to be coated for leaks, cracks and any holes with the Owner. Cracks in the new manhole wall will not be acceptable and it is expected that any cracked section will not have been installed during the initial setting of manhole.
- F. The entire interior manhole surface (including invert) shall be prepared for application of the coating system.
- G. Surface preparation shall be accepted by coating system manufacturer's authorized representative (which may be coatings applicator, if so identified in writing by coating system manufacturer) prior to application of the coating system.

3.03 COATING SYSTEM MATERIAL INSTALLATION

- A. Application procedures shall conform to recommendations of the manufacturer, including materials handling, mixing, environmental controls during application, safety and spray equipment.
- B. Spray equipment shall be specifically designed to accurately ratio and apply the coating system.
- C. Application of multi-component coating system shall be in strict accordance with manufacturer's recommendation.
 - 1. Final installation of a Raven 405 coating system shall be the greater of 125 mils or manufacture's recommended thickness to meet the required warranty described in Paragraph 1.04 of this Section. A permanent identification and date of work performed shall be affixed to each manhole structure in a readily visible location.
- D. Coating products shall interface with adjoining construction materials throughout the structure to effectively seal and protect concrete substrates from infiltration and attack by corrosive elements. Procedures and materials necessary to effect this interface shall be as recommended by the primary coating products manufacturer.
- E. Termination points of the coating products shall be made at the manhole frame and cover joint and a minimum of 1" interfacing with each pipe penetration shall be provided.
- F. The finished surfaces shall be relatively smooth, free of ridges, wrinkles and sags. Special care shall be used to insure a smooth transition between the manhole invert and the intersecting pipeline inverts such that flow will be impaired. Should any of these conditions occur, the liner shall be repaired according to the manufacturer's standards or liner shall be rejected and removed at Contractor's expense.
- G. Sewage flow shall not be allowed in the manhole before the coating system has been installed.
- H. Provide final written report (including photographs) to Owner for work on each manhole. Daily written reports given to owner's representative are to include ambient conditions measured at the time of coating, including relative humidity, manhole wall surface temperature, dew point, ambient temperature and wet-film thickness measurements of coating to insure stated compliance for materials applied.

3.04 TESTING

- A. Contractor shall notify the Engineer upon completion of surface preparation work at least 2 hours prior to application of the initial coating in order to conduct a visual inspection of surface preparation work. Acceptance of the final preparation by the Engineer does not impact the validity of the warranty by the Contractor. Contractor is fully responsible for providing a finished product that will meet or exceed the required warranty described in Paragraph 1.04 of this Section.
- B. Contractor shall provide the services of an independent testing agency approved by the Owner to verify that all surfaces are coated sufficiently and no holidays or pinholes exist through to the substrate. Testing will include a high voltage test in accordance with the latest version of ASTM D 4748 (Standard Practice for Continuity Verification of Liquid or Sheet Lining Applied to Concrete Substrates) and/or NACE RPO 188.
 - 1. Perform test after the manufacturers minimum cure times have elapsed after application of the last coat in order to develop sufficient physical properties in the coating to withstand the high voltage arc.
 - 2. High voltage setting shall be sufficient to arc through a distance of one-half inch to ground.
 - 3. Circle all indications with a dark felt tip pen.
 - 4. A double application of the final corrosion protection coat will be made so as to completely cover the indicated holiday and no visible marks showing through the final coat. Retest recoated areas to confirm conformance to requirements.
- C. Coating Adhesion: After coating system application and cure, measure and record the results of a minimum of three passing adhesion tests, without glue failures in one manhole as directed by engineer. Tests shall be per ASTM D4541 as modified herein. Utilize 20 mm test dollies and a calibrated portable pull-off adhesion tester. Document any test failure mode, whether failure is within concrete, failure is within coating or failure is at the concrete/coating interface. Failure of the dolly adhesive shall require retesting. Prior to conducting the pull test, the coating shall be scored around the dolly to just above the substrate by mechanical means without disturbing the dolly or bond within the test area. If the testing damages the coating, spot repair the test location while following manufacturer's recommendations. Failure of the coating/concrete interface with less than 20% of the substrate adhering to the coating and less than 300-psi pull-off strength, shall be deemed a coating system failure and the contractor shall remove the coating to soundly adhered edges, re-perform surface preparation procedures, and recoat the failed surfaces, at contractor's cost. Low pull-off strength values (<150 psi) will require additional testing/evaluation to determine potential adhesion defects at the sole discretion of Owner's representative.
- D. All manholes shall be visibly inspected after completion of coating system and again during warranty period. No visible leakage or lack of adhesion will be allowed.

END OF SECTION

APPENDIX A

**ODOT PERMIT
T2BM48000
2BM47995**



APPLICATION AND PERMIT TO OCCUPY OR PERFORM OPERATIONS UPON A STATE HIGHWAY

See Oregon Administrative Rule, Chapter 734, Division 55

PERMIT NUMBER

2BM47995

CLASS :

KEY#

GENERAL LOCATION				PURPOSE OF APPLICATION (TO CONSTRUCT/OPERATE/MAINTAIN)												
HIGHWAY NAME AND ROUTE NUMBER I-205 Veterans Memorial Highway				<input type="checkbox"/> POLE LINE	TYPE	MIN. VERT. CLEARANCE										
HIGHWAY NUMBER 064	COUNTY Clackamas			<input type="checkbox"/> BURIED CABLE	TYPE											
BETWEEN OR NEAR LANDMARKS MP 14 to MP 15 Off ramp to Sunnybrook Blvd NB				<input checked="" type="checkbox"/> PIPE LINE	TYPE Sanitary sewer											
HWY. REFERENCE MAP ODOT TransGIS	DESIGNATED FREEWAY <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	IN U.S. FOREST <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<input type="checkbox"/> NON-COMMERCIAL SIGN AS DESCRIBED BELOW												
APPLICANT NAME AND ADDRESS Clackamas Water Environment Services 150 Beaver Creek Road Oregon City, Or 97045				<input checked="" type="checkbox"/> MISCELLANEOUS OPERATIONS AND/OR FACILITIES AS DESCRIBED BELOW												
				<table border="1"> <tr> <th colspan="3">FOR ODOT USE ONLY</th> </tr> <tr> <td>BOND REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</td> <td>REFERENCE: OAR 734-055-0035(2)</td> <td>AMOUNT OF BOND</td> </tr> <tr> <td>INSURANCE REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</td> <td>REFERENCE: OAR 734-055-0035(1)</td> <td>SPECIFIED COMP. DATE 1/30/2025</td> </tr> </table>				FOR ODOT USE ONLY			BOND REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	REFERENCE: OAR 734-055-0035(2)	AMOUNT OF BOND	INSURANCE REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	REFERENCE: OAR 734-055-0035(1)	SPECIFIED COMP. DATE 1/30/2025
FOR ODOT USE ONLY																
BOND REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	REFERENCE: OAR 734-055-0035(2)	AMOUNT OF BOND														
INSURANCE REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	REFERENCE: OAR 734-055-0035(1)	SPECIFIED COMP. DATE 1/30/2025														

DETAIL LOCATION OF FACILITY (For more space attach additional sheets)

1/30/2026

MILE POINT	TO MILE POINT	ENGINEERS STATION	TO ENGINEERS STATION	SIDE OF HWY OR ANGLE OF CROSSING	DISTANCE FROM		BURIED CABLE OR PIPE		SPAN LENGTH
					CENTER OF PVMT	R/W LINE	DEPTH/VERT.	SIZE AND KIND	
14.20	14.20	690+15	---	East Right	290'	10'	8' to 10'	8" PVC	10'

DESCRIPTION OF DESIRED USE

Clackamas Water Environment Services (WES) must install a new 8" sanitary sewer from the east that will connect directly into an existing WES manhole (MT232) located approximately 10' inside the easterly right-of-way of I-205. This manhole is approximately 25 feet from the side of easterly Bent 3 for the northbound off ramp to Sunnybrook Blvd. Access to the site will be possible from property owned by a public school district in Clackamas County and without the need to enter from I-205 side of the right-of-way.

SPECIAL PROVISIONS (FOR ODOT USE ONLY)

TRAFFIC CONTROL REQUIRED

◆ ☐ YES [OAR 734-055-0025(6)] ☒ NO

OPEN CUTTING OF PAVED OR SURFACED AREAS ALLOWED

◆ ☐ YES [OAR 734-055-0100(2)] ☒ NO [OAR 734-055-0100(1)]

◆ AT LEAST 48 HOURS BEFORE BEGINNING WORK, THE APPLICANT OR HIS CONTRACTOR SHALL NOTIFY THE DISTRICT REPRESENTATIVE Ryan Boland AT PHONE NO.: D2Bup@odot.oregon.gov OR EMAIL OR FAX THIS PAGE TO THE DISTRICT OFFICE AT: D2Bup@odot.oregon.gov. SPECIFY TIME AND DATE WORK IS TO OCCUR.

◆ A COPY OF THIS PERMIT AND ALL ATTACHMENTS SHALL BE AVAILABLE AT THE WORK AREA DURING CONSTRUCTION.

◆ ATTENTION: Oregon Law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0001 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (503) 232-1987.

CALL BEFORE YOU DIG 1-800-332-2344

COMMENTS (FOR ODOT USE ONLY)

At the time of lane and/or complete roadway closure and again when the lane and/or complete roadway is opened on a state highway the Applicant or their Contractor is required to notify ODOT Traffic Management Operations Center (TMOC) 503-283-5859. If during the course of their permitted work the Applicant or their Contractor come across personal property in their work zone they need to contact their permit specialist. The personal property may not be removed by the Applicant or their Contractor. ODOT is not responsible to collect and/or dispose of sharps or biohazard material found within project limits.

IF THE PROPOSED APPLICATION WILL AFFECT THE LOCAL GOVERNMENT, THE APPLICANT SHALL ACQUIRE THE LOCAL GOVERNMENT OFFICIAL'S SIGNATURE BEFORE ACQUIRING THE DISTRICT MANAGER'S SIGNATURE.

LOCAL GOVERNMENT OFFICIAL SIGNATURE X MRice Digitally signed by MRice Date: 2023.12.21 09:55:49-08'00'		TITLE Senior Civil Engineer	DATE 12/21/23
APPLICANT SIGNATURE X MRice Digitally signed by MRice Date: 2023.12.21 09:56:16-08'00'	APPLICATION DATE 12/21/23	TITLE Senior Civil Engineer	TELEPHONE NO. 971-430-0386
When this application is approved by the Department, the applicant is subject to, accepts and approves the terms and provisions contained and attached: and the terms of Oregon Administrative Rules, Chapter 734, Division 55, which is by this reference made a part of this permit.		DISTRICT MANAGER OR REPRESENTATIVE x Zach Candeaux Digitally signed by Zach Candeaux Date: 2024.01.23 15:29:05 -08'00'	APPROVAL DATE

GENERAL PROVISIONS FOR POLELINE, PIPELINE, BURIED CABLE, AND MISCELLANEOUS PERMITS

Revised April 2022

APPLICANT: Clackamas Water Environment Services	PERMIT NO.: 2BM47995
HIGHWAY: I-205 Veterans Memorial Highway	MP: 14.20

These permit provisions are in addition to the requirements described in Oregon Administrative Rule, Chapter 734, Division 55 and may be supplemented by permit special provisions. In the event of a conflict, the Administrative Rule will apply then these provisions followed by any permit special provisions. Unless otherwise specified, all documents referenced are references to the current version, with any revisions or supplements, in place when the work is conducted.

All checked (☒) provisions apply.

WORKSITE

- ☒ 1. Access control fence must be maintained during permitted work and restored to its original or better condition after permitted work is complete.
- ☒ 2. The Applicant shall not use state highway right of way to display advertising signs or to display or sell merchandise of any kind.
- ☒ 3. The stopping and parking of vehicles upon state highway right of way for the maintenance of adjoining property or in furtherance of any business transaction or commercial establishment is prohibited.
- ☐ 4. All grass and small brush within the work area shall be rotary or flail mowed to ground level prior to the beginning of work to facilitate clean up.
- ☒ 5. Disturbed areas shall be reseeded with grass native to the area in an appropriate seeding time.
- ☒ 6. The spreading of mud or debris upon any state highway is prohibited and violation shall be cause for immediate cancellation of the permit. Clean up shall be at the Applicant's expense. The highway shall be cleaned of all dirt and debris at the end of each work day, or more frequently as directed by the District Manager or representative.
- ☒ 7. Applicant shall replace any landscape vegetation or fences that are damaged or destroyed. Any damage that is not fully restored within 30 days may be replaced by ODOT at the expense of the Applicant. A "plant establishment" shall be understood to be part of the planting work to assure satisfactory growth of planted materials. The plant establishment period will begin when the original planting has been completed and approved. The length of the establishment period will be one calendar year or as defined in the permit Special Provisions.
- ☐ 8. Applicant shall install and maintain the landscaped area as shown on the attached drawings. Plantings shall be limited to non-invasive, low-growing shrubs, grass or flowers that do not attain sufficient height to obstruct clear vision in any direction. ODOT may remove plantings without liability or loss, injury, or damage of any nature whatsoever if in the future it is determined to be in the public interest to do so.

TRAFFIC

- ☒ 9. The work area shall be protected in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), and the Oregon Temporary Traffic Control Handbook as supplemented or amended by ODOT.
- ☒ 10. For work requiring traffic control devices to be in place continuously for longer than three days, Applicant shall provide a site specific traffic control plan developed based on the principles of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and ODOT Standards. The traffic control plan may be reviewed by ODOT before work begins. The ODOT review does not relieve the Applicant of responsibility for the accuracy of the traffic control plan.
- ☒ 11. For permitted utility work, the Applicant shall take measures necessary to maintain the accessibility of the state highway including sidewalks and pedestrian areas by individuals with disabilities to the ODOT

Americans with Disability Act (ADA) standard during the course of the work by following the Oregon Temporary Traffic Control Handbook, Section 1.6.

- ☒ 12. When constructing a new utility service line, Applicant shall ensure that advance notice of any temporary pedestrian route is provided in an accessible format to the public, people with disabilities, and disability organizations to the greatest extent possible. The Notice is to be sent to the organizations on the contact list of Centers for Independent Living at https://www.oregon.gov/odot/Engineering/DOCS_ADA/AOCIL-Contacts.pdf
- ☒ 13. All damaged or removed highway signs shall be replaced by the Applicant. Installation shall be according to MUTCD and ODOT standards, and shall be completed as soon as possible but no later than the end of the work shift.
- ☐ 14. No lane restrictions are permitted on the roadway during the hours of darkness, on weekends, or between 6:00 AM and 9:00 AM, or 3:00 PM and 6:00 PM (Monday through Friday) without prior approval by ODOT.
- ☒ 15. Hours of work shall be No time restriction for work out of roadway.

DRAINAGE

- ☐ 16. On-site storm drainage shall be controlled within the permitted property. No blind connections to existing state facilities are allowed.
- ☐ 17. Excavation shall not be done on ditch slopes. Trench excavation shall either be at ditch bottom or outside ditch area. (Minimum depth at bottom of ditch shall be 36 inches; minimum depth outside of ditch shall be 42 inches).
- ☒ 18. Only earth or rock shall be used as fill material and shall slope so as not to change or adversely affect existing drainage. Fine grade and seed the finished fill with native grasses to prevent erosion.
- ☐ 19. A storm drainage study stamped by an Oregon Registered Professional Engineer (PE) is required. The study must meet standards of the National Pollution Discharge Elimination Systems (NPDES) when any of the following conditions apply:
- whenever a four inch pipe is inadequate to serve the developed area,
 - development site is one acre or larger in size and directly or indirectly affects state facilities, or
 - as directed by the District Manager or representative.
- ☒ 20. Applicant shall provide on-site retention for storm water runoff that exceeds that of the undeveloped site.
- ☒ 21. All water discharged to an ODOT drainage system must be treated prior to discharge. All requests for connection to an ODOT storm system must meet any requirements of the National Pollutant Discharge Elimination System (NPDES). This may include local jurisdiction approval of on-site water quality treatment facilities and/or development of an operation and maintenance plan for any on-site water quality treatment facility, as determined by local jurisdiction.

EXCAVATION / CONSTRUCTION

- ☒ 22. "Oregon Standard Specifications for Construction" and ODOT "Standard Drawings" where applicable and not otherwise superseded by the permit, shall be incorporated for use in the permit; <https://www.oregon.gov/odot/engineering/pages/index.aspx>. These documents apply only to the extent they provide standards and performance requirements for work to be performed under the permit. In the event of a conflict, the permit provisions will take precedent.
- ☐ 23. Trench backfill shall be according to the attached typical drawing, marked as Exhibit A.
- ☒ 24. When open cutting of the highway is allowed, all excavation in paved areas shall be backfilled and the roadway surface patched before the end of each shift.
- ☐ 25. Steel plates shall be pinned and a temporary cold patch applied to the edges. The Applicant shall be responsible for monitoring and maintenance of temporary patching and steel plating.
- ☐ 26. Compaction tests shall be required for each open cut per Oregon Standard Specifications for Construction. Compaction tests shall be conducted once for every 300 lineal feet per lift of continuous trench according to the Manual of Field Test Procedures (MFTP), published by ODOT. Percent Compaction shall be at least 95%. Results of compaction test shall be provided upon request of the District Manager or representative at Applicants' expense.

- ☐ 27. Control Density Fill (CDF) shall be used as surface backfill material in place of crushed rock in open trenches that impact the travel portions of the highway. A ¾"-0, or 1"-0 rock will be used for the aggregate. The amount of cement used shall not exceed 3.0% of the total mixture's weight. Maximum compressed strengths must not exceed 250 pounds per square inch (psi).
- ☐ 28. Surface restoration shall be a minimum of ~~four~~ ^{Eight} inches of hot asphalt-concrete (AC), compacted in two inch lifts, or to match existing pavement depth, whichever is greater. Sand-seal all edges and joints.
- ☐ 29. Any area of cut or damaged asphalt shall be restored in accordance with the attached "T-Cut Typical Section" drawing. For a period of two years following the patching of the paved surface, Applicant shall be responsible for the condition of the pavement patches, and during that two year period shall repair to District Manager or representative's satisfaction any of the patches which become settled, cracked, broken, or otherwise faulty.
- ☐ 30. An overlay to seal an open-cut area shall be completed prior to the end of the construction season, or when minimum temperature allows per the Oregon Standard Specification for Construction. The overlay shall be 1.5 inches deep and cover the affected area from edge of pavement to edge of pavement, and taper longitudinally at a fifty feet to one inch (50':1") ratio. Taper may be adjusted by the District Manager as required. For a period of two years following this patching of the paved surface, the Applicant shall be responsible for the condition of said pavement patches, and during that time shall repair to the District Manager or representative's satisfaction any of the patches which become settled, cracked, broken or otherwise faulty.
- ☐ 31. Highway crossings of utility lines shall be bored, or jacked. Bore pits shall be located behind the ditch line unless otherwise specified in the permit. Unattended pits shall either be protected by a six-foot fence, backfilled, or steel plated and pinned.
- ☒ 32. Any non-conductive, un-locatable, underground facility shall have a tracer wire or other similar conductive marking tape or device placed the full length of the installed underground facility in compliance with the Oregon Utilities Notification Center rules, OAR Chapter 952.
- ☒ 33. Trench backfill outside of ditch line may be native soil compacted at optimum moisture in twelve inch layers to not less than 95% relative maximum density.
- ☒ 34. Native material that is unsatisfactory for compaction shall be disposed of off the work site and granular backfill used.
- ☐ 35. Trench backfill in rock slope or shoulder shall be crushed 1"-0 or ¾"-0 size rock compacted at optimum moisture in eight-inch layers. Compaction tests shall be conducted according to the Manual of Field Test Procedures (MFTP), published by ODOT. Percent compaction shall be at least 95% maximum density. At the request of the District Manager or representative, results of compaction tests shall be provided to District Manager or representative at Applicant's expense.
- ☒ 36. Where excavation is on fill slope steeper than a two to one (2:1) ratio, slope protection shall be provided using four-inch size rock laid evenly to a minimum depth of twelve inches.
- ☒ 37. No more than 300 feet of trench longitudinally along the highway shall be left open at any one time and no trench shall be left in an open condition overnight.
- ☐ 38. Areas of disturbed cut and fill slopes shall be restored to a condition suitable to the District Manager or representative. Areas of erosion to be inlaid with an acceptable riprap material.
- ☒ 39. All underground utilities shall be installed with three-foot or more of horizontal clearance from existing or contract plans guardrail posts and attachments.
- ☐ 40. Any area of cut or damaged concrete shall be restored in accordance with the attached Typical Section-Pipe Section under sidewalk.
- ☒ 41. Utility markers, pedestals, and vaults shall be placed as near the highway right-of-way line as practical. In no case shall pedestals, vaults, and line markers be located within the area where highway maintenance activities regularly occur including mowing operations, or nearer the pavement edge than any official highway sign in the same general location.
- ☒ 42. No cable plowing is allowed within the lateral support of the highway asphalt (e.g. at six feet lower than the edge of the asphalt, no plowing within nine feet of the edge of the asphalt).
- ☐ 43. Review by the ODOT Bridge Engineer is required for all proposed bridge and structure attachments and for any facilities to be installed within sixteen feet of bridge foundations, supports, walls or related elements, or within the influence zone of bridge facilities.

MISCELLANEOUS

2BM47995

- ☒ 44. Applicant shall be responsible and liable for (1) investigating presence/absence of any legally protected or regulated environmental resource(s) in the action area; (2) determining any and all restrictions or requirements that relate to the proposed actions, and complying with such, including but not limited to those relating to hazardous material(s), water quality constraints, wetlands, archeological or historic resources(s) state and federal threatened or endangered species, etc., (3) complying with all federal, state, and local laws, and obtaining all required and necessary permits and approvals.
- ☒ 45. If the Applicant impacts a legally protected/regulated resource, Applicant shall be responsible for all costs associated with such impact, including, but not limited to all costs of mitigation and rehabilitation, and shall indemnify, and hold ODOT harmless for such impacts and be responsible and liable to ODOT for any associated costs or claims that ODOT may have.
- ☒ 46. Plans are reviewed by ODOT in general only and do not relieve the Applicant from completing roadway improvements in a manner satisfactory to ODOT. The District Manager or representative may require field changes. When revisions are made in the field, Applicant is responsible to provide "as built" drawings, within 60 days from completion of roadway improvements, and shall submit them to the District Office issuing the permit.
- ☒ 47. Applicant shall be responsible for locating and preserving all existing survey monumentation within the work area in accordance with ORS 209.150 and/or 209.155. If monumentation or its accessories are inadvertently or otherwise disturbed or destroyed, Applicant shall be responsible for all costs and coordination associated with its reestablishment by a professional licensed surveyor.
- ☒ 48. Applicant shall be responsible to restore or replace any curbs or curb ramps damaged by the permitted activity according to ODOT's ADA Standards available at <https://www.oregon.gov/ODOT/Engineering/Pages/Accessibility.aspx>. Any review or inspection of the curbs or curb ramps conducted by ODOT does not relieve the Applicant of the responsibility to comply with any other aspect of federal, state, and local laws, rules and regulations applicable to the work allowed under the permit including but not limited to the Americans with Disabilities Act of 1990.
- ☒ 49. When constructing a minor roadway improvement, Applicant shall comply with all federal, state, and local laws, regulations, executive orders and ordinances applicable to the work under this permit, including, without limitation, the provisions of ORS 276.071. If Applicant chooses to assign their permitted responsibilities to a consultant or contractor, Applicant shall inform the consultant or contractor of the requirements of ORS 276.071.
- ☒ 50. Upon completion of the permitted minor roadway improvement, Applicant shall notify ODOT and request final inspection. If all structures and appurtenances constructed under this permit are found to be in compliance with permit provisions and state standards, ODOT will accept ownership of the permitted structures and appurtenances by written notice to the Applicant.

By this signature Applicant acknowledges that the Applicant is subject to and accepts all checked (☒) provisions (4 pages).

Applicant Representative's Signature: MRice <small>Digitally signed by MRice Date: 2024.01.18 15:55:12-08'00'</small>	Applicant Representative's Title: Sr. Civil Engineer	Date: 1/18/2024
--	--	-------------------------------

This form is to be completed and submitted to the Oregon Department of Transportation with the *Application and Permit to Occupy or Perform Operations Upon a State Highway* when ground disturbance (directional boring, cable plowing, trenching, and digging of any kind) is proposed as part of a permit application for installation of a utility line including moving or repositioning existing lines or poles.

Applicant Information		
Applicant Name Clackamas Water Environment Services		
Address 150 Beavercreek Road		
City Oregon City	State Oregon	Zip 97045
Contact Person Name Michael Rice	Phone Number 971-430-0386	Email mrice@clackamas.us
Project Location Information		
Highway Name and Route Number I-205 / 64 / East Portland Freeway		
Begin MP 14.20	End MP ---	County Clackamas

I represent that this Certification is in support of the *Application and Permit to Occupy or Perform Operations Upon a State Highway* at the above location dated 12/21/23, submitted to the Oregon Department of Transportation with this Certification.

I am an authorized representative of the Applicant and certify that the Applicant has reached out to the Tribe(s) identified by the Legislative Commission on Indian Services (LCIS) and verified the presence/absence of cultural resources based on information available from the State Historic Preservation Office (SHPO) for a utility installation proposed on state highway right of way that is expected to include ground disturbance (directional boring, cable plowing, trenching, and digging of any kind).

The Tribe(s) was given at least 14 calendar days to respond to the request for feedback on cultural resources in the proposed work area that may be known to the Tribe(s) but not in the SHPO database.

Based on this information, the necessary cultural resource protection clearances and permits have been, or will be, obtained for the proposed work. In addition, it is understood that this does not relieve the Applicant from its responsibility to protect cultural resources. If cultural resources are discovered during the project, work will be stopped and SHPO contacted according to SHPO regulations.

By signing below, I certify that the above statements are true and correct to the best of my knowledge.

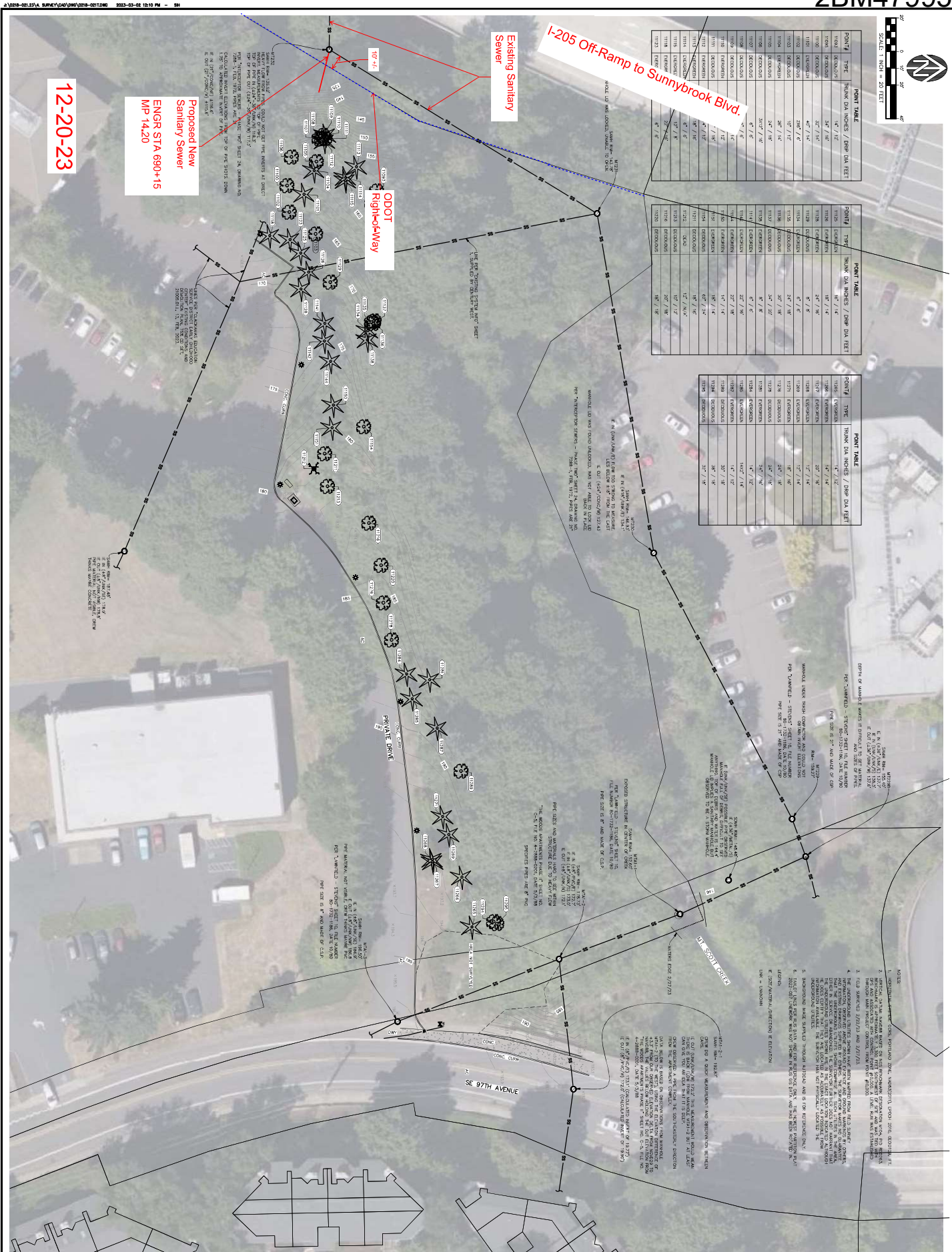
Name (Printed) Michael Rice	Signature MRice <small>Digitally signed by MRice Date: 2023.12.21 09:56:59-08'00'</small>	Date 12/21/23
--------------------------------	---	------------------

POINT#	TYPE	FROM DIA. INCHES / DEEP DIA. FEET
11505	GEOTECH	12" / 12'
11506	GEOTECH	12" / 8'
11507	GEOTECH	20" / 8'
11508	GEOTECH	12" / 16'
11509	GEOTECH	12" / 16'
11511	GEOTECH	12" / 16'
11512	GEOTECH	24" / 8'
11513	GEOTECH	24" / 8'
11514	GEOTECH	24" / 8'
11515	GEOTECH	24" / 8'
11516	GEOTECH	1602' / 16'
11517	GEOTECH	14" / 12'
11518	GEOTECH	20" / 8'
11519	GEOTECH	36" / 8'
11520	GEOTECH	36" / 8'

Existing Sanitary Sewer

Proposed New
Sanitary Sewer
ENGR STA 690+15
MP 14.20

12-20-23

[illegible]

A REPLAT OF PORTIONS OF PARCELS 1 AND 2, PARTITION PLAT NO. 1994-4, LOCATED IN THE NORTHEAST AND SOUTHEAST ONE-QUARTERS OF SECTION 4, TOWNSHIP 2 SOUTH, RANGE 2 EAST, W.M., CLACKAMAS COUNTY, OREGON

AUGUST 3, 2022

CURVE TABLE

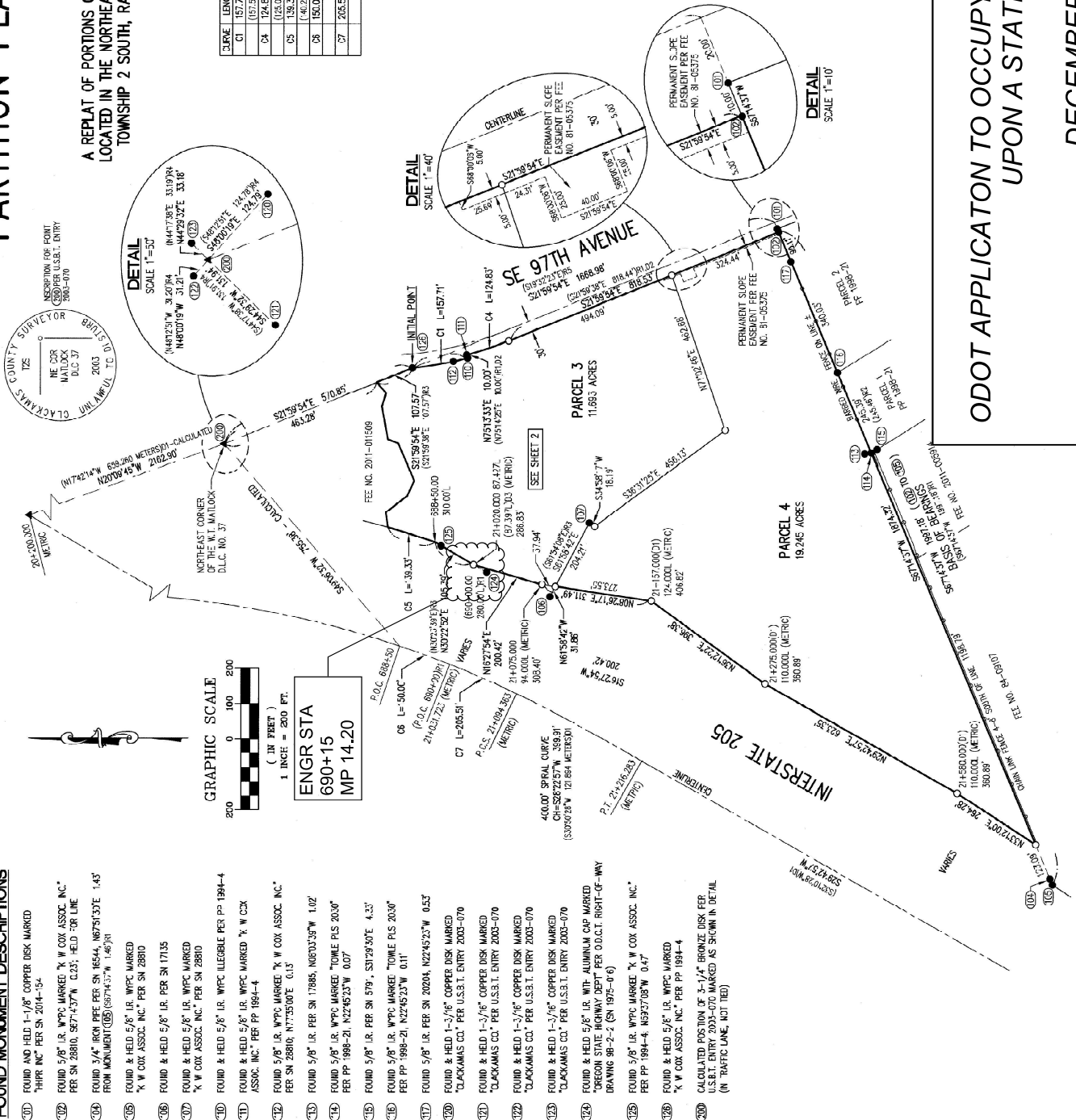
CRANE	LENGTH	34N15	BELTA	CHORD BEARING	240R0
C1	157.71	100.00 ¹	CHORD 75°	510°15'22"E	157.54
		157.57°12.30"E	0°11'12.30"E	510°14'47.0"E	(57.37)°12.02
C4	124.53	99.00 ²	0°17'13.2"	S182°30'12"E	124.74
		100.00°12.02"E	0°17'13.2"E	S182°25'34.0"E	(104.96)°12.02
C5	125.39	517.76	0°29'52.2"	N17°25'50"E	126.32
		125.39°12.30"E	0°29'52.2"E	N17°25'50"E	(148.23)°12.30
C6	150.00	268.17	0°30'00.0"	N42°06'20"E	148.33
		150.00°12.30"E	0°30'00.0"	N42°06'20"E	(148.33)°12.30
C7	205.51	984.78	4°09'13.7"	N43°39'59"E	205.45
		205.51°12.30"E	4°09'13.7"	N43°39'59"E	(205.45)°12.30

LEGEND

- | | FOUND MONUMENT AS NOTED IN DESCRIPTIONS |
|----------|--|
| ● ▲ ○ | CALCULATED POINT |
| IR. | SET 5/8" X 30" I.R. WPC MARKED "NORTHWEST SURVEY INC" ON JULY 29, 2022 |
| SN | IRON ROD |
| PP | SURVEY NO. CLACKAMAS COUNTY SURVEY RECORDS |
| WPC | PARTION PLAT NO. CLACKAMAS COUNTY PLAT RECORDS |
| C.C.D.R. | WITH FELLOW PLASTIC CAP |
| P.T. | CLACKAMAS COUNTY DEED RECORDS |
| P.C.G. | POINT "I" TANGENCY |
| P.C.S. | POINT "J" CURVATURE |
| (J01) | POINT "J" CURVE TO SPIRAL |
| (J02) | RECORD INFORMATION PER SN 22810 |
| (J03) | RECORD INFORMATION PER PP 1998-21 |
| (J04) | RECORD INFORMATION PER PP 1994-4 |
| (J05) | RECORD INFORMATION PER U.S.B.I. ENTRY 2003-070 |
| (J06) | RECORD INFORMATION PER SN 2014-154 |
| (J07) | RECORD INFORMATION PER FEE NO. 2002-091833, C.C.D.R. |
| (J08) | RECORD INFORMATION PER FEE NO. 52-18870, C.C.D.R. |
| (J09) | RECORD INFORMATION PER FEE NO. 2001-069337, C.C.D.R. |

SHEET INDEX

- SHEET 1 - PLAT BOUNDARY, MONUMENT DESCRIPTIONS
AND SOUTHERLY EASEMENT
- SHEET 2 - NORTHERLY SECTION WITH EASEMENTS, PLAT NOTES
- SHEET 3 - SURVEYOR'S CERTIFICATE, DECLARATION



ODOT APPLICATION TO OCCUPY OR PERFORM OPERATIONS
UPON A STATE HIGHWAY

DECEMBER 20, 2023

2BM47995

Offramp Bent

Connecting
Manhole

New 8" dia pipe
within ODOT
R/W



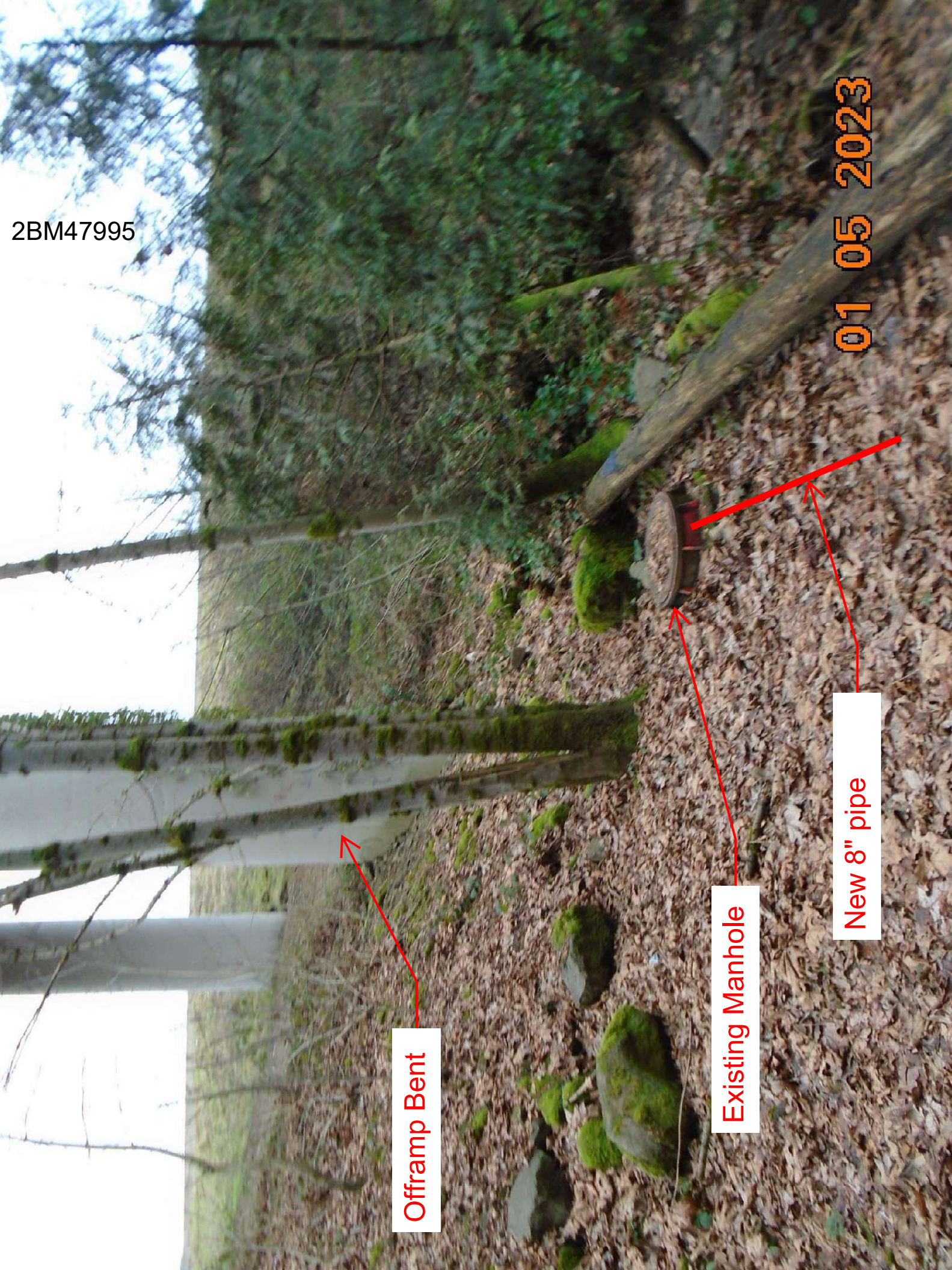
2BM47995

01 05 2023

Offramp Bent

Existing Manhole

New 8" pipe



Oregon Department of Transportation 48HR. Work Notice

District **2B** Permit Work Information

Permit #: 2BM47995

Please return this form via email to address shown at right:
Or Fax to 503.653.5655

d2bup@odot.oregon.gov (District 2B Permitting)

Applicant Name: _____

Received Info From: _____

Phone: _____

Contractor: _____

Contractor Contact: _____

Contractor Phone: _____

24-Hr Emergency#: _____

Highway Name & Route #: _____ #: _____

Mile points: _____ -- _____ (On Permit)

Direction of Travel: _____

Nature of work being done: _____

Is a Traffic Signal shut off required (Yes ☐ / No ☐)?

Signal shut off 72 hour Notice submitted? ☐ Yes ☐ No

Type of traffic control / restriction / lane closures: _____

Work Duration (Start/Finish Dates and Work Hours): Dates: Start: _____ Finish: _____

Hours: Start: _____ Finish: _____

Will Traffic impacts remain in place after work hours (i.e. steel plates, cones, etc.)?

No? ☐

Yes? ☐ If "yes" please explain: _____

NOTICE:

All sections must be completed.
Forms with incomplete or inaccurate
information will be returned for correction.
Strikethrough or "N/A" sections which do not apply.



APPLICATION AND PERMIT TO OCCUPY OR PERFORM OPERATIONS UPON A STATE HIGHWAY

See Oregon Administrative Rule, Chapter 734, Division 55

PERMIT NUMBER

T2BM48000

CLASS :

KEY#

GENERAL LOCATION				PURPOSE OF APPLICATION (TO CONSTRUCT/OPERATE/MAINTAIN)												
HIGHWAY NAME AND ROUTE NUMBER I-205 / 64 / East Portland Freeway				<input type="checkbox"/> POLE LINE	TYPE	MIN. VERT. CLEARANCE										
HIGHWAY NUMBER 064	COUNTY Clackamas			<input type="checkbox"/> BURIED CABLE	TYPE											
BETWEEN OR NEAR LANDMARKS SE Sunnybrook and SE 97th				<input type="checkbox"/> PIPE LINE	TYPE											
HWY. REFERENCE MAP ODOT TransGis	DESIGNATED FREEWAY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	IN U.S. FOREST <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		<input type="checkbox"/> NON-COMMERCIAL SIGN AS DESCRIBED BELOW												
APPLICANT NAME AND ADDRESS Clackamas Water Environment Services 150 Beaver Creek Road Oregon City, OR 97045				<input checked="" type="checkbox"/> MISCELLANEOUS OPERATIONS AND/OR FACILITIES AS DESCRIBED BELOW												
				<table border="1"> <tr> <th colspan="3">FOR ODOT USE ONLY</th> </tr> <tr> <td>BOND REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</td> <td>REFERENCE: OAR 734-055-0035(2)</td> <td>AMOUNT OF BOND</td> </tr> <tr> <td>INSURANCE REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</td> <td>REFERENCE: OAR 734-055-0035(1)</td> <td>SPECIFIED COMP. DATE 1/30/2025</td> </tr> </table>				FOR ODOT USE ONLY			BOND REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	REFERENCE: OAR 734-055-0035(2)	AMOUNT OF BOND	INSURANCE REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	REFERENCE: OAR 734-055-0035(1)	SPECIFIED COMP. DATE 1/30/2025
				FOR ODOT USE ONLY												
				BOND REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	REFERENCE: OAR 734-055-0035(2)	AMOUNT OF BOND										
INSURANCE REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	REFERENCE: OAR 734-055-0035(1)	SPECIFIED COMP. DATE 1/30/2025														

DETAIL LOCATION OF FACILITY (For more space attach additional sheets)

1/30/2026

MILE POINT	MILE TO POINT	ENGINEERS STATION	ENGINEERS TO STATION	SIDE OF HWY OR ANGLE OF CROSSING	DISTANCE FROM CENTER OF PVMT	R/W LINE	BURIED CABLE OR PIPE DEPTH/VERT.	SIZE AND KIND	SPAN LENGTH
14.22	14.29			Left					

DESCRIPTION OF DESIRED USE

Traffic control signage only for work happening on SE 97th Ave

SPECIAL PROVISIONS (FOR ODOT USE ONLY)

TRAFFIC CONTROL REQUIRED

◆ ☒ YES [OAR 734-055-0025(6)] ☐ NO

OPEN CUTTING OF PAVED OR SURFACED AREAS ALLOWED

◆ ☐ YES [OAR 734-055-0100(2)] ☒ NO [OAR 734-055-0100(1)]

- ◆ AT LEAST 48 HOURS BEFORE BEGINNING WORK, THE APPLICANT OR HIS CONTRACTOR SHALL NOTIFY THE DISTRICT REPRESENTATIVE Jim Bailey AT PHONE NO.: D2Bup@odot.oregon.gov OR EMAIL OR FAX THIS PAGE TO THE DISTRICT OFFICE AT: D2Bup@odot.oregon.gov. SPECIFY TIME AND DATE WORK IS TO OCCUR.
 - ◆ A COPY OF THIS PERMIT AND ALL ATTACHMENTS SHALL BE AVAILABLE AT THE WORK AREA DURING CONSTRUCTION.
 - ◆ ATTENTION: Oregon Law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952-001-0001 through OAR 952-001-0090. You may obtain copies of the rules by calling the center at (503) 232-1987.
- CALL BEFORE YOU DIG 1-800-332-2344**

COMMENTS (FOR ODOT USE ONLY)

At the time of lane and/or complete roadway closure and again when the lane and/or complete roadway is opened on a state highway the Applicant or their Contractor is required to notify ODOT Traffic Management Operations Center (TMOC) 503-283-5859. If during the course of their permitted work the Applicant or their Contractor come across personal property in their work zone they need to contact their permit specialist. The personal property may not be removed by the Applicant or their Contractor. ODOT is not responsible to collect and/or dispose of sharps or biohazard material found within project limits.

IF THE PROPOSED APPLICATION WILL AFFECT THE LOCAL GOVERNMENT, THE APPLICANT SHALL ACQUIRE THE LOCAL GOVERNMENT OFFICIAL'S SIGNATURE BEFORE ACQUIRING THE DISTRICT MANAGER'S SIGNATURE.

LOCAL GOVERNMENT OFFICIAL SIGNATURE X MRice Digitally signed by MRice Date: 2024.01.23 09:47:36-08'00'		TITLE Sr. Civil Engineer	DATE 1/23/2024
APPLICANT SIGNATURE X MRice Digitally signed by MRice Date: 2024.01.23 09:48:14-08'00'	APPLICATION DATE 1/23/2024	TITLE Sr. Civil Engineer	TELEPHONE NO. 9714300386
When this application is approved by the Department, the applicant is subject to, accepts and approves the terms and provisions contained and attached: and the terms of Oregon Administrative Rules, Chapter 734, Division 55, which is by this reference made a part of this permit.		DISTRICT MANAGER OR REPRESENTATIVE X	APPROVAL DATE January 25, 2024

GENERAL PROVISIONS FOR POLELINE, PIPELINE, BURIED CABLE, AND MISCELLANEOUS PERMITS

Revised April 2022

APPLICANT: Clackamas County W.E.S.	PERMIT NO.: T2BM48000
HIGHWAY: I-205 (64)	MP: 14.22-14.29

These permit provisions are in addition to the requirements described in Oregon Administrative Rule, Chapter 734, Division 55 and may be supplemented by permit special provisions. In the event of a conflict, the Administrative Rule will apply then these provisions followed by any permit special provisions. Unless otherwise specified, all documents referenced are references to the current version, with any revisions or supplements, in place when the work is conducted.

All checked (☒) provisions apply.

WORKSITE

- ☒ 1. Access control fence must be maintained during permitted work and restored to its original or better condition after permitted work is complete.
- ☒ 2. The Applicant shall not use state highway right of way to display advertising signs or to display or sell merchandise of any kind.
- ☒ 3. The stopping and parking of vehicles upon state highway right of way for the maintenance of adjoining property or in furtherance of any business transaction or commercial establishment is prohibited.
- ☐ 4. All grass and small brush within the work area shall be rotary or flail mowed to ground level prior to the beginning of work to facilitate clean up.
- ☒ 5. Disturbed areas shall be reseeded with grass native to the area in an appropriate seeding time.
- ☒ 6. The spreading of mud or debris upon any state highway is prohibited and violation shall be cause for immediate cancellation of the permit. Clean up shall be at the Applicant's expense. The highway shall be cleaned of all dirt and debris at the end of each work day, or more frequently as directed by the District Manager or representative.
- ☒ 7. Applicant shall replace any landscape vegetation or fences that are damaged or destroyed. Any damage that is not fully restored within 30 days may be replaced by ODOT at the expense of the Applicant. A "plant establishment" shall be understood to be part of the planting work to assure satisfactory growth of planted materials. The plant establishment period will begin when the original planting has been completed and approved. The length of the establishment period will be one calendar year or as defined in the permit Special Provisions.
- ☐ 8. Applicant shall install and maintain the landscaped area as shown on the attached drawings. Plantings shall be limited to non-invasive, low-growing shrubs, grass or flowers that do not attain sufficient height to obstruct clear vision in any direction. ODOT may remove plantings without liability or loss, injury, or damage of any nature whatsoever if in the future it is determined to be in the public interest to do so.

TRAFFIC

- ☒ 9. The work area shall be protected in accordance with the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), and the Oregon Temporary Traffic Control Handbook as supplemented or amended by ODOT.
- ☒ 10. For work requiring traffic control devices to be in place continuously for longer than three days, Applicant shall provide a site specific traffic control plan developed based on the principles of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and ODOT Standards. The traffic control plan may be reviewed by ODOT before work begins. The ODOT review does not relieve the Applicant of responsibility for the accuracy of the traffic control plan.
- ☒ 11. For permitted utility work, the Applicant shall take measures necessary to maintain the accessibility of the state highway including sidewalks and pedestrian areas by individuals with disabilities to the ODOT

Americans with Disability Act (ADA) standard during the course of the work by following the Oregon Temporary Traffic Control Handbook, Section 1.6.

- ☒ 12. When constructing a new utility service line, Applicant shall ensure that advance notice of any temporary pedestrian route is provided in an accessible format to the public, people with disabilities, and disability organizations to the greatest extent possible. The Notice is to be sent to the organizations on the contact list of Centers for Independent Living at https://www.oregon.gov/odot/Engineering/DOCS_ADA/AOCIL-Contacts.pdf
- ☒ 13. All damaged or removed highway signs shall be replaced by the Applicant. Installation shall be according to MUTCD and ODOT standards, and shall be completed as soon as possible but no later than the end of the work shift.
- ☐ 14. No lane restrictions are permitted on the roadway during the hours of darkness, on weekends, or between 6:00 AM and 9:00 AM, or 3:00 PM and 6:00 PM (Monday through Friday) without prior approval by ODOT.
- ☒ 15. Hours of work shall be 9:00am to 3:00pm Traffic control only!ODOT may change to night hours if the work adversely effects traffic flow.

DRAINAGE

- ☐ 16. On-site storm drainage shall be controlled within the permitted property. No blind connections to existing state facilities are allowed.
- ☐ 17. Excavation shall not be done on ditch slopes. Trench excavation shall either be at ditch bottom or outside ditch area. (Minimum depth at bottom of ditch shall be 36 inches; minimum depth outside of ditch shall be 42 inches).
- ☐ 18. Only earth or rock shall be used as fill material and shall slope so as not to change or adversely affect existing drainage. Fine grade and seed the finished fill with native grasses to prevent erosion.
- ☐ 19. A storm drainage study stamped by an Oregon Registered Professional Engineer (PE) is required. The study must meet standards of the National Pollution Discharge Elimination Systems (NPDES) when any of the following conditions apply:
 - whenever a four inch pipe is inadequate to serve the developed area,
 - development site is one acre or larger in size and directly or indirectly affects state facilities, or
 - as directed by the District Manager or representative.
- ☐ 20. Applicant shall provide on-site retention for storm water runoff that exceeds that of the undeveloped site.
- ☒ 21. All water discharged to an ODOT drainage system must be treated prior to discharge. All requests for connection to an ODOT storm system must meet any requirements of the National Pollutant Discharge Elimination System (NPDES). This may include local jurisdiction approval of on-site water quality treatment facilities and/or development of an operation and maintenance plan for any on-site water quality treatment facility, as determined by local jurisdiction.

EXCAVATION / CONSTRUCTION

- ☒ 22. "Oregon Standard Specifications for Construction" and ODOT "Standard Drawings" where applicable and not otherwise superseded by the permit, shall be incorporated for use in the permit; <https://www.oregon.gov/odot/engineering/pages/index.aspx>. These documents apply only to the extent they provide standards and performance requirements for work to be performed under the permit. In the event of a conflict, the permit provisions will take precedent.
- ☐ 23. Trench backfill shall be according to the attached typical drawing, marked as Exhibit A.
- ☐ 24. When open cutting of the highway is allowed, all excavation in paved areas shall be backfilled and the roadway surface patched before the end of each shift.
- ☐ 25. Steel plates shall be pinned and a temporary cold patch applied to the edges. The Applicant shall be responsible for monitoring and maintenance of temporary patching and steel plating.
- ☐ 26. Compaction tests shall be required for each open cut per Oregon Standard Specifications for Construction. Compaction tests shall be conducted once for every 300 lineal feet per lift of continuous trench according to the Manual of Field Test Procedures (MFTP), published by ODOT. Percent Compaction shall be at least 95%. Results of compaction test shall be provided upon request of the District Manager or representative at Applicants' expense.

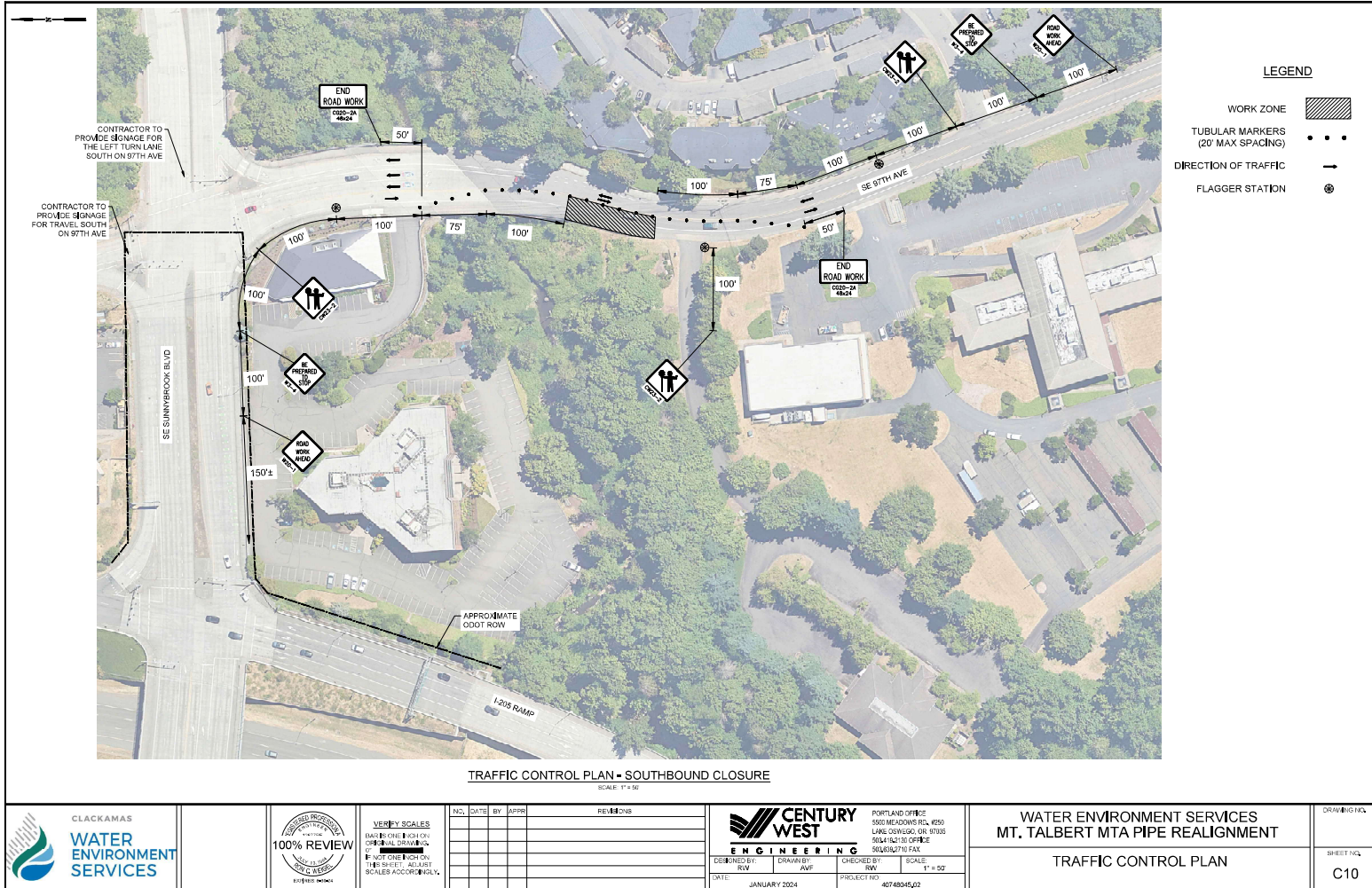
- ☐ 27. Control Density Fill (CDF) shall be used as surface backfill material in place of crushed rock in open trenches that impact the travel portions of the highway. A ¾"-0, or 1"-0 rock will be used for the aggregate. The amount of cement used shall not exceed 3.0% of the total mixture's weight. Maximum compressed strengths must not exceed 250 pounds per square inch (psi).
- ☐ 28. Surface restoration shall be a minimum of ^{Eight}~~four~~ inches of hot asphalt-concrete (AC), compacted in two inch lifts, or to match existing pavement depth, whichever is greater. Sand-seal all edges and joints.
- ☐ 29. Any area of cut or damaged asphalt shall be restored in accordance with the attached "T-Cut Typical Section" drawing. For a period of two years following the patching of the paved surface, Applicant shall be responsible for the condition of the pavement patches, and during that two year period shall repair to District Manager or representative's satisfaction any of the patches which become settled, cracked, broken, or otherwise faulty.
- ☐ 30. An overlay to seal an open-cut area shall be completed prior to the end of the construction season, or when minimum temperature allows per the Oregon Standard Specification for Construction. The overlay shall be 1.5 inches deep and cover the affected area from edge of pavement to edge of pavement, and taper longitudinally at a fifty feet to one inch (50':1") ratio. Taper may be adjusted by the District Manager as required. For a period of two years following this patching of the paved surface, the Applicant shall be responsible for the condition of said pavement patches, and during that time shall repair to the District Manager or representative's satisfaction any of the patches which become settled, cracked, broken or otherwise faulty.
- ☐ 31. Highway crossings of utility lines shall be bored, or jacked. Bore pits shall be located behind the ditch line unless otherwise specified in the permit. Unattended pits shall either be protected by a six-foot fence, backfilled, or steel plated and pinned.
- ☐ 32. Any non-conductive, un-locatable, underground facility shall have a tracer wire or other similar conductive marking tape or device placed the full length of the installed underground facility in compliance with the Oregon Utilities Notification Center rules, OAR Chapter 952.
- ☐ 33. Trench backfill outside of ditch line may be native soil compacted at optimum moisture in twelve inch layers to not less than 95% relative maximum density.
- ☐ 34. Native material that is unsatisfactory for compaction shall be disposed of off the work site and granular backfill used.
- ☐ 35. Trench backfill in rock slope or shoulder shall be crushed 1"-0 or ¾"-0 size rock compacted at optimum moisture in eight-inch layers. Compaction tests shall be conducted according to the Manual of Field Test Procedures (MFTP), published by ODOT. Percent compaction shall be at least 95% maximum density. At the request of the District Manager or representative, results of compaction tests shall be provided to District Manager or representative at Applicant's expense.
- ☐ 36. Where excavation is on fill slope steeper than a two to one (2:1) ratio, slope protection shall be provided using four-inch size rock laid evenly to a minimum depth of twelve inches.
- ☐ 37. No more than 300 feet of trench longitudinally along the highway shall be left open at any one time and no trench shall be left in an open condition overnight.
- ☐ 38. Areas of disturbed cut and fill slopes shall be restored to a condition suitable to the District Manager or representative. Areas of erosion to be inlaid with an acceptable riprap material.
- ☐ 39. All underground utilities shall be installed with three-foot or more of horizontal clearance from existing or contract plans guardrail posts and attachments.
- ☐ 40. Any area of cut or damaged concrete shall be restored in accordance with the attached Typical Section-Pipe Section under sidewalk.
- ☐ 41. Utility markers, pedestals, and vaults shall be placed as near the highway right-of-way line as practical. In no case shall pedestals, vaults, and line markers be located within the area where highway maintenance activities regularly occur including mowing operations, or nearer the pavement edge than any official highway sign in the same general location.
- ☐ 42. No cable plowing is allowed within the lateral support of the highway asphalt (e.g. at six feet lower than the edge of the asphalt, no plowing within nine feet of the edge of the asphalt).
- ☐ 43. Review by the ODOT Bridge Engineer is required for all proposed bridge and structure attachments and for any facilities to be installed within sixteen feet of bridge foundations, supports, walls or related elements, or within the influence zone of bridge facilities.

MISCELLANEOUS

- ☒ 44. Applicant shall be responsible and liable for (1) investigating presence/absence of any legally protected or regulated environmental resource(s) in the action area; (2) determining any and all restrictions or requirements that relate to the proposed actions, and complying with such, including but not limited to those relating to hazardous material(s), water quality constraints, wetlands, archeological or historic resources(s) state and federal threatened or endangered species, etc., (3) complying with all federal, state, and local laws, and obtaining all required and necessary permits and approvals.
- ☒ 45. If the Applicant impacts a legally protected/regulated resource, Applicant shall be responsible for all costs associated with such impact, including, but not limited to all costs of mitigation and rehabilitation, and shall indemnify, and hold ODOT harmless for such impacts and be responsible and liable to ODOT for any associated costs or claims that ODOT may have.
- ☒ 46. Plans are reviewed by ODOT in general only and do not relieve the Applicant from completing roadway improvements in a manner satisfactory to ODOT. The District Manager or representative may require field changes. When revisions are made in the field, Applicant is responsible to provide "as built" drawings, within 60 days from completion of roadway improvements, and shall submit them to the District Office issuing the permit.
- ☒ 47. Applicant shall be responsible for locating and preserving all existing survey monumentation within the work area in accordance with ORS 209.150 and/or 209.155. If monumentation or its accessories are inadvertently or otherwise disturbed or destroyed, Applicant shall be responsible for all costs and coordination associated with its reestablishment by a professional licensed surveyor.
- ☒ 48. Applicant shall be responsible to restore or replace any curbs or curb ramps damaged by the permitted activity according to ODOT's ADA Standards available at <https://www.oregon.gov/ODOT/Engineering/Pages/Accessibility.aspx>. Any review or inspection of the curbs or curb ramps conducted by ODOT does not relieve the Applicant of the responsibility to comply with any other aspect of federal, state, and local laws, rules and regulations applicable to the work allowed under the permit including but not limited to the Americans with Disabilities Act of 1990.
- ☒ 49. When constructing a minor roadway improvement, Applicant shall comply with all federal, state, and local laws, regulations, executive orders and ordinances applicable to the work under this permit, including, without limitation, the provisions of ORS 276.071. If Applicant chooses to assign their permitted responsibilities to a consultant or contractor, Applicant shall inform the consultant or contractor of the requirements of ORS 276.071.
- ☒ 50. Upon completion of the permitted minor roadway improvement, Applicant shall notify ODOT and request final inspection. If all structures and appurtenances constructed under this permit are found to be in compliance with permit provisions and state standards, ODOT will accept ownership of the permitted structures and appurtenances by written notice to the Applicant.

By this signature Applicant acknowledges that the Applicant is subject to and accepts all checked (☒) provisions (4 pages).

Applicant Representative's Signature:	Applicant Representative's Title:	Date:
MRice <small>Digitally signed by MRice Date: 2024.01.23 09:54:21-08'00'</small>	Sr. Civil Engineer	1/23/2024



Oregon Department of Transportation 48HR. Work Notice

District **2B** Permit Work Information

Permit #: T2BM48000

Please return this form via email to address shown at right:
Or Fax to 503.653.5655

d2bup@odot.oregon.gov (District 2B Permitting)

Applicant Name: _____

Received Info From: _____

Phone: _____

Contractor: _____

Contractor Contact: _____

Contractor Phone: _____

24-Hr Emergency#: _____

Highway Name & Route #: _____ #: _____

Mile points: _____ -- _____ (On Permit)

Direction of Travel: _____

Nature of work being done: _____

Is a Traffic Signal shut off required (Yes ☐ / No ☐)?

Signal shut off 72 hour Notice submitted? ☐ Yes ☐ No

Type of traffic control / restriction / lane closures: _____

Work Duration (Start/Finish Dates and Work Hours): Dates: Start: _____ Finish: _____

Hours: Start: _____ Finish: _____

Will Traffic impacts remain in place after work hours (i.e. steel plates, cones, etc.)?

No? ☐

Yes? ☐ If "yes" please explain: _____

NOTICE:

All sections must be completed.
Forms with incomplete or inaccurate
information will be returned for correction.
Strikethrough or "N/A" sections which do not apply.

APPENDIX B

CLACKAMAS COUNTY DTD- UTILITY PLACEMENT APPLICATION

UP191824



DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING

150 BEAVERCREEK ROAD | OREGON CITY, OR 97045

UTILITY PERMIT

Permit Number: **UP191824** Permit Issued: 12/23/2024

Record Name: CLACKAMAS EDUCATION SERVICE DISTRICT- STREET CUT FOR SANITARY Permit Expires: 06/23/2025

Permit Status: Issued

Applicant Project #:

Description: Clackamas WES will be realigning a portion of our Mt. Talbert Sanitary Sewer Interceptor. The work will include installing new sewer pipe within the limits of SE 97th Ave. and along the south side of Mt. Scott Creek within the property limits of 13455 SE 9th Ave. I am hoping to identify the traffic control plan requirements that were discussed with Erik Bertram, Nick Degliantoni, and Michael Steppes approximately a year ago.

On a separate note, this project has not finalized the selection of a contractor. WES will not be self-performing the work, but I listed that given we do not have a contractor on board yet. Will update when information is available.

Site Address: 13455 SE 97TH AVE CLACKAMAS, OR 97015

Location:

Taxlot: 22E04 00203

Road Number:

Map Page Number:

Applicant: MICHAEL RICE
150 BEAVERCREEK RD
OREGON CITY, OR 97045
9714300386
MRICE@CLACKAMAS.US

Contractor:

-

24-Hour Emergency Phone:

Inspector: Dillon Hagaman please email DHagaman@clackamas.us (preferred) or call 971-940-8731

If the primary inspector is not available please email engineering@clackamas.us (preferred) or call 503-742-4691

Size of permitted excavation: *Minimum depth is 30" (County Code chapter 7.03.170 Paragraph)*

Proposed Start: 06/02/2025

Call or fax in actual start & completion date to:

Proposed Complete:

Phone: 503-742-4691

Fax: (503) 742-4659

Conditions of this permit:

ENG101 - INSPECTIONS REQUIRED - Inspections are required and should be requested at least one (1) working day before the day an inspection is needed. Contact the County at 503-742-4691 for the inspection request.

ENG102 - SEE DRAWING - Contractor must have a copy of the permit on site. See the handout for applicable drawings for this access.

ENG105 - EXPIRATION - Work must be finished by the expiration date unless approval has been obtained from the inspector.

ENG143 - CDF BACKFILL - CDF backfill is required. All CDF slips, or copies referencing the permit number, are to be returned to Clackamas County Engineering Division within ten (10) days of completion of project.

ENG144 - CDF ALTERNATIVE - Controlled Density Fill (CDF) Alternate - (See Standard Drawing U270)

ENG145 - TRENCH PAVING - A.C REPLACEMENT - Asphalt Replacement -

1. Surface repairs to asphalt pavements shall conform to the current ODOT/APWA (Asphalt Concrete Pavement) Specifications.
2. Saw cut the pavement to a full depth at trench limits. Double saw cut to provide a twelve (12) inch 'T-cut' with a four (4) inch minimum asphalt replacement for trench repair. (See Standard Drawing U250/U260)
3. The outside saw cut must be at least three (3) feet from the edge of pavement. If less than three (3) feet, the existing outside asphalt to the edge of pavement must be removed and replaced as part of the trench pavement.
4. Minimum asphaltic concrete replacement is three (3) foot width at edge of pavement. The repair shall maintain existing road width and alignment.
5. Subsequent to asphalt removal, trench repair paving must be applied in two (2) separate lifts of two (2) inch compacted thickness for a minimum four (4) inch thickness, or the thickness that was removed; whichever is greater.
6. All undermined pavements caused by trench excavation and cave in shall be removed immediately during the construction.
7. For temperatures under 50 degrees the asphaltic concrete shall be placed in three (3) inch lifts.
8. All asphalt joints must be sealed with hot liquid asphalt, and choked with sand.
9. Any disruption in road striping must be replaced to Clackamas County Traffic Standards. Temporary reflective striping tape or reflective markers (such as stick and stomps) must be used until permanent strip can be applied.
10. Shoulders must be replaced to "as good" or "better" condition with County approved materials.
11. Bike paths and pedestrian walkways are to be repaired to the same standards as the roadway.
12. Return right-of-way to "as good" or "better" condition.

ENG146 - TRENCH PAVING - CONCRETE STREETS / SIDEWALKS - CONCRETE STREETS OR SIDEWALKS - ODOT/APWA Specification 00756.60.

1. Any cutting of concrete streets or sidewalk requires a full panel replacement.
2. An Inspector must be on site when removing concrete street panels to verify the adjacent panels are not lifted or damaged.
3. Any damage to adjacent concrete panels caused by the performance of the work permitted under this permit requires additional full panel replacements.

ENG152 - BIKE PATHS/PED WAYS & ROAD SHOULDERS - Shoulders/Bike Paths/ROW -

1. Road shoulders and right-of-way must be replaced to "as good" or "better" condition with County approved materials.
2. Bike paths and pedestrian walkways are to be repaired to the same standards as the roadway.

ENG153 - UTILITY - TRENCH PLATING - Trench Plating -

1. Trench plating and patching is required in any trench within the travel lane, and includes the bike lane and shoulder of the roadway.
2. All trench work shall be backfilled and temporarily patched with two (2) inches asphaltic concrete mix or plated and tapered with cold mix at the end of each workday.
3. Plating shall be positively secured from movement and shall be ramped with cold mix asphalt or approved temporary reusable ramps to provide for all traffic use.
4. Lighted barricades with 'CONSTRUCTION AHEAD' and 'BUMP' signs mounted on them shall be placed sufficiently both ahead and adjacent of the plating to warn all traffic. All plating signs are to remain in place until permanent surface repair paving operations are underway.

ENG154 - TRAFFIC CONTROL - Traffic Control - County Code Chapter 7.03.140

1. Provide a traffic control plan for the temporary protection and direction of traffic during the construction. Traffic Control must comply with the "Manual on Uniform Traffic Control Devices" (MUTCD).
2. Check all signs frequently for proper positioning & condition.

ENG167 - INSURANCE - Contractors performing work within any Clackamas County Right of Way shall first submit to Clackamas County DTD Engineering a certificate of liability insurance, naming Clackamas County Additionally insured. Please have the agent include the permit number for our filing records and include the additional insured endorsement.

Protection of Survey Monuments - County Code Chapter 7.03.210:

1. The County Surveyors Office has determined that there is a high probability that local survey monuments exist in or near the immediate work zone.
2. Oregon Revised Statutes 209.140 and 209.150 as well as the County Code, require the protection of all existing survey monuments.
3. These statutes require notice to the County Surveyor prior to disturbing or removing and survey monument. They also require a registered Professional Land Surveyor to reference and replace any disturbed or removed survey monument that is recorded in the County Surveyors Office.
4. The applicant shall employ all necessary means, methods, techniques and sequencing in order to preserve these monuments.
5. Failure to comply with these terms may be prosecuted as stated in ORS 209.990:

GENERAL

- The applicant is hereby authorized to work in the right of way and roadway at the location designated provided all work is performed in accordance with the Clackamas County Code, Roadway Standards, this permit, and conditions of land use approval.
- Each applicant should obtain a copy of the Clackamas County Code and Roadway Standards.
- Any fixed objects installed within County right of way must comply with Clackamas County Code and Roadway Standards.

DOCUMENTATION

Maintain a complete set of the permit, approved plans and any conditions or special provisions at the job site.

MODIFICATION OF THE PERMIT

Engineer of record should request approval for changes to the permit, plans, conditions or provisions if the scope of work changes.

NOTIFICATION

Please contact inspector listed on your permit via email or phone to request inspection type. If inspector is not available, please contact engineering at 503-742-4691 or engineering@clackamas.us.

Contact the County at least one (1) business day's notice for the following:

- a) Start of construction
- b) A break in construction greater than three (3) days (excluding holidays and weekends)
- c) Completion of construction

Be prepared to have your permit number available for entry into this automated system.

UTILITY NOTIFICATION

ATTENTION: Oregon law requires you to follow rules adopted by the Oregon Utility Notification Center. Those rules are set forth in OAR 952. (Oregon Utility Notification Center 800-332-2344 or 811 or www.digsafelyoregon.com)

Contact the affected utility companies and request line location services. Resolve any utility conflicts before initiation of construction.

SAFETY REQUIREMENTS

- The person performing the work is responsible for providing adequate safeguards in the form of barricades, pedestrian walks, night lighting, and/or other measures as the Inspector directs. The roadway or walk area shall not be unnecessarily obstructed. All material and debris shall be removed from the public right of way within a reasonable amount of time.
- Keep mud and debris off the traveled portion of the roadway.
- The person performing the work is responsible for personal or property damage resulting from the work and shall hold the County harmless from any and all legal action arising out of said work.
- The County Inspector may order the change or removal of any construction authorized by this permit at any time when the public safety, public convenience, and the general welfare of the public requires such action.

CONSTRUCTION AND MAINTENANCE RESPONSIBILITY

Failure to fulfill the construction requirements, maintain the structures as permitted to the extent that it results in damage to the county or public road, causes a hazard to the public, or where they find violations of the Clackamas County Code, Clackamas County Roadway Standards, 2008 Oregon Standard Specifications, and any special conditions or provisions established for this permit is reason for the Inspector to revoke the permit.

CONSTRUCTION

- Limit work and activity zones (construction, restoration, erosion control, etc.) to no more than 2,500 lineal feet at any one time, unless previously approved by the County.
- Limit open trenches in the right of way of an existing road to no more than 250 lineal feet at any one time, unless previously approved by the County. No trenches are to be left open overnight.

ACCESS CONTROL/MANAGEMENT OF THE RIGHT OF WAY

- Clackamas County retains its right to full supervision and control within the road right of way, and this permit is not exclusive.
- Other utilities or persons may be permitted to occupy the same portion of the road right of way simultaneously.
- The person performing or contracting the work shall not cause interference with any County road work.
- Preserve and protect all public and private infrastructure (i.e. survey monuments, drainage systems, traffic control devices, roadside barriers, utilities, etc.) ensuring that these facilities continue to properly function during the course of the work.

TRAFFIC CONTROL

- Establish and maintain work zone traffic control in compliance with the Oregon Temporary Traffic Control Handbook (OTTCH)

For Operations of Three Days or Less (December 2011).

- For traffic control set up for a continuous duration of longer than three (3) days, comply with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD) and the Oregon Supplements to the MUTCD.
- Roadway closures are prohibited unless approved by Clackamas County under separate permit and in compliance with the Roadway Standards.

SURVEY MONUMENTS

ORS 209.140 and 209.150 as well as the County Code 7.03.210 require the protection of all existing survey monuments. These Statutes also require notice to the County Surveyor prior to disturbing or removing any survey monument. This may require the employment of a registered Professional Land Surveyor. The applicant shall employ all necessary means in order to preserve these monuments. Failure to comply with these terms may be prosecuted as stated in ORS 209.990. The Clackamas County Surveyor's Office can be reached at 503-742-4475.

INTERIM RIGHT OF WAY RESTORATION

Restore and maintain road surfaces to their pre-existing grade with like materials or steel plating at the end of each work day unless otherwise approved. For bituminous road surfaces (asphaltic concrete or chip seals), interim restoration shall be with either hot mix or cold mix asphaltic concrete.

PERMANENT RIGHT OF WAY RESTORATION

Restore all existing infrastructure affected by the work to original or better condition including but not limited to the road surface, base and subgrade, pavement markings, drainage facilities, signs, safety appurtenances, bicycle and pedestrian facilities, vegetation or landscaping, and any other feature affected by the work.

ENVIRONMENTAL

Approval by Clackamas County does not imply or guarantee approval by Oregon Department of State Lands (DSL), Department of Environmental Quality (DEQ) or US Army Corps of Engineers (COE).

The applicant is responsible for all applications, fees, and coordination of Federal, State and Local regulatory offices with regard to fills and excavations within regulated waterways, riparian zones, and wetlands associated with the Clean Water Act and the Urban Stormwater National Pollutant Discharge Elimination System (NPDES), if required.

EROSION CONTROL

Install and maintain appropriate erosion and sediment control devices, in accordance with approved Erosion and Sediment Control Plan (ESCP) to ensure that all catch basins, drainage inlets, manholes, wetlands, waterways, and resource waters are sufficiently protected from erosion and sediment. Erosion and sediment control devices must be modified as changing conditions warrant. In the absence of a formal ESCP, comply with Water Environment Services standards (Erosion Prevention Planning and Design Manual), DEQ standards (DEQ Erosion and Sediment Control Manual, April 2005), and/or 1200c Permit, if applicable.

DRAINAGE

If the work performed under this permit involves or in any way interferes with the drainage of the roadway, the owner shall wholly and at their own expense make such corrections as necessary to the County's satisfaction.

BEST MANAGEMENT PRACTICES

Ensure all equipment is leak free with sufficient and appropriate spill prevention and clean up materials on site and that the personnel involved with the work are familiar with and proficient in their use. Remove construction equipment from the right of way when not in use. Do not park, re-fuel, or service equipment or store hazardous materials directly over or uphill from catch basins, drainage inlets, or manholes or within 150 feet of any wetland, waterway, or resource water. Re-fuel over a pervious surface and use absorbent pads to collect spilled fuel.

CUSTOMER SERVICE

Communicate and mutually coordinate, as needed, with adjacent residents and business that may be impacted by the work. Interaction with the public shall be in a professional, courteous, and timely manner.

This permit does not permit trespass on the lands of others.