

BIDDING DOCUMENTS

PROJECT: HUNNELL RD: LOCO RD TO TUMALO RD

PROJECT #: W66091

BID OPENING: DECEMBER 7, 2022

COMPLETION DATE: MARCH 31, 2024

CONTRACTING AGENCY:



**ROAD
DEPARTMENT**

**61150 SE 27TH STREET
BEND, OREGON 97702
PHONE: (541) 388-6581
FAX: (541) 388-2719
WEB: www.deschutescounty.gov/road**



ROAD DEPARTMENT

BIDDING DOCUMENTS

HUNNELL RD: LOCO RD TO TUMALO RD

TABLE OF CONTENTS

INVITATION TO BID.....	A1
INFORMATION FOR BIDDERS.....	A2
BID PROPOSAL FORM.....	B1
SCHEDULE OF BID ITEMS.....	B3
SUBCONTRACTOR DISCLOSURE FORM.....	B5
BID GUARANTY FORM.....	B6
CONTRACT AGREEMENT FORM (FOR INFORMATION ONLY).....	C1
PERFORMANCE BOND FORM (FOR INFORMATION ONLY).....	C3
PAYMENT BOND FORM (FOR INFORMATION ONLY).....	C5
SPECIAL PROVISIONS.....	SP1

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

PROJECT PLANS, TITLED "HUNNELL ROAD: LOCO ROAD TO TUMALO ROAD PROJECT"

OREGON STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2021

The Specification that is applicable to the Work on this Project is the 2021 edition of the "Oregon Standard Specifications for Construction". All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.

**DESCHUTES COUNTY, OREGON
ROAD DEPARTMENT
INVITATION TO BID
HUNNELL RD: LOCO RD TO TUMALO RD**

Sealed bids will be received at the Deschutes County Road Department, 61150 SE 27th Street, Bend, Oregon 97702, until but not after, **2:00 p.m. on December 7, 2022**, at which time and place all bids for the above-entitled public works project will be publicly opened and read aloud.

The Class of Work of this Project is either: A) Asphalt Concrete Paving and Oiling, or B) Earthwork and Drainage. The value for this Contract is estimated to be between \$6,000,000 and \$8,000,000. The Work will consist of, but not be limited to, the following:

- Install and maintain temporary traffic control.
- Perform earthwork and drainage.
- Construct bridge and substructure.
- Construct water supply systems.
- Construct aggregate base and shoulders.
- Construct asphalt concrete pavement.
- Install permanent signs and permanent pavement markings.
- Perform additional and incidental work as called for by the specifications and plans.

Specifications and other bid documents may be inspected and obtained from the Deschutes County Bids and RFPs website at <https://www.deschutescounty.gov/rfps>. Inquiries pertaining to these specifications shall be directed to Blaine Wruck, Transportation Engineer, in writing at Blaine.Wruck@deschutes.org or the address above.

Bids shall be made on the forms furnished by the County, including a Bid Bond or Cashiers Check for the minimum amount of 10% of the Bid Price, addressed and mailed or delivered to Chris Doty, Department Director, 61150 SE 27th Street, Bend, Oregon 97702 in a sealed envelope plainly marked "BID FOR HUNNELL RD: LOCO RD TO TUMALO RD" and the name and address of the bidder.

Bidders must submit a Subcontractor Disclosure Statement. The subcontractor disclosure statement may be submitted in the sealed bid prior to 2:00 p.m. on December 7, 2022 or in a separate sealed envelope marked "SUBCONTRACTOR DISCLOSURE STATEMENT - HUNNELL RD: LOCO RD TO TUMALO RD" prior to 4:00 p.m. on December 7, 2022 at the above location.

Because the work called for under this contract is for a public works project subject to state prevailing rates of wage under ORS 279C.800 to 279C.870, the County will not receive or consider a bid unless the bid contains a statement by the bidder that the bidder will comply with ORS 279C.840. Each bid must contain a statement as to whether the bidder is a resident bidder, as defined in ORS 279A.120. Vendors shall use recyclable and/or sustainably sourced products to the maximum extent economically feasible in the performance of the contract work set forth in this document.

Bidders shall be prequalified with the State of Oregon for the Class of Work stated above in accordance with ORS 279C.430 through 279C.450 and Deschutes County Code 12.52.020. The successful bidders and subcontractors providing labor shall maintain a qualified drug testing program for the duration of the contract. Bidders shall be licensed with the Construction Contractor's Board. Contractors and subcontractors need not be licensed under ORS 468A.720.

Deschutes County may reject any bid not in compliance with all prescribed bidding procedures and requirements, and may reject for good cause any or all bids upon a finding of Deschutes County it is in the public interest to do so. The protest period for this procurement is seven (7) calendar days.

CHRIS DOTY
Road Department Director

PUBLISHED:
DAILY JOURNAL OF COMMERCE: November 9, 2022
THE BEND BULLETIN: November 9, 2022

INFORMATION FOR BIDDERS

1. **General Description of Project.** A general description of the work to be performed is contained in the Invitation to Bid. The scope is indicated in the applicable parts of these Contract documents.
2. **Contract Documents.** The Contract documents under which it is proposed to execute the work consist of the material bound herewith. These Contract documents are intended to be mutually complementary and to provide all details reasonably required for the execution of the proposed work.

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

3. **Form of Proposals.** All proposals must be submitted on the forms furnished. Subcontractor disclosure form may be submitted with the bid or in a separate envelope.
4. **Substitutions.** Materials and/or products called for in the specifications are named in order to establish a standard of quality design. Manufacturers or suppliers of products similar to those specified may submit bids on the work providing requests for approval of substitution materials are made at least seven (7) calendar days prior to the bid opening. Adequate information on which to base approval or disapproval must be furnished to the Road Department Director or his representative and the Road Department Director shall be the sole judge of any request. When the Road Department Director approves a substitution, it is with the understanding that the Contractor guarantees the substituted article or materials to be equal or better than the specified.
5. **Preparation of Proposals.** All blank spaces in the proposal form must be filled in, in ink, or typed, in both words and figures where required. No changes shall be made in phraseology of the forms. Written amount shall govern in cases of discrepancy between the amount stated in writing and amount stated in figures.

Any proposal shall be deemed informal which contains omissions, erasures, alterations, or additions of any kind, or prices uncalled for, or which, in any manner shall fail to conform to the conditions of the published invitation to bidders.

The bidder shall sign his/her proposal in the blank space provided therefore. Proposals made by corporations or partnerships shall contain names and addresses of the principal officers or partners therein. If a corporation makes a proposal, it must be signed by one of the principal officers thereof, and the corporate seal affixed.

If made by a partnership, it must be signed by one of the partners, clearly indicating that he is signing as a partner of the firm. In the case of a proposal

made by a joint venture, each of the joint venturers must sign the proposal in his personal capacity.

The wording of the proposal shall not be changed. Any additions, conditions, limitations or provisions inserted by the bidder will render the proposal irregular and may cause its rejection.

6. **Submission of Proposals.** All proposals must be submitted in the time and place and in the manner prescribed in the invitation to bid. Proposals must be made on the prescribed proposal forms furnished. Each proposal must be submitted in a sealed envelope, so marked as to indicate its contents without being opened. If the proposal is submitted by mail, the sealed envelope containing the bid must be enclosed in a separate envelope plainly addressed for mailing to conformance with instructions in the Invitation to Bid

A responsive bid proposal must include the following completed items:

- Bid Proposal Form
- Schedule of Bid Items
- Bid Guaranty Form

7. **Modification or Withdrawal of Proposal.** Any bidder may modify his bid by written or telegraphic communication at any time prior to the scheduled closing time for receipt of bids, provided such communication is received by the County prior to the closing time, and provided further that a written confirmation of a telegraphic modification over the signature of the bidder was mailed prior to the closing time. If written confirmation of a telegraphic communication is not received within at least two calendar days of the closing time, no consideration will be given to the modification. The written or telegraphic communication should not reveal the bid price, but should state the addition or subtraction or other modification so that the County will not know the final prices or terms until the sealed bid is opened.

Proposals may be withdrawn prior to the scheduled time for the opening of the proposals either by telegraphic or written request, or in person. No proposal may be withdrawn after the time scheduled for opening of proposals, unless the County has failed to comply with the time limits applicable to award of the Contract.

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

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

For each subcontractor listed, include:

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

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

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

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

Notice – Bidder’s Requirements: Bidders are required to disclose information about certain first-tier subcontractors when the contract value estimated by the contracting Agency for a Public Improvement is greater than \$100,000 (see ORS 279C.370). Specifically, when the contract amount of a first-tier subcontractor furnishing labor or labor and materials would be greater than or equal to: (i) 5% of the project bid, but at least \$15,000, or
(ii) \$350,000 regardless of the percentage, the bidder must disclose the following information about that subcontract either in its Bid submission or within two working hours after bid closing:

(a) The subcontractor’s name, and

(b) The category of work that the subcontractor would be performing.

- 2) If the bidder will not be using any subcontractors that are subject to the above disclosure requirements, the bidder is required to indicate “NONE” on the accompanying form.
- 3) Bidder shall submit the disclosure form required by OAR 137-049-0360 either in its bid submission or separately within two working hours after Bid Closing in the manner specified by the invitation to bid.
- 4) Compliance with the disclosure and submittal requirements of ORS 279C.370 and OAR 137-049-0360 is a matter of Responsiveness. Bids which are submitted by Bid Closing, but for which the disclosure submittal has not been made by the specified deadline, are not responsive and shall not be considered for Contract award.
- 5) County shall obtain, and make available for public inspection, the disclosure forms required by ORS 279C.370 and OAR 137-049-0360. County shall also provide copies of disclosure forms to the Bureau of Labor and Industries as required by ORS 279C.835. County is not required to determine the accuracy or completeness of the information provided on disclosure forms.
- 6) Substitution of affected first-tier subcontractors shall be made only in accordance with ORS 279C.585. County shall accept written submissions filed under the statute as public records. Aside from issues involving inadvertent clerical error under ORS 279.585(5), County does not have a statutory role or duty to review, approve, or resolve disputes

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

THE COUNTY MUST REJECT A BID IF THE BIDDER FAILS TO SUBMIT THE DISCLOSURE FORM WITH THIS INFORMATION BY THE STATED DEADLINE (see OAR 137-049-0360).

9. **Bid Security.** The Bid Bond or Cashier's Check will be for a minimum of ten per cent (10%) of the amount of the bid price. If a bidder bids more than one bid proposal, each proposal must be accompanied by separate bid security. The County reserves the right to retain the bid security of the three (3) lowest bidders until the successful bidder has signed and delivered the contract and furnished one hundred percent (100%) Performance and Payment Bonds.
10. **Conditions of Work.** Each bidder must inform himself of the conditions relating to the execution of the work, and make himself thoroughly familiar with all the Contract documents. Failure to do so will not relieve the successful bidder of his obligations to enter into a Contract and complete the contemplated work in strict accordance with the Contract documents. Each bidder must inform himself on all laws and statutes, both Federal and State, relative to the regular execution of the work, the employment of labor, protection of public health, access to the work and similar requirements.
11. **Award of Contract.** The award of the contract will be made by the County on the basis of the proposal which in its sole and absolute judgment will best serve the interest of the County.

County will issue a notice of intent to award contract. Any bidder may protest the notice of intent to award contract within seven (7) calendar days of the notice of intent to award contract.

The County reserves the right to accept or reject any or all proposals, and to waive any informalities and irregularities in said proposals.

12. **Payment and Retainage.** Payment for work performed will be made by the County as specified in the Special Provisions based upon the contract unit prices on the Bid Schedule.

Upon substantial completion of the contract, Contractor may request a partial release of retainage held by the County. The maximum amount of a request for a partial release retainage shall be the Contract amount less 150 percent of the estimated cost of the Contract yet to be performed through final completion. Upon final completion, Contractor may request release of the remaining retainage. Each request for the release of retainage shall be accompanied by the Consent of the contractor's surety.

13. **Performance Bond and Payment Bond.** The successful bidder shall file with the County, at the time of execution of the contract, a Performance Bond and a Payment Bond each of not less than the contract price on the forms furnished by the County. The Surety Company furnishing the required bonds shall have a sound financial standing and a record of service satisfactory to the County, and shall be authorized to do business in the

State of Oregon. In lieu of a Performance Bond, the contractor may file cash, a Certified or Cashier's Check made payable to Deschutes County, Oregon. This money, check or certificate will be held by the County conditioned on and subject to the same provisions as set forth in the attached Performance Bond. ORS 279C.380 allows no flexibility for a cash deposit in lieu of a Payment Bond.

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

14. **Required Public Works Bond.** Before starting work on this project the Contractor and every subcontractor to which Contractor is a party for the performance of work under this contract must have a public works bond filed with the Construction Contractors Board, 700 Summer St. NE, Suite 300, Salem, Oregon 97309-5052, before starting work on the project, unless exempt under section 2 (7) or (8) of 2005 Oregon Laws Chapter 360 ORS 279C.836(7) or (8). Every subcontract to which Contractor is a party for the performance of work under this contract shall contain a provision requiring the subcontractor to have a public works bond filed with the Construction Contractors Board before starting work on this project, unless exempt under ORS 279C.836 (7) or (8) section 2 (7) or (8) of 2005 Oregon Laws Chapter 360.
15. **Failure to Execute Contract.** Upon failure by the successful bidder to enter into the Contract and furnish the necessary bond within ten (10) calendar days from the date Notice of Award is made, the bid bond accompanying the bid shall be forfeited, the proceeds paid to the County, and the award withdrawn. The award may then be made to the next lowest responsible bidder, or all bids rejected and the work is re-advertised.
16. **Disclaimer of Responsibility.** Neither the County nor the Road Department Director will be responsible for oral interpretations. Should a bidder find discrepancies in, or omissions from the drawings, specifications, or other pre-bid documents, or be in doubt as to their meaning, he shall notify the County at least seven (7) calendar working days prior to the bid opening date. Any and all such interpretations, any supplemental instructions or approval of manufacturer's materials to be substituted will be made only in the form of written addenda to the specifications, which, if issued, will be hand delivered or sent by regular mail, email and fax to all prospective bidders receiving a set of such documents, not later than two (2) calendar days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued are to be covered in the bid for such addenda to become part of the Agreement.
17. **Permits and Licenses.** The successful bidder shall be required to have or obtain, at his expense, any and all permits and licenses required by Deschutes County, any City within the County, and the State of Oregon, pertaining to the service he proposes to furnish. Licensing shall include without limitation registration with Construction Contractors Board and in the case of professional engineers and architects proof of current licensing with the appropriate State licensing board.

18. **Minimum Requirements of Bid.** The following minimum requirements as to the form and manner of submitting bids must be strictly observed; variance from these requirements will result in rejection of the bid as unresponsive.
- a. Each Bid must be submitted on forms furnished by the County, and include a complete set of contract documents.
 - b. Each Bid must be signed by the bidder.
 - c. Bid security, in the required form and amount, must accompany each bid.
 - d. Each blank in the proposal must be filled in unless an alternative is provided. Each separate bid item must be bid on, unless the proposal form clearly indicates otherwise.
 - e. Each Bid must be submitted in a separate sealed envelope, marked to identify without opening, and in the hands of the Road Department Director at the time and place specified for bid opening.
 - f. A proposal containing modifications, deletions, exceptions or reservations which in any way conflict with or purport to alter any substantive provision contained in the bid documents, will not be considered.
 - g. A conditional bid will not be considered.
 - h. Any bid submitted without all of the pages of the bid documents, but with a sufficient number of the pages of the bid documents to allow the evaluation of the bid, shall be deemed to have been submitted with the missing pages for purposes of bid evaluation. The missing pages of the bid documents shall be deemed to be incorporated into bid by reference.
19. **Plans.** Plans are not to be taken or construed as being reproduced at precisely the indicated scale. Where the plans are photographic reductions of the original tracings, the approximate amount of reduction is indicated by a note on the plans.
20. **Specifications.** The specifications are the minimum acceptable specifications for the project for which proposals are sought. Any deviation from the specifications contained herein, shall render the bid non-responsive.
21. **Examination of Site and Conditions.** Bidders are required, prior to submission of bids, to carefully examine the site and the Plans and Specifications of the contemplated work. Errors and omissions in the Plans or Specifications shall be called to the attention of the Road Department Director prior to submission of bid so that addenda may be issued. Failure to do so on the part of the Contractor does not relieve him of responsibility for a correct and completely finished job. Only a written interpretation or correction by addendum shall be binding.

22. **Pre-Bid Inquiries.** Bidders with pre-bid inquiries shall contact Cody Smith, County Engineer, in writing at blaine.wruck@deschutes.org or 61150 SE 27th Street, Bend, Oregon 97702.
23. **Prequalification of Bidders.** Bidders shall be pre-qualified with the State of Oregon in accordance with ORS 279C.430 and Deschutes County Code 12.52.020. The prequalification class is as shown in the Invitation to Bid. This contract is subject to ORS 279C.800 to 279C.870. The successful bidders and subcontractors providing labor shall maintain a qualified drug-testing program for the duration of the contract. Bidders shall be licensed with the Construction Contractor's Board. Contractors and subcontractors need not be licensed under ORS 468.710.
24. **Contract Award.** Deschutes County reserves the right to postpone award of the contract for fourteen (14) calendar days from the date of the bid opening, or until a final decision is made on a protest, whichever is later.
25. **Bidder Statement.** Submission of a bid for the project shall constitute a statement by the bidder that the provisions of ORS 279C.840 are to be complied with.

BID PROPOSAL FORM
HUNNELL RD: LOCO RD TO TUMALO RD

BIDDER NAME

CCB#

ADDRESS

CITY

STATE

ZIP CODE

CONTACT NAME

CONTACT PHONE NUMBER

CONTACT EMAIL ADDRESS

The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein; that this Proposal is, in all respects, fair and without fraud; and it is made without collusion with any official of Deschutes County, Oregon, hereinafter called County; and that the Proposal is made without any connection or collusion with any person making another proposal on this contract.

The Bidder further declares that Bidder has carefully examined the contract documents; that Bidder is satisfied as to the quantities involved, including materials and equipment, and conditions of work involved; and that this proposal is made according to the provisions and under the terms of the contract documents, which documents are hereby made a part of this Proposal.

The Bidder agrees that all of the applicable provisions of Oregon law relating to public contracts (ORS Chapter 279) are, by this reference, incorporated in and made a part of this Proposal. Bidder hereby states that Bidder will comply with ORS 279C.840.

Bidder declares that (check appropriate box):

☐ Bidder is a resident bidder of the State of Oregon.

☐ Bidder is a nonresident bidder from the State of _____.

Bidder declares that Bidder is not in violation of any tax laws of the State of Oregon and Deschutes County, including but not limited to those programs listed in ORS 305.380(4),

The Bidder further agrees that if this Proposal is accepted, Bidder will, within ten (10) calendar days after notification of acceptance, execute the contract with the County in the form of contract annexed hereto; and will, at the time of execution of the contract, deliver to the County the Performance and Payment Bonds (See Section 13 Information for Bidders) required herein; and will, to the extent of this Proposal, furnish all materials necessary to complete the work in the manner, in the time, and according to the methods as specified in the contract documents and required by the Road Department Director.

Bidder certifies that it has a drug testing program in place for its employees, or warrants that a drug testing program will be in place prior to execution of this contract, that the drug testing program is in writing, that new employees must pass a drug screening, that existing employees may be tested for reasonable cause or when an employee is injured or involved in an accident resulting in property

damage. Bidder agrees that each subcontractor providing labor under this Contract shall maintain a qualifying drug testing program for the duration of the Contract.

The Bidder agrees to commence work upon the issuance of a "Notice to Proceed" by the County and fully complete the project according to the time schedule specially set forth in the contract documents.

Bidder further agrees to pay liquidated damages for failure to complete within the specified time.

It is agreed that if the Bidder is awarded the contract for the work herein proposed and shall fail or refuse to execute the contract and furnish the contract and furnish the specified Performance and Payment Bond within ten (10) calendar days after receipt of notification of acceptance of Bidder's proposal, then, in that event, the bid security deposited herewith according to the conditions of the Invitation to Bid and Information for Bidders shall be retained by the County as liquidated damages; and it is agreed that the said sum is a fair measure of the amount of damage the County will sustain in case the Bidder shall fail or refuse to enter into the contract for the said work and to furnish the Performance and Payment Bonds (See Section 13 Information for Bidders) as specified in the contract documents. Bid security in the form of a certified check shall be subject to the same requirements as a bond.

(IF SOLE PROPRIETOR OR PARTNERSHIP)

IN WITNESS HERETO, the undersigned has set hand this _____ day of _____, 2022.

SIGNATURE OF BIDDER

TITLE

(IF CORPORATION)

IN WITNESS WHEREOF, the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers this _____ day of _____, 2022.

NAME OF CORPORATION

By: _____

Title: _____

Attest: _____

(SCHEDULE OF BID ITEMS TO FOLLOW)

ITEM NO.	SPEC SECTION	ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
<u>Part 00200 - Temporary Features and Appurtenances</u>						
001	00210	Mobilization	LS	1	\$	\$
002	00221	Temporary Work Zone Traffic Control, Complete	LS	1	\$	\$
003	00280	Erosion Control	LS	1	\$	\$
004	00280	Check Dam, Type 1	EACH	98	\$	\$
005	00280	Sediment Fence	FOOT	23000	\$	\$
<u>Part 00300 - Roadwork</u>						
006	00305	Construction Survey Work	LS	1	\$	\$
007	00310	Removal of Structures and Obstructions	LS	1	\$	\$
008	00310	Asphalt Pavement Saw Cutting	FOOT	720	\$	\$
009	00320	Clearing and Grubbing	LS	1	\$	\$
010	00330	General Excavation	CUYD	31019	\$	\$
011	00331	Subgrade Stabilization	SQYD	1500	\$	\$
012	00390	Riprap Backing	SQYD	221	\$	\$
013	00390	Loose Riprap, Class 200	CUYD	125	\$	\$
014	00390	Riprap Basins	CUYD	16	\$	\$
<u>Part 00400 - Drainage and Sewers</u>						
015	00441	Canal Crossing - Bowery	LS	1	\$	\$
016	00441	Canal Crossing - Elder	LS	1	\$	\$
017	00441	Canal Crossing - Butte	LS	1	\$	\$
018	00441	Canal Crossing - 8-Inch Private	LS	1	\$	\$
019	00441	Canal Crossing - 12-Inch Private	LS	1	\$	\$
020	00445	12-Inch Culvert Pipe, 5 Foot Depth	FOOT	83	\$	\$
021	00490	Adjusting Boxes	EACH	9	\$	\$
<u>Part 00500 - Bridges</u>						
022	00568	Canal Crossing - S.I.D. Main	LS	1	\$	\$
<u>Part 00600 - Bases</u>						
023	00641	Aggregate Base & Shoulders	TON	31580	\$	\$
<u>Part 00700 - Wearing Surfaces</u>						
024	00744	Level 3, 1/2 Inch ACP	TON	14660	\$	\$
025	00744	PG 58-34 Asphalt in Level 3, 1/2 Inch ACP	TON	807	\$	\$
026	00749	Extra for Asphalt Approaches	EACH	22	\$	\$
027	00759	Concrete Curbs, Standard Curb	FOOT	4700	\$	\$
028	00759	Concrete Islands	SQFT	3400	\$	\$
<u>Part 00800 - Permanent Traffic Safety and Guidance Devices</u>						
029	00810	Midwest Guardrail System, Type 2A	FOOT	30	\$	\$
030	00810	Midwest Guardrail System, Type 4	FOOT	10	\$	\$
031	00810	Guardrail End Pieces, Type B	EACH	1	\$	\$
032	00810	Guardrail Transition	EACH	4	\$	\$
033	00810	Guardrail Terminals, Flared	EACH	3	\$	\$
034	00855	Bi-Directional Yellow Type IAR Markers, Recessed	EACH	380	\$	\$
035	00856	Permanent Surface Mounted Tubular Markers	EACH	52	\$	\$
036	00865	Thermoplastic, Sprayed, Surface, Non-Profiled	FOOT	110893	\$	\$
037	00867	Pavement Bar, Type AB	SQFT	170	\$	\$
038	00867	Pavement Legend, Type AB: "STOP"	EACH	5	\$	\$

ITEM NO.	SPEC SECTION	ITEM	UNIT	QTY	UNIT PRICE	AMOUNT
<u>Part 00900 - Permanent Traffic Control and Illumination Systems</u>						
039	00905	Remove Existing Signs	LS	1	\$ _____	\$ _____
040	00920	Sign Support Footings	LS	1	\$ _____	\$ _____
041	00930	Perforated Steel Square Tube Slip Base Sign Supports	LS	1	\$ _____	\$ _____
042	00940	Signs, Standard Sheeting, Sheet Aluminum	SQFT	348	\$ _____	\$ _____
043	00990	Speed Feedback System	EACH	6	\$ _____	\$ _____
<u>Part 01000 - Right of Way Development and Control</u>						
044	01012	Water Quality Swale	SQYD	3233	\$ _____	\$ _____
045	01030	Permanent Seeding	ACRE	6	\$ _____	\$ _____
046	01030	Water Quality Seeding	ACRE	0.7	\$ _____	\$ _____
047	01050	Removing and Rebuilding Fence	FOOT	1406	\$ _____	\$ _____
048	01050	20 Foot Double Gates	EACH	2	\$ _____	\$ _____
049	01070	Remove and Reinstall Mailbox Supports	EACH	51	\$ _____	\$ _____
<u>Part 01100 - Water Supply Systems</u>						
050	01140	12 Inch Potable Water Pipe, Fittings & Couplings w/ Restrained Joints and Class B Backfill	FOOT	574	\$ _____	\$ _____
051	01140	4 Inch Potable Water Pipe, Fittings & Couplings w/ Restrained Joints and Class B Backfill	FOOT	1000	\$ _____	\$ _____
052	01150	12 Inch Gate Valve	EACH	4	\$ _____	\$ _____
053	01150	4 Inch Gate Valve	EACH	2	\$ _____	\$ _____
054	01150	2 Inch Gate Valve	EACH	1	\$ _____	\$ _____
055	01150	Blowoff Assembly, 2 Inch	EACH	1	\$ _____	\$ _____
056	01150	12 Inch Combination Air Release / Air Vacuum Valve Assembly	EACH	3	\$ _____	\$ _____
057	01150	4 Inch Tapping Sleeve and 4 Inch Valve Assembly	EACH	1	\$ _____	\$ _____
058	01150	2 Inch Tapping Saddle and 2 Inch Valve Assembly	EACH	1	\$ _____	\$ _____
059	01170	2 Inch Copper Water Service Line	FOOT	110	\$ _____	\$ _____
060	01170	1 Inch Water Meter Assembly	EACH	1	\$ _____	\$ _____

TOTAL BID: _____

FOR DESCHUTES COUNTY USE ONLY

ADD _____ % FOR NON-RESIDENT BIDDER _____

FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

Project Name: HUNNELL RD: LOCO RD TO TUMALO RD

Bid #: W66091 Bid Closing Date: December 7, 2022 Time: 2:00 P.M.

Name of Bidding Contractor: _____

This form must be submitted at the location specified in the Invitation to Bid on the advertised bid closing date and within two working hours (4:00 p.m.) after the advertised bid closing time.

List below the name of each subcontractor that will be furnishing labor or materials and that is required to be disclosed, the category of work that the subcontractor will be performing and the dollar value of the subcontract. Enter "NONE" if there are no subcontractors that need to be disclosed. (ATTACH ADDITIONAL SHEETS IF NEEDED).

NAME	DOLLAR VALUE	CATEGORY OF WORK
1) _____	\$ _____	_____
2) _____	\$ _____	_____
3) _____	\$ _____	_____
4) _____	\$ _____	_____
5) _____	\$ _____	_____
6) _____	\$ _____	_____
7) _____	\$ _____	_____
8) _____	\$ _____	_____

Failure to submit this form by the disclosure deadline will result in a non-responsive bid. A non-responsive bid will not be considered for award.

Form submitted by

Bidder name: _____

Contact name: _____ Phone number: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, That _____

_____ ,

hereinafter called the Principal, and _____

_____ ,

a corporation duly organized under the laws of the State of _____ ,

having its principal place of business at _____

_____ , in the State of _____ ,

and authorized to do business in the State of Oregon, as Surety, are held and firmly bound unto the

County of Deschutes, hereinafter called the Obligee, in the penal sum of _____

_____ DOLLARS (\$ _____),

for the payment of which, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The condition of this Bond is that, whereas, the Principal is submitting a bid proposal for the HUNNELL RD: LOCO RD TO TUMALO RD project hereby made a part hereof;

NOW THEREFORE, if the said bid proposal submitted by the said principal be accepted, and the contract be awarded to said Principal, and if the said Principal shall execute the proposed contract and shall furnish the Performance and Payment Bond as required by the bidding and contract documents with the time fixed by said documents, then this obligation shall be void, otherwise to remain in full force and effect. Signed and sealed this _____ day of _____, 2022.

SURETY:

CONTRACTOR:

Name

Name

By: _____

By: _____

Title: _____

Title: _____

CONTRACT
FOR
HUNNELL RD: LOCO RD TO TUMALO RD

THIS CONTRACT is made and entered into, this _____ day of _____, 2022, by and between DESCHUTES COUNTY, a political subdivision of the State of Oregon, by and through its Board of County Commissioners, hereinafter called "County", and _____, an Oregon corporation, hereinafter called "Contractor."

WITNESSTH:

THAT the said Contractor, in consideration of the sums to be paid by the County in the manner and at the time herein provided, and in consideration of the other covenants and agreements herein contained, hereby agrees to perform and complete the work herein described and provided for and to furnish all necessary machinery, tools, apparatus, equipment, supplies, materials and labor and do all things in accordance with the applicable Plans, the applicable Standard Specifications, the Special Provisions and other required provisions bound herewith or incorporated therein, and in accordance with such alterations or modifications of the same as may be made by the County, and according to such directions as may from time to time be made or given by the Engineer under the authority and within the meaning and purpose of this Contract. This agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the Contractor.

THAT the applicable Plans, the applicable Standard Specifications, the Special Provisions and other required provisions bound herewith or incorporated therein and the Schedule of Items bound herewith are hereby specifically referred to and by this reference made a part hereof, and shall by such reference have the same force and effect as though all of the same were fully written or inserted herein.

THAT the Contractor shall faithfully complete and perform all of the obligations of this Contract, and in particular, shall promptly, as due, make payment of all just debts, dues, demands and obligations incurred in the performance of said Contract; and shall not permit any lien or claim to be filed or prosecuted against the County, its agents or employees. It is expressly understood that the laws of the State of Oregon and the Ordinances of the County shall govern this Contract in all things.

THAT in consideration of the faithful performance of all of the obligations, general and special, herein set out, and in consideration of the faithful performance of the work as set forth in the Contract Documents in accordance with the directions and to the satisfaction of the Engineer, the County agrees to pay to the said Contractor the amount earned, as determined from the actual quantities of work performed, and taking into consideration any amounts that may be deductible and under the terms of the Contract, and to make such payments in the manner and at the times provided in the applicable provisions.

(SIGNATURE PAGE TO FOLLOW)

IN WITNESS WHEREOF, the parties hereto have subscribed their names and affixed their respective official seals as of the date first above written

CONTRACTOR

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

BY: _____

PATTI ADAIR, CHAIR

TITLE: _____

ANTHONY DeBONE, VICE CHAIR

DATE: _____

PHIL CHANG, COMMISSIONER

ATTEST:

RECORDING SECRETARY

APPROVED AS TO CONTENT:

ROAD DEPARTMENT DIRECTOR

APPROVED AS TO FORM:

COUNTY LEGAL COUNSEL

Bond # _____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called
(Corporation, Partnership, or Individual)

“Principal”, and _____
(Name of Surety)

hereinafter called “Surety”, are held and firmly bound unto Deschutes County, Oregon

hereinafter called “Owner”, in the penal sum of _____

_____ Dollars, \$(_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____, 2022, a copy of which is hereto attached and made a part hereof for the construction of:

HUNNELL RD: LOCO RD TO TUMALO RD

NOW THEREFORE, if Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by Owner, with or without notice to Surety and during the **two year guaranty period**, and if Principal shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless Owner from all costs and damages which is may suffer by reason of failure to do so, and shall reimburse and repay Owner all outlay and expense which Owner may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED FURTHER, that Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or the specifications.

PROVIDED, FURTHER, that no final settlement between Owner and Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in two counterparts, each one of which shall be deemed an original, this the _____ day of _____ 2022.

(SEAL)

PRINCIPAL: _____

By _____
Signature

Official Capacity

Attest: _____
Corporation Secretary

(SEAL)

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

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

Name

Signature

Address

City State Zip

Phone Fax

NOTE: Date of bond must not be prior to date of Contract.
If Contractor is Partnership, all partners should execute bond.

Bond # _____

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a _____, hereinafter called
(Corporation, Partnership, or Individual)

“Principal”, and _____
(Name of Surety)

hereinafter called “Surety”, are held and firmly bound unto Deschutes County, Oregon

hereinafter called “Owner”, in the penal sum of _____

_____ Dollars, \$(_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the _____ day of _____, 2022, a copy of which is hereto attached and made a part hereof for the construction of:

HUNNELL RD: LOCO RD TO TUMALO RD

NOW, THEREFORE, if Principal shall promptly make payment to all persons, firms, subcontractors, and corporations furnishing materials for or performing labor in the prosecution of the work provided for in such contract, and any authorized or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such work, and all insurance premiums on said work, and for all labor, performed in such work whether by subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that Surety for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between Owner and Principal shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in two counterparts, each one of which shall be deemed an original, this the _____ day of _____, 2022.

(SEAL)

PRINCIPAL: _____

By _____
Signature

Official Capacity

Attest: _____
Corporation Secretary

(SEAL)

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

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

Name

Signature

Address

City State Zip

Phone Fax

NOTE: Date of bond must not be prior to date of Contract.
If Contractor is Partnership, all partners should execute bond.

SPECIAL PROVISIONS

PROJECT: HUNNELL RD: LOCO RD TO TUMALO RD

PROJECT #: W66091

CONTRACTING AGENCY:

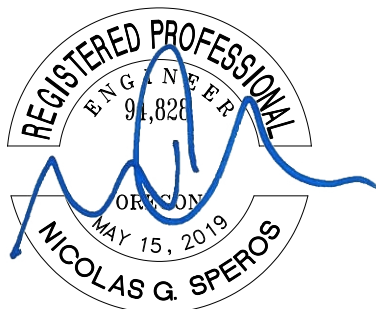


**ROAD
DEPARTMENT**

**61150 SE 27TH STREET
BEND, OREGON 97702
PHONE: (541) 388-6581
FAX: (541) 388-2719
WEB: www.deschutescounty.gov/road**

PROFESSIONAL OF RECORD CERTIFICATION:

Seal w/signature




EXPIRES: 06/30/24

Date Signed: 11-02-22

I certify the Special Provision Section(s) listed below are applicable to the design for the subject project. Modified Special Provisions were prepared by me or under my supervision.

Sections 00210, 00280, 00290, 00305, 00310, 00320, 00330, 00335, 00340, 00350, 00390, 00405, 00440, 00441, 00445, 00490, 00510, 00568, 00587, 00641, 00730, 00744, 00749, 00759, 00810, 01012, 01030, 01050, 01070, 01140, 01150, 01170, 02001, 02030, 02050, 02320, 02510

PROFESSIONAL OF RECORD CERTIFICATION:

<p>Seal w/signature</p>  <p>EXPIRES: 12/31/22</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections <u>00220, 00221, 00222, 00223, 00224, 00225, 00850, 00855, 00856, 00865, 00867, 00920, 00930, 00940, 00960, 00962, 00990, 02560, 02910</u></p>
<p>Date Signed: _____</p>	

SPECIAL PROVISIONS

WORK TO BE DONE

The work to be done under this contract consists of the following on the HUNNELL RD: LOCO RD TO TUMALO RD project:

1. Install and maintain temporary traffic control.
2. Perform earthwork and drainage.
3. Construct bridge and substructure.
4. Construct water supply systems.
5. Construct aggregate base and shoulders.
6. Construct asphalt concrete pavement.
7. Install permanent signs and permanent pavement markings.
8. Perform additional and incidental work as called for by the specifications and plans.

APPLICABLE SPECIFICATIONS

The Specification that is applicable to the Work on this Project is the 2021 edition of the "Oregon Standard Specifications for Construction."

All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications and Supplemental Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.

Copies of the Oregon Standard Specifications may be purchased or viewed online at

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

Additional Technical Specifications that are applicable to the Work which are not part of the Oregon Standard Specifications are incorporated herein by reference. The Technical Specifications include:

- Swalley Irrigation District Development Handbook – Available online at <https://www.swalley.com/development-handbook-policy-fee-schedules>
- Avion Water Company Construction Specifications – Available online at <https://avionwater.com/construction.html>

APPLICABLE RULES

The rules applicable to this contract are the Attorney General's Model Public Contract Rules, Chapter 137-046 and Chapter 137-049, as presently constituted and Deschutes County Code (DCC) Chapter 2.37. The provisions of DCC Chapter 2.37.150 are incorporated herein by reference. These provisions may be viewed at the following web address:

<http://www.co.deschutes.or.us/administration/page/deschutes-county-code>

CONTRACT TIME

The Contractor shall complete all Work to be done under the Contract not later than March 31, 2024.

CLASS OF WORK

The Class of Work for this Project is either: A) Asphalt Concrete Paving and Oiling, or B) Earthwork and Drainage.

SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS AND DEFINITIONS

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

00110.20 Definitions - Replace the definitions of the words and phrases list below with the following definitions :

Agency – County of Deschutes

Bid Booklet - The version that can be accessed and printed from the Deschutes County Bids and RFPs website, which contains the information identified in 00120.10.

Engineer - The Road Department Director of Deschutes County acting either directly or through his authorized representatives.

SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES

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

00120.00 Prequalification of Bidders – Replace the last paragraph with the following:

Deschutes County Road Department will regularly evaluate the performance of Contractors on its projects for purposes of responding to reference checks, future prequalification and determinations of responsibility.

00120.01 General Bidding Requirements - Replace this subsection with the following:

Bidders shall submit bids by paper.

The standard prequalification forms furnished by the ODOT Procurement Office shall be used by the bidder to file authorized signatures with Deschutes County Road Department. Signatures are of personnel authorized to submit Bids, modify Bids, or withdraw Bids.

00120.05 Request for Solicitation Documents – Replace this subsection with the following:

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

<https://www.deschutescounty.gov/rfps>

Each request shall include both the name of the person ordering or obtaining the Solicitation Documents, and the name of the Entity intending to use them. The Agency will add the name of the Entity intending to use the Solicitation Documents to the list of Holders of Bidding Plans. Bidders are cautioned that only Solicitation Documents obtained properly from the Deschutes County website may be used to submit Bids.

Only paper Bids will be accepted.

Copies of the Oregon Standard Specifications may be purchased or viewed online at

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

The Plans, which are applicable to the Work to be performed under the Contract, bear title and date as follows:

HUNNELL ROAD: LOCO ROAD TO TUMALO ROAD PROJECT
OCTOBER, 2022

00120.10 Bid Booklet – Replace this subsection with the following:

The Bidding Documents Booklet may include, but is not limited to:

- Cover Page
- Index
- Invitation to Bid
- Information for Bidders
- Bid Proposal Form
- Schedule of Bid Items
- Subcontractor Disclosure Form
- Bid Guaranty Form
- Contract Form (for review only)
- Payment and Performance Bond Forms (for review only)

Depending on the Class of Project, other certificates or statements may be bound within the Bidding Documents Booklet. Plans, specifications, and other documents referred to in the Bidding Documents Booklet will be considered part of the Bid.

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

The Agency reserves the right to issue Addenda making changes or corrections to the Plans, Specifications, or quantities. The Agency will provide Addenda only by publishing them on the Agency's web site at:

<https://www.deschutescounty.gov/rfps>

00120.40(a) (2) Electronic Bids – Delete this subsection.

00120.40(c) (2) Electronic Bid Schedule Entries – Delete this subsection.

00120.40 (d) Bidder's Address and Signature Pages – Replace this subsection with the following:

Bidders shall include in the Bid the address to which all communication concerning the Bid and Contract should be sent. The Bid shall be signed by a duly authorized representative of the Bidder.

00120.40(e) (2) Bid Guaranty with Electronic Bids – Delete this subsection.

00120.40(f) Disclosure of First-Tier Subcontractors – Under the paragraph “The Subcontractor Disclosure Form may be submitted for a paper Bid either,” replace the second bulleted item with the following:

- By removing it from the paper Bid Booklet, filling it out and submitting it separately to the Deschutes County Public Works Engineering and Construction Division at the address given in the Bid Booklet.

Delete the third bulleted item.

Delete the paragraph which begins “The Subcontractor Disclosure Form may be submitted for an electronic Bid either:”

Replace the paragraph that begins “Subcontractor Disclosure forms submitted by...” with the following:

Subcontractor Disclosure Forms submitted by any method will be considered late if not received by the Agency within two working hours of the time designated for receiving Bids.

00120.45 Submittal of Bids – Replace this subsection with the following:

Bids shall be submitted in the manner and prior to the time listed in the Bidding Documents Booklet. Bids may be submitted by mail, parcel delivery service, or hand delivery. Bids submitted after the time set for receiving Bids will not be opened or considered. The Agency assumes no responsibility for the receipt and return of late Bids.

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

00120.60(a) Paper Bids – Replace all references to “ODOT Procurement Office” with “Agency.”

Delete the third bullet point.

00120.60(b) Electronic Bids – Delete this subsection.

00120.70 Rejection of Nonresponsive Bids – Add the following bullet to the end of the bullet list:

- The Agency determines that any Pay Item is significantly unbalanced to the potential detriment of the Agency.

00120.95 Opportunity for Cooperative Arrangement – Delete this subsection.

SECTION 00130 – AWARD AND EXECUTION

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

00130.10 Award of Contract – Replace the paragraph that begins “The Agency will provide Notice of Intent...” with the following:

The Agency will provide Notice of Intent to Award on the Agency’s website:

<https://www.deschutescounty.gov/rfps>

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

00130.15 Right to Protest Award – Replace this subsection with the following:

Adversely affected or aggrieved Bidders, limited to the three apparent lowest Bidders and any other Bidder directly in line for Contract Award, may submit to the Board of County Commissioners of Deschutes County a written protest of the Agency’s intent to Award within five working days following the Bid Opening. The protest shall specify the grounds upon which it is based.

The Agency is not obligated to consider late protests.

00130.50 Execution of Contract and Bonds:

(a) By the Bidder – In the sentence that begins “The successful Bidder...” replace “ODOT Procurement Office – Construction” with “Agency” and replace “15 Calendar Days” with “the requested amount of time”.

(b) By the Agency – In the sentence that begins “Within 7 Calendar Days...” replace “7” with “21 (twenty-one)”.

SECTION 00140 – SCOPE OF WORK

Comply with Section 00140 of the Standard Specifications.

SECTION 00150 - CONTROL OF WORK

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

00150.05 Cooperative Arrangements – Replace this subsection, except for the subsection number and title, with the following:

Agency is not, by virtue of this Contract, a partner or joint venturer with Contractor in connection with activities carried out under this Contract, and shall have no obligation with respect to Contractor's debts or any other liabilities of each and every nature.

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

The Engineer will perform the Agency responsibilities described in the Construction Surveying Manual for Contractors, Chapter 1.5 (see Section 00305).

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

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

The Contractor shall perform slope staking including intersections and set stakes defining limits for clearing which approximate Right-of-Way and easements.

00150.50(c) Contractor Responsibilities – Replace the bullet that begins "Protect from damage or disturbance any Utility that remains..." with the following bullet:

- Protect from damage or disturbance any Utility that remains within the area in which Work is being performed. Maintain and re-establish location marks according to OAR 952-001-0090(3)(a). Coordinate re-establishment of the location marks with the associated Utility;

Replace the bullet that begins "Determine the exact location before excavating within ..." with the following bullet:

- Determine the exact location before excavating within the tolerance zone according to OAR 952-001-0090(3)(c);

Replace the bullet that begins "In addition to the notification required in OAR 952-001-0090(5), notify the Engineer..." with the following bullet:

- In addition to the notification required in OAR 952-001-0090(6), notify the Engineer and the Utility as soon as the Contractor discovers any previously unknown Utility conflicts or issues. Contrary to the OAR, stop excavating until directed by the Engineer and allow the Utility a minimum of two weeks to relocate or resolve the previously unknown Utility issues; and

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

- Hold a Utility scheduling meeting and monthly Utility coordination meetings (see also 00180.42)

00150.50(g) Utility Information (Anticipated Relocations):

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

Subsection	Utility	Contact Person's Name, Address, Email, and Phone Number	Estimated Completion Date
------------	---------	---	---------------------------

00150.50(g)(1)	Pacific Power	Brooke Berry Brooke.Berry@pacificorp.com 760-504-5996	Relocations to be completed prior to February 28, 2023.
00150.50(g)(2)	Swalley Irrigation District (SID)	Jer Camarata 64672 Cook Ave, Suite #1 Bend, OR 97703 jer@swalley.com 541-388-0658	Work to be completed as part of this Contract.
00150.50(g)(3)	Lumen	Gordon Bates, PE gbates@terratechllc.net 541-410-4936	Relocations to be completed prior to February 28, 2023
00150.50(g)(4)	Avion Water Company, Inc.	Adam Jackson 60813 Parrell Road Bend, OR 97702 Adam@avionwater.com 541-382-5342	Avion work to be completed prior to February 28, 2023 with exception of work included in Contract plans.
00150.50(g)(5)	Bend Broadband / TDS Telecom	Jack Bowles Jack.bowles@tdstelecom.com 541-693-5983	Relocations to be completed prior to February 28, 2023

The Contractor shall contact the Engineer to view the approved Utility Relocation Plans.

(1) Pacific Power – “Power Supplier”:

The Contractor shall notify the Power Supplier in writing, with a copy to the Engineer, 21 Calendar Days before the Contractor is scheduled to begin performing work.

(2) Swalley Irrigation District – “Irrigation District”:

The Contract Work includes constructing irrigation facilities within the Project limits as shown in the Contract Plans. The Contractor shall notify the Irrigation District in writing, with a copy to the Engineer, 21 Calendar Days before the Contractor is scheduled to begin performing work on or adjacent to irrigation facilities.

The Irrigation District will be releasing winter stock-run flows during the following dates:

- January 23-26, 2023
- February 21-24, 2023
- March 27-31, 2023

These are tentative dates and may be rescheduled and/or canceled by the Irrigation District due to inclement weather, low flows in the Deschutes River, or unforeseen events.

The Contractor shall suspend all irrigation facility work during stock-runs and shall provide for stock-run conveyance through the Project site. The Contractor shall not restrict the flow of water or contaminate the water of the Irrigation District. All irrigation facility work shall be completed between November 1 and March 15, with coordinated shut-down dates according to winter stock-run flow schedules.

(3) Lumen – “Telecommunication Utility”:

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 21 Calendar Days before the Contractor is scheduled to begin performing work.

(4) Avion Water Company – “Water Utility”:

The Contract work includes relocation of Avion Water Company facilities within the Project limits as shown in the Contract Plans. The Contractor shall notify the Water Utility in writing, with a copy to the Engineer, 21 Calendar Days before the Contractor is scheduled to begin performing work.

(5) Bend Broadband / TDS Telecom – “Telecommunication Utility”:

The Contractor shall notify the Telecommunication Utility in writing, with a copy to the Engineer, 21 Calendar Days before the Contractor is scheduled to begin performing work.

SECTION 00160 – SOURCE OF MATERIALS

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

00160.30 Agency-Furnished Materials – Add the following paragraph:

No Agency materials are being offered for use on this project. Contractor shall provide all required materials.

00160.40 Agency-Furnished Sources– Add the following paragraph:

No Agency sources are being offered for use on this project. Contractor shall provide all required materials.

SECTION 00165 - QUALITY OF MATERIALS

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

00165.03 Testing by Agency – Delete this subsection.

00165.04 Costs of Testing – Delete this subsection.

00165.50(b)(1) Specification Materials – Delete the second sentence.

00165.10(a) Field-Tested Materials – Add the following sentence to the end of this subsection:

This is a Type D project.

SECTION 00170 – LEGAL RELATIONS AND RESPONSIBILITIES

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

Add the following subsection:

00170.09 Debt Limitation - This Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provision herein which would conflict with law are deemed inoperative to that extent.

00170.65(b-1) Minimum Wage Rates – Replace the last two paragraphs in this subsection with the following:

The applicable prevailing wage rates for this project are the most recent version published by the Oregon Labor and Industries at the time the Project was initially advertised (July 1, 2022 Prevailing Wage Rate Book and October 1, 2022 Prevailing Wage Rates Amendment). The wage rates and can be found at the following website:

https://www.oregon.gov/boli/WHD/PWR/Pages/pwr_state.aspx

00170.70(a) Insurance Coverages - Add the following to the end of this subsection:

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

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

(d) Additional Insured – Replace this subsection except for the subsection number and title with the following:

The liability insurance coverages of 00170.70(a) shall include an Additional Insured Endorsement specifying the “Deschutes County, and its respective officers, agents, employees, and volunteers and the Deschutes County Board of Commissioners” as Additional Insureds, but only with respect to the Contractor's activities to be performed under the Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance. The liability coverages of 00170.70(a) that are permitted by the Agency to be obtained by an appropriate Subcontractor shall include all of the foregoing as Additional Insureds and shall also include the Contractor and its officers and employees as Additional Insureds.

Additional Insured Endorsements on the Commercial General Liability shall be written on ISO Form CG 20 10 07 04, or equivalent, with respect to liability arising out of ongoing operations and ISO Form CG 20 37 07 04, or equivalent, with respect to liability arising out of completed operations. Additional Insured Endorsements shall be submitted with the Certificate(s) of Insurance and must be acceptable to the Agency.

Add the following as Additional Insureds under the Contract:

- Deschutes County and its officers, agents, employees, and volunteers
- Deschutes County Board of Commissioners
- Harper Houf Peterson Righellis Inc.

(g) Certificate(s) of Insurance - Replace this subsection except for the subsection number and title with the following:

As evidence of the insurance coverages required by the Contract, the Contractor shall furnish Certificate(s) of Insurance to the Agency at the time(s) provided in 00130.50(a). As evidence of insurance coverages required by the Contract but permitted by the Agency under 00170.70(a) to be obtained by an appropriate Subcontractor, the Contractor shall furnish Certificate(s) of Insurance to the Agency for such coverages together with the Contractor's request under 00180.21 for approval of the subcontract with that Subcontractor. The Certificate(s) shall:

- List "Deschutes County and its officers, agents, employees, and volunteers and the Deschutes County Board of Commissioners as a Certificate holder and as an endorsed Additional Insured;
- Include all required endorsements or copies of the applicable policy language effecting coverage required by the Contract;
- Specify that all liability insurance coverages shall be primary and non-contributory with any other insurance and self-insurance, with exception of Workers' Compensation;
- Include a list of all policies that fall under the Excess/Umbrella Insurance if Excess or Umbrella Insurance is used to meet the minimum insurance requirement.

00170.72 Indemnity/Hold Harmless - Add the following paragraph and bullets to the end of this subsection:

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

- Deschutes County and its officers, agents, and employees
- Deschutes County Board of Commissioners
- Harper Houf Peterson Righellis Inc.

SECTION 00180 – PROSECUTION AND PROGRESS

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

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

Limitations	Subsection
Cooperation with Utilities	00150.50
On-Site Work	00180.40(b)
Contract Time	00180.50(h)
Right-of-Way and Access Delays	00180.65
Closed Lanes	00220.40(e)(1)
Limited Duration Road Closure	00220.40(f)
Noise Control	00290.32
Maintenance Under Traffic	00620.43
Opening Sections to Traffic	00744.51

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

00180.41 Project Work Schedules - After the paragraph that begins "One of the following Type..." add the following paragraph:

In addition to the "look ahead" Project Work schedule, a Type A schedule as detailed in the Standard Specifications is required on this Contract.

00180.42 Preconstruction Conference - Add the following to the end of this subsection:

The Contractor shall conduct a group Utilities scheduling meeting with representatives from the Utility companies involved with this Project and the Engineer before the preconstruction conference. The Contractor shall incorporate the Utilities time needs into the Contractor's schedule submitted at the preconstruction conference.

00180.50(h) Contract Time - The Contractor shall complete all Work to be done under the Contract not later than March 31, 2024.

SECTION 00190 – MEASUREMENT OF PAY QUANTITIES

Comply with Section 00190 of the Standard Specifications.

SECTION 00195 - PAYMENT

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

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

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

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

(a) Monthly Asphalt Cement Material Price (MACMP) - The Monthly Asphalt Cement Material Price (MACMP) is established by the Oregon Department of Transportation (ODOT) each month. For the actual MACMP, go to the ODOT website at:

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

The MACMP is based on selling prices of asphalt cement published by Poten & Partners, Inc. for primarily PG 64-22 paving grades in the Portland, Oregon area and typical non-modified paving grades in the Boise, Idaho area. The MACMP for a given month is the average of the weekly published prices for each area reported each Friday in that month. If any portion of the Project Site is located within the boundaries of ODOT Maintenance District 13 or 14, the MACMP will be based on the prices for the Boise, Idaho area. If no portion of the Project Site is within the boundaries of ODOT Maintenance District 13 or 14, the Contractor may elect to have the MACMP based on the prices of either the Portland, Oregon area or the Boise, Idaho area. If electing to use Boise, Idaho area prices for determination of the MACMP, the Contractor shall notify the Engineer in writing of the Contractor's election before or within 7 Calendar Days after the date of the preconstruction conference. This election, once acknowledged by the Engineer, will be binding for the entire duration of the Contract. If no such written notification is made, the Portland, Oregon area prices will be used as the basis of the MACMP. The area selected as the basis of the MACMP, once chosen, will become the sole area to be used as the basis for all asphalt cement used on the Project.

If the weekly prices cease to be available from Poten & Partners, Inc. for any reason, the Agency, in its discretion will select and begin using a substitute price source or index to establish the MACMP each month. The Agency does not guarantee that asphalt cement will be available at the MACMP.

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

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

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

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

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

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

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

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

Pay Item(s)

PG 58-34 Asphalt in Level 3, 1/2 Inch ACP

00195.12(d) Steel Materials Pay Item Selection - Add the following to this subsection:

No Pay Items under this Contract qualify for the steel escalation/de-escalation program for this Project.

00195.50(b) Retainage – Replace the first paragraph of this subsection with the following:

The amount to be retained from progress payments will be 5% of the value of Work accomplished, and will be retained in one of the forms specified in Subsection (c) below. No retainage will be withheld from Work performed as Force Account Work, escalation/de-escalation, bonuses, or other items decided by the Agency.

00195.50(c-2) Cash, Alternate B (Retainage Surety Bond) - Delete this subsection.

00195.50(c-3) Bonds and Securities – Delete this subsection.

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

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

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

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

SECTION 00196 – PAYMENT FOR EXTRA WORK

Comply with Section 00196 of the Standard Specifications.

SECTION 00197 – PAYMENT FOR FORCE ACCOUNT WORK

Comply with Section 00197 of the Standard Specifications.

SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS

Comply with Section 00199 of the Standard Specifications modified as follows:

00199.40 Claim Decision; Review; Exhaustion of Administrative Remedies – Replace the second and third paragraphs with the following:

If the Engineer denies the claim for additional compensation or a combination of additional compensation and Contract Time, in full or in part, according to 00199.40(a), the Contractor may request review of the denial. The disputed claim may then be resolved, in full or in part, at any of the three progressive steps of claim review procedure as set forth in (b) through (d) of this Subsection.

If the Engineer has denied a claim, in full or in part, for Contract Time only according to 00180.80, or has denied a claim, in full or in part, for correction of final compensation according to 00195.95, those disputed claims may then be resolved, in full or in part, at any of the three progressive steps of claim review procedure as specified in (b) through (d) of this Subsection.

Delete the fifth paragraph.

00199.40(b-e) - Replace these subsections in their entirety with the following:

00199.40(b) Step 1: Board of Commissioners Review – The Contractor shall request that the Engineer arrange for a hearing during a regularly scheduled Board of Commissioners Meeting in order to present the denied or partially denied claim for formal review and discussion. The meeting will take place within 21 Calendar Days of the Agency's receipt of the request, or as otherwise agreed by the parties.

If the Board of Commissioners determines that the Contractor must furnish additional information or documentation to allow proper analysis of the claim, the Engineer will prepare a Board meeting agenda item for a second hearing within 14 Calendar Days, or as otherwise agreed by the parties, at which the Contractor shall present the requested information or documentation.

If the Contractor does not accept the Step 1 decision, the Contractor may, within 10 Calendar Days of receipt of the written decision, request in writing through the Engineer that the claim be advanced to Step 3 or 4 (see (c) and (d) below).

00199(c) Step 2: Arbitration - At this step, the claim will be resolved by binding arbitration before a single arbitrator according to the Construction Industry Arbitration Rules of the American Arbitration Association or such other arbitration service and rules as agreed by the parties.

Arbitration filing costs and any arbitrator's fees will be divided equally between the Agency and the Contractor.

00199(d) Step 3: Litigation – This step applies to appeals of arbitration awards issued in Step 2 at 00199.40(c) above, according to ORS 36.600 through ORS 36.740.

The Contractor must follow each step in order, and exhaust all available administrative remedies before resorting to litigation. Lawsuits must be properly filed in a court of competent jurisdiction within 6 months from the date of the final decision that exhausted the Contractor's available administrative remedies under this Section 00199.

The Contractor shall comply with 00170.00.

SECTION 00210 - MOBILIZATION

Comply with Section 00210 of the Standard Specifications.

SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC

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

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

- When performing trench excavation or other excavation across or adjacent to a Traffic Lane on a roadway having a pre-construction posted speed greater than 35 mph, backfill the excavation, install surfacing, and open the roadway to traffic by the end of each work shift. Install a "BUMP" (W8-1-48) sign approximately 100 feet before the backfilled area and a "ROUGH ROAD" (W8-8-48) sign approximately 500 feet ahead of the "BUMP" sign. If this requirement is not met, maintain all necessary lane or shoulder closures and provide additional TCM, including flagging, at no additional cost to the Agency. Do not use temporary steel plating to reopen the roadway.
- Before activating a modified traffic signal, revising lane usage, implementing new roadway geometry, or removing a "STOP" sign, protect traffic by installing "NEW TRAFFIC PATTERN AHEAD" (W23-2) signing according to 00222.40. Keep the signs in place for 30 Calendar Days after completing the modifications.
- When an abrupt edge is created by excavation, protect traffic according to the "Excavation Abrupt Edge" and the "Typical Abrupt Edge Delineation" configurations shown on the Standard Drawings.

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

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

- Daily, Monday through Friday between 7:00 a.m. and 6:00 p.m.

Add the following subsection:

00220.40(f) Road Closure - Except as indicated in 00220.40(e)(2), the Contractor will be permitted to close all Traffic Lanes on Hunnell Road according to the construction staging and detour plans depicted in the Plans. Unless otherwise specified, the Contractor shall maintain

access for local traffic, school busses, postal services, service providers and emergency services at all times.

SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL

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

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

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

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

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

SECTION 00222 – TEMPORARY TRAFFIC CONTROL SIGNS

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

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

- Install a 54-inch "TRUCKS LEAVING HIGHWAY XXXX FT" sign in advance of each entrance point to the Work Area at sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings. Install a 54-inch "TRUCKS ENTERING HIGHWAY XXXX FT" sign in advance of each exit point from the Work Area at sign spacing "A" from the "TCD Spacing Table" shown on the Standard Drawings.
- Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign on Rogers Road approximately 150 feet in advance of Hunnell Road, facing eastbound incoming traffic.
- Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign on Hunnell Road approximately 150 feet in advance of Rogers Road, facing northbound incoming traffic.
- Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign on Hunnell Road approximately 150 feet in advance of Rogers Road, facing southbound incoming traffic.
- Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign on Pohaku Road approximately 200 feet in advance of Hunnell Road, facing eastbound incoming traffic.
- Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign on Hunnell Road approximately 200 feet in advance of Pohaku Road, facing northbound incoming traffic.
- Install a "NEW TRAFFIC PATTERN AHEAD" (W23-2) sign on Hunnell Road approximately 400 feet in advance of Pohaku Road, facing southbound incoming traffic.

- Keep the "NEW TRAFFIC PATTERN AHEAD" signs in place 30 Calendar Days after realigning Hunnell Road within the vicinity of Pohaku Road and the Irrigation District Crossing.
- During pilot car operations, install a 15 by 24-inch "WAIT FOR PILOT CAR" (CR4-20) sign at stop-controlled side roads and accesses intersecting the Highway within the limits of the pilot car operation.
- During pilot car operations, install a 12 by 12-inch "WAIT FOR PILOT CAR" (CR4-20a) sign in private residential driveways accessing the Highway within the limits of the pilot car operation. Place the sign in the driveway facing the private residence and so the sign face is not visible to Public Traffic on the Highway. Do not use the sign for apartments, condominiums or business accesses.
- At accesses, side roads, or residential driveways where "WAIT FOR PILOT CAR" (CR4-20) signs are installed, do not allow traffic to be stopped or held for longer than 20 minutes.
- In addition to the signs, public notification (e.g. flyers, door hangers) may be used to inform the residents that may be affected by the pilot car operations and the "WAIT FOR PILOT CAR" signs.

00222.45(b) Portable Changeable Message Signs - Add the following bullets to the end of this subsection:

- At least seven Calendar Days before road closures, place one or more PCMS displaying the following message as shown, or as directed:

Panel 1	Panel 2
(Road Name)	LOCAL
CLOSURE	TRAFFIC
(Date) - (Date)	ONLY

00222.80(a) Area Basis -

Add the following sentence to the end of the paragraph that begins "Temporary signs will...":

No measurement of quantities will be made for "CONSTRUCTION VEHICLE DO NOT FOLLOW" (CW23-14) signs or "WAIT FOR PILOT CAR" (CR4-20) signs.

SECTION 00223 - WORK ZONE TRAFFIC CONTROL LABOR AND VEHICLES

Comply with Section 00223 of the Standard Specifications.

SECTION 00224 - TEMPORARY TRAFFIC CHANNELIZING DEVICES

Comply with Section 00224 of the Standard Specifications modified as follows:

00224.46 Pavement Edge Delineation - Replace the paragraph that begins "Place tubular or conical markers..." with the following paragraph:

Place tubular or conical markers to delineate the edge of Pavement immediately after construction Work or paving operations create an abrupt or sloped edge drop-off greater than 1 inch in height along the right hand or left hand Shoulder.

00224.80 Measurement – Replace this section, except for the subsection number and title, with the following:

No measurement will be made for work performed under this section.

00224.90 Payment – Replace this subsection, except for the subsection number and title, with the following:

Work performed under this section will be paid for according to 00221.98.

SECTION 00225 - TEMPORARY PAVEMENT MARKINGS

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

00225.80 Measurement – Replace this section, except for the subsection number and title, with the following:

No measurement will be made for work performed under this section.

00225.90 Payment – Replace this subsection, except for the subsection number and title, with the following:

Work performed under this section will be paid for according to 00221.98.

SECTION 00280 - EROSION AND SEDIMENT CONTROL

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

00280.06 Erosion and Sediment Control Manager - Delete this subsection.

00280.62 Inspection and Monitoring - Replace this subsection, except for the subsection number and title, with the following:

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

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

00280.90 Payment - In the paragraph that begins "Item (a) includes..." delete the bullet that specifies "providing the Erosion and Sediment Control Manager".

SECTION 00290 - ENVIRONMENTAL PROTECTION

Comply with Section 00290 of the Standard Specifications.

SECTION 00305 - CONSTRUCTION SURVEY WORK

Comply with Section 00305 of the Standard Specifications modified as follows:

00305.00 Scope – Add the following to the end of this subsection:

In addition to the requirements of the ODOT *Construction Surveying Manual for Contractors*, establish Engineering Stationing for the Hunnell Road alignment at 100-foot intervals for the length of the project along the edge of the work area. Maintain the stationing so it is visible throughout construction of the project.

SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

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

00310.02 Exclusions – Replace the last bullet with the following:

- Owner or controlled by third parties, except those identified for removal as part of this Contract as shown in the Plans.

00310.90 Payment - Replace the paragraph that begins with “Item (g) applies to...” with the following:

Item (g) applies to asphalt Pavement saw cutting when shown, and also includes sand sealing of joints between abutting asphalt Pavement surfacings.

Add the following to the end of this subsection:

No separate or additional payment will be made for removal or disposal Work included in Section 00330 according to 00310.02.

No separate or additional payment will be made for removal or disposal of existing fences, or removal of existing surfacings as defined in 00110.20 under ‘Existing Surfacings’.

SECTION 00320 - CLEARING AND GRUBBING

Comply with Section 00320 of the Standard Specifications modified as follows:

00320.40(b)(3) Vegetation and Materials to be Saved – Add the following to the end of this subsection:

Prior to removing any trees within the Work Areas, the Contractor shall identify and mark trees to be removed. Before removal work commences, the Engineer shall be given the opportunity to approve removal of trees based on site conditions and input from adjacent property owners.

SECTION 00330 - EARTHWORK

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

00330.03 Basis of Performance - Add the following paragraph to the end of this subsection:

Perform all earthwork under this Section on the excavation basis.

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

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

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

00330.90 Payment – Replace the sentence that begins with "Watering of materials..." with the following:

Watering of materials required by 00330.46 will be incidental to the earthwork.

00330.92 Kinds of Incidental Earthwork - Add the following bullets to the end of the bullet list:

- Earthwork required for driveways and road approaches. Earthwork for driveways and road approaches will be that which is outside the Neat Line limits shown on the typical sections.
- Earthwork required for excavation and placement of water quality soil within swales.
- Earthwork required for excavation of trenches, including rock excavation. Earthwork for trenches will include trenching for water and/or irrigation utilities according to Section 00405.
- Earthwork required for grading at guardrail terminals.

SECTION 00331 - SUBGRADE STABILIZATION

Comply with Section 00331 of the Standard Specifications.

SECTION 00335 - BLASTING METHODS AND PROTECTION OF EXCAVATION BACKSLOPES

Comply with Section 00335 of the Standard Specifications modified as follows:

00335.40(h) Blasting Report - Add the following to the end of the bullet that begins "A copy of the color video recording..."

Use a free standing recording device that is not a cell phone or similar device, as approved by the Engineer. Submit the type of recording device to be used at least 7 Calendar Days before the blast.

SECTION 00340 - WATERING

Comply with Section 00340 of the Standard Specifications modified as follows:

00340.80 Measurement – Replace this subsection, except for the subsection number and title, with the following:

There will be no measurement of watering.

00340.90 Payment – Replace this subsection, except for the subsection number and title, with the following:

There will be no separate payment for watering. This is incidental to General Excavation section 00330.90.

SECTION 00350 - GEOSYNTHETIC INSTALLATION

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

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

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

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

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

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

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

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

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

SECTION 00390 - RIPRAP PROTECTION

Comply with Section 00390 of the Standard Specifications modified as follows:

00390.80(d) Riprap Basins— Replace this subsection, except for the subsection number and title, with the following:

Riprap basins will be measured on the volume basis in place.

00390.90 Payment – Replace the following bid item:

Pay Item	Unit of Measurement
(f) Riprap Basins	Cubic Yard

SECTION 00405 - TRENCH EXCAVATION, BEDDING, AND BACKFILL

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

00405.90 Payment - Add the following paragraph to the end of this subsection:

When the Contract Schedule of Items does not indicate payment for Work performed under this Section, no separate or additional payment will be made. Payment will be included in payment made for the appropriate items under which this Work is required.

SECTION 00440 - COMMERCIAL GRADE CONCRETE

Comply with Section 00440 of the Standard Specifications.

SECTION 00441 – IRRIGATION CANAL CROSSINGS

Section 00441, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00441.00 Scope - This Work consists of removal, excavation, trenching and construction of irrigation canal road crossings and conveyance structures. All Work shall conform to the requirements of the current version of Swalley Irrigation District Development Handbook.

Materials

00441.10 Materials - Furnish Materials meeting the following requirements:

Concrete	00440
Riprap	00390.11
Riprap Geotextile, Type 1	02320

Pipe	00445.11
Catch Basin	00470.10
Reinforcement.....	02510.10

00441.11 3-Inch Gate Valve Assembly - Furnish 3" gate valve as shown in the Contract plans.

00441.12 3-Inch Side Saddle Turnout with Flange Adapter - Furnish 3" side saddle turnout with flange adapter as shown in the Contract plans.

00444.13 Material Trash Rack - Furnish trash racks shown in the Contract plans.

Construction

00441.40 General - Construct the irrigation canal crossings as shown in the Plans and in conformance with current version of Swalley Irrigation District Development Handbook.

Measurement

00441.80 Measurement - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

Canal Crossing – Bowery Quantities:

Item	Quantity
Riprap Geotextile, Type 1	1 Sq. Yd.
Loose Riprap, Class 200	1 Cu. Yd.
8" HDPE Pipe for Irrigation Connection.....	77 Foot
12" HDPE Pipe for Irrigation Connection.....	166 Foot
Headwall, Reinforced Concrete	1 Cu. Yd.
Trash Rack	2 Each
Proportional Divider Box	1 Each
3" Gate Valve Assembly	2 Each
3" Side Saddle Turnout w/Flange Adapter	2 Each

Canal Crossing – Elder Quantities:

Item	Quantity
Riprap Geotextile, Type 1	13 Sq. Yd.
Loose Riprap, Class 200	8 Cu. Yd.
36" HDPE Pipe for Irrigation Connection.....	66 Foot
Headwall, Reinforced Concrete	3 Cu. Yd.

Canal Crossing – Butte Quantities:

Item	Quantity
Riprap Geotextile, Type 1	14 Sq. Yd.
Loose Riprap, Class 200	8 Cu. Yd.

15" HDPE Pipe for Irrigation Connection 124 Foot
Headwall, Reinforced Concrete 3 Cu. Yd.

Canal Crossing – 8" Private Quantities:

Item	Quantity
8" HDPE Pipe.....	68 Foot
G-2 Catch Basin with Solid Lid	2 Each

Canal Crossing – 12" Private Quantities:

Item	Quantity
12" HDPE Pipe.....	48 Foot
G-2 Catch Basin with Solid Lid	2 Each

Payment

00441.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Canal Crossing – Bowery", "Irrigation Canal Crossing – Elder", "Canal Crossing – Butte", "Canal Crossing – 8" Private", and "Canal Crossing – 12" Private".

No separate payment will be made for removal, excavation, trenching, riprap, geotextile, aggregate, concrete, bentonite soil entrainment, steel plating, reinforcement, pipe, conveyance structures, fittings or bends associated with canal crossings.

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

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

Comply with Section 00445 of the Standard Specifications.

SECTION 00490 - WORK ON EXISTING SEWERS AND STRUCTURES

Comply with Section 00490 of the Standard Specifications.

SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL

Comply with Section 00510 of the Standard Specifications.

SECTION 00568 – PRE-FABRICATED BRIDGE

Section 00568, which is not a Standard Specification, is included in this Project by Special Provision.

Description

00568.00 Scope - This work consists of fabricating, furnishing, transporting and constructing a pre-cast modular bridge system as shown or specified based upon dimensional and loading specifications for the main canal crossing structure. This crossing will meet 50-year design life and support HS-20 loading. The Contractor will be furnishing and installing a prefabricated bridge with spread footings and bridge rail, and the Contractor's prefab bridge vendor will be furnishing the structural engineering with stamped working drawings.

00568.01 Lines, Grades, and Cross Sections - Perform the Work to the lines, grades and Cross Sections shown or as established.

00568.02 Definitions:

Pre-Fabricated Bridge - A bridge system which consists of pre-cast modular bridge components to be assembled on site.

00568.03 Working Drawings, Calculations, and Design Submittals – Working Drawings shall meet the requirements of the Project documents and the AASHTO *LRFD Bridge Design Specifications*. Submit stamped Working Drawings and design calculations for the Pre-Fabricated Bridge elements to the Agency. Agency will review to ensure compliance with Project plans, design criteria, and Irrigation District requirements.

Materials

00568.10 General – The Contractor is required to furnish the Pre-Fabricated Bridge. Pre-Fabricated Bridge design criteria are included in the Contract Plans and Specifications. Materials used in the fabrication of the pre-cast elements shall conform to the applicable requirements of Sections 00530, 00540, and 00550.

The Contractor is responsible for coordinating delivery of the bridge span, abutments and other required elements to the site.

00568.11 Backfill Materials – Backfill materials used for Pre-Fabricated Bridge elements shall conform to the applicable Materials requirements of Section 00510.

00568.12 Quality Control – Provide quality control according to Section 00165.

Labor

00568.30 Quality Control Personnel – Provide technicians having CEBT and CDT technical certifications.

00568.31 Manufacturer Representative – Provide the services of a manufacturer's representative on-site during bridge installation.

Construction

00568.40 General - All irrigation facility work shall be completed between November 1 and March 15. The Contractor shall conform to coordinated shut-down dates according to the Irrigation District's winter stock-run flow schedules.

00568.41 Clearing, Grubbing and Removal Work – Clearing, grubbing and removal limits shall be limited to the maximum extent necessary to facilitate installation of the bridge elements as specified. Contractor shall take care not to encroach within 8 feet of the canal banks during removal work.

00568.42 Structure Excavation - Structure excavation includes:

- Removal of all material necessary for the installation of substructures as shown or specified.
- Placement of all backfill except granular wall backfill and granular structure backfill.
- Disposal of excavated material not required or suitable for backfill according to 00330.41(a)(5).
- Correction, according to recognized practice, of conditions detrimental to the Work, including removal of excess water.

Where the Plans show precast substructure elements placed against undisturbed material, make excavation for substructure elements as nearly as possible to the limits shown. Fill the space between the substructure element and remaining undisturbed material to the top of the element with granular structure backfill material, as directed. Compact the granular structure backfill to 97 percent of maximum density, according to 00330.43.

Where practicable, excavate Rock materials using excavation Equipment or non-explosive means that preclude breakage of Rock materials below and outside of the structure excavation limits. If blasting is required, the Contractor shall submit blast and boring plans for the Work to the Agency at least seven (7) calendar days prior to commencing work near the canal. Any boring casing progress monitoring reports must be validated by a Professional Land Surveyor registered in the State of Oregon and provided to the Agency.

When blasting is required, perform such Work in a manner that avoids disturbing Rock outside the structure excavation limits. Use controlled blasting techniques for all structure excavation requiring blasting according to Section 00335. Backfill and repair as directed, at no additional cost to the Agency, any excavation, shattered Rock, void, fault, or unstable condition caused by the Contractor outside the limits of structure excavation. This includes any damage to the canal, which will be repaired as directed according to Irrigation District requirements following an on-site evaluation by Irrigation District personnel, at no additional cost to the Agency or Irrigation District. Backfill and repair of voids, faults or unstable condition not caused by the Contractor or covered elsewhere in the Specifications will be paid for according to 00195.20.

Consider the elevations of the bottoms of footings or foundations shown as approximate only. The Engineer or Manufacturer Representative may order, in writing, changes in elevations of footings necessary to secure a satisfactory foundation.

Backfill, seal, or otherwise repair excavations beyond the limits shown or as directed by the Engineer with Materials acceptable to the Engineer at no additional cost to the Agency.

00568.43 Preservation of Canal Channel - Do not excavate outside of the limits shown, or disturb the canal unless specified or allowed in writing by the Agency or Irrigation District. Where such excavation is allowed, comply with Section 00405 and Irrigation District requirements. Do not sidecast any excavated material into the canal. Contractor shall remedy any impacts to the canal channel at no additional cost to the Agency or Irrigation District.

The necessary excavation for placement of riprap within the canal may be made between November 1 and March 31, and disposed of according to 00330.41(a)(4).

00568.44 Preparation of Foundations – Do not place precast bridge elements on prepared foundations without prior approval from the Engineer and Manufacturer Representative.

00568.45 Bridge Installation – The Contractor will layout and install the Pre-Fabricated Bridge per plan and per manufacturer's details and directions. Place precast bridge elements as shown or directed using means approved by the Engineer and Manufacturer Representative.

The Contractor will provide equipment capable of placing the abutment and the bridge spans without impacting the canal channel area. The Contractor shall minimize impact to adjacent vegetation and landscaping during installation. When lifting bridge elements, Contractor shall lift according to manufacturer instructions.

Any damage to the Pre-Fabricated Bridge elements will be inspected by the Manufacturer's Representative and repaired by the Contractor at the Contractor's expense. Repair methods to be approved by the Engineer.

00568.00 Deviation from Contract Plans – Any deviations from the Contract Plans associated with the Pre-Fabricated Bridge structure must first be approved by the Irrigation District General Manager, in writing, after undergoing third-party engineering review. Contractor shall submit any proposed deviations, in writing, to the Irrigation District with a copy to the Agency.

Measurement

00568.80 Measurement - No measurement of quantities will be made for the Pre-Fabricated Bridge.

The estimated quantity of structure excavation is:

Location	Structure Excavation (Cubic Yard)
Abutments	99.6

The estimated quantity granular structure backfill is:

Location	Granular Structure Backfill (Cubic Yard)
Abutments	61.1

The estimated quantity, for estimating purposes only, of granular structure backfill for the abutments, as shown above, does not include the leveling course between blocks of abutments and headwalls.

Payment

00568.90 Payment - The accepted Pre-Fabricated Bridge will be paid for at the Contract lump sum amount for the item "Canal Crossing – S.I.D. Main".

Payment will be payment in full for fabricating, transporting, excavation, furnishing and placing all materials including backfill, and for furnishing all equipment, labor, and Incidentals necessary to complete the work as specified. No separate or additional payment will be made for Structure Excavation and Backfill.

SECTION 00587 - BRIDGE RAILS

Comply with Section 00587 of the Standard Specifications modified as follows:

00587.80 Measurement - Add the following to the end of this subsection:

The estimated quantity of bridge rail is:

Structure	Rail Type	Quantity (Foot)
Canal Crossing – S.I.D. Main	Thrie Beam	100

00587.90 Payment – Replace this subsection, except for the subsection name and title, with the following:

No separate or additional payment will be made for Bridge Rails. Bridge Rails shall be incidental to Special Provision Section 00568.

SECTION 00641 - AGGREGATE SUBBASE, BASE, AND SHOULDERS

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

00641.10(a) Base and Shoulder Aggregate - In the paragraph that begins "Aggregate for bases...", add the following sentence after the first sentence:

Base and shoulder aggregate shall be 3/4"-0 size.

SECTION 00730 - EMULSIFIED ASPHALT TACK COAT

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

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

00730.42 Preparation of Underlying Surfaces – Add the following to the end of this subsection:

Immediately before applying the tack coat, the surface to be tacked shall be clean and dry. Clean all loose material by brooming, flushing with water or other approved methods. Pavement surface shall be cleaned to the apparent existing edge of pavement. Application of tack coat shall not commence until surface cleanliness has been verified and approved by the Engineer.

00730.44 Applying Tack Coat - Apply the Emulsified Asphalt with a pressure distributor conforming to 00730.22, unless otherwise allowed. Apply the Emulsified Asphalt to the prepared surface at a rate between 0.05 and 0.20 gallons per square yard as directed and with the Emulsified Asphalt temperature between 140 °F and 185 °F as recommended by the manufacturer. Refer to the manufacturer's recommendations for tack coat application rates for the underlying surface type and type of emulsion used. Application rates for tack coat diluted according to 00730.11 will be increased as necessary to provide the same amount of residual asphalt as the application rates specified above.

Do not place hot mixed asphalt concrete Pavement or Emulsified Asphalt Concrete Pavement on the tack coat until the Emulsified Asphalt separates from the water (breaks), but before it loses its tackiness. Refer to manufacturer recommendations regarding break/set time.

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

No separate or additional payment will be made for Emulsified Asphalt tack coat. Approximately 7 Tons of Emulsified Asphalt in tack coat will be required on this Project.

SECTION 00744 - ASPHALT CONCRETE PAVEMENT

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

00744.10(a) New Coarse and Fine Aggregates – Replace the last paragraph in this subsection with the following:

Test Aggregates for soundness, durability, and harmful substances at no additional cost to the Agency.

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

Provide PG 58-34 grade asphalt cement for this Project.

00744.23 Pavers – Replace the bullet that begins with “Provides the specified...” with the following:

- Provides the specified results through mechanical sensors and sensor-directed devices actuated from independent line and grade control references over an array with a minimum length of 35 feet.

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

ACP shall be windrowed. Pick-up equipment shall be used that is:

- Capable of picking up substantially all of the ACP deposited on the roadway.
- Self-supporting, not exerting any vertical load on the paving machine, or causing vibrations or other motions which could have a harmful effect on the riding quality of the completed pavement.

00744.44(a)(2) Wearing Course – Add the following paragraph to the end of this subsection:

Construct the longitudinal joint between wearing course panels 12 inches from the roadway centerline.

Add the following subsection:

00744.51 Opening Sections to Traffic - Schedule work so that the surfaces being paved are paved full width and length through the Base or wearing Course at the end of each work week before opening to traffic. Traffic will be allowed on the top Base Course up to 7 Calendar Days.

Before beginning wearing Course paving operations, make repairs to the existing surface as directed. Payment for the repairs will be made according to 00195.20.

00744.80 Measurement – Replace this subsection, except the subsection number and title, with the following:

The quantities of ACP will be measured on the weight basis, with separate measurement being made for the asphalt concrete mixture and the asphalt cement contained in the mixture. No deduction will be made for lime or any other additive used in the mixture.

The quantities of ACP shown in the Contract Schedule of Items are based on the estimated bulk specific gravity of Aggregates listed in the Special Provisions. Determine the actual bulk specific gravity for the Aggregates, recompute the quantities of ACP to be used, and inform the Agency in writing. The quantities of ACP will be adjusted accordingly with no adjustment in Contract unit prices.

When listed in the Contract Schedule of Items, extra or additional Work for approaches, driveways, walks, and other miscellaneous asphalt appurtenances will be measured according to 00749.80 through 00749.82.

00744.90 Payment – Replace this subsection, except for the subsection number and title, with the following:

The accepted quantities of ACP incorporated into the Project, whether or not recycled Materials are used, will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(a) Level 3, 1/2 Inch ACP	Ton
(b) PG 58-34 Asphalt in Level 3, 1/2 Inch ACP	Ton

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

No separate or additional payment will be made for:

- mineral filler, lime, and anti-stripping or other additives
- sawing, cleaning, and filling joints on bridge deck overlays

When specified by other Pay Items in the Contract Schedule of Items, separate payment will be made for Work described in 00745.42, 00749.91 and 00749.92.

SECTION 00749 - MISCELLANEOUS ASPHALT CONCRETE STRUCTURES

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

00749.90 Payment – Replace the paragraph that begins with “Item (a) includes...” with the following:

Item (a) includes road approaches, street connections, alley approaches, driveways, guardrail flares, non-flared guardrail terminals, and mailbox turnouts. No additional payment will be made for minor driveway approaches that are not depicted on the Project Plans.

SECTION 00759 - MISCELLANEOUS PORTLAND CEMENT CONCRETE STRUCTURES

Comply with Section 00759 of the Standard Specifications.

SECTION 00810 - METAL GUARDRAIL

Comply with Section 00810 of the Standard Specifications.

SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS

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

00850.45 Installation – Add the following to the end of this subsection:

Do not place liquid thermoplastic striping materials within one week of a rainfall event without prior written approval from the Engineer.

SECTION 00855 - PAVEMENT MARKERS

Comply with Section 00855 of the Standard Specifications.

SECTION 00856 - SURFACE MOUNTED TUBULAR MARKERS

Comply with Section 00856 of the Standard Specifications.

SECTION 00865 - LONGITUDINAL PAVEMENT MARKINGS - DURABLE

Comply with Section 0865 of the Standard Specifications.

SECTION 00867 - TRANSVERSE PAVEMENT MARKINGS - LEGENDS AND BARS

Comply with Section 00867 of the Standard Specifications modified as follows.

00867.90 Payment - Add the following paragraph after the paragraph that begins "Item (p) includes one...":

Item (q) includes the STOP legend only. The stop bar will be paid for under Item (r).

SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS

Comply with Section 00905 of the Standard Specifications.

SECTION 00920 - SIGN SUPPORT FOOTINGS

Comply with Section 00920 of the Standard Specifications modified as follows:

00920.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of concrete for minor sign supports are:

Support Type	Quantity
Perforated Steel Square Tube Slip Base Sign Supports	7.76 cu. yd.

SECTION 00930 - METAL SIGN SUPPORTS

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

00930.80 Measurement - Add the following to the end of this subsection:

The estimated quantities of structural steel are as follows:

Item	Estimated Quantity (Pound)
Minor Sign Supports	
Perforated Steel Square Tube Slip Base Sign Supports	1190

SECTION 00940 - SIGNS

Comply with Section 00940 of the Standard Specifications.

SECTION 00960 - COMMON PROVISIONS FOR ELECTRICAL SYSTEMS

Comply with Section 00960 of the Standard Specifications modified as follows:

00960.10 Materials - Replace this subsection, except for the subsection number and title, with the following:

Furnish Materials meeting the following requirements:

Commercial Grade Concrete.....	00440
Metal Illumination and Traffic Signal Supports	00962
Non-shrink Grout	02440.50
Reinforcement	02510

Add the following subsection:

00960.44 Clearing – Remove and dispose of tree limbs within Agency right-of-way as necessary to achieve maximum site distance for radars.

Add the following subsection:

00960.45(f) Structure Mounted Poles and Cabinets – Bond all poles and cabinets mounted on Structures or walls to a common ground rod at the end of the Structure. Ground the system at the first convenient acceptable location off the Structure.

Add the following subsection:

00960.49 Solar Power – Install solar power for speed feedback systems according to manufacturer's instructions.

SECTION 00962 - METAL ILLUMINATION AND TRAFFIC SIGNAL SUPPORTS

Comply with Section 00962 of the Standard Specifications modified as follows:

00962.05 Design – Delete this subsection.

00960.10 Materials – Replace this subsection except for the subsection number and title with the following:

Furnish materials for speed feedback sign supports and pedestals meeting the following requirements:

- 4" diameter (4.5" O.D.) standard galvanized schedule 40 threaded steel pipe meeting the requirements of ASTM A53, or equal.
- Transformer base.
- 3/4" ASTM A36 steel base plate.
- Connecting and leveling bolts, nuts and washers meeting the requirements of ASTM A307 or equal.
- Anchor rods meeting the requirements of ASTM A307 or equal.
- Stainless steel sign clamps for SPEED XX signs conforming to Oregon Standard Drawing TM677.

Steel pipe shall be of sufficient length to accommodate installation of sign panels, speed feedback units and associated equipment according to the Plans. Contractor shall field-verify required pipe lengths prior to procuring materials.

SECTION 00990 - TRAFFIC SIGNALS

Comply with Section 00990 of the Standard Specifications modified as follows:

Add the following subsection:

00990.43 (a) Microwave and Radar Detection Systems

Install Radar Sign TC-1000 solar powered radar speed signs according to manufacturer specifications at speed feedback system locations as shown on the Plans.

Program systems to display driver speeds greater than or equal to posted speeds. Program systems to display speed with fast flash rate when driver speeds are greater than 10mph over posted speeds. Enable "StreetSmart" data collection during programming.

Add the following subsection:

00990.45 Signal Covers - Cover mounted vehicle signals and pedestrian signals at all times until the signal installation is ready for continuous operation.

00990.70 (b) Control Equipment Testing – Replace this subsection with the following:

00990.70 (b) Equipment Testing – The Contractor shall be responsible for testing all equipment to ensure proper function of the system. Immediately notify the Agency of equipment failures that require repair or replacement. The Contractor will be responsible for repairing or replacing improperly working equipment prior to installation as needed.

Delete the following subsections:

00990.70 (c), (d), (e), (f)

00990.70 (g) Field Testing - Replace this subsection, except for the subsection number and title, with the following:

The Contractor shall be responsible for field testing all system installations to ensure proper function of the system. All systems shall be tested by the Contractor to the satisfaction of the

Engineer prior to being placed into operation. Tests shall be made to determine whether the equipment has been properly assembled, aligned, adjusted and connected. Any changes, adjustments or replacements required to make the equipment operate as specified shall be carried out by the Contractor as part of the work.

The Contractor shall furnish written notification to the Agency within 1 week of completing field testing specifying:

- System tested
- Date and time
- Test procedures
- Test results
- Corrective action required and schedule for correction.

00990.70 (h) Traffic Signal Turn-on – Delete the last paragraph in this subsection.

Add the following subsection:

00990.71 Warranty – The Contractor shall provide warranties and guarantees for all workmanship for a period of one year from date of final acceptance. After-turn on, damage to the systems caused by conditions beyond the Contractor's control will be the responsibility of the Agency.

00990.80 Measurement - Replace this subsection, except for the subsection number and title, with the following:

Measurement of Speed Feedback Systems will be measured on the unit basis for each location installed.

No measurement will be made for signs, posts, foundations or other items incidental to complete the work as shown.

00990.90 Payment – Replace this subsection, except for the subsection number and title, with the following:

The accepted quantities of Work performed under this Section will be paid for at the Contract unit price, per unit of measurement, for the following items:

Pay Item	Unit of Measurement
(c) Speed Feedback System	Each

Item (a) includes furnishing and installing all materials and components of the solar-powered speed feedback assembly, including the speed feedback sign and display, vehicle pedestal pole and foundation, radar unit, controller, solar panel, and brackets necessary to attach the assembly to the post.

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

No separate or additional payment will be made for saw cutting, earthwork, sand, aggregate, concrete, grout, or reinforcing steel. No separate or additional payment will be made for replacement of disturbed earthwork, Base, and Surfacing.

**SECTION 01012 - STORMWATER CONTROL, WATER QUALITY BIOFILTRATION
SWALE**

Section 01012, which is not a Standard Specification, is included for this Project by Special Provision.

Description

01012.00 Scope - This Work consists of furnishing and installing a water quality biofiltration swale as shown.

Materials

01012.10 Materials - Furnish Material meeting the following requirements:

Check Dam, Type 1 00280.15(a)

01012.12 Water Quality Mixture - Furnish medium compost meeting the requirements of Section 03020. Furnish soil meeting the following gradation requirements:

Sieve Size	Percent Passing (by Weight)
No. 4	100
No 10	95 - 100
No. 40	40 - 60
No. 100	10 - 25
No. 200	5 - 10

Sample soil according to AASHTO R 90. Determine sieve analysis according to AASHTO T 27 and AASHTO T 11.

Blend the medium compost and soil so that the mixture:

- Is composed of between 20 percent and 25 percent medium compost material and between 75 percent and 80 percent soil material.
- Has a pH between 5.5 and 8.0.
- Does not have clumps greater than 3 inches in any direction.

Construction

01012.40 General - Construct water quality biofiltration swale facility as shown. Perform excavation, fine grading, and placement work only when the facility area is dry and only from the top of the swale area. Do not stockpile excavated material in the facility area. Perform work in sequence as follows:

- (a) Scarify** - Scarify the subsoil area a minimum 12 inches deep.

(b) Placement of Water Quality Mixture - Place the water quality mixture in maximum 12 inch Lifts. Compact each Lift with a water filled landscape roller.

(d) Seeding - Seed according to 01030.13.

(f) Check Dams - Install permanent check dams spaced as shown or directed.

(g) Stone Embankment - Key and embed permanent check dams and rock basin flow Spreaders constructed with stone embankment horizontally into side slopes of swale to a depth not less than 12 inches. Where rock basin flow spreaders embed into side slopes, extend stone embankment 6 inches higher on side slope.

Maintenance

01012.70 Cleaning - If a stormwater control facility is used for erosion and sediment control, remove all accumulated sediment and debris before completing the facility.

01012.71 Removal - Remove temporary erosion and sediment control features according to 00280.70 only after water quality vegetation has met the establishment requirements of 01030.60.

Measurement

01012.80 Measurement - The quantities of Water Quality Swale will be measured on an area basis measured on the ground surface. The square foot price includes the following elements:

- Swale excavation
- Water Quality Soil

Payment

01012.90 Payment - The accepted quantities of Work performed under this Section will be paid for at the Contract unit price for the item "Water Quality Swale", per square yard.

Excavation is incidental to the water quality swale.

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

SECTION 01030 - SEEDING

Comply with Section 01030 of the Standard Specifications modified as follows:

01030.13(f) Types of Seed Mixes - Add the following to the end of this subsection:

Provide the following seed mix formulas:

- **Water Quality Mixture:**

Botanical Name (Common Name)	PLS Specified Rate (lb/acre)
Pseudoroegneria spicata (Bluebunch Wheatgrass)	16
Leymus cinereus (Great Basin Wild Rye)	8
Deschampsia caespitosa (Tufted Hair Grass)	8
Festuca idahoensis (Idaho fescue)	1.6
Koeleria macrantha (Prairie Junegrass)	1.6
Poa sandbergii (Sandberg's Bluegrass)	1.6

• **Permanent Seed Mixture:**

Name	Mixture %
Anatone Bluebunch Wheatgrass	35
Nezpurs Idaho Fescue.....	25
Rimrock Indian Ricegrass	15
Canbar Canby Bluegrass	15
Turkey Lake Bottlebrush Squirreldtail	7.5
Appar Blue Flax	2.5

01030.13(g) Availability - Add the following sentence to the end of this subsection:

Submit the seed and seed mixes to be used on the project according to 00150.37.

01030.40 General - Add the following sentence after the sentence beginning "Notify the Agency...":

Notify the Agency of the acreage to be seeded at least 7 Days before seeding begins.

01030.43 (b) Permanent Seeding – Add the following at the end of this subsection:

All Water Quality Swales are to be seeded with the Water Quality Seeding mixture. The remainder of the disturbed areas of the project shall be seeded with the Permanent Seeding mixture.

Add the following subsection:

01030.43(c) Seed Application Rates - Determine the seeding application rate according to 01030.13(c). Apply seed mixes at the highest application rate calculated to provide not less than the specified application rate for each individual seed species in the mix.

SECTION 01050 - FENCES

Comply with Section 01050 of the Standard Specifications modified as follows:

01050.49 Removing and Rebuilding Fence – Add to the end of this subsection:

See Contract Plans for details on existing fence material and locations to remove and rebuild. Fences that are not rebuilt are included in Section 00310.

01050.90(d) Removing and Rebuilding Fence – Add the following to the end of this subsection:

No separate or additional payment will be made for removal of fence that is not to be rebuilt. Removal of fences is incidental to Section 00310.

SECTION 01070 - MAILBOX SUPPORTS

Comply with Section 01070 of the Standard Specifications modified as follows:

01070.00 Scope - Add the following paragraph to the end of this subsection:

This Work includes removing, maintaining, and reinstalling existing mailboxes and existing supports.

01070.40 General – Add the following paragraph to the end of this subsection:

Prior to removal of existing mailboxes, if mailboxes are observed to have locks, the Contractor shall notify the corresponding property owner(s) in writing 5 days in advance of the removal work. The Contractor shall coordinate with the property owner(s) regarding unlocking of mailboxes at the time of removal.

01070.80 Measurement - Add the following paragraph to the end of this subsection:

The quantities of mailboxes and supports removed, maintained, and reinstalled will be measured on the unit basis, regardless of type, installed in permanent locations.

01070.90 Payment - Add the following Pay Item to the Pay Item list:

(d) Remove and Reinstall Mailbox SupportsEach

Item (d) includes removing mailboxes and supports, maintaining them at temporary locations, and reinstalling them at their permanent locations.

Item (d) includes library boxes and supports.

SECTION 01140 - POTABLE WATER PIPE AND FITTINGS

Comply with Section 01140 of the Standard Specifications modified as follows:

01140.00 Scope – Add the following to the end of this subsection:

All potable water pipe and fitting installations shall be completed according to the current Avion Construction Specifications.

01140.11 Handling Pipe and Fittings – Add the following paragraph to the end of this subsection:

Contractor shall coordinate with the Water Utility regarding installation of pipes and fittings in order for a representative of the Water Utility to be present during installation. Water Utility shall issue a boil notice to residents affected by service interruptions resulting from installation of pipe and fittings.

01140.41(b)(1) Curves – Add the following sentence to the end of this subsection:

Where field conditions require deflection exceeding the pipe manufacturer's recommendations for the amount of deflection at each pipe joint, deflect as necessary to complete the installation as shown. Consult the Water Utility and the pipe manufacturer regarding the proposed pipe deflection.

01140.44 Thrust Restraint – Add the following paragraph to the beginning of this subsection:

All joints, tees, elbows and fittings shall be restrained per the requirements of the Water Utility. Contractor shall consult the Water Utility regarding appropriate thrust restraint sizing and reinforcement requirements, and shall provide a copy of the sizing calculations to the Engineer and the Water Utility for review a minimum of 5 days prior to installation.

Add the following subsection:

01140.47(f) Hot Tapping – Hot tapping of existing water mains shall be performed by the pipe manufacturer or wholesaler. Contractor shall coordinate with pipe manufacturer or wholesaler regarding scheduling for hot tap installation, and shall provide a minimum 7-day written notice to the Water Utility in advance of the Work. All hot tap installations shall be performed according to the current Avion Construction Specifications.

01140.48 Maintaining Service – Add the following paragraph to the end of this subsection:

Service interruptions shall not occur between June 1 and August 31. Work requiring service interruptions shall be coordinated with the Water Utility in advance of the Work, and shall be completed within the timeframe specified by the Water Utility (one day if not specified otherwise).

01140.51(a) General – Add the following sentence to the end of the first paragraph:

Pressure testing shall be the responsibility of the pipe manufacturer or wholesaler. Contractor shall coordinate testing with the pipe manufacturer or wholesaler.

01140.90 Payment - Replace the sentence that begins with "The quantities include the pipe plus..." with the following:

No allowance shall be made for pipe fittings and couplings. These items are incidental to the pipe installation.

In the paragraph that begins “No separate or additional payment will be...”, add the following bullet to the bullet list:

- pipe reconnections
- 18” HDPE DR17 carrier sleeve with welded joints (Canal Crossing – Elder).
- 10” HDPE DR17 carrier sleeve with welded joints (Canal Crossing – Elder).
- Temporary tie ins or connections if water line improvements are phased to meet irrigation season restrictions.

The fittings and sleeve are incidental to the water pipe installation under the irrigation canal.

SECTION 01150 - POTABLE WATER VALVES

Comply with Section 01150 of the Standard Specifications modified as follows:

01150.00 Scope – Add the following to the end of this subsection:

All potable water valve installations shall be completed according to the current Avion Construction Specifications.

01150.10 Materials - Delete “Ball Valves” from the list of materials.

01150.11 Handling – Add the following to the end of this subsection:

Contractor shall coordinate with the Water Utility regarding installation of valves and valve assemblies in order for a representative of the Water Utility to be present during installation. Water Utility shall issue a boil notice to residents affected by service interruptions resulting from installation of pipe and fittings.

Add the following subsection:

01150.42 Maintaining Service – Service interruptions shall not occur between June 1 and August 31. Work requiring service interruptions shall be coordinated with the Water Utility in advance of the Work, and shall be completed within the timeframe specified by the Water Utility (one day if not specified otherwise).

01150.90 Payment – Add the following to the list of Pay Items:

Pay Item	Unit of Measurement
(h) Blowoff Assembly, 2 Inch.....	Each
(i) 12 Inch Combination Air Release / Air Vacuum Valve Assembly	Each
(j) 4 Inch Tapping Sleeve and 4 Inch Valve Assembly.....	Each
(k) 2 Inch Tapping Saddle and 2 Inch Valve Assembly.....	Each

Replace the paragraph that begins “No separate or additional...” with the following paragraph:

No separate or additional payment will be made for:

- earthwork not covered under other Pay Items
- jointing
- blocking of valves
- protective coatings
- valve boxes
- valve box extensions
- valve operator extensions
- valve reconnections
- hydrostatic testing
- temporary tie ins or connections if water line improvements are phased to meet irrigation season restrictions.

SECTION 01170 - POTABLE WATER SERVICE CONNECTIONS, 2 INCH AND SMALLER

Comply with Section 01170 of the Standard Specifications.

SECTION 02001 - CONCRETE

Comply with Section 02001 of the Standard Specifications modified as follows:

02001.02 Abbreviations and Definitions:

Add the following definition:

Lightweight Concrete - Structural concrete having a specified density using lightweight Aggregates.

Replace the sentence that begins “**Pozzolans** - Fly ash, silica fume...” with the following sentence:

Pozzolans - Fly ash, natural Pozzolans, silica fume, and high-reactivity Pozzolans.

Replace the sentence that begins “**Supplementary Cementitious Materials** - Fly ash, silica fume...” with the following sentence:

Supplementary Cementitious Materials - Pozzolans and ground granulated blast furnace slag.

02001.15(a) Current Mix Designs - Replace this subsection, except for the subsection number and title, with the following:

Mix designs that meet the requirements for the specified class of concrete and are currently being used or have been used within the past 24 months on any project, public or private, may be submitted for review. Provide individual test results that comprise the average if more

than one data point exists. For paving designs the flexural strength testing must be from within the last two years. For HPC designs the length change and permeability tests must be from within the last two years.

02001.15(b)(1) Trial Batch Plastic Properties - Replace this subsection, except for the subsection number and title, with the following:

For each trial batch, test according to the following test methods:

Test	Test Method
Sampling Fresh Concrete	WAQTC TM 2
Concrete Temperature	AASHTO T 309
Slump	AASHTO T 119 ¹
Air Content	AASHTO T 152 or T 196 ²
Density	AASHTO T 121
Yield	AASHTO T 121
Molding Concrete Specimens	AASHTO T 23 or R 39 ³
Water Cement Ratio	⁴

¹ For drilled shaft concrete test the slump retention by subsequent tests at half-hour intervals for the duration of the estimated drilled shaft placement, including temporary casing extraction. Report in table or graphical format.

² Use AASHTO T 196 for lightweight concrete.

³ Cast cylinders in single use plastic molds.

⁴ Use ODOT's Field Operating Procedure for AASHTO T 121 in the MFTP.

02001.15(c)(10) Plastic Concrete Tests – Replace the bullet that begins “Initial slump test result and subsequent...”

- Initial slump test results and subsequent results at 60-minute intervals, verifying a minimum slump of 4 inches is maintained for the total time estimated for drilled shaft placement, including temporary casing extraction. Report data in a table or graph format.

02001.15(c)(12) Documentation of Average Compressive Strength - Replace this subsection, except for the subsection number and title, with the following:

Provide an analysis, showing applicable data and calculations for documentation of average compressive strength according to ACI 301.

02001.20(a) Strength - Replace Table 2001-1 with the following Table 2001-1:

Table 02001-1

Concrete Strength and Water/Cementitious Material (w/cm) Ratio		
Type of Concrete	Strength f'_c (psi)	Maximum w/cm Ratio
Structural	3300	0.50
	3300 (Seal)	0.45
	4000	0.48
	4000 (Drilled Shaft)	
	HPC4500	0.40
	HPC(IC)4500	
	5000 +	
Paving	4000	0.44
PPCM's (with cast-in-place decks and no entrained air)	5000	0.48
	5500	0.44
	6000 +	0.42

02001.20(a)(1) Required Average Compressive Strength (f'_{cr}) - Replace this subsection, except for the subsection number and title, with the following:

Except for PPCM designs, provide the required average compressive strength according to ACI 301 for mix design approval.

02001.30(e)(1) HPC Coarse Aggregate Content - Delete the paragraph that begins "Two or more Aggregate products or sources..."

Add the following subsection:

02001.50(d) Concrete Strength Testing Technician (CSTT):

- Receive concrete test cylinders
- Record data
- Strip cylinders
- Store cylinders
- Test cylinders
- Record test data
- Report test data

SECTION 02020 – WATER

Comply with Section 02020 of the Standard Specifications.

SECTION 02030 – SUPPLEMENTARY CEMENTITIOUS MATERIALS

Comply with Section 02030, of the Standard Specifications modified as follows:

02030.00 Scope - Replace this subsection, except for the subsection number and title, with the following:

This Section includes the requirements for fly ash, natural pozzolans, silica fume, ground granulated blast furnace slag and high reactivity pozzolans used in portland cement concrete.

02030.10 Fly Ash - Replace this subsection, except for the subsection number and title, with the following:

Furnish Class C and Class F fly ash from the QPL and conforming to AASHTO M 295 (ASTM C618).

Add the following subsection:

02030.15 Natural Pozzolans - Furnish Class N natural pozzolans from the QPL and conforming to AASHTO M 295 (ASTM C618).

02030.50 Metakaolin - Replace this subsection with the following:

02030.50 High Reactivity Pozzolans - Furnish high-reactivity pozzolans from the QPL and conforming to AASHTO M 321.

SECTION 02035 – CONCRETE MODIFIERS

Comply with Section 02035 of the Standard Specifications.

SECTION 02040 – CHEMICAL ADMIXTURES

Comply with Section 02040 of the Standard Specifications.

SECTION 02045 – SYNTHETIC FIBER REINFORCING FOR CONCRETE

Comply with Section 02045 of the Standard Specifications.

SECTION 02050 - CURING MATERIALS

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

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

Furnish liquid membrane-forming curing compounds from the QPL and meeting the requirements of ASTM C309. Before use, submit a one quart sample from each lot for testing. Samples will be tested according to ODOT TM 721. Samples are not required for curing compounds used on Commercial Grade Concrete.

SECTION 02320 - GEOSYNTHETICS

Comply with Section 02320 of the Standard Specifications modified as follows:

02320.10(a)(1) Geotextiles - Add the following bullet to the beginning of the bullet list:

- QPL approved for the intended application.

02320.10(b) Acceptance Requirements - Replace this subsection with the following subsection:

02320.10(b) Identification - Identify geotextiles by the product name printed directly on the geotextile by the Manufacturer. For all other geosynthetics and when geotextiles are not marked with a product name, identify geosynthetics by the product label attached to the original packaging or the geosynthetic itself by the Manufacturer.

Allow the Engineer to visually verify geosynthetic products before installation. Open packaged geosynthetics before use in the presence of the Engineer to confirm the correct product. Geotextile rolls without the product name printed on the geotextile or the product label affixed to the geotextile or roll core by the Manufacturer will be rejected. Any other geosynthetics that are unwrapped, missing original packaging or previously opened may not be used unless approved by the Engineer.

02320.10(c)(1) Geotextiles - Replace this subsection, except for the subsection number and title, with the following:

Geotextile products listed in the QPL that are identified as “NTPEP listed” in the remarks column have been approved based on participation in the AASHTO National Transportation Product Evaluation Program (NTPEP) and test data from the program. Manufacturer’s test certification is not required for NTPEP listed geotextiles from the QPL. For other geotextiles, include the following unless directed otherwise:

- QPL product category and proposed project application.
- Product name printed directly on the geotextile by the Manufacturer. For geotextiles that are not marked with a product name, provide geotextile with product label attached to the geotextile or original packaging by the Manufacturer.
- Manufacturer’s name, lot number, roll number, production facility address, and full product information (style, brand, name, etc.).
- Chemical composition of filaments and yarns, including polymer(s) used.
- Minimum average roll values for each of the specified properties from the same lot of geotextiles as the delivered material.

SECTION 02510 - REINFORCEMENT

Comply with Section 02510 of the Standard Specifications modified as follows:

02510.11(c) Coated Reinforcement Ties and Supports - Replace this subsection, except for the subsection number and title, with the following:

Ties and supports for coated reinforcement, including ties for coated to uncoated reinforcement connections, shall be nonmetallic coated.

SECTION 02560 - FASTENERS

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

02560.30(b) High Strength Tie Rods, Anchor Bolts and Anchor Rods - Add the following paragraph to the end of this subsection:

End stamp all ASTM F1554, Grade 105 according to ASTM F1554 Supplementary Requirements S2 and S3. If the end of the bolt is to be embedded in concrete, the projecting end from the concrete shall be the marked end.

SECTION 02910 - SIGN MATERIALS

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

02910.33(a) General - Replace this subsection, except for the subsection number and title, with the following:

Permanent legends consist of white retroreflective screened, red retroreflective screened, black screened or cut-out white retroreflective sheeting. The letters and numerals of all permanent legends shall conform to the design of the FHWA Standard Rounded Capital Letter Alphabets.

Add following subsection:

02910.50 Digitally Printed Signs, Temporary - Temporary traffic control signs may use digitally printed signs from an integrated engineered match component system on the QPL and applied to furnished substrate according to 00222.10(b).