

**BID BOOKLET  
FOR HIGHWAY CONSTRUCTION**



**LINN COUNTY ROAD DEPARTMENT  
ALBANY, OREGON**

**BRIDGES AND ROADWAYS**

**MILL CREEK - FOLSOM ROAD BRIDGE REPLACEMENT**

**FOLSOM ROAD**

**LINN COUNTY**

**JULY 12, 2022**

**CLASS OF PROJECT COUNTY** \_\_\_\_\_

**CLASS OF WORK BRIDGES AND STRUCTURES** \_\_\_\_\_

**BID OF** \_\_\_\_\_

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**DESCRIPTION OF WORK**

Bridges and Roadways  
Mill Creek - Folsom Road Bridge Replacement  
Folsom Road  
Linn County

**TIMES AND PLACES OF RECEIVING BIDS (BID CLOSING)**

Bid Closing for the work described above will be 9:15:00 a.m. on the 12th day of July, 2022.

Before 9:15:00 a.m. on the day of Bid Closing, Bids shall be submitted to:

Darrin Lane, County Administrative Officer, Linn County Courthouse, 300 Fourth Avenue S.W., Room 201, Albany, Oregon 97321

Bids, Bid modifications, and Bid withdrawals will not be accepted on or after 9:15:00 a.m. on the day of Bid Closing.

**PLACE, TIME, AND DATE OF READING BIDS (BID OPENING)**

Bid Opening for the work described above will be opened and read at the Linn County Courthouse, Board of Commissioners, 300 Fourth Avenue S.W., Room 201, Albany, Oregon, beginning at approximately 9:35:00 a.m. on the day of Bid Closing.

**COMPLETION TIME LIMIT**

See Special Provisions Subsection 00180.50(h).

**CLASS OF PROJECT**

This is a County Project. Folsom Road is classified as Rural Local.

**CLASS OF WORK**

The Class of Work for this Project is: Bridges and Structures.

**APPLICABLE SPECIAL PROVISIONS**

The Special Provisions booklet applicable to the above-described work, for which Bids will be opened at the place, time, and date stated above, is that which contains the exact information as shown above on this page.

Bidders are cautioned against basing their Bids on a booklet bearing any different description, date(s), class of project, or class of work.

**BID SECTION**

The Bid Section can be found as Appendix B of the Special Provisions.

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

### INSTRUCTIONS FOR MODIFYING BID

**General** - Bid modifications must be received in writing by hand delivery, mail, parcel delivery service, email, or by electronic facsimile (FAX) transmission prior to the time designated for Bid Closing. Bid modifications received after Bid Closing will not be considered. **Incomplete or late transmittals will not be accepted, regardless of reason.**

Bids will be modified at the Bid Opening according to the information received.

**Instructions and Format** - Make modifications to Bids according to the "Letter Format for Modifying Bid" document located in this Bid Booklet and the following:

- Prepare the modifications on the Bidder's letterhead stationery.
- Include the Project title and the Bidder's company name.
- Make changes (increase/decrease statement) for each affected Bid Item. (*Lumping the changes into one Bid Item may result in the Bid Item being unbalanced, causing the Bid to be considered irregular and constituting grounds for Bid rejection.*)
- List all decreased-in-Bid items in numerical order first, then list all increased-in-Bid items.
- Show the total difference in the Bid last. (*Do not refer to your original Bid total. Do not show a new Bid total. Do not include a new Bid Schedule.*)
- Print name and sign the letter by an individual authorized to execute Bids.

**Hand Delivery, Mail, or Parcel Delivery Service** - If delivering by hand, mail or parcel delivery service deliver to:

Darrin Lane, County Administrative Officer, Linn County Courthouse, 300 Fourth Avenue S.W., Room 201, Albany, Oregon 97321

**FAX Transmittals** - If using FAX as transmission, send them according to the following:

- Send the FAX to the FAX telephone number 541-926-8228. FAX transmittals will be accepted only at this number. (*Contractors will be responsible for the payment for the transmission of Bid modifications.*)
- The time of receipt of FAX transmittals by the County will be determined by the time which is electronically imprinted upon the Bid change by the County facsimile machine.
- The Agency is not responsible for any failed or partial FAX transmissions of Bid changes, caused by whatever reason, mechanical failure or otherwise.
- **Complete Bids will not be accepted by FAX.**

**Email** - If using email as transmission, send them according to the following:

- Send scanned document to the email address: [roads.bidding@co.linn.or.us](mailto:roads.bidding@co.linn.or.us). Emails will be accepted only at this email address.
- In the subject line of the email, include the words "Modification to Bids for (Project Title)"
- The time of receipt of email by the County will be determined by the time which is electronically imprinted upon the email receipt of Bid changes received at the County email address.
- The Agency is not responsible for any failed or partial email transmissions of Bid changes, caused by whatever reason, mechanical failure or otherwise.
- **Complete Bids will not be accepted by email.**

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**LETTER FORMAT FOR MODIFYING BID**

(NOTE: Text shown as "italic-underline" are instructions for preparing the letter for modifying Bids.)

(Prepare on Bidders Letterhead Stationery)

(Bid Opening Date)

Attn: Darrin Lane, County Administrative Officer

Hand Delivery, Mail, or Parcel Delivery Service Address:

Linn County Courthouse  
300 Fourth Avenue S.W., Room 201  
Albany, Oregon 97321

SUBJECT: Modifications to Bid

(Project Title)

(Bidders Company Name)

**(For a decrease in a Bid amount: Copy and paste the following line for each Bid Item reduction.)**

Reduce Bid Item No. \_\_\_\_\_ by \$\_\_\_\_\_ per \_\_\_\_\_ (Indicate unit of measurement, e.g.,  
ton, cu. yd., sq. ft., etc.)

**(For an increase in a Bid amount: Copy and paste the following line for each Bid Item increase.)**

Increase Bid Item No. \_\_\_\_\_ by \$\_\_\_\_\_ per \_\_\_\_\_ (Indicate unit of measurement, e.g.,  
ton, cu. yd., sq. ft., etc.)

This will (increase/decrease) our total Bid by \$\_\_\_\_\_. (Only show the total increase or  
decrease of your Bid. Do not show a new  
Bid total.)

\_\_\_\_\_  
(Printed name of individual signing below.)

\_\_\_\_\_  
(Signed by an individual authorized to sign Bids  
and execute documents.)

**SPECIAL PROVISIONS  
FOR HIGHWAY CONSTRUCTION**



**LINN COUNTY ROAD DEPARTMENT  
ALBANY, OREGON**

**BRIDGES AND ROADWAYS**

**MILL CREEK - FOLSOM ROAD BRIDGE REPLACEMENT**

**FOLSOM ROAD**

**LINN COUNTY**

**JULY 12, 2022**

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**DESCRIPTION OF WORK**

Bridges and Roadways  
Mill Creek - Folsom Road Bridge Replacement  
Folsom Road  
Linn County

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**PLACE, TIME, AND DATE OF READING BIDS (BID OPENING)**

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**START DATE**

No work included in this contract shall begin prior to the Preconstruction Meeting. Other Job Site Restrictions may apply as shown in 00130.80 and 00180.40(b) of the Specifications.

**COMPLETION TIME LIMIT**

See Subsection 00180.50(h).

**CLASS OF PROJECT**

This is a County Project. Folsom Road is classified as Rural Local.

**CLASS OF WORK**

The Class of Work for this Project is: Bridges and Structures.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**PROJECT INFORMATION**

Information pertaining to this Project may be obtained from the following:

Kevin Groom, P.E., Project Engineer, Linn County Road Department,  
3010 Ferry St, S.W., Albany, Oregon 97322; Phone 541-967-3919, Fax 541-924-0202.  
Email: kgroom@co.linn.or.us

Andrew Potts, P.E., Project Manager, Linn County Road Department,  
3010 Ferry St, S.W., Albany, Oregon 97322; Phone 541-967-3919, Fax 541-924-0202.  
Email: andrew.potts@co.linn.or.us

Daineal Malone, P.E., County Engineer, Linn County Road Department,  
3010 Ferry St, S.W., Albany, Oregon 97322; Phone 541-967-3919, Fax 541-924-0202.  
Email: daineal.malone@co.linn.or.us

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**TABLE OF CONTENTS FOR SPECIAL PROVISIONS**

ASSIGNED DBE CONTRACT GOAL  
PROJECT WAGE RATES  
FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM INSTRUCTIONS  
SIGNATURE SHEETS  
SPECIAL PROVISIONS ..... 1  
WORK TO BE DONE..... 1  
APPLICABLE SPECIFICATIONS ..... 1  
CLASS OF PROJECT ..... 1  
SECTION 00100 - GENERAL CONDITIONS..... 1  
SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS, AND DEFINITIONS..... 1  
SECTION 00120 - BIDDING REQUIREMENTS AND PROCEDURES ..... 2  
SECTION 00130 - AWARD AND EXECUTION OF CONTRACT ..... 2  
SECTION 00140 - SCOPE OF WORK ..... 2  
SECTION 00150 - CONTROL OF WORK..... 3  
SECTION 00160 - SOURCE OF MATERIALS..... 3  
SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES..... 3  
SECTION 00180 - PROSECUTION AND PROGRESS ..... 5  
SECTION 00190 - MEASUREMENT OF PAY QUANTITIES ..... 5  
SECTION 00195 - PAYMENT..... 5  
SECTION 00196 - PAYMENT FOR EXTRA WORK ..... 5  
SECTION 00197 - PAYMENT FOR FORCE ACCOUNT WORK ..... 6  
SECTION 00199 - DISAGREEMENTS, PROTESTS, AND CLAIMS..... 6  
SECTION 00210 - MOBILIZATION..... 6  
SECTION 00220 - ACCOMMODATIONS FOR PUBLIC TRAFFIC ..... 6  
SECTION 00221 - COMMON PROVISIONS FOR WORK ZONE TRAFFIC CONTROL ..... 6  
SECTION 00222 - TEMPORARY TRAFFIC CONTROL SIGNS ..... 6  
SECTION 00226 - TEMPORARY ROADSIDE BARRIERS AND IMPACT ATTENUATORS..... 7  
SECTION 00227 - TEMPORARY TRAFFIC SIGNALS AND ILLUMINATION ..... 7  
SECTION 00230 - TEMPORARY ROADBED AND SURFACING..... 7  
SECTION 00250 - DIVERSION BRIDGES ..... 9  
SECTION 00253 - TEMPORARY WORK ACCESS AND CONTAINMENT..... 20  
SECTION 00280 - EROSION AND SEDIMENT CONTROL..... 20  
SECTION 00290 - ENVIRONMENTAL PROTECTION ..... 21  
SECTION 00305 - CONSTRUCTION SURVEY WORK..... 23  
SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS ..... 40  
SECTION 00320 - CLEARING AND GRUBBING ..... 40  
SECTION 00330 - EARTHWORK..... 40  
SECTION 00350 - GEOSYNTHETIC INSTALLATION..... 41  
SECTION 00501 - BRIDGE REMOVAL ..... 41  
SECTION 00504 - CONCRETE DECK SURFACE PREPARATION ..... 42  
SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL ..... 42  
SECTION 00520 - DRIVEN PILES ..... 42  
SECTION 00530 - STEEL REINFORCEMENT FOR CONCRETE..... 43  
SECTION 00540 - STRUCTURAL CONCRETE ..... 44  
SECTION 00545 - REINFORCED CONCRETE BRIDGE END PANELS..... 44  
SECTION 00550 - PRECAST PRESTRESSED CONCRETE MEMBERS ..... 44  
SECTION 00582 - BRIDGE BEARINGS..... 44  
SECTION 00585 - EXPANSION JOINTS..... 44  
SECTION 00587 - BRIDGE RAILS ..... 47  
SECTION 00589 - UTILITY ATTACHMENTS ON STRUCTURES..... 47  
SECTION 00592 - ROLLED WATERPROOFING MEMBRANE..... 49



**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

SECTION 00620 - COLD PLANE PAVEMENT REMOVAL..... 51  
SECTION 00640 - AGGREGATE BASE AND SHOULDERS..... 51  
SECTION 00730 - EMULSIFIED ASPHALT TACK COAT ..... 51  
SECTION 00744 - ASPHALT CONCRETE PAVEMENT ..... 51  
SECTION 00810 - METAL GUARDRAIL ..... 52  
SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS..... 52  
SECTION 00860 - LONGITUDINAL PAVEMENT MARKINGS - PAINT ..... 52  
SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS..... 52  
SECTION 00930 - METAL SIGN SUPPORTS ..... 52  
SECTION 00940 - SIGNS..... 53  
SECTION 01014 - STORMWATER CONTROL, WATER QUALITY FILTER STRIP..... 53  
SECTION 01030 - SEEDING..... 54  
SECTION 01050 - FENCES ..... 56  
SECTION 02001 - CONCRETE..... 56  
SECTION 02030 - SUPPLEMENTARY CEMENTITIOUS MATERIALS..... 56  
SECTION 02050 - CURING MATERIALS..... 57  
SECTION 02530 - STRUCTURAL STEEL..... 57  
SECTION 02560 - FASTENERS ..... 57  
SECTION 02690 - PCC AGGREGATES..... 58  
SECTION 02910 - SIGN MATERIALS ..... 58  
APPENDIX A - PROJECT PLANS  
APPENDIX B - BID SECTION

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**ASSIGNED DBE CONTRACT GOAL**

The minimum Assigned DBE Contract Goal for this Project is **0%**.

A Certification Directory of DBEs is available from the Certification Office of Business Inclusion and Diversity (COBID) website at:

<https://oregon4biz.diversitysoftware.com/FrontEnd/VendorSearchPublic.asp>

or by telephone at 503-986-0075.

**PROJECT WAGE RATES**

**Minimum Wage Requirements** - This Project is subject to State prevailing wage rate requirements. Not less than the applicable State prevailing wage rates shall be paid to workers according to 00170.65(b) and 00170.65(e).

**Applicable Wages** - Prevailing wage rates published in the wage determinations and any applicable modifications or amendments apply to this Project and are incorporated by reference:

Oregon Bureau of Labor and Industries (BOLI), "Prevailing Wage Rates for Public Works Contracts".

The applicable State prevailing wage rates last published prior to the time of Bid Opening, which is stated on the Description of Work page, apply to this Project.

**Wage Rates are Internet-Accessible** - The applicable Oregon Bureau of Labor and Industries (BOLI) wage rates can be found at its website (see 00110.05(e)).

**Wage Rates are Subject to Change** - Modifications or amendments to the BOLI wage rates applicable to this Project may occur at any time before Bid Opening. Bidders are responsible to monitor the respective web page(s) for modifications and amendments up until Bid Opening.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM INSTRUCTIONS**

The First-tier Subcontractor Disclosure Form is included in the Bid Section or can be downloaded from the County website listed in 00110.05(e).

**Instructions for Submitting Form**

Submit the First-Tier Subcontractor Disclosure form not later than two working hours after the time set for Bid Closing (For example, before 11:00 a.m. after a 9:00 a.m. Bid Closing.) by any of the following methods:

- By filling out the Subcontractor Disclosure Form included in the Bid Booklet and submitting it together with the Bid at the time designated for receipt of Bids.
- Hand delivering it to: The Linn County Courthouse, 300 Fourth Avenue S.W., Room 201, Albany, OR 97321, or
- FAX it to 541-924-0202
- Email to: [roads.bidding@co.linn.or.us](mailto:roads.bidding@co.linn.or.us)

The Department is not responsible for partial, failed, illegible, or partially legible email or FAX transmissions.

**Instructions for First-Tier Subcontractor Disclosure**

Without regard to the amount of a Bidder's Bid, if the Agency's cost range for a public improvement Project in the "Notice to Contractors", or in other advertisement or solicitation documents is greater than \$100,000 Bidders are required to disclose information about first-tier Subcontractors that will furnish labor or labor and materials (See ORS 279C.370). Specifically, when the contract amount of a first-tier Subcontractor is greater than or equal to: (1) 5% of the total project Bid, but at least \$15,000, or (2) \$350,000 regardless of the percentage of the total project Bid, you must disclose the following information about that Subcontractor not later than two working hours after the time set for opening Bids:

- The name of the Subcontractor
- The category of work that the Subcontractor will be performing
- The dollar amount of the subcontract

Total all work for each Subcontractor in making this determination.

If the Agency's cost range is greater than \$100,000 and you will not be using any first-tier Subcontractors, you are still required to submit the form, with the appropriate box checked or enter "NONE" on the first line.

If the Agency's cost range is greater than \$100,000 and you are not subject to the above disclosure requirements, you are still required to submit the form, with the appropriate box checked or enter "NONE" on the first line.

**THE AGENCY MUST REJECT BIDS if the Bidder fails to submit the disclosure form with this information by the stated deadline.**

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**


LINN COUNTY ROAD DEPARTMENT

SPECIAL PROVISIONS

FOR

Bridges and Roadways  
Mill Creek - Folsom Road Bridge Replacement  
Folsom Road  
Linn County

**PROFESSIONAL OF RECORD CERTIFICATION(s):**

<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 for the General Conditions and environmental elements. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections: 00100, 00110, 00120, 00130, 00140, 00150, 00160, 00170, 00180, 00190, 00195, 00196, 00197, 00199, 00280, 00290, 01014</p>
<p>Date Signed: <u>June 16, 2022</u></p>	

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

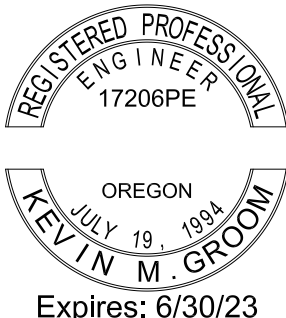
LINN COUNTY ROAD DEPARTMENT

SPECIAL PROVISIONS

FOR

Bridges and Roadways  
Mill Creek - Folsom Road Bridge Replacement  
Folsom Road  
Linn County

**PROFESSIONAL OF RECORD CERTIFICATION(s):**

<p>Seal w/signature</p>  <p>Expires: 6/30/23</p>	<p>I certify the Special Provision Section(s) listed below are applicable to the design for the subject project for bridge and roadway elements. Modified Special Provisions were prepared by me or under my supervision.</p> <p>Sections: 00210, 00220, 00221, 00222, 00226, 00227, 00230, 00250, 00253, 00305, 00310, 00320, 00330, 00350, 00501, 00504, 00510, 00520, 00530, 00540, 00545, 00550, 00582, 00585, 00587, 00589, 00592, 00620, 00640, 00730, 00744, 00810, 00850, 00860, 00905, 00930, 01030, 01050, 02001, 02030, 02050, 02530, 02560, 02690, 02910</p>
<p>Date Signed: <u>June 16, 2022</u></p>	

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**SPECIAL PROVISIONS**

**WORK TO BE DONE**

The Work to be done under this Contract consists of the following:

1. Furnish, install, maintain, and remove traffic control and erosion control devices
2. Construct and maintain temporary diversion roadway and bridge
3. Perform grading, excavation/embankment
4. Construct roadway approaches
5. Asphalt pavement saw cutting
6. Remove existing structure
7. Construct new bridge
8. Cold plane pavement removal
9. Install asphalt concrete pavement
10. Install pavement markings
11. Install approach guardrail and bridge rail
12. Install signage
13. Install fence
14. Install water quality filter strips
15. Install permanent seeding
16. Perform additional and incidental Work as called for by the Specifications and Plans

**APPLICABLE SPECIFICATIONS**

The Specifications that are applicable to the Work on this Project are the December 1, 2021 edition of the "General Conditions for Construction for the Linn County Road Department" and the 2021 edition of the "Oregon Standard Specifications for Construction", as modified by these Special Provisions. All Sections in Part 00100 apply, whether or not modified or referenced in the Special Provisions.

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.

**CLASS OF PROJECT**

This is a County Project. Folsom Road is classified as Rural Local.

**SECTION 00100 - GENERAL CONDITIONS**

Comply with Section 00100 of the General Conditions for Construction for the Linn County Road Department modified as follows:

**SECTION 00110 - ORGANIZATION, CONVENTIONS, ABBREVIATIONS, AND DEFINITIONS**

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

- American Traffic Safety Services Association (ATSSA)  
[www.atssa.com](http://www.atssa.com)
- EquipmentWatch  
[www.equipmentwatch.com](http://www.equipmentwatch.com)
- Linn County Road Department Bidding documents  
[www.co.linn.or.us/Roads/ContractConst.asp](http://www.co.linn.or.us/Roads/ContractConst.asp) - Project Title

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

- Linn County Road Department Plan Holders' Registration  
[www.co.linn.or.us/Roads/Register.asp](http://www.co.linn.or.us/Roads/Register.asp)
- ODOT Office of Civil Rights  
[www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx](http://www.oregon.gov/ODOT/Business/OCR/Pages/Forms.aspx)
- ODOT Construction Section  
[www.oregon.gov/odot/construction/pages/index.aspx](http://www.oregon.gov/odot/construction/pages/index.aspx)
- ODOT Construction Section - Qualified Products List (QPL)  
[www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx](http://www.oregon.gov/ODOT/Construction/Pages/Qualified-Products.aspx)
- ODOT Estimating  
[www.oregon.gov/ODOT/Business/Pages/Steel.aspx](http://www.oregon.gov/ODOT/Business/Pages/Steel.aspx)
- Oregon Legislative Counsel  
[www.oregonlegislature.gov/lc](http://www.oregonlegislature.gov/lc)
- ODOT Procurement Office - Conflict of Interest Guidelines and Disclosure Forms  
[www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx](http://www.oregon.gov/ODOT/Business/Procurement/Pages/PSK.aspx)
- ODOT Procurement Office - Construction Contracts Unit prequalification forms  
[www.oregon.gov/odot/business/procurement/pages/bid\\_award.aspx](http://www.oregon.gov/odot/business/procurement/pages/bid_award.aspx)
- Oregon Secretary of State: State Archives  
[sos.oregon.gov/archives/Pages/default.aspx](http://sos.oregon.gov/archives/Pages/default.aspx)
- ODOT Traffic Control Plans Unit  
[www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx](http://www.oregon.gov/ODOT/Engineering/Pages/Work-Zone.aspx)
- ODOT Traffic Standards  
[www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx](http://www.oregon.gov/ODOT/Engineering/Pages/Signals.aspx)
- Oregon Bureau of Labor and Industries (BOLI)  
[www.oregon.gov/boli/WHD/PWR/Pages/index.aspx](http://www.oregon.gov/boli/WHD/PWR/Pages/index.aspx)

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

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

**00120.05 Request for Plans, Special Provisions, and Bid Booklets** - Add the following to the end of this subsection:

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

“Bridges and Roadways  
Mill Creek – Folsom Road Bridge Replacement  
Linn County Bridge No. BR0651-0065  
ODOT Bridge No. 23903  
July 2022”

### **SECTION 00130 - AWARD AND EXECUTION OF CONTRACT**

Comply with Section 00130 of the Standard Specifications.

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

Comply with Section 00140 of the Standard Specifications.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**SECTION 00150 - CONTROL OF WORK**

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

Add the following subsection:

**00150.50(f) Utility Information (No Anticipated Relocations)** - Within the Project limits, there are no anticipated relocations with the Utilities listed in Table 00150-1. The Contractor shall contact those Utilities having buried facilities and request that they locate and mark them for their protection prior to construction.

**Table 00150-1**

<b>Utility</b>	<b>Contact Person's Name, Email, and Phone Number</b>
Lumen (Abandoned)	John Archer, Johnathan.archer@lumen.com, (503) 339-2219

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

Add the following subsection:

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

The organizations listed in Table 00150-2 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:

**Table 00150-2**

<b>Subsection</b>	<b>Utility</b>	<b>Contact Person's Name, Address, Email, and Phone Number</b>	<b>Estimated Completion Date</b>
00150.50(g)(1)	Pacific Power	Tucker Hill, <a href="mailto:tucker.hill@pacificcorp.com">tucker.hill@pacificcorp.com</a> , (541) 967-6161	July 15, 2022

The proposed relocation of the Pacific Power utilities are shown on the contract plans.

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

The Contractor shall maintain at least 10 feet of safety clearance from energized power lines. Exceptions require written approval from the Power Supplier and will require an on-site safety watcher at no cost to the Contractor. The Contractor shall provide the Engineer with a copy of the written approval of exception before beginning work.

**SECTION 00160 - SOURCE OF MATERIALS**

Comply with Section 00160 of the Standard Specifications.

**SECTION 00170 - LEGAL RELATIONS AND RESPONSIBILITIES**

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

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



**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

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

<b>Insurance Coverages</b>	<b>Combined Single Limit per Occurrence</b>	<b>Annual Aggregate Limit</b>
Commercial General Liability	\$2,000,000	\$4,000,000
Commercial Automobile Liability	\$1,000,000	(aggregate limit not required)

**00170.70(d) Additional Insured** - Add the following paragraph:

The liability insurance coverage, except Professional Liability, Errors or Omissions, or Workers' Compensation, if included, required for performance of the resulting contract will include State and its divisions, officers and employees as Additional insured but only with respect to the Contractor's activities to be performed under the resulting contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance.

**00170.70(g) Certificate(s) of Insurance** – Add the following bullet:

- List the “State of Oregon, the Oregon Transportation Commission and the Department of Transportation, and their respective officers, members, agents and employees” as a Certificate holder and endorse as an Additional Insured;

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

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

- The State of Oregon, the Oregon Transportation Commission and the Oregon Department of Transportation and their respective officers and members and employees (for purposes of this Subsection 00170.72 collectively "State") are additional Indemnitees.

Add the following two paragraphs to the end of this subsection:

Agency shall require its contractor(s) and subcontractor(s) that are not units of local government as defined in ORS 190.003, if any, to indemnify, defend, save and hold harmless the State of Oregon, Oregon Transportation Commission and its members, Oregon Department of Transportation and its officers, employees and agents from and against any and all claims, actions, liabilities, damages, losses, or expenses, including attorneys' fees, arising from a tort, as now or hereafter defined in ORS 30.260 (Claims), to the extent such Claims are caused, or alleged to be caused by the negligent or willful acts or omissions of Agency's contractor or any of the officers, agents, employees or subcontractors of the contractor. It is the specific intention of the Parties that State shall, in all instances, except to the extent Claims arise from the negligent or willful acts or omissions of the State, be indemnified from and against all Claims caused or alleged to be caused by the contractor or subcontractor.

Any such indemnification shall also provide that neither Agency's contractor and subcontractor nor any attorney engaged by Agency's contractor and subcontractor shall defend any claim in the name of the State of Oregon or any agency of the State of Oregon, nor purport to act as legal representative of the State of Oregon or any of its agencies, without the prior written consent of the Oregon Attorney General. The State of Oregon may, at anytime at its election assume its own defense and settlement in the event that it determines that Agency's contractor is prohibited from defending the State of Oregon, or that Agency's contractor is not adequately defending the State of Oregon's interests, or that an important governmental principle is at issue or that it is in the best interests of the State of Oregon to do so. The State of Oregon reserves all rights to pursue claims it may have against Agency's contractor if the State of Oregon elects to assume its own defense

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**SECTION 00180 - PROSECUTION AND PROGRESS**

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

Add the following subsection:

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

<b>Limitations</b>	<b>Subsection</b>
Cooperation with Utilities .....	00150.50
Contract Time .....	00180.50(h)
Closed Lanes .....	00220.40(e)(1)
Noise Control .....	00290.32

The Contractor shall be aware of and subject to schedule limitations in the Standard Specifications that are not listed in this subsection.

Add the following subsection:

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

The Contractor shall complete all Work to be done under the Contract, except for seeding establishment, before the elapse of 150 Calendar Days from First Notification, or not later than October 31, 2023 whichever occurs first.

**00180.85(b) Liquidated Damages** - Add the following to the end of this subsection:

The liquidated damages for failure to complete the Work on time required by 00180.50(h) will be \$1,387 per Calendar Day \*.

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

**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:

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

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

**SECTION 00196 - PAYMENT FOR EXTRA WORK**

Comply with Section 00196 of the Standard Specifications.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**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(c) Step 2: Agency Level Review** - Replace the paragraph that begins "If the Contractor does not accept the Step 2 ..." with the following paragraph:

If the Contractor does not accept the Step 2 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 (d) and (e) below), as applicable. For purposes of determining which process to use for claims under Step 3 or 4 concerning a combination of additional compensation and Contract Time or for Contract Time only, the value of the claim or portion of the claim for Contract Time will be assumed to be the appropriate Liquidated Damages as provided in 00180.85 multiplied by the number of Calendar Days in question. If applicable, advancement of the claim is subject to the provisions of 00199.60 regarding waiver and dismissal of the claim or portions of the claim.

**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:

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

One Traffic Lane may be closed on Folsom Road when allowed, shown, or directed during the duration of the project.

**00220.40(e)(2) Opened Lanes** - Replace this subsection, except for the subsection number and title, with the following:

One Traffic Lane shall be open on Folsom Road during for the duration of the project.

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

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

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

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

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

**SECTION 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:

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- When the horizontal clearance for the Roadway is less than 19 feet, install horizontal clearance (CW21-12-48) signs, identifying the narrowest width of the Roadway. Locate these horizontal clearance signs as shown or as directed.
- If the temporary detour road is not paved, protect traffic by installing signing according to the "LOOSE GRAVEL IN ROADWAY SIGNING" detail shown on the Standard Drawings. The maximum length of loose sand or gravel shall not exceed 5 miles.

### SECTION 00226 - TEMPORARY ROADSIDE BARRIERS AND IMPACT ATTENUATORS

Comply with Section 00226 of the Standard Specifications modified as follows:

**Add the following subsection:**

**00226.11(a)(3) Water Filled Barrier** – Furnish water filled YODOCK Model 2001 with YODOCK Couplers, or approved equal.

**00226.41(a) Temporary Barrier** - Delete the paragraph that begins "Secure temporary barrier to bridge decks..."

Replace the paragraph that begins "Keep the 3 feet of space behind ..." with the following paragraph:

Keep the 5.5 feet of space behind Temporary Barrier clear. Keep the 1.5 feet of space behind Minimum Deflection Temporary Barrier clear. Secure concrete barrier used for minimum deflection to Surfacing according to the Standard Drawings. Secure all other temporary barriers to Surfacing according to the manufacturer's recommendations.

Replace the paragraph that begins "When the clear area distance behind..." with the following paragraph:

When the clear area distance behind the barrier is less than 5.5 feet, use Minimum Deflection Temporary Barrier.

Add the following paragraph to the end of this subsection:

When using Temporary Barrier from the QPL on a bridge deck, submit unstamped Working Drawings detailing the securing of Temporary Barrier to bridge decks according to 00150.35.

Add the following subsection:

**00226.44 Minimum Deflection Bridge Temporary Barrier** - Secure Minimum Deflection Bridge Temporary Barrier to bridge decks according to the *ODOT Bridge Design Manual* or as shown.

### SECTION 00227 - TEMPORARY TRAFFIC SIGNALS AND ILLUMINATION

Comply with Section 00227 of the Standard Specifications.

### SECTION 00230 - TEMPORARY ROADBED AND SURFACING

Section 00230, which is not a Standard Specification, is included in this Project by Special Provision.

#### Description

**00230.00 Scope** - This Work consists of constructing, maintaining, and removing temporary Roadbeds and Surfacing, as shown or directed.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**Materials**

**00230.10 Materials** - Furnish Materials meeting the following requirements:

Aggregate Base .....	00640.10
Asphalt Concrete Pavement (ACP).....	00745.50
Emulsified Asphalt Tack Coat .....	00730.11

**00230.11 Earthwork** - Furnish Materials required to construct the Roadbed according to Section 00330 and as shown.

**Construction**

**00230.40 Earthwork** - Construct temporary embankments and excavation outside the permanent Roadbed according to the applicable parts of Section 00330, except density testing to verify compaction will not be required. Compact the embankment material according to 00330.43(c). Ensure that Earthwork that remains in place as permanent Roadbed meets all requirements of Section 00330.

**00230.43 Aggregate Base** - Place and compact Aggregate Base according to the applicable parts of Section 00640.

**00230.44 Asphalt Concrete Pavement** - Place ACP to the lines and grade shown or directed. Compact ACP according to 00745.49(d).

**00230.45 Emulsified Asphalt Tack Coat** - Apply emulsified asphalt according to the applicable parts of Section 00730.

**Maintenance**

**00230.60 Surface Maintenance** - Maintain temporary surfaces according to 00220.60.

**Finishing and Cleaning Up**

**00230.70 General** - When temporary surfaces are no longer needed, do the following:

- Remove all related materials.
- Restore the area on which the temporary Surfacing and associated Roadbed occupied to the original ground contours, or as directed.
- Apply permanent seeding to the area occupied by the temporary Surfacing and associated Roadbed, if required, according to Section 01030.
- Dispose of excess materials according to 00330.41(a)(4).

**Measurement**

**00230.80 Measurement** - No measurement of quantities will be made for Work performed under this Section. It is estimated that the following approximate quantities of Materials will be required:

<b>Material</b>	<b>Amount</b>
<b>Construct Temporary Roadbed and Surfacing:</b>	
Aggregate Base .....	400 ton

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**Remove Temporary Roadbed and Surfacing:**

Aggregate Base..... 400 ton

Quantities include only those quantities placed or removed outside the permanent Roadbed Neat Line.

Permanent seeding will be measured according to 01030.80.

**Payment**

**00230.90 Payment** - The accepted quantities of Work performed under this Section, except for permanent seeding Work, will be paid for at the Contract lump sum amount for the item "Construct and Remove Temporary Roadbed and Surfacing".

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

Permanent seeding will be paid for according to 01030.90.

**SECTION 00250 - DIVERSION BRIDGES**

Section 00250, which is not a Standard Specification, is included in this Project by Special Provision.

**Description**

**00250.00 Scope** - This Work consists of designing, constructing, inspecting, maintaining, and removing diversion bridges as shown or directed.

**00250.03 Submittals** - Submit the following at least 14 Calendar Days before the preinstallation conference:

- The Diversion Bridge Design Checklist which is included at the end of this Section.
- Stamped Working Drawings and calculations, including hydraulic, scour, and foundation calculations, according to 00150.35.
- For used material, provide the following:
  - The locations of all acceptable defects on the Working Drawings with supporting design calculations.
  - Documentation that all primary and secondary members to be incorporated into the diversion bridge meet the requirements of 00250.10.
  - A statement that the Design Engineer of Record has inspected the used Material to be incorporated into the diversion bridge.

**00250.04 Preinstallation Conference** - Hold a preinstallation conference with the Engineer, Contractor personnel, fabricator, Design Engineer of Record, and all other personnel involved in installing the diversion bridge. Meet at a mutually agreed time two weeks before installation work begins. Present and discuss all phases of the diversion bridge installation work.

**Materials**

**00250.10 Material** - Furnish new or used material for diversion bridges.

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

**(a) New and Used Material** - New and used material for diversion bridges may contain the following defects:

- Precast prestressed concrete members with spalling, cracking, section loss, or other distress that still satisfy the strength and serviceability requirements for the intended use.
- Structural steel members with notches, gouges, flame cuts, welds that have been repaired according to AWS D1.5, Section 3 or holes meeting the requirements of AWS D1.5 that still meet the structural design and fatigue requirements for the intended use.

**(b) New Material** - Furnish new material for diversion bridges according to the applicable Sections of Part 00500.

**(c) Used Material** - Used materials are defined as materials that:

- Are reclaimed from previous projects.
- Performed satisfactorily on previous projects.
- Have no damage that affects the strength or serviceability required for the application intended.
- The Design Engineer of Record can certify for use as a part of the diversion bridge according to 00250.44.

**(1) Precast Prestressed Concrete Members** - Furnish precast prestressed concrete members that:

- Meet the requirements of Section 00550.
- Are permanently marked, in a location that is visible after assembly, with the manufacturer's initials, cast date, job number, piece number, bridge number, and contract number.

Provide copies of the original shop drawings.

**(2) Structural Steel Members** - Furnish primary and secondary members that meet one of the following criteria:

### **Documented Steel:**

- Meet the requirements of AASHTO M 160 (ASTM A6).
- All existing welds were tested for discontinuities using magnetic particle, ultrasonic, or radiographic testing as appropriate according to AWS D1.5, Section 3. Evaluate all full penetration welds using tension criteria. Submit copies of all nondestructive testing (NDT) test reports to the Engineer.
- Meet the requirements of Section 02530. Verify by providing original material test reports or test reports on samples tested for yield and tensile strength, elongation, and Charpy Impact strength (zone 2).

### **Undocumented Steel:**

- Meet the requirements of AASHTO M 160 (ASTM A6).
- For the purpose of this Section, all design calculations for undocumented steel will be limited to the minimum requirements of ASTM A36 steel.
- All existing welds were tested for discontinuities using magnetic particle, ultrasonic, or radiographic testing as appropriate according to AWS D1.5, Section 3. Evaluate all full penetration welds using tension criteria. Submit copies of all NDT test reports to the Engineer.

**(3) Timber Members** - Furnish timber members that:

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- Meet the requirements of Section 02130.
- Do not contain rot, physical damage, or undue distortion.

### (4) Piling:

- a. Steel Piles** - Furnish steel piles meeting the requirements of Section 02520.

Verify the grade of steel piles by furnishing original material test reports or test reports on samples tested for yield and tensile strength, and elongation.

For the purpose of this Section, all design calculations for undocumented steel will be limited to the minimum requirements of ASTM A252, Grade 1 steel for pipe piles and ASTM A36 steel for H-Piles.

- b. Timber Piles** - Used timber piles are not allowed.

### Construction

**00250.41 Design** - Design diversion bridges according to the "Bridge Temporary Works" section of the ODOT *Bridge Design Manual*. Use the ODOT *Bridge Design Manual* edition that is current on the date of Advertisement.

**(a) Spread Footings** - For diversion bridges supported on spread footings, provide the following information:

- Soil or rock properties, ground water levels and all assumptions used to characterize the subsurface conditions for footing design.
- Estimated scour depths used in the analysis.
- Bearing capacity design calculations and recommendations.
- Recommended footing elevations.
- Estimated footing settlements and differential settlement, if applicable, based on the service conditions.
- Global stability analysis of spread footing locations.
- Method of providing adequate footing scour protection.

**(b) Driven Piles** - For diversion bridges supported on driven piles:

- Include the following information on the drawings:
  - Pile type, size, and steel grade.
  - Pile layout and spacing.
  - Required ultimate bearing capacity (nominal resistance).
  - Method for field determination of ultimate (nominal) bearing capacity (dynamic formula, wave equation, or dynamic load test).
  - Minimum pile tip elevations.
- Provide the following information and calculations:
  - Subsurface material properties, ground water levels and all assumptions used to characterize the subsurface conditions for pile design.
  - Estimated scour depths used in the analysis.



## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- Pile bearing capacity design calculations and recommendations.
- Provide the following analysis and recommendations when applicable:
  - Lateral pile load analysis.
  - Pile tip protection.
  - Pile uplift capacity.

**(c) Soffit Elevation** – The minimum soffit elevation for the diversion structure shall not be below 257.0 feet.

**(d) Width** - Design diversion bridges to match the temporary roadway width and vertical and horizontal alignment as shown.

**(e) Surfacing** - Except for concrete decks, provide the structure with a minimum 2 inch asphalt concrete or equivalent wearing surface. Immediately prior to placing the asphalt concrete:

- Clean and dry the surface to be covered.
- Apply a hot asphalt prime coat at a uniform rate of 0.20 to 0.25 gallons per square yard of deck surface or as directed by the Engineer.
- Apply a spread of aggregate, 1/4 inch to 1/2 inch in size, to give the appearance of 50 percent coverage.
- Roll the surface to secure the maximum embedment of the aggregate into the prime coat and surface.

**(f) Bridge Rail** - Design diversion bridge rail systems meeting MASH TL-3 performance criteria.

**00250.43 Construction** - Construct diversion bridges according to the applicable Sections of Part 00500 and the requirements of applicable permitting agencies.

Perform structural steel welding according to 00560.26(a) and steel piling welding according to 00520.43(g). Do not begin welding until all of the following have been approved:

- WPS-Welding Procedure Specification
- PQR-Procedure Qualification Records
- WQTR-Welder Qualification Test Records
- MTR-Material Test Report
- CWI-AWS Certified Welding Inspector

Field welding to girders, beams, stringers, crossbeams, and floor beams is not allowed.

### **00250.44 Opening to Traffic:**

**(a) Before Opening to Traffic** - Before opening diversion bridges to traffic, have the Design Engineer of Record perform the following:

- Inspect the soils to confirm that bearing capacity equals or exceeds design assumptions.
- Accompany the Engineer on an inspection of the structure to confirm the structure and materials conform to the Plans and Specifications.
- Furnish a written statement that the structure and the materials used will serve the intended use and that they comply with the Design Engineer of Record's submitted Plans and drawings.

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

**(b) After Opening to Traffic** - On diversion bridges that are open to traffic for more than one year, do the following:

- On or before each anniversary of the opening of the diversion structure, have the Design Engineer of Record inspect the structure and certify that a hands-on inspection of the structure has been performed and a determination has been made that the structure is consistent with the approved design and is currently adequate for its design loads.
- Furnish a signed and stamped report of the inspection results and certification within 30 Calendar Days of the inspection.

### **Temporary**

**00250.50 Diversion** - Provide temporary roadbed and surfacing according to Section 00230.

### **Maintenance**

**00250.60 Structure Maintenance** - Maintain diversion bridges, including wearing surfaces, in a safe and functional condition. Keep bracing and connections tight and immediately replace any damaged members, as directed or approved by the Engineer. For stream crossings, remove all debris or drift from the structure.

### **Finishing and Clean Up**

**00250.70 Structure Removal** - When diversion bridges are no longer needed, remove them according to Section 00310. Unless otherwise shown or specified, all diversion bridge materials will remain the property of the Contractor.

Satisfy all requirements of applicable permitting agencies during bridge removal.

Restore all areas occupied by the diversion bridges to original condition or as shown.

### **Measurement**

**00250.80 Measurement** - No measurement of quantities will be made for Work performed under this Section.

### **Payment**

**00250.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Diversion Bridge".

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 designing, constructing, maintaining, inspecting, or removing the diversion bridges.

Temporary roadbed and surfacing will be paid for according to 00230.90.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**DIVERSION BRIDGE DESIGN CHECKLIST**

**Instructions** - This checklist was developed to facilitate the design, review, and erection of diversion bridges. It is intended to remind the Design Engineer of Record to design and to check for specific aspects of construction. It is not a substitute for plan and design criteria or specification requirements.

The checklist is to be completed and signed by the diversion bridge Design Engineer of Record. Answer every question. Attach explanations of all negative responses to this checklist. Submit this checklist with the submittals.

	YES	NO	N/A
<b>A. Contract Plans, Specifications, and Permits</b>			
1. Are the diversion bridge's plans prepared, stamped and signed by an engineer registered to practice in Oregon?	_____	_____	_____
2. Have three complete sets (five if railroad approval is required) of the design calculations been included with the diversion bridge drawings submittal?	_____	_____	_____
3. Are diversion bridge plans in compliance with the requirements of the construction plans and specifications?	_____	_____	_____
4. Are diversion bridge plans in compliance with the requirements of the Oregon Standard Specifications for Construction, subsection 00150.35?	_____	_____	_____
5. Are all existing, adjusted or new utilities in proximity with the proposed diversion bridge shown on the diversion bridge plans and is protection of these utilities addressed?	_____	_____	_____
6. Are clearance requirements satisfied and shown on the diversion bridge plans?	_____	_____	_____
7. For construction in or over navigable waters, have all requirements for construction of the diversion bridge that are called for in the Coast Guard Permit been incorporated?	_____	_____	_____
8. Has possible damage from traffic been considered?	_____	_____	_____
9. Has damage from stream drift been considered?	_____	_____	_____

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**B. Foundation Requirements**

- |    |   |       |       |       |
|----|---|-------|-------|-------|
| 1. | Is the diversion bridge supported on driven piling?   | _____ | _____ | _____ |
| a. | Are minimum pile tip elevations or penetration depths indicated on the drawings?  | _____ | _____ | _____ |
| b. | If timber diversion bridge piles are used, are the lengths sufficient to eliminate the possibility of pile splices?   | _____ | _____ | _____ |
| c. | Is a static pile capacity analysis included in the calculations?  | _____ | _____ | _____ |
| d. | If lateral loads are applied to the piling by equipment, dead loads, flowing water, or drift, is a detailed lateral load analysis included in the calculations?         | _____ | _____ | _____ |
| e. | When piling are in an active waterway, have the potential effects of scour on axial and lateral pile support been addressed in the calculations?                        | _____ | _____ | _____ |
| f. | If the FHWA Gates Equation is used to determine bearing capacity, does the proposed pile hammer meet the minimum field energy requirements as listed in 00520.20(d)(2)? | _____ | _____ | _____ |
| g. | Will a driving criteria graph, plotting blow count versus stroke for an acceptable pile hammer, be provided for the project inspector?                                  | _____ | _____ | _____ |
| 2. | Is the diversion bridge supported on spread footings?   | _____ | _____ | _____ |
| a. | Are the spread footing elevations shown on the drawings?  | _____ | _____ | _____ |
| b. | Has a rational method for determining the ultimate bearing capacity of the foundation materials been presented and described in the calculations?                       | _____ | _____ | _____ |
| c. | Have the soil parameters used in calculating the ultimate bearing capacity been listed and confirmed by the Design Engineer of Record?                                  | _____ | _____ | _____ |
| d. | Has an appropriate Factor of Safety, or resistance factor, been used for calculating the allowable (or factored) bearing capacity of the foundation materials?          | _____ | _____ | _____ |

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

- e. Are spread footing settlement estimates included in the calculations? \_\_\_\_\_
- f. Have effective stresses been used in the calculations, when applicable? \_\_\_\_\_
- g. When spread footings are founded near the top of a slope or in a slope, have the ultimate bearing capacity calculations been modified accordingly? \_\_\_\_\_
- h. When spread footings may be subjected to flowing water, have the potential effects of scour on ultimate bearing capacity been addressed in the calculations? \_\_\_\_\_

**C. Loads**

- 1. Has the mass of the contractor's heavy equipment units crossing the diversion bridge been included in the calculations? \_\_\_\_\_
- 2. Are design loads and material properties used to determine design stresses for each different diversion bridge member shown on the diversion bridge plans? \_\_\_\_\_
- 3. Is the worst loading and member property condition, rather than the average condition, used to obtain design loads? \_\_\_\_\_
- 4. Are concentrated loads included in the analysis of supporting beams or steel beam caps? \_\_\_\_\_

**D. Allowable Stresses**

- 1. Has the method used for diversion bridge design of all members except for manufactured assemblies been noted in the design calculations? \_\_\_\_\_
- 2. Are manufactured assemblies identified as to manufacturer, model, rated working capacity and ultimate capacity? \_\_\_\_\_
- 3. Is the allowable stress and the calculated stress listed in the summary for each different diversion bridge member, except for manufactured assemblies? \_\_\_\_\_

**E. Timber Diversion bridge Construction**

- 1. Are timber grades consistent with material to be delivered to the construction site, and noted on diversion bridge drawings, and in accompanying calculations for all timber diversion bridge material? \_\_\_\_\_

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

- 2. If "rough" lumber is used, are the actual lumber dimensions used in the calculations? \_\_\_\_\_
- 3. If timber spans are governed by the strength of the timber, are the allowable stress and the calculated stress shown in the calculations? \_\_\_\_\_
- 4. If timber spans are governed by the allowable spacing of supporting joists or beams, are the allowable and the proposed spacing shown on the diversion bridge plans? \_\_\_\_\_
- 5. Has timber been checked for bending, shear, bearing stresses, and deflection? \_\_\_\_\_
- 6. Is deck timber identified as being continuous over three or more spans when they are not analyzed as simple spans? \_\_\_\_\_
- 7. Have deck timber and cap beams been checked for bearing stresses perpendicular to the grain as well as for bending and shear stresses? \_\_\_\_\_
- 8. Have posts been checked as columns as well as for compression parallel to the grain? \_\_\_\_\_

**F. Prestressed Concrete Members**

- 1. Are manufacturer initials, cast date, job number, piece number, bridge number, and contract number either permanently cast into each member or on a permanently attached stamped steel plate? \_\_\_\_\_
- 2. Are members adequate for indented use? \_\_\_\_\_
- 3. Are members free of spalls, cracks, section loss or any other distress? \_\_\_\_\_
- 4. Is location of each member marked on plans? \_\_\_\_\_
- 5. Is location of spalls or section loss of each member marked on plans? \_\_\_\_\_

**G. Steel Diversion bridge Construction**

- 1. Are steel structural shapes and plates identified by ASTM number on the diversion bridge plans and in the calculations? \_\_\_\_\_

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

- 2. Have exiting holes, notches, gouges, flame cuts, and welds been repaired according to AWS D1.5, Section 3? \_\_\_\_\_
- 3. Have exiting welds been ground flush and tested for discontinuities? \_\_\_\_\_
- 4. Have steel beams been checked for bending, shear, web crippling and buckling of the compression flange? \_\_\_\_\_
- 5. Has horizontal plane bracing been shown where required to limit compression flange buckling? \_\_\_\_\_
- 6. Are holes meeting the requirement of AWS D1.5, Section 3 shown in the diversion bridge plans? \_\_\_\_\_
- 7. Are supporting calculations showing the adequacy of steel sections with existing holes included? \_\_\_\_\_
- 8. Are fatigue category D, E and E' marked on the diversion bridge plans and is supporting analysis showing adequacy for each fatigue category provided? \_\_\_\_\_

**H. Deflections and Settlement**

- 1. Is diversion bridge deflection for concrete dead load shown on the plans for all spans? \_\_\_\_\_
- 2. Do stringers supporting cast-in-place concrete compensate for estimated camber? \_\_\_\_\_
- 3. Are provisions shown for taking up diversion bridge settlement? \_\_\_\_\_

**I. Compression Members, Connections and Bracing**

- 1. Has general buckling been evaluated for all compression members? \_\_\_\_\_
- 2. Has bracing been provided at all points of assumed support for compression members? \_\_\_\_\_
- 3. Has bracing in each direction been considered in establishing the effective length used to check post capacity? \_\_\_\_\_
- 4. Is bracing strength and stiffness sufficient for the intended purpose? \_\_\_\_\_

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

- 5. If temporary bracing is required during intermediate stages of diversion bridge erection, is it shown on the plans? \_\_\_\_\_
- 6. Have all connections been designed and detailed? \_\_\_\_\_
- 7. Are web stiffeners required on steel cap beams or steel beams to resist eccentric loads? \_\_\_\_\_
- 8. Are wedges required between longitudinal beams and cap beams to accommodate longitudinal slope or to reduce eccentric loading? \_\_\_\_\_
- 9. Have sloping diversion bridge members that exert horizontal forces on the diversion bridge been braced or tied to resist these loads? \_\_\_\_\_
- 10. Have timber headers set on shoring towers been checked for eccentric loads, and for shear and bending stresses produced by the eccentricity? \_\_\_\_\_

**J. Highway and Railroad Traffic Openings (For diversion bridge over or adjacent to highway or railroad traffic openings.)**

- 1. Does the diversion bridge have a minimum of 25 feet of horizontal clearance from center of the outside track to the bridge abutment? \_\_\_\_\_
- 2. Does the diversion bridge have a minimum of 23 feet 6 inch vertical clearance from the top of rail to the bottom of the bridge beam? \_\_\_\_\_
- 3. Does the diversion bridge meet all of the railroad permit requirements? \_\_\_\_\_

\_\_\_\_\_  
Design Engineer of Record Signature      Date



**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**SECTION 00253 - TEMPORARY WORK ACCESS AND CONTAINMENT**

Comply with Section 00253 of the Standard Specifications modified as follows:

**00253.00 Scope** - Add the following paragraphs to the end of this subsection:

On Structure No. 0651-0065, provide temporary work access and containment for the removal of the existing structure.

**00253.01 General** - Add the following paragraph to the end of this subsection:

Work platforms and containment are allowed on the bridge.

Add the following subsection:

**00253.09 Work Platform, Scaffolding and Containment Structural Design Requirements -**

Provide designs with a factor of safety of at least six for wire ropes and connecting hardware and at least four for all other components for containment structure and work platform components.

Verify structural adequacy of the bridge with added loading from containment structures and work platforms using AASHTO *Standard Specifications for Highway Bridges*, Group II, III, V, and VI load combinations.

For containment structures positioned symmetrically or asymmetrically on any span, design calculations for the bridge structural members are not required if all of the following conditions are satisfied:

- Total combined live load and dead load of all work platforms and containment structures supported by the span, including all personnel, equipment, materials, and collected debris or water, does not exceed 65 pounds per square foot.
- Point loads do not exceed 10,000 pounds at each point and point loads are spaced at least 10 feet in both horizontal directions. Point loads are applied to deck within one foot of a girder, cross beam, or diaphragm, or directly to a girder, cross beam or diaphragm.
- Containment and work platforms do not extend below elevation 257.0.

For movable containment structures, provide positive restraint to prevent movement except when containment structures are being relocated.

**00253.90 Payment** - Replace this subsection, except for the subsection number and title, with the following:

No payment will be made for Temporary Work Access and Containment. This work will be considered incidental to Bridge Removal Work.

**SECTION 00280 - EROSION AND SEDIMENT CONTROL**

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

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

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

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

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.

### **SECTION 00290 - ENVIRONMENTAL PROTECTION**

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

#### **00290.30(a)(7) Water Quality:**

- Do not discharge contaminated or sediment-laden water, including drilling fluids and waste, or water contained within a work area isolation, directly into any waters of the State or U.S. until it has been satisfactorily treated (using a best management practice such as a filter, settlement pond, bio-bag, dirt-bag, or pumping to a vegetated upland location).
- Do not use permanent stormwater quality treatment facilities to treat construction runoff unless prescribed by an ESCP approved under Section 00280
- If construction discharge water is released using an outfall or diffuser port, do not exceed velocities more than 4 feet per second, and do not exceed an aperture size of 1 inch.
- Implement containment measures adequate to prevent pollutants or construction and demolition materials, such as waste spoils, fuel or petroleum products, concrete cure water, silt, welding slag and grindings, concrete saw cutting by-products and sandblasting abrasives, from entering waters of the State or U.S.
- Implement containment measures adequate to prevent flowing stream water from coming into contact with concrete or grout within the first 24 hours after placement.
- Do not end-dump riprap into the waters of the State or U.S. Place riprap from above the ordinary high water line.
- Cease Project operations under high flow conditions that may result in inundation of the Project area, except for efforts to avoid or minimize resource damage.
- The Engineer retains the authority to temporarily halt or modify the Work in case of excessive turbidity or damage to natural resources.
- If Work activities violate permit conditions or any requirement of this subsection, stop all in-water work activities and notify the Engineer.

Add the following subsection:

**00290.30(a)(8) Visual Turbidity Monitoring** - In addition to any turbidity monitoring required by 00280.62(c) to comply with NPDES 1200 series requirements, monitor turbidity visually during in-water work according to the following:

- Before beginning Work, make upcurrent and downcurrent in stream turbidity observations.
- Every four hours, make observations at an upcurrent location outside the influence of the Project, and at a downcurrent location that indicates any turbidity caused by the Project.
- Document all turbidity monitoring observations including date, time, and location on form 734-2755, "Turbidity Monitoring Form" or another form approved by the Agency. Submit reports to the Engineer weekly during in-water work and keep copies of the reports at the Project Site.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

If a downcurrent turbidity plume is observed, modify work procedures and repair or implement in-water best management practices (BMP). If a turbidity plume is still observed at the next four-hour observation, stop all in-water work and repair or implement additional BMP. Resume in-water work when there is no longer a visible turbidity plume

**00290.32 Noise Control** - Replace the first bullet with the following:

- Do not perform construction operations, including staging, within 1000 feet of any occupied dwelling unit on Sundays, legal holidays and between the hours of 8:00 p.m. and 7:00 a.m. on weekdays and between the hours of 8:00 p.m. and 8:00 a.m. on Saturdays, unless otherwise approved by the Engineer.

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

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

**(1) Bird Management** - Bird management activities to comply with the Migratory Bird Treaty Act (16 U.S.C. 703 712) will be performed by the Agency. Ensure that the Agency and its permitted agents have access to the project area, as needed to prevent migratory bird nesting. Nesting prevention may include daily bird harassment and the installation and maintenance of devices that exclude birds.

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

**00290.41 Protection of Waters of the U.S. or State** - Add the following to the end of this subsection:

The following waters of the U.S. or State are present and have been determined to be avoidable as indicated in Table 00290-2:

**Table 00290-2**

<b>Impact Waters of the US or State</b>	<b>Removal Volume (cu yds.)</b>	<b>Fill Volume (Cu yds)</b>	<b>Station</b>	<b>Duration of Impact (Temporary or Permanent)</b>	<b>Area of impact (Acres)</b>
Mill Creek	0	0	2+75 to 3+75	N/A	0

Add the following subsection:

**00290.42 Work Containment Plan** - A Work Containment Plan (WCP) is required on this Project for bridge removal and all excavation activities.

Develop and submit a WCP for approval at least 21 Calendar Days prior to mobilization for bridge removal activities or excavation work. Maintain a copy of the WCP on the Project Site at all times during construction, readily available to employees and inspectors. Ensure that all employees comply with the provisions of the WCP. Design the WCP to avoid or minimize disturbance to protected features (sensitive cultural or natural resources, regulated work areas, aquatic life or habitat in regulated work areas) related to Contractor operations.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

Before developing the WCP, meet with Agency to review the Contractor’s activities that require the WCP to ensure that all parties understand the locations of protected features to be avoided and the measures needed to avoid and protect them.

Notify the Engineer at least 10 Calendar Days before beginning work access or containment construction activities.

The Agency reserves the right to stop Work and require the Contractor to change the WCP methods and Equipment before any additional Contract Work, at no additional cost to the Agency, if and when, in the opinion of the Agency, such methods jeopardize sensitive cultural or natural resources, regulated work areas, or aquatic life or habitat in regulated work areas.

The WCP shall identify how the Contractor's construction operations will protect regulated features during mobilization, construction, maintenance, and demolition. Include a narrative describing compliance with Section 00290 as related to construction, operation, and demolition activities specified in Section 00253.

Design, construct, maintain, and remove temporary work access and containment systems according to Section 00253.

**00290.90 Payment** - Add the following paragraph(s) to the end of this subsection:

The work containment plan will be paid for at the Contract lump sum amount for the item "Work Containment Plan and System".

Partial Payments will be made as follows:

- When the initial WCP and WCS is approved.....20%
- When WCS has been installed.....40%
- When WCS has been removed and all equipment and materials have been removed from the site.....40%

Payment will be payment in full for furnishing all materials, equipment, labor, and incidentals necessary to complete the work as specified. Payment includes providing and updating the work containment plan and for designing, constructing, maintaining, and removing the containment system.

**SECTION 00305 - CONSTRUCTION SURVEY WORK**

Section 00305, which is not a Standard Specification, is included for this Project by Special Provision.

**Description**

**00305.00 Scope** - This work consists of all surveying activities necessary to control the many phases of work required to construct the Project to the lines and grades as shown, specified, or established.

Make all supporting computations and field notes required for control of the work and as necessary to establish the exact position, orientation, and elevation of the work from control stations, including furnishing and setting construction stakes and marks, reference marks, and additional control stations.

Plans, specifications and other data necessary to lay out the work will be available for inspection at the Project Manager’s office. The Contractor will be furnished a copy of these documents.

**00305.01 Definitions:**

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

**Confidence Points** - Random points measured in the field within the boundary of a digital terrain model (DTM), the purposes of which are to verify the accuracy of the DTM and to provide evidence just prior to construction that the DTM is a reasonable representation of the original ground for computation of volumes and pay quantities. Similarly, confidence points are used to verify that a constructed grade has been built according to the design DTM. Additional information is available from the Engineer.

Confidence point locations follow these guidelines:

- Randomly selected without regard for the location of DTM points or triangles
- Evenly distributed over the entire DTM area to be validated
- Proportionately distributed between confidence point classifications as applicable
- At a density sufficient to validate the surface, generally ten per instrument location as used in collecting DTM data or if not applicable, as in data collected photogrammetrically, 2% of DTM points

**Control Network** - An array of control stations either established by the Contractor or provided by the Agency.

**Control Station** - Any item identified in the Project records as having a position and/or elevation on the Project datum and intended to be used to control the many phases of the construction work.

**Digital Terrain Model (DTM)** - An electronic computer model of the shape of the ground.

**Reference Stakes** - Stakes set away from but with information relating back to the intended location and/or grade.

**Slope Catch** - The location where a design slope intersects the existing ground and where excavation or embankment work should begin to provide the intended earthwork.

**Slope Staking** - The process of using measurements and calculations in the field to determine the slope catch. Slope staking shall normally include setting stakes to mark the slope catch and setting a reference stake for every catch stake.

**Stakes** - Stakes, nails, marks, string lines, or other devices or mechanisms set or established for the purpose of indicating or controlling the location, orientation, or grade of any feature intended for construction, or for the purpose of limiting or influencing the construction work.

**Staking** - The act of placing stakes.

**Subgrade Area** – The area of Subgrade from Subgrade shoulder to Subgrade shoulder.

**Survey Marker** - Any survey monument, control station, or stake.

**Survey Monument** - Any natural or man-made item specified or identified in a property deed, boundary survey, government document, or other instrument of public record, when the purpose of said item is to mark or reference a property boundary, geographical location, elevation, or other position.

**Surveyor** - The individual designated by the Contractor and licensed in the state of Oregon as a Professional Land Surveyor and placed in "responsible charge" of the survey work as defined in ORS 672.002(6)(b).

**Temporary Bench Mark (TBM)** - A control station established for the purpose of providing vertical control for the Project. A TBM may or may not have an established horizontal position.

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

**00305.02 Pre-Survey Conference** -The prime Contractor, subcontractors, surveyor, survey crew leader, and all surveying personnel who are to be involved in the survey work shall be present at the preconstruction meeting or shall schedule to meet with the Project Manager two weeks prior to beginning survey work. The purpose of this meeting will be to discuss methods and practices of accomplishing required survey work.

**00305.03 Review by the Engineer** -The Engineer may periodically review the notes, calculations and layout work, including field locations, for compliance with these specifications. Survey work that does not meet the tolerances in 00305.40 may be rejected, and the work redone at the Contractors expense to meet the tolerances.

Review by the Engineer does not constitute approval or acceptance of the work, nor does it relieve the Contractor of responsibility for performing work in conformance with the plans and specifications.

**00305.04 Agency Responsibilities** - The Agency Shall perform or provide the following items of work:

- Perform and provide a Pre-Construction Survey.
- Provide copies of plans and specifications.
- Establish initial horizontal and vertical control stations in the proximity of the Project.
- Provide horizontal and vertical alignment data.
- Provide cross section grade elevations to establish lines, grades, slopes, cross sections, and curve superelevation for each phase of roadwork.
- Evaluate grade for acceptance at each course of material.
- Perform measurements and calculations for pay quantities.
- Review Contractor's work and records periodically.

**00305.05 Contractor Responsibilities** - The Contactor shall perform or provide the following items of work:

- Make calculations, field notes and survey drawings for the layout and control of the work as are necessary to construct the Project as specified
- Provide original or copies of notes, calculations and drawings as requested.
- Preserve survey monuments and control stations according to 00305.71 and as governed by applicable law.
- Give the Engineer such facilities and assistance in establishing lines, grades and points as the Engineer may require.
- In the case of alterations, which involve any changes in stakes, the Contractor shall cooperate with the Engineer and facilitate the prompt re-establishment of field control for the altered or adjusted work.
- Replace and augment control stations as necessary to control the Project.
- Establish additional control stations as necessary to control the Project.
- Perform slope staking necessary for construction of earthwork including intersections and matchlines.
- Set stakes defining limits for clearing. Set stakes defining approximate right-of-way and easements.
- Set stakes to define construction centerline, centerline offsets, detour lines, or other lines necessary for control of the Project work.

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- Set stakes to define the work, that may include but is not limited to the following:
  - Roadway location and grade. Set stakes and/or hubs at 50-foot intervals on tangents and 25-foot intervals on curves
  - Controls for sanitary and domestic water system
  - Fences and gates.
  - Guardrail, barrier, barricades, and associated features.
  - Traffic delineators, reflectors, and guide devices.
  - Temporary and permanent signing \*
  - Temporary and permanent pavement striping and pavement marking devices.
  - Poles and footings, cabinets, junction boxes, sensors, and other features associated with illumination and signal facilities \*
  - Curbs, walks, ADA ramps, stairs, walls, mailboxes, and other miscellaneous structures.\*
  - Pipes, manholes, inlets, weirs, settlement basins and other storm water, drainage and water quality structures and facilities \*

\*This includes field verification of fit and functionality or as instructed by the Engineer.
- Landscaping items.
- Earthwork features including guardrail flares and mounds, berms, and mounds
- Buildings and other structures and facilities.
- Environmental impact mitigation features.
- Other incidental survey Work common to this type of construction project.
- Remove and dispose of all flagging, lath, stakes and other temporary staking material after the Project is completed.
- Perform final "as constructed" measurements.
- Complete a Post-Construction survey of monuments and control stations and submit as-built documentation to Linn County Surveyor's Office.

For bridge work, supply survey drawings depicting the location and elevations of the elements of substructure and superstructure and place stakes for features including, but not limited, to the following:

### **Substructure:**

- Piling
- Footings
- Columns, walls, and abutments
- Pile caps and cross beams
- Bearing pads or devices

### **Superstructure:**

- Horizontal alignment and deck edges
- Soffit grades
- Seismic restraints
- Wing walls and retaining walls
- Bridge end panels

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

- Deck elevations
  - Railings
  - Deck drains and other bridge drainage facilities
- Set reference stakes and elevations in the vicinity of the structure work, as are necessary for the Engineer to check the layout. This may include establishment of a control network.

**00305.06 Survey Methods** - Survey procedures shall be appropriate for the equipment being used and be according to current Agency practices.

New survey procedures that are not according to current Agency practices shall be submitted to the Engineer for review 21 days prior to conducting the work. The surveyor may be required to demonstrate the capabilities, accuracy, and reliability of the intended procedure. The Engineer will evaluate the procedure and intended application and provide approval or rejection within 21 days. Work may proceed immediately upon approval of procedures by the Engineer.

Survey equipment must be properly calibrated and kept in good repair.

**00305.07 Survey Work Records** - Contractor's survey personnel shall maintain a Project daily record of work performed by the survey crew. The daily record shall contain the date, crew names, type and location of work, and work accomplished. Upon request, furnish a copy of diary entries to the Engineer. Furnish a final copy of the diary when the Project is complete.

Contractor's survey personnel shall make all field notes and calculations in a manner consistent with current Agency practices and on forms provided or approved by the Engineer. Computations, survey notes and other records necessary to accomplish the work shall be neat, legible and complete. Furnish copies of computations, notes and other records when requested by the Engineer.

When a Project affects any permanent change to vertical clearances within the traveled way, complete and submit a Standard Vertical Clearance form (Form 734-2614) within 30 days of the change to the vertical clearance.

When a Project temporarily restricts any vertical clearances submit a Standard Vertical Clearance form (Form 734-2614) 28 days before the restriction takes effect.

For bridges, furnish all computations, layout notes, and drawings of the structure to the Engineer for review 7 Calendar Days before beginning construction.

Upon completion of construction staking and prior to final acceptance of the Contract, furnish to the Engineer, computations, survey notes, Project records and other data used to accomplish the work. Include an itemized list of the data.

All data and original documentation associated with the Project will become the property of the Agency.

**00305.08 Communication with the Surveyor** - The Engineer has the right to communicate directly with the surveyor.

**00305.09 Electronic Data** - The Engineer will not be responsible for any data translations. Compressed data provided by the Engineer or the Contractor will be in a "self-expanding executable" format. The method of exchange of electronic data will be mutually agreed upon at the pre-survey conference.



## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

**00305.10 File Formats for Digital Data Exchange** - Below are the preferred formats for data exchanged between the Agency and the Contractor. Other formats may be used, but must be pre-approved by the Engineer.

- **CAD (graphics) Files** - AutoCAD Civil 3D 2012 (.DWG) format.
- **Alignments (Horizontal and Vertical)** - AutoCAD Civil 3D 2012 (.DWG) format.
- **Elevations** - ASCII Elevation File format.
- **DTM Data** - AutoCAD Civil 3D DTM or AutoCAD Civil 3D (.DWG) format.
- **Coordinates of Miscellaneous Survey Points Set** - ASCII Coordinate File format.

**00305.12 Other Documents** - Adobe Acrobat Portable Document Format (pdf) is the preferred format for exchanging documents such as reports, drawings and maps.

### **Materials**

**00305.20 Materials** - Furnish all materials including supplies, clothing, and incidentals required to accomplish the work. Use materials of good quality and suitable for the purpose intended. Stakes, hubs, and guinnies are to be of sufficient length to provide a solid set in the ground. Mark the stakes in such a way as to remain legible for the intended duration. Provide and use safety equipment required by State and federal regulations.

### **Equipment**

**00305.30 Survey Equipment** - Furnish survey equipment required to accomplish the work that meets the following requirements:

- Components designed to work together.
- Suitable for the purpose intended.
- Capable of achieving specified tolerances.
- In good operating condition.
- Maintained to meet manufacturers specifications.
- Kept in proper adjustment throughout the duration of the Project.

Submit documentation on survey equipment that is new to the industry, to the Engineer for review 21 days prior to its use. The Engineer will evaluate the equipment and intended application and provide approval or rejection within 21 days. Equipment may be used immediately upon approval by the Engineer.

### **Labor**

**00305.40 Personnel** - Provide technically qualified personnel capable of performing required tasks in a timely and accurate manner. Perform work under the direction and review of the Surveyor.

The Surveyor is responsible for:

- Maintaining registration as a Professional Land Surveyor in the State of Oregon.
- Performing or validating requirements for procedures and testing of equipment.
- Maintaining familiarity with the site conditions and progress of the Project.
- Becoming familiar with the plans and specifications.
- Determining notes and documentation required for types of survey work.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

- Determining the accuracy required for each survey stake.
- Using appropriate equipment and methods.
- Keeping close communication with the Project inspector(s), Project Manager, and Agency survey crews working on the Project.
- Being familiar with the varying construction survey requirements of each aspect of the Project, including the various bridge construction techniques when applicable.
- Notifying the Project inspector of conflicts and changes necessary due to utilities, match point variations, design revisions, or other variables.

The survey crew leader is responsible for:

- Becoming familiar with the plans and specifications.
- Keeping close communication with the Project inspector(s), Project Manager working on the Project.
- Notifying the Project inspector of conflicts and changes necessary due to utilities, match point variations, design revisions, or other variables.

**Construction**

**00305.50 Construction Staking Tolerances** - Set stakes or other devices at an adequate frequency and within the following tolerances:

<b>Item</b>	<b>Horizontal</b>	<b>Vertical</b>
Box Culverts	± 0.10 ft	± 0.05 ft
Bridge Substructures	± 0.03 ft	± 0.03 ft
Bridge Superstructures	± 0.02 ft	± 0.02 ft
Clearing and Grubbing Stakes	± 1.00 ft	n/a
Construction Centerline Control Points	± 0.05 ft	n/a
Construction Centerline Station Points	± 0.10 ft	n/a
Curbs, Ramps, Walks, and Bike Paths	± 0.03 ft	± 0.02 ft
Engineering Stationing	± 1.00 ft	n/a
Grade Stakes - Roadway Subgrade	± 0.20 ft	± 0.05 ft
Grade Stakes - Top of Rock	± 0.20 ft	± 0.03 ft
All ACP Courses	± 0.10 ft	± 0.02 ft
Manholes, Inlets, and Culverts	± 0.10 ft	± 0.03 ft
PCC Pavement	± 0.10 ft	± 0.02 ft
Slope Stakes and References	± 0.30 ft	± 0.10 ft
Traffic Markings	± 0.20 ft	n/a
Walls - Retaining, MSE, Sound, etc.	± 0.10 ft	± 0.05 ft
Wetland Mitigation Control Stakes	± 0.20 ft	± 0.20 ft
Luminaire and Signal Poles (incl. footings)	± 0.20 ft	± 0.03 ft

Stakes for miscellaneous items not listed above will have a horizontal and vertical tolerance of 0.20 foot, unless otherwise directed. Features that are to be constructed flush to another surface should take on the same tolerance as that surface.

Staking tolerances for special circumstances will be discussed at the pre-construction meeting.

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

These staking tolerances are not cumulative to the construction tolerances identified for the appropriate items in which construction tolerances are required.

In constructing the work, the contractor shall meet the appropriate construction tolerances for the material as specified in the special provisions or standard specifications, regardless of the construction staking tolerances, specific to the work item.

**00305.51 Slope Stakes and References** - Set slope stakes and references at even design stationing on both sides of centerline at 50-foot stations on tangents, at 25-foot stations on curves, and at terrain breaks and changes in the typical section. Establish slope stakes in the field as the actual point of intersection of the design roadway slope with the existing ground line. Direct staking of the theoretical (computer generated) slope stake catch point requires prior approval of the Engineer.

Set slope stake references farther out from centerline than the actual catch point. Include all reference point and slope stake information on the reference stakes.

If an automated slope staking routine is intended to be used, the system shall be able to perform the proper superelevation, lane transitions, and benching, as well as duplicate other details in the design surface. The system shall record field modifications made to the final catch slopes. Any modifications shall be recorded and provided to the Engineer.

Record the actual as staked (three dimensional) position of the slope and reference stakes. Prepare field notes showing slope stake and reference information, and provide to the Engineer.

**00305.52 Clearing Limits** - Set clearing limit stakes according to Section 00320. Space clearing limit stakes at intervals not greater than 50 feet on tangents and not greater than 25 feet on curves, or as directed.

**00305.53 Grade Stakes** - Set grade stakes or other control for grade elevation and horizontal alignment. Set grade stakes at each grade break line. Set additional points at intervals, as necessary, not to exceed the width of the grading equipment, or as approved by the Engineer. Set these rows at 50-foot stations on tangents and at 25-foot stations on curves, or as required in special situations, as in road connections and other areas where conditions require tighter spacing of grade stakes to assure grade and alignment.

Stakes and hubs shall be checked by the inspector as a representative of the Engineer. Do not begin placement of the next material course until the Engineer has accepted the grade and approval is given to proceed.

**00305.54 Walls** - Set stakes or other devices to control the location and elevation of walls, including retaining walls, geotextile walls, wing walls, sound walls and other walls as specified. Provide horizontal and vertical control for elements of wall(s) including but not limited to footings, leveling pads, batter slope and direction, and top elevation. Stake drainage facilities, electrical conduits water pipes and other items shown or identified that are to be integrated into the construction of the wall(s).

**00305.55 Pipes and Culverts** - Stake pipes and culverts to fit field conditions. Their location may be different from the plans. Perform the following:

- Determine the roadbed slope catch points at the inlet and outlet of pipes and culverts.
- Set reference point offsets to pipes and culverts. Record information necessary to determine structure length and end treatments.
- Stake ditches or grade to make pipes and culverts functional.
- Complete and submit a Culvert Data Sheet (Form 734-3247)

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- Submit a copy of the field notes to the Engineer by the next working day following completion of the staking work.

**00305.56 Manholes and Inlets** - Determine the location of manholes, inlets, siphon boxes, slope protectors, and other similar structures. This may require an approved field adjustment to the planned location in order to avoid obstacles or assure placement at the low point. Determine the elevation of the center of the grate.

Set a stake referencing the center of the structure. Set a guard stake with the following information written on it:

- Type of structure
- Centerline station
- Centerline offset
- Reference distance
- Cut or fill to top of structure
- Center of structure elevation

Establish a reference line to control the alignment of the structure. Record data on the Culvert Data Sheet (Form 734-3247) containing staking information for the outlet pipe from the specific drainage structure.

**00305.57 Box Culverts** - Set stakes or other devices to control the location and elevation of box culverts as specified. Provide horizontal and vertical control for elements of the box culvert(s) including but not limited to footing, side walls, wing walls, weirs, fish ladders, apron and top elevation. Stake other drainage facilities, electrical conduits, water pipes, and other items shown or identified that are to be integrated into the construction of the box culvert(s). Stake ditches to make the box culverts(s) functional.

**00305.58 Engineering Stationing** - When required, establish engineering stationing at required intervals for the length of the project along the shoulder of the highway. The stationing shall be visible and maintained throughout the construction of the project.

**00305.60 Horizontal Control** - Establish horizontal control stations using Theodolite/EDM network or static GPS techniques. Least squares adjustments shall be applied to either method. The use of traverses will be permitted only if approved by the Engineer.

Preserve all Agency provided and Contractor established horizontal control stations for the life of the Project. If the horizontal control network cannot be preserved in its original position during construction or if the Agency provided control stations are not of adequate quantity or location, establish a secondary horizontal control network using the original control as a basis. This secondary control network may then be used by the Contractor to layout all construction items and may be used by the Agency for right-of-way monumentation and for other purposes.

**(a) General Specifications** - Horizontal control networks shall conform to these general requirements in addition to Theodolite/EDM or GPS specifications to follow.

### **(1) Equipment:**

- Use tripods for all occupations with theodolite, target, or GPS antenna.
- Test all components and adjust according to manufacturer specifications.

### **(2) Procedures:**

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- Include in field notes a detailed point description and vicinity sketch for each control station and survey monument established or used.
- Perform a minimally and fully constrained Least Squares adjustment.
- Prior to using 2 points for the basis of bearing, perform an analysis to verify that the points are actually those indicated in the record.
- Control station monuments shall conform to the requirements of the Agency "Right-of-Way Monumentation Policy" available from the Engineer.
- If available, include at least three existing control stations in establishing any control network.
- Establish a point identifier for each control point within the range of 1 - 399. Alphanumeric point identifiers up to eight characters may be used. Inscribe the point identifier on the monument.

**(3) Acceptance Standards** - At least squares adjustment shall be accepted based on the following criteria for all specified tolerances.

- Two-thirds of all values shall be within the total tolerance.
- 100% of all values shall be within 3 times the total tolerance.
- Tolerance for confidence regions at the 95% level is 0.05 feet + 50 ppm based on the shortest distance to the nearest unadjusted control station.

### **(4) Data Requirements:**

- Field notes containing a detailed point description and vicinity sketch for each control station and survey monument established or used.

## **(b) Terrestrial Networks:**

### **(1) Equipment:**

- Use Theodolites with a maximum angular standard of error no greater than  $\pm 6$  seconds.
- Use EDMs with a maximum distance standard error no greater than  $\pm 0.02$  feet  $\pm 5$  ppm.
- All components shall be of compatible accuracy and designed to be used together.

### **(2) Field Procedures:**

- Include distance measurements with all observations unless impractical.
- Have at least one redundant observation for every point in the network.
- Triangulation, trilateration, and resection methods are acceptable.

### **(3) Acceptance Tolerances:**

- Tolerance for angle residuals is  $\pm 3$  seconds.
- Tolerance for distance residuals is  $\pm 0.02$  feet  $\pm 2$  ppm.

**(4) Data Requirements** - Provide the following to the Engineer for each network or circuit established:

- **Raw Data Files** - These are electronic data files containing original measurements produced by the Theodolite (total station). The file shall contain:
  - Observation data for each measurement, including:
    - point identifier

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- direction, plate reading, or horizontal angle
- vertical or zenith angle
- slope distance
- Supplemental measurement data, including:
  - distance units recorded
  - angular units recorded
  - curvature and refraction correction applied
  - atmospheric correction applied
  - prism correction applied
- Codes or instructions to the processing software on how to process the data.
- Atmospheric conditions at the time of the survey.
- Angular and distance units recorded, and whether the distance has been corrected for curvature and refraction and/or atmospheric conditions.
- **Set Reduction Report** - This report summarizes the reduction of the angle sets and mean distances.
- **Least Squares Adjustment Report** – These reports contain details of the least squares adjustment, including a list of all angular and distance residuals, confidence region values at a 95% confidence level, and final adjusted coordinates.

### (c) GNSS Networks:

#### (1) Equipment:

- GNSS receivers shall be dual frequency geodetic receivers with a manufacturer-specified accuracy of  $\pm 0.02$  feet  $\pm 1$  ppm or better.
- All components shall be of compatible accuracy and designed to be used together.

#### (2) Field Procedures:

- Ensure that satellite geometry during the field observation phase is sufficient to produce accurate results. The geometric dilution of precision (GDOP) shall not be greater than 8.
- The number of healthy satellites being observed at any time shall be four or more.
- The elevation mask shall be not less than 15 degrees.
- Horizontal survey measurements, once completed, shall form a closed figure, and shall be connected to at least two existing horizontal control stations.
- Network shall be comprised entirely of independent baselines.
- Adjacent stations shall have direct connections.
- Every station shall be connected to two or more stations.
- Receiver documentation shall be followed for observation times and epoch intervals.
- Each control station shall be occupied no less than twice, of which two occupations shall be separated from each other by time. Separation shall be measured start-time to start-time. Separation shall be 90 minutes or more from initial occupation and 90

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

minutes or more from any 12-hour multiple thereafter for 30 days. Additional occupations beyond two are not subject to time restrictions.

- Back-to-back occupations of 90 minutes or more shall be separated by off leveling and re-setting the tripod and rotation of the tribrach or leveling equipment by 120 degrees or more.
- Stations closer together than 1,500 feet shall be connected with terrestrial observations.
- Inter-visible stations closer together than 3,000 feet shall be connected with terrestrial observations.

### (3) Acceptance Tolerances:

- Tolerance for linear residuals in latitude, longitude, and elevation is  $\pm 0.05$  feet.

### (4) Data Requirements - Provide the following to the Engineer for each network established:

- **Receiver Independent Exchange (RINEX) Data Files** - These are industry-standard non-proprietary electronic data files containing original data collected by the receiver. The provided files shall contain all data supported by both the RINEX file format and the equipment and software employed in the survey. Files provided shall include as a minimum:
  - GNSS observation data file
  - GNSS navigation message file
- **Observation Log Sheet** - This log includes, for each observation, start and stop times, and antenna height including measurement procedure.
- **Least Squares Adjustment Report** – These reports contain details of the least squares adjustment, including a list of all angular and distance residuals, confidence region values at a 95% confidence level, and final adjusted coordinates.

### (d) Traverses:

#### (1) Equipment:

- Identical to requirements for Theodolite/EDM networks.

#### (2) Field Procedures:

- Include distance measurements with all observations unless impractical.
- Close both traverse for angle and distance.

**(3) Acceptance Standards** - Closure shall be a minimum of 1:20,000 after angular adjustment and prior to coordinate adjustment.

#### (4) Data Requirements - Provide the following to the Engineer for each traverse established:

- **Adjustment Report** - This report contains details of the traverse adjustment, including adjusted coordinates.
- **Other Reports** - All data required for Theodolite/EDM networks except least squares adjustment report.

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

**00305.61 Vertical Control** - Establish vertical control stations using differential leveling and third order or better equipment and techniques. The development of vertical control by techniques other than differential leveling must be approved by the Engineer. A least squares adjustment shall be applied to each network of acceptable level circuits.

The Agency provided and Contractor established vertical control stations shall be preserved for the life of the Project. If the vertical control network cannot be preserved in its original position during construction or if the Agency provided control stations are not of adequate quantity or location, establish a secondary vertical control network using the original control as a basis. This secondary control network would then be used to layout all construction items and may be used by the Agency for other purposes.

### (a) Field Procedures:

- Use a compensated (or "automatic") optical level or compensated digital level.
- Use precise non-adjustable rod(s) unless otherwise directed. Do not use "Lenker" or self-computing rods.
- Use a rod level with each rod.
- Include a minimum of two published bench marks in each circuit unless otherwise directed.
- If the circuit between benches does not close within the tolerance stated below, close circuit back to the starting point.
- If the use of one benchmark is approved, close circuit back to the starting point.
- Select turning points that are firm, solid objects with a defined high point. Set a nail, spike, or stake if no existing items are acceptable. Turning plates with a weight of not less than 4.5 pounds may be used.
- Balance backsight and foresight distances to within 30 feet on each setup and to within 30 feet on the entire circuit.
- Make a record of the rod reading(s) and the observation distance on each sighting
- Set TBMs near significant construction items (bridges, intersections, and other locations where elevations will be needed) and not more than 1,000 feet apart throughout the Project.
- Select TBM monuments that are firm, solid objects with a defined high point, not likely to be moved by human or natural influences, readily identifiable, and out of the path of construction. Do not use fire hydrants, guardrails, highway signs, or nails or spikes in utility poles or fence posts.
- Include detailed point descriptions and vicinity sketch in field notes.
- Take field notes when recording measurements electronically. Include data and information not electronically measured and recorded.
- Apply a vertical least squares adjustment to allowable errors. The use of proportional distribution of error may be used if approved by the Engineer.

**(b) Acceptance Standards** - Each leveling circuit shall be accepted based on the "point-to point" or "closed-loop" limits described below. A single least squares adjustment shall be applied to the observation in the leveling circuits meeting the acceptance standards.

- Accept point to point circuit based on the following. Error of closure shall be no greater than:

$$\text{Allowable Error} = 0.05 \text{ ft. } \sqrt{D}$$

D = Shortest level line distance in miles



## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- If a closed loop, the error of closure shall be no greater than:

$$\text{Allowable Error} = 0.035 \text{ ft. } \sqrt{E}$$

E = Perimeter of level loop in miles

**(c) Data Requirements** - Provide the following to the Engineer for each network or circuit established:

- **Raw Data** - These are hand written field notes or hand-written field notes accompanied by electronic data files containing original measurements produced by the level. The file shall contain:
  - Data for each measurement, including a:
    - point identifier (within a range of 400 - 499 and also inscribed on the monument)
    - rod reading
    - observation distance.
  - Supplemental measurement data, including:
    - distance units recorded
    - curvature and refraction correction applied
- **ASCII Point Elevation Data File**

**00305.62 Bridges** - Set stakes, nails, or other devices to control the location and elevation of the various parts of bridges and progressive phases of construction. Provide horizontal and vertical control for all elements of bridge construction. Stake drainage facilities, electrical conduits, water and sewer pipes, pedestrian and bicycle facilities, traffic signal and sign supports, illumination devices, and other items shown or identified that are to be integrated into the construction of the bridge.

Identify marks or provide field notes or reports to the Engineer. Such provision of information shall be adequate for the Engineer to review the location and elevation of the mark for the intended purpose prior to incorporating material that is based on the mark.

**(a) Bridge Survey Control Stations** - Use the smallest number of original Project control stations as is practical for establishing positions and reference points for bridge construction on one bridge. Use of multiple control stations will increase the probability of incorporating error into the construction. Use control stations that are as closely related mathematically as practical. The Contractor may establish additional control stations as necessary to complete the survey work. Additional control stations shall be established in such a manner as to provide the accuracy needed to meet the tolerances in Section 00305.

Original Project stations shall be used only after the following evaluation is completed for each bridge:

- Supply a list of original Project horizontal and vertical control stations intended by the Contractor to be used in establishing positions on a given bridge.
- Measure relative positions of original Project horizontal control stations intended to be used.
- Measure elevation differences between original Project vertical control stations intended to be used.
- Supply horizontal and vertical measurement data to the Engineer
- Compare measured values with those computed from original horizontal network coordinates and vertical network elevations.

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- Any discrepancy of concern to either the Contractor or the Engineer will be resolved before that combination of control stations is used.

### (b) Layout Marks and Reference Points:

**(1) Substructure** - Stake, reference, or otherwise identify locations, orientations, and elevations necessary for placement of substructure components, including but not limited to cofferdams, piling (including batter), drilled shafts, footings, columns, abutments, caps, cross beams, bearing devices, temporary supports or falsework, and excavations and embankments associated with any of the above.

Verify and document the locations, elevations and spatial relationships with adjacent substructure components. On bridges where prefabricated beams will be used, measure and document span lengths between bearing devices at each beam location as soon as practical. Supply a copy of such documentation to the Engineer for review before the next stage of construction.

Compute the final elevations after studying the plans, specifications, and shop drawings. Adjust the grades as needed to compensate for camber or prefabricated beams, chording of beams across the low side of superelevations, width of flat beams on superelevated surfaces, and any other factor resulting from design or construction methods.

**(2) Superstructure** - Stake, reference, or otherwise identify locations, orientations, and elevations necessary for placement of superstructure components, including but not limited to beams, girders, diaphragms, earthquake restraints, deck, rails, structure mounted traffic control and illumination devices, and concrete forms, temporary supports or falsework, and excavations and embankments associated with any of the above.

Stake alignment of structure as needed at each stage of construction. Stake alignment of poured-in-place items at 10-foot stations or as established by the Engineer. Stake alignment for the following items as needed to maintain the horizontal tolerance defined in section 00305.50:

- Outside edge of girder(s)
- Face(s) or centerline(s) of internal girders or stem walls
- Edge of deck
- Alignment of grade breaks
- Pedestrian and bicycle facilities
- Rails and railings

Stake grades at each stage of construction. Stake grade of poured-in-place items 10-foot stations, or as established by the Engineer. Apply corrections to design grades based on the dynamics of the evolving structure. Corrections that may be required depend upon the design of the bridge and the construction methods employed. Provide correction values to the Engineer at least 15 working days prior to incorporating into the structure. The following list is examples of possible corrections:

- Design camber (upward adjustment to compensate for anticipated deflection)
- Structural deflection (deflection of the bridge under its own increasing weight)
- Structural shifting (dynamics of the bridge under eccentric loading)
- Falsework deflection (deflection of falsework beams under increasing weight)
- Falsework crush (compression of falsework supports under increasing weight)

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

- Form crush (compression of forms under increasing weight)
- Equipment deflection (deflection of deck finishing machine or deck rails)
- Other adjustments to staked value to achieve the design grade.

**(c) Bridge Deck Grades** - Set stakes or other devices to control the deck grade elevations. The exact process will depend upon the type of deck and the equipment being used.

**(1) Portland Cement Concrete Deck** - The surveyor and survey crew leader shall attend the first of the two deck pre-placement conferences, described in the Oregon Standard Specifications for Construction, subsection 00540.02(a), required for each deck placement.

Control of a PCC deck may involve significant work with the deck placement crew to establish control for a deck finishing machine. Rails for supporting the deck finishing machine are generally set up on either side of the deck. Each rail is held up by adjustable supports every 5 feet. Adjust the rail at each support to the desired grade while the rail is supporting the weight of the finishing machine. Corrections may need to be applied as listed in subsection 00305.52(c-2)

**(2) Asphalt Concrete Deck** - Control of an AC deck will not generally involve as many variables as PCC. An AC deck serves as a wearing surface, but not a structural component. Asphaltic concrete will frequently be used as filler to create the desired superelevations when flat beams form the superstructure. Stake control of the finish grade like any asphalt finish grade. Under some circumstances, design camber and structural deflection may need to be considered.

**00305.63 Pavements** - Set stakes or other control devices to control the location and elevation of asphalt and PCC pavement as shown. Provide surveying or survey-related activity necessary to control grade, thickness, and smoothness as required.

**00305.64 Signs, Signals, Illumination and Fabricated Items** - Determine the exact location and their relative location to roadway and bridge features as appropriate such as edge of pavement, curbs, islands, sidewalks, sidewalk ramps, lane lines, bridge columns, bridge decks, and other existing features for the following items:

- Posts and poles including foundations
- Cabinets
- Junction boxes
- Detectors
- Other similar sign, signal, and illumination appurtenances
- New fabricated items

Provide the following documentation to the Engineer before submitting working drawings:

- Field verified length of poles, posts, mast arms, and tenon locations
- Field verified orientation of triangular bases for poles
- Field verified measurements of all existing features including orientation and relationship to all other new appurtenances and new fabricated items.
- Plan, elevation, and side views
- Identification of all obstacles

Field adjustment to the planned location may be required in order to avoid obstacle and to ensure its placement in a functional location. Do not submit working drawings until the Engineer returns the field

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

verified documents. The Engineer will return field verified documents within 21 Calendar Days after receipt of the documents.

Set a stake referencing the center of the item. Set a guard stake with the following information written on it:

- Description of item (by plan number if applicable)
- Centerline station
- Centerline offset
- Cut or fill from reference point (and what point the cut or fill is to)
- Intended elevation

If the orientation of the item is significant and is not clear, establish a reference line for the skew of the item.

Have bridge layout and roadway layout features staked, including referencing, no more than seven calendar days before submitting field verification documents.

**00305.70 Temporary Protection and Direction of Traffic** - For survey activities outside of the projects traffic control plan and lasting 3 days or less, provide work zone traffic control according to ODOT's "Oregon Temporary Traffic Control Handbook".

For survey activities outside of the projects traffic control plan and lasting longer than 3 days, provide work zone traffic control according to Oregon Standard Specifications for Construction Section 00225.

### **00305.71 Preservation of Survey Markers:**

**(a) Project Control Points Established by the Engineer** - Maintain, relocate or replace existing survey monuments, control points, and stakes, as determined by the Engineer. Perform the work to produce the same level of accuracy as the original monument(s) in a timely manner, and at no additional cost to the Agency.

**(b) Monuments of Record** - Preserve survey monuments according to subsection 00170.82(c), ORS 209.140 and ORS 209.150. If such monuments are to be disturbed or destroyed, comply with requirements of these ORS at no additional cost to the Agency.

**(c) Post Construction Survey** - At the completion of the project, file a post construction survey with the Linn County Surveyor's Office. Provide the Engineer with a copy of the approved survey.

If no monuments were disturbed or destroyed during construction activities submit stamped, written verification to the Engineer.

**00305.72 Project Monumentation** - The Contractor will not be responsible for performing right-of-way monumentation.

**00305.73 Pre-Construction Survey** - The Contractor will not be responsible for performing a pre-construction Survey.

## **Measurement**

**00305.80 Measurement** - No measurement of quantities will be made for work performed under this section.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**Payment**

**00305.90 Payment** - The accepted quantities of construction survey work will be paid for at the Contract lump sum amount for the item "Construction Survey Work".

Payment will be payment in full for furnishing all material, equipment, labor, and incidentals necessary to complete the work as specified.

No separate or additional payment will be made for temporary protection and direction of traffic measures including flaggers and signing necessary for the performance of the construction survey work.

No separate or additional payment will be made for preparing surveying documents including but not limited to office time, preparing and checking survey notes, and all other related preparation work.

The amount to be allowed for "Construction Survey Work" in the progress payments will not be in excess of the reasonable value of the surveying work performed under this specification as said reasonable value is estimated by the Engineer.

Costs incurred as a result of survey errors will be borne by the Contractor. Such costs include price adjustments for failure to meet requirements of the construction specifications, repair or removal and replacement of deficient product, and over-run of material.

In cases where changes, not due to the Contractor's operations, necessitate redesign of the work, increased Contractor survey costs due to these changes will be paid for as Extra Work.

**SECTION 00310 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

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

**00310.90 Payment** - 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.

**SECTION 00320 - CLEARING AND GRUBBING**

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

**00320.01 Areas of Work** - Replace this subsection, except for the subsection number and title, with the following:

Clearing and grubbing will be required to the extents needed to complete the work unless otherwise shown on the plans or directed by the Engineer.

**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 embankment basis.

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

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

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

**00330.41(a)(4) Excess Materials** - Replace this subsection, except for the subsection number and title, with the following:

If the quantities of excavated materials are greater than required to construct embankments and to do all filling and backfilling, the Contractor may use the remaining materials to uniformly widen embankments or to flatten slopes in a manner satisfactory to the Engineer.

**00330.41(a)(5) Waste Materials** - Replace this subsection, except for the subsection number and title, with the following:

Unless otherwise specifically allowed and subject to the requirements of Section 00280, dispose of materials, classed as waste materials in 00330.41(a)(3), outside and beyond the limits of the Project and Agency controlled property according to 00290.20. Do not dispose of materials on Wetlands, either public or private, or within 300 feet of rivers or streams.

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

- Excess material used to widen embankments or flatten slopes according to 00330.41(a)(4).

### SECTION 00350 - GEOSYNTHETIC INSTALLATION

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

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

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

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

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

### SECTION 00501 - BRIDGE REMOVAL

Comply with Section 00501 of the Standard Specifications modified as follows:

**00501.00 Scope** - Add the following paragraph(s) to the end of this subsection:

Remove the existing bridge over Mill Creek on Folsom Road

Add the following subsection:

**00501.03 Submittals** - Submit unstamped bridge removal plans according to 00150.35 21 Calendar Days before beginning removal work.

Include the following information in the submittal:

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

- Removal sequence, including contractor staging and traffic staging.
- Detailed schedule of bridge removal work.
- Type of equipment that will be used, including size and capacity.
- Equipment location during removal operations.

Do not begin bridge removal work until the bridge removal plans have been approved.

Add the following subsection:

**00501.41 Broken or Intractable Piling** – If a piling breaks or becomes intractable, one of the following conditions applies:

- Make every attempt short of excavation to remove each piling. If a pile in uncontaminated sediment is intractable, breaks above the surface, or breaks below the surface, cut the pile or stump off at least 3 feet below the surface of the sediment.
- If a pile in contaminated sediment is intractable or breaks above the surface, cut the pile or stump off at the sediment level.
- If a pile breaks within contaminated sediment, make no further effort to remove it and cover the hole with a cap of clean substrate appropriate for the site.

**SECTION 00504 - CONCRETE DECK SURFACE PREPARATION**

Comply with Section 00504 of the Standard Specifications.

**SECTION 00510 - STRUCTURE EXCAVATION AND BACKFILL**

Comply with Section 00510 of the Standard Specifications modified as follows:

**00510.80(b)(1) Lump Sum** - Add the following to the end of this subsection:

The estimated quantity of structure excavation is:

<b>Location</b>	<b>Structure Excavation (Cubic Yard)</b>
Mill Creek-Folsom Road Bridge	81.0

**00510.80(d)(1) Lump Sum** - Add the following to the end of this subsection::

The estimated quantity of granular structure backfill is:

<b>Location</b>	<b>Granular Structure Backfill (Cubic Yard)</b>
Mill Creek-Folsom Road Bridge	16.0

**SECTION 00520 - DRIVEN PILES**

Comply with Section 00520 of the Standard Specifications modified as follows:

**00520.10 Materials** - Replace this subsection, except for the subsection number and title, with the following:

Furnish Materials meeting the following requirements:

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

Reinforced Pile Tip .....	02520.10
Steel Piles .....	02520.10
Steel Pile Protective Coating .....	00594
Steel Reinforcement for Concrete.....	00530

**00520.11 Engineer's Estimated Length List** - Add the following to the end of this subsection:

The Engineer's estimated lengths of steel piling are:

Location	Number	Length (feet)	Type and Size
Bent 1	5	24.0	PP 12.75 x 0.375
Bent 2	5	24.0	PP 12.75 x 0.375

**00520.43(d) Reinforced Pile Tips** - Add the following sentence to the end of this subsection:

For steel pipe piling, provide inside fit, open end cutting shoes meeting the requirements of 02520.10(e).

**00520.44 Prestressed Concrete Piles** - Delete this subsection.

**00520.45 Timber Piles** - Delete this subsection.

**00520.80(b) Furnish Piles** - Replace this subsection, except for the subsection number and title, with the following:

The quantities of furnishing steel and test piles will be measured on the length basis, as follows:

- (1) **Steel Piles** - Steel piles will be the length of each pile remaining in the completed Work, from the pile tip to the cutoff plane.
- (2) **Test Piles** - Test piles, including test piles remaining in the completed Work, will be measured according to 00520.80(b)(1).

No allowance will be made for the length of pieces furnished by the Contractor to replace piles previously accepted by the Engineer that are damaged before completion of the Project.

**00520.80(c) Drive Piles** - Replace the paragraph that begins "The quantities of driving steel..." with the following paragraph:

The quantities of driving steel piles and test piles will be measured on the unit basis. Driving test piles includes test piles remaining in the completed Work.

**SECTION 00530 - STEEL REINFORCEMENT FOR CONCRETE**

Comply with Section 00530 of the Standard Specifications modified as follows:

**00530.80(a) Lump Sum** - Add the following to the end of this subsection:

The estimated quantity of reinforcement is:



**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

Structure Number	Uncoated Reinforcement Quantity (Pound)			
	Grade 60	Grade 80	Grade 100	Stainless Steel Grade ____
0651-0065	5000	0	0	0

The weight of miscellaneous metal, based on densities listed in 00530.80(b) and Project quantities, is included in the estimated quantity of uncoated reinforcement.

**SECTION 00540 - STRUCTURAL CONCRETE**

Comply with Section 00540 of the Standard Specifications modified as follows:

**00540.41 Design of Falsework for Vertical Pressures** - Replace the title of this subsection with **“Design of Falsework”**.

**00540.80(a)(1) Lump Sum** - Add the following to the end of this subsection:

The estimated quantity of concrete is:

Bridge No. 0651-0065

Type and Class	Quantity (Cu. Yd.)
General Structural Concrete, Class 3300	36.0

**SECTION 00545 - REINFORCED CONCRETE BRIDGE END PANELS**

Comply with Section 00545 of the Standard Specifications modified as follows:

Add the following subsection:

**00545.01 Terminology** - For the purposes of this Section, the terms “end panel” and “end panels” shall respectively refer to and shall be read to mean “approach slab” and “approach slabs”.

**SECTION 00550 - PRECAST PRESTRESSED CONCRETE MEMBERS**

Comply with Section 00550 of the Standard Specifications modified as follows:

**00550.80 Measurement** - Add the following paragraph to the end of this subsection:

Stirrup extension reinforcement will be measured according to 00530.80. Estimated quantities of reinforcement for the lump sum method will be listed in 00530.80(a).

**00550.90 Payment** - Add the following paragraph to the end of this subsection:

Stirrup extension reinforcement, as shown, will be paid for according to 00530.90.

**SECTION 00582 - BRIDGE BEARINGS**

Comply with Section 00582 of the Standard Specifications.

**SECTION 00585 - EXPANSION JOINTS**

Comply with Section 00585 of the Standard Specifications modified as follows:

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

### 00585.01 Definitions –

Replace the sentence that begins “**Asphaltic Plug Joint Seal** - A sealed joint composed of Aggregate...” with the following sentence:

**Asphaltic Plug Joint Seal** - A Closed Joint composed of Aggregate and flexible binder Material placed over a steel bridging plate.

Replace the sentence that begins “**Closed Joint** - A sealed or filled joint designed...” with the following sentence:

**Closed Joint** - A sealed joint designed to prevent water and debris from passing through the joint.

Add the following definition:

**Control Joint** - A joint created by sawing a groove in a surface to create a weakened vertical plane and filled with a poured Material.

Replace the sentence that begins “**Filled Joint** - A joint using a preformed ...” with the following sentence:

**Filled Joint** - A joint using a preformed joint filler placed prior to concrete pour.

Delete the definition for **Sealed Joint**

Replace the sentence that begins “**Strip Seal** - A sealed joint with an extruded...” with the following sentence:

**Strip Seal** - A Closed Joint with an extruded elastomeric seal retained by edgebeams that are anchored to the structural elements.

Add the following subsection:

### 00585.02 Submittals:

**(a) Materials** - At least 21 Calendar Days before starting Work, submit QPL listed products to the Engineer for approval.

**(b) Personnel Qualifications** - At the pre-construction conference, submit joint installer personnel certifications(s) from the manufacturer affirming that the installers have been trained in application methods of Materials and health and safety to install Closed Joints as detailed.

**(c) Working Drawings** - At least 21 Calendar Days before starting Work, submit unstamped Working Drawings from the manufacturer for each Closed Joint according to 00150.35. Include the following:

- Plan, elevation and section of the joint system with dimensions and tolerances.
- Complete details of all joint Materials with all ASTM, AASHTO or other Material designations.
- Method of installation including sequence and installation details at traffic barriers, Roadway surfaces, curbs and sidewalks.
- Joint details to include the following:
  - Prevent the entrance of water and debris into the joint.
  - Accommodate the required Structure movements shown.

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

**00585.11 Approval of Materials** - Delete this subsection.

**00585.12 Concrete for Blockout Opening** - Replace the sentence that begins "Fill blockout openings with the ..." with the following sentence:

Fill blockout openings with the same class and type of concrete used in the deck, unless otherwise shown.

**00585.30 Closed Joint Installers** - Replace this subsection with the following subsection:

**00585.30 Joint Installers** - Provide trained personnel to install the Closed Joints.

**00585.31 Sealed Joint Manufacturer's Representative** - Replace this subsection with the following subsection:

**00585.31 Expansion Joint Seal Manufacturer's Representative** - Provide a manufacturer's representative on-site during the installation of expansion joint device. Discuss with the representative regarding the Work to be done, the methods of installation, installation procedures, and the required Equipment to assure correct installation of expansion joints

**00585.42(a) Submittals** - Replace this subsection with the following subsection:

**00585.42(a) Notification** - Notify the Engineer in writing at least 7 Calendar Days before installing the Closed Joint. Include the Contract number, Bridge number, joint seal Material, product name, and the approximate date of installation.

**00585.42(c) Joint Preparation** - Replace the sentence that begins "Prepare the joint surfaces as directed..." with the following sentence:

Prepare the joint surfaces as shown or directed in this Section and according to the joint Material manufacturer's recommendations.

**00585.42(d) Weather Conditions at Time of Installation** - Replace this subsection, except for the subsection number and title, with the following:

Install joint seals when the weather conditions are suitable for joint installation according to the manufacturer's recommendations.

**00585.42(e) Leakage Check** - Replace this subsection, except for the subsection number and title, with the following:

After joint installation is complete, check joints for leakage by flooding the joint with water. Maintain ponding of water in the Roadway Shoulders or 3 feet from the gutter line, whichever is greater, for 2 hours. Use an unnozzled water hose delivering one gallon of water per minute to the inside face of railing. Verify no leaking of joints. If leakage is observed, repair the joints using a method recommended by the manufacturer and approved by the Engineer prior to starting Work at no additional cost to the Agency. Perform additional leakage check at no additional cost to the Agency. Additional leakage checks have the same requirements.

Add the following subsection:

**00585.50 Control Joint** - Construct Control Joints as shown. If details of the control joint are not shown, sawcut the surface 1 1/2 inches deep and 1/2 inch wide and fill it with hot applied joint sealant.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**00585.80 Measurement** - Add the following to the end of the subsection:

The estimated quantities of joints are:

<b>Structure</b>	<b>Joint Type</b>	<b>Quantity (Foot)</b>
Bridge No. 0651-0065	Poured Joint Filler	56.0

**00585.90 Payment** - Add the following to the Pay Item list:

Replace the bullet that begins “performed expansion joint filler...” with the following bullet:

- performed joint filler, hot applied joint sealant, or sawcutting to construct Filled Joint

Replace the bullet that begins “providing the manufacturer's...” with the following bullet:

- providing the expansion joint seal manufacturer's representative

Add the following to the end of this subsection:

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

**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:

<b>Structure</b>	<b>Rail Type</b>	<b>Quantity (Foot)</b>
Bridge No. 0651-0065	2 Tube Side Mount	125.0

**SECTION 00589 - UTILITY ATTACHMENTS ON STRUCTURES**

Section 00589, which is not a Standard Specification, is included in this Project by Special Provision.

**Description**

**00589.00 Scope** - This Work consists of providing for attachment or installation of utilities on new and existing Structures as shown or as directed.

**Materials**

**00589.10 General** - Furnish utility attachment systems using Materials from the QPL and meeting the following requirements:

Structural Steel .....	02530
Forgings, Shafting, Castings, and Nonferrous Materials .....	02540
Fasteners .....	02560
Reflective Sheeting .....	02910.20(a)

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

Resin Bonded Anchor System ..... 00535.10

Furnish brackets constructed of stainless steel or hot-dip galvanized structural steel.

**Construction**

**00589.40 General** - Provide sufficient space around utilities for maintenance activities.

Avoid drilling through reinforcing steel. If reinforcing steel is hit, move the anchor location and patch the hole with an approved patching material from the QPL.

Attach conduits or brackets to concrete Structures with resin bonded concrete anchors, unless otherwise shown or approved.

**00589.41 Natural Gas Lines** - Conform to the portions of CFR 49 Part 192 that are applicable to the Work. Provide isolation valves 200 feet from each end of the Bridge as shown.

**00589.48 Labeling** - Clearly label all piping or conduit systems according to the following APWA color code:

**Table 00589-1**

<b>Material</b>	<b>Marker Background Color</b>
Electrical Power Lines, Cables, Conduits, Lighting Cables	Red
Gas, Oil, Steam, Petroleum, Gaseous Materials	Yellow
Communications, Alarm, Signal Lines, Cables, or Conduits	Orange
Potable Water	Blue
Reclaimed Water, Irrigation, Slurry Lines	Purple
Sewers, and Drain Lines	Green

Generate purple by placing purple transparent film over white reflective sheeting. The purple tint of the transparent film shall match Federal Standard Color 595B No. 37100.

Minimum length of label shall be as shown in Table 00589-2.

**Table 00589-2**

<b>Pipe O.D. Min.</b>	<b>Pipe O.D. Max.</b>	<b>Length of Label</b>	<b>Width of Label</b>
3/4"	1 1/4"	8"	3/4"
1 1/2"	2"	8"	1"
2 1/2"	6"	12"	2"
8"	10"	12"	2"
10"	—	12"	2"

Place labels on each pipe or conduit, on each side of every bent, and at each entrance to a box girder.

Where piping is above or below normal line of sight, place pipe labels so that label may be seen from normal eye height.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**Measurement**

**00589.80 Measurement** - No measurement of quantities will be made for Work performed under this Section.

**Payment**

**00589.90 Payment** – No separate or additional payment will be made for utility attachments on structures.

**SECTION 00592 - ROLLED WATERPROOFING MEMBRANE**

Comply with Section 00592 of the Standard Specifications modified as follows

**00592.03 Submittals** - Replace the bullet that begins “The manufacturer’s test certificate required...” with the following bullet:

- The manufacturer’s test certificate required in 00592.10.

Replace the bullet that begins “Submit a primer application plan...” with the following bullet:

- Submit a primer application plan according to 00592.42(c), which includes a manufacturer’s letter indicating primer is compatible with the rolled membrane.

Replace the bullet that begins “Proposed methods of measuring the application...” with the following bullet:

- Proposed methods of measuring the application rate of Emulsified Asphalt tack coat and primer to meet the specified application rates.

**00592.11 Hot Asphalt Cement Tack Coat** - Replace this subsection with the following subsection:

**00592.11 Emulsified Asphalt Tack Coat** - Furnish Emulsified Asphalt tack coat according to Section 00730.

**00592.40 Preparing Existing Bridge Decks** - Replace the bullet that begins “After removing the existing...” with the following bullet:

After removing the existing asphalt concrete wearing surface according to Section 00503, ensure the deck is smooth and free of obstructions. Clean the bridge deck by thoroughly sweeping and blowing compressed air immediately prior to placing the Emulsified Asphalt tack coat.

**00592.41(b) Weather and Other Restrictions** - Replace this subsection, except for the subsection number and title, with the following:

Place Emulsified Asphalt tack coat, concrete patching, and waterproofing membrane when the deck is dry, the air temperature is between 40 °F and 90 °F, and the surface temperature of the deck is 40 °F minimum and rising. Do not place Emulsified Asphalt tack coat if the surface temperature exceeds 120 °F.

**00592.41(d) Area of Application** - Replace the paragraph that begins “On Bridges with curbs or concrete rail ...” with the following paragraph:

On Bridges with curbs or concrete rail, place a 12 inch continuous membrane strip, after applying Emulsified Asphalt tack coat, so that 2 inches is placed vertically along the curb or rail, with 10 inches placed horizontally on the deck surface.

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

**00592.42(a) Tack Coat** - Replace this subsection, except for the subsection number and title, with the following:

Place Emulsified Asphalt tack coat as follows:

- (1) **Concrete Substrate** - Place Emulsified Asphalt tack coat as shown or directed and according to Section 00730. Extend the tack coat 2 inches up the face of the curb.
- (2) **ACP Base Course** - Place Emulsified Asphalt tack coat as shown or directed and according to Section 00730. Primer may be substituted for the Emulsified Asphalt tack coat on the ACP Base Course according to 00592.42(e).
- (3) **Rolled Waterproof Membrane** - Place Emulsified Asphalt tack coat as shown or directed and according to Section 00730.

**00592.42(c) Primer** - Replace the sentence beginning with “Primer may be substituted...” with the following sentence:

Primer may be substituted for Emulsified Asphalt tack coat only for application on the ACP Base Course below the rolled waterproofing membrane, with a primer application plan, according to the following:

**00592.42(d) Rolled Waterproofing Membrane** - Replace the bullet that begins “Prior to applying hot asphalt...” with the following bullet:

- Prior to applying Emulsified Asphalt tack coat, roll press the entire membrane surface with approved Equipment

**00592.42(e) ACP Wearing Course** - Replace this subsection, except for the subsection number and title, with the following:

Construct the ACP wearing Course according to Section 00744 or Section 00745. Prior to placing the Emulsified Asphalt tack coat, and any ACP Course or waterproofing membrane, verify the underlying surface is free from loose rocks, or other debris. Clean the underlying surface by thoroughly sweeping and blowing compressed air immediately prior to placing the Emulsified Asphalt tack coat. Pave in the same direction as the membrane overlap end joints.

**00592.43 Daily Report Requirements** - Replace the bullet that begins “Total gallons of hot asphalt cement...” with the following bullet:

- Total gallons of Emulsified Asphalt tack coat applied to each Bridge.

Replace the bullet that begins “Digital photographs documenting the existing...” with the following bullet:

- Digital photographs documenting the existing bridge deck surface, application of the Emulsified Asphalt tack coat, installation of the membrane, the completed membrane installation, ACP paving operations

**00592.90 Payment** - Add the following sentences to the end of the subsection:

No separate or additional payment will be made for Emulsified Asphalt tack coat, or primer.

Tack coat placed prior to paving courses are paid according to Section 00730.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**SECTION 00620 - COLD PLANE PAVEMENT REMOVAL**

Comply with Section 00620 of the Standard Specifications.

**SECTION 00640 - AGGREGATE BASE AND SHOULDERS**

Comply with Section 00640 of the Standard Specifications modified as follows:

**00640.10 Materials** - Replace this subsection, except for the subsection number and title, with the following:

Aggregates shall be 1"-0 or ¾"-0 (as the Contractor elects) crushed quarry rock only. Crushed river rock will not be allowed. Base and shoulder aggregates shall meet the applicable requirements of Sections 02630 and 02640, respectively.

**00640.41 Hauling and Placing** - Add the following paragraph:

Where required, rock shall be placed at driveways and field approaches in a manner that provides an adequate transition between the new surface and the existing surface, subject to approval by the Engineer.

**SECTION 00730 - EMULSIFIED ASPHALT TACK COAT**

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

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

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

No separate or additional payment will be made for Emulsified Asphalt tack coat.

**SECTION 00744 - ASPHALT CONCRETE PAVEMENT**

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

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

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

**00744.16 Sampling and Testing** - Add the following paragraph to the end of this subsection:

Testing may be waived upon written notice and accepted visually by the Engineer according to Section 4(B) of the MFTP. Testing for irregular areas not completed during the main paving operations, such as driveways or guardrail flares may be waived upon written notice and accepted visually by the Engineer.

**00744.43(c) Placing** - Add the following:

Any asphalt concrete left on the shoulder of the road that is 3-inches or larger shall be removed prior to shoulder rock being placed.



## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

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

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

**00744.90 Payment** - In the paragraph that begins "No separate or additional payment..." add the following bullet:

- Asphalt tack coat
- Unused, remaining, or excess ACP
- Reflective tape or temporary flexible overlay pavement markings

Add the following to the end of this subsection:

Payment will be made for the actual material placed. A weigh ticket shall be provided for any material not used on the project. If a weigh ticket is not provided, the Engineer will make an appropriate determination on the amount of Asphalt that was not used.

### **SECTION 00810 - METAL GUARDRAIL**

Comply with Section 00810 of the Standard Specifications modified as follows:

**00810.13 Guardrail Anchors** - Replace this subsection, except for the subsection number and title, with the following:

Furnish steel guardrail anchors according to Section 02820.

### **SECTION 00850 - COMMON PROVISIONS FOR PAVEMENT MARKINGS**

Comply with Section 00850 of the Standard Specifications.

### **SECTION 00860 - LONGITUDINAL PAVEMENT MARKINGS - PAINT**

Comply with Section 00860 of the Standard Specifications.

### **SECTION 00905 - REMOVAL AND REINSTALLATION OF EXISTING SIGNS**

Comply with Section 00905 of the Standard Specifications modified as follows:

**00905.90 Payment** - Replace this subsection, except for the subsection number and title, with the following:

No payment will be made for the removal of existing signs. Removal of existing signs will be considered incidental to the Bridge Removal Work.

### **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:

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

Item	Estimated Quantity (Pound)
<b>Minor Sign Supports</b>	
Perforated Steel Square Tube Slip Base Sign Supports	50

**00930.90 Payment** - Replace this subsection, except for the subsection number and title, with the following:

No separate or additional payment will be made for metal sign supports. This item shall be incidental to the installation of signs under 00940.

**SECTION 00940 - SIGNS**

Comply with Section 00940 of the Standard Specifications.

**00940.47 Sign Erecting** - Replace the paragraph that begins "When signs are installed on supports..." with the following paragraph:

When signs are installed on supports 10 feet or less from the edge of guardrail, curb, or Shoulder, set them to reflect 0 to 3 degrees away from traffic. When signs are installed on supports more than 10 feet from the edge of guardrail, curb or Shoulder, set them to reflect 0 to 3 degrees toward traffic.

**SECTION 01014 - STORMWATER CONTROL, WATER QUALITY FILTER STRIP**

Section 01014, which is not a Standard Specification, is included for this Project by Special Provision.

**Description**

**01014.00 Scope** - This Work consists of furnishing and installing a water quality filter strip as shown.

**Materials**

**01014.10 Materials** - Furnish Material meeting the following requirements:

Matting, Type D .....	00280.14
Permanent Seeding .....	01030.13(f)

**01014.11 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.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

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**

**01014.40 General** - Construct water quality filter strip facility as shown. Perform excavation, fine grading, and placement work only when the facility area is dry and only from the perimeter of the filter strip area. Do not stockpile excavated material in the facility area. Scarify the subsoil area a minimum 12 inches deep. After scarification, place the water quality mixture in maximum 12 inch Lifts. Compact each Lift with a water filled landscape roller.

**Maintenance**

**01014.70 Cleaning** - If a stormwater control facility is used for erosion and sediment control, remove all accumulated sediment and debris before completing the facility.

**Measurement**

**01014.80 Measurement** - No measurement of quantities will be made for Work performed under this Section. The estimated quantities of Materials are:

Item	Quantity
Excavation.....	45.0 Cu. Yd.
Water Quality Mixture .....	60.0 Cu. Yd.
Matting, Type D .....	190.0 Sq. Yd.
Permanent Seeding.....	0.04 Acres

**Payment**

**01014.90 Payment** - The accepted quantities of Work performed under this Section will be paid for at the Contract lump sum amount for the item "Water Quality Filter Strips".

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(c) Pure Live Seed** - Replace this subsection, except subsection number and title, with the following subsection:

Use the PLS specified rate listed in 01030.13(f) for determining PLS application rates. Ensure the PLS application rate meets the PLS specified rate. Apply pre blended seed mixes, with multiple species, at a PLS application rate ensuring all species meet or exceed the PLS specified rate for each species in the seed mix.

PLS application rate for an individual seed species is determined as follows:

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

- PLS specified rate is listed in 01030.13(f)
- PLS factor is obtained by multiplying the seed label germination percentage times the seed label purity percentage. Use the purity and germination percentages from the label on actual bags of seed to be used on the Project.
- PLS application rate is obtained by dividing the PLS specified rate by the PLS factor.

For a seed mix, make this calculation for each seed species in the mix and then adjust as follows:

- Using the seed tag, determine the weight of each seed species in the bag and use this information to find the percentage, by weight, of each seed species is in 1 pound for the pre-blended mix.
- Divide the percentage by weight of each seed species, per pound, for the pre-blended mix, by the PLS application rate for that specific seed species.

Determine the highest application rate in the seed mix and apply the seed mix at that application rate.

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

Provide the following seed mix formulas:

- **Permanent Seeding:**

Botanical Name (Common Name)	PLS (lb/acre)	÷	(% Purity (minimum)	x	% Germination) (minimum)	=	Amount (lb/acre)
<u>Festuca rubra</u> (Creeping Red Fescue)	<u>10</u>		_____		_____		_____
<u>Lolium perenne</u> (Perennial Ryegrass)	<u>18</u>		_____		_____		_____

**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.

**01030.15 Mulch** - Add the following paragraphs and bullets to the end of this subsection:

Furnish straw mulch for all temporary roadside erosion control seeding, except hydromulch may be used under the following conditions:

- Spring planting west of the Cascades between March 1 and May 15.
- Slopes are steeper than 1V to 1.5H and longer than 16 feet.
- Residential or commercial sites with low erosion potential such as sidewalk, median, or parking lot planter strips.

Projects that have variable slopes may include straw mulch and hydromulch when approved.

**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.

Add the following subsection:

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**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.

**SECTION 02001 - CONCRETE**

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

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

**Table 02001-1**

<b>Concrete Strength and Water/Cementitious Material (w/cm) Ratio</b>		
<b>Type of Concrete</b>	<b>Strength <math>f'_c</math> (psi)</b>	<b>Maximum w/cm Ratio</b>
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
<b>PPCM's</b> (with cast-in-place decks and no entrained air)	5000	0.48
	5500	0.44
	6000 +	0.42

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

**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:

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

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 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 02530 - STRUCTURAL STEEL**

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

**02530.10 Structural Steel for Bridges** - Replace this subsection, except for the subsection number and title, with the following:

Structural steel for Bridges shall conform to the following, as shown or specified:

- AASHTO M 270, Grade 36 (ASTM A709, Grade 36)
- AASHTO M 270, Grade 50 (ASTM A709, Grade 50)
- AASHTO M 270, Grade 50W (ASTM A709, Grade 50W)
- AASHTO M 270, Grade HPS 70 (ASTM A709 Grade HPS 70)
- AASHTO M 270, Grade HPS 70W (ASTM A709 Grade HPS 70W)

Impact test requirements, for both non-fracture-critical tension components (T), and fracture-critical tension components (F), are to be according to Zone 2 requirements of AASHTO M 270 Tables 11 and 12, respectively.

### **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.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**SECTION 02690 - PCC AGGREGATES**

Comply with Section 02690 of the Standard Specifications modified as follows:

**02690.20(e) Grading and Separation by Sizes for Prestressed Concrete** - Replace this subsection with the following subsection:

**02690.20(e) Grading and Separation by Sizes** - Sampling shall be according to AASHTO R 90. Sieve analysis shall be according to AASHTO T 27 and AASHTO T 11. Provide aggregates meeting the gradation requirements of Table 02690-1 for structural concrete. Provide a CAgT to perform sampling and testing when required.

**Table 02690-1**

**Gradation of Coarse Aggregates  
Percent passing (by Weight)**

Size Number	Nominal Size Square Openings	Sieve Size											
		(2½ in.)	(2 in.)	(1½ in.)	(1 in.)	(¾ in.)	(½ in.)	(¾ in.)	(No. 4)	(No. 8)	(No. 16)	(No. 50)	(No. 200)
3	(2 to 1 in.)	100	90 to 100	35 to 70	0 to 15	—	0 to 5	—	—	—	—	—	**
357*	(2 in. to No. 4)	100	95 to 100	—	35 to 70	—	10 to 30	—	0 to 5	—	—	—	**
4	(1½ to ¾ in.)	—	100	90 to 100	20 to 55	0 to 15	—	0 to 5	—	—	—	—	**
467*	(1½ to No. 4)	—	100	95 to 100	—	35 to 70	—	10 to 30	0 to 5	—	—	—	**
5	(1 to ½ in.)	—	—	100	90 to 100	20 to 55	0 to 10	0 to 5	—	—	—	—	**
56	(1 to ¾ in.)	—	—	100	90 to 100	40 to 85	10 to 40	0 to 15	0 to 5	—	—	—	**
57	(1 to No. 4)	—	—	100	95 to 100	—	25 to 60	—	0 to 10	0 to 5	—	—	**
6	(¾ to ½ in.)	—	—	—	100	90 to 100	20 to 55	0 to 15	0 to 5	—	—	—	**
67	(¾ to No. 4)	—	—	—	100	90 to 100	—	20 to 55	0 to 10	0 to 5	—	—	**
68	(¾ to No. 8)	—	—	—	100	90 to 100	—	30 to 65	5 to 25	0 to 10	0 to 5	—	**
7	(½ to No. 4)	—	—	—	—	100	90 to 100	40 to 70	0 to 15	0 to 5	—	—	**
78	(½ to No. 8)	—	—	—	—	100	90 to 100	40 to 75	5 to 25	0 to 10	0 to 5	—	**
8	(¾ to No. 8)	—	—	—	—	—	100	85 to 100	10 to 30	0 to 10	0 to 5	—	**
89	(¾ to No. 16)	—	—	—	—	—	100	90 to 100	20 to 55	5 to 30	0 to 10	0 to 5	**

\* Use two or more separated sizes which when combined meet these gradation limits.

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

**02690.20(f) Grading and Separation by Sizes for Other Concrete** - Delete this subsection.

**02690.30(g) Grading** - In the paragraph that begins “Sampling shall be according to...”, replace the words “AASHTO T 2” with the words “AASHTO R 90”.

**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:

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**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).

*INTENTIONALLY LEFT BLANK*



**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**APPENDIX A - PROJECT PLANS**

**Under Separate Cover**

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

Bridges and Roadways  
Mill Creek - Folsom Road Bridge Replacement  
Linn County Bridge No. BR0651-0065  
ODOT Bridge No. 23903  
July 2022

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**APPENDIX B - BID SECTION**

**ATTENTION:**

DO NOT INCLUDE THE PLANS AND SPECIFICATIONS WHEN SUBMITTING YOUR BID PROPOSAL. SUBMIT ONLY THE ITEMS INCLUDED IN THE BID SECTION AND ANY ADDENDUM THAT MAY HAVE BEEN ISSUED FOR THIS PROJECT.

**INCLUDED IN THIS SECTION:**

- BID SCHEDULE\*\*
- PROPOSAL
- BID PROPOSAL BOND
- FIRST TIER SUBCONTRACTOR DISCLOSURE FORM

\*\*An electronic version of the Bid Schedule is available on the county website listed in 00110.05(e). Submission of the Bid Schedule shall follow 00120.45(a).

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**BID SCHEDULE**

Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways

**Bid Opening: July 12, 2022 at approximately 9:35 a.m., P.D.T.**

ITEM	UNIT	QUANT.	UNIT PRICE	TOTAL
1. Mobilization	LS	All	\$	\$
2. Temporary Work Zone Traffic Control, Complete	LS	All	\$	\$
3. Construct and Remove Temporary Roadbed & Surfacing	LS	All	\$	\$
4. Diversion Bridge	LS	All	\$	\$
5. Erosion Control	LS	All	\$	\$
6. Sediment Barrier	FOOT	560	\$	\$
7. Pollution Control Plan	LS	All	\$	\$
8. Work Containment Plan and System	LS	All	\$	\$
9. Construction Survey Work	LS	All	\$	\$
10. Removal of Structures and Obstructions	LS	All	\$	\$
11. Clearing and Grubbing	LS	All	\$	\$
12. Embankment In Place	CUYD	200	\$	\$
13. Subgrade Geotextile	SQYD	255	\$	\$
14. Bridge Removal Work	LS	All	\$	\$
15. Structure Excavation	LS	All	\$	\$
16. Granular Structure Backfill	LS	All	\$	\$
17. Furnish Pile Driving Equipment	LS	All	\$	\$
18. Furnish PP12.75 x 0.375 Steel Piles	FT	240	\$	\$
19. Drive PP12.75 x 0.375 Steel Piles	EACH	10	\$	\$
20. PP 12.75 x 0.375 Steel Pile Splices	EACH	5	\$	\$
21. Reinforced Pile Tips	EACH	10	\$	\$
22. Reinforcement, Grade 60	LS	All	\$	\$
23. General Structural Concrete, Class 3300	LS	All	\$	\$
24. Reinforced Concrete Bridge End Panels	SQYD	126.5	\$	\$
25. 26 Inch Precast Prestressed Slabs	FOOT	452.1	\$	\$
26. Poured Joint Seal	LS	All	\$	\$
27. 2 Tube Side Mount Rail	LS	All	\$	\$
28. Rolled Waterproof Membrane	SQFT	1864	\$	\$
29. Cold Plane Removal, 0-2 Inches Deep	SQYD	760	\$	\$



**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**BID PROPOSAL**

TO: COUNTY BOARD OF COMMISSIONERS, LINN COUNTY, OREGON

**The undersigned, as bidder, declares that:**

This bid is for the work described on the "Description of Work" sheet bound in this bid.

This bid has been prepared from documents obtained from Linn County Road Department website at: <http://www.co.linn.or.us/Roads/ContractConst.asp> - Project Title

The only persons or parties interested in this bid as principals are those named in this bid.

The bidder submits this bid in accordance with and subject to the terms and conditions stated in Sections 00120 and 00130 of the specifications.

Bidder shall check one box: Bidder  is  is not a resident bidder as defined in ORS 279A.120.

The bidder has obtained and become acquainted with the applicable standard specifications, special provisions, plans, and other required provisions applicable to the particular work for which the bid is submitted.

The bidder has personally inspected the location and the site of the work and has become acquainted with all conditions, local and otherwise, affecting it.

The bidder has obtained and become acquainted with the forms of contract and bond which are to be signed by the successful bidder.

The bidder is satisfied as to the quantities and conditions and understands that in signing this bid the bidder waives all right to claim any misunderstanding regarding these quantities and conditions.

The bid guaranty submitted with this bid, if a bid bond, is by this reference made a part of this bid.

**The bidder also proposes and agrees that:**

If this bid is accepted, the bidder will execute the contract form furnished by the Agency, will provide all necessary machinery, equipment, tools, apparatus, labor and other means of construction, and will do all work and furnish all the materials specified in or called for by the contract in the manner and time prescribed in the contract and according to the requirements of the Engineer as given in the contract.

The bidder will accept, as full payment for the work performed and the materials, labor, equipment, machinery, tools, apparatus and other means of construction furnished, the amount earned under the contract as computed in the manner described in the specifications from the quantities of the various classes of work performed and the respective unit prices bid as these prices are given in the "Bid Schedule" bound in this bid.

Any contract awarded to the bidder shall include the provisions required by ORS 279C.830 or 40 U.S.C. 276a.

## **Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways**

### **The bidder also certifies to the following:**

#### **A. Noncollusion:**

The price(s) and amount of this bid have been arrived at independently and without consultation, communication, or agreement with any other contractor, bidder, or potential bidder except as disclosed on a separately attached statement.

Neither the price(s) nor the amount of this bid, and neither the approximate price(s) nor approximate amount of this bid has been disclosed to any other firm or person who is a bidder or potential bidder, and they will not be disclosed before the opening of bids.

No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, to submit a bid higher than this bid, or to submit any intentionally high or noncompetitive bid or other form of complementary bid.

This bid is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive bid.

The bidder, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted of or found liable for any act, prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract except as described on a separately attached statement.

The bidder understands and acknowledges that the above representations are material and important and will be relied on by the Agency, in awarding the contract(s) for which this bid is submitted. The bidder understands that any misstatement in this certification is and shall be treated as fraudulent concealment from the Agency, of the true facts relating to the submission of bids for this contract.

#### **B. Noninvolvement in Any Debarment and Suspension:**

The bidder, its owners, directors, principals, and officers:

Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency.

Have not within a three-year period preceding this bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.

Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in the preceding paragraph of this certification.

Have not within a three-year period preceding this bid had one or more public transactions (Federal, State, or local) terminated for cause or default.

Where the prospective primary participant is unable to certify to any of the statements in this certification, the prospective primary participant shall attach an explanation to this bid.

## Mill Creek - Folsom Road Bridge Replacement Bridges and Roadways

List exceptions. (For each exception noted, indicate to whom the exception applies, initiating agency, and dates of action. If additional space is required, attach another page with the following heading: Certification Exceptions continued, Bid Insert.)

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

### C. Lobbying Activities:

To the best of my knowledge and belief, that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" to the Agency.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting their bid that they shall require that the language of this certification be inserted in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

### D. Compliance With Oregon Tax Laws:

By signature on this bid, the undersigned hereby certifies under penalty of perjury that the undersigned is authorized to act on behalf of bidder, that the undersigned has authority and knowledge regarding bidder's payment of taxes, and that bidder is, to the best of the undersigned's knowledge, not in violation of any Oregon Tax Laws. For purposes of this

certification, "Oregon Tax Laws" means a state tax imposed by ORS 320.005 to 320.150 (Amusement Device Taxes), ORS 403.200 to 403.250 (Tax For Emergency Communications), and ORS Chapters 118 (Inheritance Tax), 314 (Income Tax), 316 (Personal Income Tax), 317 (Corporation Excise Tax), 318 (Corporation Income Tax), 321 (Timber And Forestland Tax), and 323 (Cigarettes And Tobacco Products Tax), and any local taxes administered by the Department of Revenue under ORS 305.620.

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

E. Employee Drug Testing Program:

Pursuant to ORS 279C.505(2), that the bidder has an employee drug testing program in place, and will maintain such program for the entire period of this contract. Failure to maintain such program shall constitute a material breach of contract.

F. Nondiscrimination:

Pursuant to ORS 279A.110, that the bidder has not discriminated and will not discriminate against a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns, or an emerging small business in obtaining any required subcontracts. The bidder understands that it may be disqualified from bidding on this public improvement project if the Agency finds that the bidder has violated subsection (1) of ORS 279A.110.

The Bidder certifies that it has a written policy and practice that meets the requirements described in ORS 279A.112 (House Bill 3060, 2017) of preventing sexual harassment, sexual assault and discrimination against employees who are members of a protected class.

G. Use of Registered Subcontractors:

That all subcontractors performing work on this public improvement contract will be registered with the Construction Contractors Board or licensed by the State Landscape Contractors Board in accordance with ORS Chapter 701 before the subcontractors commence work under this contract.

H. Incorporation of All Addenda:

The bidder has incorporated into this bid all addenda issued for this Project.

The bidder understands and acknowledges that the Agency will provide all addenda only by publishing them on the Agency's website. Addenda may be downloaded from the Agency's website.

The bidder shall be responsible for diligently checking the Agency's website for addenda. Bidders should check the website at least weekly until the week of Bid Closing and daily during the week of Bid Closing.

By submitting this bid, the bidder assumes all risks associated with its failure to access all addenda and waives all claims, suits, and actions against the Agency, State, the Transportation Commission, the Department of Transportation and their members, officers, agents, and employees that may arise out of the bidder's failure to access all addenda, in spite of any contingencies such as website failure, down-time, service interruptions, and corrupted, inaccurate, or incomplete addenda or information.

The party by whom this proposal is submitted, and by whom the contract will be entered into in case the award is made to bidder is:

\_\_\_\_\_ [“An Individual,” “A Partnership,” “A Corporation,” “An Association”]

doing business under the name of \_\_\_\_\_

at \_\_\_\_\_  
[Street] [City] [State] [Zip Code]



**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

which address is the address to which all communications concerning this bid and the contract should be sent.

The name of the surety by which the Performance Bond and Payment Bond covering the contract, if awarded, will be furnished and the name and address of the surety's local agent are as follows:

Name of Surety \_\_\_\_\_

Name of Agent \_\_\_\_\_

Accompanying this proposal is a \_\_\_\_\_  
["Proposal Bond," "Cashier's Check," "Certified Check", or  
"Irrevocable letter of credit"]

in the amount of 10 percent of the bid.

The bidder further proposes to accept as full payment for the work proposed herein the amount computed under the provision of the contract documents and based on the unit price amounts, under Bid Schedule bound herein, it being expressly understood that the unit prices are independent of the exact quantities involved. The bidder agrees that the unit prices represent a true measure of the labor and materials required to perform the work, including all allowances for overhead and profit for each type and unit of work called for in these contract documents.

If this proposal shall be accepted and the undersigned shall fail or neglect to contract as aforesaid, and to give bonds in the amount specified, with surety satisfactory to the Linn County Board of Commissioners, within ten (10) days [not including Sunday], from the date of receiving from the Board of Commissioners the contract and prepared and ready for execution, the Board of Commissioners may, at its option, determine that the bidder has abandoned the contract, and thereupon forfeiture of the guaranty accompanying the bid shall operate and the same shall be the property of the Linn County Board of Commissioners.

\_\_\_\_\_  
Bidder

Dated \_\_\_\_\_, 20\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**BID PROPOSAL BOND**

KNOW ALL MEN BY THESE PRESENTS, THAT WE, \_\_\_\_\_, as principal, and the \_\_\_\_\_, duly authorized under the laws of the State of Oregon, as surety, are held and firmly bound unto the County Board of Commissioners as an obligee, in the full and penal sum of ten percent (10%) of the total amount of the proposal of said principal for the work hereinafter described, for the payment of which well and truly to be made, we bind ourselves, our heirs, executors, administrators, and assigns, and successors and assigns, firmly by these presents.

The condition of this bond is such that, thereas the principal herein is herewith submitting its proposal for the following work, to wit:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Said proposal, be reference hereto, being hereby made a part hereof;

NOW, THEREFORE, if the said proposal submitted by the said principal be accepted, and the contract for said work be awarded to said principal, and if the said principal shall enter into and execute the said contract and shall furnish bond as required by the Linn County Board of Commissioners within the time fixed by said Board, then this obligation shall be void; otherwise to remain in full force and effect.

Signed and sealed this \_\_\_\_\_, day of \_\_\_\_\_, 20\_\_\_\_\_

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Company

Countersigned at \_\_\_\_\_, this \_\_\_\_\_, day of \_\_\_\_\_, 20\_\_\_\_\_

\_\_\_\_\_  
Surety

By: \_\_\_\_\_

\_\_\_\_\_  
Agent Address

\_\_\_\_\_  
Agent Phone                      Agent Fax

**Mill Creek - Folsom Road Bridge Replacement  
Bridges and Roadways**

**FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM**

**Project Name** Mill Creek - Folsom Road Bridge Replacement

**Highway** Folsom Road

**County** Linn

**Bid Opening Date** July 12, 2022

**Name of Bidding Contractor** \_\_\_\_\_

**Email Address** \_\_\_\_\_

*CHECK THIS BOX IF YOU WILL NOT BE USING ANY FIRST-TIER SUBCONTRACTORS OR IF YOU ARE NOT SUBJECT TO THE DISCLOSURE REQUIREMENTS (SEE INSTRUCTIONS).*

**FIRST-TIER SUBCONTRACTORS**

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

Firm Name	Dollar Amount
Category of Work	

(Attach additional sheets as necessary)