
Cowlitz County

Department of Public Works

**CONTRACT DOCUMENTS
FOR**

**SLIDE CREEK ROAD REALIGNMENT PROJECT
(M.P. 1.40 to 1.55, Road Number 21010)**

NE ¼ SEC. 34, T9N, R4W

**Cowlitz County Project No. 1629
C.R.P. No. 768**

March 2024

COWLITZ COUNTY
Department of Public Works
1600-13th Avenue South
Kelso, Washington 98626
Phone (360) 577-3030

BOARD OF COUNTY COMMISSIONERS

ARNE MORTENSEN	District No. 1
DENNIS P. WEBER	District No. 2
RICHARD R. DAHL	District No. 3

Cowlitz County

Department of Public Works

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Responsible for all portions of the Contract Documents

COWLITZ COUNTY
Department of Public Works
1600-13th Avenue South
Kelso, Washington 98626
Phone (360) 577-3030

Approved by:

Susan Eugenis 3/27/24
Susan Eugenis, P.E. Date
County Engineer

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***Included as indicated but numbered independently.

CALL FOR BIDS

The Board of County Commissioners of Cowlitz County, Washington will receive sealed bids until the **1st day of May, 2024, prior to 1:30 p.m.**, for the following work: **SLIDE CREEK ROAD REALIGNMENT PROJECT.**

Work performed under this contract consists of the following:

Clearing and grubbing, silt fence installation, roadway excavation, rock excavation, roadway construction, hot mix asphalt paving, culvert installation, hydroseeding, and associated work.

At that time all bids will be publicly opened and read in the Board's hearing room. Bids must be addressed to:

Board of County Commissioners
Attn: Clerk of the Board
207 Fourth Avenue North
Kelso WA 98626

Project bid documents (Plans, specifications, addenda, bid documents, bidders list and plan holders list) for this project are available online for inspection during the bidding period through the Builders Exchange of Washington (BXWA) website at www.bxwa.com. Click on Posted Projects, then Public Works, then Cowlitz County and then Projects Bidding. These documents are available for viewing, downloading and printing on your own equipment free of charge. This service is provided to Prime Bidders, Subcontractors, and Vendors bidding on this project. Bidders will need to "Register as a Bidder" through the BXWA in order to receive automatic e-mail notification of future addenda and to be placed on the Bidders List. Bidders should contact Builder's Exchange of Washington at (425) 258-1303 for questions regarding access or registration.

It is the sole responsibility of the Bidder to obtain Addenda, if any. Addenda information will be available on the BXWA web site at www.bxwa.com. Cowlitz County accepts no responsibility or liability and will provide no accommodation to bidders who fail to check for addenda and thereby submit inadequate or incomplete responses.

Cowlitz County will not provide paper copies of the Project bid documents for this project for bidding purposes. A copy of the plans and specifications may be reviewed at the office of the Clerk of the Board of County Commissioners.

All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check, or surety bond in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful bidder fail to enter into such contract and furnish satisfactory performance bond within the time stated in the specifications, the bid proposal deposit shall be forfeited to Cowlitz County.

All documents received in response to this invitation to bid will become a matter of public record and subject to the Washington public disclosure act under chapter 42.56 RCW.

Cowlitz County, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Board reserves the right to reject any and all bids and to waive any immaterial irregularities or informalities in any bid or in the bidding.

DATED this 2nd day of April, 2024.

BOARD OF COUNTY COMMISSIONERS
OF COWLITZ COUNTY, WASHINGTON

DocuSigned by:
Richard Dahl
-0AD76D9B17B54F5...
Richard R. Dahl, Chairman

DocuSigned by:
Arne Mortensen
-50C0340DDE244E6...
Arne Mortenson, Commissioner

DocuSigned by:
Dennis Weber
-9959C1D2F93B41D...
Dennis P. Weber, Commissioner

ATTEST:

DocuSigned by:
Kelly Dombrowski
-39750CE6FD1E47A...
Kelly Dombrowski, Clerk of the Board

DocuSigned by:


BIDDER'S CHECKLIST

(Informational only – not required to be submitted with the BID)

SLIDE CREEK ROAD REALIGNMENT PROJECT

Name of Project

ITEMS TO BE INCLUDED WITH BID

The following checked items are required to be completed and submitted with the BID, except as noted otherwise:

Required if Checked:

- 1. PROPOSAL FORM – To be completed and signed by bidder. Provide all information pertaining to BIDDER'S organization on the first page. Fill in all unit prices and amounts for each bid item. Fill in all subtotals, sales tax and the total bid amount in the spaces provided. List the addenda in the spaces provided to indicate acknowledgement. Sign, date, and provide requested information in the spaces provided on the last page.
- 2. CERTIFICATION OF APPRENTICESHIP – In the spaces provided on the PROPOSAL FORM, provide information on the BIDDER'S Apprenticeship Programs.
- 3. NON-COLLUSION DECLARATION – required on all projects.
- 4. PROPOSAL FOR INCORPORATING RECYCLED MATERIALS INTO THE PROJECT – required on all road construction projects.
- 5. CERTIFICATION FOR FEDERAL AID CONTRACTS – required on FHWA-funded projects.
- 6. DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION CERTIFICATION – required on FHWA-funded projects with a goal of greater than 0%.
- 7. DISADVANTAGED BUSINESS ENTERPRISE (DBE) WRITTEN CONFIRMATION DOCUMENT – required on FHWA-funded projects with a goal of greater than 0%. This form is required to be submitted within 48 hours after the time for delivery of the bid proposal.
- 8. DISADVANTAGED BUSINESS ENTERPRISE (DBE) BID ITEM BREAKDOWN – required on FHWA-funded projects with a goal of greater than 0%. This form is required to be submitted within 48 hours after the time for delivery of the bid proposal.
- 9. DISADVANTAGED BUSINESS ENTERPRISE (DBE) TRUCKING CREDIT FORM – required on FHWA-funded projects with a goal of greater than 0%. This form is required to be submitted within 48 hours after the time for delivery of the bid proposal.
- 10. LOCAL AGENCY SUBCONTRACTOR LISTS – To be filled in and signed by BIDDER.

- 11. CONTRACTOR'S PROJECT INFORMATION STANDARD QUESTIONNAIRE - The BIDDER shall complete this form.
- 12. BID DEPOSIT FORM - This form is to be executed by the BIDDER and the Surety Company unless bid is accompanied by cash, cashier's check, or a certified check. The amount of the deposit or bid bond shall be not less than 5% of the total amount of the bid and may be shown in dollars or on a percentage basis. Bid Bond forms other than the enclosed form may be accepted providing it has been approved by the OWNER prior to bid submittal.
- 13. E-VERIFY DECLARATION – The BIDDER shall complete and sign this form.
- 14. CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES – The BIDDER shall complete and sign this form. This form is required to be submitted within 24 hours after the time for delivery of the bid proposal.

PROPOSAL FORM

TO: Board of County Commissioners
County Administration Building
207 Fourth Avenue North, 3rd Floor
Kelso, WA 98626

FOR: **SLIDE CREEK ROAD REALIGNMENT PROJECT**
Name of Project

FROM:	_____	_____
	Bidder's Business Name	Mailing Address
	_____	_____
	Email Address	City, State and Zip
	_____	_____
	Name of Bidder's Representative for Bid	Telephone
	_____	_____
	Washington Registration No.	Tax I.D. No.
	_____	_____
	Employment Security Department No.	State Excise Tax Registration No.
	_____	_____
	Industrial Insurance Coverage Account No.	UBI No.

INSTRUCTIONS TO BIDDERS

1. Contract Documents. See Section 1-04.2 of the Special Provisions for a list of the "contract documents" that make up the contract. Be sure that you have a copy of the **2024** Standard Specifications for Road, Bridge, and Municipal Construction, by the Washington State Department of Transportation and the American Public Works Association, Washington State Chapter. Such specifications are sometimes referred to as the "Standard Specifications."

2. Submission of Bid. Fill out this Proposal Form completely, in accordance with Section 1-02.6 of the Standard Specifications. Enclose your Proposal Form and bid deposit in an opaque sealed

envelope addressed to:

Cowlitz County Board of County Commissioners
Attn: Clerk of the Board
County Administration Building, 3rd Floor
207 Fourth Avenue North
Kelso, WA 98626

Mark the outside of the envelope with the name of the bidder, the name of the project, and the date and time of the bid opening. It is your responsibility to make sure that your bid is physically received by the Clerk of the Board by the time set for the bid opening. Bids not so received will not be considered. Bids may not be submitted by facsimile machine.

The County's determination of when a bid was received shall be final and non-appealable.

3. Bidder Responsibility Standards. It is the intent of the Owner to award a contract to the lowest, responsible and responsive bidder for all described Work. Before award, the bidder must meet all criteria and satisfy all requirements of the following bidder-responsibility standards to be considered a responsible and a responsive bidder. The bidder may be required by the Owner to submit documentation demonstrating compliance with these standards to be qualified to be awarded a contract. The bidder must:

- a. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of bid submittal;
- b. Have a current Washington Unified Business Identifier (UBI) number;
- c. If applicable:
 - i. Have Industrial Insurance (workers' compensation) coverage for the bidder's employees working in Washington, as required in Title 51 RCW;
 - ii. Have a Washington Employment Security Department number, as required in Title 50 RCW;
 - iii. Have a Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
- d. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3).

4. Execution of Contract. The successful bidder must use the performance bond form and other forms provided by Cowlitz County to be considered both a responsible and responsive bidder.

5. Sales Tax Code. In computing and reporting sales taxes payable to the Washington State Department of Revenue on this project, the following code number shall be used: **0800.**

PROPOSAL

The undersigned bidder proposes to perform the project named above in strict compliance with the contract documents, for the following amounts:

Item No.	Approximate Quantity	ITEM	UNIT PRICE \$	AMOUNT \$
1	Force Account	Miscellaneous Construction	10,000.00	10,000.00
2	1 Hours	Replacement Staking Services	-200.00	-200.00
3	Lump Sum	Mobilization		
4	Lump Sum	Project Temporary Traffic Control		
5	Lump Sum	Clearing and Grubbing		
6	1,109 C.Y.	Roadway Excavation and Disposal Including Haul		
7	1,500 C.Y.	Rock Excavation Including Haul		
8	Lump Sum	Trimming and Cleanup		
9	1,800 S.Y.	Construction Geotextile for Separation		
10	1,030 Ton	Crushed Surfacing Base Course		
11	260 Ton	HMA Class 3/8 Inch PG 58H-22		
12	33 L.F.	Corrugated Polyethylene Storm Sewer Pipe, 18-inch Diameter		
13	480 L.F.	Silt Fence		

Item No.	Approximate Quantity	ITEM	UNIT PRICE \$	AMOUNT \$
14	0.3 Acre	Seeding, Fertilizing, And Mulching		
15	90 Ton	Quarry Spalls		

TOTAL COST TO COWLITZ COUNTY\$ _____

Addenda. The bidder acknowledges receipt of the following addenda: _____, _____, _____, _____, and _____. (Insert numbers of any addenda received.)

Non-Collusion. Each bidder must submit a declaration of non-collusion completely executed with their bid. Reasonable grounds for believing that any bidder(s) have engaged, either directly or indirectly, into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with this bid will cause rejection of all proposals which said bidder(s) has shown interest, and none of the participants to such direct or indirect actions will be considered.

The person(s) signing this bid on behalf of the bidder declare(s) under penalty of perjury under the laws of the United States and the State of Washington that this bidder has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with this bid.

Date

Signature of Person Authorized to Bind Bidder

Bidder's Business Name

Title of Person Signing Bid

Signed in _____, Washington

Failure to return this Declaration as part of the bid proposal package will make the bid nonresponsive and ineligible for award.

NON-COLLUSION DECLARATION

I, by signing the proposal, hereby declare, under penalty of perjury under the laws of the United States that the following statements are true and correct:

1. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.
2. That by signing the signature page of this proposal, I am deemed to have signed and to have agreed to the provisions of this declaration.

NOTICE TO ALL BIDDERS

To report rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

DOT Form 272-0361 EF
07/2011

Proposal for Incorporating Recycled Materials into the Project

In compliance with a new law that went into effect January 1, 2016 (SHB1695), the Bidder shall propose below, the total percent of construction aggregate and concrete materials to be incorporated into the Project that are recycled materials. Calculated percentages must be within the amounts allowed in Section 9-03.21(1)E, Table on Maximum Allowable Percent (By Weight) of Recycled Material, of the Standard Specifications.

Proposed total percentage: _____ percent.

Note: Use of recycled materials is highly encouraged within the limits shown above, but does not constitute a Bidder Preference, and will not affect the determination of award, unless two or more lowest responsive Bid totals are exactly equal, in which case proposed recycling percentages will be used as a tie-breaker, per the APWA GSP in Section 1-03.1 of the Special Provisions. Regardless, the Bidder's stated proposed percentages will become a goal the Contractor should do its best to accomplish. Bidders will be required to report on recycled materials actually incorporated into the Project, in accordance with the APWA GSP in Section 1-06.6 of the Special Provisions.

Bidder: _____

Signature of Authorized Official: _____

Date: _____

BID DEPOSIT FORM

SLIDE CREEK ROAD REALIGNMENT PROJECT

Name of Project

Name of Bidder

The bidder named above hereby submits its bid deposit in the form of a certified check, cashier's check, cash or bid bond in the amount of \$_____, which amount is not less than five (5) percent of the total bid.

PROPOSAL BOND

KNOW ALL MEN BY THESE PRESENTS, That we, _____, as Principal and _____, a corporation duly organized under the laws of the state of _____, and authorized to do business in the State of Washington, as Surety, are held and firmly bound unto Cowlitz County as Obligee, in the full and penal sum of five (5) percent of the total amount of the bid proposal of said Principal for the work hereinafter described, for the payment of which the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, by these presents.

The condition of this bond is such, that whereas the Principal herein is herewith submitting his or its sealed proposal for the following public works project, to wit:

Said bid and proposal, by reference thereto, being made a part hereof.

NOW, THEREFORE, if the said proposal bid by said Principal be accepted, and the contract be awarded to said Principal, and if the said Principal shall duly make and enter into and execute said contract and shall furnish bond as required by the contract documents within a period of ten (10) days from and after said award, exclusive of the day of such award, then this obligation shall be null and void, otherwise it shall be and remain in full force and effect.

SIGNED AND SEALED this _____ day of _____, 2024.

Name of Bidder

Name of Surety

Authorized Signature

Authorized Signature*

Title

Title

Date

* Attach Power of Attorney

E-VERIFY DECLARATION

SLIDE CREEK ROAD REALIGNMENT PROJECT
Cowlitz County Project No. 1629

Firm Name: _____

The undersigned declares, under **penalty of perjury** under the laws of Washington that:

1. That the above-named firm is currently enrolled in and using the E-Verify system implemented on October 25, 2011 as outlined in Resolution No. 11-118 and will continue to use the E-Verify system for so long as work is being performed on the above named project.
2. I certify that I am duly authorized to sign this declaration on behalf of the above-named bidder/proposer.
3. I acknowledge that Cowlitz County reserves the right to require a copy of the Memorandum of Understanding between the contractor listed above and the Department of Homeland Security certifying enrollment in the E-Verify program at any time. Failure to provide the required Memorandum of Understanding within 10 days of request could lead to suspension of this contract.

Dated at _____, State of _____ on this _____ day of _____, 2024.

Signature _____

Printed Name _____

THIS PAGE MUST BE RETURNED WITH THE BID DOCUMENTS

COMPLIANCE WITH WAGE PAYMENT LAWS DECLARATION

SLIDE CREEK ROAD REALIGNMENT PROJECT

Cowlitz County Project No. 1629

Firm Name: _____

1. The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date _____, the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.
2. I certify that I am duly authorized to sign this declaration on behalf of the above-named bidder/proposer.
3. I acknowledge that Cowlitz County is required to receive this declaration as a condition to awarding the public works contract pursuant to RCW 39.04.350.

The undersigned declares, under penalty of perjury under the laws of Washington that the foregoing is true and correct.

Signed and dated at _____, in State of _____, on this _____ day of _____, 2024.

Signature _____

Printed Name _____

THIS PAGE MUST BE RETURNED BEFORE THE PUBLIC WORKS CONTRACT CAN BE AWARDED

AGREEMENT

THIS AGREEMENT is entered into between **COWLITZ COUNTY** and _____
_____ ("Contractor") for the following project: **SLIDE CREEK ROAD
REALIGNMENT PROJECT** ("the Project").

The Parties Agree as Follows:

1. Acceptance of Bid Proposal. Cowlitz County accepts Contractor's bid proposal for the Project. Such acceptance is limited to the following items of the bid proposal: **1-15**.

2. Contractor to Accomplish Project. Contractor shall do all work and furnish all labor, materials, equipment, tools, services, and incidentals necessary to accomplish the Project in strict compliance with the contract documents.

3. Contract Amount. Cowlitz County shall pay Contractor in accordance with the contract documents, based on the unit prices and lump sums stated in the Proposal Form. The total contract amount for the Project shall not exceed \$ _____, including sales taxes.

4. Contract Documents. (a) This Agreement shall be governed by and incorporates by reference the **2024** Standard Specifications for Road, Bridge, and Municipal Construction, by the Washington State Department of Transportation and the American Public Works Association, Washington State Chapter (the "Standard Specifications"). All provisions of the Standard Specifications apply unless specifically modified herein. (b) The contract documents constitute the parties' entire and integrated agreement concerning the Project, and supersede all prior and contemporaneous negotiations, representations, or agreements, both written and oral.

5. Contractor Registration. By submitting a bid, each bidder warrants that it is currently a registered contractor in accordance with RCW 18.27. Continuous registration throughout the performance of the project is a requirement of the contract. The bidder shall promptly furnish proof of registration whenever requested.

6. Performance of Work. (a) The Contractor warrants that all work performed shall be free from defects in material and workmanship, shall conform to the contract documents, and shall be fit for Cowlitz County's intended purposes. If the Engineer determines that the work or any portion thereof fails to conform to the foregoing warranty, the Engineer shall give the Contractor written notice thereof and the Contractor shall then take corrective action as directed by the Engineer. The purpose of the

corrective action will be to remedy all nonconforming work and any damage caused by the nonconforming work. The Contractor shall begin the repair or replacement within 10 days after receiving the notice and shall complete the work within such reasonable time as determined by the Engineer. If the Contractor fails to carry out the corrective action as required by this section, Cowlitz County may perform the corrective action with its own resources or by contract, and the Contractor shall pay all the costs thereof.

(b) If other provisions of the contract documents contain different performance requirements, the more stringent requirements shall apply.

(c) No inspection, acceptance, use, or occupancy of the work, or payment for the work, shall relieve the Contractor from its responsibilities.

(d) The Contractor warrants good title to all materials, supplies, and equipment incorporated into the work.

7. Uniformity of Equipment and Materials. Like items of equipment and materials to be incorporated into the work shall be products of one manufacturer.

8. Substitution of "Equal" Products. Unless otherwise provided, any reference in the contract documents to any product by a brand name, model, or catalog number shall be understood as establishing a standard of quality, and products equal in quality may be substituted if approved in advance by the Engineer. If the Contractor wishes to propose a substitution, it shall submit a written proposal in a form approved by the County, warranting and guarantying the substitute product will be, including but not limited to, at least equal to or better than the specified product in terms of quality, function, performance, compatibility and reliability, to the Engineer, whose decision shall be final. The proposal shall identify the proposed substitute product, and the Contractor shall upon request and at its expense furnish the Engineer with such detailed specifications, test results, and other data as are helpful to the Engineer. The Engineer will not consider any proposed substitution if there is inadequate time available to fully evaluate the proposal. If the Engineer approves a substitution proposed by the Contractor, it is understood that such approval is in reliance upon the Contractor's written warranty and guaranty the substitute product to be, including but not limited to, at least equal to or better than the specified product in terms of quality, function, performance, compatibility and reliability. There will be no additional compensation or extensions to the time for completion. If the installation, application or performance of the substitute product is not equal to the specified product, the Engineer may direct the Contractor to remove the substitute product and replace it with the specified product, and to remedy any damage and delay caused by the use of the substitute product, all at the Contractor's expense. The County has a right to a deductive Change Order if the substituted product proves less costly than the contractually required product.

9. Utilities. The Contractor shall comply with the provisions of RCW 19.122, Standard Specification 1-07.17, and this paragraph. The telephone number of the Cowlitz County Utilities Coordinating Council is (800) 424-5555. The Special Provisions and/or contract plans identify all underground facilities known by Cowlitz County to be located within the area of excavation required as part of the work. Locations and dimensions shown in the Special Provisions or on the plans are in accordance with available information without uncovering, measuring, or other verification. If a utility is known or suspected of having underground facilities within the area of the excavation, and that utility is not a subscriber to the Cowlitz County Utilities Coordinating Council, the Contractor shall give individual notice to that utility.

10. Prevailing Wages and E-Verify. The Contractor shall pay all fees required by the Department of Labor and Industries in connection with the administration of the prevailing wage requirements. No increase in prevailing wage rates or fringe benefits shall be grounds for any additional compensation to the Contractor.

Cowlitz County requires that all businesses which contract with the County for contracts awarded by formal competitive procedures be enrolled in the Federal E-Verify Program. The requirement extends to every subcontractor meeting the same criteria. The Prime Contractor must provide certification of enrollment with bid submittal. The Prime Contractor is responsible for verification of every applicable subcontractor. Cowlitz County reserves the right to require a copy of a Memorandum of Understanding between the Prime or any Subcontractor and Department of Homeland Security upon request at any time during the project verifying the contractor's enrollment. Failure to provide this document could result in suspension of the project.

A copy of Resolution No. 11-118 is available at the Offices of the Board of County Commissioners. Federal E-Verify Program is a web-based application that can be accessed at www.dhs.gov/everify.

11. Air Pollution Regulations. The Southwest Washington Air Pollution Control Authority has adopted regulations to control the emission of contaminants into the air by sources within the Authority's jurisdiction, which includes Cowlitz County. The Contractor shall comply with all regulations and orders of such Authority.

12. Shoring. If in the performance of this contract, the Contractor or any subcontractor excavates any trench to a depth in excess of four feet, the Contractor shall provide adequate safety systems for the trench excavation that comply with the requirements of the Washington Industrial Safety and Health Act, RCW 39.04.180, and with all regulations thereunder. It is not anticipated that any excavation 4-feet or more in depth will be required for completion of the Work under this contract. Therefore, no bid item for trench safety systems is included in the bidder's proposal. In the event in the

performance of the contract the Engineer directs excavation such that shoring or extra excavation is required as determined by the Engineer, payment to the Contractor for such work will be made in accordance with Standard Specifications Section 1-04.4.

13. Worker's Benefits. The following is added at the end of Standard Specification 1-07.10: Notwithstanding the provisions of the preceding paragraphs, Contractor shall remain at all times liable for payment of any and all premiums due under Title 50 or Title 51 RCW, or any other employee benefit act, with respect to all work performed by Contractor or any subcontractor pursuant to this contract. Contractor shall indemnify, defend and hold Cowlitz County harmless from and against any claim or demand for payment of such premiums. The Contractor's responsibilities under this section shall survive the termination or completion of the contract and/or any release of retainage with respect to the contract. These waivers by the Contractor are a material inducement to County to enter into this contract, are reflected in Contractor's compensation, and have been mutually negotiated by the parties.

**BOARD OF COUNTY COMMISSIONERS
OF COWLITZ COUNTY, WASHINGTON**

Richard R. Dahl, Chairman

Name of Contractor

Arne Mortensen, Commissioner

Signatory Authorized by Firm Bylaws
to Bind Contractor

Dennis P. Weber, Commissioner

Title

ATTEST:

Kelly Dombrowski, Clerk of the Board

Date

Date

Washington Contractor's Registration Number

APPROVED AS TO FORM:

Civil Deputy Prosecuting Attorney

[Executed copies shall be delivered each to County, Contractor, Surety and Insurance Company]

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that the undersigned Contractor and Surety, a corporation, organized and existing under and by virtue of the laws of the State of Washington, are jointly and severally obligated to Cowlitz County, State of Washington, in the penal sum of \$ _____, for the payment of which sum we jointly and severally bind ourselves and our heirs, executors, administrators, and assigns, and successors and assigns, firmly in accordance with the following provisions:

The Contractor has entered into or is about to enter into a contract with Cowlitz County for the following project: **SLIDE CREEK ROAD REALIGNMENT PROJECT.**

Now, if the Contractor fully and timely performs all terms, conditions and requirements of the contract in all respects, including all warranty provisions; and pays all laborers, mechanics, subcontractors, and materialmen, and all persons who supply such person or persons, or subcontractors, with provisions and supplies for the above project; and defends and indemnifies Cowlitz County against any direct or indirect loss, damage, liability, judgments, and costs, to the extent required by the contract; then this obligation shall be void; otherwise it shall remain in full force and effect.

Provided, however, that the conditions of this obligation shall not apply to any money loaned or advanced to the Contractor or to any subcontractor or other person in the performance of any such work.

The Surety, for value received agrees that no change, extension of time, alteration or addition to the terms of the Contract, the specifications accompanying the Contract or to the work to be performed under the Contract shall in any way affect its obligation on this bond, and waives notice of any change, extension of time, alteration or addition to the terms of the Contract or the work performed. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Contractor shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

Any judgment against Cowlitz County that relates to or is covered by the contract or this bond shall be conclusive against the Contractor and the Surety, not only as to the amount of damages but also as to their liability if reasonable notice of the pendency of the suit has been given.

Name of Contractor

Name of Surety

Authorized Signature

Authorized Signature*

Title

Title

Date

Date

* Attach Power of Attorney

SPECIAL PROVISIONS

INTRODUCTION TO THE SPECIAL PROVISIONS

(January 4, 2024 APWA GSP, Option A)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2024 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter “Standard Specifications”). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

These Special Provisions are made up of both General Special Provisions (GSPs) from various sources, which may have project-specific fill-ins; and project-specific Special Provisions. Each Provision either supplements, modifies, or replaces the comparable Standard Specification, or is a new Provision. The deletion, amendment, alteration, or addition to any subsection or portion of the Standard Specifications is meant to pertain only to that particular portion of the section, and in no way should it be interpreted that the balance of the section does not apply.

The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source. For example:

(March 8, 2013 APWA GSP)

(April 1, 2013 WSDOT GSP)

Project specific special provisions are labeled without a date as such:

*(*****)*

Also incorporated into the Contract Documents by reference are:

- *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently adopted edition, with Washington State modifications, if any
- *Standard Plans for Road, Bridge and Municipal Construction*, WSDOT Manual M21-01, current edition

Contractor shall obtain copies of these publications, at Contractor’s own expense.

**- DIVISION 1 -
GENERAL REQUIREMENTS**

DESCRIPTION OF WORK

(March 13, 1995)

This contract provides for the improvement of *** Clearing and grubbing, silt fence installation, roadway excavation, rock excavation, roadway construction, hot mix asphalt paving, culvert installation, hydroseeding, *** and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

(*****)

Appendices. The following appendices are hereby provided for the Contractor's information:

- Appendix A – Plans**
- Appendix B – Geotechnical Report**
- Appendix C – Applicable Standard Plans**

1-01.3 Definitions

(January 19, 2022 APWA GSP)

Delete the heading **Completion Dates** and the three paragraphs that follow it, and replace them with the following:

Dates

Bid Opening Date

The date on which the Contracting Agency publicly opens and reads the Bids.

Award Date

The date of the formal decision of the Contracting Agency to accept the lowest responsible and responsive Bidder for the Work.

Contract Execution Date

The date the Contracting Agency officially binds the Agency to the Contract.

Notice to Proceed Date

The date stated in the Notice to Proceed on which the Contract time begins.

Substantial Completion Date

The day the Engineer determines the Contracting Agency has full and unrestricted use and benefit of the facilities, both from the operational and safety standpoint, any remaining traffic disruptions will be rare and brief, and only minor incidental work, replacement of temporary substitute facilities, plant establishment periods, or correction or repair remains for the Physical Completion of the total Contract.

Physical Completion Date

The day all of the Work is physically completed on the project. All documentation required by the Contract and required by law does not necessarily need to be furnished by the Contractor by this date.

Completion Date

The day all the Work specified in the Contract is completed and all the obligations of the Contractor under the contract are fulfilled by the Contractor. All documentation required by the Contract and required by law must be furnished by the Contractor before establishment of this date.

Final Acceptance Date

The date on which the Contracting Agency accepts the Work as complete.

Supplement this Section with the following:

All references in the Standard Specifications or WSDOT General Special Provisions, to the terms "Department of Transportation", "Washington State Transportation Commission", "Commission", "Secretary of Transportation", "Secretary", "Headquarters", and "State Treasurer" shall be revised to read "Contracting Agency".

All references to the terms "State" or "state" shall be revised to read "Contracting Agency" unless the reference is to an administrative agency of the State of Washington, a State statute or regulation, or the context reasonably indicates otherwise.

All references to "State Materials Laboratory" shall be revised to read "Contracting Agency designated location".

All references to "final contract voucher certification" shall be interpreted to mean the Contracting Agency form(s) by which final payment is authorized, and final completion and acceptance granted.

Additive

A supplemental unit of work or group of bid items, identified separately in the Bid Proposal, which may, at the discretion of the Contracting Agency, be awarded in addition to the base bid.

Alternate

One of two or more units of work or groups of bid items, identified separately in the Bid Proposal, from which the Contracting Agency may make a choice between different methods or material of construction for performing the same work.

Business Day

A business day is any day from Monday through Friday except holidays as listed in Section 1-08.5.

Contract Bond

The definition in the Standard Specifications for "Contract Bond" applies to whatever bond form(s) are required by the Contract Documents, which may be a combination of a Payment Bond and a Performance Bond.

Contract Documents

See definition for "Contract".

Contract Time

The period of time established by the terms and conditions of the Contract within which the Work must be physically completed.

Notice of Award

The written notice from the Contracting Agency to the successful Bidder signifying the Contracting Agency's acceptance of the Bid Proposal.

Notice to Proceed

The written notice from the Contracting Agency or Engineer to the Contractor authorizing and directing the Contractor to proceed with the Work and establishing the date on which the Contract time begins.

Traffic

Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and equestrian traffic.

(*****)

"Contracting Agency" means Cowlitz County.

"Engineer" or "Project Engineer" means the Cowlitz County Engineer.

"Secretary" or "Secretary of Transportation" means the Board of County Commissioners of Cowlitz County.

"State" or "State of Washington" means Cowlitz County, except when referring to state departments other than the department of transportation, and except when referring to state publications, laws, etc.

1-02 BID PROCEDURES AND CONDITIONS**1-02.1 Prequalification of Bidders**

Delete this Section and replace it with the following:

1-02.1 Qualifications of Bidder

(January 24, 2011 APWA GSP)

Before award of a public works contract, a bidder must meet at least the minimum qualifications of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be awarded a public works project.

1-02.2 Plans and Specifications

(June 27, 2011 APWA GSP)

Delete this section and replace it with the following:

Information as to where Bid Documents can be obtained or reviewed can be found in the Call for Bids (Advertisement for Bids) for the work.

After award of the contract, plans and specifications will be issued to the Contractor at no cost as detailed below:

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	2	Furnished automatically upon award.
Contract Provisions	2	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	3	Furnished only upon request.

Additional plans and Contract Provisions may be obtained by the Contractor from the source stated in the Call for Bids, at the Contractor’s own expense.

1-02.5 Proposal Forms

(July 31, 2017 APWA GSP)

Delete this section and replace it with the following:

The Proposal Form will identify the project and its location and describe the work. It will also list estimated quantities, units of measurement, the items of work, and the materials to be furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit prices; extensions; summations; the total bid amount; signatures; date; and, where applicable, retail sales taxes and acknowledgment of addenda; the bidder’s name, address, telephone number, and signature; the bidder’s UDBE/DBE/M/WBE commitment, if applicable; a State of Washington Contractor’s Registration Number; and a Business License Number, if applicable. Bids shall be completed by typing or shall be printed in ink by hand, preferably in black ink. The required certifications are included as part of the Proposal Form.

The Contracting Agency reserves the right to arrange the proposal forms with alternates and additives if such be to the advantage of the Contracting Agency. The bidder shall bid on all alternates and additives set forth in the Proposal Form unless otherwise specified.

1-02.6 Preparation of Proposal

Section 1-02.6 is supplemented with the following:

(November 20, 2023)

The fourth and fifth paragraphs of Section 1-02.6 are deleted.

1-02.6 Preparation of Proposal

(January 4, 2024 APWA GSP 1-02.6, Option B)

Supplement the second paragraph with the following:

4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.

5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

Delete the last two paragraphs, and replace them with the following:

The Bidder shall submit with their Bid a completed Contractor Certification Wage Law Compliance form, provided by the Contracting Agency. Failure to return this certification as part of the Bid Proposal package will make this Bid Nonresponsive and ineligible for Award. A Contractor Certification of Wage Law Compliance form is included in the Proposal Forms.

The Bidder shall make no stipulation on the Bid Form, nor qualify the bid in any manner.

A bid by a corporation shall be executed in the corporate name, by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign).

A bid by a partnership shall be executed in the partnership name and signed by a partner. A copy of the partnership agreement shall be submitted with the Bid Form if any DBE requirements are to be satisfied through such an agreement.

A bid by a joint venture shall be executed in the joint venture name and signed by a member of the joint venture. A copy of the joint venture agreement shall be submitted with the Bid Form if any DBE requirements are to be satisfied through such an agreement.

Add the following new section:

1-02.6(1) Recycled Materials Proposal

(January 4, 2016 APWA GSP)

The Bidder shall submit with the Bid, its proposal for incorporating recycled materials into the project, using the form provided in the Contract Provisions.

1-02.9 Delivery of Proposal

(January 4, 2024 APWA GSP, Option A)

Delete this section and replace it with the following:

DBE DOCUMENT SUBMITTAL REQUIREMENTS

General

Each Proposal shall be submitted in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery.

To be considered responsive on a FHWA-funded project, the Bidder may be required to submit the following items, as required by Section 1-02.6:

- DBE Utilization Certification (WSDOT 272-056)
- DBE Written Confirmation Document (WSDOT 422-031) from each DBE firm listed on the Bidder's completed DBE Utilization Certification
- Good Faith Effort (GFE) Documentation (if applicable)
- DBE Bid Item Breakdown (WSDOT 272-054)

Proposals that are received as required will be publicly opened and read as specified in Section 1-02.12. The Contracting Agency will not open or consider any Bid Proposal that is received after the time specified in the Call for Bids for receipt of Bid Proposals, or received in a location other than that specified in the Call for Bids. The Contracting Agency will not open or consider any "Supplemental Information" (DBE confirmations, or GFE documentation) that is received after the time specified above or received in a location other than that specified in the Call for Bids.

If an emergency or unanticipated event interrupts normal work processes of the Contracting Agency so that Proposals cannot be received at the office designated for receipt of bids as specified in Section 1-02.12 the time specified for receipt of the Proposal will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which the normal work processes of the Contracting Agency resume.

DBE Utilization Certification (WSDOT Form 272-056)

The DBE Utilization Certification shall be received at the same location and no later than the time required for delivery of the Proposal. The Contracting Agency will not open or consider any Proposal when the DBE Utilization Certification is received after the time specified for receipt of Proposals or received in a location other than that specified for receipt of Proposals. The DBE Utilization Certification may be submitted in the same envelope as the Bid deposit.

DBE Written Confirmation (WSDOT Form 422-031) and/or GFE Documentation, (if applicable)

The DBE Written Confirmation Documents and/or GFE Documents are not required to be submitted with the Proposal. The DBE Written Confirmation Document(s) and/or GFE (if any) shall be received either with the Bid Proposal or as a Supplement to the Bid. The documents shall be received no later than 48 hours (not including Saturdays, Sundays and Holidays) after the time for delivery of the Proposal. To be considered responsive, Bidders shall submit Written Confirmation Documentation from each DBE firm listed on the Bidder's completed DBE Utilization Certification and/or the GFE as required by Section 1-02.6.

DBE Bid Item Breakdown (WSDOT form 272-0-54)

The DBE Bid Item Breakdown shall be received either with the Bid Proposal or as a Supplement to the Bid. The documents shall be received no later than 48 hours (not including Saturdays, Sundays and Holidays) after the time for delivery of the Proposal. The successful Bidder shall submit a completed DBE Bid Item Breakdown, however, minor errors and corrections to DBE Bid Item Breakdown will be returned for correction for a period up to five calendar days after bid opening (not including Saturdays, Sundays and Holidays) DBE Bid Item Breakdown that are still incorrect after the correction period will be determined to be non-responsive.

The DBE Bid Item Breakdown will not be included as part of the executed Contract.

1-02.10 Withdrawing, Revising, or Supplementing Proposal

(July 23, 2015 APWA GSP)

Delete this section, and replace it with the following:

After submitting a physical Bid Proposal to the Contracting Agency, the Bidder may withdraw, revise, or supplement it if:

1. The Bidder submits a written request signed by an authorized person and physically delivers it to the place designated for receipt of Bid Proposals, and
2. The Contracting Agency receives the request before the time set for receipt of Bid Proposals, and
3. The revised or supplemented Bid Proposal (if any) is received by the Contracting Agency before the time set for receipt of Bid Proposals.

If the Bidder’s request to withdraw, revise, or supplement its Bid Proposal is received before the time set for receipt of Bid Proposals, the Contracting Agency will return the unopened Proposal package to the Bidder. The Bidder must then submit the revised or supplemented package in its entirety. If the Bidder does not submit a revised or supplemented package, then its bid shall be considered withdrawn.

Late revised or supplemented Bid Proposals or late withdrawal requests will be date recorded by the Contracting Agency and returned unopened. Mailed, emailed, or faxed requests to withdraw, revise, or supplement a Bid Proposal are not acceptable.

(*****)

1-02.12 Public Opening of Proposal

Section 1-02.12 is supplemented with the following:

Date Of Opening Bids

Sealed bids are to be received at the following location prior to the time specified in the CALL FOR BIDS:

Board of County Commissioners
 Attn: Clerk of the Board
 County Administration Building
 207 Fourth Avenue North, 3rd Floor
 Kelso WA 98626

1-02.13 Irregular Proposals

(January 4, 2024 APWA GSP)

Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
 - a. The Bidder is not prequalified when so required;

- b. The Bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;
 - c. A price per unit cannot be determined from the Bid Proposal;
 - d. The Proposal form is not properly executed;
 - e. The Bidder fails to submit or properly complete a subcontractor list (WSDOT Form 271-015), if applicable, as required in Section 1-02.6;
 - f. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Certification (WSDOT Form 272-056), if applicable, as required in Section 1-02.6;
 - g. The Bidder fails to submit Written Confirmations (WSDOT Form 422-031) from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidder's DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
 - h. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award in accordance with Section 1-07.11;
 - i. The Bidder fails to submit a DBE Bid Item Breakdown (WSDOT Form 272-054), if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
 - j. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.
2. A Proposal may be considered irregular and may be rejected if:
- a. The Proposal does not include a unit price for every Bid item;
 - b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
 - c. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;
 - d. The completed Proposal form contains unauthorized additions, deletions, alternate Bids, or conditions;
 - e. Receipt of Addenda is not acknowledged;
 - f. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
 - g. If Proposal form entries are not made in ink.

1-02.14 Disqualification of Bidders

(May 17, 2018 APWA GSP, Option A)

Delete this section and replace it with the following:

A Bidder will be deemed not responsible if the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1), as amended.

The Contracting Agency will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1). To assess bidder responsibility, the Contracting Agency reserves the right to request documentation as needed from the Bidder and third parties concerning the Bidder's compliance with the mandatory bidder responsibility criteria.

If the Contracting Agency determines the Bidder does not meet the mandatory bidder responsibility criteria in RCW 39.04.350(1) and is therefore not a responsible Bidder, the Contracting Agency shall notify the Bidder in writing, with the reasons for its determination. If the Bidder disagrees with this determination, it may appeal the determination within two (2) business days of the Contracting Agency's determination by presenting its appeal and any additional information to the Contracting Agency. The Contracting Agency will consider the appeal and any additional information before issuing its final determination. If the final determination affirms that the Bidder is not responsible, the Contracting Agency will not execute a contract with any other Bidder until at least two business days after the Bidder determined to be not responsible has received the Contracting Agency's final determination.

1-02.15 Pre-Award Information

(December 30, 2022 APWA GSP)

Revise this section to read:

Before awarding any contract, the Contracting Agency may require one or more of these items or actions of the apparent lowest responsible bidder:

1. A complete statement of the origin, composition, and manufacture of any or all materials to be used,
2. Samples of these materials for quality and fitness tests,
3. A progress schedule (in a form the Contracting Agency requires) showing the order of and time required for the various phases of the work,
4. A breakdown of costs assigned to any bid item,
5. Attendance at a conference with the Engineer or representatives of the Engineer,
6. Obtain, and furnish a copy of, a business license to do business in the city or county where the work is located.
7. Any other information or action taken that is deemed necessary to ensure that the bidder is the lowest responsible bidder.

1-03 AWARD AND EXECUTION OF CONTRACT

1-03.1 Consideration of Bids

(December 30, 2022 APWA GSP)

Revise the first paragraph to read:

After opening and reading proposals, the Contracting Agency will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any bid item, the price per unit will control. If a minimum bid amount has been established for any item and the bidder's unit or lump sum price is less than the minimum specified amount, the Contracting Agency will unilaterally revise the unit or lump sum price, to the minimum specified amount and recalculate the extension. The total of extensions, corrected where necessary, including sales taxes where applicable and such additives and/or alternates as selected by the

Contracting Agency, will be used by the Contracting Agency for award purposes and to fix the Awarded Contract Price amount and the amount of the contract bond.

1-03.1(1) Identical Bid Totals
(December 30, 2022 APWA GSP)

Revise this section to read:

After opening Bids, if two or more lowest responsive Bid totals are exactly equal, then the tie-breaker will be the Bidder with an equal lowest bid, that proposed to use the highest percentage of recycled materials in the Project, per the form submitted with the Bid Proposal. If those percentages are also exactly equal, then the tie-breaker will be determined by drawing as follows: Two or more slips of paper will be marked as follows: one marked "Winner" and the other(s) marked "unsuccessful". The slips will be folded to make the marking unseen. The slips will be placed inside a box. One authorized representative of each Bidder shall draw a slip from the box. Bidders shall draw in alphabetic order by the name of the firm as registered with the Washington State Department of Licensing. The slips shall be unfolded and the firm with the slip marked "Winner" will be determined to be the successful Bidder and eligible for Award of the Contract. Only those Bidders who submitted a Bid total that is exactly equal to the lowest responsive Bid, and with a proposed recycled materials percentage that is exactly equal to the highest proposed recycled materials amount, are eligible to draw.

1-03.3 Execution of Contract
(January 4, 2024 APWA GSP Option B)

Revise this section to read:

Within 3 calendar days of Award date (not including Saturdays, Sundays and Holidays), the successful Bidder shall provide the information necessary to execute the Contract to the Contracting Agency. The Bidder shall send the contact information, including the full name, email address, and phone number, for the authorized signer and bonding agent to the Contracting Agency.

Copies of the Contract Provisions, including the unsigned Form of Contract, will be available for signature by the successful bidder on the first business day following award. The number of copies to be executed by the Contractor will be determined by the Contracting Agency.

Within 10 calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4, the Transfer of Coverage form for the Construction Stormwater General Permit with sections I, III, and VIII completed when provided. Before execution of the contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

Until the Contracting Agency executes a contract, no proposal shall bind the Contracting Agency nor shall any work begin within the project limits or within Contracting Agency-furnished sites. The Contractor shall bear all risks for any work begun outside such areas and for any materials ordered before the contract is executed by the Contracting Agency.

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within the calendar days after the award date stated above, the Contracting Agency may grant up to a maximum of 10 additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond

(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

The successful bidder shall provide executed payment and performance bond(s) for the full contract amount. The bond may be a combined payment and performance bond; or be separate payment and performance bonds. In the case of separate payment and performance bonds, each shall be for the full contract amount. The bond(s) shall:

1. Be on Contracting Agency-furnished form(s);
2. Be signed by an approved surety (or sureties) that:
 - a. Is registered with the Washington State Insurance Commissioner, and
 - b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
3. Guarantee that the Contractor will perform and comply with all obligations, duties, and conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:
 - a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
 - b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or vice president, unless accompanied by written proof of the authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

1-03.7 Judicial Review

(December 30, 2022 APWA GSP)

Revise this section to read:

All decisions made by the Contracting Agency regarding the Award and execution of the Contract or Bid

rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction.

1-04 SCOPE OF THE WORK

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda *(December 30, 2022 APWA GSP)*

Revise the second paragraph to read:

Any inconsistency in the parts of the contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):

1. Addenda,
2. Proposal Form,
3. Special Provisions,
4. Contract Plans,
5. Standard Specifications,
6. Contracting Agency's Standard Plans or Details (if any), and
7. WSDOT Standard Plans for Road, Bridge, and Municipal Construction.

(*****)

Interpretation of Contract Documents. The Contractor shall provide any work or materials clearly implied in the contract even if the contract documents do not mention it specifically. If the contract documents use words that are not defined therein but have a commonly accepted technical or trade meaning, the words shall be understood in accordance with that meaning.

1-04.4 Changes

(January 19, 2022 APWA GSP)

The first two sentences of the last paragraph of Section 1-04.4 are deleted.

1-05 CONTROL OF WORK

1-05.1 Authority of The Engineer

Section 1-05.1 is supplemented with the following:

(*****)

Additional Directions from Engineer. If the Engineer determines that the provisions in the contract documents are not sufficiently clear to permit the Contractor to proceed with the work, the Engineer shall, either on his own or upon written request from the Contractor, furnish such additional written directions as he deems appropriate. When the Contractor makes such a request, it must do so in writing and must allow ample time to permit the Engineer to review the request and prepare any additional directions before the Contractor begins any work affected by the request. Any additional directions

issued by the Engineer shall not be inconsistent with the contract documents and shall have the same force and effect as if contained in the contract documents.

1-05.3 Plans and Working Drawings

Section 1-05.3 is supplemented with the following:

Shop Drawings. The Contractor shall submit five copies of all shop drawings and samples to the Engineer for review and approval in accordance with the schedule of shop drawing submissions approved at the Pre-Construction Conference. Contractor shall check and verify all field measurements prior to submitting shop drawings to Engineer for review and approval, shop drawings shall have been checked by and stamped with the approval of the Contractor and identified as the Engineer may require. The data shown on the Shop Drawings will be complete with respect to dimensions, design criteria, material or construction and like information to enable the Engineer to review the information as required.

At the time of each submission, the Contractor shall, in writing, call the Engineer's attention to any deviations that the Shop Drawings or Samples may have from the requirements of the Contract Documents.

The Engineer will review and approve with reasonable promptness shop drawings and samples, but the Engineer's review and approval shall be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, sequences, techniques or procedures of construction or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. The Contractor shall make any corrections required by the Engineer and shall return the required number of corrected copies of shop drawing and resubmit new samples for review and approval. The Contractor shall direct specific attention, in writing, to revisions other than the corrections called for by the Engineer on previous submittals. The Contractor's stamp of approval on any shop drawings or samples shall constitute a representation to Owner and Engineer that Contractor has either determined and verified all quantities, dimensions, field construction criteria, materials, catalog numbers, and similar data or assumes full responsibility for doing so, and that the Contractor has reviewed or coordinated each shop drawing or sample with the requirements of the work and the Contract Documents.

Where a shop drawing or sample is required by the Specifications, no related work shall be commenced until the submittal has been reviewed and approved by the Engineer.

The Engineer's review and approval of shop drawings or samples shall not relieve the Contractor from responsibility for any deviations from the Contract Documents unless the Contractor has, in writing, called the Engineer's attention to such deviation at the time of submission and the Engineer has given written concurrence and approval to the specific deviation, nor shall any concurrence or approval by the Engineer relieve the Contractor from responsibility for errors or omissions in the shop drawings.

1-05.4 Conformity With And Deviations From Plans And Stakes

Section 1-05.4 is supplemented with the following:

(*****)

The Contracting Agency will provide construction surveying following a written request by the Contractor. The Contractor shall prepare the project site as necessary to accommodate the survey operations. This includes clearing and grubbing, and any excavation or placement of fill materials necessary for the stakes to be placed at the correct elevations. If the Contracting Agency's survey personnel arrive at the project site and the site has not been adequately prepared for the specific surveying task, the survey request will be denied and returned to the Contractor. The Contracting Agency will not provide the requested surveying services until a new request has been submitted by the Contractor.

The Contractor shall provide sufficient, safe and adequate space for the surveyors to set points and elevations and shall use caution whenever it is necessary to have equipment working at the same time and the same vicinity as the Contracting Agency's survey personnel. If the Engineer determines that sufficient, safe and adequate space is not provided, then survey personnel may be withdrawn until corrective action is taken by the Contractor to the satisfaction of the Engineer.

The Contractor shall assume full responsibility for the interpretation and measurements from the stakes, hubs or marks. If the Contractor notices any discrepancies in line or grade, the Contractor shall bring them to the immediate attention of the Engineer, prior to constructing the affected work.

Replacement Staking Services

If at any time the Contracting Agency is required to replace survey staking previously done by the Contracting Agency, the Contractor shall bear the expense. The Contractor shall be charged by the hour at the rate set in the bid proposal form for each hour that the replacement staking requires.

Measurement

Replacement staking services shall be measured by the whole hour rounded up for any partial hour. The time for determining the hour charges will be from the time the Contracting Agency's personnel leave their current work until they return to that work at the same point as the departure.

Payment

"Replacement Staking Services", per hour, will be deducted off the regular and final progress payments at the rate per hour shown in the bid proposal form.

Add the following new sub-section:

1-05.4 Conformity With and Deviations from Plans and Stakes

Supplement this section with the following:

Roadway and Utility Surveys

(July 23, 2015 APWA GSP, Option 1)

The Engineer shall furnish to the Contractor one time only all principal lines, grades, and measurements the Engineer deems necessary for completion of the work. These shall generally consist of one initial set of:

1. Slope stakes for establishing grading;
2. Curb grade stakes;
3. Centerline finish grade stakes for pavement sections wider than 25 feet; and
4. Offset points to establish line and grade for underground utilities such as water, sewers, and storm drains.

On alley construction projects with minor grade changes, the Engineer shall provide only offset hubs on one side of the alley to establish the alignment and grade.

1-05.7 Removal of Defective and Unauthorized Work

(October 1, 2005 APWA GSP)

Supplement this section with the following:

If the Contractor fails to remedy defective or unauthorized work within the time specified in a written notice from the Engineer or fails to perform any part of the work required by the Contract Documents, the Engineer may correct and remedy such work as may be identified in the written notice, with Contracting Agency forces or by such other means as the Contracting Agency may deem necessary.

If the Contractor fails to comply with a written order to remedy what the Engineer determines to be an emergency situation, the Engineer may have the defective and unauthorized work corrected immediately, have the rejected work removed and replaced, or have work the Contractor refuses to perform completed by using Contracting Agency or other forces. An emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy could be potentially unsafe, or might cause serious risk of loss or damage to the public.

Direct or indirect costs incurred by the Contracting Agency attributable to correcting and remedying defective or unauthorized work, or work the Contractor failed or refused to perform, shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due, or to become due, the Contractor. Such direct and indirect costs shall include in particular, but without limitation, compensation for additional professional services required, and costs for repair and replacement of work of others destroyed or damaged by correction, removal, or replacement of the Contractor's unauthorized work.

No adjustment in contract time or compensation will be allowed because of the delay in the performance of the work attributable to the exercise of the Contracting Agency's rights provided by this Section.

The rights exercised under the provisions of this section shall not diminish the Contracting Agency's right to pursue any other avenue for additional remedy or damages with respect to the Contractor's failure to perform the work as required.

1-05.11 Final Inspection

Delete this section and replace it with the following:

1-05.11 Final Inspections and Operational Testing

(October 1, 2005 APWA GSP)

1-05.11(1) Substantial Completion Date

When the Contractor considers the work to be substantially complete, the Contractor shall so notify the Engineer and request the Engineer establish the Substantial Completion Date. The Contractor's request shall list the specific items of work that remain to be completed in order to reach physical completion. The Engineer will schedule an inspection of the work with the Contractor to determine the status of completion. The Engineer may also establish the Substantial Completion Date unilaterally.

If, after this inspection, the Engineer concurs with the Contractor that the work is substantially complete and ready for its intended use, the Engineer, by written notice to the Contractor, will set the Substantial Completion Date. If, after this inspection the Engineer does not consider the work substantially complete and ready for its intended use, the Engineer will, by written notice, so notify the Contractor giving the reasons, therefore.

Upon receipt of written notice concurring in or denying substantial completion, whichever is applicable, the Contractor shall pursue vigorously, diligently and without unauthorized interruption, the work necessary to reach Substantial and Physical Completion. The Contractor shall provide the Engineer with a revised schedule indicating when the Contractor expects to reach substantial and physical completion of the work.

The above process shall be repeated until the Engineer establishes the Substantial Completion Date and the Contractor considers the work physically complete and ready for final inspection.

1-05.11(2) Final Inspection and Physical Completion Date

When the Contractor considers the work physically complete and ready for final inspection, the Contractor by written notice, shall request the Engineer to schedule a final inspection. The Engineer will set a date for final inspection. The Engineer and the Contractor will then make a final inspection and the Engineer will notify the Contractor in writing of all particulars in which the final inspection reveals the work incomplete or unacceptable. The Contractor shall immediately take such corrective measures as are necessary to remedy the listed deficiencies. Corrective work shall be pursued vigorously, diligently,

and without interruption until physical completion of the listed deficiencies. This process will continue until the Engineer is satisfied the listed deficiencies have been corrected.

If action to correct the listed deficiencies is not initiated within 7 days after receipt of the written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor, take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.

The Contractor will not be allowed an extension of contract time because of a delay in the performance of the work attributable to the exercise of the Engineer's right hereunder.

Upon correction of all deficiencies, the Engineer will notify the Contractor and the Contracting Agency, in writing, of the date upon which the work was considered physically complete. That date shall constitute the Physical Completion Date of the contract but shall not imply acceptance of the work or that all the obligations of the Contractor under the contract have been fulfilled.

1-05.11(3) Operational Testing

It is the intent of the Contracting Agency to have at the Physical Completion Date a complete and operable system. Therefore, when the work involves the installation of machinery or other mechanical equipment; street lighting, electrical distribution or signal systems; irrigation systems; buildings; or other similar work it may be desirable for the Engineer to have the Contractor operate and test the work for a period of time after final inspection but prior to the physical completion date. Whenever items of work are listed in the Contract Provisions for operational testing, they shall be fully tested under operating conditions for the time period specified to ensure their acceptability prior to the Physical Completion Date. During and following the test period, the Contractor shall correct any items of workmanship, materials, or equipment which prove faulty, or that are not in first class operating condition. Equipment, electrical controls, meters, or other devices and equipment to be tested during this period shall be tested under the observation of the Engineer, so that the Engineer may determine their suitability for the purpose for which they were installed. The Physical Completion Date cannot be established until testing and corrections have been completed to the satisfaction of the Engineer.

The costs for power, gas, labor, material, supplies, and everything else needed to successfully complete operational testing, shall be included in the unit contract prices related to the system being tested, unless specifically set forth otherwise in the proposal.

Operational and test periods, when required by the Engineer, shall not affect a manufacturer's warranties or warranties furnished under the terms of the contract.

1-05.13 Superintendents, Labor and Equipment of Contractor

(August 14, 2013 APWA GSP)

Delete the sixth and seventh paragraphs of this section.

Add the following new section:

1-05.16 Water and Power

(October 1, 2005 APWA GSP)

The Contractor shall make necessary arrangements and shall bear the costs for power and water necessary for the performance of the work, unless the contract includes power and water as a pay item.

1-06 CONTROL OF MATERIAL

1-06.6 Recycled Materials

(January 4, 2016 APWA GSP)

Delete this section, including its subsections, and replace it with the following:

The Contractor shall make their best effort to utilize recycled materials in the construction of the project. Approval of such material use shall be as detailed elsewhere in the Standard Specifications.

Prior to Physical Completion the Contractor shall report the quantity of recycled materials that were utilized in the construction of the project for each of the items listed in Section 9-03.21. The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass, steel furnace slag and other recycled materials (e.g. utilization of on-site material and aggregates from concrete returned to the supplier). The Contractor's report shall be provided on DOT form 350-075 Recycled Materials Reporting.

1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC

1-07.1 Laws To Be Observed

Section 1-07.1 is supplemented with the following:

(October 1, 2005 APWA GSP)

Supplement this section with the following:

In cases of conflict between different safety regulations, the more stringent regulation shall apply.

The Washington State Department of Labor and Industries shall be the sole and paramount administrative agency responsible for the administration of the provisions of the Washington Industrial Safety and Health Act of 1973 (WISHA).

The Contractor shall maintain at the project site office, or other well-known place at the project site, all articles necessary for providing first aid to the injured. The Contractor shall establish, publish, and make known to all employees, procedures for ensuring immediate removal to a hospital, or doctor's care, persons, including employees, who may have been injured on the project site. Employees should not be permitted to work on the project site before the Contractor has established and made known procedures for removal of injured persons to a hospital or a doctor's care.

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the

conditions of the project site, including safety for all persons and property in the performance of the work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

1-07.2 State Sales Tax

Delete this section, including its sub-sections, in its entirety and replace it with the following:

1-07.2 State Sales Tax

(June 27, 2011 APWA GSP)

The Washington State Department of Revenue has issued special rules on the State sales tax. Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Contracting Agency will not adjust its payment if the Contractor bases a bid on a misunderstood tax liability.

The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2) describes this exception.

The Contracting Agency will pay the retained percentage (or release the Contract Bond if a FHWA-funded Project) only if the Contractor has obtained from the Washington State Department of Revenue a certificate showing that all contract-related taxes have been paid (RCW 60.28.051). The Contracting Agency may deduct from its payments to the Contractor any amount the Contractor may owe the Washington State Department of Revenue, whether the amount owed relates to this contract or not. Any amount so deducted will be paid into the proper State fund.

1-07.2(1) State Sales Tax — Rule 171

WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets, roads, etc., which are owned by a municipal corporation, or political subdivision of the state, or by the United States, and which are used primarily for foot or vehicular traffic. This includes storm or combined sewer systems within and included as a part of the street or road drainage system and power lines when such are part of the roadway lighting system. For work performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in the various unit bid item prices, or other contract amounts, including those that the Contractor pays on the purchase of the materials, equipment, or supplies used or consumed in doing the work.

1-07.2(2) State Sales Tax — Rule 170

WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or existing buildings, or other structures, upon real property. This includes, but is not limited to, the construction of streets, roads, highways, etc., owned by the state of Washington; water mains and their appurtenances; sanitary sewers and sewage disposal systems unless such sewers and disposal systems are within, and a part of, a street or road drainage system; telephone, telegraph, electrical power

distribution lines, or other conduits or lines in or above streets or roads, unless such power lines become a part of a street or road lighting system; and installing or attaching of any article of tangible personal property in or to real property, whether or not such personal property becomes a part of the realty by virtue of installation.

For work performed in such cases, the Contractor shall collect from the Contracting Agency, retail sales tax on the full contract price. The Contracting Agency will automatically add this sales tax to each payment to the Contractor. For this reason, the Contractor shall not include the retail sales tax in the unit bid item prices, or in any other contract amount subject to Rule 170, with the following exception.

Exception: The Contracting Agency will not add in sales tax for a payment the Contractor or a subcontractor makes on the purchase or rental of tools, machinery, equipment, or consumable supplies not integrated into the project. Such sales taxes shall be included in the unit bid item prices or in any other contract amount.

1-07.2(3) Services

The Contractor shall not collect retail sales tax from the Contracting Agency on any contract wholly for professional or other services (as defined in Washington State Department of Revenue Rules 138 and 244).

1-07.3(2) Merchantable Timber Requirements

(April 7, 2008)

Section 1-07.3(2) is supplemented with the following:

This project contains merchantable timber.

Export Restrictions - DOT Form 410-100, Purchaser Certification for Export Restricted Timber, will be included when the contract is sent to the Contractor for execution. The form shall be completed and signed by the Contractor. The Contractor shall send the original signed form and one copy of the signed form directly to the Washington State Department of Revenue at the address on the form. The Contractor shall send one signed copy along with the other documents required by Section 1-03.3 to the Contracting Agency with the executed contract.

State Tax Requirements - It shall be the Contractor's responsibility to pay to the State Department of Revenue all taxes on harvested timber.

1-07.7 Load Limits

Section 1-07.7 is supplemented with the following:

(March 13, 1995)

If the sources of materials provided by the Contractor necessitates hauling over roads other than State Highways, the Contractor shall, at the Contractor's expense, make all arrangements for the use of the haul routes.

1-07.13 Contractor's Responsibility for Work

(*****)

1-07.13(4) Repair of Damage

Section 1-07.13(4) is revised to read:

The Contractor shall promptly repair all damage to either temporary or permanent work as directed by the Engineer. For damage qualifying for relief under Sections 1-07.13(1), 1-07.13(2) or 1-07.13(3), payment will be made in accordance with Section 1-04.4. Payment will be limited to repair of damaged work only. No payment will be made for delay or disruption of work.

(*****)

1-07.14 Responsibility for Damage

Section 1-07.14 is supplemented with the following:

Indemnification. References in Standard Specification 1-07.14 to the Contractor's "agents" shall be understood to include the Contractor's subcontractors. The Contractor's responsibilities under Standard Specification 1-07.14 shall survive the termination or completion of the contract.

Utilities and Similar Facilities

Section 1-07.17 is supplemented with the following:

(April 2, 2007)

Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

The following addresses and telephone numbers of utility companies known or suspected of having facilities within the project limits are supplied for the Contractor's convenience:

**Power:	Cowlitz Public Utility District 961 12 th Avenue Longview, Washington 98632 (360) 577-7546
Telephone:	Lumen Technologies 4501 NE Minnehaha St, Bldg II Vancouver, WA 98661 (564) 888-2024
Cable:	Comcast 6916 NE 40 th Street Vancouver, WA 98661 (360) 891-3204**

(*****)

The above are all the utilities known by the County to be within the location of the planned excavation or project area. With respect to any utilities other than those identified above, which are not known to the County, the Contractor shall bear full responsibility. Additionally, the Contractor shall take all steps required to comply with RCW Chapter 19.122. Once marked by the owner of the underground facility, the Contractor is responsible for maintaining the markings, per RCW 19.122.030.

1-07.18 Public Liability and Property Damage Insurance

Delete this section in its entirety, and replace it with the following:

1-07.18 Insurance

(January 4, 2024 APWA GSP)

1-07.18(1) General Requirements

- A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.
- B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.
- C. If any insurance policy is written on a claims-made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.
- D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.
- E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.
- F. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency

- G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.
- H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.
- I. Under no circumstances shall a wrap-up policy be obtained, for either initiating or maintaining coverage, to satisfy insurance requirements for any policy required under this Section. A "wrap up policy" is defined as an insurance agreement or arrangement under which all the parties working on a specified or designated project are insured under one policy for liability arising out of that specified or designated project.

1-07.18(2) Additional Insured

All insurance policies, with the exception of Workers Compensation, and of Professional Liability and Builder's Risk (if required by this Contract) shall name the following listed entities as additional insured(s) using the forms or endorsements required herein:

- the Contracting Agency and its officers, elected officials, employees, agents, and volunteers

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by this Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 1-07.18(4) describes limits lower than those maintained by the Contractor.

For Commercial General Liability insurance coverage, the required additional insured endorsements shall be at least as broad as ISO forms CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

1-07.18(3) Subcontractors

The Contractor shall cause each subcontractor of every tier to provide insurance coverage that complies with all applicable requirements of the Contractor-provided insurance as set forth herein, except the Contractor shall have sole responsibility for determining the limits of coverage required to be obtained by subcontractors.

The Contractor shall ensure that all subcontractors of every tier add all entities listed in 1-07.18(2) as additional insureds, and provide proof of such on the policies as required by that section as detailed in 1-07.18(2) using an endorsement as least as broad as ISO CG 20 10 10 01 for ongoing operations and CG 20 37 10 01 for completed operations.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency evidence of insurance and copies of the additional insured endorsements of each subcontractor of every tier as required in 1-07.18(4) Verification of Coverage.

1-07.18(4) Verification of Coverage

The Contractor shall deliver to the Contracting Agency a Certificate(s) of Insurance and endorsements for each policy of insurance meeting the requirements set forth herein when the Contractor delivers the signed Contract for the work. Failure of Contracting Agency to demand such verification of coverage with these insurance requirements or failure of Contracting Agency to identify a deficiency from the insurance documentation provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Verification of coverage shall include:

1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.
2. Copies of all endorsements naming Contracting Agency and all other entities listed in 1-07.18(2) as additional insured(s), showing the policy number. The Contractor may submit a copy of any blanket additional insured clause from its policies instead of a separate endorsement.
3. Any other amendatory endorsements to show the coverage required herein.
4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these requirements – actual endorsements must be submitted.

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s). If Builders Risk insurance is required on this Project, a full and certified copy of that policy is required when the Contractor delivers the signed Contract for the work.

1-07.18(5) Coverages and Limits

The insurance shall provide the minimum coverages and limits set forth below. Contractor's maintenance of insurance, its scope of coverage, and limits as required herein shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the Contracting Agency's recourse to any remedy available at law or in equity.

All deductibles and self-insured retentions must be disclosed and are subject to approval by the Contracting Agency. The cost of any claim payments falling within the deductible or self-insured retention shall be the responsibility of the Contractor. In the event an additional insured incurs a liability subject to any policy's deductibles or self-insured retention, said deductibles or self-insured retention shall be the responsibility of the Contractor.

1-07.18(5)A Commercial General Liability

Commercial General Liability insurance shall be written on coverage forms at least as broad as ISO occurrence form CG 00 01, including but not limited to liability arising from premises, operations, stop gap liability, independent contractors, products-completed operations, personal and advertising injury, and liability assumed under an insured contract. There shall be no exclusion for liability arising from explosion, collapse or underground property damage.

The Commercial General Liability insurance shall be endorsed to provide a per project general aggregate limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

Contractor shall maintain Commercial General Liability Insurance arising out of the Contractor's completed operations for at least three years following Substantial Completion of the Work.

Such policy must provide the following minimum limits:

\$2,000,000	Each Occurrence
\$3,000,000	General Aggregate
\$3,000,000	Products & Completed Operations Aggregate
\$2,000,000	Personal & Advertising Injury each offence
\$2,000,000	Stop Gap / Employers' Liability each accident

1-07.18(5)B Automobile Liability

Automobile Liability shall cover owned, non-owned, hired, and leased vehicles; and shall be written on a coverage form at least as broad as ISO form CA 00 01. If the work involves the transport of pollutants, the automobile liability policy shall include MCS 90 and CA 99 48 endorsements.

Such policy must provide the following minimum limit:

\$1,000,000	Combined single limit each accident
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1-07.18(5)C Workers' Compensation

The Contractor shall comply with Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

1-07.23 Public Convenience And Safety

1-07.23(1) Construction Under Traffic

The second paragraph of Section 1-07.23(1) is supplemented with the following:

(*****)

The Contractor shall limit the total delay to the public, to a maximum of *** 20 *** minutes, during travel through the project. If the delay becomes greater than *** 20 *** minutes, the Contractor shall immediately begin to take action to cease the operations that are causing the delays. If the *** 20 *** minute delay limit has been exceeded, as determined by the Engineer, the Contractor shall provide to the Engineer, a written proposal to revise his work operations to meet the *** 20 *** minute limit. This proposal shall be approved by the Engineer prior to resuming any work requiring traffic control.

Section 1-07.23(1) is supplemented with the following:

(*****)

Road Closure. The Contractor may close Slide Creek Road to traffic for one continuous period not to exceed 40 working days. Access shall be maintained at all times for local traffic and all existing driveways.

The Contractor shall provide two (2) weeks' notice to the Engineer prior to the start of the proposed road closure. The Contractor shall provide and maintain all temporary traffic control devices and signs adjacent to the work area. The County will provide and maintain all detour signs.

1-07.24 Rights of Way

(July 23, 2015 APWA GSP)

Delete this section and replace it with the following:

Street Right of Way lines, limits of easements, and limits of construction permits are indicated in the Plans. The Contractor's construction activities shall be confined within these limits unless arrangements for use of private property are made.

Generally, the Contracting Agency will have obtained, prior to bid opening, all rights of way and easements, both permanent and temporary, necessary for carrying out the work. Exceptions to this are noted in the Bid Documents or will be brought to the Contractor's attention by a duly issued Addendum.

Whenever any of the work is accomplished on or through property other than public Right of Way, the Contractor shall meet and fulfill all covenants and stipulations of any easement agreement obtained by the Contracting Agency from the owner of the private property. Copies of the easement agreements may be included in the Contract Provisions or made available to the Contractor as soon as practical after they have been obtained by the Engineer.

Whenever easements or rights of entry have not been acquired prior to advertising, these areas are so noted in the Plans. The Contractor shall not proceed with any portion of the work in areas where right of way, easements or rights of entry have not been acquired until the Engineer certifies to the Contractor that the right of way or easement is available or that the right of entry has been received. If the Contractor is delayed due to acts of omission on the part of the Contracting Agency in obtaining easements, rights of entry or right of way, the Contractor will be entitled to an extension of time. The Contractor agrees that such delay shall not be a breach of contract.

Each property owner shall be given 48 hours notice prior to entry by the Contractor. This includes entry onto easements and private property where private improvements must be adjusted.

The Contractor shall be responsible for providing, without expense or liability to the Contracting Agency, any additional land and access thereto that the Contractor may desire for temporary construction facilities, storage of materials, or other Contractor needs. However, before using any private property, whether adjoining the work or not, the Contractor shall file with the Engineer a written permission of the private property owner, and, upon vacating the premises, a written release from the property owner of each property disturbed or otherwise interfered with by reasons of construction pursued under this contract. The statement shall be signed by the private property owner, or proper authority acting for the owner of the private property affected, stating that permission has been granted to use the property and all necessary permits have been obtained or, in the case of a release, that the restoration of the property has been satisfactorily accomplished. The statement shall include the parcel number, address, and date of signature. Written releases must be filed with the Engineer before the Completion Date will be established.

1-08 PROSECUTION AND PROGRESS

Add the following new section:

1-08.0 Preliminary Matters

(May 25, 2006 APWA GSP)

Add the following new section:

1-08.0(1) Preconstruction Conference

(October 10, 2008 APWA GSP)

Prior to the Contractor beginning the work, a preconstruction conference will be held between the Contractor, the Engineer and such other interested parties as may be invited. The purpose of the preconstruction conference will be:

1. To review the initial progress schedule;
2. To establish a working understanding among the various parties associated or affected by the work;
3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;
4. To establish normal working hours for the work;
5. To review safety standards and traffic control; and
6. To discuss such other related items as may be pertinent to the work.

The Contractor shall prepare and submit at the preconstruction conference the following:

1. A breakdown of all lump sum items;
2. A preliminary schedule of working drawing submittals; and
3. A list of material sources for approval if applicable.

Add the following new section:

1-08.0(2) Hours of Work

(December 8, 2014 APWA GSP)

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

All working hours and days are also subject to local permit and ordinance conditions (such as noise ordinances).

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 10 am prior to the day(s) the Contractor is requesting to change the hours.

If the Contracting Agency approves such a deviation, such approval may be subject to certain other conditions, which will be detailed in writing. For example:

1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting Agency for the costs in excess of straight-time costs for Contracting Agency representatives who worked during such times. (The Engineer may require designated representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include but are not limited to: survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such work necessitates their presence.)
2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.
4. If a 4-10 work schedule is requested and approved the non-working day for the week will be charged as a working day.
5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll.

1-08.0(3) Reimbursement for Overtime Work of Contracting Agency Employees
(May 25, 2006 APWA GSP)

Where the Contractor elects to work on a Saturday, Sunday, or holiday, or longer than an 8-hour work shift on a regular working day, as defined in the Standard Specifications, such work shall be considered as overtime work. On all such overtime work an inspector will be present, and a survey crew may be required at the discretion of the Engineer. In such case, the Contracting Agency may deduct from amounts due or to become due to the Contractor for the costs in excess of the straight-time costs for employees of the Contracting Agency required to work overtime hours.

The Contractor by these specifications does hereby authorize the Engineer to deduct such costs from the amount due or to become due to the Contractor.

1-08.1 Subcontracting

Section 1-08.1 is supplemented with the following:

(*****)

The Contractor shall ensure that each subcontractor (in any tier) agrees in writing to: (a) perform its work in strict compliance with these contract documents; and (b) defend, indemnify, and hold harmless

Cowlitz County (and its officials, employees, and agents) from claims and liabilities arising from the subcontractor's acts and omissions, to the same extent provided in Standard Specification 1-07.14 for the Contractor. Upon request, the Contractor will promptly provide the Engineer with a copy of any subcontract.

The Contractor shall include the language of this section in each of its first tier subcontracts, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the Owner, the Contractor shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this section apply to all subcontractors regardless of tier.

At the time of subcontract execution, the Contractor shall verify that each of its first tier subcontractors meets the following bidder responsibility criteria:

1. Have a current certificate of registration in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. If applicable, have:
 - a. Have Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;
 - b. A Washington Employment Security Department number, as required in Title 50 RCW;
 - c. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 - d. An electrical contractor license, if required by Chapter 19.28 RCW;
 - e. An elevator contractor license, if required by Chapter 70.87 RCW.
4. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).

1-08.3 Progress Schedule.

Add the following to Section 1-08.3:

(*****)

A critical path schedule shall be submitted by the Contractor for review and approval by the Engineer prior to the preconstruction meeting. Work shall not begin until the critical path schedule is approved. Any deviation from the approved critical path must be submitted to the Engineer with a modified critical path schedule two (2) working days prior to the proposed deviation. Approval must be received from

the Engineer prior to proceeding with the deviation. Costs for the critical path schedule shall be included in the bid items of this contract and will not be paid for individually.

The construction activities shall proceed as follows unless otherwise approved by the Engineer:

1. Install temporary traffic control signs and barricades for road closure.
2. Install silt fence.
3. Complete clearing and grubbing.
4. Complete roadway excavation and rock excavation.
5. Place construction geotextile for separation and crushed surfacing base course.
6. Armor roadside ditch with quarry spalls.
7. Complete paving with hot mix asphalt.
8. Complete seeding, fertilizing and mulching of all exposed soil within project limits.
9. Remove temporary traffic control signs and barricades for road closure.

1-08.5 Time for Completion

Section 1-08.5 is supplemented with the following:

(March 13, 1995)

This project shall be physically completed within *** 40 *** working days.

1-08.9 Liquidated Damages

(March 3, 2021 APWA GSP, Option B – cannot be used on Federal Aid Projects)

Revise the second and third paragraphs to read:

Accordingly, the Contractor agrees:

1. To pay (according to the following formula) liquidated damages for each working day beyond the number of working days established for Physical Completion, and
2. To authorize the Engineer to deduct these liquidated damages from any money due or coming due to the Contractor.

Liquidated Damages Formula

$$LD=0.15C/T$$

Where:

LD = liquidated damages per working day (rounded to the nearest dollar)

C = original Contract amount

T = original time for Physical Completion

When the Contract Work has progressed to Substantial Completion as defined in the Contract, the Engineer may determine the Contract Work is Substantially Complete. The Engineer will notify the Contractor in writing of the Substantial Completion Date. For overruns in Contract time occurring after the date so established, the formula for liquidated damages shown above will not apply. For overruns in Contract time occurring after the Substantial Completion Date, liquidated damages shall be assessed on the basis of direct engineering and related costs assignable to the project until the actual Physical Completion Date of all the Contract Work. The Contractor shall complete the remaining Work as promptly as possible. Upon request by the Project Engineer, the Contractor shall furnish a written schedule for completing the physical Work on the Contract.

1-09 MEASUREMENT AND PAYMENT

1-09.6 Force Account

(December 30, 2022 APWA GSP)

Supplement this section with the following:

The Contracting Agency has estimated and included in the Proposal, dollar amounts for all items to be paid per force account, only to provide a common proposal for Bidders. All such dollar amounts are to become a part of Contractor's total bid. However, the Contracting Agency does not warrant expressly or by implication, that the actual amount of work will correspond with those estimates. Payment will be made on the basis of the amount of work actually authorized by the Engineer.

1-09.9 Payments

(December 30, 2022 APWA GSP)

Section 1-09.9 is revised to read:

The basis of payment will be the actual quantities of Work performed according to the Contract and as specified for payment.

The Contractor shall submit a breakdown of the cost of lump sum bid items at the Preconstruction Conference, to enable the Project Engineer to determine the Work performed on a monthly basis. A breakdown is not required for lump sum items that include a basis for incremental payments as part of the respective Specification. Absent a lump sum breakdown, the Project Engineer will make a determination based on information available. The Project Engineer's determination of the cost of work shall be final.

Progress payments for completed work and material on hand will be based upon progress estimates prepared by the Engineer. A progress estimate cutoff date will be established at the preconstruction conference.

The initial progress estimate will be made not later than 30 days after the Contractor commences the work, and successive progress estimates will be made every month thereafter until the Completion Date. Progress estimates made during progress of the work are tentative, and made only for the purpose of determining progress payments. The progress estimates are subject to change at any time prior to the calculation of the final payment.

The value of the progress estimate will be the sum of the following:

1. Unit Price Items in the Bid Form — the approximate quantity of acceptable units of work completed multiplied by the unit price.
2. Lump Sum Items in the Bid Form — based on the approved Contractor's lump sum breakdown for that item, or absent such a breakdown, based on the Engineer's determination.
3. Materials on Hand — 100 percent of invoiced cost of material delivered to Job site or other storage area approved by the Engineer.
4. Change Orders — entitlement for approved extra cost or completed extra work as determined by the Engineer.

Progress payments will be made in accordance with the progress estimate less:

1. Retainage per Section 1-09.9(1), on non FHWA-funded projects;
2. The amount of progress payments previously made; and
3. Funds withheld by the Contracting Agency for disbursement in accordance with the Contract Documents.

Progress payments for work performed shall not be evidence of acceptable performance or an admission by the Contracting Agency that any work has been satisfactorily completed. The determination of payments under the contract will be final in accordance with Section 1-05.1.

Failure to perform obligations under the Contract by the Contractor may be decreed by the Contracting Agency to be adequate reason for withholding any payments until compliance is achieved.

Upon completion of all Work and after final inspection (Section 1-05.11), the amount due the Contractor under the Contract will be paid based upon the final estimate made by the Engineer and presentation of a Final Contract Voucher Certification to be signed by the Contractor. The Contractor's signature on such voucher shall be deemed a release of all claims of the Contractor unless a Certified Claim is filed in accordance with the requirements of Section 1-09.11 and is expressly excepted from the Contractor's certification on the Final Contract Voucher Certification. The date the Contracting Agency signs the Final Contract Voucher Certification constitutes the final acceptance date (Section 1-05.12).

If the Contractor fails, refuses, or is unable to sign and return the Final Contract Voucher Certification or any other documentation required for completion and final acceptance of the Contract, the Contracting Agency reserves the right to establish a Completion Date (for the purpose of meeting the requirements of RCW 60.28) and unilaterally accept the Contract. Unilateral final acceptance will occur only after the Contractor has been provided the opportunity, by written request from the Engineer, to voluntarily submit such documents. If voluntary compliance is not achieved, formal notification of the impending establishment of a Completion Date and unilateral final acceptance will be provided by email with

delivery confirmation from the Contracting Agency to the Contractor, which will provide 30 calendar days for the Contractor to submit the necessary documents. The 30-calendar day period will begin on the date the email with delivery confirmation is received by the Contractor. The date the Contracting Agency unilaterally signs the Final Contract Voucher Certification shall constitute the Completion Date and the final acceptance date (Section 1-05.12). The reservation by the Contracting Agency to unilaterally accept the Contract will apply to Contracts that are Physically Completed in accordance with Section 1-08.5, or for Contracts that are terminated in accordance with Section 1-08.10. Unilateral final acceptance of the Contract by the Contracting Agency does not in any way relieve the Contractor of their responsibility to comply with all Federal, State, tribal, or local laws, ordinances, and regulations that affect the Work under the Contract.

Payment to the Contractor of partial estimates, final estimates, and retained percentages shall be subject to controlling laws.

(March 13, 2012 APWA GSP)

Supplement this section with the following:

Lump sum item breakdowns are not required when the bid price for the lump sum item is less than \$20,000.

Section 1-09.9 is supplemented with the following:

(*****)

Partial Payments. Partial payments shall be made once each month, based on estimates prepared by the Engineer. The Contractor shall prepare a document detailing work and labor performed and material furnished during each calendar month, and shall deliver the document to the Engineer by the fifth day of the following month. The documentation shall be in a format prescribed by the Engineer. If the Contractor's documentation is timely submitted, the County Auditor will issue a warrant payable to the Contractor on the last working day of the month, based on the estimate prepared by the Engineer.

1-09.11(3) Time Limitation and Jurisdiction

(December 30, 2022 APWA GSP)

Revise this section to read:

For the convenience of the parties to the Contract it is mutually agreed by the parties that all claims or causes of action which the Contractor has against the Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that all such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to all such claims or causes of action. It is further mutually agreed by the parties that when claims or causes of action which the Contractor asserts against the Contracting Agency arising from the Contract are filed with the Contracting Agency or initiated in court,

the Contractor shall permit the Contracting Agency to have timely access to all records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13(3)A Arbitration General

(January 19, 2022 APWA GSP)

Revise the third paragraph to read:

The Contracting Agency and the Contractor mutually agree to be bound by the decision of the arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the Superior Court of the county in which the Contracting Agency's headquarters is located, provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a basis for decisions.

1-10 TEMPORARY TRAFFIC CONTROL

1-10.2 Traffic Control Management

General

Section 1-10.2(1) is supplemented with the following:

(October 3, 2022)

The Traffic Control Supervisor shall be certified by one of the following:

The Northwest Laborers-Employers Training Trust
27055 Ohio Ave.
Kingston, WA 98346
(360) 297-3035
<https://www.nwlett.edu>

Evergreen Safety Council
12545 135th Ave. NE
Kirkland, WA 98034-8709
1-800-521-0778
<https://www.esc.org>

The American Traffic Safety Services Association
15 Riverside Parkway, Suite 100
Fredericksburg, Virginia 22406-1022
Training Dept. Toll Free (877) 642-4637
Phone: (540) 368-1701
<https://atssa.com/training>

Integrity Safety
13912 NE 20th Ave.
Vancouver, WA 98686
(360) 574-6071
<https://www.integritysafety.com>

US Safety Alliance
(904) 705-5660
<https://www.ussafetyalliance.com>

K&D Services Inc.
2719 Rockefeller Ave.
Everett, WA 98201
(800) 343-4049
<https://www.kndservices.net>

1-10.3 Traffic Control Labor, Procedures, and Devices

1-10.3(3)A Construction Signs

(*****)

The first paragraph of Section 1-10.3(3)A is revised to read as follows:

All signs required by the approved traffic control plan(s) as well as any other appropriate signs prescribed by the Engineer shall be furnished by the Contractor. The Contractor shall provide the posts or supports and erect and maintain the signs in a clean, neat, and presentable condition until the necessity for them has ceased. When the need for these signs has ceased, the Contractor, upon approval of the Engineer, shall remove all signs, posts, and supports from the project and they shall remain the property of the Contractor. There shall be no intermixing of signs with non-fluorescent orange reflective sign sheeting and signs with fluorescent orange reflective sign sheeting on the same signpost.

The third paragraph of Section 1-10.3(3)A is supplemented with the following:

The Contractor shall furnish, install, and remove all construction signs and all cones, barricades, flashers, and other traffic control devices of a temporary and portable nature. The Contractor shall maintain all signs and other traffic control devices.

"MOTORCYCLES USE EXTREME CAUTION" signs per W21-1701 of the WSDOT Sign Fabrication Manual shall be supplied by the Contractor if there will be grooved pavement, abrupt lane edges, steel plates or gravel-or-earth surfaced roadways within the project limits. The Contractor shall include the signs in the Traffic Control Plan and install the signs in advance of the work zone and maintain the signs for as long as the above conditions are present. These signs are in addition to any other signs stating the condition of the roadway. MOTORCYCLES USE EXTREME CAUTION" signs shall be considered Class B signs.

The seventh paragraph of Section 1-10.3(3)A is revised to read as follows:

Signs, posts, or supports that are lost, stolen, damaged, destroyed, or which the Engineer deems to be unacceptable while their use is required on the project, shall be replaced by the Contractor without additional compensation.

BID ITEMS

BID ITEM 1: MISCELLANEOUS CONSTRUCTION

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 1-09.6, except as modified below.

1-09.6 Force Account

Insert the following paragraph before the first paragraph of Section 1-09.6, which begins "The terms of the contract or of a change order may call...":

The Miscellaneous Construction bid item has been included for any additional work directed by the Engineer that is not required by the original contract. The amount indicated in the proposal for this bid item is to provide a common bid amount. The actual amount paid under this bid item may vary from no payment to the full amount of the bid item.

Add the following to Section 1-09.6:

In lieu of the preceding prescribed method of determining payment for force account work, payment may be made at unit prices or lump sum prices agreed to by the Engineer and the Contractor, prior to beginning the Miscellaneous Construction work.

BID ITEM 2: REPLACEMENT STAKING SERVICES

This bid item shall be accomplished in accordance with the Plans, Standard Specification Section 1-05.4 and the Special Provisions for Section 1-05.4.

BID ITEM 3: MOBILIZATION

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 1-09.7.

BID ITEM 4: PROJECT TEMPORARY TRAFFIC CONTROL

This bid item shall be accomplished in accordance with the Plans and Standard Specification Sections 1-07 and 1-10 and the Special Provisions for Section 1-10.

BID ITEM 5: CLEARING AND GRUBBING

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 2-01 except as modified below:

2-01.1 Description

Delete paragraph one of Section 2-01.1, which begins "The Contractor shall clear..." and replace with the following:

(*****)

The Contractor shall clear, grub, and clean the entire limits of clearing within the project area, unless otherwise noted or specified. The Contractor shall also clear, grub and clean areas designated to receive fill materials, as specified herein. Existing trees outside the limits of clearing and specific improvements marked on the plans as remaining shall be protected from damage.

Delete paragraph two of Section 2-01.1 which begins "Clearing" means removing and..." and replace with the following:

(*****)

"Clearing" means removing and disposing of all unwanted material from the surface, as determined by the Engineer, such as trees, brush, vines, down timber, lumber, concrete, miscellaneous trash, and other.

2-01.2 Disposal of Usable Material and Debris

Add the following to Section 2-01.2:

(*****)

No waste site has been provided by the County for this project.

2-01.5 Payment

Add the following to the third paragraph of Section 2-01.5 which begins "the unit Contract price per acre...":

(*****)

It has been calculated that there are approximately 0.31 acres of Clearing and Grubbing required for this project. This value has been provided for the purposes of bidding only. No adjustment to this lump sum bid item will be made.

BID ITEM 6: ROADWAY EXCAVATION AND DISPOSAL INCLUDING HAUL

BID ITEM 7: ROCK EXCAVATION INCLUDING HAUL

These bid items shall be accomplished in accordance with the Plans and Standard Specification Section 2-03, except as modified below. The bid quantities listed for these items are approximate and are for the purposes of bidding only. Overruns and underruns in these bid items shall not be cause for adjustment in the unit prices. Section 1-04.6 "Increased or Decreased Quantities" does not apply to these bid items.

2-03 ROADWAY EXCAVATION AND EMBANKMENT

2-03.1 Description

Delete paragraph one of Section 2-03.1 which begins “The work described in...” and replace with the following:

(*****)

The work described in this section, regardless of the nature or type of materials encountered, includes excavation and grading the roadway, excavation below grade, excavating channels and ditches, removal of slide material, placement and compaction of excavated materials as directed by the Engineer, and disposal of all excess material. These activities may be performed in making cuts, embankments, slopes, roadway ditches, parking areas, driveways, and in completing other related work.

2-03.3 Construction Requirements

Add the following to Section 2-03.3:

2-03.3(19) Removal of Pavement, Sidewalks, and Curbs

Removal of pavement, sidewalks, curbs, or other similar materials that lie within the limits of excavation shall be included in the unit bid price for this bid item and shall be completed in accordance with Section 2-02.3(3) unless specifically identified for removal under the Removal of Structures and Obstructions bid item of this document.

Add the following to Section 2-02.3(3) which is referenced by Section 2-03.3(19):

(*****)

Revise Item 2. of Section 2-02.3(3) which begins “Material that is..” to read as follows:

2. Material from excavated pavements, sidewalks, curbs and gutters shall be disposed of in accordance with applicable local and state regulations.

2-03.3(2) Rock Cuts

Add the following to Section 2-03.3(2):

(*****)

From Station **10+00** to Station **14+50 right**, rock may be encountered to a depth of 15 feet below existing grade. The depths listed above include overburden. This material may not be suitable for excavation by normal means. Normal means is defined as excavation with a hydraulic excavator with a minimum operating weight of 80,000 pounds and a 50,000-pound bucket digging force with toothed bucket. Material not suitable for excavation by normal means must be excavated with means other than the use of explosives. The Contractor shall make his own determination of equipment required to perform the work. No additional compensation other than provided herein will be allowed due to the presence of rock. Only material not suitable for excavation by normal means shall be considered “Rock Excavation”. The Engineer shall determine if material excavated will be paid under the “Roadway Excavation, Embankment and Disposal Including Haul” or “Rock Excavation Including Haul” bid items.

2-03.3(3) Excavation Below Grade

Add the following after the second paragraph of Section 2-03.3(3) which begins "If the Contractor uses...":

(*****)

Existing culverts, storm drains, and drainage structures located within the horizontal limits of the excavation shall be removed, backfilled, and compacted, unless otherwise noted on the plans.

2-03.3(7)A General

Delete the text of Section 2-03.3(7)A which begins "The Contractor shall haul..." and replace with the following:

(*****)

The excavated materials for this project shall become the property of the Contractor to be disposed of in accordance with Section 2-03.3(7)C. No waste site has been provided by the County.

The disposal of waste or excess materials from this project on private property requires a permit(s) from Cowlitz County Building and Planning Department. This includes the temporary stockpiling and processing/crushing of material (soil, rock, etc.). No adjustment in the time of completion will be made for the time required to obtain permits and/or the failure to obtain or qualify for a permit. It is recommended that the contractor contact the Building and Planning Department early in the bidding process to review potential sites to avoid problems and delays.

2-03.4 Measurement

Add the following to Section 2-03.4:

(*****)

Roadway excavation and disposal including haul - by the cubic yard. The quantities indicated on the proposal include an estimated 0 cubic yards of over excavation. The actual over excavation quantity will be determined by neat line measurement. All other materials will be measured in-place as determined by neat-line modeling.

Rock Excavation Including Haul – by the cubic yard. The rock excavation quantity will be determined by neat line measurement. Only material determined to be not suitable for excavation by normal means will be measured for the bid item Rock Excavation Including Haul.

2-03.5 Payment

Add the following to Section 2-03.5:

(*****)

"Roadway Excavation and Disposal Including Haul", per cubic yard.

The unit contract price per cubic yard for Roadway Excavation and Disposal Including Haul shall be full pay for excavating, loading, hauling, and disposing of the materials as directed by the Engineer. All work required in removal and backfilling of existing culverts or structures shall be included in the unit bid price of this bid item.

When the Engineer orders excavation below subgrade before subgrade preparation is complete, unit prices for Roadway Excavation and Disposal Including Haul shall apply.

“Rock Excavation Including Haul”, per cubic yard.

The unit contract price per cubic yard for Rock Excavation Including Haul shall be full pay for fracturing, excavating, loading, hauling, placing, compacting, or otherwise disposing of the materials as directed by the Engineer.

BID ITEM 8: TRIMMING AND CLEANUP

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 2-11.

BID ITEM 9: CONSTRUCTION GEOTEXTILE FOR SEPARATION

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 2-12, except as modified below. The bid quantity listed for this item is approximate and is for the purposes of bidding only. Overruns and underruns in this bid item shall not be cause for adjustment in the unit price. Section 1-04.6 “Increased or Decreased Quantities” does not apply to this bid item.

2-12 CONSTRUCTION GEOTEXTILE

2-12.2 Materials

Add the following to Section 2-12.2:

(*****)

Construction Geotextile for Separation shall be nonwoven.

2-12.3 Construction Requirements

Add the following to Section 2-12.3:

(*****)

Geotextile shall be placed with the long axis parallel to the centerline of the road. Overlaps of the fabric shall be pinned with sod pins on intervals determined for the site by the Engineer. Pleats for changing directions of the fabric roll shall be pinned. Additional sod pins shall be used to prevent displacement of the fabric by the wind or other conditions. Fabric placed over benches cut in a slope shall be pinned at the bottom of the vertical cuts at 10-foot intervals, or as otherwise directed by the Engineer.

2-12.4 Measurement

Delete paragraph one of Section 2-12.4 which begins “Construction geotextile, with the...”, and replace with the following:

(*****)

Construction geotextile will be measured by the square yard of material installed.

BID ITEM 10: CRUSHED SURFACING BASE COURSE

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 4-04, except as modified below.

(*****)

4-04.3(4) Placing and Spreading

Delete item 2 of Section 4-04.3(4), which begins "Road Mix Method. Each..." and replace with the following:

- 2. **Road Mix Method.** The road mix method of mixing crushed surfacing base course and top course will not be allowed.
- 3. **Placement on Construction Geotextile.** Crushed surfacing base course to be placed on construction geotextile shall not be dumped directly onto geotextile. Crushed surfacing base and top course shall be dumped on previously placed materials then spread over the geotextile and compacted as required by the Plans.

(*****)

Delete the second paragraph under item **2 Road Mix Method** of Section 4-04.3(4), which begins "The following nominal depth..." and replace with the following:

The following nominal depth of compacted material shall not be exceeded in any one course without the approval of the Engineer:

Crushed Surfacing	0.50-foot
-------------------	-----------

4-04.3(5) Shaping and Compaction

Add the following to Section 4-04.3(5):

(*****)

The top surface of the compacted materials shall not deviate from the design grade in excess of the following:

Crushed Surfacing Base Course: + or – 0.02 foot.

BID ITEM 11: HMA CLASS 3/8 Inch PG 58H-22

This bid item shall be accomplished in accordance with the Plans, the following APWA GSP for Section 5-04, as modified by Cowlitz County. Cowlitz County modifications to the APWA GSP are shown as underlined text for additions and as strikethrough text for deletions.

5-04 Hot Mix Asphalt

(January 31, 2023 APWA GSP)

Delete Section 5-04, Hot Mix Asphalt, and replace it with the following:

5-04.1 Description

This Work shall consist of providing and placing one or more layers of plant-mixed hot mix asphalt (HMA) on a prepared foundation or base in accordance with these Specifications and the lines, grades, thicknesses, and typical cross-sections shown in the Plans. The manufacture of HMA may include warm mix asphalt (WMA) processes in accordance with these Specifications. WMA processes include organic additives, chemical additives, and foaming.

HMA shall be composed of asphalt binder and mineral materials as may be required, mixed in the proportions specified to provide a homogeneous, stable, and workable mixture.

5-04.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt Binder	9-02.1(4)
Cationic Emulsified Asphalt	9-02.1(6)
Anti-Stripping Additive	9-02.4
HMA Additive	9-02.5
Aggregates	9-03.8
Recycled Asphalt Pavement (RAP)	9-03.8(3)B, 9-03.21
Reclaimed Asphalt Shingles (RAS)	9-03.8(3)B, 9-03.21
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21

The Contract documents may establish that the various mineral materials required for the manufacture of HMA will be furnished in whole or in part by the Contracting Agency. If the documents do not establish the furnishing of any of these mineral materials by the Contracting Agency, the Contractor shall be required to furnish such materials in the amounts required for the designated mix. Mineral materials include coarse and fine aggregates, and mineral filler.

The Contractor may choose to utilize recycled asphalt pavement (RAP) in the production of HMA. The RAP may be from pavements removed under the Contract, if any, or pavement material from an existing stockpile.

The Contractor may use up to 20 percent RAP by total weight of HMA with no additional sampling or testing of the RAP.

If the Contractor wishes to utilize High RAP/Any RAS, the design must be listed on the WSDOT Qualified Products List (QPL).

The grade of asphalt binder shall be as required by the Contract. Blending of asphalt binder from different sources is not permitted.

The Contractor may only use warm mix asphalt (WMA) processes in the production of HMA with 20 percent or less RAP by total weight of HMA. The Contractor shall submit to the Engineer for approval the process that is proposed and how it will be used in the manufacture of HMA.

Production of aggregates shall comply with the requirements of Section 3-01.

Preparation of stockpile site, the stockpiling of aggregates, and the removal of aggregates from stockpiles shall comply with the requirements of Section 3-02.

5-04.2(1) How to Get an HMA Mix Design on the QPL

If the Contractor wishes to submit a mix design for inclusion in the Qualified Products List (QPL), please follow the WSDOT process outlined in Standard Specification 5-04.2(1).

5-04.2(1)A Vacant

5-04.2(2) Mix Design - Obtaining Project Approval

No paving shall begin prior to the approval of the mix design by the Engineer.

Nonstatistical evaluation will be used for all HMA not designated as Commercial HMA in the Contract documents.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Project Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Project Engineer. The Proposal quantity of HMA that is accepted by commercial evaluation will be excluded from the quantities used in the determination of nonstatistical evaluation.

Nonstatistical Mix Design. Fifteen days prior to the first day of paving the Contractor shall provide one of the following mix design verification certifications for Contracting Agency review;

- The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.
- The proposed HMA mix design on WSDOT Form 350-042 with the seal and certification (stamp & signature) of a valid licensed Washington State Professional Engineer.
- The Mix Design Report for the proposed HMA mix design developed by a qualified City or County laboratory that is within one year of the approval date.

The mix design shall be performed by a lab accredited by a national authority such as Laboratory Accreditation Bureau, L-A-B for Construction Materials Testing, The Construction Materials Engineering Council (CMEC's) ISO 17025 or AASHTO Accreditation Program (AAP) and shall supply evidence of participation in the AASHTO: resource proficiency sample program.

Mix designs for HMA accepted by Nonstatistical evaluation shall:

- Be designed for ***0.3 to less than 3.0*** million equivalent single axle loads (ESALs).
- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).

- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324 or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

At the discretion of the Engineer, agencies may accept verified mix designs older than 12 months from the original verification date with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

Commercial Evaluation Mix Design. Approval of a mix design for “Commercial Evaluation” will be based on a review of the Contractor’s submittal of WSDOT Form 350-042 (for commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.

For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of ESALs appropriate for the required use.

5-04.2(2)B Using Warm Mix Asphalt Processes

The Contractor may elect to use additives that reduce the optimum mixing temperature or serve as a compaction aid for producing HMA. Additives include organic additives, chemical additives and foaming processes. The use of Additives is subject to the following:

- Do not use additives that reduce the mixing temperature more than allowed in Section 5-04.3(6) in the production of mixtures.
- Before using additives, obtain the Engineer’s approval using WSDOT Form 350-076 to describe the proposed additive and process.

5-04.3 Construction Requirements

5-04.3(1) Weather Limitations

Do not place HMA for wearing course on any Traveled Way beginning October 1st through March 31st of the following year without written concurrence from the Engineer.

Do not place HMA on any wet surface, or when the average surface temperatures are less than those specified below, or when weather conditions otherwise prevent the proper handling or finishing of the HMA.

Minimum Surface Temperature for Paving

Compacted Thickness (Feet)	Wearing Course	Other Courses
Less than 0.10	55°F	45°F
0.10 to .20	45°F	35°F
More than 0.20	35°F	35°F

5-04.3(2) Paving Under Traffic

When the Roadway being paved is open to traffic, the requirements of this Section shall apply.

The Contractor shall keep intersections open to traffic at all times except when paving the intersection or paving across the intersection. During such time, and provided that there has been an advance warning to the public, the intersection may be closed for the minimum time required to place and compact the mixture. In hot weather, the Engineer may require the application of water to the pavement to accelerate the finish rolling of the pavement and to shorten the time required before reopening to traffic.

Before closing an intersection, advance warning signs shall be placed, and signs shall also be placed marking the detour or alternate route.

During paving operations, temporary pavement markings shall be maintained throughout the project. Temporary pavement markings shall be installed on the Roadway prior to opening to traffic. Temporary pavement markings shall be in accordance with Section 8-23.

All costs in connection with performing the Work in accordance with these requirements, except the cost of temporary pavement markings, shall be included in the unit Contract prices for the various Bid items involved in the Contract.

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

Plants used for the preparation of HMA shall conform to the following requirements:

1. **Equipment for Preparation of Asphalt Binder** – Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.
2. **Thermometric Equipment** – An armored thermometer, capable of detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The thermometer location shall be convenient and safe for access by Inspectors. The plant shall also be equipped with an approved dial-scale thermometer, a mercury actuated thermometer, an electric pyrometer, or another approved thermometric instrument placed at the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates. This device shall be in full view of the plant operator.
3. **Heating of Asphalt Binder** – The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method

shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.

4. **Sampling and Testing of Mineral Materials** – The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall provide for the setup and operation of the field-testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).
5. **Sampling HMA** – The HMA plant shall provide for sampling HMA by one of the following methods:
 - a. A mechanical sampling device attached to the HMA plant.
 - b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

5-04.3(3)B Hauling Equipment

Trucks used for hauling HMA shall have tight, clean, smooth metal beds and shall have a cover of canvas or other suitable material of sufficient size to protect the mixture from adverse weather. Whenever the weather conditions during the work shift include, or are forecast to include precipitation or an air temperature less than 45°F or when time from loading to unloading exceeds 30 minutes, the cover shall be securely attached to protect the HMA.

The Contractor shall provide an environmentally benign means to prevent the HMA mixture from adhering to the hauling equipment. Excess release agent shall be drained prior to filling hauling equipment with HMA. Petroleum derivatives or other coating material that contaminate or alter the characteristics of the HMA shall not be used. For live bed trucks, the conveyer shall be in operation during the process of applying the release agent.

5-04.3(3)C Pavers

HMA pavers shall be self-contained, power-propelled units, provided with an internally heated vibratory screed and shall be capable of spreading and finishing courses of HMA plant mix material in lane widths required by the paving section shown in the Plans.

The HMA paver shall be in good condition and shall have the most current equipment available from the manufacturer for the prevention of segregation of the HMA mixture installed, in good condition, and in working order. The equipment certification shall list the make, model, and year of the paver and any equipment that has been retrofitted.

The screed shall be operated in accordance with the manufacturer's recommendations and shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture. A copy of the manufacturer's recommendations shall be provided upon request by the Contracting Agency. Extensions will be allowed provided they produce the same

results, including ride, density, and surface texture as obtained by the primary screed. Extensions without augers and an internally heated vibratory screed shall not be used in the Traveled Way.

When specified in the Contract, reference lines for vertical control will be required. Lines shall be placed on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line will be permitted. The grade and slope for intermediate lanes shall be controlled automatically from reference lines or by means of a mat referencing device and a slope control device. When the finish of the grade prepared for paving is superior to the established tolerances and when, in the opinion of the Engineer, further improvement to the line, grade, cross-section, and smoothness can best be achieved without the use of the reference line, a mat referencing device may be substituted for the reference line. Substitution of the device will be subject to the continued approval of the Engineer. A joint matcher may be used subject to the approval of the Engineer. The reference line may be removed after the completion of the first course of HMA when approved by the Engineer. Whenever the Engineer determines that any of these methods are failing to provide the necessary vertical control, the reference lines will be reinstalled by the Contractor.

The Contractor shall furnish and install all pins, brackets, tensioning devices, wire, and accessories necessary for satisfactory operation of the automatic control equipment.

If the paving machine in use is not providing the required finish, the Engineer may suspend Work as allowed by Section 1-08.6. Any cleaning or solvent type liquids spilled on the pavement shall be thoroughly removed before paving proceeds.

5-04.3(3)D Material Transfer Device or Material Transfer Vehicle

A Material Transfer Device/Vehicle (MTD/V) shall only be used with the Engineer's approval, unless otherwise required by the Contract.

Where an MTD/V is required by the Contract, the Engineer may approve paving without an MTD/V, at the request of the Contractor. The Engineer will determine if an equitable adjustment in cost or time is due.

When used, the MTD/V shall mix the HMA after delivery by the hauling equipment and prior to laydown by the paving machine. Mixing of the HMA shall be sufficient to obtain a uniform temperature throughout the mixture. If a windrow elevator is used, the length of the windrow may be limited in urban areas or through intersections, at the discretion of the Engineer.

To be approved for use, an MTV:

1. Shall be self-propelled vehicle, separate from the hauling vehicle or paver.
2. Shall not be connected to the hauling vehicle or paver.
3. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
4. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.

5. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

To be approved for use, an MTD:

1. Shall be positively connected to the paver.
2. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
3. Shall mix the HMA after delivery by the hauling equipment and prior to placement into the paving machine.
4. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the mixture.

5-04.3(3)E Rollers

Rollers shall be of the steel wheel, vibratory, oscillatory, or pneumatic tire type, in good condition and capable of reversing without backlash. Operation of the roller shall be in accordance with the manufacturer's recommendations. When ordered by the Engineer for any roller planned for use on the project, the Contractor shall provide a copy of the manufacturer's recommendation for the use of that roller for compaction of HMA. The number and weight of rollers shall be sufficient to compact the mixture in compliance with the requirements of Section 5-04.3(10). The use of equipment that results in crushing of the aggregate will not be permitted. Rollers producing pickup, washboard, uneven compaction of the surface, displacement of the mixture or other undesirable results shall not be used.

5-04.3(4) Preparation of Existing Paved Surfaces

When the surface of the existing pavement or old base is irregular, the Contractor shall bring it to a uniform grade and cross-section as shown on the Plans or approved by the Engineer.

Preleveling of uneven or broken surfaces over which HMA is to be placed may be accomplished by using an asphalt paver, a motor patrol grader, or by hand raking, as approved by the Engineer.

Compaction of preleveling HMA shall be to the satisfaction of the Engineer and may require the use of small steel wheel rollers, plate compactors, or pneumatic rollers to avoid bridging across preleveled areas by the compaction equipment. Equipment used for the compaction of preleveling HMA shall be approved by the Engineer.

Before construction of HMA on an existing paved surface, the entire surface of the pavement shall be clean. All fatty asphalt patches, grease drippings, and other objectionable matter shall be entirely removed from the existing pavement. All pavements or bituminous surfaces shall be thoroughly cleaned of dust, soil, pavement grindings, and other foreign matter. All holes and small depressions shall be filled with an appropriate class of HMA. The surface of the patched area shall be leveled and compacted thoroughly. Prior to the application of tack coat, or paving, the condition of the surface shall be approved by the Engineer.

A tack coat of asphalt shall be applied to all paved surfaces on which any course of HMA is to be placed or abutted; ~~except that tack coat may be omitted from clean, newly paved surfaces at the discretion of the Engineer.~~ Tack coat shall be uniformly applied to cover the existing pavement with a thin film of residual asphalt free of streaks and bare spots at a rate between 0.02 and 0.10 gallons per square yard of retained asphalt. The rate of application shall be approved by the Engineer. A heavy application of tack coat shall be applied to all joints. For Roadways open to traffic, the application of tack coat shall be limited to surfaces that will be paved during the same working shift. The spreading equipment shall be equipped with a thermometer to indicate the temperature of the tack coat material.

Equipment shall not operate on tacked surfaces until the tack has broken and cured. If the Contractor's operation damages the tack coat it shall be repaired prior to placement of the HMA.

The tack coat shall be CSS-1, or CSS-1h emulsified asphalt. The CSS-1 and CSS-1h emulsified asphalt may be diluted once with water at a rate not to exceed one-part water to one-part emulsified asphalt. The tack coat shall have sufficient temperature such that it may be applied uniformly at the specified rate of application and shall not exceed the maximum temperature recommended by the emulsified asphalt manufacturer.

5-04.3(4)A Crack Sealing

When the Proposal includes a pay item for crack sealing, seal cracks in accordance with Section 5-03.

5-04.3(4)B Vacant

5-04.3(4)C Pavement Repair

The Contractor shall excavate pavement repair areas and shall backfill these with HMA in accordance with the details shown in the Plans and as marked in the field. The Contractor shall conduct the excavation operations in a manner that will protect the pavement that is to remain. Pavement not designated to be removed that is damaged as a result of the Contractor's operations shall be repaired by the Contractor to the satisfaction of the Engineer at no cost to the Contracting Agency. The Contractor shall excavate only within one lane at a time unless approved otherwise by the Engineer. The Contractor shall not excavate more area than can be completely finished during the same shift, unless approved by the Engineer.

Unless otherwise shown in the Plans or determined by the Engineer, excavate to a depth of 1.0 feet. The Engineer will make the final determination of the excavation depth required. The minimum width of any pavement repair area shall be 40 inches unless shown otherwise in the Plans. Before any excavation, the existing pavement shall be sawcut or shall be removed by a pavement grinder. Excavated materials will become the property of the Contractor and shall be disposed of in a Contractor-provided site off the Right of Way or used in accordance with Sections 2-02.3(3) or 9-03.21.

Asphalt for tack coat shall be required as specified in Section 5-04.3(4). A heavy application of tack coat shall be applied to all surfaces of existing pavement in the pavement repair area.

Placement of the HMA backfill shall be accomplished in lifts not to exceed 0.35-foot compacted depth. Lifts that exceed 0.35-foot of compacted depth may be accomplished with the approval of the Engineer. Each lift shall be thoroughly compacted by a mechanical tamper or a roller.

5-04.3(5) Producing/Stockpiling Aggregates and RAP

Aggregates and RAP shall be stockpiled according to the requirements of Section 3-02. Sufficient storage space shall be provided for each size of aggregate and RAP. Materials shall be removed from stockpile(s) in a manner to ensure minimal segregation when being moved to the HMA plant for processing into the final mixture. Different aggregate sizes shall be kept separated until they have been delivered to the HMA plant.

5-04.3(5)A Vacant

5-04.3(6) Mixing

After the required amount of mineral materials, asphalt binder, recycling agent and anti-stripping additives have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials is ensured.

When discharged, the temperature of the HMA shall not exceed the optimum mixing temperature by more than 25°F as shown on the reference mix design report or as approved by the Engineer. Also, when a WMA additive is included in the manufacture of HMA, the discharge temperature of the HMA shall not exceed the maximum recommended by the manufacturer of the WMA additive. A maximum water content of 2 percent in the mix, at discharge, will be allowed providing the water causes no problems with handling, stripping, or flushing. If the water in the HMA causes any of these problems, the moisture content shall be reduced as directed by the Engineer.

Storing or holding of the HMA in approved storage facilities will be permitted with approval of the Engineer, but in no event shall the HMA be held for more than 24 hours. HMA held for more than 24 hours after mixing shall be rejected. Rejected HMA shall be disposed of by the Contractor at no expense to the Contracting Agency. The storage facility shall have an accessible device located at the top of the cone or about the third point. The device shall indicate the amount of material in storage. No HMA shall be accepted from the storage facility when the HMA in storage is below the top of the cone of the storage facility, except as the storage facility is being emptied at the end of the working shift.

Recycled asphalt pavement (RAP) utilized in the production of HMA shall be sized prior to entering the mixer so that a uniform and thoroughly mixed HMA is produced. If there is evidence of the recycled asphalt pavement not breaking down during the heating and mixing of the HMA, the Contractor shall immediately suspend the use of the RAP until changes have been approved by the Engineer. After the required amount of mineral materials, RAP, new asphalt binder and asphalt rejuvenator have been introduced into the mixer the HMA shall be mixed until complete and uniform coating of the particles and thorough distribution of the asphalt binder throughout the mineral materials, and RAP is ensured.

5-04.3(7) Spreading and Finishing

The mixture shall be laid upon an approved surface, spread, and struck off to the grade and elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture.

Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

HMA Class 1"	0.35 feet
HMA Class ¾" and HMA Class ½"	
wearing course	0.30 feet
other courses	0.35 feet
HMA Class ⅜"	0.15 <u>0.17</u> feet

On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the paving may be done with other equipment or by hand.

When more than one JMF is being utilized to produce HMA, the material produced for each JMF shall be placed by separate spreading and compacting equipment. The intermingling of HMA produced from more than one JMF is prohibited. Each strip of HMA placed during a work shift shall conform to a single JMF established for the class of HMA specified unless there is a need to make an adjustment in the JMF.

The internal temperature of the HMA mixture as measured immediately behind the paver screed should not be less than the minimum Compaction Temperature listed in the Mix Design Submittal Form or that listed in the WSDOT Mix Design Verification Report, whichever is greater.

All underground utilities testing shall be completed, and the installation of the underground utilities shall be accepted by the utility owner prior to placing HMA. All fill and crushed surfacing materials under the HMA pavement shall be placed, compacted and tested according to the Contract Documents prior to placing HMA. The HMA mixture shall be laid upon the prepared surface, spread, and struck off to the grade and elevation established.

The finish surface of the compacted HMA shall not deviate from the design grade in excess of the following:

Specified Depth	Max. Allowable Deviation	Ave. Depth Deviation
	At any point	for entire project
Single lift 0.08 – 0.17'	-0.045'	-0.015'
Multi lift 0.00 – 0.25'	-0.03'	-0.01'
0.26 – 0.50'	-0.045'	-0.015'
0.51 – 0.75'	-0.06'	-0.02'
over 0.75'	-0.075'	-0.025'

5-04.3(8) Aggregate Acceptance Prior to Incorporation in HMA

For HMA accepted by nonstatistical evaluation, the aggregate properties of sand equivalent, uncompacted void content, and fracture will be evaluated in accordance with Section 3-04. Sampling and testing of aggregates for HMA accepted by commercial evaluation will be at the option of the Engineer.

5-04.3(9) HMA Mixture Acceptance

Acceptance of HMA shall be as provided under nonstatistical, or commercial evaluation.

Nonstatistical evaluation will be used for the acceptance of HMA unless Commercial Evaluation is specified.

Commercial evaluation will be used for Commercial HMA and for other classes of HMA in the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores, prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA accepted by commercial evaluation shall be as approved by the Engineer. Sampling and testing of HMA accepted by commercial evaluation will be at the option of the Engineer.

The mix design will be the initial JMF for the class of HMA. The Contractor may request a change in the JMF. Any adjustments to the JMF will require the approval of the Engineer and may be made in accordance with this section.

HMA Tolerances and Adjustments

1. **Job Mix Formula Tolerances** – The constituents of the mixture at the time of acceptance shall be within tolerance. The tolerance limits will be established as follows:

For Asphalt Binder and Air Voids (Va), the acceptance limits are determined by adding the tolerances below to the approved JMF values. These values will also be the Upper Specification Limit (USL) and Lower Specification Limit (LSL) required in Section 1-06.2(2)D2

Property	Non-Statistical Evaluation	Commercial Evaluation
Asphalt Binder	+/- 0.5%	+/- 0.7%
Air Voids, Va	2.5% min. and 5.5% max	N/A

For Aggregates in the mixture:

- a. First, determine preliminary upper and lower acceptance limits by applying the following tolerances to the approved JMF.

Aggregate Percent Passing	Non-Statistical Evaluation	Commercial Evaluation
1", ¾", ½", and 3/8" sieves	+/- 6%	+/- 8%
No. 4 sieve	+/-6%	+/- 8%
No. 8 Sieve	+/- 6%	+/-8%
No. 200 sieve	+/- 2.0%	+/- 3.0%

- b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.

2. **Job Mix Formula Adjustments** – An adjustment to the aggregate gradation or asphalt binder

content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.

- a. **Aggregates** –2 percent for the aggregate passing the 1½", 1", ¾", ½", ⅜", and the No. 4 sieves, 1 percent for aggregate passing the No. 8 sieve, and 0.5 percent for the aggregate passing the No. 200 sieve. The adjusted JMF shall be within the range of the control points in Section 9-03.8(6).
- b. **Asphalt Binder Content** – The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent.

5-04.3(9)A Vacant

5-04.3(9)B Vacant

5-04.3(9)C Mixture Acceptance – Nonstatistical Evaluation

HMA mixture which is accepted by Nonstatistical Evaluation will be evaluated by the Contracting Agency by dividing the HMA tonnage into lots.

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots and Sublots

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 800 tons, whichever is less except that the final subplot will be a minimum of 400 tons and may be increased to 1200 tons.

All of the test results obtained from the acceptance samples from a given lot shall be evaluated collectively. If the Contractor requests a change to the JMF that is approved, the material produced after the change will be evaluated on the basis of the new JMF for the remaining sublots in the current lot and for acceptance of subsequent lots. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

Sampling and testing for evaluation shall be performed on the frequency of one sample per subplot.

Sampling and testing for total project quantities less than 400 tons is at the discretion of the engineer. For a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed:

- i. If test results are found to be within specification requirements, additional testing will be at the Engineer's discretion.
- ii. If test results are found not to be within specification requirements, additional testing as needed to determine a CPF shall be performed.

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling

Samples for acceptance testing shall be obtained by the Contractor when ordered by the Engineer. The Contractor shall sample the HMA mixture in the presence of the Engineer and in accordance with AASHTO T 168. A minimum of three samples should be taken for each class of HMA placed on a project. If used in a structural application, at least one of the three samples shall be tested.

Sampling and testing HMA in a structural application where quantities are less than 400 tons is at the discretion of the Engineer.

For HMA used in a structural application and with a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed. In all cases, a minimum of 3 samples will be obtained at the point of acceptance, a minimum of one of the three samples will be tested for conformance to the JMF:

- If the test results are found to be within specification requirements, additional testing will be at the Engineer’s discretion.
- If test results are found not to be within specification requirements, additional testing of the remaining samples to determine a CPF shall be performed.

5-04.3(9)C3 Mixture Nonstatistical Evaluation – Acceptance Testing

Testing of HMA for compliance of V_a will at the option of the Contracting Agency. If tested, compliance of V_a will use WSDOT SOP 731.

Testing for compliance of asphalt binder content will be by WSDOT FOP for AASHTO T 308.

Testing for compliance of gradation will be by FOP for WAQTC T 27/T 11.

5-04.3(9)C4 Mixture Nonstatistical Evaluation – Pay Factors

For each lot of material falling outside the tolerance limits in 5-04.3(9), the Contracting Agency will determine a CPF using the following price adjustment factors:

Table of Price Adjustment Factors	
Constituent	Factor “F”
All aggregate passing: 1½", 1", ¾", ½", ⅜" and No. 4 sieves	2
All aggregate passing No. 8 sieve	15
All aggregate passing No. 200 sieve	20
Asphalt binder	40
Air Voids (V_a) (where applicable)	20

Each lot of HMA produced under Nonstatistical Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the nonstatistical tolerance limits in the Job Mix

Formula shown in Table of Price Adjustment Factors, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The nonstatistical tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the Roadway shall be tested to provide a minimum of three sets of results for evaluation.

5-04.3(9)C5 Vacant

5-04.3(9)C6 Mixture Nonstatistical Evaluation – Price Adjustments

For each lot of HMA mix produced under Nonstatistical Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The total job mix compliance price adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the CPF.

5-04.3(9)C7 Mixture Nonstatistical Evaluation - Retests

The Contractor may request a subplot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, V_a . The results of the retest will be used for the acceptance of the HMA in place of the original subplot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of \$500 per sample.

5-04.3 (9)D Mixture Acceptance – Commercial Evaluation

If sampled and tested, HMA produced under Commercial Evaluation and having all constituents falling within the tolerance limits of the job mix formula shall be accepted at the unit Contract price with no further evaluation. When one or more constituents fall outside the commercial tolerance limits in the Job Mix Formula shown in 5-04.3(9), the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The commercial tolerance limits will be used in the calculation of the CPF and the maximum CPF shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or samples from the street shall be tested to provide a minimum of three sets of results for evaluation.

For each lot of HMA mix produced and tested under Commercial Evaluation when the calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined. The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The Job Mix Compliance Price Adjustment will be calculated as the product of the NCMF, the quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.

If a constituent is not measured in accordance with these Specifications, its individual pay factor will be considered 1.00 in calculating the CPF.

5-04.3(10) HMA Compaction Acceptance

HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including lanes for intersections, ramps, truck climbing, weaving, and speed change, and having a specified compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of relative density. The specified level of relative density shall be a CPF of not less than 0.75 when evaluated in accordance with Section 1-06.2, using a LSL of 92.0 (minimum of 92 percent of the maximum density). The maximum density shall be determined by WSDOT FOP for AASHTO T 729. The specified level of density attained will be determined by the evaluation of the density of the pavement. The density of the pavement shall be determined in accordance with WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when using cores to determine density.

Tests for the determination of the pavement density will be taken in accordance with the required procedures for measurement by a nuclear density gauge or Roadway cores after completion of the finish rolling.

If the Contracting Agency uses a nuclear density gauge to determine density the test procedures FOP for WAQTC TM 8 and WSDOT SOP T 729 will be used on the day the mix is placed and prior to opening to traffic.

Roadway cores for density may be obtained by either the Contracting Agency or the Contractor in accordance with WSDOT SOP 734. The core diameter shall be 4-inches minimum, unless otherwise approved by the Engineer. Roadway cores will be tested by the Contracting Agency in accordance with WSDOT FOP for AASHTO T 166.

If the Contract includes the Bid item "Roadway Core", the cores shall be obtained by the Contractor in the presence of the Engineer on the same day the mix is placed and at locations designated by the Engineer. If the Contract does not include the Bid item "Roadway Core", the Contracting Agency will obtain the cores.

For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling wheel rutting shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

Test Results

For a subplot that has been tested with a nuclear density gauge that did not meet the minimum of 92 percent of the reference maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core be used for determination of

the relative density of the subplot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the subplot and will be used for calculation of the CPF and acceptance of HMA compaction lot.

When cores are taken by the Contracting Agency at the request of the Contractor, they shall be requested by noon of the next workday after the test results for the subplot have been provided or made available to the Contractor. Core locations shall be outside of wheel paths and as determined by the Engineer. Traffic control shall be provided by the Contractor as requested by the Engineer. Failure by the Contractor to provide the requested traffic control will result in forfeiture of the request for cores. When the CPF for the lot based on the results of the HMA cores is less than 1.00, the cost for the coring will be deducted from any monies due or that may become due the Contractor under the Contract at the rate of \$200 per core and the Contractor shall pay for the cost of the traffic control.

5-04.3(10)A HMA Compaction – General Compaction Requirements

Compaction shall take place when the mixture is in the proper condition so that no undue displacement, cracking, or shoving occurs. Areas inaccessible to large compaction equipment shall be compacted by other mechanical means. Any HMA that becomes loose, broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective, shall be removed and replaced with new hot mix that shall be immediately compacted to conform to the surrounding area.

Separate breakdown and finish rollers are required. The type of rollers to be used and their relative position in the compaction sequence shall generally be the Contractor's option, provided the specified densities are attained. Unless the Engineer has approved otherwise, rollers shall only be operated in the static mode when the internal temperature of the mix is less than 175°F. Regardless of mix temperature, a roller shall not be operated in a mode that results in checking or cracking of the mat. Rollers shall only be operated in static mode on bridge decks. Approaches shall be compacted with vibratory plates or a small roller if determined necessary by the Engineer.

5-04.3(10)B HMA Compaction - Cyclic Density

Low cyclic density areas are defined as spots or streaks in the pavement that are less than 90 percent of the theoretical maximum density. At the Engineer's discretion, the Engineer may evaluate the HMA pavement for low cyclic density, and when doing so will follow WSDOT SOP 733. A \$500 Cyclic Density Price Adjustment will be assessed for any 500-foot section with two or more density readings below 90 percent of the theoretical maximum density.

5-04.3(10)C Vacant

5-04.3(10)D HMA Nonstatistical Compaction

5-04.3(10)D1 HMA Nonstatistical Compaction - Lots and Sublots

HMA compaction which is accepted by nonstatistical evaluation will be based on acceptance testing performed by the Contracting Agency dividing the project into compaction lots.

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A subplot shall be equal to one day's production or 400 tons, whichever is less except that the final subplot will be a minimum of 200 tons and may be increased to

800 tons. Testing for compaction will be at the rate of 5 tests per subplot per WSDOT T 738.

The subplot locations within each density lot will be determined by the Engineer. For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request after the Engineer is satisfied that material conforming to the Specifications can be produced.

HMA mixture accepted by commercial evaluation and HMA constructed under conditions other than those listed above shall be compacted on the basis of a test point evaluation of the compaction train. The test point evaluation shall be performed in accordance with instructions from the Engineer. The number of passes with an approved compaction train, required to attain the maximum test point density, shall be used on all subsequent paving.

HMA for preleveling shall be thoroughly compacted. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.

5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing

The location of the HMA compaction acceptance tests will be randomly selected by the Engineer from within each subplot, with one test per subplot.

5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments

For each compaction lot with one or two sublots, having all sublots attain a relative density that is 92 percent of the reference maximum density the HMA shall be accepted at the unit Contract price with no further evaluation. When a subplot does not attain a relative density that is 92 percent of the reference maximum density, the lot shall be evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however, lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below 1.00 but greater than 0.90. Lots with CPF lower than 0.90 will be evaluated for compliance per 5-04.3(11). Additional testing by either a nuclear moisture-density gauge or cores will be completed as required to provide a minimum of three tests for evaluation.

For compaction below the required 92%, a Non-Conforming Compaction Factor (NCCF) will be determined. The NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40 percent. The Compaction Price Adjustment will be calculated as the product of CPF, the quantity of HMA in the compaction control lot in tons, and the unit Contract price per ton of mix.

5-04.3(11) Reject Work

5-04.3(11)A Reject Work General

Work that is defective or does not conform to Contract requirements shall be rejected. The Contractor may propose, in writing, alternatives to removal and replacement of rejected material. Acceptability of such alternative proposals will be determined at the sole discretion of the Engineer. HMA that has been rejected is subject to the requirements in Section 1-06.2(2) and this specification, and the Contractor shall submit a corrective action proposal to the Engineer for approval.

5-04.3(11)B Rejection by Contractor

The Contractor may, prior to sampling, elect to remove any defective material and replace it with new material. Any such new material will be sampled, tested, and evaluated for acceptance.

5-04.3(11)C Rejection Without Testing (Mixture or Compaction)

The Engineer may, without sampling, reject any batch, load, or section of Roadway that appears defective. Material rejected before placement shall not be incorporated into the pavement. Any rejected section of Roadway shall be removed.

No payment will be made for the rejected materials or the removal of the materials unless the Contractor requests that the rejected material be tested. If the Contractor elects to have the rejected material tested, a minimum of three representative samples will be obtained and tested. Acceptance of rejected material will be based on conformance with the nonstatistical acceptance Specification. If the CPF for the rejected material is less than 0.75, no payment will be made for the rejected material; in addition, the cost of sampling and testing shall be borne by the Contractor. If the CPF is greater than or equal to 0.75, the cost of sampling and testing will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at a CPF of 0.75. If rejection occurs after placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

5-04.3(11)D Rejection - A Partial Sublot

In addition to the random acceptance sampling and testing, the Engineer may also isolate from a normal sublot any material that is suspected of being defective in relative density, gradation or asphalt binder content. Such isolated material will not include an original sample location. A minimum of three random samples of the suspect material will be obtained and tested. The material will then be statistically evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)E Rejection - An Entire Sublot

An entire sublot that is suspected of being defective may be rejected. When a sublot is rejected a minimum of two additional random samples from this sublot will be obtained. These additional samples and the original sublot will be evaluated as an independent lot in accordance with Section 1-06.2(2).

5-04.3(11)F Rejection - A Lot in Progress

The Contractor shall shut down operations and shall not resume HMA placement until such time as the Engineer is satisfied that material conforming to the Specifications can be produced:

1. When the CPF of a lot in progress drops below 1.00 and the Contractor is taking no corrective action, or
2. When the Pay Factor (PF) for any constituent of a lot in progress drops below 0.95 and the Contractor is taking no corrective action, or
3. When either the PF for any constituent or the CPF of a lot in progress is less than 0.75.

5-04.3(11)G Rejection - An Entire Lot (Mixture or Compaction)

An entire lot with a CPF of less than 0.75 will be rejected.

5-04.3(12) Joints

5-04.3(12)A HMA Joints

5-04.3(12)A1 Transverse Joints

The Contractor shall conduct operations such that the placing of the top or wearing course is a

continuous operation or as close to continuous as possible. Unscheduled transverse joints will be allowed, and the roller may pass over the unprotected end of the freshly laid mixture only when the placement of the course must be discontinued for such a length of time that the mixture will cool below compaction temperature. When the Work is resumed, the previously compacted mixture shall be cut back to produce a slightly beveled edge for the full thickness of the course.

A temporary wedge of HMA constructed on a 20H:1V shall be constructed where a transverse joint as a result of paving or planing is open to traffic. The HMA in the temporary wedge shall be separated from the permanent HMA by strips of heavy wrapping paper or other methods approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving.

The material that is cut away shall be wasted and new mix shall be laid against the cut. Rollers or tamping irons shall be used to seal the joint.

5-04.3(12)A2 Longitudinal Joints

The longitudinal joint in any one course shall be offset from the course immediately below by not more than 6 inches nor less than 2 inches. All longitudinal joints constructed in the wearing course shall be located at a lane line or an edge line of the Traveled Way. A notched wedge joint shall be constructed along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size or more than $\frac{1}{2}$ of the compacted lift thickness and then taper down on a slope not steeper than 4H:1V. The sloped portion of the HMA notched wedge joint shall be uniformly compacted.

5-04.3(12)B Bridge Paving Joint Seals

Bridge Paving Joint Seals shall be in accordance with Section 5-03.

5-04.3(13) Surface Smoothness

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than $\frac{1}{8}$ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than $\frac{1}{4}$ inch in 10 feet from the rate of transverse slope shown in the Plans.

When deviations in excess of the above tolerances are found that result from a high place in the HMA, the pavement surface shall be corrected by one of the following methods:

1. Removal of material from high places by grinding with an approved grinding machine, or
2. Removal and replacement of the wearing course of HMA, or
3. By other method approved by the Engineer.

Correction of defects shall be carried out until there are no deviations anywhere greater than the allowable tolerances.

Deviations in excess of the above tolerances that result from a low place in the HMA and deviations resulting from a high place where corrective action, in the opinion of the Engineer, will not produce satisfactory results will be accepted with a price adjustment. The Engineer shall deduct from monies due or that may become due to the Contractor the sum of \$500.00 for each and every section of single traffic lane 100 feet in length in which any excessive deviations described above are found.

When utility appurtenances such as manhole covers and valve boxes are located in the traveled way, the utility appurtenances shall be adjusted to the finished grade prior to paving. This requirement may be waived when requested by the Contractor, at the discretion of the Engineer or when the adjustment details provided in the project plan or specifications call for utility appurtenance adjustments after the completion of paving.

Utility appurtenance adjustment discussions will be included in the Pre-Paving and Pre-Planing Briefing (5-04.3(14)B3). Submit a written request to waive this requirement to the Engineer prior to the start of paving.

5-04.3(14) Planing Bituminous Pavement

The planing plan must be approved by the Engineer and a pre-planing meeting must be held prior to the start of any planing. See Section 5-04.3(14)B2 for information on planing submittals.

Where planing an existing pavement is specified in the Contract, the Contractor must remove existing surfacing material and to reshape the surface to remove irregularities. The finished product must be a prepared surface acceptable for receiving an HMA overlay.

Use the cold milling method for planing unless otherwise specified in the Contract. Do not use the planer on the final wearing course of new HMA.

Conduct planing operations in a manner that does not tear, break, burn, or otherwise damage the surface which is to remain. The finished planed surface must be slightly grooved or roughened and must be free from gouges, deep grooves, ridges, or other imperfections. The Contractor must repair any damage to the surface by the Contractor's planing equipment, using an Engineer approved method.

Repair or replace any metal castings and other surface improvements damaged by planing, as determined by the Engineer.

A tapered wedge cut must be planed longitudinally along curb lines sufficient to provide a minimum of 4 inches of curb reveal after placement and compaction of the final wearing course. The dimensions of the wedge must be as shown on the Drawings or as specified by the Engineer.

A tapered wedge cut must also be made at transitions to adjoining pavement surfaces (meet lines) where butt joints are shown on the Drawings. Cut butt joints in a straight line with vertical faces 2 inches or more in height, producing a smooth transition to the existing adjoining pavement.

After planing is complete, planed surfaces must be swept, cleaned, and if required by the Contract, patched and preleveled.

The Engineer may direct additional depth planing. Before performing this additional depth planing, the Contractor must conduct a hidden metal in pavement detection survey as specified in Section 5-04.3(14)A.

5-04.3(14)A Pre-Planing Metal Detection Check

Before starting planing of pavements, and before any additional depth planing required by the Engineer, the Contractor must conduct a physical survey of existing pavement to be planed with equipment that can identify hidden metal objects.

Should such metal be identified, promptly notify the Engineer.

See Section 1-07.16(1) regarding the protection of survey monumentation that may be hidden in pavement.

The Contractor is solely responsible for any damage to equipment resulting from the Contractor's failure to conduct a pre-planing metal detection survey, or from the Contractor's failure to notify the Engineer of any hidden metal that is detected.

5-04.3(14)B Paving and Planing Under Traffic

5-04.3(14)B1 General

In addition, the requirements of Section 1-07.23 and the traffic controls required in Section 1-10, and unless the Contract specifies otherwise or the Engineer approves, the Contractor must comply with the following:

1. Intersections:
 - a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial closure must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).
 - b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.
 - c. Should closure of the intersection in its entirety be necessary, and no trolley service is impacted, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.
 - d. Any work in an intersection requires advance warning in both signage and a number of

Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.

- e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.
2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.
3. Permanent pavement marking must comply with Section 8-22.

5-04.3(14)B2 Submittals - Planing Plan and HMA Paving Plan

The Contractor must submit a separate planing plan and a separate paving plan to the Engineer at least 5 Working Days in advance of each operation's activity start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-planing briefing and pre-paving briefing. When requested by the Engineer, the Contractor must provide each operation's traffic control plan on 24 x 36 inch or larger size Shop Drawings with a scale showing both the area of operation and sufficient detail of traffic beyond the area of operation where detour traffic may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be changed if the Engineer agrees sufficient detail is shown.

The planing operation and the paving operation include, but are not limited to, metal detection, removal of asphalt and temporary asphalt of any kind, tack coat and drying, staging of supply trucks, paving trains, rolling, scheduling, and as may be discussed at the briefing.

When intersections will be partially or totally blocked, provide adequately sized and noticeable signage alerting traffic of closures to come, a minimum 2 Working Days in advance. The traffic control plan must show where police officers will be stationed when signalization is or may be, countermanded, and show areas where flaggers are proposed.

At a minimum, the planing and the paving plan must include:

1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's traffic control as it relates to the specific requirements of that day's planing and paving. Briefly describe the sequencing of traffic control consistent with the proposed planing and paving sequence, and scheduling of placement of temporary pavement markings and channelizing devices after each day's planing, and paving.
2. A copy of each intersection's traffic control plan.
3. Haul routes from supplier facilities, and locations of temporary parking and staging areas, including return routes. Describe the complete round trip as it relates to the sequencing of paving operations.
4. Names and locations of HMA supplier facilities to be used.

5. List of all equipment to be used for paving.
6. List of personnel and associated job classification assigned to each piece of paving equipment.
7. Description (geometric or narrative) of the scheduled sequence of planing and of paving and intended area of planing and of paving for each day's work, must include the directions of proposed planing and of proposed paving, sequence of adjacent lane paving, sequence of skipped lane paving, intersection planing and paving scheduling and sequencing, and proposed notifications and coordinations to be timely made. The plan must show HMA joints relative to the final pavement marking lane lines.
8. Names, job titles, and contact information for field, office, and plant supervisory personnel.
9. A copy of the approved Mix Designs.
10. Tonnage of HMA to be placed each day.
11. Approximate times and days for starting and ending daily operations.

5-04.3(14)B3 Pre-Paving and Pre-Planing Briefing

At least 2 Working Days before the first paving operation and the first planing operation, or as scheduled by the Engineer for future paving and planing operations to ensure the Contractor has adequately prepared for notifying and coordinating as required in the Contract, the Contractor must be prepared to discuss that day's operations as they relate to other entities and to public safety and convenience, including driveway and business access, garbage truck operations, transit operations and working around energized overhead wires, school and nursing home and hospital and other accesses, other Contractors who may be operating in the area, pedestrian and bicycle traffic, and emergency services. The Contractor, and Subcontractors that may be part of that day's operations, must meet with the Engineer and discuss the proposed operation as it relates to the submitted planing plan and paving plan, approved traffic control plan, and public convenience and safety. Such discussion includes, but is not limited to:

1. General for both the Paving and Planing:
 - a. The actual times of starting and ending daily operations.
 - b. In intersections, how to break up the intersection, and address traffic control and signalization for that operation, including use of peace officers.
 - c. The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, public convenience and safety, and other Contractors who may operate in the Project limits.
 - d. Notifications required of Contractor activities and coordinating with other entities and the public as necessary.

- e. Description of the sequencing of installation and types of temporary pavement markings as it relates to planning and paving.
 - f. Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed.
 - g. Description of procedures and equipment to identify hidden metal in the pavement, such as survey monumentation, monitoring wells, streetcar rail, and castings, before planing as per Section 5-04.3(14)B2.
 - h. Description of how flaggers will be coordinated with the planing, paving, and related operations.
 - i. Description of sequencing of traffic controls for the process of rigid pavement base repairs.
 - j. Other items the Engineer deems necessary to address.
2. Paving – additional topics:
- a. When to start applying tack and coordinating with paving.
 - b. Types of equipment and numbers of each type of equipment to be used. If more pieces of equipment than personnel are proposed, describe the sequencing of the personnel operating the types of equipment. Discuss the continuance of operator personnel for each type of equipment as it relates to meeting Specification requirements.
 - c. Number of JMFs to be placed, and if more than one JMF is used, how the Contractor will ensure different JMFs are distinguished, how pavers and how MTVs are distinguished, and how pavers and MTVs are cleaned so that one JMF does not adversely influence the other JMF.
 - d. Description of contingency plans for that day's operations such as equipment breakdown, rain out, and supplier shutdown of operations.
 - e. Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

5-04.3(15) Sealing Pavement Surfaces

Apply a fog seal where shown in the plans. Construct the fog seal in accordance with Section 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to opening to traffic.

5-04.3(16) HMA Road Approaches

Construct HMA approaches at the locations shown in the Plans or where staked by the Engineer, in accordance with Section 5-04.

5-04.3(17) Protection of Monuments

Monuments that are within cases shall be adjusted as described in the Special Provisions for the bid item Adjusting Valve Boxes/Monument Cases. In areas where pavement planing will occur, the planing shall come to within 0.5 feet of the monument. If the monument has no case, it shall be protected and covered as necessary throughout the planing and paving operations. The new pavement shall match the grade of the existing pavement surface surrounding the monument.

In locations where pavement planing will not occur and survey monuments have no existing casing, the Contractor shall cover the monument with material that will protect the monument from damage. The Contractor shall pave over the protected monument, leaving a 3-inch diameter hole in the paving mat centered over the monument. After paving operations are complete, the Contractor shall coat the sides of the hole and underlying pavement with tack coat. No tack coat shall cover the monument itself.

5-04.4 Measurement

HMA Cl. ___ PG ___, HMA for ___ Cl. ___ PG ___, and Commercial HMA will be measured by the ton in accordance with Section 1-09.2, with no deduction being made for the weight of asphalt binder, mineral filler, or any other component of the mixture. If the Contractor elects to remove and replace mix as allowed by Section 5-04.3(11), the material removed will not be measured.

Roadway cores will be measured per each for the number of cores taken.

Pavement repair excavation will be measured by the square yard of surface marked prior to excavation.

Planing bituminous pavement will be measured by the square yard.

5-04.5 Payment

Payment will be made for each of the following Bid items that are included in the Proposal:

“HMA Cl. ___ PG ___”, per ton.

“HMA for Approach Cl. ___ PG ___”, per ton.

“HMA for Preleveling Cl. ___ PG ___”, per ton.

“HMA for Pavement Repair Cl. ___ PG ___”, per ton.

“Commercial HMA”, per ton.

The unit Contract price per ton for “HMA Cl. ___ PG ___”, “HMA for Approach Cl. ___ PG ___”, “HMA for Preleveling Cl. ___ PG ___”, “HMA for Pavement Repair Cl. ___ PG ___”, and “Commercial HMA” shall be full compensation for all costs, including anti-stripping additive, incurred to carry out the requirements of Section 5-04 except for those costs included in other items which are included in this Subsection and which are included in the Proposal. The cost of asphalt for tack coat, preparation of existing surfaces, protection of monuments, temporary striping and removal of existing buttons and all other costs in connection with performing the work in accordance with these requirements shall be included in the unit cost for the HMA bid item of this contract. This contract does not have a separate

bid item for "HMA for Approach". The bid item "HMA Class 3/8" PG 58H-22" includes HMA paving of driveway approaches.

"Pavement Repair Excavation Incl. Haul", per square yard.

The unit Contract price per square yard for "Pavement Repair Excavation Incl. Haul" shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(4) with the exception, however, that all costs involved in the placement of HMA shall be included in the unit Contract price per ton for "HMA for Pavement Repair Cl. ___ PG ___", per ton.

"Asphalt for Prime Coat", per ton.

The unit Contract price per ton for "Asphalt for Prime Coat" shall be full payment for all costs incurred to obtain, provide and install the material in accordance with Section 5-04.3(4).

"Prime Coat Agg.", per cubic yard, or per ton.

The unit Contract price per cubic yard or per ton for "Prime Coat Agg." shall be full pay for furnishing, loading, and hauling aggregate to the place of deposit and spreading the aggregate in the quantities required by the Engineer.

"Planing Bituminous Pavement", per square yard.

The unit Contract price per square yard for "Planing Bituminous Pavement" shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(14).

"Job Mix Compliance Price Adjustment", by calculation.

"Job Mix Compliance Price Adjustment" will be calculated and paid for as described in Section 5-04.3(9)C6.

"Compaction Price Adjustment", by calculation.

"Compaction Price Adjustment" will be calculated and paid for as described in Section 5-04.3(10)D3.

"Roadway Core", per each.

The Contractor's costs for all Work associated with the coring (e.g., traffic control) shall be incidental and included in the unit Bid price per each.

"Cyclic Density Price Adjustment", by calculation.

"Cyclic Density Price Adjustment" will be calculated and paid for as described in Section 5-04.3(10)B.

BID ITEM 12: CORRUGATED POLYETHYLENE STORM SEWER PIPE, 18-INCH DIAM

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 7-04 and 7-08, except as modified below.

7-04.3 Construction Requirements

(*****)

Add the following to Section 7-08, which is referenced by Section 7-04.3:

7-08.2 Materials

(*****)

Delete the text of Section 7-08.2 and replace with the following:

Materials shall meet the requirements of the following sections:

- Gravel Backfill for Pipe Zone Bedding 9-03.9(3), Base Course
- Gravel Backfill for Pipe Zone Backfill 9-03.9(3), Base Course
- Gravel Backfill Above Pipe 9-03.9(3), Base Course

7-08.3(2) Laying Pipe

Add the following to Section 7-08.3(2):

(*****)

7-08.3(2)J Beveled Ends

All exposed ends of storm sewer pipes or culverts shall be beveled on a 3:1 slope beginning 6 inches above the pipe flow line, or beveled to match the embankment or ditch foreslope, not to exceed 4:1.

7-04.3(1)A General

(*****)

Add the following to Section 7-04.3(1)A:

Testing will not be required if a section of storm sewer pipe is less than 75 feet long, has less than 5 feet of cover, and has no inlet or junction structures.

7-04.4 Measurement

(*****)

Delete the second sentence of paragraph one of Section 7-04.4, which begins, “The number of linear...” and replace with the following:

The number of linear feet will be measured from the inside face of drainage structure to the inside face of drainage structure or from the inside face of drainage structure to the end of pipe, as is appropriate.

7-04.5 Payment

(*****)

Delete paragraph two of Section 7-04.5, which begins, “The unit contract price...” and add the following:

The unit contract price per linear foot for storm sewer pipe of the type and size specified shall be full pay for furnishing and installing the pipe. Installation shall include excavation, removal of culverts or structures to be abandoned or replaced, fittings, jointing materials, beveling, backfilling to existing grade or subgrade, compaction, and all other items essential for completion of the installation to the required lines and grades.

BID ITEM 13: SILT FENCE

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 8-01.

BID ITEM 14: SEEDING, FERTILIZING, AND MULCHING

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 8-02, except as modified below:

8-02.3 Construction Requirements

8-02.3(9)B Seeding, Fertilizing and Mulching

Section 8-02.3(9)B is supplemented with the following:

Seed Mix: Grass seed, of the following composition, proportion, and quality shall be applied at the rate of ****80**** pounds of pure live seed per acre on all areas requiring permanent roadside seeding within the project limits.

Kind and Variety of Seed in Mixture	Pounds Pure Live Seed (PLS) Per Acre
Deschampsia elongata Slender Hairgrass	0.32
Elymus glaucus Blue Wildrye	34.43
Festuca idahonesis Idaho Fescue	5.61
Festuca ovina Sheep Fescue	0.93
Hordeum brachyantherum Meadow Barley	29.71

Koeler cristata Prairie Junegrass	0.27
<i>Lolium multiflorum</i> Annual Ryegrass	8.73
Total Pounds PLS Per Acre	80.00

Seeds shall be certified “Weed Free”, indicating there are not noxious or nuisance weeds in the seed.

Fertilizing

Sufficient quantities of fertilizer shall be applied to supply the following amounts of nutrients:

- Total Nitrogen as N - 135 pounds per acre.
- Available Phosphoric Acid as P₂O₅ - 60 pounds per acre.
- Soluble Potash as K₂O - 60 pounds per acre.

90 pounds of nitrogen applied per acre shall be derived from isobutylidene diurea (IBDU), cyclo-di-urea (CDU), or a time release, polyurethane coated source with a minimum release time of 6 months. The remainder may be derived from any source.

The fertilizer formulation and application rate shall be approved by the Engineer before use.

Mulching

Wood Cellulose Fiber mulch shall be hydraulically applied at a rate of 2,000 pounds per acre to produce 100% soil coverage.

BID ITEM 15: QUARRY SPALLS

This bid item shall be accomplished in accordance with the Plans and Standard Specification Section 8-15, except as modified below. The bid quantity listed for this item is approximate and is for the purposes of bidding only. Overruns and underruns in this bid item shall not be cause for adjustment in the unit price. Section 1-04.6 “Increased or Decreased Quantities” does not apply to this bid item.

8-15.3 Construction Requirements

8-15.3(6) Quarry Spalls

(*****)

Add the following to Section 8-15.3(6):

A hoe-pack may also be used for compaction.

(February 26, 2024)

Standard Plans

The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01, effective October 23, 2023, is made a part of this contract.

The Standard Plans are revised as follows:

A-10.30

RISER RING detail (Including SECTION view and RISER RING DIMENSIONS table): The RISER RING detail is deleted from the plan.

INSTALLATION detail, SECTION A: The "1/4" callout is revised to read "+/- 1/4" (SEE CONTRACT ~ Note: The + 1/4" installation is shown in the Section A view)"

A-40.20

Sheet 1, NOTES 1, 2, 3, and 4 are replaced with the following:

1. Use the ½ inch joint details for bridges with expansion length less than 100 feet and for bridges with L type abutments. Use the 1 inch joint details for other applications.
2. Use detail 5, 6, 7 on steel trusses and timber bridges with concrete bridge deck panels.
3. For details 1, 2, 3, and 4, the item "HMA Joint Seal at Bridge End" shall be used for payment. For details 5 and 6, the item "HMA Joint Seal at Bridge Deck Panel Joint" shall be used for payment. For detail 7, the item "Clean and Seal Bridge Deck Panel Joint" shall be used for payment.

Sheet 2, Detail 8 reference to "6-09.3(6)" is revised to read "6-21.3(7)".

A-60.40

Note 2 reference to "6-09.3(6)" is revised to read "6-21.3(7)".

B-90.40

Valve Detail – DELETED

C-60.10

Sheet 1 of 2, Side view, add new callout pointing to the outer edges of the 3" x 12" lifting slots at bottom of barrier. New callout reads "PERMISSIBLE 3/4" CHAMFER."

Sheet 1 of 2, Side view, add 2-inch diameter lifting holes centered 32" from each end of the barrier and 15" from the top face (2 lifting holes total). Add new callout pointing to the new lifting holes. New callout reads "PERMISSIBLE 2" DIAM. LIFTING HOLE"

C-85.11

On Section B, the callout "3" EXPANDED POLYSTYRENE AROUND COLUMN (TYP.]" is revised to read "3" EXPANDED POLYSTYRENE OR POLYETHYLENE FOAM AROUND COLUMN (TYP.]"

D-3.10

Sheet 1, Typical Section, callout – "FOR WALLS WITH SINGLE SLOPE TRAFFIC BARRIER. USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-3.15" is revised to read; "FOR WALLS WITH SINGLE SLOPE TRAFFIC BARRIER, SEE CONTRACT PLANS"

Sheet 1, Typical Section, callout – “FOR WALLS WITH F-SHAPE TRAFFIC BARRIER. USE THE DETAILS ABOVE THE MATCH LINE ON STANDARD PLAN D-3.16” is revised to read; “FOR WALLS WITH F-SHAPE TRAFFIC BARRIER, SEE CONTRACT PLANS”

D-3.11

Sheet 1, Typical Section, callout – ““B” BRIDGE APPROACH SLAB (SEE BRIDGE PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE STANDARD PLANS D-3.15 OR D-3.16” is revised to read; “B” BRIDGE APPROACH SLAB OR MOMENT SLAB (SEE CONTRACT PLANS)

Sheet 1, Typical Section, callout – “TYPICAL BARRIER ON BRIDGE APPROACH SLAB (SEE BRIDGE PLANS) OR PERMANENT GEOSYNTHETIC WALL BARRIER ~ SEE STANDARD PLANS D-3.15 OR D-3.16” is revised to read; “TYPICAL BARRIER ON BRIDGE APPROACH SLAB OR MOMENT SLAB (SEE CONTRACT PLANS)

D-10.10

Wall Type 1 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT Bridge Design Manual (BDM) and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.15

Wall Type 2 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.30

Wall Type 5 may be used in all cases.

D-10.35

Wall Type 6 may be used in all cases.

D-10.40

Wall Type 7 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the 11/3/15 Bridge Design memorandum.

D-10.45

Wall Type 8 may be used if no traffic barrier is attached on top of the wall. Walls with traffic barriers attached on top of the wall are considered non-standard and shall be designed in accordance with the current WSDOT BDM and the revisions stated in the revisions stated in the 11/3/15 Bridge Design memorandum.

F-10.18

Note 2, “Region Traffic engineer approval is needed to install a truck apron lower than 3”.” - DELETED

J-10.10

Sheet 4 of 6, “Foundation Size Reference Table”, PAD WIDTH column, Type 33xD=6’ – 3” is revised to read: 7’ – 3”. Type 342LX / NEMA P44=5’ – 10” is revised to read: 6’ – 10”

Sheet 5 of 6, Plan View, "FOR EXAMPLE PAD SHOWN HERE:, "first bullet" item, "-SPACE BETWEEN TYPE B MOD. CABINET AND 33x CABINET IS 6" (IN)" IS REVISED TO READ: "SPACE BETWEEN TYPE B MOD. CABINET (BACK OF ALL CHANNEL STEEL) AND 33x CABINET IS 6" (IN) (CHANNEL STEEL ADDS ABOUT 5" (IN)"

J-10.16

Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14

J-10.17

Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14

J-10.18

Key Note 1, Standard Plan J-10.30 revised to Standard Plan J-10.14

J-20.26

Add Note 1, "1. One accessible pedestrian pushbutton station per pedestrian pushbutton post."

J-20.16

View A, callout, was – LOCK NIPPLE, is revised to read; CHASE NIPPLE

J-21.10

Sheet 1 of 2, Elevation View, Round Concrete Foundation Detail, callout – "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY" IS REVISED TO READ: "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ FOUR REQ'D. PER ASSEMBLY"

Sheet 1 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 1 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Round), add dimension depicting the distance from the top of the foundation to find 2 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 2 # 4 reinf. Bar.

Sheet 2 of 2, Elevation view (Square), add dimension depicting the distance from the top of the foundation to find 1 #4 reinforcing bar shown, to read; 3" CLR. Delete "(TYP.)" from the 2 ½" CLR. dimension, depicting the distance from the bottom of the foundation to find 1 # 4 reinf. Bar.

Detail F, callout, "Heavy Hex Clamping Bolt (TYP.) ~ ¾" (IN) Diam. Torque Clamping Bolts (see Note 3)" is revised to read; "Heavy Hex Clamping Bolt (TYP.) ~ ¾" (IN) Diam. Torque Clamping Bolts (see Note 1)"

Detail F, callout, "¾" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Four Required (See Note 4)" is revised to read; "¾" (IN) x 2' – 6" Anchor Bolt (TYP.) ~ Three Required (See Note 2)"

J-21.15

Partial View, callout, was – LOCK NIPPLE ~ 1 ½" DIAM., is revised to read; CHASE NIPPLE ~ 1 ½" (IN) DIAM.

J-21.16

Detail A, callout, was – LOCKNIPPLE, is revised to read; CHASE NIPPLE

J-22.15

Ramp Meter Signal Standard, elevation, dimension 4’ - 6” is revised to read; 6’-0”
(2x) Detail A, callout, was – LOCK NIPPLE ~ 1 ½” DIAM. is revised to read; CHASE NIPPLE ~ 1 ½” (IN) DIAM.

J-40.10

Sheet 2 of 2, Detail F, callout, “12 – 13 x 1 ½” S.S. PENTA HEAD BOLT AND 12” S. S. FLAT WASHER” is revised to read; “12 – 13 x 1 ½” S.S. PENTA HEAD BOLT AND 1/2” (IN) S. S. FLAT WASHER”

J-40.36

Note 1, second sentence; “Finish shall be # 2B for backbox and # 4 for the cover.” Is revised to read; “Finish shall be # 2B for barrier box and HRAP (Hot Rolled Annealed and Pickled) for the cover.

J-40.37

Note 1, second sentence; “Finish shall be # 2B for backbox and # 4 for the cover.” Is revised to read; “Finish shall be # 2B for barrier box and HRAP (Hot Rolled Annealed and Pickled) for the cover.

J-75.20

Key Notes, note 16, second bullet point, was: “1/2” (IN) x 0.45” (IN) Stainless Steel Bands”, add the following to the end of the note: “Alternate: Stainless steel cable with stainless steel ends, nuts, bolts, and washers may be used in place of stainless steel bands and associated hardware.”

J-75.55

Notes, Note A1, Revise reference, was – G-90.29, should be – G-90.20.

L-5.10

Sheet 1, General Note 8, third sentence – was; “For traffic barrier having no deflection distance, the fence shall be placed a minimum horizontal distance of 3’ – 6’ as measured form the top front face of the barrier.” Is revised to read; “For traffic barrier having no deflection distance, the fence shall be placed a minimum horizontal distance of 2’ – 6” as measured form the top front face of the barrier.”

Sheet 2, Reinforcing Steel Bending Diagram, (mark) B detail, callout – “128 deg.” is revised to read: “123 deg.”, callout – “51 deg.” is revised to read: “57 deg.”

M-40.10

Guide Post Type ~ Reflective Sheeting Applications Table, remove reference - “(SEE NOTE 5)”

The following are the Standard Plan numbers applicable at the time this project was advertised. The date shown with each plan number is the publication approval date shown in the lower right-hand corner of that plan. Standard Plans showing different dates shall not be used in this contract.

A-10.10-008/7/07	A-30.35-0010/12/07	A-50.10-018/17/21
A-10.20-0010/5/07	A-40.00-017/6/22	A-50.40-018/17/21
A-10.30-0010/5/07	A-40.10-047/31/19	A-60.10-0312/23/14
A-20.10-008/31/07	A-40.15-008/11/09	A-60.20-0312/23/14

A-30.10-0011/8/07	A-40.20-041/18/17	A-60.30-016/28/18
A-30.30-016/16/11	A-40.50-03 9/12/23	A-60.40-008/31/07
B-5.20-039/9/20	B-30.50-03 2/27/18	B-75.20-03 8/17/21
B-5.40-021/26/17	B-30.60-00 9/9/20	B-75.50-02 3/15/22
B-5.60-021/26/17	B-30.40-03 2/27/18	B-70.60-01 1/26/17
B-10.20-038/23/23	B-30.70-04 2/27/18	B-75.60-00 6/8/06
B-10.40-028/17/21	B-30.80-01 2/27/18	B-80.20-00 6/8/06
B-10.70-038/23/23	B-30.90-02 1/26/17	B-80.40-00 6/1/06
B-15.20-012/7/12	B-35.20-00 6/8/06	B-85.10-01 6/10/08
B-15.40-012/7/12	B-35.40-01 8/23/23	B-85.20-00 6/1/06
B-15.60-021/26/17	B-40.20-00 6/1/06	B-85.30-00 6/1/06
B-20.20-023/16/12	B-40.40-02 1/26/17	B-85.40-00 6/8/06
B-20.40-042/27/18	B-45.20-01 7/11/17	B-85.50-01 6/10/08
B-20.60-033/15/12	B-45.40-01 7/21/17	B-90.10-00 6/8/06
B-25.20-022/27/18	B-50.20-00 6/1/06	B-90.20-00 6/8/06
B-25.60-038/23/23	B-55.20-03 8/17/21	B-90.30-00 6/8/06
B-30.05-009/9/20	B-60.20-02 9/9/20	B-90.40-01 1/26/17
B-30.10-032/27/18	B-60.40-01 2/27/18	B-90.50-00 6/8/06
B-30.15-002/27/18	B-65.20-01 4/26/12	B-95.20-02 8/17/21
B-30.20-042/27/18	B-65.40-00 6/1/06	B-95.40-01 6/28/18
B-30.30-032/27/18	B-70.20-01 3/15/22	
C-1.....9/8/22	C-22.40-10 10/16/23	C-60.70-01 9/8/22
C-1b.....10/12/23	C-22.45-06 9/8/22	C-60.80-01 9/8/22
C-1d.....10/31/03	C-23.70-01 10/16/23	C-70.15-00 8/17/21
C-2c8/12/19	C.24.10-04 10/16/23	C-70.10-04 10/16/23
C-4f.....8/12/19	C-24.15-00 3/15/22	C-75.10-02 9/16/20
C-6a.....9/8/22	C-25.20-07 8/20/21	C-75.20-03 8/20/21
C-79/8/22	C-25.22-06 8/20/21	C-75.30-03 8/20/21
C-7a.....9/8/22	C-25.26-05 8/20/21	C-80.10-03 10/16/23
C-20.10-0910/12/23	C-25.30-01 8/20/21	C-80.20-01 6/11/14
C-20.14-059/8/22	C-25.80-05 8/12/19	C-80.30-02 8/20/21
C-20.15-0310/12/23	C-60.10-03 10/16/23	C-80.40-01 6/11/14
C-20.18-049/8/22	C-60.15-00 8/17/21	C-85.10-00 4/8/12
C-20.40-1010/12/23	C-60.20-01 9/8/22	C-85.11-01 9/16/20
C-20.41-048/22/22	C-60.30-01 8/17/21	C-85.15-03 10/17/23
C-20.42-0610/12/23	C-60.40-00 8/17/21	C-85-18-03 9/8/22
C-20.43-008/22/22	C-60.45-00 8/17/21	C-81.10-00 9/12/23
C-20.45.03.....9/8/22	C-60.50-00 8/17/21	C-81.15-00 9/12/23
C-22.16-0810/17/23	C-60.60-00 8/17/21	
D-2.36-036/11/14	D-3.11-03 6/11/14	D-10.25-01 8/7/19
D-2.46-028/13/21	D-4 12/11/98	D-10.30-00 7/8/08
D-2.84-0011/10/05	D-6 6/19/98	D-10.35-00 7/8/08
D-2.92-014/26/22	D-10.10-01 12/2/08	D-10.40-01 12/2/08

D-3.09-005/17/12	D-10.15-01 12/2/08	D-10.45-01 12/2/08
D-3.10-015/29/13	D-10.20-01 8/7/19	D-20.10-00 10/9/23
E-12/21/07	E-48/27/03	E-20.10-00 9/12/23
E-25/29/98	E-4a8/27/03	E-20.20-00 10/4/23
F-10.12-049/24/20	F-10.62-02 4/22/14	F-40.15-04 9/25/20
F-10.16-0012/20/06	F-10.64-03 4/22/14	F-40.16-03 6/29/16
F-10.18-033/28/22	F-30.10-04 9/25/20	F-45.10-04 10/16/23
F-10.40-049/24/20	F-40.12-03 6/29/16	F-80.10-04 7/15/16
F-10.42-001/23/07	F-40.14-03 6/29/16	
G-10.10-009/20/07	G-24.50-058/7/19	G-90.10-03 7/11/17
G-20.10-038/20/21	G-24.60-05 6/28/18	G-90.20-05 7/11/17
G-22.10-046/28/18	G-25.10-05 9/16/20	G-90.30-04 7/11/17
G-24.10-0011/8/07	G-26.10-00 7/31/19	G-95.10-02 6/28/18
G-24.20-01 2/7/12	G-30.10-04 6/23/15	G-95.20-03 6/28/18
G-24.30-026/28/18	G-50.10-03 6/28/18	G-95.30-03 6/28/18
G-24.40-076/28/18		
H-10.10-00 7/3/08	H-32.10-009/20/07	H-70.10-02 8/17/21
H-10.15-007/3/08	H-60.10-01 7/3/08	H-70.20-02 8/17/21
H-30.10-0010/12/07	H-60.20-01 7/3/08	
I-10.10-018/11/09	I-30.20-00 9/20/07	I-40.20-00 9/20/07
I-30.10-023/22/13	I-30.30-02 6/12/19	I-50.20-02 7/6/22
I-30.15-023/22/13	I-30.40-02 6/12/19	I-60.10-01 6/10/13
I-30.16-017/11/19	I-30.60-02 6/12/19	I-60.20-01 6/10/13
I-30.17-016/12/19	I-40.10-00 9/20/07	I-80.10-02 7/15/16
J-05.50-008/30/22	J-26.20-016/28/18	J-50.10-01 7/31/19
J-107/18/97	J-27.10-01 7/21/16	J-50.11-02 7/31/19
J-10.10-04 9/16/20	J-27.15-00 3/15/12	J-50.12-02 8/7/19
J-10.12-00 9/16/20	J-28.01-00 8/30/22	J-50.13-01 8/30/22
J-10.14-00 9/16/20	J-28.10-02 8/7/19	J-50.15-01 7/21/17
J-10.15-01 6/11/14	J-28.22-00 8/07/07	J-50.16-01 3/22/13
J-10.16-02 8/18/21	J-28.24-02 9/16/20	J-50.18-00 8/7/19
J-10.17-02 8/18/21	J-28.26-01 12/02/08	J-50.19-00 8/7/19
J-10.18-02 8/18/21	J-28.30-03 6/11/14	J-50.20-00 6/3/11
J-10.20-04 8/18/21	J-28.40-02 6/11/14	J-50.25-00 6/3/11
J-10.21-02 8/18/21	J-28.42-01 6/11/14	J-50.30-00 6/3/11
J-10.22-0310/4/23	J-28.43-01 6/28/18	J-60.05-01 7/21/16
J-10.25-00 7/11/17	J-28.45-03 7/21/16	J-60.11-00 5/20/13
J-10.26-00 8/30/22	J-28.50-03 7/21/16	J-60.12-00 5/20/13
J-12.15-00 6/28/18	J-28.60-03 8/27/21	J-60.13-00 6/16/10
J-12.16-00 6/28/18	J-28.70-04 8/30/22	J-60.14-01 7/31/19

J-15.10-016/11/14	J-29.10-028/26/22	J-75.10-027/10/15
J-15.15-027/10/15	J-29.15-017/21/16	J-75.20-017/10/15
J-20.01-008/30/22	J-29.16-027/21/16	J-75.30-027/10/15
J-20.10-0510/4/23	J-30.10-018/26/22	J-75.50-008/30/22
J-20.11-037/31/19	J-40.01-008/30/22	J-75.55-008/30/22
J-20.15-036/30/14	J-40.05-007/21/16	J-80.05-008/30/22
J-20.16-026/30/14	J-40.10-044/28/16	J-80.10-018/18/21
J-20.20-025/20/13	J-40.20-034/28/16	J-80.12-008/18/21
J-20.26-017/12/12	J-40.30-044/28/16	J-80.15-006/28/18
J-21.10-046/30/14	J-40.35-015/29/13	J-81.10-028/18/21
J-21.15-016/10/13	J-40.36-027/21/17	J-81.12-009/3/21
J-21.16-016/10/13	J-40.37-027/21/17	J-84.05-008/30/22
J-21.17-016/10/13	J-40.38-015/20/13	J-86.10-006/28/18
J-21.20-016/10/13	J-40.39-005/20/13	J-90.10-036/28/18
J-22.15-027/10/15	J-40.40-027/31/19	J-90.20-036/28/18
J-22.16-037/10/15	J-45.36-007/21/17	J-90.21-026/28/18
J-26.10-037/21/16	J-50.05-007/21/17	J-90.50-006/28/18
J-26.15-015/17/12		
K-70.20-016/1/16	K-80.32-008/17/21	K-80.35-019/16/20
K-80.10-029/25/20	K-80.34-008/17/21	K-80.37-019/16/20
L-5.10-017/17/23	L-20.10-037/14/15	L-40.20-026/21/12
L-5.15-009/19/22	L-30.10-026/11/14	L-70.10-015/21/08
L-10.10-026/21/12	L-40.15-016/16/11	L-70.20-015/21/08
M-1.20-049/25/20	M-9.60-002/10/09	M-24.66-007/11/17
M-1.40-039/25/20	M-11.10-048/2/22	M-40.10-0410/17/23
M-1.60-039/25/20	M-12.10-038/2/22	M-40.20-0010/12/07
M-1.80-036/3/11	M-15.10-027/17/23	M-40.30-017/11/17
M-2.20-037/10/15	M-17.10-027/3/08	M-40.40-009/20/07
M-2.21-007/10/15	M-20.10-048/2/22	M-40.50-009/20/07
M-3.10-049/25/20	M-20.20-024/20/15	M-40.60-009/20/07
M-3.20-048/2/22	M-20.30-042/29/16	M-60.10-016/3/11
M-3.30-049/25/20	M-20.40-036/24/14	M-60.20-038/17/21
M-3.40-049/25/20	M-20.50-026/3/11	M-65.10-038/17/21
M-3.50-039/25/20	M-24.20-024/20/15	M-80.10-016/3/11
M-5.10-039/25/20	M-24.40-024/20/15	M-80.20-006/10/08
M-7.50-011/30/07	M-24.60-046/24/14	M-80.30-006/10/08
M-9.50-026/24/14	M-24.65-007/11/17	

PREVAILING MINIMUM HOURLY WAGE RATES

State of Washington
 Department of Labor & Industries
 Prevailing Wage Section - Telephone 360-902-5335
 PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 4/1/2024

<u>County</u>	<u>Trade</u>	<u>Job Classification</u>	<u>Wage</u>	<u>Holiday</u>	<u>Overtime</u>	<u>Note</u>	<u>*Risk Class</u>
Cowlitz	<u>Asbestos Abatement Workers</u>	Journey Level	\$54.85	<u>6Z</u>	<u>1M</u>		<u>View</u>
Cowlitz	<u>Boilermakers</u>	Journey Level	\$74.29	<u>5N</u>	<u>1C</u>		<u>View</u>
Cowlitz	<u>Brick Mason</u>	Brick Finisher	\$45.83	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Brick Mason</u>	Caulker-Pointer-Cleaner	\$71.24	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Brick Mason</u>	Journey Level	\$71.24	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Building Service Employees</u>	Janitor	\$16.28		<u>1</u>		<u>View</u>
Cowlitz	<u>Building Service Employees</u>	Shampooer	\$16.28		<u>1</u>		<u>View</u>
Cowlitz	<u>Building Service Employees</u>	Waxer	\$16.28		<u>1</u>		<u>View</u>
Cowlitz	<u>Building Service Employees</u>	Window Cleaner	\$16.28		<u>1</u>		<u>View</u>
Cowlitz	<u>Cabinet Makers (In Shop)</u>	Journey Level	\$16.28		<u>1</u>		<u>View</u>
Cowlitz	<u>Carpenters</u>	Acoustical Worker	\$65.45	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Carpenters</u>	Bridge & Highway Carpenter	\$66.05	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Carpenters</u>	Floor Layer And Floor Finishers	\$65.45	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Carpenters</u>	Journey Level	\$65.45	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Carpenters</u>	Scaffold/Shoring Erecting & Dismantling	\$65.45	<u>7E</u>	<u>4X</u>	<u>8N</u>	<u>View</u>
Cowlitz	<u>Carpenters</u>	Stationary Power Saw	\$65.45	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Application of all Composition Mastic	\$72.87	<u>15J</u>	<u>4U</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Application of all Epoxy Material	\$72.37	<u>15J</u>	<u>4U</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Application of all Plastic Material	\$72.87	<u>15J</u>	<u>4U</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Application of Sealing Compound	\$72.37	<u>15J</u>	<u>4U</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Application of Underlayment	\$72.87	<u>15J</u>	<u>4U</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Building General	\$72.37	<u>15J</u>	<u>4U</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Composition or Kalman Floors	\$72.87	<u>15J</u>	<u>4U</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Concrete Paving	\$72.37	<u>15J</u>	<u>4U</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Curb & Gutter Machine	\$72.87	<u>15J</u>	<u>4U</u>		<u>View</u>
Cowlitz	<u>Cement Masons</u>	Curb & Gutter, Sidewalks	\$72.37	<u>15J</u>	<u>4U</u>		<u>View</u>

Cowlitz	Cement Masons	Curing Concrete	\$72.37	15J	4U	View
Cowlitz	Cement Masons	Finish Colored Concrete	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Floor Grinding	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Floor Grinding/Polisher	\$72.37	15J	4U	View
Cowlitz	Cement Masons	Green Concrete Saw, self-powered	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Grouting of all Plates	\$72.37	15J	4U	View
Cowlitz	Cement Masons	Grouting of all Tilt-up Panels	\$72.37	15J	4U	View
Cowlitz	Cement Masons	Guniting Nozzleman	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Hand Powered Grinder	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Journey Level	\$72.37	15J	4U	View
Cowlitz	Cement Masons	Patching Concrete	\$72.37	15J	4U	View
Cowlitz	Cement Masons	Pneumatic Power Tools	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Power Chipping & Brushing	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Sand Blasting Architectural Finish	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Screed & Rodding Machine	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Spackling or Skim Coat Concrete	\$72.37	15J	4U	View
Cowlitz	Cement Masons	Troweling Machine Operator	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Troweling Machine Operator on Colored Slabs	\$72.87	15J	4U	View
Cowlitz	Cement Masons	Tunnel Workers	\$72.87	15J	4U	View
Cowlitz	Divers & Tenders	Bell/Vehicle/Submersible Operator (not under pressure)	\$117.21	5A	1B	View
Cowlitz	Divers & Tenders	Dive Master	\$85.02	5A	1B	View
Cowlitz	Divers & Tenders	Dive Supervisor	\$85.02	5A	1B	View
Cowlitz	Divers & Tenders	Diver	\$117.21	5A	1B	8V View
Cowlitz	Divers & Tenders	Diver On Standby	\$80.52	5A	1B	View
Cowlitz	Divers & Tenders	Diver Tender	\$73.21	5A	1B	View
Cowlitz	Divers & Tenders	Manifold Operator	\$73.21	5A	1B	View
Cowlitz	Divers & Tenders	Manifold Operator Mixed Gas	\$77.71	5A	1B	View
Cowlitz	Divers & Tenders	Remote Operated Vehicle Operator/Technician	\$73.21	5A	1B	View
Cowlitz	Divers & Tenders	Remote Operated Vehicle Tender	\$68.34	5A	1B	View
Cowlitz	Dredge Workers	Assistant Engineer	\$70.01	5D	1N	8D View
Cowlitz	Dredge Workers	Assistant Mate (deckhand)	\$64.65	5D	1N	8D View
Cowlitz	Dredge Workers	Boatman (licensed)	\$70.01	5D	1N	8D View
Cowlitz	Dredge Workers	Fill Equipment Operator	\$67.35	5D	1N	8D View
Cowlitz	Dredge Workers	Fireman	\$68.52	5D	1N	8D View
Cowlitz	Dredge Workers	Leverman (hydraulic & Clamshell)	\$73.17	5D	1N	8D View
Cowlitz	Dredge Workers	Mate	\$70.01	5D	1N	8D View
Cowlitz	Dredge Workers	Oiler	\$64.65	5D	1N	8D View
Cowlitz	Dredge Workers	Tenderman (boatman Attending Dredge Plant)	\$68.52	5D	1N	8D View
Cowlitz	Dredge Workers	Welder	\$70.01	5D	1N	8D View

Cowlitz	Drywall Applicator	Journey Level	\$65.45	5A	1B	View
Cowlitz	Drywall Tapers	Journey Level	\$63.70	7E	1E	View
Cowlitz	Electrical Fixture Maintenance Workers	Journey Level	\$25.23		1	View
Cowlitz	Electricians - Inside	Journey Level	\$91.09	5A	1B	View
Cowlitz	Electricians - Inside	Journeyman, Welder	\$97.32	5A	1B	View
Cowlitz	Electricians - Motor Shop	Craftsman	\$16.28		1	View
Cowlitz	Electricians - Motor Shop	Journey Level	\$16.28		1	View
Cowlitz	Electricians - Powerline Construction	Cable Splicer	\$93.00	5A	4D	View
Cowlitz	Electricians - Powerline Construction	Certified Line Welder	\$85.42	5A	4D	View
Cowlitz	Electricians - Powerline Construction	Groundperson	\$55.27	5A	4D	View
Cowlitz	Electricians - Powerline Construction	Heavy Line Equipment Operator	\$85.42	5A	4D	View
Cowlitz	Electricians - Powerline Construction	Journey Level Lineperson	\$85.42	5A	4D	View
Cowlitz	Electricians - Powerline Construction	Line Equipment Operator	\$73.35	5A	4D	View
Cowlitz	Electricians - Powerline Construction	Meter Installer	\$55.27	5A	4D	8W View
Cowlitz	Electricians - Powerline Construction	Pole Sprayer	\$85.42	5A	4D	View
Cowlitz	Electricians - Powerline Construction	Powderperson	\$63.50	5A	4D	View
Cowlitz	Electronic Technicians	Journey Level	\$74.89	5A	1B	View
Cowlitz	Elevator Constructors	Mechanic	\$111.71	5N	4A	View
Cowlitz	Elevator Constructors	Mechanic In Charge	\$120.87	5N	4A	View
Cowlitz	Fabricated Precast Concrete Products	Journey Level	\$16.28		1	View
Cowlitz	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$16.28		1	View
Cowlitz	Fence Erectors	Fence Erector	\$46.90	6Z	1M	View
Cowlitz	Fence Erectors	Fence Laborer	\$46.90	6Z	1M	View
Cowlitz	Flaggers	Journey Level	\$50.12	6Z	1M	View
Cowlitz	Glaziers	Journey Level	\$73.97	7I	11K	View
Cowlitz	Heat & Frost Insulators And Asbestos Workers	Mechanic	\$83.04	5N	1F	View
Cowlitz	Heating Equipment Mechanics	Journey Level	\$96.42	7F	1E	View
Cowlitz	Hod Carriers & Mason Tenders	Journey Level	\$58.20	5D	1B	View
Cowlitz	Industrial Power Vacuum Cleaner	Journey Level	\$16.28		1	View
Cowlitz	Inland Boatmen	Boat Operator	\$61.41	5B	1K	View
Cowlitz	Inland Boatmen	Cook	\$56.48	5B	1K	View
Cowlitz	Inland Boatmen	Deckhand	\$57.48	5B	1K	View
Cowlitz	Inland Boatmen	Deckhand Engineer	\$58.81	5B	1K	View
Cowlitz	Inland Boatmen	Launch Operator	\$58.89	5B	1K	View
Cowlitz	Inland Boatmen	Mate	\$57.31	5B	1K	View

Cowlitz	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	\$16.28		1		View
Cowlitz	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$16.28		1		View
Cowlitz	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	\$16.28		1		View
Cowlitz	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	\$16.28		1		View
Cowlitz	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	\$16.28		1		View
Cowlitz	Insulation Applicators	Journey Level	\$65.45	5A	1B		View
Cowlitz	Ironworkers	Journey Level	\$78.11	15K	11N		View
Cowlitz	Laborers	Anchor Machines	\$54.85	6Z	1M		View
Cowlitz	Laborers	Application (including Pot Power Tender For Same), Applying Protective Material By Hand Or Nozzle On Utility Lines Or Storage Tanks On Project	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Asbestos Removal	\$54.85	6Z	1M		View
Cowlitz	Laborers	Asphalt Plant Laborers	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Asphalt Raker	\$55.36	6Z	1M		View
Cowlitz	Laborers	Asphalt Spreaders	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Ballast Regulators	\$54.85	6Z	1M		View
Cowlitz	Laborers	Batch Weighman	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Bit Grinder	\$54.85	6Z	1M		View
Cowlitz	Laborers	Brick Pavers (Dry)	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Broomers	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Brush (power Saw)	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Brush Burners And Cutters	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Burners	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Car And Truck Loaders	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Carpenter Tender	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Change-house Man Or Dry Shack Man	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Chipping Guns	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Choker Setters	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Choker Splicer	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Chuck Tender	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Clary Power Spreader And Similar Types	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Clean Up Laborers	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Clean-up Nozzleman-green-cutter (concrete Rock, Etc.)	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Concrete Crew, Bull Gang	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Concrete Laborers	\$54.24	6Z	1M	8S	View

Cowlitz	Laborers	Concrete Nozzlemen	\$55.36	6Z	1M		View
Cowlitz	Laborers	Concrete Power Buggyman	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Concrete Saw Operator	\$54.85	6Z	1M		View
Cowlitz	Laborers	Concrete Saw Operator (walls)	\$55.36	6Z	1M		View
Cowlitz	Laborers	Confined Space / Hole Watch	\$50.12	6Z	1M		View
Cowlitz	Laborers	Crusher Feeder	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Curing, Concrete	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Demolition And Wrecking Charred Materials	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Demolition, Wrecking And Moving Laborers	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Drill Doctor	\$54.85	6Z	1M		View
Cowlitz	Laborers	Drill Operators, Air Tracks, Cat Drills, Wagon Drills, Rubber-mounted Drills And Other Similar Types, Including At Crusher Plants	\$55.36	6Z	1M		View
Cowlitz	Laborers	Dry Pack Machine	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Dry Stack Walls	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Dumpers, Road Oiling Crew	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Dumpmen (for Grading Crew)	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Elevator Feeders	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Erosion Control Specialist	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Final Clean-up	\$50.12	6Z	1M		View
Cowlitz	Laborers	Fine Graders	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Fire Watch	\$50.12	6Z	1M		View
Cowlitz	Laborers	Form Strippers (not Swinging Stages)	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	General Laborer	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Grade Checker	\$55.36	6Z	1M		View
Cowlitz	Laborers	Guard Rail, Median Rail, Reference Post Guide Post, Right-of-way Marker	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Guniting Nozzleman	\$55.36	6Z	1M		View
Cowlitz	Laborers	Guniting Nozzleman Tender	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Guniting Or Sand Blasting Pot Tender	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Hand Placed Sand Blasting (wet)	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Handlers Or Mixers Of All Materials Of An Irritating Nature (including Cement & Lime)	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Hazardous Waste Worker	\$54.85	6Z	1M		View
Cowlitz	Laborers	High Scalers, Strippers And Drillers Covers Work In Swinging Stages, Chairs Or Belts, Under Extreme Conditions Unusual To Blasting, Barring Down, Or S	\$55.36	6Z	1M		View
Cowlitz	Laborers	Jackhammer	\$54.24	6Z	1M	8S	View

Cowlitz	Laborers	Laser Beam	\$55.36	6Z	1M		View
Cowlitz	Laborers	Laser Beam (pipe Laying) - Applicable When Employee Assigned To Move, Set Up, Align	\$55.36	6Z	1M		View
Cowlitz	Laborers	Laser Beam (tunnel) - Applicable When Employee Assigned To Move, Set Up, Align	\$55.36	6Z	1M		View
Cowlitz	Laborers	Lead Abatement	\$54.85	6Z	1M		View
Cowlitz	Laborers	Leverman Or Aggregate Spreaders (flaherty And Similar Types)	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Loading Spotters	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Loop Installation	\$55.36	6Z	1M		View
Cowlitz	Laborers	Manhole Building	\$54.85	6Z	1M		View
Cowlitz	Laborers	Material Yard Man	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Miner - Tunnel	\$55.36	6Z	1M		View
Cowlitz	Laborers	Miner - Tunnel	\$55.36	6Z	1M		View
Cowlitz	Laborers	Mold Remediation Or Removal	\$54.85	6Z	1M		View
Cowlitz	Laborers	Multiple Tampers	\$54.85	6Z	1M		View
Cowlitz	Laborers	Nippers And Timbermen	\$54.85	6Z	1M		View
Cowlitz	Laborers	Nuclear Plant Worker - Lead Shield	\$54.85	6Z	1M		View
Cowlitz	Laborers	Paving Breakers	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Pilot Car	\$50.12	6Z	1M		View
Cowlitz	Laborers	Pipe Doping & Wrapping	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Pipe Layer All Types	\$55.36	6Z	1M		View
Cowlitz	Laborers	Pittsburgh Chipper Operator Or Similar Types	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Post Hold Digger, Air, Gas Or Electric	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Pot Tender	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Powderman	\$55.36	6Z	1M		View
Cowlitz	Laborers	Powderman Tender	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Power Jacks	\$54.85	6Z	1M		View
Cowlitz	Laborers	Power Saw Operators (bucking & Falling)	\$54.85	6Z	1M		View
Cowlitz	Laborers	Pressure Washer	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Pumpcrete Nozzleman	\$55.36	6Z	1M		View
Cowlitz	Laborers	Railroad Track Laborers	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Ribbon Setter, Head	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Ribbon Setters (including Steel Forms)	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Rigger/Signal Persion	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Rip Rap Man (hand Placed)	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Rip Rap Man (head)	\$54.24	6Z	1M	8S	View
Cowlitz	Laborers	Road Pump Tender	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Sand Blasting (dry)	\$54.85	6Z	1M		View
Cowlitz	Laborers	Scaffold Tender	\$53.44	6Z	1M	8T	View
Cowlitz	Laborers	Sewer Labor	\$53.44	6Z	1M	8T	View

Cowlitz Laborers	Sewer Timbermen	\$54.85	6Z	1M		View
Cowlitz Laborers	Signalman	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Skipman	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Slopers	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Spraymen	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Stake Chaser	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Stake-setter	\$54.24	6Z	1M	8S	View
Cowlitz Laborers	Stockpiler	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Tampers	\$54.24	6Z	1M	8S	View
Cowlitz Laborers	Tie Back Shoring	\$54.24	6Z	1M	8S	View
Cowlitz Laborers	Timber Faller And Bucker (hand Labor)	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Toolroom Man (at Job Site)	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Track Liners	\$54.85	6Z	1M		View
Cowlitz Laborers	Traffic Control Laborer	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Traffic Control Supervisor	\$55.36	6Z	1M		View
Cowlitz Laborers	Tugger Operator	\$54.85	6Z	1M		View
Cowlitz Laborers	Tunnel Bullgang (above Ground)	\$55.36	6Z	1M		View
Cowlitz Laborers	Tunnel Chuck Tenders	\$55.36	6Z	1M		View
Cowlitz Laborers	Tunnel Motorman - Dinky Locomotive	\$55.36	6Z	1M		View
Cowlitz Laborers	Tunnel Muckers, Brakemen	\$55.36	6Z	1M		View
Cowlitz Laborers	Tunnel Powderman	\$55.36	6Z	1M		View
Cowlitz Laborers	Tunnel Shield Operator	\$55.36	6Z	1M		View
Cowlitz Laborers	Vibrating Screed	\$54.85	6Z	1M		View
Cowlitz Laborers	Vibrators (all Types)	\$54.85	6Z	1M		View
Cowlitz Laborers	Water Blaster	\$54.85	6Z	1M		View
Cowlitz Laborers	Weight-man-crusher (aggregate When Used)	\$53.44	6Z	1M	8T	View
Cowlitz Laborers	Welder	\$54.85	6Z	1M		View
Cowlitz Laborers - Underground Sewer & Water	General Laborer and Topman	\$55.36	6Z	1M		View
Cowlitz Laborers - Underground Sewer & Water	Pipe Layer	\$55.36	6Z	1M		View
Cowlitz Landscape Construction	Landscape Operator	\$65.93	7B	4G	8U	View
Cowlitz Landscape Construction	Landscaping or Planting Laborer	\$42.62	6Z	1M		View
Cowlitz Landscape Maintenance	Groundskeeper	\$16.28		1		View
Cowlitz Lathers	Journey Level	\$65.25	5A	1B		View
Cowlitz Marble Setters	Journey Level	\$72.24	5A	1B		View
Cowlitz Metal Fabrication (In Shop)	Fitter	\$25.33	7S	1B		View
Cowlitz Metal Fabrication (In Shop)	Machine Operator	\$25.33	7S	1B		View
Cowlitz Metal Fabrication (In Shop)	Welder	\$25.33	7S	1B		View
Cowlitz Millwright	Journey Level	\$75.38	5A	1B		View
Cowlitz Modular Buildings	Journey Level	\$16.28		1		View
Cowlitz Painters	Bridge Painter	\$56.94	7E	11L		View
Cowlitz Painters	Commercial Painter	\$48.86	7E	11L		View

Cowlitz	<u>Painters</u>	Industrial Painter	\$50.81	<u>7E</u>	<u>11L</u>	<u>9F</u>	<u>View</u>
Cowlitz	<u>Pile Driver</u>	Journey Level	\$66.39	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Plasterers</u>	Journey Level	\$63.74	<u>5H</u>	<u>1E</u>		<u>View</u>
Cowlitz	<u>Playground & Park Equipment Installers</u>	Journey Level	\$16.28		<u>1</u>		<u>View</u>
Cowlitz	<u>Plumbers & Pipefitters</u>	Journey Level	\$86.72	<u>5A</u>	<u>1G</u>		<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Air Filtration Equipment(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt Plant (any Type) (assistant Engineer Required) (group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Burner & Reconditioner (any Type), (asst To Engineer If Required)(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Extrusion Machine Operator(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Paver (screed Man Required)(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Pugmill (any Type) (group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Raker(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Roller (any Asphalt Mix)(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Roto-mill, Pavement Profiler Under 8 Ft Lateral Cut(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Roto-mill, Pavement Profiler, 8 Ft Lateral Cut & Over(group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Roto-mill, Pavement Profiler, Groundman(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Screed(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Asphalt, Truck Mounted Spreader, With Screed(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Auger Oiler(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Auto Grader Or "trimmer" (grade Checker Required) (group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Back Filling Machine (assistant To Engineer Required)(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Backhoe, Robotic, Track And Wheel Type Up To And Including 20,000 Lbs. With Any Attachments(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Band Wagons (in Conjunction With Whell Excavator)(group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Bell Man (any Type Of Comunication)(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Blade Any Type(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Blade, Robotic(group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators</u>	Boatman(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>

Cowlitz	Power Equipment Operators	Boatman, Licensed(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Bobcat, Skid Steer (< 1yd) (group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Boom Type Lifting Device, 5 Ton Capacity Or Less(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Boring Machine (asst To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Broom Self-propelled, Construction Job Site(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Bulldozer Operator, 20,000 Lbs Or Less, Or 100 Horse Or Less(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Bulldozer Operator, Over 20,000 Lbs And More Than 100 Horse Up To 70,000 Lbs(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Bulldozer Over 70,000 Lbs Up To And Including 120,000 Lbs(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Bulldozer Over 120,000 Lbs And Above(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Bulldozer Robotic Equipment(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Cable-plow (any Type)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Cableway 25 Ton & Over(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Cableway Up To 25 Ton(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Canal Trimmer (grade Oiler Required)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Cat Drill (john Henry)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Cement Pump(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Challenger(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Chip Spreading Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Chippers (asst To Engineer If Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Churn Drill & Earth Boring Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Combination Heavy Duty Mechanic-welder, When Required To Do Both(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Compactor Self Propelled Without Blade(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Compactor With Blade Self Propelled(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Compactor, Multi-engine(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Compactor, Robotic(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Compressor (any Power) 1,250 Cu Ft And Over Total Capacity(group 5)	\$65.93	7B	4G	8U	View

Cowlitz	Power Equipment Operators	Compressor Operator (any Power) Under 1,250 Cu Ft Total Capacity(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Batch Plant And/or Wet Mix (3 Units Or More) (group1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Batch Plant And/or Wet Mix Operator (1 & 2 Drums)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Batch Plant Quality Control(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Breaker (assistant To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Canal Line, Assistant To Engineer Required(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Curing Machine (riding Type)(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Diamond Head Profiler(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Paving Road Mixer(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Planer(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete Saw(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Automatic Slip Form Paver (asst To Engineer Required)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Combination Mixer & Compressor Operator, Gunite Work(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Curb Machine Mechanical Berm, Curb And/or Curb And Gutter(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Finishing Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Grout Plant(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Grouting Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Joint Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Mixer Mobile(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Mixer Single Drum Any Capacity(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Paving Machine 8' And Less (asst To Engineer Required)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Placing Boom(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Pump Truck(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Pump(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Pumpcrete Operator (any Type)(group 5)	\$65.93	7B	4G	8U	View

Cowlitz	Power Equipment Operators	Concrete, Reinforced Tank Banding Machine (asst To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Slip Form Pumps, Power Driven Hydraulic Lifting Device For Concrete Forms(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Spreader(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Telebelt(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Concrete, Treated Base Roller Operator, Oiling(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Conveyor Operator Or Assistant(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Conveyored Material Hauler(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Bridge Locomotive, Gantry And Overhead(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Carry Deck(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Chicago Boom & Similar Types(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Floating (derrick Barge) 30 Ton But Less Than 150 Ton (asst To Engineer Required) (group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Floating 150 Ton But Less Than 250 Ton (asst To Engineer Required) (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Floating 250 Ton And Over (asst To Engineer And Deckhand Required)(group 1)	\$75.72	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Floating Clamshell 3 Cu. Yds. & Over (fireman Or Diesel Electric Engineer Required)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Floating Clamshell, Dragline Etc. Operator Under 3 Cu. Yds. Or Less Than 30 Ton (diesel-electric Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Hydraulic 200 Ton Through 399 Ton (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Hydraulic 50 Ton Through 89 Ton With Luffing Or Tower Attachment(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Hydraulic 50 Ton Through 89 Tons(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Hydraulic 90 Ton Through 199 Ton With Luffing Or Tower Attachment (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Hydraulic 90 Ton Through 199 Ton(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Hydraulic Crane 200 Ton Through 300 Ton With Luffing Or Tower Attachment(group 1)	\$75.72	7B	4G	8U	View

Cowlitz	Power Equipment Operators	Crane, Hydraulic Crane 400 Ton And Over(group 1)	\$77.88	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Hydraulic Crane Over 300 Ton Through 399 Ton With Luffer Or Tower Attachment(group 1)	\$77.88	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Hydraulic Under 50 Ton(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Lattice Boom 200 Ton Through 299 Ton, With Over 200' Boom(group 1)	\$75.72	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Lattice Boom 300 Ton Through 399 Ton(group 1)	\$75.72	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Lattice Boom 300 Ton Through 399 Ton, With Over 200' Boom(group 1)	\$77.88	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Lattice Boom 50 Ton Through 89 Ton With 150' Boom Or Less(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Lattice Boom 50 Ton Through 89 Ton With Over 150' Boom	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Lattice Boom 90 Ton Through 199 Ton With 150' - 200' Boom(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Lattice Boom Under 50 Ton(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Lattice Boom, 200 Ton Through 299 Ton With 200' Boom Or Less (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Lattice Boom, 90 Ton Through 199 Ton With Over 200' Boom (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Shovel, Dragline Or Clamshell 3 Cu. Yds. But Less Than 5 Cu. Yds. (asst To Engineer Required)(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Tower Crane With 175' Tower Or Less And With Less Than 200' Jib(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Tower Crane With Over 175' Tower Or Over 200' Jib (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Tugger(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Whirley 90 Ton And Over (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crane, Whirley Under 90 Ton(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crusher Feederman(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crusher Oiler(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Crusher Plant(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Deckhand(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Derrick Operator Under 100 Ton (two Operators Required)	\$67.17	7B	4G	8U	View

		When Swing Control Is Remote From Hoist)(group 4)					
Cowlitz	Power Equipment Operators	Diesel-electric Engineer (plant Or Floating)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Directional Drill Over 20,000 Lbs Pullback(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Drill Assistant(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Drill Cat Operator(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Drill Directional Type Less Than 20,000 Lbs Pullback(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Drill Doctor And/or (bit Grinder)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Drill Mud Mixer(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Drill Oscillator(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Drill, Directinal Locator(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Driller, Percussion, Diamond, Core, Cable, Rotary & Similar Type(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Elevating Grader Operator, Tractor Towed Requiring Operator Or Grader(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Elevating Loader Operator (any Type)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Elevator To Move Personnel Or Materials(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Excavator Over 80,000 Lbs Through 130,000 Lbs(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Excavator Operator, Over 20,000 Lbs Through 80,000 Lbs(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Excavator Operator, Over 130,000 Lbs(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Fireman(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Floating, Crane 350 Ton And Over (asst To Engineer And Deckhand Required)(group 1)	\$77.88	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Fork Lift(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Fork Lift, Over 10 Ton Or Robotic(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Generator Operator(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Grade Checker(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Grade Setter / Layout From Plans(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Grade-all(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Guardrail Machines, I.e. Punch, Auger, Etc.(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Guardrail Punch Oiler(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hammer Operator (pile Driver) (group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Heavy Duty Repairman Assistant(group 6)	\$62.71	7B	4G	8U	View

Cowlitz	Power Equipment Operators	Heavy Equipment Robotics Operator Or Mechanic(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Helicopter Hoist(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Helicopter Radioman (ground) (group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Helicopter When Used In Erecting Workcrane(group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hoist Operator, Single Drum(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hoist, 2 Drums Or More(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hoist, Stiff Leg, Guy Derrick Or Similar Type, 50 Ton And Over(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hydraulic Backhoe Track Type Up To And Including 20,000 Lbs(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hydraulic Backhoe Wheel Type (any Make)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hydraulic Pipe Press(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hydro Axe (loader Mounted Or Similar Type)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hydrographic Seeder Machine Straw, Pulp Or Seed(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Hydrostatic Pump Operator(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Internal Full Slab Vibrator Operator(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Jack Operator, Elevating Barges, Barge Operator, Self-unloading (asst To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Laser Screed(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Lattice Boom Crane 400 Ton And Over(group 1)	\$77.88	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Lime Spreader, Construction Job Site(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Loaders Operator, Front End & Overhead, 25,000 Lbs And Less Than 60,000 Lbs(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Loaders, 120,000 Lbs And Above(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Loaders, 60,000 Lbs And Less Than 120,000 Lbs(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Loaders, Rubber-tire Type, Less Than 25,000 Lbs(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Log Skidders(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Master Environmental Maintenance Mechanic(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Material Handler(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Mechanic, Heavy Duty(group 4)	\$67.17	7B	4G	8U	View

Cowlitz	Power Equipment Operators	Mixer Box (c.t.b., Dry Batch, Etc.)(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Oiler(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Parts Man (tool Room)(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Pavement Grinder And Or Grooving Machine (riding Type)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Pile Driver Operator (not Crane Type) (asst To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Pipe Bending, Cleaning, Doping And Wrapping Machines(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Pipe, Cast In Place Pipe Laying Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Plant Oiler(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Pump (any Power)(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Pump Operator, More Than 5 Pumps (any Size)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Ballast Compactor, Regulator Or Tamper Machines(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Ballast Tamper Multi-purpose(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Brakeman, Switchman, Motorman(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Car Mover(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Clip Applicator(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, High Rail Self Loader Truck(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Lo-railer(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Locomotive, 40 Ton And Over (asst To Engineer Required)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Shuttle Car Operator(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Speedswing(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Switchman(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Tamping Machine, Mechanical, Self-propelled(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rail, Track Liner(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Remote Controlled Earth Moving Equipment(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rigger(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Roller Grading (not Asphalt)(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Rubber-tired Dozers And Pushers(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Scraper All Types(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Service Oiler (greaser)(group 5)	\$65.93	7B	4G	8U	View

Cowlitz	Power Equipment Operators	Shovel, Dragline, Clamshell, 5 Yards And Over(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Side-boom(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Skip Loader, Drag Box(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Stump Grinder (loader Mounted Or Similar Type)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Surface Heater And Planer(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Sweeper Self-propelled, Construction Job Site(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tar Pot Fireman (power Agitated) Or Not(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tractor Rubber-tired, 50 Hp Flywheel & Under(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tractor, Rubber-tired Over 50 Hp Flywheel(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Trenching Machine 3 Ft Depth And Deeper (asst To The Operator If Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Trenching Machine Operator, Maximum Digging Capacity 3 Ft Depth(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Truck Crane Oiler-driver(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Truck, All Terrain Or Track Type(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Truck, Barrel Type(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Truck, Boom(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Truck, Off-road Trucks, Articulated And Non-articulated Trucks(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Truck, Offroad Trucks, Articulated And Non-articulated Trucks(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Truck, Vacuum(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Truck, Water(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tub Grinder(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tunnel Boring Machine Mechanic(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tunnel Boring Machine(group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tunnel Segment Plant(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tunnel Separation Plant(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tunnel Shaef Loader(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tunnel, Locomotive, Dinkey(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tunnel, Micro Boring Tunnel Machine(group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tunnel, Mucking Machine(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Tunnel, Power Jumbo Setting Slip Forms, Etc.(group 5)	\$65.93	7B	4G	8U	View

Cowlitz	Power Equipment Operators	Tunnel, Shield Operator(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Ultra High Pressure Water Jet Cutting Tool System Operator(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Underwater Equipment, Remote Or Otherwise(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Vacuum Blasting Machine Operator(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Water Pulls, Water Wagon(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Welder's Assistant(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Welder; Heavy Duty, Certified Or Not(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Welding Machine(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Wheel Excavation Any Size (grade Oiler Required)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators	Wire Mat Or Brooming Machine(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Air Filtration Equipment(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt Plant (any Type) (assistant Engineer Required) (group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Burner & Reconditioner (any Type), (asst To Engineer If Required)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Extrusion Machine Operator(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Paver (screed Man Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Pugmill (any Type) (group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Raker(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Roller (any Asphalt Mix)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Roto-mill, Pavement Profiler Under 8 Ft Lateral Cut(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Roto-mill, Pavement Profiler, 8 Ft Lateral Cut & Over(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Roto-mill, Pavement Profiler, Groundman(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Screed(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Asphalt, Truck Mounted Spreader, With Screed(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Auger Oiler(group 6)	\$62.71	7B	4G	8U	View

Cowlitz	Power Equipment Operators- Underground Sewer & Water	Auto Grader Or "trimmer" (grade Checker Required) (group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Back Filling Machine (assistant To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Backhoe, Robotic, Track And Wheel Type Up To And Including 20,000 Lbs. With Any Attachments(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Band Wagons (in Conjunction With Whell Excavator)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Bell Man (any Type Of Comunication)(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Blade Any Type(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Blade, Robotic(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Boatman(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Boatman, Licensed(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Bobcat, Skid Steer (< 1yd) (group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Boom Type Lifting Device, 5 Ton Capacity Or Less(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Boring Machine (asst To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Broom Self-propelled, Construction Job Site(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Bulldozer Operator, 20,000 Lbs Or Less, Or 100 Horse Or Less(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Bulldozer Operator, Over 20,000 Lbs And More Than 100 Horse Up To 70,000 Lbs(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Bulldozer Over 70,000 Lbs Up To And Including 120,000 Lbs(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Bulldozer Over 120,000 Lbs And Above(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Bulldozer Robotic Equipment(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Cable-plow (any Type)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Cableway 25 Ton & Over(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Cableway Up To 25 Ton(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Canal Trimmer (grade Oiler Required)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Cat Drill (john Henry)(group 4)	\$67.17	7B	4G	8U	View

Cowlitz	Power Equipment Operators-Underground Sewer & Water	Cement Pump(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Challenger(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Chip Spreading Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Chippers (asst To Engineer If Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Churn Drill & Earth Boring Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Combination Heavy Duty Mechanic-welder, When Required To Do Both(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Compactor Self Propelled Without Blade(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Compactor With Blade Self Propelled(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Compactor, Multi-engine(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Compactor, Robotic(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Compressor (any Power) 1,250 Cu Ft And Over Total Capacity(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Compressor Operator (any Power) Under 1,250 Cu Ft Total Capacity(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Batch Plant And/or Wet Mix (3 Units Or More) (group1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Batch Plant And/or Wet Mix Operator (1 & 2 Drums)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Batch Plant Quality Control(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Breaker (assistant To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Canal Line, Assistant To Engineer Required(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Curing Machine (riding Type)(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Diamond Head Profiler(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Paving Road Mixer(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Planer(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete Saw(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Automatic Slip Form Paver (asst To Engineer Required)(group 2)	\$71.65	7B	4G	8U	View

Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Combination Mixer & Compressor Operator, Guniting Work(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Curb Machine Mechanical Berm, Curb And/or Curb And Gutter(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Finishing Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Grout Plant(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Grouting Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Joint Machine(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Mixer Mobile(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Mixer Single Drum Any Capacity(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Paving Machine 8' And Less (asst To Engineer Required)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Placing Boom(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Pump Truck(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Pump(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Pumpcrete Operator (any Type)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Reinforced Tank Banding Machine (asst To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Slip Form Pumps, Power Driven Hydraulic Lifting Device For Concrete Forms(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Spreader(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Telebelt(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Concrete, Treated Base Roller Operator, Oiling(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Conveyor Operator Or Assistant(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Conveyed Material Hauler(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Crane, Bridge Locomotive, Gantry And Overhead(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Crane, Carry Deck(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Crane, Chicago Boom & Similar Types(group 4)	\$67.17	7B	4G	8U	View

Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Floating (derrick Barge) 30 Ton But Less Than 150 Ton (asst To Engineer Required) (group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Floating 150 Ton But Less Than 250 Ton (asst To Engineer Required) (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Floating 250 Ton And Over (asst To Engineer And Deckhand Required)(group 1)	\$75.72	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Floating Clamshell 3 Cu. Yds. & Over (fireman Or Diesel Electric Engineer Required)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Floating Clamshell, Dragline Etc. Operator Under 3 Cu. Yds. Or Less Than 30 Ton (diesel-electric Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Hydraulic 200 Ton Through 399 Ton (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Hydraulic 50 Ton Through 89 Ton With Luffing Or Tower Attachment(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Hydraulic 50 Ton Through 89 Tons(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Hydraulic 90 Ton Through 199 Ton With Luffing Or Tower Attachment (group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Hydraulic 90 Ton Through 199 Ton(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Hydraulic Crane 200 Ton Through 300 Ton With Luffing Or Tower Attachment(group 1)	\$75.72	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Hydraulic Crane 400 Ton And Over(group 1)	\$77.88	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Hydraulic Crane Over 300 Ton Through 399 Ton With Luffer Or Tower Attachment(group 1)	\$77.88	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Hydraulic Under 50 Ton(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Lattice Boom 200 Ton Through 299 Ton, With Over 200' Boom(group 1)	\$75.72	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Lattice Boom 300 Ton Through 399 Ton(group 1)	\$75.72	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Lattice Boom 300 Ton Through 399 Ton, With Over 200' Boom(group 1)	\$77.88	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Lattice Boom 50 Ton Through 89 Ton With 150' Boom Or Less(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Crane, Lattice Boom 50 Ton Through 89 Ton With Over 150'	\$71.65	7B	4G	8U	View

		Boom					
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Lattice Boom 90 Ton Through 199 Ton With 150' - 200' Boom(group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Lattice Boom Under 50 Ton(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Lattice Boom, 200 Ton Through 299 Ton With 200' Boom Or Less (group 1)	\$73.56	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Lattice Boom, 90 Ton Through 199 Ton With Over 200' Boom (group 1)	\$73.56	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Shovel, Dragline Or Clamshell 3 Cu. Yds. But Less Than 5 Cu. Yds. (asst To Engineer Required)(group 3)	\$70.50	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Tower Crane With 175' Tower Or Less And With Less Than 200' Jib(group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Tower Crane With Over 175' Tower Or Over 200' Jib (group 1)	\$73.56	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Tugger(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Whirley 90 Ton And Over (group 1)	\$73.56	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crane, Whirley Under 90 Ton(group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crusher Feederman(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crusher Oiler(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Crusher Plant(group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Deckhand(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Derrick Operator Under 100 Ton (two Operators Required When Swing Control Is Remote From Hoist)(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Diesel-electric Engineer (plant Or Floating)(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Directional Drill Over 20,000 Lbs Pullback(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Drill Assistant(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Drill Cat Operator(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Drill Directional Type Less Than 20,000 Lbs Pullback(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Drill Doctor And/or (bit Grinder)(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Drill Mud Mixer(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>

Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Drill Oscillator(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Drill, Directinal Locator(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Driller, Percussion, Diamond, Core, Cable, Rotary & Similar Type(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Elevating Grader Operator, Tractor Towed Requiring Operator Or Grader(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Elevating Loader Operator (any Type)(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Elevator To Move Personnel Or Materials(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Excavator Over 80,000 Lbs Through 130,000 Lbs(group 3)	\$70.50	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Excavator Operator, Over 20,000 Lbs Through 80,000 Lbs(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Excavator Operator, Over 130,000 Lbs(group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Fireman(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Floating, Crane 350 Ton And Over (asst To Engineer And Deckhand Required)(group 1)	\$77.88	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Fork Lift(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Fork Lift, Over 10 Ton Or Robotic(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Generator Operator(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Grade Checker(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Grade Setter / Layout From Plans(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Grade-all(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Guardrail Machines, I.e. Punch, Auger, Etc.(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Guardrail Punch Oiler(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Hammer Operator (pile Driver) (group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Heavy Duty Repairman Assistant(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Heavy Equipment Robotics Operator Or Mechanic(group 2)	\$71.65	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Helicopter Hoist(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Helicopter Radioman (ground) (group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>

Cowlitz	Power Equipment Operators- Underground Sewer & Water	Helicopter When Used In Erecting Workcrane(group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Hoist Operator, Single Drum(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Hoist, 2 Drums Or More(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Hoist, Stiff Leg, Guy Derrick Or Similar Type, 50 Ton And Over(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Hydraulic Backhoe Track Type Up To And Including 20,000 Lbs(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Hydraulic Backhoe Wheel Type (any Make)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Hydraulic Pipe Press(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Hydro Axe (loader Mounted Or Similar Type)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Hydrographic Seeder Machine Straw, Pulp Or Seed(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Hydrostatic Pump Operator(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Internal Full Slab Vibrator Operator(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Jack Operator, Elevating Barges, Barge Operator, Self-unloading (asst To Engineer Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Laser Screed(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Lattice Boom Crane 400 Ton And Over(group 1)	\$77.88	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Lime Spreader, Construction Job Site(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Loaders Operator, Front End & Overhead, 25,000 Lbs And Less Than 60,000 Lbs(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Loaders, 120,000 Lbs And Above(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Loaders, 60,000 Lbs And Less Than 120,000 Lbs(group 3)	\$70.50	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Loaders, Rubber-tire Type, Less Than 25,000 Lbs(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Log Skidders(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Master Environmental Maintenance Mechanic(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Material Handler(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Mechanic, Heavy Duty(group 4)	\$67.17	7B	4G	8U	View

Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Mixer Box (c.t.b., Dry Batch, Etc.)(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Oiler(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Parts Man (tool Room)(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Pavement Grinder And Or Grooving Machine (riding Type)(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Pile Driver Operator (not Crane Type) (asst To Engineer Required)(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Pipe Bending, Cleaning, Doping And Wrapping Machines(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Pipe, Cast In Place Pipe Laying Machine(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Plant Oiler(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Pump (any Power)(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Pump Operator, More Than 5 Pumps (any Size)(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Ballast Compactor, Regulator Or Tamper Machines(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Ballast Tamper Multi-purpose(group 4)	\$67.17	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Brakeman, Switchman, Motorman(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Car Mover(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Clip Applicator(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, High Rail Self Loader Truck(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Lo-railer(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Locomotive, 40 Ton And Over (asst To Engineer Required)(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Shuttle Car Operator(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Speedswing(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Switchman(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Tamping Machine, Mechanical, Self-propelled(group 6)	\$62.71	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Cowlitz	<u>Power Equipment Operators-Underground Sewer & Water</u>	Rail, Track Liner(group 5)	\$65.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>

Cowlitz	Power Equipment Operators- Underground Sewer & Water	Remote Controlled Earth Moving Equipment(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Rigger(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Roller Grading (not Asphalt) (group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Rubber-tired Dozers And Pushers(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Scraper All Types(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Service Oiler (greaser)(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Shovel, Dragline, Clamshell, 5 Yards And Over(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Side-boom(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Skip Loader, Drag Box(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Stump Grinder (loader Mounted Or Similar Type)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Surface Heater And Planer(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Sweeper Self-propelled, Construction Job Site(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Tar Pot Fireman (power Agitated) Or Not(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Tractor Rubber-tired, 50 Hp Flywheel & Under(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Tractor, Rubber-tired Over 50 Hp Flywheel(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Trenching Machine 3 Ft Depth And Deeper (asst To The Operator If Required)(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Trenching Machine Operator, Maximum Digging Capacity 3 Ft Depth(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler-driver(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Truck, All Terrain Or Track Type(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Truck, Barrel Type(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Truck, Boom(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Truck, Off-road Trucks, Articulated And Non-articulated Trucks(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Truck, Offroad Trucks, Articulated And Non-articulated Trucks(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators- Underground Sewer & Water	Truck, Vacuum(group 5)	\$65.93	7B	4G	8U	View

Cowlitz	Power Equipment Operators-Underground Sewer & Water	Truck, Water(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tub Grinder(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel Boring Machine Mechanic(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel Boring Machine(group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel Segment Plant(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel Separation Plant(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel Shaef Loader(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel, Locomotive, Dinkey(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel, Micro Boring Tunnel Machine(group 1)	\$73.56	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel, Mucking Machine(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel, Power Jumbo Setting Slip Forms, Etc.(group 5)	\$65.93	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Tunnel, Shield Operator(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Ultra High Pressure Water Jet Cutting Tool System Operator(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Underwater Equipment, Remote Or Otherwise(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Vacuum Blasting Machine Operator(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Water Pulls, Water Wagon(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Welder's Assistant(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Welder; Heavy Duty, Certified Or Not(group 4)	\$67.17	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Welding Machine(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Wheel Excavation Any Size (grade Oiler Required)(group 2)	\$71.65	7B	4G	8U	View
Cowlitz	Power Equipment Operators-Underground Sewer & Water	Wire Mat Or Brooming Machine(group 6)	\$62.71	7B	4G	8U	View
Cowlitz	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$57.22	5A	4A		View
Cowlitz	Power Line Clearance Tree Trimmers	Spray Person	\$54.32	5A	4A		View
Cowlitz	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$57.22	5A	4A		View
Cowlitz	Power Line Clearance Tree Trimmers	Tree Trimmer	\$51.18	5A	4A		View
Cowlitz	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$38.99	5A	4A		View

Cowlitz	<u>Refrigeration & Air Conditioning Mechanics</u>	Journey Level	\$89.21	<u>5A</u>	<u>1G</u>	View
Cowlitz	<u>Residential Brick Mason</u>	Journey Level	\$23.02		<u>1</u>	View
Cowlitz	<u>Residential Carpenters</u>	Journey Level	\$26.70		<u>1</u>	View
Cowlitz	<u>Residential Cement Masons</u>	Journey Level	\$16.28		<u>1</u>	View
Cowlitz	<u>Residential Drywall Applicators</u>	Journey Level	\$36.07		<u>1</u>	View
Cowlitz	<u>Residential Drywall Tapers</u>	Journey Level	\$16.28		<u>1</u>	View
Cowlitz	<u>Residential Electricians</u>	Journey Level	\$30.53		<u>1</u>	View
Cowlitz	<u>Residential Glaziers</u>	Journey Level	\$42.76		<u>1</u>	View
Cowlitz	<u>Residential Insulation Applicators</u>	Journey Level	\$28.53		<u>1</u>	View
Cowlitz	<u>Residential Laborers</u>	Journey Level	\$53.44	<u>6Z</u>	<u>1M</u>	<u>8T</u> View
Cowlitz	<u>Residential Marble Setters</u>	Journey Level	\$23.02		<u>1</u>	View
Cowlitz	<u>Residential Painters</u>	Journey Level	\$48.86	<u>7E</u>	<u>11L</u>	View
Cowlitz	<u>Residential Plumbers & Pipefitters</u>	Journey Level	\$51.05		<u>1</u>	View
Cowlitz	<u>Residential Refrigeration & Air Conditioning Mechanics</u>	Journey Level	\$96.42	<u>7F</u>	<u>1E</u>	View
Cowlitz	<u>Residential Sheet Metal Workers</u>	Journey Level	\$96.42	<u>7F</u>	<u>1E</u>	View
Cowlitz	<u>Residential Soft Floor Layers</u>	Journey Level	\$58.78	<u>7E</u>	<u>11Q</u>	View
Cowlitz	<u>Residential Sprinkler Fitters (Fire Protection)</u>	Journey Level	\$41.11		<u>1</u>	View
Cowlitz	<u>Residential Stone Masons</u>	Journey Level	\$23.02		<u>1</u>	View
Cowlitz	<u>Residential Terrazzo Workers</u>	Journey Level	\$16.28		<u>1</u>	View
Cowlitz	<u>Residential Terrazzo/Tile Finishers</u>	Journey Level	\$36.64		<u>1</u>	View
Cowlitz	<u>Residential Tile Setters</u>	Journey Level	\$16.28		<u>1</u>	View
Cowlitz	<u>Roofers</u>	Journey Level	\$62.70	<u>5A</u>	<u>3H</u>	View
Cowlitz	<u>Roofers</u>	Using Irritable Bituminous Materials	\$65.70	<u>5A</u>	<u>3H</u>	View
Cowlitz	<u>Sheet Metal Workers</u>	Journey Level (Field or Shop)	\$96.42	<u>7F</u>	<u>1E</u>	View
Cowlitz	<u>Shipbuilding & Ship Repair</u>	New Construction Heat & Frost Insulator	\$83.04	<u>5N</u>	<u>1F</u>	View
Cowlitz	<u>Shipbuilding & Ship Repair</u>	Ship Repair Heat & Frost Insulator	\$83.04	<u>5N</u>	<u>1F</u>	View
Cowlitz	<u>Sign Makers & Installers (Electrical)</u>	Journey Level	\$16.88		<u>1</u>	View
Cowlitz	<u>Sign Makers & Installers (Non-Electrical)</u>	Journey Level	\$16.28		<u>1</u>	View
Cowlitz	<u>Soft Floor Layers</u>	Journey Level	\$64.71	<u>15J</u>	<u>4C</u>	View
Cowlitz	<u>Solar Controls For Windows</u>	Journey Level	\$16.28		<u>1</u>	View
Cowlitz	<u>Sprinkler Fitters (Fire Protection)</u>	Journey Level	\$73.15	<u>7J</u>	<u>1R</u>	View
Cowlitz	<u>Stage Rigging Mechanics (Non Structural)</u>	Journey Level	\$16.28		<u>1</u>	View
Cowlitz	<u>Stone Masons</u>	Journey Level	\$71.24	<u>5A</u>	<u>1B</u>	View
Cowlitz	<u>Street And Parking Lot Sweeper Workers</u>	Journey Level	\$16.28		<u>1</u>	View
Cowlitz	<u>Surveyors</u>	Chain Person	\$62.71	<u>7B</u>	<u>1B</u>	<u>9H</u> View
Cowlitz	<u>Surveyors</u>	Instrument Person	\$65.93	<u>7B</u>	<u>1B</u>	<u>9H</u> View

Cowlitz	<u>Surveyors</u>	Party Chief	\$71.65	<u>7B</u>	<u>1B</u>	<u>9H</u>	<u>View</u>
Cowlitz	<u>Telecommunication Technicians</u>	Journey Level	\$74.89	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Telephone Line Construction - Outside</u>	Cable Splicer	\$40.36	<u>5A</u>	<u>2B</u>		<u>View</u>
Cowlitz	<u>Telephone Line Construction - Outside</u>	Hole Digger/Ground Person	\$26.92	<u>5A</u>	<u>2B</u>		<u>View</u>
Cowlitz	<u>Telephone Line Construction - Outside</u>	Telephone Equipment Operator (Light)	\$33.74	<u>5A</u>	<u>2B</u>		<u>View</u>
Cowlitz	<u>Telephone Line Construction - Outside</u>	Telephone Lineperson	\$38.15	<u>5A</u>	<u>2B</u>		<u>View</u>
Cowlitz	<u>Terrazzo Workers</u>	Journey Level	\$61.27	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Tile Setters</u>	Journey Level	\$61.27	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Tile, Marble & Terrazzo Finishers</u>	Finishers	\$45.70	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Traffic Control Stripers</u>	Journey Level	\$85.52	<u>15N</u>	<u>1K</u>		<u>View</u>
Cowlitz	<u>Truck Drivers</u>	Asphalt Mix Over 10 Yards	\$49.39	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Truck Drivers</u>	Asphalt Mix To 10 Yards	\$49.24	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Truck Drivers</u>	Dump Truck	\$49.24	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Truck Drivers</u>	Dump Truck And Trailer	\$49.39	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Truck Drivers</u>	Other Trucks	\$49.39	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Truck Drivers - Ready Mix</u>	Transit Mix 5 cubic yards and under	\$49.24	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Truck Drivers - Ready Mix</u>	Transit Mix over 11 cubic yards up to 15 cubic yards	\$49.85	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Truck Drivers - Ready Mix</u>	Transit Mix over 5 cubic yards up to 7 cubic yards	\$49.39	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Truck Drivers - Ready Mix</u>	Transit Mix Over 7 cubic yards up to 11 cubic yards	\$49.54	<u>5A</u>	<u>1B</u>		<u>View</u>
Cowlitz	<u>Well Drillers & Irrigation Pump Installers</u>	Irrigation Pump Installer	\$16.28		<u>1</u>		<u>View</u>
Cowlitz	<u>Well Drillers & Irrigation Pump Installers</u>	Oiler	\$16.28		<u>1</u>		<u>View</u>
Cowlitz	<u>Well Drillers & Irrigation Pump Installers</u>	Well Driller	\$17.97		<u>1</u>		<u>View</u>

APPENDICES

The following appendices are hereby provided and are made a part of the Contract Documents. The Contractor shall perform all work in accordance with the plans and specifications subject to the requirements and conditions contained within the Appendices.

- Appendix A – Plans**
- Appendix B – Geotechnical Report**
- Appendix C – Applicable Standard Plans**

APPENDIX A

Plans

APPENDIX B

Geotechnical Report



Date: March 20, 2020
To: Roger Maurer, P.E.
Cowlitz County Department of Public Works
From: William L. Nickels Jr., P.E., G.E.
Subject: Geotechnical Investigation
Project: Slide Creek Road Embankment Failure
Project No.: 2201007
Task Order No.: 5046-23



Exp. 9-16-2025

We have completed the requested geotechnical investigation for the above-referenced project. This memorandum includes a description of our work, a discussion of the site conditions, a summary of subsurface conditions, and a discussion of engineering analyses. Recommendations for roadway realignment and construction are also provided. The site location is shown on Figure 1A (Appendix A).

The County is the project owner and will provide civil engineering for the roadway realignment. Foundation Engineering, Inc. was authorized by the County by Task Order 5046-23, dated January 22, 2020, to complete a geotechnical investigation for the project and provide recommendations for roadway realignment. Our scope of work was outlined in a proposal dated January 17, 2020.

BACKGROUND

On November 20, 2019, we visited the site and observed that a 100-foot long section of the shoulder had collapsed, and that cracked and patched pavement extended to within 4 feet of the roadway centerline. The outside 4 feet of the road shoulder was displaced by up to 5 feet, leaving a vertical scarp at the edge of the remaining road. Remnants of pavement, gravel shoulder, and boulders were observed on the slope below the scarp. Further downslope, the slope extended ± 40 feet to a small creek at an average slope of 52 degrees. Adjacent to the failure, the slopes below the road averaged ± 45 degrees and were partially supported by stumps and roots. The cut slope on the uphill side of the road was ± 6 to 12 feet high and typically 1:1 (H:V).

Based on the observed embankment failure, the collapse of the outside edge of the road and shoulder appear to be the result of the unusually steep embankment slope. Reconstructing the embankment slope would result in fill extending into the creek. Therefore, realigning the road to avoid the failing embankment was proposed to restore the roadway width.

LOCAL GEOLOGY

Geologic mapping shows the site is underlain by the Saddle Mountain Basalt of the Columbia River Basalt Group (Wells and Sawlan, 2014). Site explorations encountered weathered and decomposed basalt consistent with the expected weathering profile of the mapped basalt.

FIELD EXPLORATION

On February 11, 2020, three test pits were excavated into the road cut upslope of the failed embankment. The field investigation also included observation and mapping of the pavement cracks and topographic features associated with the embankment failure. The test pit locations are shown on the Site Plan, Figure 2A (Appendix A).

Surface Observations

The surface conditions observed near the vicinity of the embankment failure consist of hilly terrain with deeply incised stream valleys. At this location, Slide Creek Road is a ± 22 to 24-foot wide road with a ± 10 to 15-foot high cut slope on the upslope side, and a steep embankment slope extending over 40 feet down to Slide Creek on the downslope side. The cut slope is predominantly covered in grass and a thin soil mantle with a small outcrop of basalt near Station 12 + 00.

The road appears to have been constructed on a cut-fill section with the cut section extending to about the existing centerline. The failure appears to have occurred near the cut-fill boundary. The failure extends along ± 100 feet of the downhill lane and has left a ± 3 to 4-foot high vertical scarp, 8 to 10 feet from the centerline. Slope displacement was observed extending another ± 25 feet north of the main scarp, and road cracking was observed ± 75 feet south of the main scarp.

Subsurface Conditions

Three test pits were excavated into the existing cut slope to investigate the subsurface conditions for the roadway realignment. The test pit locations are shown on Figure 2A (Appendix A) and an interpreted cross-section that is included in Figure 3A (Appendix A). A summary of the conditions encountered in the test pits is provided below. Additional details are provided in the test pit logs (Appendix B).

Test pit TP-1 was excavated into the existing cut slope near the north end of the failure area. The excavation encountered ± 2 feet of topsoil over very stiff clayey silt (residual soil). Starting ± 5 feet above the road, the residual soil transitioned to clayey silt with angular cobbles and gravel.

Test pit TP-2 was located near the center of the site. The excavation encountered ± 3 feet of loose silty gravel and cobbles over fractured basalt. The basalt has decomposed to very dense gravel and cobbles consisting of interlocking angular basalt fragments. Starting ± 7 feet upslope of the road, the excavation encountered

soft to hard (R2 to R4) basalt with close to moderately close jointing. The joints were infilled with clayey silt. This material is consistent with the adjacent basalt outcrop.

Test pit TP-3 was located near the southern end of the site. The excavation encountered ± 1.5 feet of topsoil consisting of medium stiff clayey silt with some gravel and roots. Below the topsoil, the excavation encountered dense, angular cobbles and gravel in a silty matrix.

EVALUATION AND DESIGN RECOMMENDATIONS

Repair options for Slide Creek Road include reconstruction of the embankment, construction of a retaining wall, or realigning the road into the cut slope. Each option is discussed below.

Embankment reconstruction would require excavating the failed soil and reconstructing the embankment by benching into the existing surface and placing compacted quarry spalls or similar materials. The maximum practical embankment slope would be 1.5(H):1(V), which is not as steep as the existing slope. Due to the flatter finished slope, the embankment toe would extend to the creek.

The embankment repair option would impact the riparian area and require the construction of a ± 40 -foot high embankment slope. Therefore, keeping the roadway on the same alignment would require a retaining wall. The retaining wall would likely be over 100 feet long and up to 10 feet tall. Due to the steep slopes, a soldier pile wall would likely be required.

Realigning the road into the slope will avoid reconstruction of the embankment or a costly retaining wall. Therefore, the preferred repair option is to realign the road, so the new edge of pavement matches the existing centerline. This will shift the new alignment entirely into the cut section and avoid the steep, failure prone embankment slope. We estimate the resulting cut slope will be up to ± 15 feet high. A cross-section showing the proposed realignment is included in Figure 3A (Appendix A).

Cut Slopes

The existing cut slope is between a ± 1 (H):1(V) and $\pm 1\frac{1}{4}$ (H):1(V), and the slope appears to be performing well with no evidence of slope instability. Based on the performance of existing slope and the materials observed in the test pits, we anticipate the new cut slope will perform similar to the existing slope. To reduce the cut volume and width, the weathered rock could be excavated at up to 1(H):1(V) and the soil may be excavated at $1\frac{1}{4}$ (H):1(V). However, considering the irregular nature of the weathered rock surface, it is more practical to design the slope at $1\frac{1}{4}$ (H):1(V). Following the excavation, the slope should be seeded and mulched to promote vegetation growth and reduce erosion. The residual soil may be slow to revegetate, and additional seeding or erosion control matting may be needed.

The failed section of road should be graded and rounded to $\pm 3(H):1(V)$ and the exposed soil seeded to reduce future erosion.

Excavation

Test pit TP-2 encountered rock and a small rock outcrop is visible near the center of the proposed excavation slope. Additional rock is anticipated within the proposed excavation. The contractor should review the proposed site conditions and select appropriate excavation equipment and anticipated effort based on their experience.

Seasonal Issues

The site contains fine-grained soils that are expected to be sensitive to disturbance and softening when wet. It will also be impractical to compact the fine-grained subgrade and will be challenging to cut the new slope during wet weather. Therefore, we recommend restricting the earthwork activities to the dry summer months that typically extend from June to mid-October. Completing the earthwork during the dryer months will also minimize erosion on freshly cut slopes.

RECOMMENDATIONS

All specifications contained herein refer to the Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction (WSDOT, 2020). It is assumed these specifications will be referred to for general or specific items not addressed in this memorandum.

The earthwork should be restricted to the dry summer months that typically extend from June to October to reduce erosion and expedite material placement and compaction. We should be notified to provide wet weather construction recommendations if wet season construction is planned.

General Earthwork Specifications

1. Dispose of the materials and debris outside of the project area in conformance with Disposal Method No. 2 as specified in Section 2 01.2(2). Do not place material, even temporarily, in the slide area.
2. Use a seed and fertilizer mixture designed for the climate and soils present within the project area. Immediately seed and mulch the exposed soil following construction of the cut slope.

Cut Slopes

3. Excavate the cut slope at up to $\pm 1 \frac{1}{4}(H):1(V)$.
4. Realign the roadway ± 12 feet east with the proposed west edge of the pavement east of the line shown on Figure 2A (appendix A)
5. Round the new roadway shoulder through the slide area to $\pm 3(H):1(V)$.

LIMITATIONS

Construction Observation and Testing

We recommend a representative from Foundation Engineering be present during construction to observe the site excavations and confirm the assumed soil, rock, and ground water conditions. We should be provided the opportunity to review all drawings and specifications that pertain to site preparation, embankment construction, and slope excavations. Site preparation will require field confirmation of foundation soils. Mitigation of any subgrade pumping will also require engineering review and judgment. Any geotechnical engineering judgment during construction should be provided by a representative of Foundation Engineering. Frequent field density tests should be run on all compacted fills, subgrade, and base rock.

Variation of Subsurface Conditions, Use of Information, and Warranty

The analysis, conclusions, and recommendations contained herein are based on the assumption that the subsurface conditions encountered in the test pits are representative of the overall site conditions within the project limits. The above recommendations assume we will have the opportunity to review final drawings and be present during construction to observe the subsurface conditions and confirm our design assumptions. No changes in the enclosed recommendations should be made without our approval. We will assume no responsibility or liability for any engineering judgment, inspection, or testing performed by others.

This memorandum was prepared for the exclusive use of Cowlitz County for the Slide Creek Road Embankment Failure project in Cowlitz County, Washington. Information contained herein should not be used for other sites or for unanticipated construction without our written consent. This report is intended for planning and design purposes. Contractors using this information to estimate construction quantities or costs do so at their own risk. Our services do not include any survey or assessment of potential surface contamination or contamination of the soil or ground water by hazardous or toxic materials. We assume those services, if needed, have been completed by others.

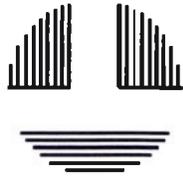
Our work was done in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made.

It has been a pleasure assisting you with this phase of your project. Please let us know if you have any questions or comments.

REFERENCES

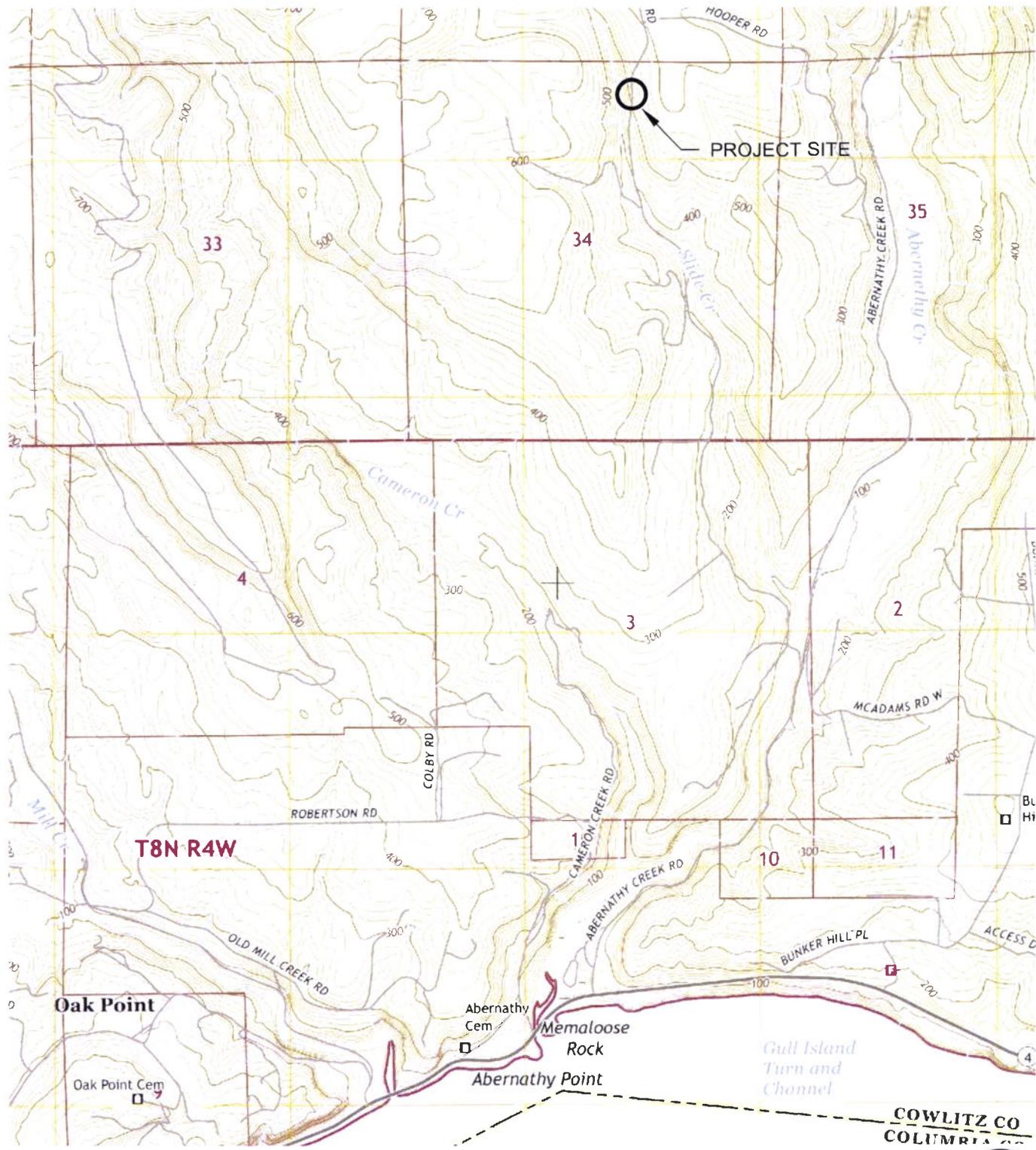
Wells, R.E., and Sawlan, M.G., 2014, *Preliminary Geologic Map of the Eastern Willapa Hills, Cowlitz, Lewis, and Wahkiakum Counties, Washington*: U.S. Geological Survey (USGS), Open-File Report OF-2014-1063.

WSDOT, 2020, *Standard Specifications for Road, Bridge, and Municipal Construction*: Washington State Department of Transportation (WSDOT).



Appendix A

Figures



SCALE: 1" = 2000'

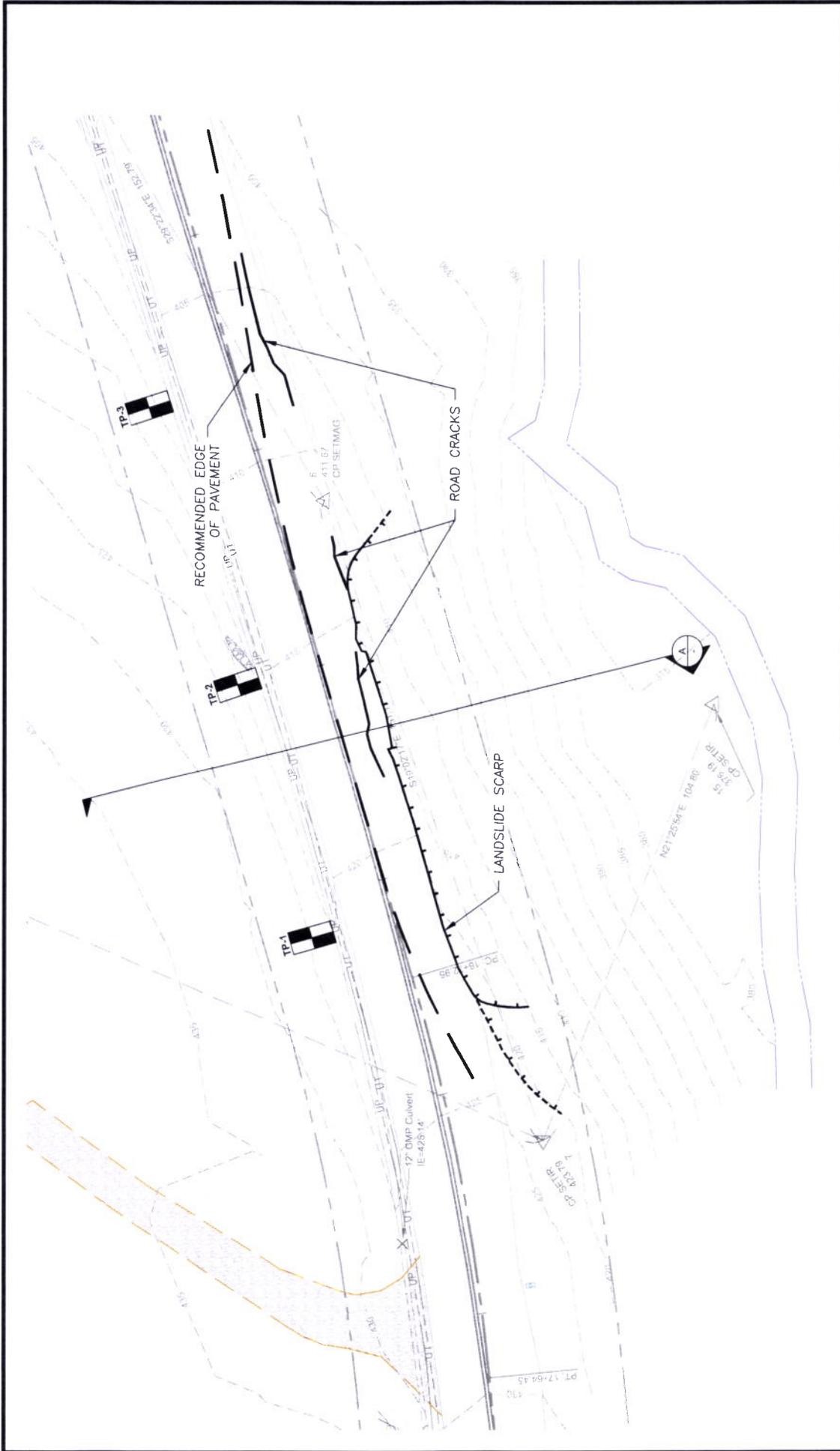


Foundation Engineering, Inc.
Professional Geotechnical Services

PROJECT NO. 2201007	DATE: Mar. 17, 2020	DRAWN BY: SLM
------------------------	------------------------	------------------

VICINITY MAP
Slide Creek Roadway Realignment
Cowlitz County, Washington

FIGURE NO.
1A



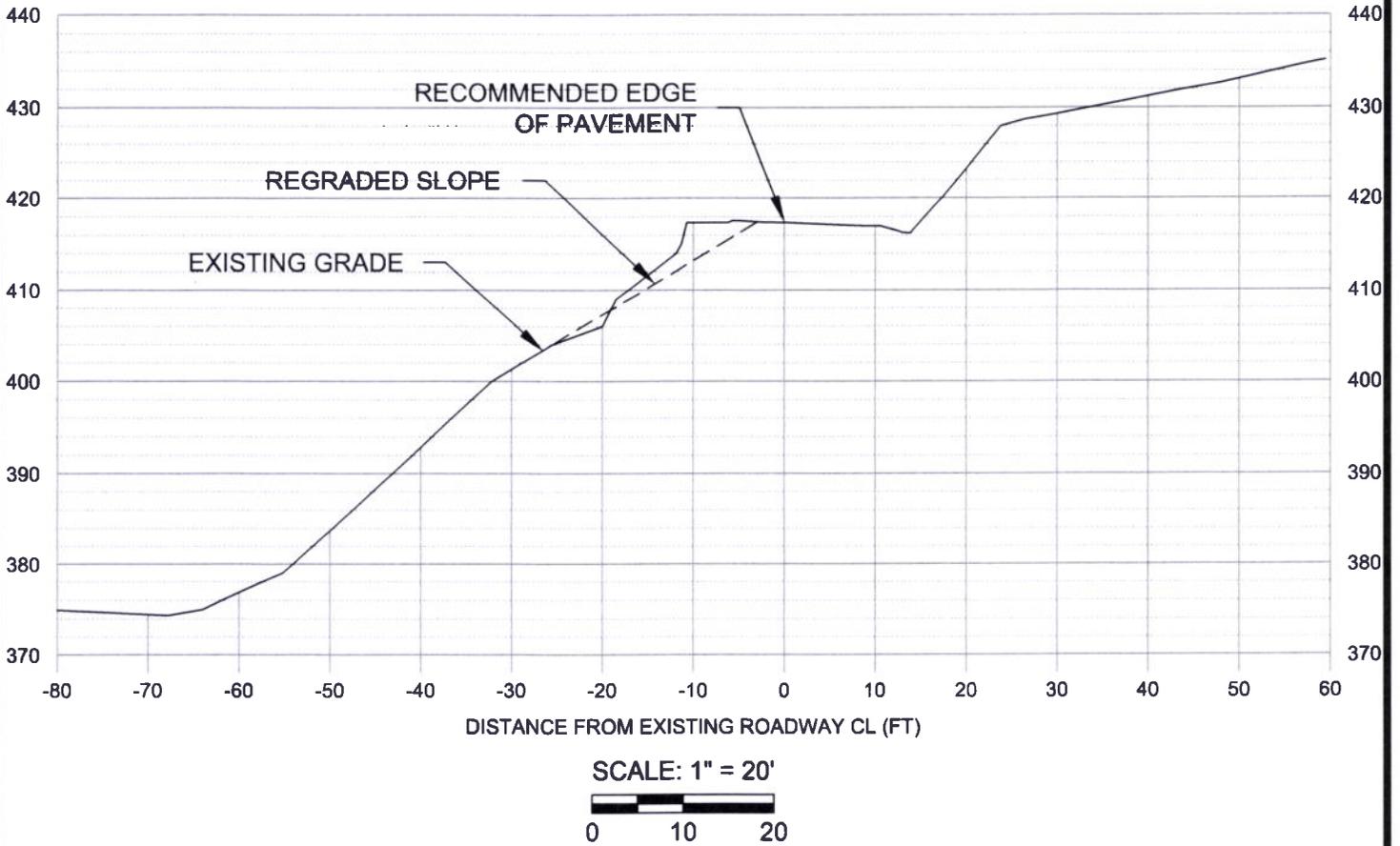

Foundation Engineering, Inc.
 Professional Geotechnical Services

SITE PLAN
 Slide Creek Roadway Realignment
 Cowlitz County, Washington

PROJECT NO: 2201007
 DATE: Mar-17, 2020
 DRAWN BY: SLM

SCALE: 1" = 20'


FIGURE NO. **2A**



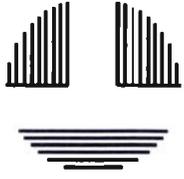
Foundation Engineering, Inc.
Professional Geotechnical Services

PROJECT NO. 2201007	DATE: Mar. 17, 2020	DRAWN BY: SLM
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SECTION A

Slide Creek Roadway Realignment
Cowlitz County, Washington

FIGURE NO.
3A



Appendix B

Test Pit Logs

DISTINCTION BETWEEN FIELD LOGS AND FINAL LOGS

A field log is prepared for each boring or test pit by our field representative. The log contains information concerning sampling depths and the presence of various materials such as gravel, cobbles, and fill, and observations of ground water. It also contains our interpretation of the soil conditions between samples. The final logs presented in this report represent our interpretation of the contents of the field logs and the results of the sample examinations and laboratory test results. Our recommendations are based on the contents of the final logs and the information contained therein and not on the field logs.

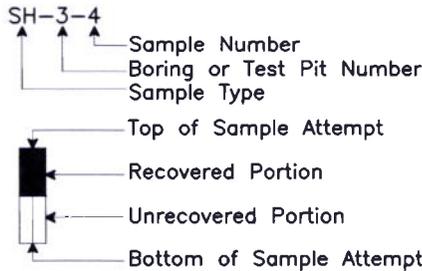
VARIATION IN SOILS BETWEEN TEST PITS AND BORINGS

The final log and related information depict subsurface conditions only at the specific location and on the date indicated. Those using the information contained herein should be aware that soil conditions at other locations or on other dates may differ. Actual foundation or subgrade conditions should be confirmed by us during construction.

TRANSITION BETWEEN SOIL OR ROCK TYPES

The lines designating the interface between soil, fill or rock on the final logs and on subsurface profiles presented in the report are determined by interpolation and are therefore approximate. The transition between the materials may be abrupt or gradual. Only at boring or test pit locations should profiles be considered as reasonably accurate and then only to the degree implied by the notes thereon.

SAMPLE OR TEST SYMBOLS



- C - Pavement Core Sample
- CS - Rock Core Sample
- OS - Oversize Sample (3-inch split-spoon)
- S - Grab Sample
- SH - Thin-walled Shelby Tube Sample
- SS - Standard Penetration Test Sample (split-spoon)

- ▲ Standard Penetration Test Resistance equals the number of blows a 140 lb. weight falling 30 in. is required to drive a standard split-spoon sampler 1 ft. Practical refusal is equal to 50 or more blows per 6 in. of sampler penetration.
- Water Content (%).

UNIFIED SOIL CLASSIFICATION SYMBOLS

- | | |
|------------|---------------------|
| G - Gravel | W - Well Graded |
| S - Sand | P - Poorly Graded |
| M - Silt | L - Low Plasticity |
| C - Clay | H - High Plasticity |
| Pt - Peat | O - Organic |

FIELD SHEAR STRENGTH TEST

Shear strength measurements on test pit side walls, blocks of soil or Shelby tube samples are typically made with Torvane or Field Vane shear devices.

TYPICAL SOIL/ROCK SYMBOLS

- | | | |
|----------|--------|-----------|
| Concrete | Sand | Basalt |
| Organics | Gravel | Sandstone |
| Clay | Silt | Siltstone |

WATER TABLE

- Water Table Location
 (1/31/16) Date of Measurement



FOUNDATION ENGINEERING INC.
 PROFESSIONAL GEOTECHNICAL SERVICES

820 NW CORNELL AVENUE 7887 SW CIEBUS DRIVE, BUILDING 24
 CORVALLIS, OR 97330 BEAVERTON, OR 97008
 BUS. (541) 757-7645 BUS. (503) 641-1541

SYMBOL KEY EXPLORATION LOGS

Explanation of Common Terms Used in Soil Descriptions

Field Identification	Cohesive Soils			Granular Soils	
	SPT*	S_u^{**} (tsf)	Term	SPT*	Term
Easily penetrated several inches by fist.	0 - 2	< 0.125	Very Soft	0 - 4	Very Loose
Easily penetrated several inches by thumb.	2 - 4	0.125-0.25	Soft	4 - 10	Loose
Can be penetrated several inches by thumb with moderate effort.	4 - 8	0.25 - 0.50	Medium Stiff	10 - 30	Medium Dense
Readily indented by thumb but penetrated only with great effort.	8 - 15	0.50 - 1.0	Stiff	30 - 50	Dense
Readily indented by thumbnail.	15 - 30	1.0 - 2.0	Very Stiff	> 50	Very Dense
Indented with difficulty by thumbnail.	>30	> 2.0	Hard		

* SPT N-value in blows per foot (bpf)

** Undrained shear strength

Term	Soil Moisture Field Description
Dry	Absence of moisture. Dusty. Dry to the touch.
Damp	Soil has moisture. Cohesive soils are below plastic limit and usually moldable.
Moist	Grains appear darkened, but no visible water. Silt/clay will clump. Sand will bulk. Soils are often at or near plastic limit.
Wet	Visible water on larger grain surfaces. Sand and cohesionless silt exhibit dilatancy. Cohesive soil can be readily remolded. Soil leaves wetness on the hand when squeezed. Soil is wetter than the optimum moisture content and above the plastic limit.

Term	PI	Plasticity Field Test
Non-plastic	0 - 3	Cannot be rolled into a thread at any moisture.
Low Plasticity	3 - 15	Can be rolled into a thread with some difficulty.
Medium Plasticity	15 - 30	Easily rolled into thread.
High Plasticity	> 30	Easily rolled and re-rolled into thread.

Term	Soil Structure Criteria
Stratified	Alternating layers at least ¼ inch thick.
Laminated	Alternating layers less than ¼ inch thick.
Fissured	Contains shears and partings along planes of weakness.
Slickensided	Partings appear glossy or striated.
Blocky	Breaks into small lumps that resist further breakdown.
Lensed	Contains pockets of different soils.

Term	Soil Cementation Criteria
Weak	Breaks under light finger pressure.
Moderate	Breaks under hard finger pressure.
Strong	Will not break with finger pressure.

 **FOUNDATION ENGINEERING INC.**
PROFESSIONAL GEOTECHNICAL SERVICES

820 NW CORNELL AVENUE 7857 SW CIRRUS DRIVE, BUILDING 24
CORVALLIS, OR 97330 BEAVERTON, OR 97008
BUS. (541) 757-7845 BUS. (503) 641-1641

COMMON TERMS
SOIL DESCRIPTIONS

Explanation of Common Terms Used in Rock Descriptions

Field Identification		UCS (psi)	Strength	Hardness (ODOT)
Indented by thumbnail.	R0	< 100	Extremely Weak	Extremely Soft
Crumbles under firm blows with geological hammer, can be peeled by a pocket knife.	R1	100–1,000	Very Weak	Very Soft
Can be peeled by a pocket knife with difficulty, shallow indentations made by firm blow with geological hammer.	R2	1,000–4,000	Weak	Soft
Cannot be scraped or peeled with a pocket knife, specimen can be fractured with a single blow of geological hammer.	R3	4,000–8,000	Medium Strong	Medium Hard
Specimen requires more than one blow of geological hammer to fracture it.	R4	8,000–16,000	Strong	Hard
Specimen requires many blows of geological hammer to fracture it.	R5	>16,000	Very Strong	Very Hard

Term	Weathering Field Identification
Fresh	Crystals are bright. Discontinuities may show some minor surface staining. No discoloration in rock fabric.
Slightly Weathered	Rock mass is generally fresh. Discontinuities are stained and may contain clay. Some discoloration in rock fabric.
Moderately Weathered	Significant portions of rock show discoloration and weathering effects. Crystals are dull and show visible chemical alteration. Discontinuities are stained and may contain secondary mineral deposits.
Highly Weathered (Predom. Decomp.)	Rock can be excavated with geologist's pick. All discontinuities exhibit secondary mineralization. Complete discoloration of rock fabric. Surface of core is friable and usually pitted due to washing out of highly altered minerals by drilling water.
Decomposed	Rock mass is completely decomposed. Original rock "fabric" may be evident (relict texture). May be reduced to soil with hand pressure.

Spacing (meters)	Spacing	Spacing Term	Bedding/Foliation
< 0.06	< 2 in.	Very Close	Very Thin (Laminated)
0.06 – 0.30	2 in. – 1 ft.	Close	Thin
0.30 – 0.90	1 ft. – 3 ft.	Moderately Close	Medium
0.90 – 3.0	3 ft. – 10 ft.	Wide	Thick
> 3.0	> 10 ft.	Very Wide	Very Thick (Massive)

Vesicle Term	Volume
Some vesicles	5 – 25%
Highly vesicular	25 – 50%
Scoriaceous	> 50%

Stratification Term	Description
Lamination	<1 cm (0.4 in.) thick beds
Fissile	Preferred break along laminations
Parting	Preferred break parallel to bedding
Foliation	Metamorphic layering and segregation of minerals

RQD %	Designation	RQD %	Designation
0 – 25	Very Poor	75 – 90	Good
25 – 50	Poor	90 – 100	Excellent
50 – 75	Fair		

Rock Quality Designation (RQD) is the cumulative length of intact pieces 4 inches or longer excluding breaks caused by drilling and handling divided by run length, expressed as a percentage.



FOUNDATION ENGINEERING INC.
PROFESSIONAL GEOTECHNICAL SERVICES

820 NW CORNELL AVENUE 7857 SW CIRRUS DRIVE, BUILDING 24
CORVALLIS, OR 97330 BEAVERTON, OR 97008
BUS. (541) 757-7645 BUS. (503) 641-1541

COMMON TERMS ROCK DESCRIPTIONS

Comments	Depth, Feet	Sample #	Location	C, TSF	Elev. Depth	Symbol	Soil and Rock Description
S-1-1: moisture content = 53.6%	1-2	S-1-1	█		2.0		Stiff clayey SILT, some organics (MH); brown to dark brown, moist, medium plasticity, blocky structure, organics consist of roots and wood, (topsoil).
S-1-2: moisture content = 33.8%	6-7	S-1-2	█		7.0		Very stiff clayey SILT (MH); orange-brown, moist, medium plasticity, blocky structure, (residual soil).
No seepage or groundwater encountered to the limit of exploration	10-11						Very stiff clayey SILT, some gravel and cobbles (MH); orange-brown, moist, medium plasticity, gravel and cobble-sized angular basalt fragments, (residual soil).
Bottom of test pit at road surface elevation	12-13				12.0		BOTTOM OF EXPLORATION

Project No.: 2201007
 Surface Elevation: N/A (Approx.)
 Date of Test Pit: February 11, 2020

Test Pit Log: TP-1
Slide Creek Road Realignment
Cowlitz County, Oregon

Comments	Depth, Feet	Sample #	Location	C, TSF	Elev. Depth	Symbol	Soil and Rock Description
	1-2	S-2-1	█		3.0	○ ○ ○ ○	Loose silty GRAVEL and COBBLES (GM); dark brown, silt is moist, medium plasticity silt, gravel and cobble-sized angular basalt fragments, (topsoil).
	4-5				9.0	○ ○ ○ ○	Very dense GRAVEL and COBBLES, scattered boulders, trace clayey silt (GP); orange-brown, silt is moist, medium plasticity silt, gravel, cobble, and boulder-sized angular interlocking basalt fragments, (decomposed basalt).
No seepage or groundwater encountered to the limit of exploration	10-11					△ △ △ △	Soft to hard (R2 to R4) BASALT; orange-brown, highly weathered, close to moderately close joints, joints are infilled with up to 1 inch of clayey silt, (basalt).
Bottom of test pit at road surface elevation	14-15				16.0		BOTTOM OF EXPLORATION

Project No.: 2201007
 Surface Elevation: N/A (Approx.)
 Date of Test Pit: February 11, 2020

Test Pit Log: TP-2
Slide Creek Road Realignment
Cowlitz County, Oregon

Comments	Depth, Feet	Sample #	Location	C, TSF	Elev. Depth	Symbol	Soil and Rock Description	
<p>S-3-1: moisture content = 51.6%</p> <p>No seepage or groundwater encountered to the limit of exploration</p> <p>Bottom of test pit at road surface elevation</p>	1-	S-3-1			15		Medium stiff clayey SILT, some gravel and organics (MH); dark brown, moist, medium plasticity, gravel-sized is angular basalt fragments, organics consist of roots, (topsoil).	
	2-							Dense GRAVEL and COBBLES, some silt (GM); orange-brown, silt is moist and medium plasticity silt, gravel and cobble-sized angular basalt fragments, (decomposed basalt).
	3-	S-3-2						Gradational contact.
	4-							
	5-							
	6-							
	7-							
	8-							
	9-							
	10-							
	11-	11.0						BOTTOM OF EXPLORATION
	12-							
	13-							
	14-							
	15-							
	16-							

Project No.: 2201007

Surface Elevation: N/A (Approx.)

Date of Test Pit: February 11, 2020

Test Pit Log: TP-3

Slide Creek Road Realignment

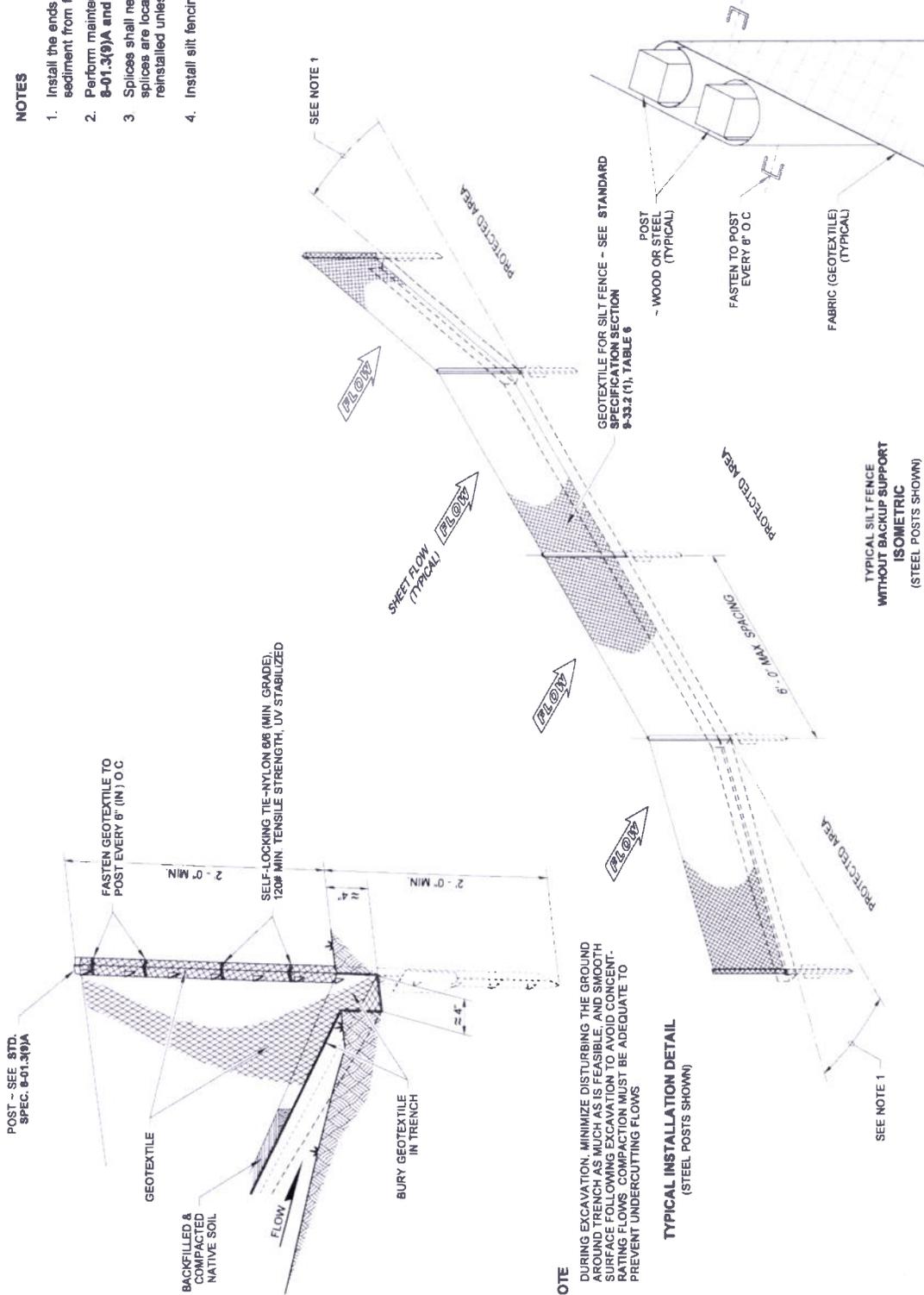
Cowlitz County, Oregon

APPENDIX C

Applicable Standard Plans

NOTES

1. Install the ends of the silt fence to point slightly upslope to prevent sediment from flowing around the ends of the fence
2. Perform maintenance in accordance with **Standard Specifications 8-01.3(9)A and 8-01.3(16)**.
3. Splices shall never be placed in low spots or sump locations. If splices are located in low or sump areas, the fence may need to be reinstalled unless the Project Engineer approves the installation
4. Install silt fencing parallel to mapped contour lines.



NOTE

DURING EXCAVATION, MINIMIZE DISTURBING THE GROUND AROUND TRENCH AS MUCH AS IS FEASIBLE, AND SMOOTH SURFACE FOLLOWING EXCAVATION TO AVOID CONCENTRATING FLOWS. COMPACTION MUST BE ADEQUATE TO PREVENT UNDERCUTTING FLOWS

STATE OF WASHINGTON REGISTERED LANDSCAPE ARCHITECT
 SANDRA L. SALISBURY
 CERTIFICATE NO. 000860

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT. ANY FIELD ADJUSTMENTS OR CHANGES TO THE ORIGINAL DESIGN BY THE PROFESSIONAL LANDSCAPE ARCHITECT SHALL BE MADE BY THE ARCHITECT'S SIGNATURE AND SEAL. ANY CHANGES MADE BY OTHERS SHALL BE MADE BY THE ARCHITECT'S SIGNATURE AND SEAL.

SILT FENCE

STANDARD PLAN I-30.15-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

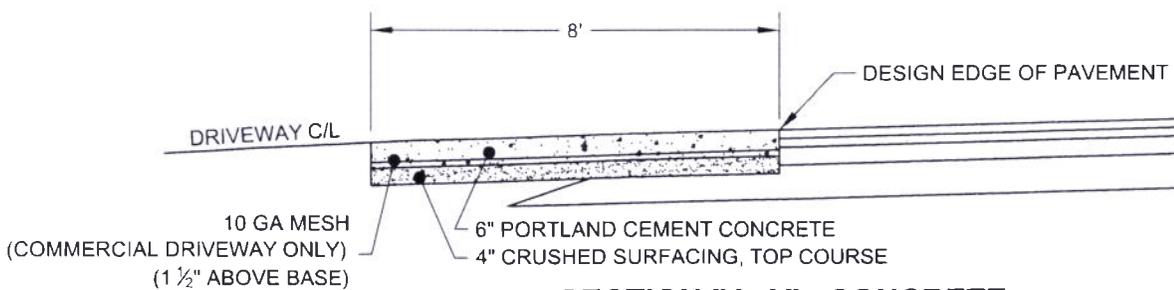
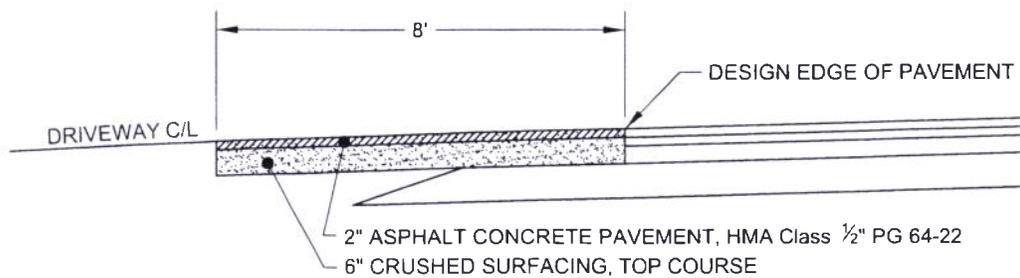
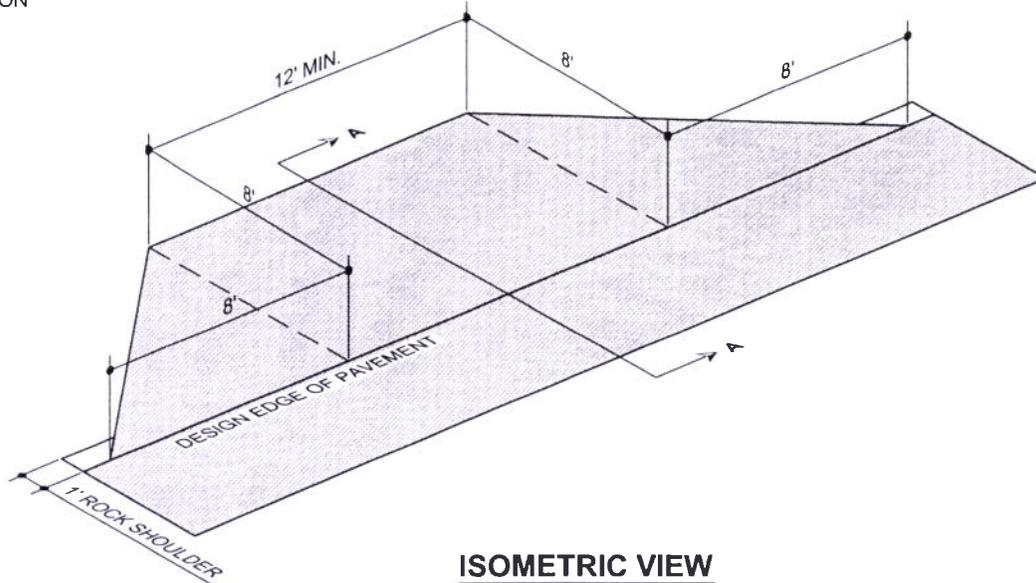
Pasco Bakotich III 3/22/13
 STATE GEOLOGICAL ENGINEER DATE



SPliced FENCE SECTIONS SHALL BE CLOSE ENOUGH TOGETHER TO PREVENT SILT LADEN WATER FROM ESCAPING THROUGH THE FENCE AT THE OVERLAP

SPlice DETAIL
 (WOOD POSTS SHOWN)

ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE LATEST EDITION OF THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION



NOTES:

1. Concrete shall have a minimum compressive strength of 3000 p.s.i. after 28 days - 6 sack mix.

RGL
 DESIGNED BY
JMC 3/6/07
 DRAWN BY
KAC
 APPROVED BY
3-21-07
 DATE

STANDARD APPROACH

ASPHALT OR CONCRETE APRON

N T S



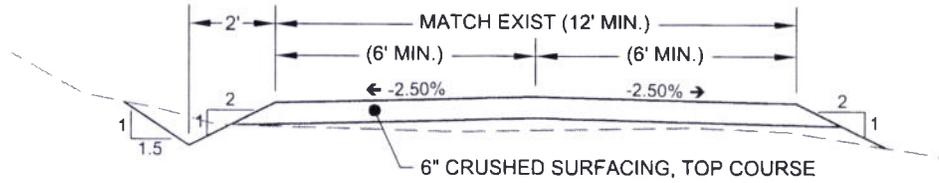
DEPARTMENT OF PUBLIC WORKS

207 4th AV. NORTH
 KELSO, WASHINGTON
 98626

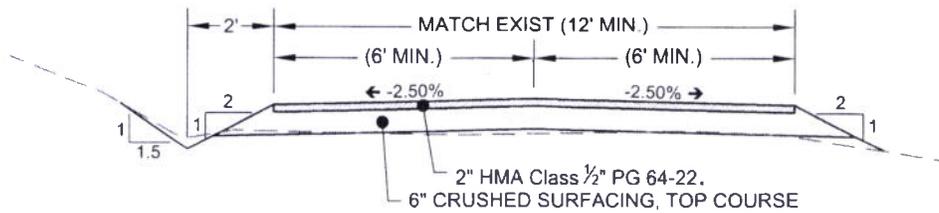
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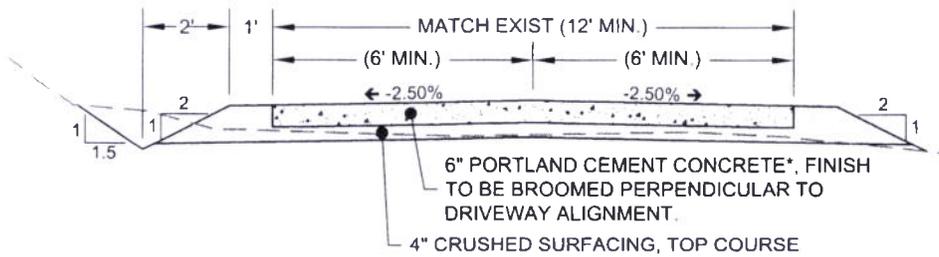
ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE LATEST EDITION OF THE WSDOT STANDARD SPECIFICATIONS FOR ROAD, BRIDGE, AND MUNICIPAL CONSTRUCTION



TYPICAL GRAVEL DRIVEWAY SECTION



TYPICAL ASPHALT DRIVEWAY SECTION



TYPICAL CONCRETE DRIVEWAY SECTION

NOTE:

* Concrete shall have a minimum compressive strength of 3000 p.s.i. after 28 days - 6 sack mix.

RGL
 DESIGNED BY
 JMC 3/6/07
 DRAWN BY
 KAC
 APPROVED BY
 3-21-07
 DATE

STANDARD DRIVEWAY

TYPICAL SECTIONS
 N T S



DEPARTMENT
 OF PUBLIC
 WORKS
 207 4th AV. NORTH
 KELSO, WASHINGTON
 98626
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**ATTENTION PROPERTY OWNERS
AND
CONTRACTORS**



**CALL BEFORE
YOU DIG
1-800-424-5555**

The Cowlitz County Utility Coordination Council is comprised of local utilities whose common purpose is to help prevent accidents and damages to their underground facilities. ONE TELEPHONE CALL, 1-800-424-5555, two (2) working days prior to digging will relay a message to these utilities. On the next page is a listing of utilities and entities belonging to the Council.

Forty-eight (48) hours' notice (excluding weekends and holidays) is requested to permit our locators to mark our facilities for you. ONE CALL answering service is available twenty-four (24) hours a day, seven (7) days a week. All calls are recorded. (EMERGENCY LINE LOCATES ARE AVAILABLE AT ALL TIMES).

RCW 19.122.010, Washington Laws, 1988, Chapter 99 on Underground Utilities states that utilities shall be assigned "...responsibilities for locating and keeping accurate records of utility locations, protecting and repairing damage to existing underground facilities, and protecting the public health and safety from interruption in utility services caused by damage to existing underground utility facilities."

Callers are asked to use white paint to show their proposed path of excavation. Each locator uses a different color paint to show their underground facility (see reverse page). Digging should be done by hand 18" on either side of marking until utility is visible, before using other equipment.

**PLAN FOR SAFETY – CALL BEFORE YOU DIG
LOCATING SERVICES ARE FREE**

Thank you,

Cowlitz County
Utility Coordination Council

THE FOLLOWING LOCAL UTILITIES, ENTITIES AND OTHERS FORM THE COWLITZ COUNTY UTILITY COORDINATION COUNCIL:

		<u>COLOR CODE</u>
POWER	P.U.D. OF COWLITZ COUNTY	RED
GAS	CASCADE NATURAL GAS NORTHWEST PIPELINE CORPORATION OLYMPIC PIPE LINE COMPANY	YELLOW
TELEPHONE	AT&T GENERAL TELEPHONE KALAMA TELEPHONE U.S. SPRINT COMMUNICATIONS CENTURY LINK VERIZON COMMUNICATIONS FRONTIER CASCADE NETWORKS	ORANGE
WATER	BEACON HILL SEWER DISTRICT CITY OF CASTLE ROCK CITY OF KALAMA CITY OF KELSO CITY OF LONGVIEW CITY OF WOODLAND COWLITZ COUNTY PUBLIC WORKS P.U.D. OF COWLITZ COUNTY	BLUE
SEWER	BEACON HILL SEWER DISTRICT CITY OF CASTLE ROCK CITY OF KALAMA CITY OF KELSO CITY OF LONGVIEW CITY OF WOODLAND COWLITZ COUNTY PUBLIC WORKS (includes leachate pipeline)	GREEN
T.V. CABLE	COMCAST WASHINGTON STATE DEPARTMENT OF TRANSPORTATION	ORANGE

(OTHER UTILITIES MAY JOIN IN THE FUTURE – PLEASE ASK THE OPERATOR)

REPORT ALL EMERGENCIES TO “911”. All other damages should be reported directly to the utilities involved.

Nicks in insulation of gas, power or telephone should be reported to utilities promptly, as failure later can cause serious injuries or damages.

END OF CONTRACT