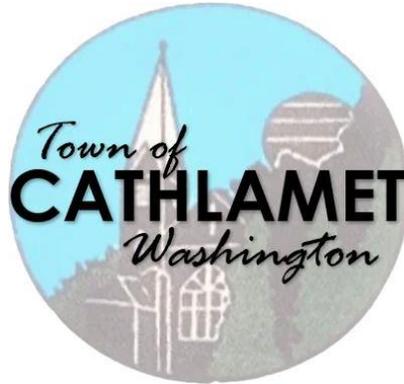


# TOWN OF CATHLAMET

WAHKIAKUM COUNTY

WASHINGTON



## CONTRACT PROVISIONS

for

## BOEGE ROAD AND STATE ROUTE 4 PRV STATIONS

G&O #22239  
JUNE 2023

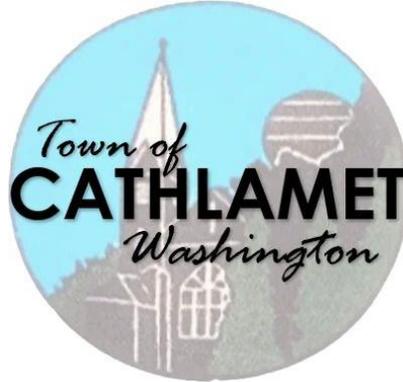


**Gray & Osborne, Inc.**  
CONSULTING ENGINEERS

# TOWN OF CATHLAMET

WAHKIAKUM COUNTY

WASHINGTON



## CONTRACT PROVISIONS

for

## BOEGE ROAD AND STATE ROUTE 4 PRV STATIONS



6/28/23

G&O #22239  
JUNE 2023



**Gray & Osborne, Inc.**  
CONSULTING ENGINEERS

## CALL FOR BIDS

### TOWN OF CATHLAMET

#### **BOEGE ROAD AND STATE ROUTE 4 PRV STATIONS ENGINEER'S ESTIMATE \$310,000**

Sealed Proposals will be received by the undersigned at the Town of Cathlamet, 375 2<sup>nd</sup> Street, Cathlamet, Washington 98612, up to 12:30 p.m.; local time on Thursday, July 20, 2023, for furnishing the necessary labor, materials, equipment, tools, and guarantees thereof to construct Boege Road and State Route 4 PRV Stations.

This contract provides for all labor, materials, and equipment necessary for the construction of the Boege Road and State Route 4 PRV Stations.

The Work shall be substantially complete within 40 working days after the commencement date stated in the Notice to Proceed. All bidding and construction is to be performed in compliance with the Contract Provisions and Contract Plans for this project and any addenda issued thereto that are on file at the office of the Town Clerk, Town Hall, Cathlamet, Washington.

The Proposals will be publicly opened and read aloud shortly after the time and date stated above. Proposals are to be submitted only on the form provided with the Bid Documents. All Proposals must be accompanied by a certified check, postal money order, cashiers check, or Proposal bond payable to the "Town of Cathlamet" and in an amount of not less than five percent (5%) of the total Proposal amount.

Bid Documents for this project are available free-of-charge at the following website: <http://gobids.grayandosborne.com>. Bidders are encouraged to register in order to receive automatic email notification of future addenda and to be placed on the Bidders List. For assistance, please call (206) 284-0860. Contract questions shall be directed only to the office of the Project Engineer.

Financing of the Project has been provided by Town of Cathlamet, Washington. The Town of Cathlamet expressly reserves the right to reject any or all Proposals and to waive minor irregularities or informalities in any Proposal.

(Signed)

**SARAH CLARK**  
**TOWN CLERK**

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**PART 1**  
**BID DOCUMENTS**

## **BIDDER'S CHECKLIST**

### **1. REQUIRED FORMS**

The Bidder shall submit the following forms, which must be executed in full and submitted with the Proposal.

- a. Proposal (including Statement of Bidder's Qualifications) (Pages P-1 - P-6)
- b. Bid Deposit or Proposal Bond (PB-1)

### **2. SUPPLEMENTAL BIDDER CRITERIA**

The Apparent two lowest bidders shall submit to the Contracting Agency the completed Supplemental Bidder Criteria forms in the Appendix by noon of the second business day following the bid submittal deadline.

### **3. AGREEMENT FORMS**

The following forms (a., b., and c.) are to be executed and the Certificates of Insurance (d. and e.) are to be provided after the Contract is awarded and prior to Contract execution.

- a. Agreement (Pages A-1 - A-3)
- b. Performance Bond (Page B-1)
- c. Public Works Payment Bond (Page B-2)
- d. Certificate of Insurance
- e. Certificate of Builders Risk Insurance

# BOEGE ROAD AND STATE ROUTE 4 PRV STATIONS

## PROPOSAL

Town of Cathlamet  
375 2<sup>nd</sup> Street  
Cathlamet, Washington 98612

The undersigned has examined the Work site(s), local conditions, the Contract, and all applicable laws and regulations covering the Work. The following unit and lump sum prices are tendered as an offer to perform the Work in accordance with all of the requirements set forth in the Contract and all applicable laws and regulations.

As required by the Contract, a postal money order, certified check, cashier's check or Proposal bond made payable to the Owner is attached hereto. If this Proposal is accepted and the undersigned fail(s) or refuse(s) to enter into a contract and furnish the required performance bond, labor and material payment bond, special guarantee bonds (if required), required insurance and all other required documentation, the undersigned will forfeit to the Owner an amount equal to five percent of the Proposal amount.

After the date and hour set for submitting the Proposals, no bidder may withdraw its Proposal, unless the Award of the contract is delayed for a period exceeding 60 consecutive calendar days.

The undersigned agrees that in the event it is Awarded the contract for the Work, it shall employ only Contractors and Subcontractors that are duly licensed by the State of Washington and remain so at all times they are in any way involved with the Work.

The undersigned agrees that the Owner reserves the right to reject any or all Proposals and to waive any minor irregularities and informalities in any Proposal.

**The undersigned agrees that the Owner will Award the Contract to the lowest responsible, responsive bidder whose Proposal is in the best interest of the Owner.**

**PROPOSAL - Continued**

<u>NO.</u>	<u>ITEM</u>	<u>QUANTITY</u>	<u>UNIT PRICE</u>	<u>AMOUNT</u>
1.	Mobilization and Demobilization	1 LS	\$ _____	\$ _____
2.	Minor Change	1 CALC	\$5,000.00	\$5,000.00
3.	Trench Excavation Safety Systems	1 LS	\$ _____	\$ _____
4.	Temporary Erosion and Sedimentation Control	1 LS	\$ _____	\$ _____
5.	Project Temporary Traffic Control	1 LS	\$ _____	\$ _____
6.	SPCC Plan	1 LS	\$ _____	\$ _____
7.	Locate Existing Utilities	1 LS	\$ _____	\$ _____
8.	Site Earthwork	1 LS	\$ _____	\$ _____
9.	PRV Vault 1 Connection to Existing System	1 LS	\$ _____	\$ _____
10.	PRV Vault 2 Connection to Existing System	1 LS	\$ _____	\$ _____
11.	PRV Vault 1 and Fittings	1 LS	\$ _____	\$ _____
12.	PRV Vault 2 and Fittings	1 LS	\$ _____	\$ _____
13.	Surface Restoration	1 LS	\$ _____	\$ _____

Subtotal: .....\$ \_\_\_\_\_

Washington State Sales Tax (7.6%): .....\$ \_\_\_\_\_

TOTAL CONSTRUCTION COST: .....\$ \_\_\_\_\_

**Note: A bid must be received on all items.**

**PROPOSAL - Continued**

**STATEMENT OF BIDDER'S QUALIFICATIONS**

Name of Firm: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

Contact Person for this Project: \_\_\_\_\_

E-mail: \_\_\_\_\_

Number of years the Contractor has been engaged in the construction business under the present firm name, as indicated above:

\_\_\_\_\_

**WORK TO BE COMPLETED BY BIDDER**

List the Work and the dollar amount thereof that the Bidder will complete with its forces, if awarded the contract.

<b>Work to be Performed</b>	<b>Dollar Amount</b>

**PROPOSAL - Continued**

**PROPOSED SUBCONTRACTORS** (Per RCW 39.30.060)

In accordance with RCW 39.30.060, for Proposals exceeding one million dollars, failure to list subcontractors with whom the bidder, if awarded the contract, will directly subcontract for performance of the work of structural steel installation, rebar installation, heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCW, and electrical, as described in Chapter 19.28 RCW or naming more than one subcontractor to perform the same work will result in your bid being non-responsive and therefore void.

These subcontractors must be listed below along with the work to be performed. This information must be provided with the Proposal or within one hour after the published bid submittal time for the work of heating, ventilation, air conditioning, plumbing and electrical. This information must be provided with the Proposal or within 48 hours after the published bid submittal time for the work of structural steel and rebar installation.

To the extent the Project includes one or more categories of work referenced in RCW 39.30.060, and no subcontractor is listed below to perform such work, the bidder certifies that the work will either (i) be performed by the bidder itself, or (ii) be performed by a lower tier subcontractor who will not contract directly with the bidder.

Subcontractor Name \_\_\_\_\_  
Work to be performed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subcontractor Name \_\_\_\_\_  
Work to be performed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subcontractor Name \_\_\_\_\_  
Work to be performed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subcontractor Name \_\_\_\_\_  
Work to be performed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Subcontractor Name \_\_\_\_\_  
Work to be performed \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Bidder's are notified that it is the opinion of the enforcement agency that PVC or metal conduit, junction boxes, etc., are considered electrical equipment and therefore considered part of electrical work, even if the installation is for future use and no wiring or electrical current is connected during the project.

**PROPOSAL - Continued**

**ADDENDA RECEIVED**

<b>Addendum No.</b>	<b>Date Received</b>	<b>Name of Recipient</b>

**NOTE: Bidder shall acknowledge receipt of all addenda. Bidder is responsible for verifying the actual number of addenda issued prior to submitting a Proposal.**

Subject to any extensions of the Contract Time granted under the Contract, the undersigned agrees to substantially complete the Work required under this Contract within 40 working days (the Substantial Completion Date) and to physically complete the Work required under this contract within 50 working days (the Physical Completion Date) from when Contract Time begins.

The undersigned has reviewed and fully understands the provisions in the Contract regarding liquidated damages and agrees that liquidated damages shall be \$1,000.00 per day for each and every working day beyond the Contract Time allowed for substantial completion until the Substantial Completion Date is achieved and \$1,500.00 for each and every working day required beyond the Contract Time for physical completion until the Physical Completion Date is achieved.

The undersigned is, and will remain in, full compliance with all Washington State administrative agency requirements including, but not limited to registration requirements of Washington State Department of Labor & Industries for contractors, including but not limited to requirements for bond, proof of insurance and annual registration fee. The undersigned's Washington State:

Dept. of Labor and Industries Workman's Compensation Account No. is \_\_\_\_\_;  
Dept. of Licensing Contractor's Registration No. is \_\_\_\_\_;  
Unified Business Identifier Number is \_\_\_\_\_;  
Excise Tax Registration Number is \_\_\_\_\_; and  
Employment Security Account Number is \_\_\_\_\_.

The undersigned has reviewed all insurance requirements contained in the Contract and has verified the availability of and the undersigned's eligibility for all required insurance. The undersigned verifies that the cost for all required insurance, has been included in this Proposal.

In relation to claims related in whole or in part to workplace injuries to employees, the undersigned waives any immunity granted under the State Industrial Insurance Law, RCW Title 51. This waiver has been specially negotiated by the parties, which is acknowledged by the undersigned in signing this Proposal.

By signing the proposal, the undersigned declares, under penalty of perjury under the laws of the United States and the State of Washington, that the following statements are true and correct:



**PROPOSAL BOND**

KNOW ALL MEN BY THESE PRESENTS, That we \_\_\_\_\_

of \_\_\_\_\_ as principal, and the \_\_\_\_\_

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 the **TOWN OF CATHLAMET** in the  
full and penal sum of five percent of the total amount of the bid proposal of said principal for the  
work hereinafter described, for the payment of which, well and truly to be made, we bind our  
heirs, executors, administrators and assigns, and successors and assigns, firmly 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 construction project, to wit:

**BOEGE ROAD AND STATE ROUTE 4 PRV STATIONS**

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 said principal shall duly make and enter into and  
execute said Contract and shall furnish bond as required by the **TOWN OF CATHLAMET**  
within a period of 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 remain and be in full force and effect.

IN TESTIMONY WHEREOF, The principal and surety have caused these presents to be  
signed and sealed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_

(Principal)

\_\_\_\_\_

(Surety)

\_\_\_\_\_

(Attorney-in-fact)

## **PART 2**

### **AGREEMENT AND BONDS**

## **AGREEMENT**

THIS AGREEMENT is entered into by and between the **TOWN OF CATHLAMET** (hereinafter called the Owner) and \_\_\_\_\_ (hereinafter called the Contractor).

The Owner and the Contractor agree as follows:

### **ARTICLE 1. WORK.**

**[Include description of all schedules, alternate or additive items awarded]**

### **ARTICLE 2. CONTRACT TIME.**

The Contractor shall substantially complete the Work required by the Contract within \_\_\_\_\_ working days (the Substantial Completion Date) and physically complete the Work within \_\_\_\_\_ working days (the Physical Completion Date).

### **ARTICLE 3. LIQUIDATED DAMAGES.**

The Owner and the Contractor recognize that time is of the essence and that the Owner will suffer financial loss if the Work is not completed within the time, plus any extensions thereof, allowed in accordance with the Contract. They also recognize the inconvenience, expense, and difficulties involved in a legal proceeding to prove the actual loss suffered by the Owner if the Work is not completed within the time allowed in the Contract. Accordingly, the Owner and the Contractor agree that as liquidated damages for delay, and not as a penalty, the Contractor shall pay the Owner (\$ \_\_\_\_\_) per day for each working day beyond the Substantial Completion Date until the Contractor achieves substantial completion of the Work and (\$ \_\_\_\_\_) per day for each working day beyond the Physical Completion Date until the Contractor achieves physical completion of the Work.

### **ARTICLE 4. CONTRACT PRICE.**

The Owner shall pay the Contractor the amount(s) set forth in the Proposal (in United States dollars) for completion of the Work in accordance with the Contract.

**ARTICLE 5. CONTRACT.**

The Contract, which comprises the entire agreement between the Owner and the Contractor concerning the Work, consists of the following:

- This Agreement;
- The Contractor’s Proposal including the bid, bid schedule(s), information required of bidder, Proposal bond, and all required certificates and affidavits;
- The Performance Bond and the Public Works Payment Bond;
- The Contract Provisions;
- The Plans (or drawings) consisting of \_\_\_\_\_ sheets, as listed in the index on sheet \_\_\_\_\_ of the Plans;
- Addenda numbers \_\_\_\_\_, inclusive; and
- Change Orders issued after the effective date of this Agreement.

There are no Contract Documents other than those listed in this Article 5. The Contract may be amended only in writing by Change Order as provided in the Contract.

**ARTICLE 6. MISCELLANEOUS.**

For purpose of indemnifying and defending any work place injury claims by employees of the Contractor and Subcontractors, the Contractor waives any immunity granted under the State Industrial Insurance Law, RCW Title 51. This waiver has been specifically negotiated between the parties and is hereby acknowledged by the Contractor.  
\_\_\_\_\_(Contractor’s initials)

The Contractor shall not assign any rights under or interests in the Contract, including but not limited to rights to payment, without the prior written consent of the Owner. Unless specifically stated in a written consent to an assignment, no assignment will release or discharge the Contractor-assignor from any duty or responsibility under the Contract.

The Contract is binding upon the Owner and the Contractor, and their respective partners, successors, assigns and legal representatives.

AGREEMENT – Continued

IN WITNESS WHEREOF, Owner and Contractor have caused this Agreement to be executed the day and year indicated below.

**TOWN OF CATHLAMET**

**CONTRACTOR**

By \_\_\_\_\_

License No. \_\_\_\_\_  
By \_\_\_\_\_

Date \_\_\_\_\_

Title \_\_\_\_\_

Attest \_\_\_\_\_

Name and Address for giving notices (print)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

INFORMATION ONLY

**PUBLIC WORKS PERFORMANCE BOND**  
**to TOWN OF CATHLAMET, WA**

Bond No. \_\_\_\_\_

The **TOWN OF CATHLAMET**, Washington, (Town) has awarded to \_\_\_\_\_ (Principal), a contract for the construction of the project designated as Boege Road and State Route 4 PRV Stations in Cathlamet, Washington (Contract), and said Principal is required under the terms of that Contract to furnish a bond for performance of all obligations under the Contract.

The Principal, and \_\_\_\_\_ (Surety), a corporation organized under the laws of the State of \_\_\_\_\_ and licensed to do business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Dept., are jointly and severally held and firmly bound to the Town, in the sum of \_\_\_\_\_ US Dollars (\$ \_\_\_\_\_ **amount to include sales tax**) Total Contract Amount, subject to the provisions herein.

This statutory performance bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall well and faithfully perform all of the Principal's obligations under the Contract and fulfill all the terms and conditions of all duly authorized modifications, additions, and changes to said Contract that may hereafter be made, at the time and in the manner therein specified; and if such performance obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety agrees to indemnify, defend, and protect the Town against any claim of direct or indirect loss resulting from the failure of the Principal, its heirs, executors, administrators, successors, or assigns (or any of the employees, subcontractors, or lower tier subcontractors of the Principal) to faithfully perform the Contract.

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 Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

This bond may be executed in two (2) original counterparts, and shall be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed and original power of attorney for the officer executing on behalf of the surety.

The Surety agrees to be bound by the laws of the state of Washington and subjected to the jurisdiction of the state of Washington.

PRINCIPAL

SURETY

\_\_\_\_\_  
Principal Signature \_\_\_\_\_ Date

\_\_\_\_\_  
Surety Signature \_\_\_\_\_ Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

Local office/agent of Surety Company:

Name \_\_\_\_\_

Telephone \_\_\_\_\_

Address \_\_\_\_\_

**PUBLIC WORKS PAYMENT BOND  
to TOWN OF CATHLAMET, WA**

Bond No. \_\_\_\_\_

The **TOWN OF CATHLAMET**, Washington, (Town) has awarded to \_\_\_\_\_ (Principal), a contract for the construction of the project designated as Boege Road and State Route 4 PRV Stations in Cathlamet, Washington (Contract), and said Principal is required under the terms of that Contract to furnish a payment bond in accord with Title 39.08 Revised Code of Washington (RCW) and (where applicable) 60.28 RCW.

The Principal, and \_\_\_\_\_ (Surety), a corporation organized under the laws of the State of \_\_\_\_\_ and licensed to do business in the State of Washington as surety and named in the current list of "Surety Companies Acceptable in Federal Bonds" as published in the Federal Register by the Audit Staff Bureau of Accounts, U.S. Treasury Dept., are jointly and severally held and firmly bound to the Town, in the sum of \_\_\_\_\_ US Dollars (\$ \_\_\_\_\_ **amount to include sales tax**) Total Contract Amount, subject to the provisions herein.

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW Titles 60.28, 39.08, and 39.12 including all workers, laborers, mechanics, subcontractors, lower tier subcontractors, and material suppliers, and all persons who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and all taxes incurred on said Contract under Title 50 and 51 RCW and all taxes imposed on the Principal under Title 82 RCW; and if such payment obligations have not been fulfilled, this bond shall remain in full force and effect.

The Surety agrees to indemnify, defend, and protect the Town against any claim of direct or indirect loss resulting from the failure of the Principal, its heirs, executors, administrators, successors, or assigns, (or the subcontractors or lower tier subcontractors of the Principal) to pay all laborers, mechanics, subcontractors, lower tier subcontractors material persons, and all persons who shall supply such contractor or subcontractors with provisions and supplies for the carrying on of 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, except as provided herein, 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 Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

This bond may be executed in two (2) original counterparts, and shall be signed by the parties' duly authorized officers. This bond will only be accepted if it is accompanied by a fully executed and original power of attorney for the officer executing on behalf of the surety.

The Surety agrees to be bound by the laws of the state of Washington and subjected to the jurisdiction of the state of Washington.

**PRINCIPAL**

**SURETY**

Principal Signature

Date

Surety Signature

Date

Printed Name

Printed Name

Title

Title

Local office/agent of Surety Company:

Name \_\_\_\_\_

Telephone \_\_\_\_\_

Address \_\_\_\_\_

## **PART 3**

# **GENERAL CONDITIONS**

# GENERAL CONDITIONS

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# **GENERAL CONDITIONS**

## **SECTION 1 - GENERAL INFORMATION APPLICABLE TO PROPOSAL AND CONTRACT**

### **1.01 DEFINITIONS AND TERMINOLOGY**

The following terms are abbreviated and defined as they are used in the Contract. When used in the Proposal form to denote items of Work and units of measurements, abbreviations mean the full expression of the abbreviated term.

### **1.02 ABBREVIATIONS AND TERMINOLOGY**

#### **1.02.1 REFERENCED STANDARDS AND CODES**

The following is a partial list of specifications and codes that may be referenced in sections of the Contract. The Contractor shall be responsible for conducting its Work and carrying out its operations and furnishing equipment in accordance with the latest edition or versions, in effect at the time of bid opening, of any applicable specified portions of the referenced standards and codes.

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AFBMA	Anti-friction Bearing Manufacturing Association
AGA	American Gas Association
AGC	Associated General Contractors of America
AI	Asphalt Institute
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMCA	Air Moving and Conditioning Association
ANLA	American Nursery and Landscape Association
ANSI	American National Standards Institute, Inc.
APA	American Plywood Association
API	American Petroleum Institute
APWA	American Public Works Association
ARA	American Railway Association
AREMA	American Railway Engineering and Maintenance-of-Way Association
ASA	American Standards Association
ASCE	American Society of Civil Engineers
ASLA	American Society of Landscape Architects
ASME	American Society Mechanical Engineers
ASNT	American Society for Nondestructive Testing
ASTM	American Society for Testing and Material
AWPA	American Wood Preservers' Association
AWS	American Welding Society

AWWA	American Water Works Association
CFR	Code of Federal Regulations
CLI	Chain Link Institute
CRAB	County Road Administration Board
CRSI	Concrete Reinforcing Steel Institute
CSA	Canadian Standards Associations
CSI	Construction Specifications Institute
DIPRA	Ductile Iron Pipe Research Association
EEI	Edison Electric Institute
EPA	Environmental Protection Agency
ETL	Electrical Testing Laboratories
FHWA	Federal Highway Administration
FM	Factory Mutual
FSS	Federal Specifications and Standards, General Services Administration
HUD	United State Department of Housing and Urban Development
IBC	International Building Code
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronic Engineers
IES	Illumination Engineering Society
IMSA	International Municipal Signal Association
IPC	International Plumbing Code
ISA	Instrumentation Society of America
JIC	Joint Industry Conference Electrical Standards for Industrial Equipment
LID	Local Improvement District
LPI	Lightning Protection Institute
MSHA	Mine Safety and Health Act
MSS	Manufacturer's Standardization Society of the Valve and Fitting Industry
MUTCD	Manual on Uniform Traffic Control Devices
NCMA	National Concrete Manufacturer's Association
NEC	National Electrical Code
NEMA	National Electrical Manufacturers' Association
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NRMCA	National Ready Mix Concrete Association
OMWBE	Office of Minority and Women's Business Enterprises
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
PPI	Plastic Pipe Institute
P/PCI	Precast/Prestressed Concrete Institute
RCW	Revised Code of Washington
SAE	Society of Automotive Engineers
SEPA	State Environmental Policy Act
SIES	Specifications and Illuminating Engineering Society
SSPC	Steel Structures Painting Council
UL	Underwriters' Laboratory
ULID	Utility Local Improvement District
UMTA	Urban Mass Transit Administration

WABO	Washington Association of Building Officials
WAC	Washington Administrative Code
WCLIB	West Coast Lumber Inspection Bureau
WISHA	Washington Industrial Safety and Health Administration
WRI	Wire Reinforcement Institute
WSDL&I	Washington State Department of Labor and Industries
WSDOE	Washington State Department of Ecology
WSDOT	Washington State Department of Transportation
WWPA	Western Wood Products Association

### **1.02.2 TERMINOLOGY**

The use of pronouns of any gender in these General Conditions shall include pronouns of all genders, as applicable.

The terms “provide,” “furnish” and “install” are used interchangeably in the Contract and mean that the Contractor shall provide, furnish, and install the item(s) described unless specifically noted otherwise.

The terms “Plans” and “Drawings” are used interchangeably in the Contract and shall mean the Contract Plans, which show location, character, and dimensions of prescribed Work, including layouts, profiles, cross-sections, and other details.

### **1.02.3 ITEMS OF WORK AND UNITS OF MEASUREMENT**

AC	Asbestos Cement Pipe
Agg.	Aggregate
Al.	Aluminum
ATB	Asphalt Treated Base
BST	Bituminous Surface Treatment
CB	Catch Basin
Cfm	Cubic Feet per Minute
Cfs	Cubic Feet per Second
Cl.	Class
CMP	Corrugated Metal Pipe
Comb.	Combination
Conc.	Concrete
CPEP	Corrugated Polyethylene Pipe
Crib.	Cribbing
Culv.	Culvert
Cy or Cu. Yd.	Cubic Yard(s)
Dia.	Diameter
DI	Ductile Iron
DIM	Dimension
EA	Each
EL	Elevation
Est.	Estimate or Estimated

Excl.	Excluding
F	Fahrenheit
FIG	Figure
Ft.	Foot or Feet
GALV	Galvanized
Gph	Gallon(s) per Hour
Gpm	Gallon(s) per Minute
HDPE	High Density Polyethylene
HMA	Hot Mix Asphalt
HR	Hour
Hund.	Hundred
In.	Inch or Inches
Incl.	Including
L	Liter
Lb.	Pound(s)
LF or Lin. Ft.	Linear Foot (Feet)
LS	Lump Sum
M	Thousand
MBM	Thousand Feet Board Measure
Pres.	Pressure
PSI	Pounds per Square Inch
PSF	Pounds per Square Foot
PVC	Polyvinyl Chloride
QTY	Quantity
Reg.	Regulator
Reinf.	Reinforced, Reinforcing
SF	Square Foot (Feet)
Sec.	Section
SL	Slope
St.	Street
Stl.	Steel
SST	Stainless Steel
Str.	Structural
Sy or Sq. Yd.	Square Yard(s)
Th.	Thick or Thickness
TN	Ton
Tr.	Treatment
TYP	Typical
VC	Vitrified Clay

### **1.03 DEFINITIONS**

#### **ACCEPTANCE**

The formal action by Owner or Owner's governing body as provided in RCW 39.08 and RCW 60.28, as existing or amended.

## **ADDENDUM**

A written or graphic document issued to all Bidders prior to bid opening and identified as an addendum, which clarifies, modifies or supplements the bid documents and becomes part of the Contract.

## **ADDITIVE**

A supplemental unit of work or group of bid items, identified separately in the Proposal, which may, at the discretion of the Owner, 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 Proposal, from which the Owner may make a choice between different methods or material of construction for performing the same work.

## **AWARD**

The formal decision of the Owner awarding the Contract to the lowest or most favorable responsible and responsive Bidder for the Work.

## **BID DOCUMENTS**

The component parts of the proposed Contract which may include, but not limited to, the Proposal form, the proposed Contract Provisions, the proposed Contract Plans, Addenda, and Subsurface Boring Logs (if any).

## **BIDDER**

A natural person or legal entity (e.g., partnership, corporation, limited liability company, firm, or joint venture) submitting a proposal or bid.

## **BUSINESS DAY**

A business day is any day from Monday through Friday, except holidays, as listed in Section 3.04.14.

## **CLERK**

The duly elected or appointed Clerk of the Commission, Council, or Board of Directors of the Owner or authorized designee.

## **COMMISSION, COUNCIL, OR BOARD OF DIRECTORS**

The duly elected or appointed Council, Commission, or Board of Directors of the Owner.

## **CONTRACT**

The written agreement between the Owner and the Contractor. It describes, among other things:

1. What work will be done, and by when;
2. Who will provide labor and materials; and
3. How Contractor will be paid.

The Contract includes: the agreement form, Bidder's completed Proposal form, all required certificates and affidavits, Performance Bond and Public Works Payment Bond, Contract Provisions, Contract Plans, and all Addenda and Change Orders executed pursuant to the provisions of the Contract.

## **CONTRACT BOND**

The approved form of security furnished by the Contractor and the Contractor's Surety as required by the Contract, that guarantees performance of all the Work required by the Contract and payment to anyone who provides supplies or labor for the performance of the Work.

## **CONTRACT DOCUMENTS**

See definition for "Contract."

## **CONTRACT PLANS (PLANS OR DRAWINGS)**

The Contract Plans (or drawings) are those plans, drawings or other illustrations and all addenda and revisions, whether issued before or after the award of the Contract to Contractor, which show location, character, and dimensions of the Work, including layouts, profiles, cross-sections and other details.

## **CONTRACT PROVISIONS**

A publication addressing the Work required for an individual project. At the time of the Call for Bids, the Contract Provisions may include, for a specific individual project, general conditions, supplemental general conditions, specifications, a listing of the applicable WSDOT Standard Plans, the prevailing minimum hourly wage rates, and an informational Proposal form with the listing of Bid items. The proposed Contract Provisions may also include, for a specific individual project, various required certifications or declarations. At the time of the Contract execution date, the Contract Provisions include the proposed Contract Provisions and include any Addenda, a copy of the agreement form, and a copy of the Proposal form with the Contract prices and extensions.

## **CONTRACT TIME**

The period of time established by the terms and conditions of the Contract within which the Work shall be complete.

## **CONTRACTOR**

The natural person(s) or legal entity (e.g., partnership, corporation, limited liability company, firm, joint venture) Contracting with the Owner to do the prescribed Work.

## **DATES**

**Substantial Completion Date** is the day that the Engineer determines the Owner has full and unrestricted use and benefit of the Work, from both an 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 Work.

**Physical Completion Date** is the day that the Engineer determines that all of the Work required by the Contract is physically completed and the Owner has received from the Contractor all required record drawings, operation and maintenance manuals, manufacturers' affidavits, and software and programming.

**Contract Completion Date** is the day when all the Work and all the obligations of the Contractor under the Contract are fulfilled by the Contractor. All documentation and other items required by the Contract and required by law shall be furnished by the Contractor before establishment of this date.

**Final Acceptance Date** is the date on which the Owner accepts the Work as complete.

## **FIELD REPRESENTATIVE**

The Owner's representative who observes the Contractor's performance of the Work. Such observation shall not be relied upon by the Contractor or others as approval or acceptance of the Work, nor shall it in any manner relieve the Contractor from its obligations and responsibilities under the Contract.

## **NOTICE TO PROCEED**

The written notice from the Owner 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.

## **OWNER**

The government entity or agency that awards the Contract to the Contractor and is responsible for the execution and administration of the Contract.

## **PROJECT ENGINEER/ENGINEER**

The Owner's representative who administers the construction program for the Owner.

## **PROPOSAL (or BID)**

A Bidder's offer, on a properly completed Proposal form, to perform the Work required by the Contract. The terms Proposal and Bid may be used interchangeably.

## **SPECIFICATIONS**

Written provisions describing the Work and requirements thereof.

## **STANDARD PLANS**

A manual of specific plans or drawings adopted by the Owner, which show frequently recurring components of work that, have been standardized for use.

## **SUBCONTRACTOR**

A natural person, or entity (e.g., partnership, corporation, limited liability company, firm or joint venture) to which the Contractor sublets a portion of the Work.

## **SUBGRADE**

The top surface of the roadbed on which subbase, base, surfacing, pavement, or layers of similar materials are placed.

## **SUPPLEMENTARY GENERAL CONDITIONS**

That part of the Contract amends or supplements these General Conditions.

## **TRAVELED WAY**

That part of the roadway made for vehicle travel, excluding shoulders and auxiliary lanes.

## **WORK**

The provision of all labor, materials, tools, equipment, supervision and other things needed to complete the project in full accordance with the Contract Documents.

## **WORKING DRAWINGS**

Shop drawings, shop plans, erection plans, falsework plans, framework plans, cofferdam, cribbing and shoring plans, bending diagrams for reinforcing steel, or any other supplementary plans or similar data, including a schedule of submittal dates for working drawings where specified, that the Contractor shall submit to the Engineer for approval.

## **SECTION 2 - INSTRUCTIONS FOR PREPARATION OF PROPOSAL (OR BID)**

### **2.01 BID PROCEDURES AND CONDITIONS**

#### **2.01.1 QUALIFICATIONS OF BIDDERS**

Where applicable and required, Bidders shall provide all requested information relating to experience, financing, equipment, and organization relating to their ability to properly perform the Work. The Owner reserves the right to take whatever action it deems necessary to ascertain the responsibility of the Bidder and the ability of the Bidder to perform the Work satisfactorily.

#### **2.01.2 CONTRACT PROVISIONS AND CONTRACT PLANS**

Contract Provisions and Contract Plans are on file in the offices of the Owner and the Engineer, Gray & Osborne, Inc. After award of the Contract, up to five sets of Contracts will be issued without charge to the Contractor. Additional sets of Contracts may be purchased from the Owner by the Contractor.

#### **2.01.3 ESTIMATED QUANTITIES**

The quantities shown in the Proposal form are estimates and are stated only for bid comparison purposes. The Owner does not warrant, expressly or by implication, that the actual quantities will correspond with those estimates. Payment will be made on the basis of the actual quantities of each item of Work satisfactorily completed in accordance with the requirements of the Contract.

#### **2.01.4 EXAMINATION OF CONTRACT AND SITE**

##### **2.01.4(1) General**

Bidders shall satisfy themselves by personal examination of Contract Provisions, Contract Plans, and site of the proposed improvements, and by any other examination and investigation which they may desire to make as to the accuracy of the estimate of quantities, the nature of the Work and the difficulties to be encountered. Bidders shall review the entire Contract to ensure that the completeness of their Proposal includes all items of Work regardless of where shown in the Contract. Bidders are cautioned that alternate sources of information (copies of the Contract obtained from third parties) are not necessarily an accurate or complete representation of the Contract. Bidders shall use such information at their own risk.

Bidders shall be familiar and comply with all applicable federal, state, and local laws, ordinances, and regulations in any way applicable to the performance the Work. Bidders are responsible for familiarizing themselves with all current state and federal wage rates applicable to the Work and its duration before submitting a Proposal based on the Contract Provisions and Contract Plans. Any wage determination contained in the Contract is for the Bidder's general information only and is not warranted to be complete or accurate. The Owner will not consider any plea of misunderstanding or ignorance of such requirements. Bid prices shall reflect what the Bidder has determined to be the total cost of completing the Work, including but not limited to: construction methods, materials, labor, administrative costs, any and all applicable taxes, and equipment.

Except as the Contract may provide, the Bidder to which the Contract is awarded shall receive no payment for any costs that exceed those set forth in the Proposal.

#### **2.01.4(2) Interpretation of the Contract Provisions and Contract Plans**

If any Bidder desires interpretation or clarification of the Contract Provisions and Contract Plans, the Bidder shall make a written request to the Engineer for such clarification or interpretation prior to the submission of a Proposal. If the Engineer determines that the Contract Provisions and/or Contract Plans do not require interpretation or clarification, the Engineer will so notify the Bidder making the request. All interpretations and clarifications made by the Engineer will be by written addendum to all planholders of record, and a copy of the addendum will be filed in the office of the Owner. Neither the Owner nor the Engineer will be responsible for any interpretation, clarification or explanation of the Contract Provisions and Contract Plans that is not set forth in a written addendum to all planholders of record, and Bidders shall not under any circumstances rely on any other interpretation, clarification or explanation.

#### **2.01.4(3) Subsurface Information**

If the Owner has made a subsurface investigation of the site of the proposed Work, the boring log data and soil sample test data accumulated by the Owner will be made available for inspection by the Bidders. However, the Owner makes no representation or warranty, express or implied, that:

- a. The Bidders' interpretations from the boring logs may be correct;
- b. Moisture conditions and indicated water tables will not vary from those found at the time the borings were made;
- c. The ground at the location of the borings has not been physically disturbed or altered after the boring was made; and
- d. Conditions below the surface of the ground are consistent throughout the site with the information made available hereunder, or that conditions to be encountered on the site are uniform or consistent with geological conditions usually encountered in the area.

The Owner makes no representations, guarantees, or warranties as to the condition, materials, or proportions of the materials between the specific borings, regardless of any subsurface information the Owner may make available to the prospective Bidders. Bidders are solely responsible for making the necessary investigations to support and/or verify any conclusions or assumptions used in preparation of their Proposals.

Any subsurface investigations and analysis were carried out for design purposes only. Contractor may not rely upon or make any claim against Owner, Engineer, or any of their subconsultants, with respect to:

1. The completeness of such reports for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and

procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or

2. Other conclusions, interpretations, opinions, representations, and information contained in such reports; or
3. Any Contractor interpretation of or conclusion drawn from any “technical data” or any such other data, conclusions, interpretations, opinions or information.

#### **2.01.4(4) Availability of Specified Items**

Prior to submitting a Proposal, all Bidders shall verify that all items necessary to complete the Work will be available in time to allow the Work to be completed within the Contract Time. In the event that one or more items may not be available to allow the Work to be completed within the Contract Time, the Bidder shall notify the Engineer in writing prior to submitting a Proposal. Responsibility for delays and related costs because of non-availability of items necessary to complete the Work shall be borne by the Contractor.

#### **2.01.5 PROPOSAL DEPOSIT**

A deposit of at least 5 percent of the total Proposal amount shall accompany each Proposal (Proposal Deposit). The Proposal Deposit may be in the form of a Proposal bond (surety bond), certified check, cashier’s check, or postal money order made payable to the Owner. All Proposal bonds shall be on the form included within the Contract Provisions and shall be signed by the Bidder and the surety. The surety shall: (1) be registered with the Washington State Commissioner, and (2) appear on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner. The Proposal bond shall not be conditioned in any way to modify the minimum 5 percent required. The Proposal Deposit will be held as a guaranty that the successful Bidder will, within 10 days from the date of notification of Award, enter into a Contract and furnish approved Performance and Public Works Payment Bonds, on forms attached, in amounts equal to 100 percent of the amount of the Contract, including state sales tax.

The failure to furnish a Proposal Deposit of a minimum of 5 percent with the Proposal shall make the Proposal non responsive and shall cause the Proposal to be rejected by the Owner.

#### **2.01.6 PROPOSAL**

- (1) Proposals shall be submitted on the Proposal form included in the Contract Provisions. All Proposals shall be completed, signed by an authorized person and dated. To be considered by the Owner as a responsive Proposal, the Bidder shall bid on all Additive or Alternate items set forth in the Proposal form, unless otherwise specified in the Contract Documents.
- (2) To be responsive, a Proposal shall state that it will remain valid for a period of 60 days following the date of Proposal opening. In the event that a conflict in this

duration appears elsewhere in the Contract Provisions, the longest duration shall apply.

- (3) All prices set forth on the Proposal form shall be legible and either be written in ink or typed. In the space provided on the Proposal form, Bidders shall identify all Addenda that have been received. The Proposal, Proposal Deposit, and all other certificates, forms or other documents required by the Contract Provisions to be executed and delivered with the Proposal shall be submitted in a sealed package, addressed to the Owner, and plainly marked "Proposal for \_\_\_\_\_ (insert name of project as shown on the Proposal) to be opened on the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_," (insert the day, month and year shown in the published bid notice). The Owner will not consider any Proposal received after the time established for opening Proposals.
- (4) Where noted in the Proposal, the Bidder is to furnish information concerning its experience with work of a similar nature, equipment to be used on this project, and general background information. Information that is incomplete, evasive, or of a general nature only, may be considered as grounds for rejection of the Proposal.
- (5) RCW 39.30.060 requires Bidders on public works projects expected to cost one million dollars or more to provide the names of the structural steel installation, rebar installation, heating, ventilation and air conditioning, plumbing and electrical Subcontractors to whom the Bidder will directly subcontract those portions of the Work if awarded the Contract. The Bidder may not list more than one Subcontractor for each category of Work identified, unless Subcontractors vary with bid alternates, in which case the Bidder shall indicate which Subcontractor will be used for which alternate. Failure of the Bidder to list the names of such Subcontractors or to name itself to perform such Work, or listing two or more Subcontractors to perform the same Work, shall render the Bidder's Proposal unresponsive and void. Under RCW 39.30.060, the required names of such Subcontractors shall be provided with the Proposal or within one hour after the published Proposal submittal time. In addition to compliance with the requirements of RCW 39.30.060, the apparent successful Bidder may be required to submit to the Engineer as soon as possible after the Proposal opening, and not later than three calendar days thereafter, a written list of all proposed Subcontractors in addition to structural steel installation, rebar installation, heating, ventilation, and air conditioning, plumbing and electrical contractors, that will perform subcontracting Work on the project. If not previously provided, the following information shall be provided for each Subcontractor:
  - a. Name, address, email address, facsimile number, telephone number, contractor registration number and certification numbers;
  - b. The type of Work to be performed;

- c. A list of at least three recently completed projects for Work similar to that to be performed by the proposed Subcontractor, with the following information for each project:
    - i. Name of project,
    - ii. Name, address, and telephone number of the project owner; and
  - d. Any additional pertinent information establishing the experience or qualifications of the proposed Subcontractor.
- (6) After opening and reading Proposals, the Owner 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, converted to the actual extension, will control. The total extensions, corrected where necessary, will be used by the Owner for comparison and award purposes and to establish the amount of the Contractor's Performance and Public Works Payment Bonds.

#### **2.01.7 WITHDRAWING OR REVISING PROPOSAL**

After submitting a physical Proposal to the Owner, the Bidder may withdraw, or revise 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 Proposals; and
2. The Owner receives the request before the time set for receipt of Proposals; and
3. The revised or supplemented Proposal (if any) is received by the Owner before the time set for receipt of Proposals.

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

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

#### **2.01.8 DISQUALIFICATION OF BIDDERS**

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

- b. The authorized proposal form furnished by the Owner is not used or is altered;
- c. The completed proposal form contains any unauthorized additions, deletions, alternate Bids, or conditions;
- d. The Bidder adds provisions reserving the right to reject or accept the award, or enter into the Contract;
- e. A price per unit cannot be determined from the Bid Proposal;
- f. The Proposal form is not properly executed;
- g. The Bidder fails to submit or properly complete a Subcontractor list, if applicable;
- h. The Bidder fails to submit or properly complete a Disadvantaged, Minority or Women’s Business Enterprise Certification, if applicable;
- i. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or
- j. More than one proposal is submitted for the same project from a Bidder under the same or different names.

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 Owner;
- c. Receipt of Addenda is not acknowledged;
- d. 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
- e. If Proposal form entries are not made in ink.

3. 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; or does not meet Supplemental Criteria 1 through 8 in this Section:

The Owner will verify that the Bidder meets the mandatory bidder responsibility criteria in RCW 39.04.350(1), and Supplemental Criteria 1. Evidence that the Bidder meets Supplemental Criteria 2 through 8 shall be provided by the Bidder as stated later in this Section.

a. **Criteria 1 – Federal Debarment**

- 1. Criterion: The Bidder shall not currently be debarred or suspended by the Federal government.
- 2. Documentation: The Bidder shall not be listed as having an “active exclusion” on the U.S. government’s “System for Award Management” database (www.sam.gov).

b. **Criteria 2 – Delinquent State Taxes**

1. **Criterion:** The Bidder shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.
2. **Documentation:** The Bidder shall, if and when required as detailed below, sign a statement (on a form to be provided by the Owner) that the Bidder does not owe delinquent taxes to the Department of Revenue. If the Bidder owes delinquent taxes, they must submit a written payment plan approved by the Department of Revenue, to the Owner by the deadline listed below.

c. **Criteria 3 – Claims Against Retainage and Bonds**

1. **Criterion:** The Bidder shall not have a record of excessive claims filed against the retainage or payment bonds for public works projects in the 3 years prior to the bid submittal date, that demonstrate a lack of effective management by the Bidder of making timely and appropriate payments to its Subcontractors, suppliers, and workers, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Owner.
2. **Documentation:** The Bidder shall, if and when required as detailed below, sign a statement (on a form to be provided by the Owner) that the Bidder has not had claims against claims against retainage and bonds in the 3 years prior to the bid submittal date. If the Bidder has had claims against retainage and bonds in the three years prior to the bid submittal date, they shall submit a list of the public works projects completed in the 3 years prior to the bid submittal date that have had claims against retainage and bonds and include for each project the following information:
  - Name of project
  - The owner and contact information for the owner;
  - A list of claims filed against the retainage and/or payment bond for any of the projects listed;
  - A written explanation of the circumstances surrounding each claim and the ultimate resolution of the claim.

d. **Criteria 4 – Public Bidding Crime**

1. **Criterion:** The Bidder and/or its owners shall not have been convicted of a crime involving bidding on a public works contract in the 5 years prior to the bid submittal date.
2. **Documentation:** The Bidder, if and when required as detailed

below, shall sign a statement (on a form to be provided by the Owner) that the Bidder and/or its owners have not been convicted of a crime involving bidding on a public works contract.

e. **Criteria 5 – Termination for Cause / Termination for Default**

1. **Criterion:** The Bidder shall not have had any public works contract terminated for cause or terminated for default by a government agency in the 5 years prior to the bid submittal date, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Owner.
2. **Documentation:** The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Owner) that the Bidder has not had any public works contract terminated for cause or terminated for default by a government agency in the 5 years prior to the bid submittal date; or if Bidder was terminated, describe the circumstances.

f. **Criteria 6 – Lawsuits**

1. **Criterion:** The Bidder shall not have lawsuits with judgments entered against the Bidder in the 5 years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Owner.
2. **Documentation:** The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Owner) that the Bidder has not had any lawsuits with judgments entered against the Bidder in the 5 years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, or shall submit a list of all lawsuits with judgments entered against the Bidder in the 5 years prior to the bid submittal date, along with a written explanation of the circumstances surrounding each such lawsuit. The Owner shall evaluate these explanations to determine whether the lawsuits demonstrate a pattern of failing to meet of terms of construction related contracts.

g. **Criteria 7 – Contract Time (Liquidated Damages)**

1. **Criterion:** The Bidder shall not have had liquated damages assessed on any projects it has completed 5 years prior to the bid submittal date that demonstrate a pattern of failing to meet Contract Time, unless there are extenuating circumstances and such circumstances are deemed acceptable to the Owner.

2. Documentation: The Bidder, if and when required as detailed below, shall sign a statement (on a form to be provided by the Owner) that the Bidder has not had liquidated damages assessed on any projects it has completed within the 5 years prior to the bid submittal date, or shall submit a list of projects with assessed liquidated damages along with Owner contact information, and number of days assessed liquidated damages.

h. **Criteria 8 – Capacity and Experience**

1. Criterion: The Bidder shall have sufficient current capacity and the project superintendent assigned to the project shall have experience to meet the requirements of this project. The Bidder and the project superintendent shall have successfully completed at least two projects as the prime contractor, of a similar size and scope, during the 5-year period immediately preceding the bid submittal deadline for this project. Similar size is defined as a minimum of 70 percent of the bid amount submitted by the Bidder.
2. Documentation: The Bidder shall, if and when required as detailed below, on a form to be provided by the Owner, provide the Bidder's gross dollar amount of work currently under contract, the Bidder's gross dollar amount of contracts currently not completed, five major pieces of equipment anticipated to be on the project and whether the equipment is leased or owned, the superintendent assigned to this project and their number of years of experience, and two project references of similar size and scope during the 5-year period immediately preceding the bid submittal deadline for this project. The Owner may check owner references for the previous projects and may evaluate the owner's assessment of the Bidder performance.

As evidence that the Bidder meets Supplemental Responsibility Criteria 2 through 8 stated above, the apparent two lowest Bidders must submit to the Owner by 12:00 P.M. (noon) of the second business day following the bid submittal deadline, a written statement verifying that the Bidder meets Supplemental Criteria 2 through 8 together with supporting documentation (sufficient in the sole judgment of the Owner) demonstrating compliance with Supplemental Responsibility Criteria 2 through 8. The Owner reserves the right to request further documentation as needed from the low bidder and documentation from other Bidders as well to assess Bidder responsibility and compliance with all bidder responsibility criteria. The Owner also reserves the right to obtain information from third-parties and independent sources of information concerning a Bidder's compliance with the mandatory and Supplemental Criteria, and to use that information in their evaluation. The Owner may consider mitigating factors in determining whether the Bidder complies with the requirements of the Supplemental Criteria.

The basis for evaluation of Bidder compliance with these mandatory and Supplemental Criteria shall include any documents or facts obtained by Owner (whether from the Bidder or third parties) including but not limited to: (i) financial, historical, or operational data from the Bidder; (ii) information obtained directly by the Owner from others for whom the Bidder has worked, or other public agencies or private enterprises; and (iii) any additional information obtained by the Owner which is believed to be relevant to the matter.

If the Owner determines the Bidder does not meet the bidder responsibility criteria above and is therefore not a responsible Bidder, the Owner 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 2 business days of the Owner's determination by presenting its appeal and any additional information to the Owner. The Owner 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 Owner will not execute a contract with any other Bidder until at least 2 business days after the Bidder determined to be not responsible has received the Owner's final determination.

Request to Change Supplemental Bidder Responsibility Criteria Prior To Bid: Bidders with concerns about the relevancy or restrictiveness of the Supplemental Bidder Responsibility Criteria may make or submit requests to the Owner to modify the criteria. Such requests shall be in writing, describe the nature of the concerns, and propose specific modifications to the criteria. Bidders shall submit such requests to the Owner no later than 5 business days prior to the bid submittal deadline and address the request to the Project Engineer or such other person designated by the Owner in the Bid Documents.

### **2.01.9 PROPOSAL ERRORS**

If a Bidder discovers an error in the Bidder's Proposal after the Proposals have been opened and tabulated and desires to withdraw the erroneous Proposal, the Bidder shall submit a notarized affidavit signed by the Bidder, accompanied by original certified worksheets used in the preparation of the Proposal, requesting relief from the Award. The affidavit shall describe the specific error(s) and certify that the worksheets are the originals used in the preparation of the Proposal.

The affidavit and the certified worksheets shall be received by the Engineer before 5:00 p.m. local time on the next business day following the day of the Proposal opening or the claim of error will not be considered. The Engineer will review the certified worksheets to determine the validity of the claimed error, and make its recommendation to the Owner. If the Owner and Engineer concur that the claim of error is allowable under applicable law, the Bidder will be relieved of responsibility for the Proposal, and the Proposal Deposit will be returned to the Bidder. Thereafter, at the discretion of the Owner, all Proposals may be rejected or an Award made to the next lowest responsive, responsible Bidder.

## **2.02 AWARD AND EXECUTION OF CONTRACT**

### **2.02.1 AWARD OF CONTRACT**

A Contract will not be awarded until the Owner is satisfied that the successful Bidder is responsible, reasonably familiar with the Work to be performed and has the necessary capital, tools, personnel and equipment to satisfactorily perform the Work.

The Owner reserves the right to waive informalities in the bidding, accept a Proposal of the lowest responsive, responsible Bidder, reject any or all Proposals, republish the call for Proposals, or revise or cancel the project.

After the date and hour set for the opening of the Proposals, no Bidder may withdraw its Proposal unless the Award of the Contract is delayed for a period exceeding 60 calendar days following Proposal opening. In the event that a conflicting duration appears elsewhere in the Invitation for Proposals or Contract Provisions or advertisement, the longer period shall govern.

### **2.02.2 EXECUTION OF CONTRACT**

Within 10 calendar days after notification by the Owner of the Award, the successful Bidder shall return to the Engineer the signed Owner-prepared Contract, all insurance certificates and endorsements required by the Contract Provisions, all other certificates, information, and forms required by the Contract Provisions, and Performance and Public Works Payment Bonds required by the Contract Provisions. If the Contract is signed by an officer, agent, or other authorized representative of the Contractor, the officer, agent, or other representative shall furnish satisfactory evidence of authority to sign as the legal representative of the Contractor, if required by the Owner. An authorized partner of a joint venture may sign the Contract, subject to the approval of the Owner, which may, at its discretion, require each and every member of the joint venture to sign the Contract.

Should the successful Bidder fail to return to the Engineer the signed Owner-prepared Contract, all insurance certificates and endorsements required by the Contract Provisions, all other certifications, information, and forms required by the Contract Provisions, and Performance and Public Works Payment Bonds required by the Contract Provisions within 10 calendar days after notification by the Owner of the Award, the Owner reserves the right to and may elect to withdraw the award to the successful Bidder and award the Contract to the next responsible, responsive Bidder.

Until the Owner executes the Contract, no Proposal shall bind the Owner, and the Contractor shall not commence any Work. The Contractor shall bear all risks for any Work begun before the Contract is executed by the Owner.

### **2.02.3 FAILURE TO EXECUTE CONTRACT**

If the Contractor fails to submit the insurance certificates, bonds, and all other certificates, forms, information and documents as required by the Contract Provisions, with the executed Contract within the time required by the Contract Provisions, the Owner may then award the Contract to the next lowest responsive, responsible Bidder or reject any or all Proposals.

### **2.02.4 RETURN OF PROPOSAL DEPOSIT**

When Proposals have been examined and corrected as necessary, Proposal Deposits accompanying Proposals ineligible for further consideration will be returned. All other Proposal Deposits will be held until the Contract is awarded and fully executed, after which the Proposal Deposits, except those subject to forfeiture, will be returned.

### **2.02.5 NOTICE TO PROCEED**

A written Notice to Proceed will be issued to the Contractor by the Owner or Engineer after the Contract has been executed by the Contractor and the Owner, and the Performance and Public Works Payment Bonds and required insurance and other certificates and documents are approved by the Owner and, when applicable, by State or Federal agencies responsible for funding any portion of the project. The Contractor shall not commence Work until the Notice to Proceed has been issued.

## **SECTION 3 - GENERAL REQUIREMENTS OF THE CONTRACT**

### **3.01 SCOPE OF THE WORK**

#### **3.01.1 INTENT OF THE CONTRACT**

The intent of the Contract is to describe a functionally complete project to be constructed in accordance with the Contract. The Contractor shall provide all labor, supervision, materials, tools, equipment, transportation, supplies, and other things required expressly by, or reasonably implied from, the Contract, to complete all Work. Omissions from the Contract of details of Work which are necessary to carry out the intent of the Contract, or which are customarily performed, shall not relieve the Contractor from performing the complete Work called for by the Contract; such Work shall be performed as if fully set forth and described in the Contract. The unit or other bid prices shall be full payment for everything required to complete the Work, including but not limited to labor, supervision, materials, equipment, jobsite and home office overhead and profit.

#### **3.01.2 COORDINATION OF CONTRACT**

The Contract Plans and the Contract Provisions for the Work shall be considered as a whole, and anything shown or called for in one and omitted in any other is as binding as if called for or shown on both. Figure dimensions shall, in all cases, be used in preference to scale dimensions. Any inconsistency in the Contract Documents shall be resolved by the following order of precedence (e.g., 1 presiding over 2 through 4, 2 presiding over 3 through 4, etc.):

1. Addenda;
2. The Agreement and Proposal Form;
3. Specifications;
- 3a. Supplementary General Conditions (including conditions supplied by federal or state agencies on projects funded, in whole or part, by such agencies. In the event of a conflict in various forms of General Conditions, those conditions affording the greatest benefit or protection to the Owner shall govern.);
- 3b. General Conditions;
- 3c. Technical Specifications;
4. Contract Plans.

#### **3.01.3 ASSIGNMENT OF CONTRACT**

The Contractor shall not assign the Contract or any part of the Contract or of the funds to be received under the Contract unless such assignment is approved by the Owner and the Contractor's Performance and Public Works Payment Bonds surety prior to the execution or effectiveness of the assignment.

## **3.02 CONTROL OF WORK**

### **3.02.1 AUTHORITY AND ROLE OF THE ENGINEER**

- (1) The Engineer is the authorized representative of the Owner, and is employed to act as advisor and consultant to the Owner in engineering matters relating to the Contract. Among other things, the Engineer may determine the quantity of material installed or Work completed, evaluate whether materials and equipment comply with the Specifications, and assist the Owner with answering questions relating to the meaning and intent of the Contract. The Owner, with the advice of the Engineer, will make the final determination relating to quality, acceptability and conformity of labor and materials to the requirements of the Contract.
- (2) The Engineer does not purport to be a safety expert, and is not engaged in that capacity under the Contract or the Engineer's contract with the Owner. The Engineer does not have either the authority or the responsibility to enforce construction safety laws, rules, regulations or procedures, or to order the stoppage of Work for claimed violations thereof. From time to time, the Engineer may inform the Contractor of conditions that may constitute safety issues or violations. Such information will be provided solely to cooperate with and assist the Contractor and shall not make the Field Representative or the Engineer responsible for the enforcement of safety laws, rules, regulations or procedures. After receiving information relating to safety issues from the Engineer, the Contractor shall make its own examination and analysis of the situation reported and take such action, if any, that the Contractor determines to be appropriate. The Engineer's performance of project representation and observation services shall not make the Engineer responsible for the enforcement of safety laws, rules, regulations or procedures; nor shall it make the Engineer responsible for construction means, methods, techniques, sequences, or procedures, or for the Contractor's failure to properly perform the Work, all of which are entirely the responsibility of the Contractor.
- (3) The Engineer shall have no liability whatsoever to, or contractual relationship with, the Contractor in any way relating to the Contract. The Owner and the Contractor shall look solely to each other for the enforcement with respect to any rights, obligations, claims or liabilities arising under or in any way relating to the Contract. Neither the authority given to the Engineer herein, nor any action or service provided by the Engineer or its subconsultants with regard to the Work, shall create any duty owed by the Engineer or its subconsultants to the Contractor or a cause of action against the Engineer or its subconsultants by Contractor.
- (4) Nothing in the Contract shall, in any way, be construed to place responsibility on the Field Representative, Engineer or the Owner for the method, manner, direction or superintendency of the performance of the Work by the Contractor. Such responsibility rests solely with the Contractor.

- (5) Neither the Engineer nor any of its assistants or agents shall have any power to waive any obligation of the Contract. The Engineer's failure to reject Work that is defective or otherwise does not comply with the requirements of the Contract shall not constitute approval or acceptance of the Work or relieve the Contractor of its obligations under the Contract, notwithstanding that such Work has been estimated for payment or that payments have been made for that Work. Neither shall such failure to reject Work, nor any acceptance by the Engineer or by the Owner of any part or of the whole of the Work bar a claim by the Owner at any subsequent time for recovery of damages for the cost of removal and replacement of any portions of the Work that do not comply with the Contract.
- (6) No order, measurement, determination or certificate by the Engineer or Owner for payment of money or payment for or acceptance of the whole or of any part of the Work by the Engineer or the Owner or extension of time or possession taken by the Owner shall constitute a waiver of any portion of the Contract, nor shall any waiver of any breach of the Contract constitute a waiver of any other or subsequent breach thereof.

### **3.02.2 AUTHORITY OF FIELD REPRESENTATIVE**

- (1) Field Representatives are assigned to the project site to keep the Engineer and Owner generally informed as to the progress of the Work and the manner in which it is being done; to keep records; and to act as liaison between the Contractor, Owner and Engineer. When observed, the Field Representative shall call the attention of the Contractor to any deviations from the Contract. However, failure of the Field Representative to call the attention of the Contractor to faulty Work or deviations from the Contract shall not constitute either a waiver of any requirement in the Contract or acceptance of said Work.
- (2) Since one of the Field Representative's primary responsibilities is to observe that the Work progresses expediently and in a workmanlike manner, the Field Representative may offer suggestions to the Contractor, which the Contractor, at its sole discretion, may or may not choose to follow. Such suggestions are not to be considered as anything but suggestions offered to cooperate with and assist the Contractor and shall not constitute an assumption of responsibility, financial or otherwise, by the Field Representative, the Engineer or the Owner.
- (3) The presence or absence of the Field Representative on the job site will be at the sole discretion of the Owner, and the presence or absence of the Field Representative at any time will not relieve the Contractor of its responsibility to properly perform the Work as required by the Contract.
- (4) The Field Representative will have the authority, but not the obligation, to reject defective materials and equipment if observed; however, the failure of the Field Representative to reject defective materials and equipment or any other Work involving deviations from the Contract will not constitute acceptance of such Work. The Field Representative is not authorized to approve or accept any portion of the

Work or to issue instructions contrary to the Contract; all such approvals, acceptances or instructions shall be in writing and signed by the Engineer or the Owner.

- (5) The Field Representative does not purport to be a safety expert, and is not engaged in that capacity under the Contract or the Engineer's contract with the Owner. The Field Representative does not have either the authority or the responsibility to enforce construction safety laws, rules, regulations or procedures, or to order the stoppage of Work for claimed violations thereof. From time to time, the Field Representative may inform the Contractor of conditions that may constitute safety issues or violations. Such information will be provided solely to cooperate with and assist the Contractor and shall not make the Field Representative or the Engineer responsible for the enforcement of safety laws, rules, regulations or procedures. After receiving information relating to safety issues from the Field Representative, the Contractor shall make its own examination and analysis of the situation reported and take such action, if any, that the Contractor determines to be appropriate. The Field Representative's performance of observation services shall not make the Field Representative responsible for the enforcement of safety laws, rules, regulations or procedures; nor shall it make the Field Representative responsible for construction means, methods, techniques, sequences, or procedures, or for the Contractor's failure to properly perform the Work, all of which are entirely the responsibility of the Contractor.

### **3.02.3 CONSTRUCTION OBSERVATION AND INSPECTIONS**

- (1) All Work required by the Contract, including all materials and equipment to be furnished and the manufacture and preparation thereof shall, at all times, be subject to observation by the Owner's designated representatives, who may, at any time in the performance of their duties, enter upon the Work or the shops and factories where any part of the Work, materials or equipment are being prepared, fabricated or manufactured.
- (2) Observation of Work by the Owner, the Engineer, or the Field Representative shall not relieve the Contractor of its obligation to furnish satisfactory materials and workmanship. Work or materials found unsatisfactory at any time during the life of the Contract, and the applicable warranty periods, guarantees or limitation periods shall be promptly corrected or replaced immediately by the Contractor at its own expense.
- (3) Upon request by the Owner or Engineer, the Contractor shall furnish all tools, labor, equipment and materials necessary to examine any Work that may be completed or in progress, even to the extent of uncovering or taking down portions of completed or covered Work. Work shall be left exposed until examined by the Owner or Engineer, at no additional cost to the Owner. If the Owner or the Engineer determines that the uncovered Work does not comply with the requirements of the Contract, the cost of such examination and the cost of reconstruction and/or repair shall be borne by the Contractor.

- (4) The Contractor shall promptly comply with all directions of the Engineer with reference to correcting any Work or replacing any materials or equipment found to be not in accordance with the Contract. In the event of a dispute, the Contractor may appeal to the Engineer's decision to the Owner in accordance with the Contract, and the Owner's decision shall be final.

#### **3.02.4 EMERGENCY CONTACT LIST**

The Contractor shall submit an emergency contact list to the Engineer no later than five calendar days after the date the Contract is executed. The list shall include, at a minimum, the Contractor's project manager or equivalent, project superintendent, traffic control supervisor, and erosion and sediment control lead. The list shall identify a representative with delegated authority to act as the emergency contact on behalf of the Contractor and include one or more alternates. The emergency contact shall be available upon the Engineer's request at other than normal working hours. The emergency contact list shall include 24-hour telephone numbers for all individuals identified as emergency contacts or alternates.

#### **3.02.5 ORAL AGREEMENTS**

No oral agreement or conversation with any officer, agent, or employee of the Owner, either before or after execution of the Contract, shall affect or modify any of the terms or obligations contained in any of the documents comprising the Contract. Such oral agreement or conversation shall be considered as unofficial information and in no way binding upon the Owner, unless subsequently put in writing and signed by the Owner.

#### **3.02.6 ELECTRONIC FILES**

All Work performed shall be in conformity with the signed Contract Plans and Contract Provisions. If the Contractor requests electronic files, the Engineer may provide the files. The use of the electronic files shall be at the Contractor's sole risk. The Engineer does not warrant the completeness or accuracy of the electronic files and the Engineer assumes no liability for any errors or omissions in the digital data. The Contractor shall be responsible for reviewing and checking the electronic files to ensure that they are suitable for the Contractor's purpose.

### **3.03 LEGAL RELATIONS AND RESPONSIBILITIES**

#### **3.03.1 APPLICABLE LAWS AND REGULATIONS**

##### **3.03.1(1) General**

The Contractor shall comply with all laws, ordinances, rules and regulations of any authority having jurisdiction in any way relating to the project, including, but not limited to, regulations governing site maintenance, clean-up, air pollution control, noise control, water quality control, surface water control and runoff, tree and vegetation protection, cultural resources and oil and hazardous substance control.

### **3.03.1(2) Utilities and Similar Facilities**

The Contractor shall protect all private and public utilities from damage. Utilities include, among others: telephone lines; cable television and high-speed internet lines; gas; electric power lines; sanitary sewer; septic sewer systems; storm sewer, waterlines, and irrigation lines; street lighting and traffic signal and signing systems; and railroad tracks and related equipment.

In accordance with Chapter 19.122 of the Revised Code of Washington, the Contractor shall call the One-Number Locator Service for the field location of underground utilities. If no locator service is available for the area where the project is located, the Contractor shall provide written notice to all owners of utilities known to, or suspected of, having underground facilities within or near all areas of that will be excavated.

The Contractor shall be responsible for all costs required to protect public and private utilities from damage.

### **3.03.1(3) Site Maintenance**

The Contractor shall keep the Work site, staging areas, and Contractor's facilities clean and free from rubbish and debris. Materials and equipment shall be removed from the Work site when they are no longer necessary. Upon completion of the Work and before final acceptance, the Work site shall be cleared of equipment, unused materials, and rubbish and the Work site shall be left in clean and neat condition.

### **3.03.1(4) State Taxes**

The Washington State Department of Revenue has issued special rules on the State sales tax. Section 3.03.1(4) a through Section 3.03.1(4) c are meant to clarify those rules. The Contractor should contact the Washington State Department of Revenue for answers to questions in this area. The Owner 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 3.03.1(4) b describes this exception.

The Owner will pay the retained percentage 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 Owner 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 the Contract or not. Any amount so deducted will be paid into the proper State fund.

#### **a. 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.

b. 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 Owner, retail sales tax on the full Contract price. The Owner 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 Owner 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.

c. Services

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

**3.03.1(5) Equal Employment Responsibilities**

The Contractor shall, at its sole cost and expense, comply with all applicable laws, policies and regulations pertaining to nondiscrimination and equal employment opportunities. The absence of specific provisions or other requirements mandated by state, municipal or federal laws, policies or regulations from these General Conditions shall not excuse the Contractor from compliance with such laws, regulations or policies.

### **3.03.1(6) Archaeological and Historical Objects**

Archaeological or historical objects, such as ruins, human skeletal remains, sites, buildings, artifacts, fossils, or other objects of antiquity that may have significance from a historical or scientific standpoint, which may be encountered by the Contractor, shall not be further disturbed. The Contractor shall immediately notify the Engineer of any such finds.

The Engineer will determine if the material is to be salvaged. The Contractor may be required to stop work in the vicinity of the discovery until such determination is made. The Engineer may require the Contractor to suspend Work in the vicinity of the discovery until salvage is accomplished.

If the Engineer finds that the suspension of Work in the vicinity of the discovery increases or decreases the cost or time required for performance of any part of the Work under the Contract, the Engineer will make an adjustment in payment or the time required for the performance of the Work in accordance with Section 3.04.6.

### **3.03.2 SAFETY MEASURES**

All Work under the Contract shall be performed in a safe manner. The Contractor and all Subcontractors shall comply with all applicable rules, regulations, and safety standards of the Washington State Department of Labor and Industries and all other federal, state, local and other governmental entities having jurisdiction over the project. The Contractor shall be solely and completely responsible for the conditions of the job site, including the safety of all persons and property during the performance of the Work. This requirement shall apply continuously and not be limited to normal working hours.

The Engineer's review of the Contractor's work plan, safety plan, construction sequences, schedule or performance does not and is not intended to include review or approval of the adequacy of the Contractor's safety measures in, on, or near the job site. The Engineer does not purport to be a safety expert, and is not engaged in that capacity under the Contract. The Engineer has neither the authority nor the responsibility to enforce construction safety laws, rules, regulations, or procedures, or to order the stoppage of Work for claimed violations thereof.

The Contractor shall exercise all required and appropriate precautions to protect all persons and property from injury and damage.

### **3.03.3 HAZARDOUS MATERIAL**

Biological hazards and associated physical hazards may be present at the Work site. The Contractor shall take precautions and perform any necessary Work to provide and maintain a safe and healthful Work site in accordance with all applicable laws. The cost for all Work necessary to provide and maintain a safe Work site shall be included in the Contractor's Proposal, unless the Contract includes provisions to the contrary.

### **3.03.4 PAYMENT OF WAGES AND RELATED REQUIREMENTS**

#### **3.03.4(1) Minimum Prevailing Wage Requirements**

- a. The Contract is subject to the minimum prevailing wage and hour requirements of RCW 39.12 and RCW 49.28 (as amended or supplemented). On projects having federal funding, federal wage laws and rules may also apply. The Contract may list minimum hourly rates for wages for trades or occupations in the locality within the state where such labor is performed as determined by the Industrial Statistician for the Department of Labor and Industries or under the federal Davis-Bacon Act. These rates are for general reference purposes only and may not be current or complete. The Contractor, any Subcontractor, or other person doing any Work under the Contract shall not pay any worker less than the applicable current minimum hourly wage rates required by applicable law. Higher wages and benefits may be paid.
- b. The Contractor, any Subcontractor, and all individuals or firms required by RCW 39.12, WAC 296-127, or the Federal Davis-Bacon and Related Acts (DBRA) to pay minimum prevailing wages, shall not pay any worker less than the minimum hourly wage rates and fringe benefits required by RCW 39.12 or the DBRA. Higher wages and benefits may be paid.
- c. In accordance with WAC 296-127, the applicable prevailing wage rates that are in effect on the date when Proposals are due shall remain in effect for the duration of the Contract. By incorporating prevailing wage rates into the Contract, the Owner does not warrant or imply that the Contractor will find labor available at those rates. The Contractor shall calculate in its Proposal any amounts above the minimums that it will actually have to pay. Further, rates for wages and/or fringe benefits may change while the Contract is in force. If they do, the Contractor shall bear the cost of paying rates above those in effect at time of bid.
- d. If employing labor in a class not listed in the Contract Provisions on State funded projects, the Contractor shall request the Industrial Statistician, Department of Labor and Industries to determine the correct wage and benefits rate.
- e. If employing labor in a class not listed in the Contract Provisions on a federally funded project, the Contractor shall request the U.S. Secretary of Labor to determine the correct wage and benefits rate.
- f. The Contractor shall ensure that any firm (Supplier, Manufacturer, or Fabricator) that falls under the provisions of RCW 39.12 because of the definition "Contractor" in WAC 296-127-010, complies with all the requirements of RCW 39.12.
- g. The Contractor shall be responsible for compliance with the requirements of the DBRA and RCW 39.12 by all firms (Subcontractors, lower tier Subcontractors, Suppliers, Manufacturers, or Fabricators) engaged in any part of the Work necessary to complete the Contract. Therefore, should a violation of this

Subsection occur by any firm that is providing Work or materials for completion of the Contract whether directly or indirectly responsible to the Contractor, the Owner will take action against the Contractor, as provided by the provisions of the Contract, to achieve compliance, including, but not limited to, withholding payment on the Contract until compliance is achieved.

### **3.03.4(2) Posting Notice Requirements**

Notice of intent to pay prevailing wages and prevailing wage rates for the project shall be posted for the benefit of workers. The Contractor shall post the following, together with anything else necessary to comply with all applicable laws and regulations:

- a. One copy of the approved “Statement of Intent to Pay Prevailing Wages” for the Contractor, each Subcontractor, and any other firm (Supplier, Manufacturer, of Fabricator) that falls under the provisions of RCW 39.12 because of the definition of “Contractor” in WAC 296-127-010;
- b. One copy of the prevailing wage rates for the project;
- c. The address and telephone number of the Industrial Statistician for the Department of Labor and Industries, along with a statement that complaints and questions about wage rates may be directed there; and
- d. FHWA 1495/1495A “Wage Rate Information” poster if the project is funded with federal aid.

Notice shall be posted at a location readily visible to workers at the job site, or where no field office is established, at a local office. The Contractor shall supply a copy of the Notice to any employee upon request.

### **3.03.4(3) Apprentices**

If employing apprentices, the Contractor shall submit to the Owner written evidence showing:

- a. That each apprentice is enrolled in a program approved by the Washington State Apprenticeship and Training Council;
- b. The progression schedule for each apprentice; and
- c. The established apprentice-journeyman ratios and wage rates in the project locality upon which the Contractor shall base such ratios and rates under the Contract. Any worker for whom an apprenticeship agreement has not been registered and approved by the Washington State Apprenticeship and Training Council shall be paid the prevailing hourly rate for journeymen provided in RCW 39.12.021.

### **3.03.4(4) Required Documents**

#### **1. General**

All “Statements of Intent to Pay Prevailing Wages”, “Affidavits of Wages Paid” and Certified Payrolls, including a signed Statement of Compliance for Federal-aid projects, shall be submitted on the State L&I online Prevailing Wage Intent & Affidavit (PWIA) system. Statements of Intent to Pay Prevailing Wages”, and “Affidavits of Wages Paid” shall also be submitted to the Engineer. When requested by the Engineer, Certified Payrolls shall also be submitted to the Engineer.

#### **2. Intents and Affidavits**

On forms provided by the Industrial Statistician of State L&I, the Contractor shall submit to the Engineer the following for themselves and for each firm covered under RCW 39.12 that will or has provided Work and materials for the Contract:

- a. The approved “Statement of Intent to Pay Prevailing Wages” State L&I’s form number F700-029-000. The Contracting Agency will make no payment under this Contract until this statement has been approved by State L&I and reviewed by the Engineer.
- b. The approved “Affidavit of Prevailing Wages Paid”, State L&I’s form number F700-007-000. The Contracting Agency will not grant Completion until all approved Affidavit of Wages paid for the Contractor and all Subcontractors have been received by the Engineer. The Contracting Agency will not release to the Contractor any funds retained under RCW 60.28.011 until “Affidavit of Prevailing Wages Paid” forms have been approved by State L&I and all of the approved forms have been submitted to the Engineer for every firm that worked on the Contract.

The Contractor is responsible for requesting these forms from State L&I and for paying any fees required by State L&I.

#### **3. Certified Payrolls**

Certified payrolls are required to be submitted by the Contractor for themselves, all Subcontractors and all lower tier Subcontractors. The payrolls shall be submitted weekly on all Federal-aid projects and no less than monthly on State funded projects.

#### **4. Penalties for Noncompliance**

The Contractor is advised, if these payrolls are not supplied within the prescribed deadlines, any or all payments may be withheld until compliance is achieved. In addition, failure to provide these payrolls may result in other sanctions as provided by State laws (RCW 39.12.050) and/or Federal regulations (29 CFR 5.12).

### **3.03.5 BONDS, INSURANCE AND INDEMNITY OBLIGATIONS**

#### **3.03.5(1) Contract Bonds**

The successful Bidder shall provide an executed Performance Bond and Public Works Payment Bond for the full Contract amount (including sales tax). The Contract Bonds shall:

1. Be on Owner-furnished forms;
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. Be conditioned upon the faithful performance of the Contract by the Contractor within the prescribed time; and
4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under Titles 50, 51 and 82 RCW; and
5. Guarantee that the Surety shall indemnify, defend, and protect the Owner against any claim of direct or indirect loss resulting from the failure:
  - a. Of the Contractor (or any of the employees, Subcontractors, or lower tier Subcontractors of the Contractor) to faithfully perform the Contract; or
  - b. Of the Contractor (or the Subcontractors or lower tier Subcontractors of the Contractor) to pay all laborers, mechanics, Subcontractors, lower tier Subcontractors, materialperson, or any other person who provides supplies or provisions for carrying out the Work.
6. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
7. 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 must be signed by the president or vice-president, unless accompanied by written proof of the authority of the individual signing the bond to bind the corporation (i.e., corporate resolution, power of attorney or a letter to such effect by the president or vice-president).

The Owner may require Sureties or Surety companies on the Contract Bonds to appear and qualify themselves. Whenever the Owner deems the Surety or Sureties to be inadequate, it may, upon

written demand, require the Contractor to furnish additional Surety to cover any remaining Work. Until the added Surety is furnished, payments on the Contract will stop.

### **3.03.5(1.1) Two-Year Guarantee Period**

The Contractor shall return to the project and repair or replace all defects in workmanship and material discovered within 2 years after Final Acceptance of the Work. The Contractor shall start work to remedy any such defects within 7 calendar days of receiving Owner's written notice of a defect, and shall complete such Work within the time stated in the Owner's notice. In case of an emergency, where damage may result from delay or where loss of services may result, such corrections may be made by the Owner's own forces or another contractor, in which case the cost of corrections shall be paid by the Contractor. In the event the Contractor does not accomplish corrections within the time specified, the Work will be otherwise accomplished and the cost of same shall be paid by the Contractor.

When corrections of defects are made, the Contractor shall then be responsible for correcting all defects in workmanship and materials in the corrected work for 2 years after acceptance of the corrections by Owner.

This guarantee is supplemental to and does not limit or affect the requirements that the Contractor's Work comply with the requirements of the Contract or any other legal rights or remedies of the Owner.

### **3.03.5(2) Worker's Benefits**

- a. The Contractor shall make all payments required for unemployment compensation under RCW Title 50 and for industrial insurance and medical aid required under RCW Title 51. If any payment required by Title 50 or Title 51 is not made when due, the Contractor shall indemnify the Owner with respect to all costs and damages, including attorneys' fees and expenses, associated with such nonpayment. The Owner may retain payments due under Title 50 or Title 51 from any money due to the Contractor and make payment to the appropriate fund.
- b. The Contractor shall include in the various items in its bid Proposal all costs for payment of unemployment compensation and for providing the required insurance coverage(s). The Contractor will not be entitled to any additional payment for: (1) failure to include such costs in the Proposal, or (2) post-Award determinations made by the U.S. Department of Labor, the Washington State Department of Labor and Industries, or any other agency or entity regarding insurance coverage requirements.

### **3.03.5(4) Public Liability & Property Damage Insurance**

#### **3.03.5(4.1) General Requirements**

- A. The Contractor shall procure and maintain insurance described in all subsections in this Section, from insurers with a current A.M. Best rating not less than A – VII

and licensed to do business in the state of Washington. The Owner reserves the right to approve or reject the insurance provided, based on the insurer (including financial condition), terms and coverage, the Certificate of Insurance, and/or endorsements.

- B. The Contractor shall keep this insurance in force during the term of the Contract and for 30 days after the Physical Completion Date, unless otherwise indicated.
- C. All insurance coverage required by this section shall be written and provided by “occurrence-based” policy forms rather than by “claims made” forms.
- D. The insurance policies shall contain a “cross liability” provision.
- E. The Contractor’s and all Subcontractors’ insurance coverage shall be primary and non-contributory insurance as respects the Owner’s insurance, self-insurance, or insurance pool coverage. Any insurance, self-insurance or self-insured pool coverage maintained by the Owner shall be excess of the Contractor’s insurance and shall not contribute with it.
- F. The Contractor shall provide the Owner and all Additional Insured with written notice of any policy cancellation and the date of effective cancellation within 2 business days of receipt.
- G. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Owner.
- H. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of Contract, upon which the Owner may, after giving 5 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 Owner on demand, or at the sole discretion of the Owner, offset against funds due the Contractor from the Owner.
- I. 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.

#### **3.03.5(4.2) Additional Insured**

All insurance policies, with the exception of Workers Compensation, shall name the following listed entities as additional insured(s) using the forms or endorsements required herein:

- The Owner and its officers, elected/appointed officials, employees, agents, and volunteers;
- Gray & Osborne, Inc.;

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 the Contract, and irrespective of whether the Certificate of Insurance provided by the Contractor pursuant to 3.03.5(4.4) describes limits lower than those maintained by the Contractor.

### **3.03.5(4.3) Subcontractors**

Contractor shall ensure that each Subcontractor of every tier obtains and maintains at a minimum the insurance coverages listed in 3.03.5(4.5)A and 3.03.5(4.5)B. Upon request of the Owner, the Contractor shall provide evidence of such insurance.

### **3.03.5(4.4) Verification of Coverage**

The Contractor shall deliver to the Owner 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. The certificate and endorsements shall conform to the following requirements:

1. An ACORD certificate or a form determined by the Owner to be equivalent. The certificate or an endorsement form shall indicate the Contractor's insurance is primary and non-contributory.
2. The Contractor shall obtain endorsement forms CG 2010 10 01, CG 2032 07 04 and CG 2037 10 01 or the equivalent of each, naming the Owner and all other entities listed in 3.03.5(4.2) as Additional Insured(s) and showing the policy number. If the Contractor is unsuccessful in securing these endorsements after exerting commercially reasonable efforts, the Contractor shall obtain other endorsements providing equivalent protection to the Additional Insured. Commercially reasonable efforts shall be evidenced by a signed statement by the Contractor's insurance broker indicating that endorsement forms CG 2010 10 01, CG 2032 07 04 and CG 2037 10 01 are not available and the endorsements submitted provide equivalent protection to the Additional Insured.
3. Any other amendatory endorsements to show the coverage required herein.
4. A notification of coverage enhancements on the Certification of Insurance shall not satisfy these requirements; actual endorsement must be submitted.

Upon request, the Contractor shall forward to the Owner 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.

### **3.03.5(4.5) Coverages and Limits**

The insurance shall provide the minimum coverages and limits set forth below. Providing coverage in these stated minimum limits shall not be construed to relieve the Contractor from liability in excess of such limits. All deductibles and self-insured retentions shall be disclosed and

are subject to approval by the Owner. The cost of any claim payments falling within the deductible shall be the responsibility of the Contractor.

### **3.03.5(4.5)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 3 years following Substantial Completion of the Work.

Such policy must provide the following minimum limits:

\$1,000,000	Each Occurrence
\$2,000,000	General Aggregate
\$2,000,000	Products & Completed Operations Aggregate
\$1,000,000	Personal & Advertising Injury, each offence
\$1,000,000	Stop Gap/Employers' Liability

### **3.03.5(4.5)B Automobile Liability**

Automobile Liability for owned, non-owned, hired, and leased vehicles, with an MCS 90 endorsement and a CA 9948 endorsement attached if "pollutants" are to be transported. Such policy(ies) shall provide the following minimum limit:

\$1,000,000	combined single limit each accident
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### **3.03.5(4.5)C Workers' Compensation**

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

### **3.03.5(4.5)D Excess or Umbrella Liability**

The Contractor shall provide Excess or Umbrella Liability coverage at limits of \$2 million per occurrence and annual aggregate. This excess or umbrella liability coverage shall apply, at a minimum, to both the Commercial General and Auto insurance policy coverage and employers liability.

This requirement may be satisfied instead through the Contractor's primary Commercial General and Automobile Liability coverage, or any combination thereof.

### **3.03.5(4.5)E Builders Risk Insurance**

The Contractor shall purchase and maintain Builders Risk insurance covering interests of the Owner, the Contractor, Subcontractors, and lower tier Subcontractors in the Work. Builders Risk shall be required for all structures on the project. A structure is any equipment, facility, building, bridge, retaining wall, or tank extending 4 feet or more above adjacent grade; or any facility less than 4 feet above adjacent grade, and containing more than \$50,000 worth of electrical or mechanical equipment. Poles, light standards, or antenna less than 50 feet in height and less than 2 feet in diameter shall not be considered structures. Builders Risk insurance, when required, shall be on an all-risk policy form and shall insure against the perils of fire and extended coverage and physical loss or damage including flood, earthquake, theft, vandalism, malicious mischief and collapse. The Builders Risk insurance, when required, shall include coverage for temporary buildings, debris removal, and damage to materials in transit or stored off-site. Such insurance shall cover “soft costs” including but not limited to design costs, licensing fees, and architect’s and engineer’s fees. Builders Risk insurance shall be written in the amount of the completed value of the applicable portions of the project, with no coinsurance provisions.

The Builders Risk insurance covering the Work shall have a deductible of \$5,000 for each occurrence, which will be the responsibility of the Contractor. Higher deductibles for flood, earthquake and all other perils may be accepted by the Owner upon written request by the Contractor and written acceptance by the Owner. Any increased deductibles accepted by the Owner will remain the responsibility of the Contractor.

The Builders Risk insurance shall be maintained until the Physical Completion Date.

The Contractor and the Owner waive all rights against each other and any of their Subcontractors, lower tier Subcontractors, agents and employees, each of the other, for damages caused by fire or other perils to the extent covered by Builders Risk insurance or other property insurance applicable to the Work. The policies shall provide such waivers by endorsement or otherwise.

Liability for facilities not covered by Builders Risk shall remain the responsibility of the Contractor.

### **3.03.5(4.5)F LHWCA Insurance**

If the Contract involves work on or adjacent to Navigable Waters of the United States, the Contractor shall procure and maintain insurance coverage in compliance with the statutory requirements of the U.S. Longshore and Harbor Workers' Compensation Act (LHWCA).

Such policy must provide the following minimum limits:

\$1,000,000	Bodily Injury by Accident – each accident
\$1,000,000	Bodily Injury by Disease – each employee
\$1,000,000	Bodily Injury by Disease – policy limits

### **3.03.5(4.5)G Protection and Indemnity Insurance Including Jones Act**

If the Contract involves marine activities, or work from a boat, vessel, or floating platform, the Contractor shall procure and maintain Protection and Indemnity (P&I) coverage including collision liability, injury to crew (Merchant Marine Act of 1920 - Jones Act) and passengers, removal of wreck and liability for seepage, pollution, containment and cleanup using form SP-23 or SP 38 or a form as least as broad.

All entities listed under Section 3.03.5(4.2) of the General Conditions shall be named as additional insureds on the Contractor's Protection and Indemnity insurance policy.

Such policy must provide the following minimum limits:

\$1,000,000	Bodily Injury by Accident – each accident or occurrence
\$1,000,000	Bodily Injury by Disease – each employee
\$1,000,000	Bodily Injury by Disease – policy limits

### **3.03.5(4.5)H Hull and Machinery**

If the Contract involves use of a boat, vessel, or floating platform, the Contractor shall procure and maintain coverage at Market Value of vessel on American Institute Hull Clauses, 6/2/77 form.

### **3.03.5(4.5)I Marine Pollution**

If this Contract is near or on water, the Contractor shall procure and maintain Pollution Liability (OPA, CERCLA) insurance to satisfy U.S. Coast Guard requirements as respects the Federal Oil Pollution Act of 1990 and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended.

Such policy must provide the following minimum limits, or statutory limits of liability as applicable, whichever is higher:

\$1,000,000	per Occurrence
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### **3.03.5(4.5)J Pollution Liability**

If this Contract includes work with lead based paint, materials containing asbestos or transportation of hazardous materials, the Contractor shall provide a Contractors Pollution Liability policy, providing coverage for claims involving bodily injury, property damage (including loss of use of tangible property that has not been physically injured), cleanup costs, remediation, disposal or other handling of pollutants, including costs and expenses incurred in the investigation, defense, or settlement of claims, arising out of any one or more of the following:

1. Contractor's operations related to this project.
2. Remediation, abatement, repair, maintenance or other work with lead-based paint or materials containing asbestos.
3. Transportation of hazardous materials away from any site related to this project.

All entities listed under 3.03.5(4.2) of these general conditions shall be named by endorsement as additional insureds on the Contractors Pollution Liability insurance policy.

Such Pollution Liability policy shall provide the following minimum limits:

\$1,000,000 each loss and annual aggregate

### **3.03.5(4.5)K Professional Liability**

If the Contract requires engineering design services, the Contractor and/or its Subcontractor(s) and/or its design consultant providing construction management, value engineering, or any other design-related non-construction professional services shall provide evidence of Professional Liability insurance covering professional errors and omissions.

Such policy shall provide the following minimum limits:

\$1,000,000 per claim and annual aggregate

If the scope of such design-related professional services includes work related to pollution conditions, the Professional Liability insurance shall include coverage for Environmental Professional Liability.

If insurance is 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.

### **3.03.5(5) Indemnity and Hold Harmless**

- a. To the fullest extent permitted by law and subject to the limitations of RCW 4.24.115, the Contractor shall defend, indemnify and hold harmless the Owner and the Engineer and their appointed and elected officials, agents and employees from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees and expenses arising out of or resulting from the negligent performance of the Work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including the loss of use resulting therefrom, and (2) is caused by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. Provided, however, that when any such claim, damage, loss or expense arises from the concurrent negligence of (1) the Owner, or anyone for whose acts it may be liable, and (2) the Contractor, or anyone for whose acts it may be liable, it is expressly agreed that the Contractor's obligations of defense and indemnity under this section shall be effective only to the extent of the Contractor's negligence and those for whose negligence the Contractor is responsible. This obligation of indemnity shall not extend to claims, losses or expenses arising from the sole negligence of the Owner, its appointed or elected officials, agents or employees.

- b. In any and all claims against the Owner or the Engineer or any of their agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this section shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workmen's compensation acts, disability benefit acts or other employee benefit acts, it being the expressed intent of the parties that Contractor herein specifically waives any immunity granted under the State Industrial Insurance Law, RCW Title 51. **THIS WAIVER HAS BEEN SPECIALLY NEGOTIATED BY THE PARTIES, WHO HAVE ACKNOWLEDGED SAME BY AFFIXING THEIR SIGNATURES TO THE PROPOSAL FORM.**

### **3.03.5(6) Patent Royalties & Process Fees**

The Contractor shall be responsible for all costs arising from the use of patented devices, materials, or processes used in or incorporated in the Work. The Contractor agrees to indemnify, defend, and save harmless the Owner from all claims and damages, in any way relating to the use of patented devices, materials, or processes used in or incorporated in the Work.

### **3.03.6 METHOD OF SERVING NOTICE**

All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, shall be in paper format, hand delivered or sent via mail delivery service to the Owner. Electronic formats such as emails or electronically delivered copies of correspondence will not constitute such notice and will not comply with the requirements of the Contract.

## **3.04 PROSECUTION AND PROGRESS OF THE WORK**

### **3.04.1 QUALITY OF WORK**

#### **3.04.1(1) Workmanship**

- a. The Contractor represents that it is fully experienced and possesses all the necessary capital, facilities and expertise to perform all of the Work, and hereby guarantees that all of the Work performed by it under the Contract will be of the highest quality and done in a workmanlike fashion in strict accordance with the requirements of the Contract.
- b. The Contractor shall at all times employ skilled workers and use skilled Subcontractors in the performance of the Work. When required in writing by the Owner or the Engineer, the Contractor or its Subcontractors shall remove from the Work site any person or Subcontractor who is, in the opinion of the Owner or the Engineer, not competent, not qualified, disorderly, or otherwise unsatisfactory and shall not again employ such discharged person or Subcontractor on the Work,

except with the prior written consent of the Owner. Discharge of any person or Subcontractor shall not be the basis of any claim for compensation or damages against the Owner or the Engineer.

- c. All Work performed under the Contract shall be of first quality workmanship throughout, with the Work complete and in full working order upon completion.
- d. Except when otherwise expressly specified in the Contract, the Contractor shall design, survey, layout and be responsible for all methods, materials and equipment used in performing the Work.
- e. If, at any time, the Contractor's workforce (including Subcontractors), in the opinion of the Owner and/or the Engineer, shall be inadequate for maintaining the necessary progress required to complete the Work within the Contract Time, the Contractor shall at its sole cost, if so required by the Owner and/or the Engineer, increase the workforce or equipment to such an extent as to give reasonable assurance of compliance with the Work schedule. The failure of the Owner and/or the Engineer to make such demand shall not relieve the Contractor of its obligation to perform the Work in accordance with the requirements of the Contract. The Contractor alone shall be responsible for the safety, efficiency and adequacy of its activities, construction methods and the rate of progress required by the Contract.

#### **3.04.1(2) Contractor's Supervisory and Site Personnel**

- a. The Contractor shall assign sufficient supervisory personnel to ensure the faithful prosecution of the Work and shall have adequate supervisory personnel present at the Work site who are either employees of the Contractor or duly authorized representatives designated in writing to the Owner and/or the Engineer. The Contractor shall at all times maintain at the Work site a complete copy of the Contract Provisions, Contract Plans, and record drawings of the Work that has been completed.
- b. The Contractor shall at all times have at least one duly authorized supervisory representative at the Work site who shall be fully authorized to make binding decisions on behalf of the Contractor with respect to the Work. If the Contractor's duly authorized supervisory representative at the Work site will be absent from the Work site for more than four hours, he/she shall designate an assistant who possesses the same authority and so inform the Owner and the Field Representative, if applicable.

#### **3.04.2 MATERIALS AND EQUIPMENT**

- (1) Materials and equipment furnished and installed shall be manufactured, fabricated or constructed to meet all applicable safety requirements. All material and equipment supplied by the Contractor and incorporated in the Work shall be of new manufacture, free from defects and in strict compliance with the requirements of

the Contract. When required by the Owner, a certificate from the manufacturer or other responsible supplier shall be supplied attesting to this fact.

- (2) All tools and equipment used for construction operations shall be of the size and type suitable for the Work and shall be kept in safe and good working condition at all times.
- (3) The Contractor shall, whenever required during the progress of the Work and after completion of the Work, furnish proof acceptable to the Owner that all items of equipment and all materials installed equal or exceed all requirements specified in the Contract.
- (4) The Contractor shall use all means possible to protect materials and equipment from damage or degradation of any kind before, during and after installation.
- (5) The Contractor shall replace any materials or equipment damaged during the performance of the Work to the approval of the Owner and the Engineer. The cost of replacing damaged materials and equipment shall be borne by the Contractor.

### **3.04.3 SPECIFICATION OF PARTICULAR MATERIALS AND EQUIPMENT**

- (1) Within the Contract, certain items are specified by brand, style, trade name, or manufacturer in order to set forth a standard of quality, and/or preference by the Owner. Unless specifically noted otherwise, it is not the intent of the Contract to exclude other processes or materials of a type and quality equal to those designated.
- (2) The term “or equal” as used in the Contract does not mean that the Contractor’s substitution of material or equipment will necessarily be approved as equal by the Engineer. If the Contractor desires to substitute material or equipment on the basis that it is equal to that specified, the Contractor shall submit a written request to the Engineer to substitute the material or equipment. The Contractor shall not use or incorporate such material or equipment into the Work until the Contractor has received written approval from the Engineer.
- (3) If the Contractor proposes substitutions, the Engineer will record all time used to evaluate each proposed substitution. If an approved substitution requires revisions to the Contract Documents, the Engineer will record all time to accomplish the revisions. Whether or not the Engineer approves a proposed substitution all direct and indirect cost to evaluate the proposed substitution shall be deducted from amounts due or to become due to the Contractor.
- (4) No additional compensation or extension of time will be allowed the Contractor for any changes required to incorporate substituted materials or equipment.

### **3.04.4 STORAGE**

#### **3.04.4(1) On-Site Storage**

The Contractor shall store all equipment and materials in a safe and suitable place in accordance with the manufacturer's recommendations. Materials and equipment shall be covered or wrapped to protect them from moisture, dust and deterioration, as required or necessary. All on-site storage areas shall be approved in advance by the Owner and the Engineer.

#### **3.04.4(2) Off-Site Storage**

The Contractor may be required to provide offsite storage of equipment and materials to enable construction to occur at the Work site. The Contractor has full responsibility to secure all offsite storage areas, if needed, and shall include the costs for providing such storage areas in the bid Proposal for the individual equipment and material items requiring off-site storage. All off-site storage areas shall be enclosed or fenced and be secure.

### **3.04.5 DEFECTIVE MATERIALS, EQUIPMENT AND WORKMANSHIP**

- (1) Materials, equipment, or workmanship which, in the opinion of the Owner or the Engineer, does not conform to the Contract or are in any other way unsatisfactory or unsuited to the purpose for which they are intended may be rejected. The Contractor shall remove from the Work site without delay, all rejected materials, equipment and work, and shall promptly replace the same in strict conformity with the requirements of the Contract. Unsatisfactory materials, equipment and workmanship may be rejected at any time, notwithstanding any previous testing, inspection or acceptance of such materials, equipment or workmanship, or inclusion thereof in any previously issued progress estimates.
- (2) If the Contractor fails to correct defective Work, equipment or materials, the Owner shall have the right to exercise any of the following options or any combination thereof:
  - a. The Owner may replace the defective Work, materials or equipment by purchase from or contract with any other parties at the expense of the Contractor, and in this event, the Owner shall be entitled without compensation to the Contractor, to the use of the defective Work or equipment for such reasonable time as is necessary to enable Owner to replace such defective Work, materials or equipment.
  - b. The Owner may elect to accept the defective Work, materials or equipment and issue a Change Order reflecting a credit against the Contract price, computed under the terms of the Contract in an amount to be determined by the Engineer, which amount shall reflect the actual value to the Owner of the accepted Work.

- c. Upon receipt of notice from the Owner of any defects in material, equipment or workmanship which appear within a two-year period following the Substantial Completion Date, or within any other warranty or guarantee period required by the Contract or provided by a manufacturer or supplier, the Contractor shall promptly and with the least possible delay and inconvenience to the Owner, repair or replace such defective workmanship, material or equipment without expense to the Owner.
- d. The Contractor shall be responsible for the full cost of correcting defective Work and complying with warranties and guarantees as required by the Contract. Direct or indirect costs, including administrative and engineering, incurred by the Owner 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 Owner 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.
- e. All warranties, guarantees, and other obligations to correct work that does not comply with the Contract are material requirements of the Contract. The performance of all warranties, guarantees and other obligations shall be secured by the Performance Bond and the Public Works Payment Bond submitted by the Contractor at the time the Contract is signed.

#### **3.04.6 CHANGES IN THE WORK**

- (1) The Owner or the Engineer may, at any time, without notice to the Performance Bond or Public Works Payment Bond sureties, by written order designated or indicated to be a Change Order or Change Directive, make any change, including modifications to, additions to or deletions from the Work including, but not limited to, changes:
  - a. To the Contract Provisions and Contract Plans;
  - b. To quantities or performance of the Work;
  - c. To Owner-furnished facilities, equipment, materials, services or the Work site; or
  - d. To the schedule for the Work or the Contract Time.
- (2) A Change Order is an amendment to the Contract, which signifies changes in the scope of the Work, the Contract Time, and/or the Contract price. A Change Order shall be the complete expression of the agreement between the Owner and the Contractor. No claims or entitlement to an equitable adjustment or changes to the

Contract Time and/or Contract price will be allowed for alleged verbal or oral agreements or directives.

- (3) The Engineer will issue a written change order for any change. If the Engineer determines that the change increased or decreased the Contractor's costs or time to do any of the Work, the Engineer will make an equitable adjustment to the Contract. The equitable adjustment will be by agreement with the Contractor. However, if the parties are unable to agree, the Engineer will determine the amount of the equitable adjustment in accordance with Section 3.04.6(7) and adjust the time as the Engineer deems appropriate. Extensions of time will be evaluated in accordance with Section 3.04.15(2).

The Contractor shall proceed with the Work upon receiving:

1. A written change order approved by the Owner; or
2. An oral order from the Engineer before actually receiving the written change order.

Within 14 calendar days of delivery of the change order the Contractor shall endorse and return the change order, request an extension of time for endorsement or respond in accordance with Section 3.04.8. The Owner may unilaterally process the change order if the Contractor fails to comply with these requirements. Changes normally noted on field stakes or variation from estimated quantities, except as provided in Section 3.04.6(8), will not require a written change order. These changes shall be made at the unit prices that apply. The Contractor shall respond immediately to changes shown on field stakes without waiting for further notice.

The Contractor shall obtain written consent of the Surety or Sureties if the Engineer requests such consent.

- (4) All Change Orders will be prepared by the Owner or Engineer and executed in triplicate with one copy to the Owner, one to the Contractor, and one retained by the Engineer.
- (5) If the Contractor encounters any circumstances during the performance of the Work that the Contractor contends creates any entitlement to a change in the Contract Time, the Contract price, or both, the Contractor shall immediately provide written notice to the Engineer. Within 10 calendar days after providing written notice, the Contractor shall provide a written request to the Engineer for a change to the Contract Time and/or Contract price and provide detailed information supporting the request, including cost and schedule information.
- (6) No claim by the Contractor shall be allowed if the terms of this Section 3.04.6 are not strictly followed. In the event of any non-compliance, the Contractor shall be conclusively determined to have waived any claim or entitlement to an adjustment of the Contract Time or the Contract price.

- (7) The cost to be included in an adjustment for any changes to the Work, adjustment of the Contract Time or Contract price and any equitable adjustment or entitlement related to the Work or the Contract shall meet the notice provisions of Section 3.04.6, and will be determined strictly by one or a combination of the following methods:
- a. Contract unit bid prices previously agreed upon; or
  - b. If there are no unit bid prices, an agreed lump sum; or
  - c. If the amount of the adjustment cannot be agreed upon in advance or in the manner provided in subparagraph a or b above, the cost will be determined by the actual cost of:
    1. Labor including working foremen. Labor rates will only include the basic wage and fringe benefits, the current rates for Federal Insurance Compensation Act (FICA), Federal Unemployment Tax Act (FUTA) and State Unemployment Tax Act (SUTA), and the company's present rates for medical aid and industrial insurance premiums. Labor reimbursement calculations will be based on a "Labor List" (List) prepared and submitted by the Contractor and any Subcontractor before the Contractor commences force account Work. The Engineer may compare the List to payrolls and other documents and may at any time, require the Contractor to submit a new List.

In the event that an acceptable List is not received by the time that force account calculations are begun, the Engineer will develop a List unilaterally, utilizing the best data available.

2. Materials incorporated permanently into the Work;
3. The ownership or rental cost of equipment during the time of use on the extra work. Equipment rates shall be as set forth in the then current AGC/WSDOT Equipment Rental Agreement. These rates shall be full compensation for all costs incidental to furnishing and operating the equipment. The Contractor shall submit copies of the applicable portions of the AGC/WSDOT Equipment Rental Agreement to the Engineer. The rates listed in the Rental Rate Blue Book (as modified by the current AGC/WSDOT Equipment Rental Agreement) shall be full compensation for all fuel, oil, lubrication, ordinary repairs, maintenance, and all other costs incidental to furnishing and operating the equipment except labor for operation; plus

4. Overhead and Profit as follows:

For Work performed by the Contractor, an amount to be agreed upon but not to exceed 15 percent of the labor, material, and equipment cost agreed to by the Engineer as compensation for supervision, small tools, provisions for safety, home office and field overhead, profit and other general conditions expenses, including, but not limited to, insurance, bond and business and occupation taxes.

For Subcontractor Work, the Subcontractor will be allowed an amount to be agreed upon but not to exceed 15 percent of the labor, material, and equipment cost agreed to by the Engineer as compensation for supervision, small tools, provisions for safety, home office and field overhead, profit and other general conditions expenses, including, but not limited to, insurance, bond and business and occupation taxes. The Contractor will be allowed an additional markup of 10 percent to compensate the Contractor for all administrative costs, including home office and field overhead, profit, bonding, insurance, business and occupation taxes and any other costs incurred.

In no case will the total fixed fee for the Contractor and all Subcontractors of all tiers exceed 30 percent.

- (8) Payment to the Contractor will be made only for the actual quantities of Work performed and accepted in conformance with the Contract. When the accepted quantity of Work performed under a unit item varies from the original bid quantity, payment will be at the unit Contract price for all Work unless the total accepted quantity of any Contract item, adjusted to exclude added or deleted amounts included in change orders accepted by both parties, increases or decreases by more than 25 percent from the original bid quantity, and that bid item represents 10 percent or more of the total original Contract price. In that case, payment for Contract Work may be adjusted as described herein.

The adjusted final quantity shall be determined by starting with the final accepted quantity measured after all Work under an item has been completed. From this amount, subtract any quantities included in additive change orders accepted by both parties. Then, to the resulting amount, add any quantities included in deductive change orders accepted by both parties. The final result of this calculation shall become the adjusted final quantity and the basis for comparison to the original Proposal quantity.

- a. **Increased Quantities.** Either party to the Contract will be entitled to renegotiate the price for that portion of the adjusted final quantity in excess of 1.25 times the original Proposal quantity, if 10 percent or more of the original Contract price. The price for excessive increased quantities will be determined by agreement of the parties, or, where the parties cannot agree,

the price will be determined by the Engineer based upon the actual costs to perform the Work, including reasonable markup for overhead and profit. The final price will be determined by the Engineer.

- b. **Decreased Quantities.** Either party to the Contract will be entitled to an equitable adjustment if the adjusted final quantity of Work performed is less than 75 percent of the original Bid quantity, if 10 percent or more of the original Contract price. The Contractor shall submit the documentation to support the equitable adjustment to the Engineer. The equitable adjustment shall be based upon and limited to three factors:
1. Any increase or decrease in unit costs of labor, materials or equipment, utilized for Work actually performed, resulting solely from the reduction in quantity;
  2. Changes in production rates or methods of performing Work actually done to the extent that the nature of the Work actually performed differs from the nature of the Work included in the original plan; and
  3. An adjustment for the anticipated contribution to unavoidable fixed cost and overhead from the units representing the difference between the adjusted final quantity and 75 percent of the original plan quantity.

The following limitations shall apply to renegotiated prices for increases and/or equitable adjustments for decreases:

1. The equipment rates shall be actual cost but shall not exceed the rates set forth in the AGC/WSDOT Equipment Rental Agreement.
2. No payment will be made for extended or unabsorbed home office overhead and field overhead expenses to the extent that there is an unbalanced allocation of such expenses among the Contract Bid items.
3. No payment for consequential damages or loss of anticipated profits will be allowed because of any variance in quantities from those originally shown in the Proposal form, Contract Provisions, and Contract Plans.
4. The total payment (including the adjustment amount and unit prices for Work performed) for any item that experiences an equitable adjustment for decreased quantity shall not exceed 75 percent of the amount originally Bid for the item.

If the adjusted final quantity of any item does not vary from the quantity shown in the Proposal by more than 25 percent, then the Contractor and the Owner agree that all Work under that item will be performed at the original Contract unit price.

When ordered by the Engineer, the Contractor shall proceed with the Work pending determination of the cost or time adjustment for the variation in quantities.

The Contractor and the Owner agree that there will be no cost adjustment for decreases if the Owner has entered the amount for the item in the Proposal form only to provide a common Proposal for Bidders.

### **3.04.7 DIFFERING SITE CONDITIONS**

The Contractor shall promptly, and before such conditions are disturbed, notify the Engineer in writing of: (1) pre-existing subsurface or latent physical conditions at the Work site that differ materially from those indicated in the Contract Documents, or (2) pre-existing unknown physical conditions at the Work site, of an unusual nature, that differ materially from those ordinarily encountered and generally recognized as inherent in the Work of the character required by the Contract. The Engineer shall be given an opportunity to examine such conditions in order to advise the Owner of possible modifications to the Work to mitigate such conditions. If the Engineer determines that conditions are materially different and cause a material increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, an equitable adjustment shall be made in the Contract Time and/or Contract price in accordance with other applicable provisions of the Contract relating to changes in the Work. Failure of the Contractor to give notice of such conditions at the time of discovery shall constitute a waiver of any claim for an equitable adjustment. Any such adjustments to the Contract price shall be computed strictly limited to amounts provided under paragraph 3.04.6.

### **3.04.8 PROTEST BY THE CONTRACTOR**

If the Contractor disagrees with anything in a Change Order or a written directive, or with any interpretation or determination by the Engineer, the Contractor shall:

- a. Immediately submit a signed written notice of protest to the Engineer before doing the Work;
- b. Supplement the written protest within 14 calendar days with a written statement and supporting documents providing the following:
  1. The date and nature of the protested order, direction, instruction, interpretation or determination;
  2. A full discussion of the circumstances which caused the protest, including names of persons involved, time, duration, and nature of

the Work involved and a review of the Plans and Contract Provisions referenced to support the protest;

3. The estimated dollar cost, if any, of the protested Work and a detailed breakdown showing how that estimate was determined; and
4. An analysis of the progress schedule showing the schedule change or disruption if the Contractor is asserting a schedule change or disruption; and
5. If the protest is continuing, the information required above shall be supplemented upon request by the Engineer until the protest is resolved.

The Contractor shall keep detailed and complete records of extra costs and schedule impacts to Contract Time that in any way relate to a protest. The Contractor shall allow the Engineer to have access to all documents and records needed for evaluating the protest.

The Engineer will evaluate all protests that comply with this Section. If the Engineer determines that a protest is valid, the Engineer will adjust the Contract price and/or the Contract Time by an adjustment in accordance with Section 3.04.6 and 3.04.15(2).

During the time when any protest is pending, the Contractor shall proceed promptly with the Work, as the Engineer orders in writing.

The Contractor's failure to submit a protest in strict accordance with the requirements of this Section shall constitute a waiver of any claim for an adjustment to the Contract Time, the Contract price, or other relief.

### **3.04.9 SUBCONTRACTORS AND SUBCONTRACTS**

#### **3.04.9(1) Contractor Responsibility**

Nothing contained in the Contract shall create any contractual or other relationship between the Owner and/or the Engineer and any Subcontractor or lower tier Subcontractor, and no performance undertaken by any such Subcontractor or lower tier Subcontractor shall, under any circumstances, relieve the Contractor of its obligations and responsibilities under the Contract.

Prior to subcontracting any Work, the Contractor shall verify that every first tier Subcontractor meets the responsibility criteria stated below at the time of subcontract execution. The Contractor shall include these responsibility criteria in every subcontract, and require every Subcontractor to:

1. Possess any electrical contractor license required by 19.28 RCW or elevator contractor license required by 70.87 RCW, if applicable;
2. Have a certificate of registration in compliance with Chapter 18.27 RCW;

3. Have a current State unified business identifier number;
4. If applicable, have:
  - a. Industrial insurance coverage for the Subcontractor's employees working in Washington (Title 51 RCW);
  - b. An employment security department number (Title 50 RCW);
  - c. A state excise tax registration number (Title 82 RCW).
5. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or RCW 39.12.065(3);
6. Verify these responsibility criteria for every lower tier subcontractor at the time of subcontract execution; and
7. Include these responsibility criteria in every lower tier subcontract.

**3.04.9(2) Contractor Work Performance Requirement**

Work done by the Contractor's own organization shall account for at least 30 percent of the awarded Contract price.

**3.04.9(3) Approval of Subcontractors**

The Contractor shall not subcontract Work unless the Engineer approves in writing. Each request to subcontract shall be on the form the Engineer provides. If the Engineer requests, the Contractor shall provide proof that the Subcontractor has the experience, ability, and equipment the Work requires. The Contractor shall require each Subcontractor to comply with Section 3.03.4 and to furnish all certificates and statements required by the contract. Approval of a Subcontractor by the Owner shall not relieve the Contractor or Subcontractor of any obligations or responsibilities under the Contract. Any delays or other impacts caused by the failure of the Contractor to provide required information and obtain approval of any Subcontractor in a timely manner will not be considered as justification for additional compensation or an extension of the Contract Time.

**3.04.9(4) Subcontracts**

Upon approval of Subcontractors by the Engineer, the Contractor shall, if requested, provide the Owner with complete copies of all subcontracts entered into between the Contractor and any Subcontractor. Providing requested subcontracts to the Owner shall be a condition precedent to the Owner's obligation to make any progress payment to the Contractor.

**3.04.9(5) Incorporation of Contract**

Every subcontract entered into by the Contractor shall expressly bind each Subcontractor to all of the terms and conditions of the Contract, which the Contractor shall incorporate into each

subcontract by reference. The Contractor shall provide a copy of the Contract to all Subcontractors and obtain written confirmation from Subcontractors that the Subcontractor received a copy of the Contract. All Subcontractors shall provide a copy of the Contract to all lower tier Subcontractors and obtain written confirmation from lower tier Subcontractors that the lower tier Subcontractor received a copy of the Contract.

#### **3.04.9(6) Replacement of Subcontractors**

Subject to the requirements of state and/or federal agencies having jurisdiction over MBE/WBE/DBE requirements applicable to the Work, should it become impossible for a Subcontractor to perform the Subcontractor's intended work, the Contractor shall submit the information required above for an alternate Subcontractor at least 10 days prior to the time that the Subcontractor is scheduled to begin work. The failure of any Subcontractor to perform its portion of the Work in a timely or workmanlike fashion is the sole responsibility of the Contractor.

#### **3.04.10 MUTUAL RESPONSIBILITY OF CONTRACTORS**

The Owner reserves the right to perform other work on or near the Work site using its own forces and/or other contractors. The Contractor shall take all reasonable steps to coordinate its performance of the Work with the Owner and/or such other contractors and Subcontractors. If, through acts of commission or omission on the part of the Contractor, any other contractor or any Subcontractor shall suffer loss or damage with respect to the other work being performed by the Owner, the Contractor agrees to promptly settle with such other Contractor or Subcontractor by agreement or other dispute resolution process. The Contractor agrees to indemnify and hold harmless the Owner and the Engineer from all claims asserted against and liability incurred by the Owner or the Engineer resulting from disputes between the Contractor and any other contractor or any Subcontractor or material supplier. The indemnification rights of the Owner and the Engineer include expenses such as, but not limited to, salaries/wages of employees and all other expenses relating to any mediation, litigation, or arbitration, including costs, consulting fees and attorneys' fees. If such other Contractor or Subcontractor shall assert any claim against the Owner on account of any damage alleged to have been sustained by an act or omission of the Contractor or anyone for whose acts it may be liable, the Owner or the Engineer shall notify the Contractor, which shall defend, indemnify and save harmless the Owner and the Engineer against such claim.

The coordination of the Work with other work by the Owner shall be taken into account by the Contractor as part of its site investigation obligations under Section 2.01.4, and all costs thereof shall be borne by the Contractor as part of the Contract price for the Work.

#### **3.04.11 RISK OF LOSS**

The Contractor shall have all risk of loss for all Work in progress, all materials, all equipment and all other items in any way relating to the Work through theft, fire, other casualty, act of God, or any other cause until the Contract Completion Date.

## **3.04.12 MEASUREMENT AND PAYMENT**

### **3.04.12(1) General**

The Contract price for the Work, whether lump sum or unit prices, shall constitute full compensation for furnishing all facilities, labor, materials, appurtenances, and incidentals and performing all operations necessary to construct and complete all items of the Work in accordance with the Contract, notwithstanding that minor or incidental features of the Work may not be shown on the Contract Plans or Contract Provisions.

### **3.04.12(2) Measurement**

Measurement for all items shall be as specified in the Contract for unit price and lump sum price items.

### **3.04.12(3) Payment**

Payment for all of the Work will be made at the lump sum or unit Contract price as set forth in the Contract. Payment of the Contract price shall constitute full compensation for the complete performance of all of the Work.

### **3.04.12(4) Access to Books and Records**

The Contractor shall, whenever so requested, give the Owner and/or the Engineer access to all invoices, bills of lading and other documents relating to the Work. The Contractor shall, without charge, provide personnel and measures and scales with adequate capacity for measuring or weighing any materials or other items paid for on a unit price basis.

### **3.04.12(5) Progress Payment Estimates**

Progress payment estimates shall be prepared by the Engineer and reviewed by the Contractor and will be submitted with the Engineer's recommendation to the Owner for its approval on the first day of the month for all Work completed through the 26<sup>th</sup> day of the preceding month, unless otherwise agreed upon by the Owner, the Engineer and the Contractor. The Engineer will prepare progress payment estimates as accurately as available information permits. The Owner will make no payment under the Contract for the Work performed until the "Statement of Intent to Pay Prevailing Wages," in accordance with RCW 39.12.040, is submitted to the Engineer, including Subcontractor wage rates. In general, each progress payment will be based upon the payment schedule and the value of Work performed during the preceding pay period. Before the final progress payment estimate is prepared, all quantities will be reviewed by the Engineer.

### **3.04.12(6) Payment for Materials on Hand**

The Owner may reimburse the Contractor for 90 percent of the invoice amount of materials and equipment purchased before their incorporation into the Work if properly stored on or near the Work site. Invoices for equipment and materials will be verified and approved by the Engineer. Each invoice shall be sufficiently detailed to enable the Engineer to determine actual costs.

Payment for materials on hand shall not exceed the total Contract cost of the Contract item. Payment will not be made for granular materials, forming materials, consumables, nails, tie wire, etc. Payment will not be made for materials for any invoice that is less than \$2,000.00 or for freight bills and similar items. Payment for equipment or materials on hand shall not constitute acceptance of the equipment or materials. Equipment and materials will be rejected if found to be faulty, even if payment for it has been made.

#### **3.04.12(7) Payments Withheld**

The Engineer may decide not to recommend approval of all or a portion of a progress estimate, and/or the Owner may decide to withhold from a progress estimate an amount sufficient to protect the Owner from loss because of:

- a. Defective Work not remedied;
- b. Third-party claims or reasonable evidence indicating the probability that a third-party claim will be asserted;
- c. Failure of the Contractor to make timely and proper payments to Subcontractors or for labor, materials or equipment;
- d. Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract price;
- e. Damage to the Owner or another contractor;
- f. Reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance of the Contract price will not be adequate to cover actual or liquidated damages for the anticipated delay;
- g. Repeated failure by the Contractor to comply with the directions of the Owner or the Engineer or to carry out the Work in accordance with the Contract;
- h. Other appropriate reasons necessary to protect the Owner.

#### **3.04.12(8) Payment Upon Correction of Deficiencies**

When the reason or reasons for withholding payment are resolved, payment will be made for amounts previously withheld.

#### **3.04.12(9) Final Payment**

After final inspection (Section 3.04.16(2)) of the Work and a determination by the Engineer that the Physical Completion Date has been achieved, the balance of the Contract price due to the Contractor will be paid based upon the final estimate by the Engineer and presentation of a Final Contract Voucher Certification signed by the Contractor. The Final Contract Voucher Certification shall be deemed to be a release of all claims of the Contractor unless a claim is filed

in accordance with the requirements of Section 3.05 and is expressly excepted from release in the Contractor's Final Contract Voucher Certification. The date the Owner signs the Final Contract Voucher Certification constitutes the Contract Completion Date in accordance with Section 3.04.16(3).

If the Contractor fails, refuses, or is unable to sign and return the Final Contract Voucher Certification or any other documentation required in order to achieve the Contract Completion Date, the Owner reserves the right to establish a completion date (for the purpose of meeting the requirements of RCW 39.08 and RCW 60.28) and unilaterally accept the Work. 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 certified letter from the Owner 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 certified letter is received by the Contractor. The date on which the Owner unilaterally signs the Final Contract Voucher Certification shall constitute the Contract Completion Date under Section 3.04.16(3). The Owner shall have the right to unilaterally establish a Contract Completion Date when either (1) the Physical Completion Date for the Work has been achieved in accordance with Section 3.04.16(2), or (2) the Owner terminates the contract in accordance with Section 3.07. Unilateral establishment of the Contract Completion Date by the Owner shall not in any way relieve the Contractor of any liability for failing to comply with the Contract or from responsibility for compliance with all federal, state, tribal, or local laws, ordinances, and regulations that affect the Work.

Payment to the Contractor of partial or final payment estimates and retained percentages shall be subject to applicable laws.

### **3.04.13 WORK HOURS**

Except in the case of emergency or unless otherwise approved by the Owner, the normal straight time working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and 6:00 p.m. of a working day with a maximum 1-hour lunch break and a 5-day work week. The normal straight time 8-hour working period for the Contract shall be established at the preconstruction conference or prior to the Contractor commencing the Work.

Written permission from the Engineer is required, if a Contractor desires to perform Work on holidays, Saturdays, or Sundays; before 7:00 a.m. or after 6:00 p.m. on any day; or longer than an 8-hour period on any day. The Contractor shall apply in writing to the Engineer for such permission, no later than noon on the working day prior to the day for which the Contractor is requesting permission to work.

Permission to work between the hours of 10:00 p.m. and 7:00 a.m. during weekdays and between the hours of 10:00 p.m. and 9:00 a.m. on weekends or holidays may also be subject to noise control requirements. Approval to continue work during these hours may be revoked at any time the Contractor exceeds the Owner's noise control regulations or complaints are received from the public or adjoining property owners regarding the noise from the Contractor's operations. The

Contractor shall have no claim for damages or delays should such permission be revoked for these reasons.

Permission to work Saturdays, Sundays, holidays, or other than the agreed upon normal straight time working hours Monday through Friday may be given subject to certain other conditions set forth by the Owner or Engineer. These conditions may include but are not limited to:

- 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 Owner's material testing lab; inspectors; and other Owner employees when in the opinion of the Engineer, such Work necessitates their presence.
- Requiring the Contractor to reimburse the Owner all the costs in excess of straight time costs for the Owner's representatives who work during such times. These costs shall be deducted from amounts due or to become due to the Contractor.
- Considering the Work performed on Saturdays, Sundays, and holidays as working days with regard to the Contract Time.
- 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.

#### **3.04.14 CONTRACT TIME**

The Contract Time shall begin on the first working day following the 10<sup>th</sup> calendar day after the issuance of the written Notice to Proceed or the first day on which the Contractor begins to perform Work on the site, whichever occurs first. Time is of the essence of the Contract. All of the Work shall be completed within the time limits set forth in the Contract, and the Contractor's unexcused failure to do so shall result in the assessment of liquidated damages as provided in the Contract.

The Contractor shall complete all of the physical Work within the number of working days that are specified as the Contract Time. Every day will be counted as a working day unless it is a non-working day or the Engineer determines the day to be an unworkable day. A non-working day is a Saturday, a Sunday, a day on which the Contract suspends work, or one of the following holidays: January 1<sup>st</sup>; the third Monday of January; the third Monday of February; Memorial Day; June 19<sup>th</sup>; July 4<sup>th</sup>; Labor Day; November 11<sup>th</sup>; Thanksgiving Day; the day after Thanksgiving; and Christmas. Whenever any of these holidays falls on a Sunday, the following Monday shall be counted a non-working day. When the holiday falls on a Saturday, the preceding Friday shall be counted a non-working day.

The days between December 25<sup>th</sup> and January 1<sup>st</sup> will be classified as nonworking days, provided that the Contractor actually suspends performance of the Work.

An unworkable day is defined as a partial or whole day that the Engineer determines to be unworkable because of weather, conditions caused by the weather, or such other conditions beyond the control of the Contractor that prevent the satisfactory and timely performance of the Work, and

such performance, if not hindered, would have otherwise progressed toward physical completion of the Work.

Each working day shall be charged to the Contract Time as it occurs until the Work is physically complete. If requested by the Contractor in writing, the Engineer will provide the Contractor with a weekly statement that shows the number of working days: (1) charged to the Contract Time the week before; (2) specified for the substantial and physical completion of the Contract Time; and (3) remaining to achieve the substantial and physical completion of the Contract. The statement will also show the nonworking days and any partial or whole days that the Engineer declares to be unworkable. If the Contractor disagrees with any statement issued by the Engineer, the Contractor shall submit a written protest within 10 calendar days after the date of the statement. The protest shall be sufficiently detailed to enable the Engineer to ascertain the basis for the dispute and amount of time disputed. Any statement that is not protested by the Contractor as required in this Section shall be deemed as having been accepted as correct. If the Contractor elects to work 10 hours a day 4 days a week (a 4-10 schedule), the fifth day of that week will be charged as a working day if that day would be chargeable as a working day if the Contractor had not elected to utilize a 4-10 schedule.

### **3.04.15 CONSTRUCTION SCHEDULE**

#### **3.04.15(1) Progress Schedule**

- a. The Contractor shall submit to the Engineer four copies of a progress schedule no later than at the preconstruction conference, or some other mutually agreed upon submittal time. The schedule shall be a critical path method (CPM) schedule, bar chart, or other standard schedule format unless otherwise specified in the Technical Specifications. Regardless of which format is used, the schedule shall identify the critical path. The Engineer will evaluate the schedule and return the schedule for corrections. No progress payments will be made until the required progress schedules have been submitted in a form acceptable to the Engineer.
- b. Scheduling terms and practices shall conform to the standards established in Construction Planning and Scheduling, Second Edition, published by the Associated General Contractors of America. Except for Weekly Look-Ahead Schedules, all schedules shall meet these general requirements, and provide the following information:
  - i. Show the construction start date.
  - ii. Include all activities necessary to physically complete the Work on the project.
  - iii. Show the planned order of Work activities in a logical sequence.
  - iv. Show the durations of Work activities in working days as defined in Section 3.04.13 and 3.04.14.

- v. Show activities in durations that are reasonable for the intended Work.
- vi. Define activity duration in sufficient detail to evaluate the progress of individual activities on a daily basis.
- vii. Show the Substantial and Physical Completion of all Work within the Contract Time.

Total float belongs to the project and shall not be for the exclusive benefit of any party. If the Engineer determines that the Progress Schedule or any necessary Schedule Update does not provide the required information, then the schedule will be returned to the Contractor for correction and resubmittal.

- c. Each week the Work is performed, the Contractor shall submit a Weekly Look-Ahead Schedule showing the Contractor's and all the Subcontractors' proposed Work activities for the next two weeks. The Weekly Look Ahead Schedule shall include the description, duration and sequence of Work, along with the planned hours of Work. This schedule may be network schedule, bar chart, or other standard schedule format. The Weekly Look-Ahead Schedule shall be submitted to the Engineer by the mid-point of the week preceding the scheduled Work or some other mutually agreed upon submittal time.
- d. The Engineer may request a Schedule Update when any of the following events occur:
  - i. The project has experienced a change that affects the critical path.
  - ii. The sequence of Work is changed from that in the approved schedule.
  - iii. The project is significantly delayed.
  - iv. Upon receiving an extension of Contract Time.

The Contractor shall submit four copies of the Schedule Update within 15 calendar days of receiving a written request, or when an update is required by any other portion of the Contract. A "significant" delay in time is defined as 10 working days or 10 percent of the original Contract Time, whichever is greater.

In addition to the other requirements in this Section, Schedule Updates shall reflect the following information:

- v. The actual duration and sequence of as-constructed Work activities, including changed Work.
- vi. Approved time extensions.

- vii. Any construction delays or other conditions that affect the progress of the Work.
- viii. Any modifications to the as-planned sequence or duration of remaining activities.
- ix. The Substantial and Physical Completion of all remaining Work in the remaining Contract Time.

Unresolved request for time extensions shall be reflected in the Schedule Update by assuming no time extension will be granted, and by showing the effects to follow-on activities necessary to substantially and physically complete the project within the currently authorized time for completion.

- e. The original Progress Schedule and all Schedule Updates shall not conflict with any time and order-of-work requirement in the Contract.
- f. If the Engineer deems that the original or any necessary supplemental progress schedule does not provide the information required in this section, the Owner may withhold progress payments until a schedule containing the required information has been submitted by the Contractor and accepted by the Engineer.
- g. The Contractor shall comply with other progress schedule requirements that are further defined in the Technical Specifications.
- h. The Engineer's approval of any schedule shall not transfer any of the Contractor's responsibilities to the Owner. The Contractor alone shall remain responsible for adjusting forces, equipment, and work schedules to ensure completion of the Work within the time(s) specified in the Contract.

#### **3.04.15(2) Extensions of the Contract Time**

- a. The Contractor specifically waives claims for damages for any hindrance or delay, excepting unreasonable delays caused by the Owner. In lieu thereof, the Contractor will be granted equitable extensions of the Contract Time for which liquidated damages will not otherwise be claimed by the Owner under the following circumstances:
  - i. A delay caused by any suit or other legal action against the Owner will entitle the Contractor to an equivalent extension of time, unless the period of such delay exceeds 90 calendar days. When such period is exceeded, the Owner will, upon written request of the Contractor, either negotiate a termination of the Contract or grant a further extension of the Contract Time, whichever is in the best interests of the Owner.
  - ii. Should any other unforeseen condition occur that is beyond the reasonable control of Contractor, requires more time for the Contractor to complete the

performance of the Work by the Substantial Completion Date, the Contractor shall notify the Owner and the Engineer in writing prior to the performance of such Work, and in any event within 10 calendar days after the occurrence of the unforeseen condition. The notice shall set forth in detail the Contractor's estimate of the required time extension. The Owner will allow such equitable extension of the Contract Time that the Engineer determines to be appropriate. Failure to comply with the notice provisions required by the Contract shall be deemed a complete waiver of any entitlement to adjustment of the Contract Time.

### **3.04.15(3) Liquidated Damages**

- a. The Contractor acknowledges that the Owner will suffer monetary damages in the event of an unexcused delay in the Substantial Completion Date and the Physical Completion Date of the Work. If the Contractor fails, without excuse under the Contract, to complete the Work within the Contract Time, or any proper extension thereof granted by the Owner, the Contractor agrees to pay to the Owner the amount specified in the Proposal form, not as a penalty, but as liquidated damages for such breach of the Contract, for each day that the Contractor shall be in default after the time stipulated for the Substantial Completion Date and the Physical Completion Date of the Work.
- b. The amount of liquidated damages is fixed and agreed upon by and between the Contractor and the Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain, and said amount is specifically agreed to be a reasonable approximation of damages that the Owner would sustain as a result of an unexcused delay in the Substantial Completion Date and the Physical Completion Date; said amount may be retained from time to time by the Owner from current progress payments.

### **3.04.16 COMPLETION AND ACCEPTANCE OF THE WORK**

#### **3.04.16(1) Substantial Completion Date**

- a. When the Contractor considers the Work to be substantially complete and ready for its intended purpose, the Contractor shall notify the Engineer in writing and include an itemized list of remaining Work to be completed. On the Substantial Completion Date, the Owner shall have full and unrestricted use and benefit of all of the facilities that comprise the Work, both from an operational and safety standpoint, with only minor incidental work, replacement of temporary substitute facilities, or correction or repair of work remaining for the physical completion of the total Work.
- b. If the Engineer determines that the Work is not substantially complete, it will so notify the Contractor in writing identifying those items of the Work that shall be completed by the Contractor in order to achieve the Substantial Completion Date.

- c. If the Engineer believes that the Work is substantially complete, the Engineer will meet with the Contractor to: (1) prepare a list of incomplete or unsatisfactory items of the Work that shall be completed or corrected; (2) define the division of responsibility between Owner and Contractor with respect to security, operation, maintenance, heat, utilities, insurance, etc., for the facilities; and (3) describe any other issues related to approval of the substantially completed Work. Upon reaching agreement with the Contractor, the Engineer will notify the Owner that, in its opinion and based on the information supplied by the Contractor, the Work is substantially complete, listing the items of incomplete Work, defining the division of responsibilities for the facilities, and setting forth any other terms related to final completion and acceptance.
- d. The Owner, who has sole authority to make the determination of the Substantial Completion Date, will review the Engineer's recommendation that the Work is substantially complete and, if it concurs, will instruct the Engineer to notify the Contractor that the Work is accepted as being substantially complete. Except for any portion(s) of Work specified for early completion or required by the Owner for early possession, substantial completion will not occur for any portion of the Work until the entire Work is ready for possession and use. The approval notice will include a list of incomplete Work items, establish the Substantial Completion Date, and describe any other terms relating to such approval. The Contractor shall acknowledge receipt of the approval notice in writing, indicating acceptance of all of its terms and provisions.
- e. The date of Substantial Completion, as determined by the Engineer and agreed to by the Owner, shall be the date for the beginning of the warranty period.
- f. Subsequent to the Substantial Completion Date, the Owner may exclude the Contractor from the Work during such periods when construction activities might interfere with the operation of the project. The Owner, however, shall allow the Contractor reasonable access for completion of incomplete punch list items.

**3.04.16(2) Physical Completion Date**

- a. The Contractor shall complete all physical Work within the Contract Time.
- b. Upon physical completion of the Work, including completion of all corrective Work described in Section 3.04.16(1) above and the submission of all required record drawings, operation and maintenance manuals, manufacturers' affidavits, software and programming, and other items required by the Contract, the Contractor shall notify the Engineer in writing that the Work is physically complete. Upon receipt of the notification, the Engineer will determine if the Work is physically complete in accordance with the Contract. If the Engineer determines that any materials, equipment, or workmanship do not meet the requirements of the Contract, the Engineer will prepare a list of such items and submit it to the Contractor. Following the satisfactory completion of the corrective Work by the

Contractor, the Engineer will notify the Owner that the Work is physically complete in accordance with the requirements of the Contract.

- c. The Engineer, with the concurrence of the Owner, will give the Contractor written notice of the Physical Completion Date for all of the Work. The Physical Completion Date shall not constitute the Owner's acceptance of the Work.

**3.04.16(3) Contract Completion Date (Acceptance of the Project)**

- a. When all of the Contractor's obligations under the Contract have been performed satisfactorily, the Owner will provide the Contractor with written notice of the Contract Completion Date. The following events shall occur in order for the Contractor to achieve the Contract Completion Date:
  - 1. The Contractor shall have achieved the Substantial Completion Date and the Physical Completion Date for the Work; and
  - 2. The Contractor shall furnish all documentation required by the Contract and required by law. The documents shall include, but are not limited to, the following:
    - i. Complete and legally effective releases and/or waivers of liens or bond or retainage claims in a form acceptable to the Owner. Subject to prior approval of the Owner, the Contractor may, if approved by the Owner, submit in lieu of the lien or claims releases and waivers: (1) receipts showing payment of all accounts in full; (2) an affidavit that the release and receipts cover all labor, services, materials, and equipment for which a lien or other claim could be filed and that all payrolls, material, and equipment bills and other indebtedness connected with the Work for which the Owner or the Owner's property might in any way be responsible, have been paid; and (3) the consent of the surety, if any, to final payment. If any Subcontractor or supplier fails to furnish a release waiver or receipt in a form satisfactory to the Owner, the Contractor may be permitted by the Owner to furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any lien or similar claim;
    - ii. Certified Payrolls (Federal Aid projects or if requested);
    - iii. Final Contract Voucher Certification.
    - iv. Affidavits of Wages Paid for the Contractor and all Subcontractors must be submitted to the Owner.
- b. The Contractor agrees that neither completion nor final acceptance shall relieve the Contractor of the responsibility to indemnify, defend, and protect the Owner against any claim or loss resulting from the failure of the Contractor (or the Subcontractors

or lower tier Subcontractors) to pay all laborers, mechanics, Subcontractors, materialpersons, or any other person who provides labor, supplies, or provisions for carrying out the Work or for any payments required for unemployment compensation under Title 50 RCW or for industrial insurance and medical aid required under Title 51 RCW.

Final acceptance shall not constitute acceptance of any unauthorized or defective work or material. The Owner shall not be barred from requiring the Contractor to remove, replace, repair, or dispose of any unauthorized or defective work or material or from recovering damages for any such work or material.

#### **3.04.16(4) Use of Completed Portions of the Work**

The Owner reserves the right to use and occupy any portion of the Work which has been completed sufficiently to permit partial use and occupancy, and such partial use and occupancy shall not be construed as an acceptance of the Work as a whole or any part thereof. Any claims that the Owner may have against the Contractor shall not be deemed to have been waived by such partial use and occupancy.

#### **3.04.16(5) Waiver of Claims by Contractor**

The Contractor's acceptance of the final payment from the Owner constitutes an irrevocable and complete waiver of any and all claims against the Owner under the Contract or otherwise arising from the Work, except for those claims that have been properly identified in writing in advance of final payment, and for which timely and sufficient prior written notice has been given, all in accordance with the Contract.

#### **3.04.17 CORRECTION OF FAULTY WORK AFTER FINAL PAYMENT**

The Owner's final payment to the Contractor shall not relieve the Contractor of responsibility for faulty materials, equipment or workmanship. The Contractor shall promptly repair or replace any such defects discovered within the warranty or other applicable limitations period.

#### **3.04.18 RETAINAGE**

1. Pursuant to RCW 60.28, there will be retained from monies earned by the Contractor on progress estimates a sum not to exceed 5 percent of the monies earned by the Contractor. Such retainage shall be used as a trust fund for the protection and payment (1) to the State with respect to taxes imposed pursuant to RCW Title 82, which may be due from such Contractor, and (2) the claims of any other person or entity arising under the Contract or RCW 60.28.
2. Monies retained pursuant to RCW 60.28 shall, at the option of the Contractor, be:
  - a. Retained in a fund by the Owner;

- b. Deposited by the Owner in an interest-bearing account in a bank, mutual savings bank, or savings and loan association (interest on monies so retained may be paid to the Contractor);
- c. Deposited by the Owner in an escrow (interest-bearing) account in a bank, mutual saving bank, or savings and loan association (interest on monies so retained shall be paid to the Contractor). Deposits are to be in the name of the Owner and are not to be allowed to be withdrawn without the Owner's written authorization. The Owner will issue a check representing the sum of the monies reserved, payable to the bank or trust company;
- d. In choosing option (b) or (c), the Contractor agrees to assume full responsibility to pay all costs which may accrue from escrow services, brokerage charges or both, and further agrees to assume all risks in connection with the investment of the retainage in securities.

At the time the Contract is executed the Contractor shall designate the option desired.

- 3. Release of retainage will be made within the statutory period following the last date for filing of claims pursuant to RCW Chapter 60.28, provided that the following conditions are met:
  - a. A release has been obtained from the Washington State Department of Revenue;
  - b. A "Certificate of Payment of Contributions Penalties and Interest on Public Works Contract" is received from the Washington State Employment Security Department;
  - c. The Washington State Department of Labor and Industries indicates the Contractor is current on the payment of industrial insurance and medical aid premiums;
  - d. All claims by the Owner against the Contractor have been resolved;
  - e. No claims have been filed against the retained percentage;
  - f. All required "Affidavits of Wages Paid" are on file with the Owner for the Contractor and all Subcontractors, regardless of tier;
- 4. In the event that claims are filed against the retainage, the Contractor will be paid the retained percentage less an amount sufficient to pay all such claims, together with a sum determined by the Owner to be sufficient to pay the costs of foreclosing on claims and to attorneys' fees, all in accordance with applicable law.

## **3.05 DISPUTES AND CLAIMS**

### **3.05.1 DISPUTES**

When disputes occur, the Contractor shall pursue resolution through the Engineer. The Contractor shall follow the notice and protest procedures outlined in Section 3.04. If negotiation using the procedures outlined in Section 3.04 fails to provide satisfactory resolution, the Contractor shall pursue the more formalized method set forth in Section 3.05.2 for submitting claims.

### **3.05.2 CLAIMS**

If the Contractor contends that additional payment is due, has provided timely notices and protests as required by Section 3.04, and the Contractor has pursued and exhausted all of the means provided in that section to resolve the dispute, the Contractor may submit a claim as provided in this Section. Any claim for an increase in the Contract price or for an extension of the Contract Time by the Contractor is waived if the written notifications and protests required in Section 3.04 have been not provided, or if the Engineer is not afforded reasonable access to the Contractor's complete records relating to the claim, as required by Section 3.04.8, or if a claim is not submitted in accordance with the requirements of this Section. The fact that the Contractor has provided proper notification, properly submitted a claim, or provided the Engineer with access to records, shall not in any way be construed as proving or substantiating the validity of the claim. If, after consideration by the Owner, the claim is found to have merit, the Owner will make an equitable adjustment to either the Contract price, the Contract Time, or both. If the Owner finds the claim to be without merit, no adjustment will be made.

All claims submitted by the Contractor shall be in writing and in sufficient detail to enable the Engineer to ascertain the basis for and amount of the claim. All claims shall be submitted to the Engineer in the manner in Section 3.03.6. The following information shall accompany each claim submitted:

1. A detailed factual statement of the basis for the claim for additional compensation and/or extension of time, including all relevant dates, locations, and items of work relating to the claim.
2. The date on which the events occurred that give rise to the claim.
3. The name of each person involved in or having knowledge about the claim.
4. The specific provisions of the Contract which support the claim and a statement of the reasons why such provisions support the claim.
5. If the claim relates to a decision of the Engineer that the Contract leaves to the Engineer's discretion or as to which the Contract provides that the Engineer's decision is final, the Contractor shall set out in detail all facts supporting its position relating to the decision of the Engineer.

6. The identification of any documents and the substance of any oral communications that support the claim.
7. Copies of any identified documents, other than Owner documents and documents previously furnished to the Owner by the Contractor, that support the claim (manuals which are standard to the industry may be included by reference).
8. If an extension of the Contract Time is sought:
  - a. The specific days and dates for which the extension is sought;
  - b. The specific reasons why the Contractor believes a time extension should be granted;
  - c. The specific provisions of Section 3.04.15(2) under which the time extension is sought; and
  - d. An analysis of the Contractor's progress schedule, demonstrating the reasons why a time extension should be granted.
9. If additional compensation is sought, the exact amount sought and a breakdown of that amount into the following categories:
  - a. Labor;
  - b. Materials;
  - c. Direct equipment. The actual cost for each piece of equipment for which a claim is made, or, in the absence of actual cost, the rates established by the AGC/WSDOT Equipment Rental Agreement which was in effect when the Work was performed. The amounts claimed for any piece of equipment shall not exceed the rates established by the Equipment Rental Agreement, even if the actual cost for such equipment is higher. The Owner may audit the Contractor's cost records, as provided in Section 3.06, to determine actual equipment costs. The following information shall be provided for each piece of equipment:
    - i. Detailed description (e.g., make, model, year, diesel or gas, size of bucket);
    - ii. The hours of use or standby; and
    - iii. The specific day and dates of use or standby.
  - d. Subcontractor claims (in the same level of detail as specified herein); and
  - e. Other information as requested by the Engineer or the Owner.

10. A notarized statement containing the following language:

Under the penalty of law for perjury or falsification, the undersigned,

\_\_\_\_\_, \_\_\_\_\_  
(name) (title)

of \_\_\_\_\_  
(company)

hereby certifies that the claim for extra compensation and time, if any, made herein for work on this Contract is a true statement of the actual costs incurred and time sought, and is fully documented and supported under the Contract between the parties.

If the claim for extra time and/or compensation involves any work of a Subcontractor or lower tier Subcontractor, the undersigned duly authorized agent of the Contractor hereby swears that Contractor has investigated the basis for the Subcontractor’s or lower tier Subcontractor’s claims and has determined that all such claims are justified as to entitlement and amount of money and/or time requested, has reviewed and verified the adequacy of all back-up documentation and has no reason to believe and does not believe that the factual basis for the Subcontractor’s or lower tier Subcontractor’s claim is falsely represented.

Dated \_\_\_\_\_/s/\_\_\_\_\_

Subscribed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_  
Notary Public

My Commission Expires:\_\_\_\_\_

It will be the responsibility of the Contractor to keep full and complete records of the costs and additional time incurred with respect to any claim. The Contractor shall permit the Engineer to have access to those records and any other records and documents as may be required by the Engineer to determine the facts or contentions involved in the claim. The Contractor shall retain all records and documents in any way relating to the Work for a period of not less than three years after the Contract Completion Date.

The Contractor shall in good faith attempt to reach a negotiated resolution of all claims with the Engineer or its designee.

The Contractor’s failure to submit with the Final Contract Voucher Certification a list of all claims, together with the information and details required by this Section shall operate as a waiver of the claims by the Contractor, as provided in

Section 3.04.12(9).

If the Contractor submits a claim in full compliance with all the requirements of this Section, the Owner will respond in writing to the claim as follows:

1. Within 45 calendar days from the date the claim is received by the Owner, if the claim amount is less than \$100,000;
2. Within 90 calendar days from the date the claim is received by the Owner, if the claim amount is equal to or greater than \$100,000; or
3. If these time periods are unreasonable due to the complexity of the claim, the Contractor will be notified within 15 calendar days from the date the claim is received by the Owner of the amount of time which will be necessary for the Owner to evaluate the claim and issue a response.

Full compliance by the Contractor with the provisions of this Section is a condition precedent to the Contractor's right to commence a lawsuit or pursue other legal remedies.

### **3.05.3 TIMELINE AND JURISDICTION**

For the convenience of the parties to the Contract it is mutually agreed by the parties that any claims or causes of action which the Contractor has against the Owner arising from the Contract shall be brought within 180 calendar days from the date of Physical Completion (Section 3.04.16(2)) of the Contract by the Owner; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of the county where the Owner headquarters is located, provided that where an action is asserted against a county, RCW 36.01.05 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 any such claims or causes of action. It is further mutually agreed by the parties that when any claims or causes of action which the Contractor asserts against the Owner arising from the Contract are filed with the Owner or initiated in court, the Contractor shall permit the Owner to have timely access to any records deemed necessary by the Owner to assist in evaluating the claims or action.

### **3.05.4 CONTINUATION OF WORK PENDING RESOLUTION OF DISPUTES**

The Contractor shall expeditiously carry on the Work, adhere to the progress schedule, and comply with all written directives of the Owner or the Engineer regardless of any dispute or claim that may exist between the Owner and the Contractor. No Work shall be delayed or postponed pending resolution of any dispute or claim. Failure or refusal of the Contractor to comply with the written directives of the Owner or the Engineer shall constitute a material breach of the Contract and immediately constitute grounds for the Owner to withhold payments to the Contractor, suspend the Work or terminate the Contract. Notice under this Section shall be in accordance with other provisions of the Contract.

### **3.06 AUDITS**

If the Contractor requests an equitable adjustment to either the Contract price or the Contract Time, the Owner shall have the right to audit the Contractor's books, records, other documents, and accounting practices and procedures, and to inspect the Contractor's plant, equipment and facilities to examine all facts and verify all direct and indirect costs of whatever nature claimed to have been incurred or are anticipated to be incurred. The right to audit encompasses all subcontracts and is binding upon Subcontractors. All subcontracts that the Contractor enters into shall contain a clause allowing the Owner to audit all Subcontractor books, records, other documents, and accounting practices and procedures, and to inspect the Subcontractor's plant, equipment and facilities. All audits shall be performed by auditors of the Owner during normal working hours at the Contractor's or Subcontractor's office or any other location mutually agreed upon. The Contractor, Subcontractor, or lower tier Subcontractor shall cooperate fully with the auditor and shall make available all required information. Failure to cooperate or provide requested information shall be grounds for denial of the claim.

### **3.07 SUSPENSION OF WORK AND TERMINATION OF CONTRACT**

#### **3.07.1 SUSPENSION OF WORK**

1. The Owner or the Engineer may order suspension of all or any part of the Work if:
  - a. Unsuitable or other conditions that are beyond the reasonable control of the Contractor exist or arise that prevent satisfactory and timely performance of the Work; or
  - b. The Contractor does not comply with the Contract; or
  - c. It is in the public interest.
2. If the Engineer determines that the suspension is for reasons set forth in Subsection a. or c. above, an equitable adjustment will be made in the Contract Time but not the Contract price. If the Engineer determines that the suspension is for reasons set forth in Subsection b. above, no adjustment shall be made in the Contract Time or the Contract price.
3. If the Contract is suspended for reasons set forth in Subsection a. or c. above and the Contractor believes that the suspension of performance of all or part of the Work has continued for an unreasonable period of time, the Contractor shall give written notice to the Engineer of its intention to seek an equitable adjustment in the Contract Time or the Contract price. In the event that an equitable adjustment is allowed, no adjustment shall be allowed for any time lost or costs incurred more than 10 calendar days before delivery of the written notice to the Engineer. No profit of any kind will be allowed on any increase in costs due to the suspension, delay or interruption.

### **3.07.2 TERMINATION FOR DEFAULT**

1. The Owner may terminate the Contract for default, effective seven days following delivery of written notice of default to the Contractor, if the Contractor:
  - a. Refuses or fails to supply enough properly skilled laborers or conforming materials to complete the Work in a timely manner;
  - b. Refuses or fails to prosecute the Work with such diligence as will ensure its physical completion by the Physical Completion Date;
  - c. Performs work which deviates from the requirements of the Contract and refuses or fails to correct the non-conforming work;
  - d. Fails to make prompt payment to Subcontractors and/or suppliers for labor or materials;
  - e. Fails to comply with laws, ordinances, rules, regulations or orders of a public authority having jurisdiction; or
  - f. Otherwise fails to follow written directives of the Owner or the Engineer or is in default of a material provision of the Contract.
2. If the Contractor abandons the Work for any cause other than failure of the Owner to make monthly progress payments for Work properly performed, or if the Contractor refuses to comply with requirements of the Contract, the Owner has the additional right to notify the Contractor's performance bond surety and require the surety to complete the Work in accordance with the Contract.

### **3.07.3 TERMINATION FOR CONVENIENCE OF THE OWNER**

The Owner may by written notice terminate the Contract at any time in whole or in part, without cause, and except where termination is due to the Contractor's default, the Owner shall pay the Contractor that portion of the Contract price corresponding to the acceptable Work completed to the Owner's satisfaction, together with reasonable costs, as determined in the sole discretion of the Owner, necessarily incurred by the Contractor in terminating the remaining portion of Work, less any payments made before termination. In no event shall the Owner be required to pay the Contractor any amount in excess of the completed portion Contract price. The Owner shall not be required to pay the Contractor any amount for consequential damages including but not by means of limitation lost or anticipated profits on Work that is not performed as a result of termination.

### **3.07.4 RESPONSIBILITY OF THE CONTRACTOR AND SURETY**

Termination of the Contract shall not relieve the Contractor of any responsibilities under the Contract for Work performed. Nor shall termination of the Contract relieve the sureties of their obligations under the bonds required or permitted by the Contract or applicable law.

## **PART 4**

# **TECHNICAL SPECIFICATIONS**

# TECHNICAL SPECIFICATIONS

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09900	Painting.....	09900-1
<b>Divisions 10 through 12</b>		
Not Used		

<b>SECTION</b>	<b>DESCRIPTION</b>	<b>PAGE</b>
<b>Division 13</b>	<b>Special Construction</b>	
13417	Pressure Gauges .....	13417-1
<b>Division 14</b>	<b>Conveying Systems</b>	
	Not Used	
<b>Division 15</b>	<b>Mechanical</b>	
15050	Piping Systems.....	15050-1
15066	Pipe and Conduit Support System .....	15066-1
15100	Valves .....	15100-1
<b>Division 16</b>	<b>Electrical</b>	
	Not Used	

**DIVISION 1**

**GENERAL TECHNICAL REQUIREMENTS**

## **SECTION 01110**

### **SUMMARY OF WORK**

#### **PART 1 GENERAL**

##### **1.1 SCOPE OF WORK**

The work specified in this Section consists of furnishing all labor, materials, and equipment necessary for construction of the Boege Road and State Route 4 PRV Stations, as shown on the Plans, and specified herein.

- A. Provide clearing and grubbing as necessary to execute the project.
- B. Furnish and install new Boege Road PRV vaults, site piping, valves, appurtenances, and drainage piping.
- C. Furnish connections to the existing water mains.
- D. Provide testing, commissioning, and training as specified herein.
- E. Provide all associated work as shown on the Plans and specified herein, for a complete and workable system.

##### **1.2 PROJECT INFORMATION**

The Contract Documents show the location, arrangement, and type of work to be performed under the proposed project.

The Contractor shall be responsible for proper notification to and coordination with all utility districts, service districts, and all other persons and services that will be affected by this project at least one week in advance of beginning any construction that affects them.

It is the intent and purpose of these Contract Documents to have constructed complete facilities in good working order for the least practical cost to the Owner. Suggestions, recommendations, as well as inquiries from the Contractor that will serve this purpose are welcome and will be given consideration by the Owner and the Engineer.

##### **1.3 CONTRACTOR USE OF SITE AND PREMISES**

Construction operations shall be limited to public right-of-way and subject to the approval of the Engineer.

The Contractor shall submit a traffic control plan per Section 01950.

The Contractor shall allow representatives of the Owner, funding, and regulatory agencies access to the project site at all times.

The Contractor shall notify the Owner at least 48 hours in advance of any proposed water system shut downs. The Contractor shall also be responsible for notifying all impacted water users 48 hours in advance of any water shutoff.

#### **1.4 ORDER OF WORK**

The order of work will be at the option of the Contractor, except as noted below, in keeping with good construction practice, time restrictions, requirements of the permits applicable to this project, and the order of work as outlined herein, all costs of which shall be included in the various bid amounts. The Contractor shall conduct the order of work to allow the existing facilities to remain operational during the construction of the Project and shall coordinate all of their activities through the Engineer with the Owner's operations and maintenance staff. The Contractor shall provide a written plan of activities to the Engineer and Owner each Thursday for the following week, for review and coordination with existing facility operations.

The implementation of any measure required to protect the environment shall supersede any order of work designated within these Specifications. The Contractor shall meet the conditions as outlined in any and all permits and requirements of the Federal, State, County, and City regulatory agencies.

The Contractor shall keep the disruption of the existing facility operations to a minimum. Water system shutdowns shall be limited to 8 hours during any 24-hour period.

Access to the existing operations areas shall be maintained. Disruption of this access shall be kept to a minimum and must be prearranged and scheduled through the Engineer with the Owner's operations and maintenance staff.

The following summary shall be used as a general guideline of the construction tasks to be performed. The tasks are generally listed in the order of completion. The tasks, however, can be completed in a different order than listed herein, including performance of two or more tasks concurrently. The Contractor shall prepare a complete project schedule, which shall be provided in accordance with the limitations specified herein.

- A. Place order for any long lead items, confirming delivery and installation dates. Install when scheduled

- B. Install temporary erosion and sedimentation control measures prior to any ground surface disturbance occurring.
- C. Install, disinfect and test pressure reducing valve stations with new piping, fittings, valves, and appurtenances.
- D. Provide all associated work as shown on the Plans and specified herein, for a complete and workable system.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 01150**

### **SURVEYS**

#### **PART 1 GENERAL**

##### **1.1 SCOPE**

The work specified in this Section includes all survey for the project. The Contractor shall provide all construction survey for the Work. The Engineer will provide primary horizontal and vertical control data and monuments, as shown on the Plans.

At the Contractor's request, the Engineer will provide the Plans in electronic format. Electronic files are provided for the Contractor's convenience and are not part of the Contract. Calculations shall be made from the Plans.

During the prosecution of the work, the Contractor shall make all necessary measurements to prevent misfitting, and shall be responsible for the accurate construction of the work.

##### **1.2 DEFINITIONS**

The meaning of words and terms used in this provision shall be as listed in "Definitions of Surveying and Associated Terms" current edition, published by the American Congress on Surveying and Mapping, and the American Society of Civil Engineers.

##### **1.3 RELATED WORK SPECIFIED ELSEWHERE**

<b><u>Section</u></b>	<b><u>Item</u></b>
01720	Record Drawings

##### **1.4 QUALIFICATIONS**

The Contractor shall employ a Professional Land Surveyor (PLS) registered in the State of Washington and acceptable to the Owner. All surveying shall be completed by or under the direct supervision of the PLS.

##### **1.5 SUBMITTALS**

The Contractor shall submit the name, address, and license number of the Professional Land Surveyor before starting construction.

## 1.6 QUALITY ASSURANCE

The Contractor shall ensure a surveying accuracy within the following tolerances:

	<u>Vertical</u>	<u>Horizontal</u>
Slope Stakes	±0.1 feet	±0.10 feet
Subgrade Grade Stakes Set 0.04 foot Below Grade	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Stationing on Roadway	N/A	±0.1 feet
Alignment on Roadway	N/A	±0.04 feet
Surfacing Grade Stakes	±0.01 feet	±0.1 foot (parallel to alignment) ±0.1 feet (normal to alignment)
Roadway Paving Pins for Surfacing or Paving	±0.01 feet	±0.1 feet (parallel to alignment) ±0.05 feet (normal to alignment)
Alignment of sewer and storm manholes and catch basins	±.01 feet	±0.1 feet
Stationing on Structures		±.02 feet
Alignment on structures		±.02 feet
Superstructure elevations	±.01 feet variation from Plan elevation	
Substructure	±.02 feet variation from Plan grades	

When the following items are included in the project, the Contractor shall perform independent checks from different secondary control to ensure that the points staked are within the specified survey accuracy tolerances:

- Piles
- Shafts
- Footings
- Columns

The Owner may spot-check the Contractor's surveying. These spot-checks will not change the requirements for accuracy by the Contractor

## **PART 2 PRODUCTS**

Not Used.

## **PART 3 EXECUTION**

The Contractor's PLS shall establish all secondary survey controls, horizontal and vertical, as necessary to assure proper placement of all Work based upon the primary control points provided by the Owner. The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, clearing limit stakes, slope stakes, and grades for the Work. Except for the survey control data to be furnished by the Owner, calculations, surveying, and measuring required for setting and maintaining the lines and grades shall be the Contractor's responsibility.

Survey records shall be maintained by the Contractor's PLS, including a description of the work performed on each shift, the methods utilized, and the control points used. The record shall be adequate to allow the survey to be reproduced. A copy of each day's record shall be provided to the Engineer within three working days of Engineer's request.

All surveyed points shall be established by placing hubs and tacks with marked stakes in unpaved areas or P.K. nails with painted markings in paved areas. All surveying stakes shall be marked in accordance with WSDOT Standard Plan A-10.10-00. When stakes are needed that are not described in the Standard Plans, then those stakes shall be marked as ordered by the Engineer. The Contractor's surveyor shall maintain and replace survey hubs, stakes, nails and markings immediately if destroyed, removed, or the Engineer determines the stake or pavement markings are illegible.

The Engineer is responsible for locating and referencing those monuments shown on the Plans, of being removed or destroyed during construction, and preparing the required permit forms with the Department of Natural Resources (DNR) for

those monuments only. The Contractor shall protect all survey markers, monuments and property corners unless shown otherwise on the Plans. The Contractor shall work to preserve the existing monumentation as provided in RCW 58.09.130 and WAC 332-120. The Contractor shall notify the Engineer immediately if it becomes apparent that a survey marker will be disturbed due to construction. The Contractor shall allow 5 working days for the Engineer to acquire adequate information so that the monument, including property corners, may be replaced referenced in its original position prior to disturbance. All cost associated with replacement of monuments that have been disturbed before being referenced due to lack of proper notification by the Contractor shall be deducted from monies due to the Contractor.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 01160**

### **REGULATORY REQUIREMENTS**

#### **PART 1 GENERAL**

##### **1.1 SCOPE**

The work specified in this Section contains information pertaining to permits and licenses, and use of private property.

##### **1.2 PERMITS AND LICENSES**

Except as noted below, the Contractor shall be responsible for obtaining and paying all fees associated with all the necessary permits, licenses, approvals, and construction permits necessary for the execution of this Contract, whether they be City, County, State, or federal permits.

The Owner is in possession of, or will be responsible for obtaining the following approvals and permits, and will pay the fees associated with the application and procurement of such approvals and permits. The Contractor is advised to become familiar with these approvals and permits as necessary for this project. The Contractor shall comply with all conditions of each approval/permit as if the conditions were detailed herein. Copies of these permits are required to be onsite at all times.

- A. WSDOT plan review and approval (obtained by Owner)
- B. WSDOT Right-Of-Way Permit/Franchise (applied and paid for by Owner, obtained by Contractor)

##### **1.3 USE OF PRIVATE PROPERTY**

The Contractor shall be responsible for all conditions of any arrangements the Contractor makes for the use of any privately owned property.

In the event any dispute occurs and claims for damages are filed by the property owners, the Owner will request that the Contractor give evidence that they have requested their insurance company to make personal contact with the claimants. Any settlement for insurance claims shall be strictly an act restricted to the claimant, the Contractor, and their insurance company.

The Contractor is advised that in the event of any property damage, the Owner reserves the right to withhold monies to protect the property owner.

#### **1.4 PROPERTY RELEASE FORM**

The Contractor shall be held responsible for acquiring signed property release forms, in the format provided on the following page, for all properties that have been disturbed or damaged by the Contractor's operations, or utilized by the Contractor for staging, storing, or stock piling of materials or equipment.

This work shall include submitting the form(s), as further shown herein, by certified mail to each property owner effected and further including therein a self addressed stamped envelope for the property owner's use. The enclosed self addressed envelope shall be addressed to: Town of Cathlamet, 375 2<sup>nd</sup> Street, Cathlamet, WA 98612. Contractor shall provide evidence of all certified mailings.

**\*\*\* END OF SECTION \*\*\***

**PROPERTY RELEASE**

\_\_\_\_\_  
(Property Address)  
\_\_\_\_\_  
\_\_\_\_\_

DATE: \_\_\_\_\_

I, \_\_\_\_\_, owner of \_\_\_\_\_  
(Property Owner's Name) (Property Description or  
\_\_\_\_\_, hereby release  
Address)  
\_\_\_\_\_, from any property  
(Contractor's Name)

damage or personal injury resulting from construction adjacent  
to or on my property located at \_\_\_\_\_,  
(Property Address)  
during construction of the Boege Road and State Route 4 PRV Stations.

My signature below is my acknowledgment and acceptance that my property, as  
identified above, was returned to a satisfactory condition.

Name: \_\_\_\_\_

Signed: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone: \_\_\_\_\_

## SECTION 01200

### MEASUREMENT AND PAYMENT

#### PART 1 GENERAL

##### 1.1 SCOPE

This Section further defines Measurement and Payment for this project.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01290	Schedule of Values
01300	Submittals

##### 1.3 MEASUREMENT

Measurement for all items shall be as indicated in these Specifications for unit price and lump sum price bid items. Bid items are outlined in detail in this Specification Section and listed in the Proposal.

Measurement shall be in accordance with Section 1-09.1 of the WSDOT Standard Specifications. Volumes of gravel materials and concrete volumes shall be measured by the Engineer in the field and quantities will be limited to the relative neat line dimensions shown on the Plans or as approved by the Engineer in the field.

Weighing equipment, scale verification checks, load tickets for quarry spalls, rock riprap, cobbles, gravel materials, hot mix asphalt, bituminous construction materials, etc., shall conform to Section 1-09.2 of the WSDOT Standard Specifications. Load tickets shall include all gravel materials, cast-in-place concrete, cement grout, CDF, hot mix asphalt, ATB, and reinforcing steel. The Owner will pay for no material received by weight unless they have been weighed as required in this Section or as required by another method the Engineer has approved in writing. All costs incidental to weighing shall be merged into the various unit prices bid.

##### 1.4 INDIVIDUAL BID ITEMS

The following is a list of bid items for the project. The contract price for each item constitutes full compensation for furnishing all equipment, labor, materials, appurtenances, and incidentals and performing all operations necessary to construct and complete the various bid items in accordance with the Contract

Documents. Payment for each item shall be considered as full compensation, notwithstanding that minor features may not be mentioned herein. Work paid for under one item will not be paid for under any other item. If a particular item of work shown on the Plans or described in Specifications is not described in a specific bid item, this item of work shall be considered as incidental to the work and the costs for this work shall be merged into the various respective unit price and lump sum bid items.

1. Mobilization and Demobilization

- a. Measurement: Will be measured by lump sum.
- b. Payment: The lump sum contract price for MOBILIZATION AND DEMOBILIZATION shall include all costs for the labor, materials, and equipment required for mobilization and demobilization on the project as described in Section 01505.

Payment for MOBILIZATION AND DEMOBILIZATION shall be as follows:

35% Payment: When Contractor has mobilized on-site and temporary facilities are in place.

50% Payment: When 5 percent of the total pay items are completed (not including payment for materials on hand).

75% Payment: When 50 percent of the total pay items are completed (not including payment for materials on hand).

100% Payment: When Project is completed and recommended for acceptance.

2. Minor Changes

- a. Measurement: Will be negotiated prior to commencing any such work under this pay item and shall be for work to remedy unforeseen conditions, utility conflicts, minor landscaping, minor drainage improvements, or special surface restoration.
- b. Payment: Payment or credits for changes amounting to \$5,000 or less may be made under the Bid Item MINOR

CHANGE. At the discretion of the Owner, this procedure for Minor Changes may be used in lieu of the more formal procedure as outlined in General Conditions Section 3.04.6. The Contractor will be provided a copy of the completed order for Minor Changes. The agreement for the Minor Changes will be documented by signature of the Contractor or notation of the verbal agreement. If the Contractor is in disagreement with anything required by the order for Minor Changes, the Contractor may protest the order as provided in General Conditions Section 3.04.8.

Payments or credits will be determined in accordance with General Conditions Section 3.04.6. All Minor Change work will be within the scope of the Contract Work and will not change Contract Time. For the purpose of providing a common Proposal for all Bidders, the Owner has entered an amount for MINOR CHANGE in the Proposal to become part of the total Bid by the Contractor.

3. Project Temporary Traffic Control
  - a. Measurement: Shall be measured by lump sum.
  - b. Payment: The lump sum contract price for PROJECT TEMPORARY TRAFFIC CONTROL shall include costs for all labor, material, and equipment to provide temporary traffic control for the project as shown on the Plans and as specified in Section 01950.
4. Locate Existing Utilities
  - a. Measurement: Shall be measured by lump sum.
  - b. Payment: The unit price bid per lump sum for LOCATE EXISTING UTILITIES shall include all costs for the labor, materials, and equipment required to locate existing utilities as shown on the Drawings, and as specified herein and in Section 02050.
5. Trench Excavation Safety Systems
  - a. Measurement: Will be measured by lump sum.
  - b. Payment: The lump sum contract price for TRENCH EXCAVATION SAFETY SYSTEMS shall include all

costs for labor, materials, and equipment required to provide sheeting, shoring, and bracing of trenches and open excavations as required to meet the Washington Industrial Safety and Health Act, Chapter 49.17 RCW and Section 02250. These costs shall not be considered incidental to any other bid item.

6. Site Earthwork
  - a. Measurement: Shall be measured by lump sum.
  - b. Payment: The lump sum contract price for SITE EARTHWORK which shall include all costs for dewatering, clearing and grubbing, tree removal and wastehaul, grading the site, all excavations to subgrades including trenching, loading, and wastehauling excess material, as shown on the Plans and as specified herein, and in Sections 02230, 02240, 02300 and 02305.
7. Temporary Erosion Control and Sedimentation Control
  - a. Measurement: Shall be measured by lump sum.
  - b. Payment: The lump sum contract price for TEMPORARY EROSION CONTROL AND SEDIMENTATION CONTROL shall include all costs for the labor, material, and equipment for installation and maintenance of all temporary erosion and sediment control measures and best management practices (BMPs), as shown on the Plans and as further described in Section 02370.
8. SPCC Plan
  - a. Measurement: Shall be measured by lump sum.
  - b. Payment: The lump sum contract price for SPCC PLAN shall include all costs for the labor, material, and equipment to prepare and carry out the plan as described in Section 02370.
9. PRV Vault 1 Connection to Existing Water System
  - a. Measurement: Shall be measured per each.



the Plans and as specified in Sections 02530, 15050, and 15100. This item shall also include all costs for foundation gravel, backfill, and drain rock as shown on the Plans and as specified herein.

13. Surface Restoration

- a. Measurement: Shall be measured by lump sum.
- b. Payment: The lump sum contract price for SURFACE RESTORATION shall include all costs for the labor, material, and equipment associated with cleanup, surface restoration, topsoil, and hydroseeding as shown on Plans and as specified in Section 02900.

**1.5 PROJECT MATERIALS ON HAND**

See General Conditions Section 3.04.12(6).

**1.6 PAYMENT**

Payment for all work will be made at the contract unit price or lump sum price as indicated in the Proposal, payment of which shall constitute full compensation, for a complete installation.

For items of equipment, acceptable operating and maintenance information shall be delivered to the Engineer before the Contractor will be paid for more than 90 percent of the purchase value of that equipment. Purchase value shall be the net price for the equipment as given on the invoice.

Final operating and maintenance manuals per Section 01300 must be delivered to the Engineer prior to the Project being 90 percent complete. Progress payments for work in excess of 90 percent completion will not be made until the specified acceptable operating and maintenance information has been delivered to the Engineer.

**\*\*\* END OF SECTION \*\*\***

## SECTION 01300

### SUBMITTALS

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes requirements that apply to all equipment and materials supplied on the Project.

The Contractor shall be responsible for the accuracy and completeness of the information contained in each submittal and shall assure that the material, equipment or method of work shall be as described in the submittal. The Contractor shall verify that all features of all products conform to the requirements of the Contract Documents. Submittal documents shall be clearly edited to indicate only those items, models, or series of equipment that are being submitted for review. All extraneous materials shall be crossed out or otherwise obliterated. The Contractor shall ensure that there is no conflict with other submittals and notify the Engineer in each case where their submittal may affect the work of another contractor or the Owner. The Contractor shall ensure coordination of submittals among the related crafts and subcontractors and shall verify such coordination on all submittals.

Where noted in the Contract Documents, the structural, mechanical, and electrical designs associated with the indicated equipment items are specific to the manufacturer and model number specified. Any structural, mechanical, or electrical modifications required to utilize an approved substitution to the specified equipment shall be made by the Contractor at no additional cost to the Owner. Where approved substitutions of specified equipment affect other materials or equipment, mechanical, structural, or electrical work, the Contractor shall note in the equipment submittal any necessary changes to accommodate the substituted equipment. It shall also be the responsibility of the Contractor to coordinate other mechanical, structural, or electrical equipment submittals to make sure that all changes necessary to accommodate the substituted equipment are addressed in these submittals as well.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01320	Progress Schedules
01385	Documentation of Existing Conditions
01400	Quality Control
01720	Record Drawings
01800	Testing, Commissioning, and Training

<u>Section</u>	<u>Item</u>
Division 2	Sitework
08310	Metal Access Hatches
Division 13	Special Construction
Division 15	Mechanical

### **1.3 WORK INCLUDED**

Submittals required for this work shall include any or all of the following as required by the particular specification section and the submittal schedule:

- A. Schedules and Plans
- B. PRODUCT SUBMITTALS
  - 1. Manufacturer's Literature
  - 2. Shop Drawings
  - 3. Color and Material Samples
  - 4. Design Calculations
  - 5. Test Reports
- C. Equipment Operation and Maintenance Manuals
- D. Record Drawings

### **1.4 SUBMITTAL INFORMATION**

Shop, catalog, and other appropriate drawings and information shall be submitted to the Engineer for review prior to fabrication or ordering of all equipment and materials specified. The number of copies of submittal information to be submitted shall be as indicated below.

All submittal information shall be sent to the Engineer through the Contractor. The Contractor shall assign a separate submittal number to each item or group of items that relate to each specification section. Submittal numbers shall be assigned in consecutive ascending order, with the first project submittal assigned the number "1." Resubmittals shall be numbered using the same number followed by an alphabetical suffix. All submittals shall bear the Contractor's certification that they have reviewed, checked, and approved the submittal information prior to transmitting to the Engineer. The submittal number and related specification section shall be marked on each submittal.

## **PART 2 PRODUCTS**

### **2.1 GENERAL**

When the Contract Documents require a submittal the contractor shall submit the following number of documents.

<b>Type of Submittal</b>	<b>Number of Copies</b>
Schedules or Plans	5
Product Submittal	8
Design Calculations	5
Test Reports	5
Preliminary Equipment Manuals	3
Final Equipment Manuals	4

If requested by the Contractor and approved by the Engineer and Owner, the Contractor may submit one copy of submittals electronically. Hard copies of Equipment Manuals must be submitted. Hard copies of final, reviewed submittals must also be provided. If submittals are provided electronically, only one reviewed copy will be returned to the Contractor. Electronic submittals shall be provided in tabbable, searchable, pdf format and should include a table of contents bookmarked to provide a navigation link to each section of the submittal. Information should be clear and legible. Information pertaining to the specific materials proposed for use on the project shall be highlighted.

### **2.2 PRODUCT SUBMITTALS**

#### **A. TIMING**

Submittals for the following items must be provided to the Engineer for review within 14 calendar days of Notice to Proceed:

- Vaults
- Valves
- Piping

#### **B. GENERAL**

When indicated in the Contract Documents the contractor shall submit product data for review by the Engineer. Unless otherwise specified, within 21 calendar days after receipt of the submittal, the Engineer shall review the submittal and return three copies of the marked-up submittal. The reproducible original will be retained by the Engineer. The returned submittal shall indicate one of the following actions:

1. If the review indicates that the material, equipment, or work method complies with the project Specifications, submittal copies will be marked “NO EXCEPTIONS TAKEN.” In this event, the Contractor may begin to implement the work method or incorporate the material or equipment covered by the submittal.
2. If the review indicates limited corrections are required, copies will be marked “MAKE CORRECTIONS NOTED.” The Contractor may begin implementing the work method or incorporating the material and equipment covered by the submittal in accordance with the noted corrections. Where submittal information will be incorporated in operation and maintenance data, a corrected copy shall be provided.
3. If the review reveals that the submittal is insufficient or contains incorrect data, copies will be marked “AMEND AND RESUBMIT.” Except at their own risk, the Contractor shall not undertake work covered by this submittal until it has been revised, resubmitted, and returned marked either “NO EXCEPTIONS TAKEN” or “MAKE CORRECTIONS NOTED.”
4. If the review indicates that the material, equipment, or work method does not comply with the project Specifications, copies of the submittal will be marked “REJECTED - SEE REMARKS.” Submittals with deviations that have not been identified clearly may be rejected. Except at their own risk, the Contractor shall not undertake the work covered by such submittals until a new submittal is made and returned marked either “NO EXCEPTIONS TAKEN” or “MAKE CORRECTIONS NOTED.”

#### C. MANUFACTURER’S LITERATURE

Where the contents of submitted literature include data not pertinent to the submittal, the portion(s) of the contents being submitted for the Engineer’s review shall be clearly indicated.

#### D. SHOP DRAWINGS

Shop drawings shall be submitted in the form of blue-line or black-line prints of each sheet. Blueprint submittals will not be acceptable.

All shop drawings shall be accurately drawn to a scale sufficiently large enough to show pertinent features and method of connection or joining.

On all shop drawings, figure dimensions shall be used as opposed to scaled dimensions.

**E. COLOR AND MATERIAL SAMPLES**

All material samples shall be of the exact article proposed to be furnished for the work and shall be submitted in the quantity required. Samples shall be returned to the Contractor, with one retained by the Engineer.

Unless the precise color is specifically described in the Contract Documents, or whenever a choice of color or pattern is available in a specified product, accurate color charts shall be submitted to the Engineer for their review and selection.

**F. DESIGN CALCULATIONS**

Where required in the Specifications, design calculations shall be submitted to the Engineer. Design calculations shall be complete, concise, and in an easy-to-read format. All design calculations shall be stamped by a Professional Engineer licensed in the State of Washington.

**G. TEST REPORTS**

Copies of all test reports shall be submitted to the Engineer.

**2.3 EQUIPMENT MANUALS**

**A. GENERAL**

For all items of equipment, manufacturer's equipment operation and maintenance manuals shall be submitted to the Engineer for review. One copy will be returned to the Contractor with comments.

The following information shall be furnished for all items of equipment installed on the project requiring operational and/or maintenance procedures, and for any additional items indicated by the Engineer.

**1. Lubrication Information**

This shall consist of the manufacturer's recommendations regarding the lubricants to be used and the lubrication schedule to be followed.

2. Electrical and Control Diagrams

Diagrams shall show internal and connection wiring.

3. Startup Procedures

These instructions consist of equipment manufacturer's recommendations for installation, adjustment, calibration, and troubleshooting.

4. Operating Procedures

These instructions consist of the equipment manufacturer's recommended step-by-step procedures for starting, operating, and stopping the equipment under specified modes of operation.

5. Preventive Maintenance Procedures

These instructions consist of the equipment manufacturer's recommended steps and schedules for maintaining the equipment.

6. Overhaul Instructions

These instructions consist of the manufacturer's directions for the disassembly, repair, and reassembly of the equipment and any safety precautions that must be observed while performing the work.

7. Parts List

This list consists of the generic title and identification number of each component part of the equipment.

8. Spare Parts List

This list consists of the manufacturer's recommendations of number of parts, which should be stored by the Owner and any special storage precautions, which may be required.

9. Exploded View

Exploded or cut views of equipment shall be provided if available as a standard item of the manufacturer's information. When exploded or cut views are not available, plan and section views shall be provided with detailed callouts.

10. Test Documentation

Reports, records, data and forms documenting the results of equipment factory tests, including pump and blower performance curves, shall be provided, with the operating points for the specific equipment designated. When a special factory test of the supplied equipment is not performed, the manufacturer's standard performance reports and curves, with specified operating points, shall be provided for the supplied equipment.

11. Specific Information

Where items of information not included in the above list are required, they will be provided as described in the specifications for the equipment.

12. Warranty Information

13. Maintenance Information Summaries

In addition, the following items of equipment shall be provided with Maintenance Information Summaries in each appropriate section of the equipment manuals, prepared according to the format specified herein:

- Valves (larger than 1-inch in size)

Maintenance information summaries shall be prepared on 8-1/2-inch x 11-inch paper only and shall contain the following information compiled from manufacturer's recommendations in the order shown.

1. Description or name of item of equipment.
2. Manufacturer.
3. Name, address, and telephone number of local manufacturer's representative.
4. Serial number (where applicable). The Contractor shall verify that it matches the equipment installed on the project.
5. Equipment nameplate data including model number.

6. Recommended maintenance procedures:
  - a. Description of procedures.
  - b. Maintenance frequency required.
  - c. Lubricant(s) or other materials required (where applicable), including type of lubricant, lubricant manufacturer, and specific compound.
  - d. Additional information as required for proper maintenance.
  
7. Recommended spare parts.

The maintenance information summary shall be placed at the beginning of the manual.

All operation and maintenance information shall be comprehensive and detailed, and shall contain information adequately covering all normal operation and maintenance procedures.

For ease of identification, each manufacturer's brochure and manual shall be appropriately labeled with the equipment name and equipment specification number as it appears in the project Specifications. The information shall be organized in binders. The binders shall be provided with a table of contents and tab sheets to permit easy location of desired information.

Lubricants shall be described in detail, including type, recommended manufacturer, and manufacturer's specific compound to be used.

It shall be the responsibility of the Contractor to ensure that all operation and maintenance materials are obtained. Material submitted must meet the approval of the Engineer prior to project acceptance.

## B. EXTRANEEOUS DATA

Where the contents of the manuals include manufacturers' standard brochures or catalog pages, the exact item(s) used in this installation shall be clearly indicated and all manufacturers' data which is extraneous shall be clearly deleted.

C. FINAL EQUIPMENT MANUALS

The Contractor shall be responsible for tracking and coordinating each separate manufacturer's equipment operation and maintenance manual submittal and shall resubmit, as necessary, until the Engineer's review indicates that the submittal is acceptable. The Contractor shall maintain equipment manual files until final approval copies are delivered to the Engineer. The Contractor shall be responsible for collating the approved operation and maintenance submittal sections into complete final manufacturers' equipment operation and maintenance manuals bound in post binders which are indexed to the Specifications. The Contractor shall deliver the complete final operation and maintenance manuals to the Engineer prior to project completion. All copies final manufacturers' equipment manuals submitted will be retained by the Engineer or Owner.

The Contractor shall also supply three CD-Rom or USB copies of the final equipment manuals in a tabbed, searchable, .pdf format, with a table of contents bookmarked to provide a navigation link to each section of the manual.

**PART 3 EXECUTION**

**3.1 IDENTIFICATION OF SUBMITTALS**

A. GENERAL

Each submittal shall be accompanied by a letter of transmittal showing the date of transmittal, specification section, or drawing number to which the submittal pertains, submittal number, and a brief description of the material submitted.

B. RESUBMITTALS

When material is resubmitted for any reason, it shall be submitted under a new letter of transmittal and referenced to the previous submittal.

**3.2 REVIEW OF SUBMITTALS**

The Engineer will review all submittals for general conformance with the design and other requirements of the Contract Documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the Contract Documents. Submittals may be rejected based on inadequate information and/or not meeting the requirements of the Contract Documents. Rejection of submittals requires action on the part of the Contractor to correct the reason for the rejection. The Contractor remains responsible for details and accuracy, for confirming and

correlating all quantities and dimensions, for selecting fabrication processes, and for techniques of assembly and installation.

### **3.3 COORDINATION OF PRODUCT SUBMITTALS**

#### **A. GENERAL**

Prior to submittal for review by the Engineer, all data shall be fully coordinated, including the following:

1. All field dimensions and conditions.
2. All trades and public agencies involved, including necessary approvals.
3. All deviations from the Contract Documents.

#### **B. GROUPING OF SUBMITTALS**

1. All submittals shall be grouped with associated items, unless otherwise specifically permitted by the Engineer.
2. The Engineer may reject the submittals in their entirety or any part thereof, if not in accordance with the Contract Documents.

#### **C. CERTIFICATION**

Submittals shall bear the Contractor's certification that they has reviewed, checked, and approved the shop drawings prior to forwarding them to the Engineer.

### **3.4 TIMING OF PRODUCT SUBMITTALS**

#### **A. GENERAL**

1. All submittals shall be made far enough in advance of installation to provide all required time for reviews and securing necessary approvals.
2. In scheduling, the Contractor shall allow for the time indicated in Part 2.2A for the Engineer's review following their receipt of the submittal.

**B. DELAYS**

No additional or separate payment will be made for costs of delays occasioned by tardiness of submittals on the part of the Contractor.

**3.5 EQUIPMENT MANUALS**

The preliminary copies of the manufacturer's equipment manuals shall be delivered to the Engineer for review not later than the time of equipment delivery to the project site.

Final copies of the manufacturer's equipment manuals shall be delivered to the Engineer at least 14 calendar days prior to requesting payment in excess of 90 percent completion for the project. Prior to submittal of the final equipment manuals, the Contractor shall check the manuals for accuracy and completeness and shall verify that prior review comments have been addressed.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 01310**

### **PROJECT MEETINGS**

#### **PART 1 GENERAL**

##### **1.1 SCOPE**

The work specified in this Section includes information pertaining to the various meetings that will be held during the course of constructing this project.

##### **1.2 PRECONSTRUCTION CONFERENCE**

As soon as possible following the award of the Contract, a preconstruction conference shall be scheduled for representatives of the Owner, the Contractor, the Engineer, funding agencies, regulatory agencies, and affected utilities.

##### **1.3 PROJECT PROGRESS MEETINGS**

The Owner and the Engineer will schedule and attend regular meetings with the Contractor for coordination, administrative, and procedural requirements of the project. The Contractor shall provide a meeting room with table and chairs at or near the site for project progress meetings or shall coordinate a virtual meeting if approved by the Owner.

##### **1.4 CONSTRUCTION MEETINGS**

The Contractor shall schedule and hold regular meetings during the project:

- A. Safety Meetings (Contractor's subcontractors shall attend if they are working onsite.)
- B. Project Progress Meetings
- C. Equipment Installation Meetings
- D. Coordination Meetings
- E. Startup and Testing Meetings

The Contractor shall notify the Owner and Engineer in advance of all meetings. The meetings may or may not be attended by the Owner and Engineer.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 01320**

### **PROGRESS SCHEDULES**

#### **PART 1 GENERAL**

##### **1.1 SCOPE**

The work specified in this Section further defines the progress schedule requirements described in the General Conditions Section 3.04.15(1). This Section specifies the procedures for preparing and revising the cost-loaded construction schedule used for planning and managing construction activities. The schedule provides a basis for determining the progress status of the project relative to the completion time, specific dates, and for determining the acceptability of the progress payment estimates.

##### **1.2 DESCRIPTION**

The Contractor shall prepare a time-scale network schedule using a critical path method (CPM). A general guide for preparing such a schedule is contained in “The Use of CPM in Construction, a Manual for Contractors and the Construction Industry,” published by the Associated General Contractors of America.

The schedule shall depict all significant construction activities and all items of work listed in the breakdown of contract prices submitted by the Contractor. Assigned values for each part of the work shall be indicated. The dependencies between activities shall be indicated so that it may be established what effect the progress of any one activity has on the schedule.

Completion time and all specific dates and sequencing requirements shall be shown on the schedule. Activities making up the critical path shall be identified.

No activity on the schedule shall have a duration longer than 14 consecutive days or an assigned value greater than \$15,000, except activities comprising only fabrication and delivery, which may extend for more than 14 consecutive days. Activities which exceed these limits shall be divided into more detailed components. The scheduled duration of each activity shall be based on the work being performed during the normal 40-hour workweek with allowances made for legal holidays and normal weather conditions.

### 1.3 SUBMITTALS

The CPM Progress Schedule shall be prepared using a computerized system. The schedule shall be submitted in the form of an arrow diagram or precedence diagram with activity listings. The following shall be included:

- A. Network diagram shall show in detail and in order of sequence all significant activities, their descriptions, durations, and dependencies, as necessary and as required to complete all work and each separate part of the work.
- B. The activity listing shall show the following information for each activity shown on the network diagram:
  - 1. Description
  - 2. Duration
  - 3. Start and finish dates
  - 4. Total float time and free float time
- C. Milestone activity completions shall be shown and clearly defined.
- D. The critical path shall be clearly indicated.
- E. A legend defining any abbreviations used on the schedule shall be provided.
- F. All CPM schedules shall conform to the requirements of the Owner's overall Project schedule and the Contract Documents.

The Contractor shall submit four hard copies (bluelines or blacklines) plus an electronic file with each schedule submittal. The hard copies shall be full size (22" x 34") and the electronic copy shall be in pdf format. Electronic files may also be viewable using Microsoft Project®. All schedule reports shall be 8-1/2-inch x 11-inch format. The Contractor shall provide, in chronological order, a list of constraints used, if any, in the preparation of the schedule.

Within 14 calendar days after receipt of the schedule, the Owner and Engineer will return a copy of the schedule to the Contractor with comments. Review of the schedule is for purposes of evaluating the Contractor's ability to complete the Work within the Contract time. Review shall not constitute approval or acceptance of the Contractor's construction means, methods, or sequencing.

The Contractor shall submit an updated Progress Schedule with each application for payment or whenever actual construction progress deviates significantly from the current schedule.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 01385**

### **DOCUMENTATION OF EXISTING CONDITIONS**

#### **PART 1 GENERAL**

##### **1.1 SCOPE**

The work specified in this Section includes the video recording requirements for the project.

The Contractor shall provide the Engineer with a computer-readable digital format of the project area prior to and upon completion of all construction. The video recording shall utilize equipment that will visually document an accurate audio-visual description of the existing and post-construction conditions.

The Contractor shall notify the Engineer prior to the recording to allow the Engineer to witness the video recording. The Contractor shall provide preconstruction video recording of the existing conditions for the entire project site.

Upon completion of the work, the Contractor shall provide video recording in the same manner and vantage point as the preconstruction video recordings. The intent of this Specification section is to provide a comparison between existing and post-construction conditions.

The rate of speed the documentation will be video recorded at, the panning rates, and the zoom-in/zoom-out rates will be controlled so that playback will produce a clear television picture of the areas video recorded.

The video recording shall be accomplished during a period of good visibility. Unless otherwise directed by the Engineer, video recording will not be allowed during times of precipitation or poor visibility.

When available light is not sufficient to produce a clear television image, additional lighting shall be supplied by the photographer to ensure good picture quality. The camera crew shall be able to work independent of any power source, utilizing battery power to operate the camera, and lighting.

A legible reader board shall be provided by the photographer to visually document the date, job title, and site identification. The audio portion of the video recording will be used for identification purposes, addresses, and any other audio required or as directed by the Engineer.

**\*\*\* END OF SECTION \*\*\***

## SECTION 01400

### QUALITY CONTROL

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes the control tests, test sample collection, required field-testing, and special inspections as specified herein, and indicated on the Plans.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
02300	Earthwork
02700	Gravel Materials

##### 1.3 PAYMENT

All testing as required by this Section shall be coordinated and scheduled by the Contractor with the Owner's designated testing agency. The Owner will contract with, and pay for, a testing agency to conduct all field and laboratory tests and special inspections as designated herein.

Retesting and reinspection required because of defective work and testing performed for the convenience of the Contractor shall also be paid for by the Contractor. Costs for retesting (beyond that which is required herein) will be reimbursed to the Owner in the form of a credit on a change order at the time of project acceptance.

All costs for scheduling, sampling, coordinating, and retesting of defective work shall be considered as incidental to the work and merged into the respective unit and lump sum prices bid.

#### PART 2 PRODUCTS

##### 2.1 SOILS AND GRANULAR MATERIALS

###### A. COMPACTION CONTROL

Optimum moisture content and maximum density tests shall be determined by the following method:

ASTM D1557 – Laboratory Compaction Characteristics of Soil Using Modified Effort

**B. IN-PLACE TESTS**

In-place density and moisture content tests shall be made by an independent testing laboratory according to the following methods:

ASTM D1556 – Density and Unit Weight of Soil in Place by the Sand Cone Method

ASTM D6938 – Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).

**2.2 AGGREGATES**

All aggregates shall be tested in accordance with applicable WSDOT test methods:

<b><u>Title</u></b>	<b><u>Test Method</u></b>
Sampling	AASHTO T2
Sieve Analysis of Fine and Coarse Aggregates	104A
Material Finer than No. 200 Sieve in Aggregates	102A
Percentage of Particles Smaller than 0.025 mm and 0.005 mm	603A
Organic Impurities	111A
Abrasion of Coarse Aggregates by Use of the Los Angeles Machine	101A
Sand Equivalent	109A

**PART 3 EXECUTION**

**3.1 SAMPLING AND TESTING FREQUENCY**

**A. GENERAL**

The Contractor shall be responsible for the coordination and scheduling of a certified independent testing laboratory employed by the Owner to provide the following quality control tests at the number and frequency described herein. The precise location of the tests shall be designated by the Engineer. The Contractor shall cooperate with laboratory personnel employed to conduct the density testing, sampling of material(s), and

special inspections. The Contractor shall provide safe access within the work site for laboratory personnel such that density testing and visual inspection can be performed. The Contractor shall provide samples of materials to be tested in the quantities required and herein specified to the appropriate laboratory personnel. The Contractor shall furnish all labor, equipment, tools, and materials necessary to obtain and deliver samples as herein designated. He shall also provide and repair any test holes required in order to facilitate the testing and sampling and to provide for the testing laboratory's exclusive use for storage and curing of test samples until removed to the laboratory.

Any areas tested and further failing compliance with the Specifications shall be recompacted and retested at the Contractor's expense, until a successful density test indicating compliance with these Specifications has been achieved.

**B. SOIL TESTING**

The Contractor shall schedule and coordinate with the Owner-employed independent testing laboratory to conduct the following quality control tests at the given frequency:

<u>Material</u>	<u>Test</u>	<u>Minimum Sampling &amp; Testing Frequency</u>
Backfill for foundations, walls, trenches and roads <sup>1</sup>	Gradation	One for every 500 cy or one per day, whichever is more frequent, for each type of soil or fill material with quantities exceeding 25 cy. For trenches, one per day and one every 250 feet of trench.
	In-Place Density <sup>2,3,4</sup>	One every 500 cy or one per day for each type of soil or fill material with quantities exceeding 25 cy. For trenches, one per day and one every 250 feet of trench.
	Moisture-Density Relationship <sup>3</sup>	One prior to start of backfilling operation, one every 20 densities and any time material type changes.
Pipe Bedding <sup>1</sup>	Gradation	One every 750 feet of trench.
Subgrade and Fills <sup>1</sup>	In-Place Density <sup>2,3</sup>	One every 500 cy of each type material.
	Moisture-Density Relationship	One for every 20 densities for each material.

<u>Material</u>	<u>Test</u>	<u>Minimum Sampling &amp; Testing Frequency</u>
	Gradation	One for every moisture-density.
1.	All acceptance tests shall be conducted from in-place samples.	
2.	Additional tests shall be conducted when variations occur due to the Contractors, operations, weather conditions, site conditions, etc.	
3.	The nuclear densometer, if properly calibrated, may be used but only to supplement the required testing frequency and procedures. The densometer shall be calibrated and is recommended for use when the time for complete results becomes critical.	
4.	Depending on soil conditions, it is anticipated that compaction tests shall be required at depths of 2 feet above the pipe and at each additional 5 feet to the existing surface plus a test at the surface.	

C. SPECIAL INSPECTIONS

Contractor shall coordinate and schedule all required Special Inspections per WABO requirements (Chapter 17 of the IBC) with the Owner designated testing agency. Special inspections include cast-in-place concrete, concrete reinforcement.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 01500**

### **TEMPORARY FACILITIES**

#### **PART 1 GENERAL**

##### **1.1 SCOPE**

The work specified in this Section includes the temporary facilities required for this project, but not necessarily limited to:

- A. Temporary utilities such as water, electricity, telephone, off-site staging, and off-site parking.
- B. Temporary piping, pumps, valves, fittings, and appurtenances necessary to keep existing facilities fully operational during construction.
- C. Sanitary facilities.
- D. Temporary enclosures such as fences, tarpaulins, barricades, and canopies.

#### **PART 2 PRODUCTS**

##### **2.1 UTILITIES**

###### **A. TEMPORARY ELECTRICITY**

The Contractor shall provide temporary power for construction at the project site. They shall make arrangements with the electrical utility (to obtain temporary power) and shall pay all costs and fees charged by the utility associated with connection of temporary power. The Contractor shall provide all special connections, receptacles, panelboards, etc., which are required for temporary service, and are not provided by the utility.

The Contractor shall furnish and install all temporary wiring and associated equipment required to keep all portions of the existing facilities in operation at all times.

Area distribution boxes shall be furnished, installed, and so located that the individual trades may use their own construction-type extension cords to obtain proper power and artificial lighting at all points where required. The Contractor shall provide a main disconnect on all temporary wiring panels, labeled "MAIN DISCONNECT," to ensure the safety of personnel using extension cords and hand tools. Panels shall also be properly

grounded and equipped with GFCI breakers in accordance with WISHA requirements.

The Contractor shall provide the Engineer single line diagrams of the temporary wiring showing all circuit breakers. These diagrams shall be provided prior to installation of this wiring. These diagrams are necessary to provide information to Owner personnel for off-hours operation.

The Contractor shall pay all demand, consumption, taxes, and fees associated with the temporary electrical service.

## B. WATER

The Contractor shall be responsible for providing water necessary for construction. This includes costs for supplying potable water for hydrostatic pressure leak testing of all water-holding structures and operational testing of all equipment and processes. Water is available from the Owner free of charge, provided that it is used responsibly. The Contractor shall install a meter with backflow prevention device prior to obtaining water from the Owner.

## 2.2 TEMPORARY PIPING

The Contractor shall furnish and install all temporary piping and pumping and, upon completion of the work, remove all such temporary piping as required, except as designated on the Plans to remain as a part of the Project. Prior to installation, the Contractor shall submit drawings to the Engineer showing the proposed installation of temporary piping and pumps, including location, type of pipe, fittings, and valves. The Contractor shall obtain the Engineer's approval for temporary piping and pumping plan prior to installation.

Temporary piping and pumping shall be provided as necessary to maintain the existing facilities in operation until the new facilities are constructed, operational. An effort has been made on the Plans and/or Specifications to note instances and locations where temporary piping and/or pumping may be required; however, this in no way limits the temporary piping and pumping to be provided by the Contractor at these locations.

## 2.3 SANITARY FACILITIES

The Contractor shall provide toilet and wash-up facilities for their workforce and the Engineer at the site of work. They shall comply with applicable laws, ordinances, and regulations pertaining to the public health and sanitation of dwellings and camps.

## **2.4 OFF-SITE STAGING AND PARKING**

The Contractor shall note that space is limited throughout the construction site. Employees of the Contractor, all subcontractors, vendors, suppliers, and associated personnel shall not be allowed to park onsite during the course of construction without prior approval from the Owner. It shall be the responsibility of the Contractor to provide sufficient parking facilities in authorized area(s) other than the construction site for the above-mentioned personnel.

The Contractor shall not be allowed to stockpile and store equipment and materials throughout the construction site. The Contractor shall coordinate their schedule so that all equipment and materials shall be brought to the construction site only when they are to be installed/utilized.

The Contractor shall provide storage of equipment and materials at an offsite, bonded warehouse, to be approved by the Engineer. The Contractor shall pay all costs associated with off-site delivery, storage, and transfer to the construction site.

## **2.5 ENCLOSURES**

The Contractor shall furnish, install, and maintain during the project time all required scaffolds, tarpaulins, barricades, canopies, warning signs, steps, bridges, platforms, and other temporary construction necessary for proper completion of the work in compliance with all pertinent safety and other regulations.

## **PART 3 EXECUTION**

All temporary facilities and controls shall be maintained as long as required for the safe and proper completion of the work. The Contractor shall remove such temporary facilities and controls as rapidly as progress of the work will permit or as directed by the Owner.

**\*\*\* END OF SECTION \*\*\***

## SECTION 01505

### MOBILIZATION AND DEMOBILIZATION

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section consists of mobilization and demobilization. Mobilization consists of preconstruction activities and preparatory work for the project necessary to mobilize labor, materials, and equipment to the project site. Demobilization consists of activities to remove materials and equipment from the project site upon project completion, including final cleanup. Items which are not considered mobilization or demobilization include but are not limited to:

- A. On-going activities throughout the duration of construction.
- B. Profit, interest on borrowed money, overhead, or management costs.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
Division 1	General Technical Requirements

#### PART 2 PRODUCTS

Products and materials required for mobilization and demobilization are described in the various sections of Division 1 and in other parts of the Contract Documents.

#### PART 3 EXECUTION

Complete mobilization and demobilization as required by the various sections of Division 1 and other parts of the Contract Documents.

**\*\*\* END OF SECTION \*\*\***

## SECTION 01720

### RECORD DRAWINGS

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes the record drawings, which shall be maintained and annotated by the Contractor during construction.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals

##### 1.3 INFORMATION PROVIDED BY THE OWNER

The Contractor will be provided with the following items to maintain record drawings for the project:

- A. Two full size paper set of Plans.

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

##### 3.1 GENERAL

The Contractor shall maintain the following record drawings for the project:

- A. A neat and legibly marked set of Contract Plans showing the final location of piping, equipment, electrical conduits, outlet boxes and cables;
- B. Additional documents such as schedules, lists, drawings, and electrical and instrumentation diagrams included in the Contract Documents; and
- C. Contractor layout and installation drawings.

Unless otherwise specified, record drawings shall be full size and maintained in a clean, dry, and legible condition. Record documents shall not be used for construction purposes and shall be available for review by the Engineer during normal working hours at the Contractor's field office. At the completion of the

work, prior to final payment, all record drawings shall be submitted to the Engineer.

Marking of the drawings shall be kept current and shall be done at the time the material and equipment are installed. Annotations to the record documents shall be made with an erasable colored pencil conforming to the following color code:

- A. Additions - Red
- B. Deletions - Green
- C. Comments - Blue
- D. Dimensions - Graphite

Legibly mark drawings to record actual depths, horizontal and vertical location of underground raceways, cables, and appurtenances referenced to permanent surface improvements.

The Contractor's record drawings (full-size hard-copy) will be reviewed regularly for completeness by the Engineer prior to preparing the progress estimate for payment. If the record drawings do not reflect the work performed, payment for that item of work will not be included in the progress estimate.

At the conclusion of the project, the Contractor shall submit Record Drawings for review by the Owner in accordance with the requirements of Section 01300. Record Drawings shall be submitted within 14 calendar days of Physical Completion of the project.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 01740**

### **CLEANUP**

#### **PART 1 GENERAL**

##### **1.1 SCOPE**

The work specified in this Section includes the maintenance of the building, structures, and site(s) in a standard of cleanliness throughout the construction period as described herein.

Throughout the construction period, the Contractor shall maintain the cleanliness of the site and structures as described herein. The Contractor is also to maintain access to all existing, operating equipment such that the equipment may be serviced and operated.

Dust of all kinds, including concrete dust produced by construction activities, shall be controlled to avoid damage to existing, operating equipment. Enclosures, ventilation, and air scrubbing may be required where significant potential for damage is determined by the Engineer.

##### **1.2 RELATED WORK SPECIFIED ELSEWHERE**

In addition to standards described in this Section, comply with all requirements for cleaning up when described in other sections of these Contract Documents.

##### **1.3 QUALITY ASSURANCE**

###### **A. INSPECTION**

The Contractor shall conduct daily site inspections, and more often if necessary, to verify that requirements are being met.

###### **B. CODES AND STANDARDS**

In addition to the standards described in this Section, comply with all pertinent requirements of governmental agencies having jurisdiction.

#### **PART 2 PRODUCTS**

##### **2.1 CLEANING MATERIALS AND EQUIPMENT**

Provide all required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

## **2.2 COMPATIBILITY**

Use only the cleaning materials and equipment which are compatible with the surface being cleaned, as recommended by the manufacturer of the material or as approved by the Engineer.

## **PART 3 EXECUTION**

### **3.1 PROGRESS CLEANING**

#### **A. GENERAL**

Retain all stored materials and equipment in an orderly fashion allowing maximum access, not impeding drainage or traffic, and providing protection.

Do not allow the accumulation of scrap, debris, waste material, and other items not required for this work.

At least twice each month, and more often if necessary, completely remove all scrap, debris, and waste material from the project site.

Provide adequate storage for all materials awaiting removal from the project site, observing all requirements for fire protection and protection of the environment.

#### **B. SITE**

Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Move these items into a place designated for their storage until disposal becomes available.

Weekly, and more often if necessary, inspect all arrangements of materials stored on the site, restack, arrange, or otherwise service all arrangements to meet the requirements above.

Maintain the site in a neat and orderly condition at all times so as to meet the approval of the Engineer.

#### **C. STRUCTURES**

Weekly, and more often if necessary, inspect the structures and pick up all scrap, debris and waste material. Move these items into a place designated for their storage until disposal becomes available.

Weekly, and more often if necessary, sweep clean all interior spaces. “Clean” shall be interpreted to mean free from dust and other materials that can be swept with a broom using reasonable diligence.

In preparing to install succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of the succeeding material. Use all equipment and materials required to achieve the required cleanliness.

D. STREETS

All paved and unpaved streets in the vicinity of the project shall be kept free of material tracked from the project site(s) or dropped from vehicles entering and leaving the site(s). The Contractor shall inspect roads in each active area daily, and all material deposited on the road from the Contractor’s activities shall be removed prior to the end of the workday. This shall include sweeping, as required, to collect any mud, dirt and dust from the surface. All catch basins and culverts in the work area shall be inspected before completion and cleaned as directed by the Engineer.

**3.2 FINAL CLEANING**

A. DEFINITION

Except as otherwise specifically provided, “clean” shall be interpreted as meaning the level of cleanliness generally provided by commercial building maintenance equipment and materials.

B. GENERAL

Prior to final inspection, remove from the jobsite all tools, surplus materials, equipment, scrap, debris, and waste. Conduct final project cleaning as described below.

C. STRUCTURES

1. Exterior

Visually inspect all exterior surfaces and remove all traces of soil, waste, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. If necessary to achieve a uniform degree of exterior cleanliness, hose down the exterior of the structure. In the event of stubborn stains not removable with

water, the Engineer may require light sandblasting or other cleaning at no additional cost to the Owner.

2. Interior

Visually inspect all interior surfaces and remove all traces of soil, waste, smudges, and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. Remove all paint droppings, spots, stains, and dirt from finished surfaces. Use only appropriate cleaning materials and equipment.

3. Glass

Clean all glass inside and outside.

D. TIMING

Schedule final cleaning as approved by the Engineer to enable the Owner to accept a completely clean project, ready for occupancy.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 01800**

### **TESTING, COMMISSIONING, AND TRAINING**

#### **PART 1 GENERAL**

##### **1.1 SCOPE**

The work specified in this Section includes the installation, testing, commissioning, and training for all mechanical, electrical, and instrumentation systems and completed portions of the work.

See also Section 16050 for additional electrical and instrumentation system testing requirements.

##### **1.2 RELATED WORK SPECIFIED ELSEWHERE**

<u>Section</u>	<u>Item</u>
01110	Scope of Work
01300	Submittals
01400	Quality Control
Division 11	Equipment
Division 13	Special Construction
Division 15	Mechanical

##### **1.3 QUALITY ASSURANCE**

###### **A. INSTALLATION**

All mechanical, electrical, and instrumentation equipment provided under this Contract shall be installed in conformity with the Contract Documents, including the manufacturer's requirements. Should a manufacturer's installation recommendation conflict with specific requirements of this Contract Document, the Contractor shall bring the matter to the attention of the Engineer. Any additional costs arising out of changes authorized by the Engineer to accommodate manufacturer's installation recommendations will be considered extra work. Any costs incurred by the Contractor through failure to timely notify the Engineer of a difference between Contract Document and manufacturer's installation requirements shall be borne by the Contractor.

## B. TESTING

### 1. General Requirements

All equipment and partially complete or fully completed portions of the work included in this Contract shall be tested and inspected to prove compliance with the Contract requirements. Unless otherwise specified, all costs of testing, including temporary facilities and connections, shall be borne by the Contractor. For the purpose of this Section, equipment shall mean any mechanical, electrical, instrumentation, or other device with one or more moving parts or devices requiring an electrical, pneumatic, or hydraulic connection. Installed leakage tests and other piping tests shall be as specified in Sections 15050. Installed tests for electrical and instrumentation devices and systems shall be in accordance with the requirements as listed on the Plans.

No tests specified herein shall be applied until the item to be tested has been inspected and approval given for the application of such test.

Tests and inspection shall include:

- a. The delivery acceptance test and inspections.
- b. The installed tests and inspections. These tests may be performed with water or the process fluid, as described in the accepted test plan.
- c. The operational testing of completed sections of the facility. These tests may be performed with water or the process fluid, as described in the accepted test plan.
- d. The commissioning of completed sections of the facility by Owner's personnel. The commissioning shall be performed with the process fluid at normal flows.

Tests and inspections, unless otherwise specified or accepted, shall be in accordance with the recognized standards of the industry. The Contractor shall see that scheduling and performance of all tests are coordinated with involved subcontractors and suppliers. The Contractor shall allow for up to two additional setpoint changes during testing. No extra costs or time allowances shall be provided as long as this setpoint allowance is not exceeded.

The form of evidence of satisfactory fulfillment of delivery acceptance test and inspection requirements shall be, at the discretion of the Engineer, either by tests and inspections carried out in their presence or by certificates or reports of tests and inspections carried out by approved persons or organizations. The Contractor shall provide and use forms that include all test information, including specified operational parameters. The content of the forms used shall be acceptable to the Engineer.

A master test log book shall be maintained by the Contractor, which shall cover all tests including piping, equipment, electrical, and instrumentation. The master test log book shall be provided with loose-leaf pages that shall be copied weekly after updating for transmittal to the Engineer. The master test log book shall be transmitted to the Engineer upon completion of the project.

## 2. Delivery Acceptance Tests and Inspections

The delivery acceptance tests and inspections shall be at the Contractor's expense for any equipment specified herein and shall include the following:

- a. Test of items at the place of manufacture during and/or on completion of manufacture, comprising hydraulic pressure tests, electric and instrumentation subsystems tests, performance and operating tests and inspections in accordance with the relevant standards of the industry and more particularly as detailed in individual clauses of these Specifications to satisfy the Engineer that the items tested and inspected comply with the requirements of this Contract. Tests other than those specified shall be in accordance with Section 01400.
- b. Inspection of all items delivered at the site or to any authorized place of storage so that the Engineer may be satisfied that such items are of the specified quality and workmanship and are in good order and condition at the time of delivery. The Contractor shall be prepared to remove all coverings, containers, or crates to permit the Engineer to conduct their inspection. Should the Engineer find, in their opinion, indication of damage or deficient quality of workmanship, the Contractor shall provide the necessary documentation or conduct such tests deemed necessary by the Engineer to demonstrate compliance.

### 3. Installed Tests and Inspections

#### a. General

All equipment shall be tested by the Contractor to the satisfaction of the Engineer before any facility is put into operation. Tests shall be as specified herein and shall be made to determine whether the equipment has been properly assembled, aligned, adjusted and connected. Any changes, adjustments, or replacements required to make the equipment operate as specified shall be carried out by the Contractor as part of the work.

#### b. Procedures

##### i. General

The procedures shall be divided into two distinct stages; preoperation checkout and water test. Testing procedures shall be designed to duplicate, as nearly as possible, all conditions of operation and shall be carefully selected to ensure that the equipment is not damaged. Once the testing procedures have been reviewed and approved by the Engineer, the Contractor shall produce checkout, alignment, adjustment and calibration sign-off forms for each item of equipment to be used in the field by the Contractor and the Engineer jointly to ensure that each item of electrical, mechanical and instrumentation equipment has been properly installed and tested. The Contractor is advised that failure to observe these precautions may place the acceptability of the subject equipment in question.

##### ii. Preoperation Checkout

The installed tests and inspection procedures shall incorporate all requirements of these Specifications and shall proceed in a logical, step-wise sequence to ensure that all equipment has been properly serviced, aligned, connected, calibrated, and adjusted prior to operation. Preoperation checkout procedures shall include, but not necessarily be limited to:

- (1) Piping system pressure testing and cleaning as specified in Division 15.
- (2) Electrical system testing as specified in Division 16.
- (3) Alignment of equipment.
- (4) Preoperation lubrication.

iii. Water Test

Once all affected equipment has been subjected to the required preoperational checkout procedures and the Engineer has witnessed and has not found deficiencies in that portion of the work, individual systems may be started and operated under simulated operating conditions to determine as nearly as possible whether the equipment and systems meet the requirements of these Specifications. Test media for these systems shall either be the intended fluid or a compatible substitute. The equipment shall be operated a sufficient period of time to determine machine operating characteristics, including temperatures and vibration, to observe performance characteristics, including performance throughout the specified range for blowers, and to permit initial adjustment of operating controls. When testing requires the availability of auxiliary systems such as electrical power, compressed air, control air, or instrumentation which have not yet been placed in service, the Contractor shall provide acceptable substitute sources, capable of meeting the requirements of the machine, device, or system, at no additional cost to the Owner. Disposal methods for test media shall be subject to review by the Engineer.

If under test, any portion of the work should fail to fulfill the Contract requirements and is adjusted, altered, renewed or replaced, tests on that portion when so adjusted, altered, removed or replaced, together with all other portions of the work as are affected thereby, shall, if so required by the

Engineer, be repeated within reasonable time and in accordance with the specified conditions. The Contractor shall pay to the Owner all reasonable expenses incurred by the Owner as a result of repeating such tests.

Once simulated operation has been completed, all machines shall be rechecked for proper alignment, realigned, if necessary, and doweled in place. All equipment shall be checked for loose connections, unusual movement, excessive temperature, noise, and/or vibration or other indications of improper operating characteristics. Any deficiencies shall be corrected to the satisfaction of the Engineer. All machines or devices, which exhibit unusual or unacceptable operating characteristics shall be disassembled and inspected. They shall then be repaired or removed from the site and replaced at no cost to the Owner.

Test results shall be within the tolerances set forth in the detailed Specification sections of the Contract Documents. If no tolerances have been specified, test results shall conform to tolerances established by recognized industry practice. Where, in the case of an otherwise satisfactory installed test, any doubt, dispute, or difference should arise between the Engineer, and the Contractor regarding the test results or the methods or equipment used in the performance of such test, then, the Engineer may order the test to be repeated. If the repeat test, using such modified methods or equipment as the Engineer may require, substantially confirms the previous test, then all costs in connection with the repeat test will be paid by the Owner otherwise the costs shall be borne by the Contractor. Where the results of any installed test fail to comply with the Contract requirements for such test, then such repeat tests as may be necessary to achieve the Contract requirements shall be conducted by the Contractor at their expense.

Unless otherwise specified, the Contractor shall provide at no expense to the Owner, all water, power, fuel, compressed air supplies, labor and all

other necessary items and work required to complete all tests and inspection specified herein. The Contractor shall provide, at no expense to the Owner, temporary heating, ventilating, and air conditioning for any areas requiring it in the case where permanent facilities are not complete and operable at the time of installed tests and inspections. Temporary facilities shall be maintained until permanent systems are in service.

4. Operational Testing

After completion of all installed testing and review by the Engineer that all equipment complies with the requirements of the Specifications, the Contractor shall conduct operational testing. All domestic water, oil, fuel, and chemical systems shall be filled with the specified fluid.

The Contractor shall operate the completed facility for a period of not less than that specified in Part 3.4 of this Section during which all systems shall be operated as a complete facility at various loading conditions, as directed by the Engineer. Should the operational testing period be halted for any reason related to the facilities constructed or the equipment furnished under this Contract, or the Contractor's temporary testing systems, the operational testing program shall be repeated until the specified continuous period has been accomplished without interruption. All process units shall be brought to full operating conditions, including temperature, pressure, and flow.

Record drawings of facilities involved must be accepted and ready for turnover to the Owner at the time of operational testing.

All costs for water, fuel, power, and chemicals required during operational testing shall be borne by the Owner.

5. Commissioning

After completion of the operational testing and certifications by the Engineer that the systems meet all performance requirements, commissioning will begin. The commissioning period for all systems shall be 14 calendar days. The Contractor shall remove all temporary piping that may have been in use during the operational testing and shall assist the Owner with the placement of the facility into its fully operational mode. The Owner's operations and

maintenance personnel will be responsible for operation of the facility or portion of the facility during this period of time. The facility or portion thereof shall be fully and continuously operational, accepting all normal flow called for in design and performing all functions as designed.

The Contractor shall be available, with all appropriate subcontractors and trades, at all times during commissioning periods to provide immediate assistance in case of failure of any portion of the system being tested. This assistance shall be available, if needed, on a 24-hour basis. The Engineer will not issue a certificate of Substantial Completion until the end of the commissioning period (including training) and then only when all corrections required to assure a reliable and completely operational facility have been complete. The Contractor shall be responsible for all costs in excess of the Owner's normal expected costs of operations during the commissioning period. The Contractor shall bear the costs of all necessary repairs or replacements, including labor and materials, required to keep the portion of the plant being commissioned operational.

The commissioning period will be considered completed when the facility has been continuously operated without major interruption, equipment failure, or system breakdown for the specified commissioning period. A major interruption, failure or breakdown shall be a condition or event that prevents the facility from continuously and adequately handling normal flow, cannot be repaired or corrected immediately by the Contractor, and is not caused by improper operation and maintenance of the facilities by the Owner. An interruption of the commissioning period under these circumstances will require a re-start of commissioning once required repairs and corrections are made by the Contractor. Should the commissioning period be halted for any reason related to the facilities constructed or the equipment furnished under this Contract, the commissioning shall be repeated until the specified continuous period has been accomplished without interruption.

Final O&M manuals for the facilities must be accepted and ready for turnover to the Owner before the start of commissioning.

## C. TRAINING

During the phase of water testing of equipment, the Contractor shall make available experienced factory-trained representatives of the manufacturers of all the various pieces of equipment, to train the Owner's personnel in

the operation and maintenance thereof. The time required for this training shall be as covered in the specifications for the specific piece of equipment. The Contractor shall notify the Engineer of the time of the training at least 10 days prior to the start time of the training.

## **1.4 SUBMITTALS**

### **A. STARTUP AND TESTING PLAN**

Prior to receipt of any progress payments in excess of 60 percent of the Contractor's total bid for the work, the Contractor shall submit to the Engineer five copies of a startup and testing plan with details of the installed tests and inspection procedures he proposes to adopt for testing and startup of all equipment to be operated singly and together.

### **B. TRAINING OUTLINE**

The Contractor shall submit five copies of a detailed outline of training activities to be performed by each manufacturer's representative 10 days prior to the start time of the training. This outline shall indicate how the manufacturer's representative is going to allocate the required specified number of training hours to fulfill these contractual obligations.

## **PART 2 PRODUCTS**

### **2.1 INSTALLATION**

Materials employed in the installation shall conform to the requirements of the Contract Documents and the recommendations of the equipment manufacturers.

### **2.2 TESTING**

#### **A. GAUGES, METERS, RECORDERS, AND MONITORS**

Gauges, meters, recorders, and monitors shall be provided by the Contractor as required to supplement or augment the instrumentation system provided under this Contract to properly demonstrate that all equipment fully satisfies the requirements of the Specifications. All devices employed for the purpose of measuring the performance of the facility's equipment and systems shall be specifically selected to be consistent with the variables to be monitored. All instruments shall be recently calibrated, and the Contractor shall be prepared at all times to demonstrate, through recalibration, the accuracy of all instruments employed for testing purposes. Calibration procedures shall be in accordance with applicable standards of ASTM, ISA, and IEEE. The

adequacy of all gauges, meters, recorders and monitors shall be subject to review by the Engineer.

**B. RECORDS**

The Contractor shall provide sign-off forms for all installed and operational testing to be accomplished under this Contract. Sign-off forms shall be provided for each item of mechanical, electrical and instrumentation equipment provided or installed under this Contract and shall contain provisions for recording relevant performance data for original testing and not less than three retests. Separate sections shall be provided to record values for the preoperation checkout, as well as signatures of representatives of the equipment manufacturers, the Contractor, and the Engineer.

**C. TEMPORARY TEST FACILITIES AND MODIFICATIONS**

The Contractor shall provide and install all necessary temporary piping, valves, pumps, tanks, controls, and other facilities and modifications to enable the operational testing of the permanent facility components. Operational testing requiring the recirculation of water or process fluids within the facility shall be performed by the Contractor using temporary facilities, if needed, provided and installed by the Contractor. Temporary facilities shall be removed by the Contractor once the required testing is completed.

**PART 3 EXECUTION**

**3.1 INSTALLATION**

All equipment and apparatus used in testing shall be installed by specialists properly skilled in the trades and professions required to assure first-class workmanship. Where required by detailed Specifications, the Contractor shall cause the installation of specific equipment testing items to be accomplished under the supervision of factory-trained installation specialists furnished by the equipment manufacturers. The Contractor shall be prepared to document the skills and training of all workmen engaged in the installation of all testing equipment furnished either by the Contractor or the Owner.

**3.2 TESTING**

Testing shall proceed on a step-by-step basis in accordance with the Contractor's written testing procedures. The Contractor's testing work shall be accomplished by a skilled team of specialists under the direction of a coordinator whose sole responsibility shall be the orderly, systematic testing of all equipment, systems,

structures, and the complete facility as a unit. Each individual step in the procedures shall be witnessed by a representative of the Engineer.

During the facility operational testing period, all equipment and systems in operation shall be operated to the greatest extent practicable, at conditions, which represent the full range of operating parameters as defined by the Contract Documents.

### **3.3 TRAINING**

Training of the Owner's personnel shall be done by experienced technical manufacturers' representatives. Training shall be provided during a scheduled, dedicated session and shall not be combined with other field services such as equipment testing, startup and check-out. When required by these specifications, the training sessions shall be video and audio-taped by the Contractor and the final DVD delivered to the Owner. These manufacturers' representatives shall follow the outline presented here:

#### **GENERAL OUTLINE FOR MANUFACTURER PRESENTATIONS**

##### **A. FAMILIARIZATION**

1. Overview explaining theory of operation.
2. Show catalog, parts lists, drawings, etc., in the shop drawings and O&M manuals. Clearly identify the model or identification number of the equipment for which training is being provided.
3. Check out the installation of the specific equipment items.
4. Demonstrate the unit and show that all parts of the Specifications are met.
5. Answer questions.

##### **B. SAFETY**

1. Point out safety references.
2. Discuss proper precautions around equipment.

##### **C. OPERATION**

1. Point out reference literature.

2. Explain all modes of operation (including emergency).
3. Check out Owner's personnel on proper use of the equipment. (Let them do it).

D. PREVENTIVE MAINTENANCE (PM)

1. Pass out PM list including:
  - a. Reference material.
  - b. Daily, weekly, monthly, quarterly, semi-annual, and annual jobs.
2. Show how to perform PM jobs.
3. Show Owner's personnel what to look for as indicators of equipment problems.

E. CORRECTIVE MAINTENANCE

1. List possible problems.
2. Discuss repairs - point out special problems.
3. Open up equipment and demonstrate procedures, where practical.

F. PARTS

1. Show how to use parts list and order parts.
2. Check over spare parts on hand. Make recommendations.

G. LOCAL REPRESENTATIVES

1. Where to order parts: Name, address, telephone, fax, e-mail.
2. Service problems:
  - a. Who to call.
  - b. How to get emergency help.

### **3.4 FACILITY OPERATIONAL TESTING**

The systems described below shall be tested to demonstrate the performance of mechanical, electrical, instrumentation and control subsystems together as an integrated system. Where the testing described in this Section conflicts with the testing requirements specified for individual equipment, or the manufacturer's recommended testing procedure, those requirements and procedures shall prevail.

Unless otherwise noted, a time period of two calendar days shall be allowed for each facility operational test. Unless otherwise noted, each portion of the facility being operationally tested must perform through its complete design range for a period of two 24-hour days. Facility operational testing shall be sequenced in coordination with the work sequence specified in Section 01110.

**\*\*\* END OF SECTION \*\*\***

## **SECTION 01950**

### **TRAFFIC CONTROL**

#### **PART 1 GENERAL**

##### **1.1 SCOPE**

Temporary traffic control refers to the control of all types of traffic, including vehicles, bicyclists and pedestrians (including pedestrians with disabilities). The Contractor, utilizing contractor labor and contractor-provided equipment and materials (except when such labor, equipment, or materials are to be provided by the Owner as specifically identified in the Contract Documents), shall plan, manage, supervise and perform all temporary traffic control activities need to support the work of the Contract.

The Contractor shall provide flaggers, signs, and other traffic control devices not otherwise specified as being furnished by the Owner. The Contractor shall erect and maintain all construction signs, warning signs, detour signs, and other traffic control devices, necessary to warn and protect the public at all times from injury or damage as a result of the Contractor's operations which may occur on highways, roads or streets. No work shall be done on or adjacent to the roadway until all necessary signs and traffic control devices are in place.

The traffic control resources and activities shall be used for the safety of the public, the Contractor's employees, the Owner's personnel and to facilitate the movement of the traveling public. Traffic control resources and activities may be used for the separation or merging of public and construction traffic when in accordance with a specific approved traffic control plan.

Upon failure of the Contractor to immediately provide flaggers; erect, maintain, and remove signs; or provide, erect, maintain, and remove other traffic control devices when ordered to do so by the Owner, the Owner may, without further notice to the Contractor or the Surety, perform any of the above and deduct all of the costs from the Contractor's payment.

The Contractor shall be responsible for providing adequate flaggers, signs and other traffic control devices for the protection of the work and the public at all times regardless of whether or not the flaggers, signs, and other traffic control devices are ordered by the Owner, furnished by the Owner, or paid for by the Owner.

## 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals

## 1.3 REFERENCES

This Section references the latest revisions to the following documents:

<u>Reference</u>	<u>Title</u>
MUTCD	<i>Manual of Uniform Traffic Control Devices Washington State Modifications to the MUTCD Quality Guidelines for Temporary Traffic Control Devices</i>
ANSI 107	<i>High Visibility Garment Standard</i>

## 1.4 TRAFFIC CONTROL MANAGEMENT

### A. GENERAL

It is the Contractor's responsibility to plan, conduct, and safely perform the work. The Contractor shall manage temporary traffic control with his or her own staff. Traffic control management responsibilities shall be formally assigned to one or more company supervisors who are actively involved in the planning and management of field Contract activities. The Contractor shall provide the Engineer with a copy of the formal assignment. The duties of traffic control management may not be subcontracted.

The Contractor shall designate an individual or individuals to perform the duties of the primary Traffic Control Supervisor (TCS). The designation shall also identify an alternate TCS who can assume the duties of the primary TCS in the event that person's inability to perform. The TCS shall be responsible for safe implementation of approved Traffic Control Plans provided by the Contractor.

The primary and alternate TCS shall be certified as worksite traffic control supervisors by one of the organizations listed herein. Possession of a current TCS card and flagging card by the primary and alternate TCS is mandatory. A traffic control management assignment and a TCS designation are required on all projects that will utilize traffic control.

The Contractor shall maintain 24-hour telephone numbers at which the Contractor's assigned traffic control management personnel and the TCS can be contacted and be available upon the Engineer's request at other

than normal working hours. These persons shall have the resources, ability and authority to expeditiously correct any deficiency in the traffic control system.

- B. The duties of the Contractor's traffic control management personnel shall include:
1. Overseeing and approving the actions of the Traffic Control Supervisor (TCS) to ensure that proper safety and traffic control measures are implemented and consistent with the specific requirements created by the Contractor's work zones and the Contract. Some form of oversight shall be in place and effective even when the traffic control management personnel are not present at the jobsite.
  2. Providing the Contractor's designated TCS with approved Traffic Control Plans (TCPs), which are compatible with the work operations, and traffic control for which they will be implemented.
  3. Discussing proposed traffic control measures and coordinating implementation of the Contractor-adopted traffic control plan(s) with the Owner.
  4. Coordinating all traffic control operations, including those of subcontractors, suppliers, and any adjacent construction or maintenance operations.
  5. Coordinating the project's activities (road closures and lane closures) with appropriate police, fire control agencies, city or county engineering, medical emergency agencies, school districts, and transit companies.
  6. Overseeing all requirements of the Contract, which contribute to the convenience, safety, and orderly movement of vehicular and pedestrian traffic.
  7. Having the latest adopted edition of the MUTCD including the Modifications to the MUTCD for Streets and Highways for the State of Washington and applicable standards and specifications available at all times on the Project.
  8. Attending all Project meetings where traffic management is discussed.

9. Being present onsite a sufficient amount of time to adequately accomplish the above-listed duties.

C. TRAFFIC CONTROL SUPERVISOR

A Traffic Control Supervisor (TCS) shall be on the Project whenever traffic control labor is required or less frequently, as approved by the Owner.

The TCS shall personally perform all the duties of the TCS. The TCS's duties shall include:

1. Inspecting traffic control devices and nighttime lighting for proper location, installation, message, cleanliness, and effect on the traveling public. Traffic control devices shall be inspected each work shift except that Class A signs and nighttime lighting need to be checked only once a week. Traffic control devices left in place for 24 hours or more should also be inspected once during the nonworking hours when they are initially set up (during daylight or darkness, whichever is opposite of the working hours).
2. Ensuring that corrections are made if traffic control devices are not functioning as required. The TCS may make minor revisions to the approved traffic control plan to accommodate site conditions as long as the original intent of the traffic control plan is maintained and the revision has concurrence of the TCM and/or Owner.
3. Attending traffic control coordinating meetings or coordination activities as authorized by the Owner.
4. Ensuring that all needed traffic control devices are available and in good working condition prior to the need to install those devices.
5. Ensuring that all pedestrian routes or access points, existing or temporary, are kept clear and free of obstructions and that all temporary pedestrian routes or access points are detectable and accessible to persons with disabilities as provided for in the approved plans.
6. Having a current set of approved TCPs and applicable contract provisions as provided by the TCM and the latest adopted edition of the MUTCD including the *Washington State Modifications to the MUTCD* and applicable standards and specifications.

## **1.5 TCM AND TCS QUALIFICATIONS**

The TCM and TCS shall be certified by one of the following:

The Northwest Laborers – Employers Training Trust  
27055 Ohio Avenue  
Kingston, Washington 98346  
(360) 297-3035

Evergreen Safety Council  
401 Pontius Avenue N.  
Seattle, Washington 98109  
(800) 521-0778 or (206) 382-4090

The TCS and all flaggers shall have a current flagging card from the State of Washington, Oregon, or Idaho.

## **1.6 SUBMITTALS**

### **A. TRAFFIC CONTROL PLAN**

The Contractor shall prepare and submit five copies of a Traffic Control Plan(s). All construction signs, flaggers, spotters, and other traffic control devices shall be shown on the traffic control plans. The Contractor shall designate and adopt in writing the specific traffic control plan or plans required for their method of performing the work. The traffic control plan(s) shall be in accordance with the established standards for plan development as shown in the MUTCD, Part VI.

The Traffic Control Plan shall meet the specific requirements of the franchise agreements and right-of-way permits required for this project. In addition, the Traffic Control Plan shall meet the following requirements:

- Highway shoulder closure, high speed, per WSDOT standards.
- Maintain pedestrian traffic through, or around the project location at all times

The Contractor, at the end of each day, shall leave the Work area in such condition that it can be traveled without damage to the Work, without danger to traffic, and without one-way traffic control.

## **PART 2 PRODUCTS**

### **2.1 TRAFFIC CONTROL DEVICES**

Flagging, signs and all other traffic control devices furnished or provided shall conform to the standards established in the latest WSDOT adopted edition of the *Manual on Uniform Traffic Control Devices (MUTCD)* published by the U.S. Department of Transportation and the *Washington State Modifications to the MUTCD*. Requirements for pedestrian traffic control devices are addressed in the MUTCD.

### **2.2 CONSTRUCTION SIGNS**

All construction signs required by the approved traffic control plan(s) as well as any other appropriate signs prescribed by the Owner 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. All non-applicable signs shall be removed or completely covered with either metal or plywood during periods when they are not needed. When the need for any of these signs has ceased, the Contractor, upon approval of the Owner, shall take down these signs, post, or supports.

Construction signs will be divided into two classes. Class A construction signs are those signs that remain in service throughout the construction or during a major phase of the work. They are mounted on posts, existing fixed structures, or substantial supports of a semi-permanent nature. Sign and support installation for Class A signs shall be in accordance with the WSDOT Standard Plans. Class A signs shall be designated as such on the Traffic Control Plan. Class B Construction signs are those signs that are placed and removed daily, or are used for short durations which may extend for 1 to 3 days. They are mounted on portable or temporary mountings.

Tripod-mounted signs in place more than 3 days in any one location, unless approved by the Engineer, shall be required to be post-mounted and shall be classified as Class A construction signs. Where it is necessary to add weight to the signs for stability, sandbags or other similar ballast may be used but the top of the ballast shall not be more than 4 inches above the road surface, and shall not interfere with the breakaway features of the device. The Contractor shall follow the manufacturer's recommendations for sign ballasting.

## **PART 3 EXECUTION**

### **3.1 GENERAL**

The Contractor shall provide all labor and equipment to execute the Traffic Control Plan. It is the Contractor's responsibility to plan, conduct, and safely perform the work.

The TCS shall be responsible for safe implementation of approved Traffic Control Plans provided by the TCM.

### **3.2 TRAFFIC CONTROL LABOR**

The Contractor shall furnish all personnel for flagging, spotting, for the execution of all procedures related to temporary traffic control and for setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control traffic during construction operations.

Vests and other high-visibility apparel shall be in conformance with ANSI 107.

Flaggers and spotters shall be posted where shown on the approved Traffic Control Plan. Flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, or Idaho. The flagging card shall be immediately available and shown upon request by the Owner.

During hours of darkness, flagging stations shall be illuminated in a manner that ensures that flaggers can easily be seen but that does not cause glare to the traveling public. Flagger station illumination shall meet the requirements of the MUTCD.

Flaggers shall be equipped with portable two-way radios, with a range suitable for the project. The radios shall be capable of having direct contact with project management (foreman, superintendents, etc.)

The Contractor shall furnish flagger Stop/Slow paddles conforming to the requirements of the MUTCD, except the minimum width shall be 24 inches.

**\*\*\* END OF SECTION \*\*\***

**DIVISION 2**

**SITework**

**SECTION 02050**

**LOCATE EXISTING UTILITIES**

**PART 1 GENERAL**

**1.1 SCOPE**

The work specified in this Section includes the anticipated conflicts, which may exist with existing utilities. A reasonable attempt has been made to locate the existing utilities; however, the exact location, and/or depth are unknown in most instances. Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification. It shall be the responsibility of the Contractor to locate existing utilities and their depth.

**1.2 RELATED WORK SPECIFIED ELSEWHERE**

<u>Section</u>	<u>Item</u>
02250	Temporary Shoring and Bracing
02300	Earthwork

**PART 2 PRODUCTS**

Not Used.

**PART 3 EXECUTION**

**3.1 GENERAL**

The Contractor shall determine the difficulties to be encountered in constructing the Project and his locate effort based upon the information provided on the Plans, field investigation, and the Contractor's contacts with the existing utility companies. The Contractor shall determine the extent of exploration required to first prevent damage to those existing utilities, and secondly to determine if the proposed improvements are in conflict with existing utilities.

The Contractor shall locate existing utilities sufficiently ahead of construction so that the Engineer can modify the alignment, or grade prior to construction. Where the alignment of the proposed utility cannot be adjusted to miss the existing utility without installation of additional pipe or fittings, the Contractor may be entitled to additional compensation to reroute the proposed utility.

The Contractor shall call the Utility Location Request Center (One Call Center), for field location, not less than 2 nor more than 10 business days before the

scheduled date for commencement of excavation that may affect underground utility facilities, unless otherwise agreed upon by the parties involved. A business day is defined as any day other than Saturday, Sunday, or a legal local, State, or Federal holiday. The telephone number for the One Call Center for this project is (800) 424-5555. If no one-number locator service is available, notice shall be provided individually to those owners known to or suspected of having underground facilities within the area of the proposed excavation.

The Contractor shall pothole 1 full working day in advance of trenching operations to determine the exact horizontal and vertical location of existing utilities and determine if a conflict exists. If a conflict should exist, the Engineer shall be notified. The Contractor shall plan potholing activities far enough in advance such that the Engineer can make adjustments to utility location or alignment as required. No compensation shall be made to the Contractor for standby time or work required to relocate a Contractor-installed facility as a result of a utility conflict. All utility potholing shall be planned well in advance of installation work. Utility potholing shall be considered incidental and no additional compensation shall be made.

The Contractor is alerted to the existence of Chapter 19.122 RCW, a law relating to underground utilities. Any cost to the Contractor incurred as a result of this law shall be at the Contractor's expense.

No excavation shall begin until all know facilities in the vicinity of the excavation area have been located and marked.

**\*\*\* END OF SECTION \*\*\***

## SECTION 02230

### CLEARING AND GRUBBING

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes the clearing, grubbing, and stripping of the proposed project areas in preparation of foundations, embankment construction, and pipeline installation.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
02305	Wet Weather Earthwork
02300	Earthwork
02370	Erosion Control

##### 1.3 DEFINITIONS

“Clearing, grubbing, and stripping debris” as hereinafter used shall be considered as all material removed by the clearing, grubbing, and stripping operations.

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

##### 3.1 DISPOSAL OF CLEARING AND GRUBBING DEBRIS

Clearing and grubbing debris shall be disposed of by hauling to waste and disposal sites approved by the Owner.

##### 3.2 CLEARING AND GRUBBING

Clearing and grubbing shall be performed as required to complete the work shown on the Plans to a minimum depth of 8 inches in order to remove the root zone of existing vegetation.

This work shall include removal and disposal of all trees, logs, brush, stumps, roots, and minor manmade structures to include but not limited to concrete, asphalt abandoned metal and equipment, rubbish and debris to the limits indicated on the plans or as required and approved by the owner. This work shall be to a

depth necessary to remove stumps, large roots and all other objectionable material. This work shall also include the protection from injury or defacement of trees, bushes, shrubs, and other objects designated to remain.

**\*\*\* END OF SECTION \*\*\***

## SECTION 02240

### DEWATERING

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes dewatering excavations of any kind and location, including but not limited to groundwater, surface water, and precipitation, until backfilling has been completed to finished grade.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals
02300	Earthwork
02305	Wet Weather Earthwork
02370	Erosion Control

##### 1.3 SUBMITTALS

Prior to the start of construction, the Contractor shall submit a dewatering plan in accordance with Section 01300 containing both a graphical and narrative presentation identifying proposed methods, equipment sizes and contingency plans should dewatering cause settlement of any adjacent facilities. The dewatering plan shall show specific locations, in plan and section, where dewatering is expected as well as a general discussion of methods to be employed should water be encountered in other locations. The plan shall detail the depth, diameter and anticipated flow for dewatering wells, well points or sumps.

Acceptance by the Owner of the method, installation, and operation and maintenance details submitted by the Contractor shall not in any way be considered to relieve the Contractor from full responsibility for errors therein or from the entire responsibility for complete and adequate design and performance of the system in controlling the water level in the excavated areas, and for control of the hydrostatic pressures to the depths specified herein. The Contractor shall be solely responsible for the proper design, installation, proper operation, maintenance, and any failure of any component of the dewatering system.

##### 1.4 REFERENCES

“Rossum J.R., 1954, *Control of Sand in Water Systems*, Journal American Water Works Association, Volume 46, pp. 123-132”

## **1.5 QUALITY CONTROL**

It shall be the sole responsibility of the Contractor to control the rate and effect of the dewatering efforts to avoid all objectionable settlement and subsidence. The Contractor shall comply with local codes and ordinances of governing authorities with regard to disposal of water pumped from dewatering operations.

Proposed discharge points shall be approved by the Owner prior to implementation of dewatering. The Contractor shall be responsible for taking all reasonable precautions necessary to ensure continuous, successful operation of the system.

## **PART 2 PRODUCTS**

Dewatering shall be in accordance with the guidance stated in the Geotechnical Report for this Project.

The Contractor shall have sufficient pumping equipment and/or other machinery available onsite before operations begin to assure that the operation of the dewatering system can be maintained. This shall include providing backup pumps of similar capacity and a standby generator of the capacity required to continuously operate the Contractor's dewatering system.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION AND APPLICATION**

During excavation, the installation of piping, conduits and structures and during the placing of backfill, excavations shall be kept free of water, subsurface or otherwise. The Contractor shall furnish all equipment necessary to dewater the excavations and shall dispose of the water so as not to cause a nuisance or menace to the public. The dewatering system shall be installed and operated by the Contractor so that the groundwater level outside the excavation is not reduced to the extent that would damage or endanger adjacent structures or property. The release of groundwater to its static levels shall be performed so as to maintain the undisturbed state of the foundation soils, prevent disturbance of backfill and prevent movement of all structures and pipelines.

Design implementation and maintenance of any dewatering system shall be the responsibility of the Contractor.

The Contractor shall construct all dewatering wells in accordance with WAC 173-160. The dewatering system shall be sufficient to maintain the groundwater level at an elevation to protect the surface of the trench bottoms, the

base of the bedding course or other foundation, and shall be accomplished prior to pipe laying and jointing or placement of reinforcing steel for concrete.

If well points or wells are used, they shall be adequately spaced to provide the necessary dewatering. The dewatering operation, however accomplished, shall be carried out so that it does not destroy or weaken the strength of the soil under or alongside the excavations.

The Contractor shall design filters and screen slot sizes for all sumps, wells and well points which prevents the movement of fines during pumping. The Contractor shall develop the wells such that they produce no more than 10-ppm silica as measured with a Rossum Sand Tester (Rossum, 1954) or equivalent.

### **3.2 MONITORING**

The Contractor shall install water level observation wells in dewatered areas sufficient to determine whether groundwater levels are maintained as per Part 3.1 of this Section.

### **3.3 FIELD QUALITY CONTROL**

A continual check by the Contractor shall be maintained to ensure that the subsurface soil is not being removed by the dewatering operation. The Contractor shall test all dewatering discharge using a Rossum Sand Tester or equivalent to determine the silica content of the discharge. The Contractor shall notify the Owner at least 24 hours prior to testing. Where critical structures or facilities exist immediately adjacent to areas of proposed dewatering, reference points shall be established and observed at frequent intervals to detect any settlement that could develop.

Should settlement be observed, the Contractor shall cease dewatering operations and implement contingency plans as outlined in the Contractor's approved dewatering plan. The responsibility for conducting the dewatering operation in a manner that protects adjacent structures and facilities rests solely on the Contractor. The cost of repairing any damage to adjacent structures and restoration of facilities shall be the responsibility of the Contractor. Permanent piping systems, existing or new, shall not be incorporated into the Contractor's dewatering system.

**\*\*\* END OF SECTION \*\*\***

## SECTION 02250

### TEMPORARY SHORING AND BRACING

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes the temporary shoring and bracing for excavations including the trench excavation safety systems as shown on the Plans and as specified herein.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals
02300	Earthwork
02511	Connection to Existing System
02530	Utility Structures
15050	Piping Systems

##### 1.3 WORK INCLUDED

The extent of temporary shoring and bracing work includes, but is not limited to:

- A. Temporary shoring and bracing necessary to protect the following against loss of ground or caving embankments: existing structures, buildings, roads, walkways, utilities, electrical transmission towers and support wiring, other facilities and improvements where required to comply with codes and authorities having jurisdiction.
- B. Trench excavation safety systems, pursuant to RCW Chapter 49.17 and WAC 296-155-655.
- C. Maintenance of shoring and bracing.

##### 1.4 QUALITY ASSURANCE

###### A. SHORING DESIGN

The Contractor shall provide layout and design drawings and specifications for shoring and bracing when a trench box is inadequate for the purpose or will not be used and trench depth exceeds 4 feet and back sloping will not be used. Temporary shoring and bracing system design

and calculations shall be prepared, stamped, and signed by a Professional Engineer registered in the State of Washington.

**B. REGULATIONS**

The Contractor shall design sheeting, shoring and bracing in accordance with the Washington State Safety Code and any local codes and ordinances of governing authorities having jurisdiction. Pile driving will not be allowed on the site; drilling shall be required for all required piles.

**1.5 SUBMITTALS**

The Contractor shall submit shoring and bracing layout and design drawings, calculations and other backup data to the Owner for review in accordance with Section 01300 prior to the start of construction.

**1.6 PROJECT CONDITIONS**

**A. SITE SURVEY**

The background survey information provided on the Plans is shown for clarity only. The Contractor shall determine, before commencing work, the exact location of all existing features that may be disrupted by new construction, including existing underground utilities. The Contractor shall be fully responsible for any and all damages, which might be caused by the Contractor's failure to exactly locate and/or preserve existing site features. Prior to commencing work, the Contractor shall check and verify governing dimensions and elevations.

The Contractor shall survey adjacent structures and facilities, establishing exact elevations at fixed points to act as temporary bench marks to monitor potential settlement from the contractor's ongoing operations. Clearly identify temporary bench marks and record existing elevations from the control points shown on the Plans.

During excavation, the Contractor shall resurvey bench marks weekly. The Contractor shall maintain and make available at the job site an accurate log of surveyed elevations for comparison with original elevations, and promptly notify the Owner if changes in elevations occur or if cracks, sags or other damage is evident.

## **1.7 EXISTING UTILITIES**

The Contractor shall protect existing active sewer, water, gas, electrical, and other utility services and structures that may be present. This shall also include all pipelines, services, and structures that are the property of the Owner.

## **PART 2 PRODUCTS**

The Contractor shall provide suitable shoring and bracing materials, which shall support loads imposed. Materials for shoring systems need not be new, but shall be in serviceable conditions.

## **PART 3 EXECUTION**

### **3.1 VERIFICATION OF CONDITIONS**

The Contractor shall notify the Owner immediately if, during construction, subsurface conditions are different from those encountered in the exploratory holes.

### **3.2 INSTALLATION AND APPLICATION**

The Contractor shall provide shoring systems adequately anchored and braced to resist earth and hydrostatic pressures at locations as needed to support excavations during construction. The Contractor shall locate required bracing to clear all permanent work. Bracing which must be relocated shall be installed prior to the removal of original bracing. The Contractor shall not place bracing where it will be cast into or included in permanent concrete work, except as otherwise acceptable to the Owner. The Contractor shall maintain bracing until structural elements are rebraced by other bracing or until permanent construction is able to withstand lateral earth and hydrostatic pressures.

### **3.3 REMOVAL**

The Contractor shall remove shoring and bracing in stages to avoid disturbances to adjacent and underlying soils and damage to structures, pavements, facilities and utilities. The Contractor shall repair or replace, as acceptable to the Owner, adjacent work damaged or displaced through the installation or removal of shoring and bracing work.

### **3.4 EXCAVATION SAFETY SYSTEMS**

All work shall be carried out with due regard for public safety. Open trenches shall have proper barricades and at night they shall be distinctly indicated by adequately placed lights, as provided for elsewhere in the Specifications.



## SECTION 02300

### EARTHWORK

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes the earthwork, including trench excavation and backfill for piping, excavation and backfill for structures, and finish grading.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals
02240	Dewatering
02250	Temporary Shoring and Bracing
02305	Wet Weather Earthwork
02370	Erosion Control
02700	Gravel Materials
02950	Site Restoration and Rehabilitation

#### PART 2 PRODUCTS

##### 2.1 GRAVEL MATERIALS

All gravel materials shall conform to Section 02700.

#### PART 3 EXECUTION

##### 3.1 PREPARATION

Excavation may commence once all erosion control measures are in place in accordance with the Plans and Section 02370 and to the satisfaction of the Owner.

The Contractor shall call the Underground Utility Locate Service (1-800-424-5555) and obtain a field locate prior to commencing trenching activities. The Contractor is responsible for coordinating with utility companies which may not subscribe to the utility locate service for identification and location of their facilities. The existing utilities shown on the Plans are based on as-built drawings and mapping of surface features in so far as practical to do so. It is the Contractor's responsibility to verify the locations of the existing utilities, and protect these utilities during construction, and to repair any utilities damaged as a result of the Contractor's operations.

The Contractor shall pothole 1 full working day in advance of trenching operations to determine the exact horizontal and vertical location of existing utilities and determine if a conflict exists. If a conflict should exist, the Engineer shall be notified. The Contractor shall plan potholing activities far enough in advance such that the Engineer can make adjustments to utility location or alignment as required. No compensation shall be made to the Contractor for standby time or work required to relocate a Contractor-installed facility as a result of a utility conflict. All utility potholing shall be planned well in advance of installation work. Utility potholing shall be considered incidental and no additional compensation shall be made.

### **3.2 GENERAL REQUIREMENTS**

Excavation, compaction and backfill for structures, pipelines and the final site contours shall be formed by either excavating or compacting fill, as required, to provide the cross-sections as shown on the Plans.

All excavation performed on this Project shall be considered unclassified. Excavation shall consist of the removal of any and all material encountered, including debris, rubble, concrete, metal, topsoil, cutting and removal of existing surfacing, tree stumps, trees, logs, abandoned rail ties, abandoned piping, piling, riprap, etc.

Excavations shall be kept free of water, both surface water and groundwater, during the excavation, installation of pipelines and structures, and the placement of backfill. For additional requirements see Section 02240.

The Contractor's attention is also called to the depth of the structures and piping; for this reason, special shoring and bracing may be required. All shoring and bracing or sheeting required to perform and protect the excavation and to safeguard the employees, shall be furnished by the Contractor. For additional requirements see Section 02250.

No timber bracing, lagging, sheathing or other lumber shall be left in any excavation except with permission of the Engineer and in the event such permission is granted, no separate payment shall be allowed for burying such material.

All stockpiles shall be covered with plastic and no stockpile shall be higher than 6 feet above existing grade.

### **3.3 EXCAVATION AND BACKFILL FOR STRUCTURES**

Excavation and backfill for structures shall be in conformance with Section 2-09 of the WSDOT Standard Specifications, and as further described herein. All

excavation for structures shall be done to the dimensions and levels indicated on the Plans or specified herein. Excavation shall be made to such width outside the lines of the structures to be constructed as may be required for proper working methods, the erection of forms and the protection of the work.

Excavation shall consist of the removal of any and all material encountered to the elevations shown on the Plans. Excavations for structures shall be continued down to the subgrade which is defined as 12 inches below concrete mat foundations, concrete footings, and slab on grade floors for the installation of foundation gravel material, unless otherwise noted on the Plans.

Fill material placed under structures, including footings and floor slabs, shall be foundation gravel free from debris and organics, as specified in Section 02700.

In the event unsuitable material is encountered below the subgrade shown on the Plans and described herein, the Contractor, as required by the Engineer, shall over-excavate until a suitable foundation is reached. If over-excavation of unsuitable material is required by the Engineer, it will be under the unit price bid item entitled "UNSUITABLE EXCAVATION," as described in Section 01200. The Contractor shall then replace the material with compacted foundation gravel, as specified in Section 02700. Quantities, if any, shall be calculated by neat line measurement to the depth agreed to in the field by the Engineer.

The Contractor shall notify the Engineer when excavation for compacted fill or structures is complete. No forms, reinforcing steel, or concrete shall be placed until the excavation has been inspected by the Engineer.

There is no warranty that the native material is suitable for backfill or is suitable, as excavated, for placement and compaction as required by these Specifications. In the event that the Contractor is unable to find onsite, sufficient native material to accomplish the structure backfilling, the select material that he shall furnish and install shall be Gravel Backfill for Walls, as specified in Section 02700.

### **3.4 PROTECTION OF FOUNDATION SURFACES**

Care shall be taken to preserve the foundation surfaces shown on the Plans in an undisturbed condition. If the Contractor unnecessarily over excavates or disturbs the foundation surfaces shown on the Plans or specified herein without written authorization of the Engineer the Contractor shall replace such foundations with concrete fill or other suitable material approved by the Owner in a manner which will show by test an equal bearing capacity with the undisturbed foundation material. No additional payment shall be made for the added quantity of concrete fill or other suitable material used because of unnecessary over excavation caused by the Contractor or their operations.

### 3.5 EXCAVATION AND BACKFILL FOR TRENCHES

Excavation and backfill for trenches shall be in conformance with Sections 7-08 and 7-09 of the WSDOT Standard Specifications, and as further described herein. The following pipe materials shall be considered flexible:

- PVC
- Corrugated Polyethylene

All other pipe materials shall be considered rigid.

Upon completion of work each day, all pipeline open trenches shall be completely backfilled, leveled, and temporarily patched or graveled, as herein specified. Under certain conditions, the trench may be left open at the last length of pipe laid during the day to avoid re-excavation the following morning, provided that the opening is adequately plated or covered for vehicle traffic. Special attention shall be given to barricading to keep vehicular traffic away from newly-backfilled trench areas until restored for traffic.

The Engineer reserves the right to restrict the Contractor in the amount of trench for pipeline that can be opened during the working day. Should the Contractor, in the Engineer's opinion, fail to diligently pursue backfilling, an allowable limit of open trench shall be 100 lineal feet and shall be strictly enforced.

The width of the trench at or below a point 12 inches above the top of the outside diameter of the pipe shall be carefully controlled and maintained to ensure the strength of the pipe and prevent pipe failures. Backfilling shall proceed as follows:

#### A. SUBGRADE PREPARATION

The subgrade for piping is defined as the elevation of the bottom of the pipe bedding material as shown on the Plans.

In the event unsuitable material is encountered below the subgrade shown on the Plans and described herein, the Contractor, as required by the Engineer, shall over-excavate until a suitable foundation is reached. If over-excavation of unsuitable material is required by the Engineer, it will be paid for under the unit price bid item entitled "UNSUITABLE EXCAVATION," as found in the Proposal. The Contractor shall then replace the material with compacted foundation gravel, as specified in Section 02700.

Quantities, if any, shall be calculated by neat line measurement to the depth agreed to in the field by the Engineer.

**B. BEDDING FOR RIGID PIPE**

Above the foundation material, if any, the bedding material shall be suitable native or Gravel Backfill for Pipe Bedding, as specified in Section 02700. This material shall be placed in lifts of approximately 8 inches up to a point 12 inches above the pipe. This material shall be hand shoveled in place and carefully worked under and around the pipe.

**C. BEDDING FOR FLEXIBLE PIPE**

Above the foundation material, if any, Gravel Backfill for pipe bedding, as specified in Section 02700, shall be placed in lifts of approximately 8 inches up to a point 12 inches above the pipe. This material shall be hand shoveled in place and carefully worked under and around the pipe.

**D. BACKFILL FOR TRENCHES**

Partial backfill to protect the pipe will be permitted immediately after the pipe has been properly laid in accordance with the Plans and these Specifications. Complete backfilling of trenches will not be permitted until the section of pipe installed has been inspected by the Engineer.

From the point 12 inches above the top of the pipe barrel, the backfill material to be used in the trench section shall be suitable native material or Bank Run Gravel, as specified in Section 02700, except where required or shown on the Plans to use other material. The Contractor shall place backfill in horizontal lifts not to exceed 8 inches in thickness. All backfill shall be free of large rocks, organic matter, stumps, trees, pieces of pavement, broken concrete and other deleterious substances.

The Contractor shall remedy, at their expense, any defects that appear in the backfill prior to final acceptance of the work. Cleanup operations shall progress immediately behind backfilling to accommodate the return to normal use of the trench area.

During placement of the initial lifts, the backfill material shall not be bulldozed into the trench or dropped directly over the pipe with less than 3 feet of backfill material above the top of the pipe.

**3.6 ROCK EXCAVATION**

It is not anticipated that solid rock will be encountered. Should such material be encountered, however, it will be paid for change order as directed by the Engineer and approved by the Owner. Boulders or broken rock less than 2 cubic yards in

volume as measured in the field by the Engineer, will not be classified as rock, nor will so-called “hard-pan” or cemented gravel, even though it may be advantageous to use explosives in its removal if blasting were allowed. For the purpose of this contract, rock excavation shall be defined as mineral matter in place and of such hardness and texture that, when it is encountered, cannot be loosened by three passes of a ripper tooth mounted on the larger of a tracked backhoe of at least 25,000 pounds operating weight and 75 horsepower or the largest backhoe being utilized on the job by the Contractor. Where rocks occur as boulders that are smaller than the larger of: (1) 2 cubic yards in volume, or (2) the volume that can be readily handled by the largest backhoe being utilized on the job by the Contractor, they shall be considered incidental to excavation.

Where removal of a boulder results in a void below the desired elevation of the intended excavation, backfilling of the void shall be handled in the same manner as the replacement of unsuitable excavated material.

### **3.7 REUSE AND DISPOSAL OF EXCAVATED MATERIAL**

Excavated materials shall be properly protected and reused where possible. Excavated materials not used for fill shall be hauled to an approved waste site(s), as selected by the Contractor. The Contractor shall submit a list of approved waste haul site(s) to the Owner prior to the commencement of hauling of waste materials. Any permits required for waste haul and disposal shall be the responsibility of the Contractor.

### **3.8 FINAL SITE GRADING**

The site shall be graded consistent with the elevations shown on the Plans. The slopes between elevations shall be uniform or as shown on the Plans. Excavations and backfill shall be to the elevations required for the placement of all surface restorations, such as asphalt, concrete, gravel surfacing, or landscaping. All areas shall be graded to provide proper drainage. The final ground surface shall be smooth, raked free of debris and stones, and prepared for restoration as specified in Section 02900.

### **3.9 STRUCTURE COMPACTION**

The foundation gravel material placed underneath all structures shall be moisture conditioned to within 3 percent of optimum moisture content and shall be placed in loose, horizontal layers. The thickness of layers placed before compaction shall not exceed 8 inches for heavy equipment compactors and shall not exceed 4 inches for hand-operated mechanical compactors. Water settlement is not allowed for compaction.

Layers shall be compacted to a dense state equaling at least 95 percent of the maximum dry density, using the Modified Proctor, per ASTM D1557. Prior to the placement of fill below structures, any and all groundwater and surface water shall be drained or pumped from areas to be filled.

Wall backfill material shall be compacted to at least 90 percent of the maximum dry density, using the Modified Proctor, per ASTM D1557 within 5 feet of all walls and shall be compacted to at least 95 percent of the maximum dry density, using the Modified Proctor, per ASTM D1557 beyond 5 feet of all walls. Any and all compaction within 5 feet of all walls shall be accomplished by means of hand-operated mechanical equipment rather than heavy equipment compactors.

### **3.10 TRENCH COMPACTION**

Trench backfill materials shall be moisture conditions to within three percent of optimum moisture content. Water settlement is not allowed for compaction.

Pipe bedding materials, for both rigid and flexible pipes, shall be compacted to at least 95 percent of the maximum dry density, using the Modified Proctor, per ASTM D1557.

Compaction of the backfill above the bedding material in all trenches in non-structural and non-paved areas shall be performed by using mechanical equipment to at least 90 percent of the maximum dry density, using the Modified Proctor, per ASTM D1557.

Compaction of the backfill above the bedding material in all trenches in structural or paved areas shall be performed by using mechanical equipment to at least 95 percent of the maximum dry density, using the Modified Proctor, per ASTM D1557.

**\*\*\* END OF SECTION \*\*\***

## SECTION 02305

### WET WEATHER EARTHWORK

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes the procedures to be followed if earthwork is to be accomplished in wet weather or in wet conditions where control of soil moisture is difficult.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals
02300	Earthwork
02370	Erosion Control
02700	Gravel Materials

#### PART 2 PRODUCTS

The size or type of construction equipment shall be selected as required to prevent soil disturbance. In some instances, it may be necessary to limit equipment size or to excavate soils with a backhoe, Gradall, or equivalent type of equipment to minimize subgrade disturbance caused by construction traffic.

Material used as structural fill during wet weather earthwork shall generally consist of clean granular material containing less than 5 percent fines (material passing the U.S. Standard No. 200 sieve), based on wet sieving the fraction passing the 3/4-inch sieve. The fines shall be non-plastic.

#### PART 3 EXECUTION

##### 3.1 WET WEATHER EXCAVATION AND FILL PLACEMENT QUALITY CONTROL

Excavation and placement of fill or backfill material will be observed on a full-time basis by the Owner, to determine that all work is being accomplished in accordance with these Specifications.

##### 3.2 WET WEATHER EARTHWORK PROTECTION

The ground surface shall be sloped away from construction areas to promote the rapid runoff of precipitation and prevent ponding of water.

Earthwork shall be accomplished in small sections to minimize exposure to wet weather. Excavation or the removal of unsuitable soil shall be followed immediately by the placement and compaction of a suitable thickness (generally 8 inches or more if approved by the Owner) of clean foundation gravel.

No soil shall be left uncompacted and exposed to moisture. A smooth drum vibratory roller, or equivalent, shall be used to seal the ground surface after placement of fill or backfill materials.

All wet weather work shall meet local, state and federal codes as specified herein and as indicated on the Plans.

**\*\*\* END OF SECTION \*\*\***

**SECTION 02370**

**EROSION CONTROL**

**PART 1 GENERAL**

**1.1 SCOPE**

The work specified in this Section includes the temporary erosion and sedimentation control (TESC) in and around the site caused by the actions of the Contractor as shown on the Plans and as specified herein.

Work under this Section shall be directed towards site areas disturbed during construction as well as all off-site storage and parking areas maintained by the Contractor.

**1.2 RELATED WORK SPECIFIED ELSEWHERE**

<u>Section</u>	<u>Item</u>
01300	Submittals
02240	Dewatering
02300	Earthwork

**1.3 SUBMITTALS**

- A. Stormwater Pollution Prevention Plan (SWPPP)

A SWPPP shall be prepared by the CESCL for the project and submittal in accordance with Section 01300 and paragraph 1.5 of this specification section. The SWPPP shall be submitted to the Owner for approval at the preconstruction conference.

**1.4 CERTIFIED EROSION AND SEDIMENT CONTROL LEAD (CESCL)**

The Contractor shall designate a Certified Erosion and Sediment Control Lead (CESCL) for this project. The CESCL shall have, for the life of this Contract, a current Certificate of Training in Construction Site Erosion and Spill Control signed by the WSDOT Water Quality Program Manager.

Duties of the CESCL shall include, but are not limited to:

- A. Inspecting temporary erosion and spill control Best Management Practice (BMPs) for proper location, installation, maintenance, and repair. Inspections shall be made as noted on the Plans and after each significant precipitation event, including those that occur during weekends and after

working hours. A Temporary Erosion and Spill Control Inspection Report shall be prepared for each inspection and shall be included in the Temporary Erosion and Spill Control file. The inspection report shall include, but not be limited to:

1. When BMPs are installed, removed or changed;
  2. Repairs needed or made;
  3. Turbidity monitoring results;
  4. Observations of BMP effectiveness and proper placement;
  5. Recommendations for improving performance of BMPs.
- B. Prepare and maintain a Temporary Erosion and Spill Control file on site that includes but is not limited to:
1. Temporary Erosion and Spill Control Inspection Reports;
  2. Contractor's Stormwater Pollution Prevention Plan (SWPPP);
  3. Spill Prevention, Control, and Countermeasures (SPCC) Plan;
  4. All project permits, including but not limited to grading permits and Hydraulics Project Approval;
  5. Manufacturer instructions for all products used for TESC BMPs;
  6. Washington State Department of Ecology's Stormwater Management Manual for Western Washington, Chapter 4, Volume II, current edition.

## **1.5 STORMWATER POLLUTION PREVENTION PLAN**

The CESCL Contractor shall be responsible for preparing a Stormwater Pollution Prevention Plan (SWPPP). The intent of the SWPPP is to reflect the Contractor's operations by supplementing the TESC Drawings, details, and notes shown on the Plans to provide comprehensive pollution control at the construction site, staging areas, stockpiles, and borrow sites. The SWPPP shall be prepared by the CESCL for the project and submittal in accordance with Section 01300. The SWPPP shall be submitted to the Owner for approval at the preconstruction conference. No work shall begin until the Contractor's SWPPP, as approved by the Owner, is implemented. The SWPPP shall address, at least, the following items:

- Identification of construction haul routes and location of BMPs (e.g., stabilized construction entrance, silt fences, storm drain inlet protection).
- Waste disposal methods and locations.
- Detailed construction sequence and schedule, including identifying dates scheduled for BMP installation, removal, clearing, grading, seeding, and landscaping.
- Details for any temporary flow diversions, dewatering systems, and BMPs (in accordance with the current edition of the Washington State Department of Ecology’s Stormwater Management Manual for Western Washington) proposed by the Contractor.
- Calculations for temporary sedimentation ponds, if used
- A list of products to be used, including Material Safety Data Sheets.
- Identification of stockpile and staging areas, and BMPs to be implemented at these locations.

The SWPPP shall be prepared in accordance with details shown on the Plans, these Specifications, and Chapter 4, Volume II Chapter 7 – BMPs from the current edition of the Washington State Department of Ecology’s Stormwater Management Manual for Western Washington, which are hereby referenced and made a part of the Contract Documents. Only those sections of the Stormwater Management Manual for Western Washington that address preparation, implementation, and maintenance of permanent and temporary erosion and sedimentation control BMPs are applicable.

The SWPP shall include best management practices to control windblown dust.

## **PART 2 PRODUCTS**

### **2.1 SILT FENCES**

Silt fences shall conform to the details shown on the Plans and the fabric shall conform meet the requirements of Geotextile for Temporary Silt Fence of Section 9-33 of the WSDOT Standard Specifications.

### **2.2 STORM DRAIN INLET (CATCH BASIN) PROTECTION**

Storm drain inlet protection shall be with a “silt sack,” as manufactured by ACF Environmental or equal.

## **2.3 EROSION CONTROL BLANKET**

On all disturbed slopes steeper than 2H:1V, an erosion control blanket shall be placed and secured per manufacturer's recommendation with a biodegradable means.

The erosion control blanket shall be temporary, biodegradable and is to remain in place.

The erosion control blanket shall be "Biomac C" as manufactured by MacCaferri, Inc. or "Curlex II," as manufactured by American Excelsior Co., or Equal.

## **PART 3 EXECUTION**

### **3.1 PREPARATION**

Site preparation work shall be performed only during periods when beneficial results can be obtained. When drought, excessive moisture or other unsatisfactory conditions prevail, the work shall be stopped.

### **3.2 BEST MANAGEMENT PRACTICES (BMPS)**

Silt fences shall be constructed to control erosion and migration of soils disturbed during construction. The fences and dams shall provide temporary protection and shall be removed only upon approval of the Owner.

All areas or drainage ways downstream of the construction site shall have Best Management Practices (BMPs) installed prior to the beginning of any clearing activities. Runoff from cleared or disturbed area shall be directed through the BMPs. Disturbed ground shall be stabilized at the end of each work day. Permanent soil stabilization and erosion and sedimentation control shall be implemented upon reaching finish grade. Slope protection shall be immediately implemented upon any soils showing signs of erosion. This shall be done in a manner approved by the Owner.

All BMPs shall be inspected, maintained and kept in a condition sufficient to provide effective erosion and sedimentation control at all times. The site shall be inspected to ensure the BMPs are properly located, constructed and operating as designed during the first storm. Any necessary adjustments or repairs shall be made immediately and be approved by the Owner. The BMPs shall be inspected thereafter as noted on the Plans and after all significant storm events. Turbidity monitoring will be held on a weekly basis at a minimum, or more frequently if necessary as determined by the CESCL.

All BMPs shall be removed no later than 30 consecutive calendar days after final site stabilization has been achieved as determined by the Owner. BMPs such as storm drain inlet protection, straw bales, silt fences and supports and plastic coverings shall be removed and properly disposed of offsite by the Contractor. Areas disturbed by removal of these BMPs shall be immediately stabilized in a manner approved by the Owner.

**\*\*\* END OF SECTION \*\*\***

## SECTION 02511

### CONNECTION TO EXISTING SYSTEM

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes the connection of pipelines being constructed under this project to existing water mains as shown on the Plans and as specified herein.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
Division 15	Mechanical

#### PART 2 PRODUCTS

Not Used.

#### PART 3 EXECUTION

All cut-in connections to the existing system shall be made after a successful pressure test of the new main has been witnessed by the Owner and after a purity test has been satisfactorily evidenced except as allowed by the Owner.

The location, type and size of existing facilities have been determined from available records and are approximate. It is anticipated that connections to these existing facilities may be made, in general, as shown on the Plans except adjustments may be required for vertical and horizontal alignment.

It shall be the responsibility of the Contractor to determine the exact location and ascertain the type and size of the existing facilities prior to starting work on each connection and to provide any alternations as required in the connection detail.

Connections to existing facilities shall be made with the use of fittings, valves, flexible couplings, solid sleeves, shackling and other miscellaneous fittings, and thrust blocks as shown on the or with additional pipe or fittings as approved by the Owner and as indicated in Piping Systems to connect the new construction under this Project to the existing pipelines.

All pipe and fittings used for the connection shall be clean and disinfected with a minimum 5 percent chlorinated solution immediately prior to making said connection. The Contractor shall take extra precautions to ensure the tightness of



## SECTION 02530

### UTILITY STRUCTURES

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes precast concrete vaults, manholes, catch basins, castings, and steps for a complete installation as shown on the Plans and specified herein.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals
02300	Earthwork
08310	Metal Access Hatches

#### PART 2 PRODUCTS

##### 2.1 GENERAL

The exterior finish of all precast concrete utility structures shall be smooth with no imperfections larger than 1/8 inch in diameter. The interior finish of all precast concrete utility structures shall be smooth and sacked with non-shrink cementitious materials and epoxy bonding agent. No bug holes, fins, projections, or other defects are acceptable.

##### 2.2 PRECAST VAULTS

Precast concrete vaults shall be cast in an established precast yard. Precast vaults shall be designed for H-20 loads. Submit design calculations and shop drawings for review and approval prior to fabrication. Shop drawings shall detail wall thickness, concrete strength, reinforcing requirements, and shall include all appurtenances, such as access hatches, floor drains, and other items called for on the Plans.

All vaults shall be constructed with a minimum of 4-inch-thick solid walls.

All vaults shall have a ladder and safety post installed as shown on the Plans.

The access hatches shall be as specified in Section 08310.

### **2.3 SUMP GRATING**

Grating shall be specified in Section 05500.

### **2.4 GASKETS**

Rubber gaskets shall conform to Section 9-04.4 of the WSDOT Standard Specifications.

## **PART 3 EXECUTION**

### **3.1 PRECAST VAULTS**

Precast vaults shall be installed as shown on the Plans and in accordance with the manufacturer's recommendations.

### **3.2 FINAL ADJUSTMENT AND CLEANUP**

After installation is complete, the Contractor shall cleanout all precast structures prior to placing the new facilities into service. The adjustment of castings shall be done in a manner satisfactory to the Owner. Adjustment shall be done only with precast grade rings. Bricks are unacceptable. Grouting and final adjustment of castings shall be done with non-shrink grout.

**\*\*\* END OF SECTION \*\*\***

## SECTION 02700

### GRAVEL MATERIALS

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes the various types of granular materials that are to be used in trenches and other excavations as shown on the Plans and as specified herein.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals
02300	Earthwork
02305	Wet Weather Earthwork

##### 1.3 SUBMITTALS

The Contractor shall provide certificates of laboratory tests in accordance with Section 01300, indicating particle size distribution for review for each type of granular material furnished and proctor test reports for all material to be placed as pipe bedding material, trench backfill, backfill under and around structures and underneath crushed surfacing and asphalt concrete pavements.

The certificates and proctor test reports shall be provided to the Owner at least 5 calendar days prior to placement.

#### PART 2 PRODUCTS

##### 2.1 FOUNDATION GRAVEL

Foundation gravel shall be Class A Gravel Backfill for Foundations in conformance with Section 9-03.12(1)A of the WSDOT Standard Specifications.

##### 2.2 GRAVEL BACKFILL FOR PIPE BEDDING

Gravel backfill for pipe bedding shall meet the requirements of Section 9-03.12(3) of the WSDOT Standard Specifications.

### **2.3 BANK RUN GRAVEL FOR TRENCH BACKFILL**

Bank run gravel for trench backfill shall be free from organic matter or other deleterious materials and in conformance with Section 9-03.19 of the WSDOT Standard Specifications.

### **2.4 QUARRY SPALLS**

Quarry spalls shall conform to Section 9-13 of the WSDOT Standard Specifications. Materials used for quarry spalls shall meet the requirements of Section 9-13.1(5) of the WSDOT Standard Specifications, except that the size of material shall be revised as follows: 100 percent passing a 4-inch sieve size and 40 percent passing a 2-inch sieve size.

### **2.5 CRUSHED SURFACING**

Crushed surfacing base course and top course shall conform to Section 9-03.9(3) of the WSDOT Standard Specifications.

### **2.6 GRAVEL BACKFILL FOR DRAINS**

Gravel Backfill for Drains shall conform to Section 9-03.12(4) of the WSDOT Standard Specifications.

## **PART 3 EXECUTION**

### **3.1 FOUNDATION GRAVEL**

Foundation gravel shall be placed and compacted underneath all structures to a minimum depth of 12 inches unless indicated otherwise on the Plans, and to a greater depth where foundations are unstable and excess suitable excavated material is unavailable to stabilize such foundations.

In the event the Contractor unnecessarily overexcavates the pipe trench or structure foundation, or if the width of the pipe trench becomes wider than the pay limit shown on the Plans, all material so placed shall be at the Contractor's sole expense.

### **3.2 GRAVEL BACKFILL FOR PIPE BEDDING**

Bedding material shall be placed simultaneously on both sides of the pipe for the full width of the trench in lifts not exceeding 6 inches. To assure uniform support, the material shall be carefully worked underneath the pipe haunches with a tool capable of preventing the formation of void spaces around the pipe. In the event the Contractor overexcavates the pipe trench, or if the width of the pipe

trench becomes wider than the pay limit shown on the Plans, all material so placed shall be at the Contractor's sole expense.

### **3.3 BANK RUN GRAVEL FOR TRENCH BACKFILL**

Bank run gravel for trench backfill shall be used where excavated material is unsuitable or unavailable for the backfill of trenches as approved by the Owner.

In the event the Contractor overexcavates the pipe trench, or if the width of the pipe trench becomes wider than the pay limit shown on the Plans, all material so placed shall be at the Contractor's sole expense.

### **3.4 QUARRY SPALLS**

Quarry spalls shall be placed where shown on the Plans, where foundations are unsuitable if approved by the Owner or in other locations where approved by the Owner.

### **3.5 CRUSHED SURFACING**

Crushed surfacing base course and/or top course shall be placed underneath asphalt paving, to the lines and grades shown on the Plans or as required by the Plans and shall be compacted to a dense, unyielding state of at least 95 percent of the maximum dry density, using the modified Proctor, per ASTM D1557.

### **3.6 GRAVEL BACKFILL FOR DRAINS**

Gravel Backfill for Drains shall be placed as shown on the Plans or as required by the Plans and shall be compacted to a dense, unyielding state of at least 95 percent of the maximum dry density, using the modified Proctor, per ASTM D1557.

**\*\*\* END OF SECTION \*\*\***

## SECTION 02950

### SITE RESTORATION AND REHABILITATION

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes areas requiring restoration or rehabilitation as shown on the Plans or specified herein, including those areas that shall be graded, restored with hydroseeding or sod, areas restored with concrete sidewalk and driveway, and areas containing certain improvements and landscaping on and along the right-of-way including the adjacent private properties. The work also includes repair and replacement of fencing and other property features impacted construction.

Particular care shall be taken to minimize damage to landscaped areas within and adjacent to construction areas. In the event that construction is to be carried out in landscaped areas, appropriate measures shall be taken to restore such areas to conditions existing prior to construction.

Surface restoration type and location are shown on the Plans.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals
02230	Clearing and Grubbing
02300	Earthwork
02700	Gravel Materials

##### 1.3 QUALITY ASSURANCE

###### A. PLANT MATERIAL

Quality, size, and conditions as determined by standards set forth in the American Association of Nurserymen Standard ANSI Z60.1.

###### B. FERTILIZER

Conform to Washington State Department of Agriculture Laws and Federal Specification O-F-241D pertaining to commercial fertilizers.

###### C. SEED

Conform to the standards for “certified”-grade seed or better.

Furnished in standard container on which the following information is shown: seed name, lot number, net weight, percentage of purity, germination, weed seed and inert material.

Furnish to the Owner duplicate copies of a statement signed by the vendor, certifying that each lot of seed has been tested by a recognized seed testing laboratory within 6 months before the date of delivery on the Project.

Seed that is wet, moldy, or otherwise damaged in transit or storage will not be accepted.

**PART 2 PRODUCTS**

**2.1 HYDROSEEDING**

The seed mixture for easement and property restoration shall have the following composition, proportion, and quality:

**Alternative 1 Seed Mixture Typical Western Washington**

<b>Kind and Variety of Seed in Mixture</b>	<b>Percent By Weight</b>	<b>Minimum Percent of Pure Seed</b>	<b>Minimum Percent of Germination</b>
Colonial Bent Grass (Highland or Astoria)	10%	9.8%	85%
Creeping Red Fescus (Illahee Rainier or Pennlawn)	40%	39.2%	90%
Perennial Rye Grass	30%	29.4%	90%
White Clover (Pre-inoculated)	20%	19.6%	90%
Maximum Percentage of Weed Seed	1.0%		
Maximum Inert and Other Crops	1.0%		

The seed mixture shall have the following composition, proportion and quality:

The seed shall be applied at a minimum rate of 120 pounds per acre.

A commercial fertilizer of the following formulation shall be furnished as specified, and all fertilizer shall be premixed prior to use on the job. The fertilizer shall be applied at the rate of 500 lbs. per acre.

<b>Nitrogen (Inorganic) as N<sub>2</sub></b>	<b>Nitrogen (Organic) Ureaformaldehyde</b>	<b>Phosphorous as P<sub>2</sub>O<sub>5</sub></b>	<b>as K<sub>2</sub>O</b>	<b>Potassium lbs/Acre</b>
10%	38%	20%	20%	500

## **2.2 TOPSOIL**

Topsoil shall have a pH value between 6 and 8, shall be fertile, friable, natural loam, containing 5 to 8 percent of humus, and shall be capable of sustaining vigorous lawn growth. Topsoil shall be free of any admixtures of subsoil, stones 2 inches in diameter or larger, clods of earth, plants or their roots, sticks, or other extraneous material. All topsoil shall be furnished as necessary and approved by the Owner to complete the required restoration and seeding.

## **PART 3 EXECUTION**

### **3.1 HYDROSEEDING**

Areas that have been cleared and grubbed and graded within the public right-of-way, which are not covered by gravel, concrete, or pavement, shall receive hydroseeding, fertilizing, and mulching. These areas shall be leveled, acceptable to Owner, existing topsoil broken up to a depth of 6 inches and hydroseeded. Graded areas shall receive 6 inches of topsoil prior to hydroseeding. Native materials selected by the Owner from material excavated for foundations and stockpiled onsite may be used for topsoil.

For those areas in which hydroseeding would be difficult, the Contractor may request approval from the Owner to hand-apply the hydroseeding mix. Approval shall be granted for hand-application only after reviewing and approving the procedure that the Contractor recommends.

Seeding, fertilizing, and mulching shall be installed in conformance with Sections 8-01 and 9-14 of the WSDOT Standard Specification.

Seeding, fertilizing, and mulching shall be installed using an approved type hydroseeder.

When weather conditions are not conducive to satisfactory results from seeding operations, the Owner may order the work suspended and it shall be resumed only when the desired results are likely to be obtained.

Areas that have received an application of mulching shall be inspected upon completion of the work and again on the completion of the application of seed and fertilizer.

### **3.2 SOIL PREPARATION**

Verify that planting bed grades are in accordance with those indicated on the Plans before proceeding with work. Verify that soil conditions are satisfactory for soil preparation work.

Prepare soil no closer than 3 feet from existing tree trunks up to 6 inches in diameter; no closer than 4 feet from existing tree trunks up to 12 inches in diameter; no closer than 6 feet from existing tree trunks larger than 12 inches in diameter.

Loosen compacted soils to a depth of 12 inches. Rake and remove all material larger than 1-1/2 inches in diameter.

Place 2 to 3 inches of topsoil over existing soil, mix and till to a depth of 6 inches. This material shall be suitable topsoil from the site or imported material.

### **3.3 TOPSOIL**

Those areas to receive topsoil shall have the trenched backfilled to within 6 inches of the finished grade. A compacted 6-inch depth of topsoil shall then be applied to the subgrade. The Contractor may elect to utilize and stockpile existing and excavated topsoil material; however, no separate payment will be made for its use.

### **3.4 LANDSCAPED AND IMPROVED AREAS**

Certain improvements and landscaping have been placed on and along the rights-of-way including the adjacent private properties. Wherever such property is damaged, destroyed, or the use thereof is interfered with due to the operation of the Contractor, it shall be immediately restored to its former condition by the Contractor. Notice should be given to the property owner along the route of construction by the Contractor advising them of the methods he will use to preserve and restore the improvements.

### **3.5 FINISHING AND CLEANUP**

Before acceptance of the Project, all pipes, manholes, catch basins, and other appurtenances shall be cleaned of all debris and foreign material. After all other work on the Project is completed and before final acceptance, the entire roadway, including the roadbed, planting, sidewalk areas, shoulders, driveways, alley and side street approaches, slopes, ditches, utility trenches, and construction areas shall be neatly finished to the lines, grades and cross-sections shown on the Drawings and as hereinafter specified.

In undeveloped areas, the entire area which has been disturbed by the construction shall be shaped so that, upon completion, the area will present a uniform appearance, blending into the contour of the adjacent properties. All other requirements outlined previously shall be met. Slopes, sidewalk areas, planting

areas and roadway shall be smoothed and finished to the required cross-section and grade.

Upon completion of the cleaning and dressing, the Project shall appear uniform in all respects. All graded areas shall be true to line and grade as shown on the typical sections and as required by the Owner.

All rocks in excess of 1-inch diameter shall be removed from the entire construction area and shall be disposed of the same as required for other waste material. In no instance, shall the rock be thrown onto private property. Overhang on slopes shall be removed and slopes dressed neatly so as to present a uniform, well sloped surface.

All excess excavated material within the limits of the Project shall be removed entirely. All debris resulting from clearing and grubbing or grading operations shall be removed and disposed.

Drainage facilities, such as inlets, catch basins, culverts, and open ditches, shall be cleaned of all debris resulting from the Contractor's operations.

All pavements and oil mat surfaces, whether new or old, shall be thoroughly cleaned. Existing improvements, such as Portland cement concrete curbs, curb and gutters, walls, sidewalks, and other facilities which have been sprayed by the asphalt cement shall be cleaned to the satisfaction of the Owner.

Castings for manholes, monuments, water valves, lamp poles, vaults, and other similar installations which have been covered with the asphalt material shall be cleaned to the satisfaction of the Owner.

### **3.6 CONSTRUCTION ACCEPTANCE**

The Contractor shall protect and care for all seeded and sodded areas until fully established and healthy. Care shall include equipment and labor necessary to provide sufficient and continuous watering of all seeded areas until final acceptance.

The Contractor shall guarantee landscaping materials and workmanship for a period of 2 years following the date of project acceptance. During the 2-year guarantee period, should any seed areas show signs of failure such as dead or dying areas of grass or bare spots, the Contractor shall repair or replace all deficient areas to the satisfaction of the Owner.

### **3.7 PERMANENT SIGNING AND APPURTENANCES**

During the life of the Contract all existing signs, mailboxes and other appurtenances that are damaged or removed shall be replaced by the Contractor at no additional expense to the Owner.

Existing signs may be temporarily relocated to portable sign stands for convenience of construction, subject to the approval of the Owner. When temporarily installed on posts, the signs shall be located as near as practical to their permanent locations and shall have a minimum vertical clearance above the pavement in accordance with the Manual on Uniform Traffic Control Devices (MUTCD). Private signs and appurtenances shall be removed and provided to the Owner.

All portable sign stands shall be designed to rigidly support the sign in position without creating a hazard to the motorist. Portable sign stands shall be furnished by the Contractor and upon completion of the work shall remain the property of the Contractor and shall be removed from the Project.

All signs, unless specified herein, shall be mounted at a height of 7 feet as measured vertically from the ground (finished grade) to the bottom of the sign.

### **3.8 ADJUSTMENT OF NEW AND EXISTING STRUCTURES TO GRADE**

This work consists of constructing and/or adjusting all new and existing utility structures encountered on the Project to finished grade.

Prior to commencing manhole adjustments, a plywood and visqueen cover, as approved by the Owner, shall be placed over the manhole base and channel to protect them from debris.

The castings shall not be adjusted until the contractor has completed his paving operations. The asphalt concrete pavement around the casting shall be cut and removed to a neat circle, the diameter of which shall not exceed 6 inches from the outside diameter of the casting frame. The casting frame shall be brought up to the desired grade. Adjustment of manholes, catch basins and precast concrete vaults shall be made with the use of concrete adjustment rings or bricks. No iron adjustment rings will be allowed. An approved class of mortar (one part cement to two parts of plaster sand) shall be placed between adjustment rings or bricks and casting frame to completely fill all voids and to provide a watertight seal. No rough or uneven surfaces will be permitted inside or out. Adjustment rings or brick shall be placed and aligned so as to provide vertical sides and vertical alignment of ladder steps (if steps are necessary).

**\*\*\* END OF SECTION \*\*\***

**DIVISION 8**

**DOORS AND WINDOWS**

## SECTION 08310

### METAL ACCESS HATCHES

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section consists of the Contractor furnishing and installing 10 aluminum access hatches and accessories as shown on the Plans and as specified herein.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
02530	Utility Structures

##### 1.3 QUALITY ASSURANCE

Access hatches shall be guaranteed against defects in material and/or workmanship for a period of 10 years by the manufacturer.

##### 1.4 EQUIPMENT LIST

The metal access hatches to be installed are as follows:

<u>Location</u>	<u>Clear Opening</u>
Boege Road and SR 4 PRV Vault 1	36" x 72"
Boege Road and SR 4 PRV Vault 2	36" x 72"

#### PART 2 PRODUCTS

##### 2.1 APPROVED MANUFACTURERS

Metal access hatches shall be as manufactured by Halliday Products, Inc., Bilco, L. W. Hatch, or equal.

##### 2.2 ACCESS HATCH TYPE 2

Type 2 access hatches shall be MSU Mississauga Ltd. (72" x 36") MD-H20, or equal. The hatches shall have a 1/4-inch-thick one-piece mill finish, extruded aluminum channel frame, incorporating a continuous concrete anchor. A 1-1/2-inch drainage coupling shall be located in the front left corner of the channel frame, unless shown otherwise on the Plans. A bituminous coating shall be applied to the frame exterior where it comes in contact with concrete. The door

panel shall be 1/4-inch aluminum diamond plate reinforced to withstand a live load of the H-20 designation. The door shall open to 90 degrees and automatically lock with a stainless steel hold-open arm shall incorporate an enclosed stainless steel compression spring assist. The door shall close flush with the frame and rest on a built-in neoprene cushion/gasket. Hinges and all fastening hardware shall be stainless steel. The unit shall lock with a stainless steel slam lock with removable key and have a non-corrosive handle. The unit shall be guaranteed against defects in material and/or workmanship for a period of 10 years.

### **PART 3 EXECUTION**

Units shall be installed as specified herein and as shown on the Plans. The units shall be connected with drain piping as shown on the Plans, and shall be installed according to the manufacturer's recommendations for safe and proper storage.

**\*\*\* END OF SECTION \*\*\***

**DIVISION 9**

**FINISHES**

## SECTION 09900

### PAINTING

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section covers the furnishing and installation of protective coatings, complete-in-place. Special shop coatings and/or factory-applied finishes on manufactured or fabricated items may be specified elsewhere. Regardless of the number of paint coats previously applied, at least two field coats of paint shall be applied to all surfaces unless otherwise specified herein. Field painting is not required for factory prefinished equipment items such as pumps, blowers, motors, etc. Touchup of the factory applied coatings may be required.

The word “paint” as used herein shall be taken to include all protective coatings and incidental materials as required with the exception that anodized aluminum or zinc galvanized coatings shall not be considered as paint.

Unless specifically noted otherwise in these Specifications or on the Plans, all work performed under this Contract (both new work and modifications to existing facilities) shall be painted. If an existing wall or ceiling (or similar surface) is modified in some way, the entire wall or ceiling surface is to be painted.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals
Division 13	Special Construction
Division 15	Mechanical

##### 1.3 REFERENCED STANDARDS

The following standards are referenced and shall be considered a part of these Specifications:

American National Standards Institute (ANSI):

A159.1, Surface Preparation Specifications;

Z53.1, Safety Color Code for Marking Physical Hazards

American Society for Testing and Materials (ASTM):

D4263, Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method

E84, Standard Test Method for Surface Burning Characteristics of Building Materials

National Fire Protection Association (NFPA):  
101, Life Safety Code

Steel Structures Painting Council (SSPC):  
SP-1, Solvent Cleaning  
SP-2, Hand Tool Cleaning  
SP-3, Power Tool Cleaning  
SP-5, White Metal Blast Clearing  
SP-6, Commercial Blast Cleaning  
SP-7, Brush-off Blast Cleaning  
SP-10, Near-White Blast Cleaning  
SP-11, Power Tool Cleaning  
SP-13 Surface Preparation for Concrete Surfaces  
VIS-89, Visual Standard

## **1.4 DEFINITIONS**

### **A. PAINT**

Includes fillers, primers, sealers, emulsions, oils, alkyds, latex, enamels, thinners, stains, epoxies, vinyls, urethanes, shellacs, varnishes and any other applied coating specified within these Specifications or shown on the Plans.

### **B. FINISHED ROOM OR SPACE**

One that has a finish called for on Room Finish Schedule, or is indicated on the Plans, or is specified herein, to be painted.

### **C. PAINTING COVERAGE RATE**

Coverage's expressed in SF/GAL/coat are the manufacturer's published theoretical coverage's in square feet per gallon per coat.

## **1.5 SUBMITTALS**

In addition to the general submittal requirements listed in Section 01300, the following shall be submitted:

1. Written acknowledgment and certification that products submitted meet requirements of standards referenced in this Section.

2. Manufacturer's application instructions for primer and finish coats.
3. Manufacturer's surface preparation instructions.
4. Manufacturer's full line of color samples for color selection by Owner.
5. If products being used are manufactured by a company other than the specified reference standard, the Contractor must provide a complete comparison of the proposed products with the specified reference products per Part 2.1 requirements, including application procedure, coverage rates, and verification that product is designed for intended use. Information must be provided that demonstrates that manufacturer's products are equal to the performance standards of products manufactured by the Tnemec Company, which is the reference standard.
6. Manufacturer's approval of protective coating systems applicator.
7. List of Applicator's experience and qualifications. A minimum of 5-years of experience in the painting of wastewater treatment plant facilities required.

## **PART 2 PRODUCTS**

### **2.1 APPROVED MANUFACTURERS**

The following is an approved coating systems manufacturers list subject to compliance with the Specifications contained herein:

1. Ameron Protective Coatings Division.
2. Sherwin Williams.
3. Tnemec Company.
4. Or equal.

The specified coating shall be understood as establishing the type and quality of coating desired. Other manufacturers' products will be accepted provided sufficient information is submitted to allow the Engineer to determine that the coatings proposed are equivalent to those named. Proposed coatings shall be submitted for review in accordance with these Specifications. Requests for review of equivalency will not be accepted from anyone except the Contractor, and such requests shall not be considered until after the Contract has been awarded.

No substitutions shall be allowed that change the number of coats, thickness or generic type of paint required. All materials shall be brought to the jobsite in the

original sealed and labeled containers of the paint manufacturer and shall be subject to inspection by the Engineer.

No coating materials other than those specified shall be brought to the jobsite. Thinners, driers and oils brought to the jobsite shall be only those recommended and approved by the paint manufacturer.

All paint shall conform to the applicable air quality regulations at the point of application. Any paint material which cannot be guaranteed by the manufacturer to comply, whether specified by product designation or not, shall not be used.

It shall be the responsibility of the Contractor to ensure the compatibility of the field painting products which will be in contact with each other or which will be applied over shop painted or previously painted surfaces. Paint used in successive field coats shall be produced by the same manufacturer. Paint used in the first field coat over shop painted or previously painted surfaces shall cause no wrinkling, lifting, or other damage to the underlying paint.

All paint used for intermediate and finish coats shall be guaranteed by the paint manufacturer to be fumeproof and suitable for wastewater plant atmospheres containing hydrogen sulfide. Any paint that cannot be so guaranteed shall not be used. Paint shall be lead-free and mercury-free if available, but in no case shall the lead or mercury content cause discoloration in a wastewater plant atmosphere.

Tnemec Company products are the reference standard and Tnemec designations for product type are used herein. Requirements for an approved equal product are listed below:

1. For approval of an equal manufacturer. The Contractor shall provide to the Owner in writing a detailed side-by-side comparison of the proposed equal Products Characteristics, Performance Characteristics, and Application Conditions for each Tnemec coating specified in this specification. For consideration for approval this written comparison shall be certified and notarized by an officer of the proposed manufacturer as true and correct.
2. For Products Characteristics this detailed side-by-side comparison shall include for example, but not limited to, Volume Solids, Weight Solids, VOC, Mix Ratio, Zinc Content in Dry Film (by Weight), Spreading Rate per coat, Drying Schedule, Shelf Life and Flash Point.
3. For Performance Characteristics this detailed side-by-side comparison shall include for example, but not limited to, Abrasion Resistance, Corrosion Weathering, Direct Impact Resistance, Dry Heat Resistance, Flexibility, Moisture Condensation Resistance, Pencil Hardness, Salt Fog Resistance, Slip Coefficient and Wet Heat Resistance

4. In addition to the detailed side-by-side comparison for approval of an equal manufacturer, The Contractor shall provide to the Owner in writing five similar installations that have had the proposed or equal coating system and date coating system was put into service. In addition the installations names, locations, and owner's name with contact person and telephone number shall be provided.
5. For consideration for approval as an equal coating system the detailed side-by-side comparison shall be submit, with successful bidder's Shop Drawing at the time of the Preconstruction Conference, along with any proposed monetary adjustments to the contract price. As with all shop drawings, final approval rests with the Owner.
6. As a minimum standard any equal coating system shall have a 5-year service history on its coating system.

## 2.2 PAINT SYSTEMS

### A. DUCTILE IRON PIPE AND FITTING MATERIALS (NON-IMMERSION)

#### 1. Scope

This Section shall apply to exposed ductile iron pipe, fittings and materials that are not continuously or intermittently submerged.

#### 2. Surface Preparation

Provide surface profile in accordance with ASTM D 4417, Method C

#### 3. Coatings

##### Primer System:

Coat One

Product: Omnithane Series 1

MDFT: 2.5 to 3.5 mils

##### Finish System:

Coat One

Product: Hi-Build Epoxoline Tnemec Series N69

MDFT: 4.0 to 6.0 mils

Coat Two	
Product:	Endura-Shield Tnemec Series 1095
MDFT:	3.0 to 5.0 mils
Total MDFT:	9.5 to 14.5 mils

## **PART 3 EXECUTION**

### **3.1 GENERAL**

It is the intent of these Specifications that materials and workmanship be provided such that the highest quality job is obtained. The completed work, prior to acceptance, must be free from runs, skips, mars and any other disfiguring mark due to faulty workmanship or care of the completed work.

It is the responsibility of the Contractor to ensure that all surfaces are prepared in accordance with the written recommendations and directions of the paint manufacturer whose paint is applied.

Approval of conditions shall be obtained from the Engineer prior to applying any or all coats of paint; however, such approval shall not relieve the Contractor of their responsibility of conformance with these Specifications and conformance with the manufacturer's recommendations.

It shall be the responsibility of the Contractor to prevent settling of dust or the occurrence of other conditions detrimental to the finished quality of the job and to repair any damaged paint at no additional cost to the Owner.

Materials or equipment delivered with prime coats shall be touched up as required prior to the application of additional coating(s).

The Contractor shall apply each coating at the rate and in the manner specified by the paint manufacturer. If material has thickened or must be diluted for application by spray gun, the coating shall be built-up to the same thickness achieved with undiluted material. Deficiencies in film thickness shall be corrected by the application of an additional coat(s) of paint. Film thickness shall be determined when dry by the Engineer with a magnetic dry film thickness gauge. The thickness gauge shall be calibrated with test shims.

Where thinning is necessary, only the products of the manufacturer furnishing the paint and for the particular purpose shall be allowed. All thinning shall be done strictly in accordance with the manufacturer's instructions as well as with the full knowledge and approval of the Engineer.

No paint shall be applied when the surrounding air temperature, as measured in the shade, is below 40 degrees F. No paint shall be applied when the temperature of the surface to be painted is below 35 degrees F. Paint shall not be applied to wet or damp surfaces and shall not be applied in rain, snow, fog or mist or when the relative humidity exceeds 85 percent. No paint shall be applied when it is expected that the relative humidity will exceed 85 percent or that the air temperature will drop below 40 degrees F within 18 hours after the application of the paint. Dew or moisture condensation should be anticipated and if such conditions are prevalent, painting shall be delayed until conditions improve to be certain that the surfaces are dry prior to application of paint. No paint shall be applied when the ambient temperature is less than 5 percent F. above the dewpoint. Further, the day's painting shall be completed well within advance of the probable time of day when condensation will occur, in order to permit the paint film an appreciable drying time prior to the formation of moisture.

Manufacturer's recommended drying time shall be construed to mean "under normal conditions." Where conditions are other than normal because of the weather or because painting must be done in confined spaces, longer drying times shall be necessary. The manufacturer's recommendations for recoating time intervals shall be strictly adhered to.

Adequate ventilation, which will effectively remove solvents, shall be provided for proper drying of paints on interior surfaces. A minimum of 7-consecutive calendar days at 70 degrees F following the application of the final coat on submerged surfaces shall be required before submergence. Longer periods shall be allowed prior to submergence if recommended by the paint manufacturer or if weather conditions require a longer curing time.

### **3.2 MIXING AND THINNING**

Paint shall be thoroughly mixed each time any is withdrawn from the container. Paint containers shall be kept tightly closed except while paint is being withdrawn.

Paint shall be factory mixed to proper consistency and viscosity for hot weather application without thinning. Thinning will be permitted only as necessary to obtain recommended coverage at lower application temperatures. Only thinners approved by the paint manufacturer shall be used. In no case shall the wet film thickness of applied paint be reduced, by addition of paint thinner or otherwise, below the thickness recommended by the paint manufacturer.

### 3.3 SURFACE PREPARATION

#### A. GENERAL

Surfaces shall be dry and thoroughly cleaned of foreign materials with all defects filled or removed. All trades employed shall leave the surfaces of their work in such a condition that only minor cleaning, sanding and filling is required of the painting trade for surface preparation.

Hardware, switchplates, machined surfaces, nameplates, lighting fixtures and all other surfaces not to be painted shall be removed or otherwise protected. Drop cloths shall be provided, where necessary, to avoid spotting of surfaces adjacent to the item being painted. Working parts of electrical equipment shall be protected from damage during surface preparation and painting operations.

Ferrous metal cleaning shall be in accordance with Steel Structures Painting Council Specifications (SSPC).

<u>Description</u>	<u>SSPC</u>
White Metal Blast Cleaning	SP-5
Commercial Blast Cleaning	SP-6
Brush-Off Blast Cleaning	SP-7
Near-White Blast Cleaning	SP-10
Preparation of Concrete	SP-13

The words “blast cleaning” or equivalent phrases of equal intent shall be taken to refer to the applicable SSPC specification when used in the paint manufacturer’s recommendations or these Specifications.

Hand tool cleaning shall be used when power tool cleaning is not possible. Hand and power tool cleaning shall be in accordance with SSPC Specifications SP-2, SP-3 or SP-11, respectively.

The blast cleaning profile depth shall be not less than 1 mil or greater than 2 mils. In the case of equipment to which the manufacturer applies a primer coating in the shop after fabrication, the blast profile depth needs to be as noted above.

B. FERROUS METAL, GALVANIZED METAL AND HOLLOW METAL SURFACES

The Contractor shall assure that fabrication, welding or burning is completed prior to the sandblasting operation. The Contractor shall chip or grind off flux, splatter, slag or other laminations left from welding. The Contractor shall remove all mill scale. The Contractor shall grind smooth rough welds and other sharp projections.

The Contractor shall near-white blast clean, in accordance with SSPC SP-10, submerged surfaces and surfaces to 12 inches above highest liquid level, and areas subject to splash or spillage.

The Contractor shall commercial blast clean, in accordance with SSPC SP-6, all interior and exterior structural steel surfaces, surfaces located 12 inches above submerged areas, and surfaces located in areas not subject to splash or spillage where exposed to open bodies of liquids.

The Engineer reserves the right to accept preparation of these surfaces in accordance with SSPC SP-3 for areas not practical or possible to sandblast to SSPC SP-6 requirements.

The Contractor shall near-white blast clean, in accordance with SSPC SP-10 surfaces, subject to heat in excess of 600 degrees F. The Contractor shall power tool or hand clean in accordance with SSPC SP-2 or SSPC SP-3. The Contractor shall apply prime coat on cleaned surfaces within 2 hours of cleaning. The Contractor shall solvent clean galvanized surfaces in accordance with SSPC SP-1.

C. EQUIPMENT

The Contractor shall sandblast the following equipment items or surfaces in accordance with applicable SSPC standards whether prime coated or not:

Shop primed surfaces, which have 2 percent or more of the primed surface damaged.

If catalyzed epoxy prime coat has been exposed to sunlight for longer than 60 days.

### 3.4 APPLICATION

#### A. GENERAL

The Contractor shall mix and apply coatings by brush, roller or spray in accordance with the manufacturer's installation instructions. Spraying equipment shall be inspected and approved in writing by the coating manufacturer. The Contractor shall provide complete coverage's to the mil thickness specified. The thickness specified shall be dry film mil thickness. All paint systems are "to cover." In situations of discrepancy between the manufacturer's square footage coverage rates and mil thickness, mil thickness requirements govern. When color or undercoats show through, the Contractor shall apply additional coats until paint film is of uniform finish and color. The Contractor shall not apply consecutive coats until the Engineer has had an opportunity to observe and approve previous coats.

The Contractor shall apply materials under adequate illumination, shall evenly spread and flow on to provide full, smooth coverage, shall work each application of material into corners, crevices, joints and other difficult to work areas, shall avoid degradation and contamination of blasted surfaces and avoid intercoat contamination, shall clean contaminated surfaces before applying next coat and shall immediately smooth out runs or sags, or remove and recoat entire surfaces. The Contractor shall assure that preceding coats are dry before recoating, shall recoat within the time limits specified by the coating manufacturer and shall allow coated surfaces to cure prior to allowing traffic or other work to proceed.

The Contractor shall coat all aluminum surfaces in contact with dissimilar materials. All fabricated and structural steel shall have prime coat(s) applied in the shop and finish coat(s) applied in the field.

During application of either prime or finish coats, brush coat all weld seams, edges, angles, fasteners and other irregular surfaces to insure a monolithic film, pinhole free surface. Finish coats of paint shall be uniform in color and sheen without streaks, laps, runs, drips, sags or missed areas.

All submerged or intermittently submerged materials shall have surface preparation and coatings applied prior to installation unless otherwise approved by the Engineer. All pipe, pipe supports, and pipe hangers that will be painted shall have surface preparation and coatings applied prior to installation.

## B. PRIME COAT INSTALLATION

The Contractor shall prime all surfaces indicated to be painted, shall touch-up damaged primer coats prior to finish coats and shall assure field-applied coatings are compatible with factory-applied coatings. If coatings are not compatible, and if approved in writing by the Engineer, the Contractor shall apply a 2-mil-thick universal barrier coat recommended by the paint manufacturer prior to applying field coats or completely remove factory coatings and reprime.

The Contractor shall prime ferrous metals bedded in concrete to a minimum of 1 inch below exposed surfaces. The Contractor shall backroll all primer coats applied to existing or new CMU block. The Contractor shall assure sandblasting operations do not result in the embedment of sand particles in paint film. The Contractor shall brush or spray bolts, welds, edges and difficult access areas with primer prior to primer application over the entire surface being coated. The Contractor shall backroll concrete, masonry, gypsum board and plaster surfaces with a roller if the primer has been spray applied.

## C. FINISH SCHEDULE

All work performed under this Contract (both new work and modifications to existing facilities) shall be painted. If the finish schedule requires wall surfaces to be painted in a particular space, the Contractor shall paint all appurtenant surfaces unless specifically noted not to be painted on the Plans. These items to be painted shall include:

1. Ferrous metals.

The Contractor shall paint all exposed interior and exterior surfaces including:

1. Ferrous metals.

The Contractor shall not paint the following elements unless specifically noted on the Plans to be painted:

1. Stainless steel surfaces except as required to identify piping.
2. Exposed to view aluminum surfaces.
3. Galvanized metal surfaces.

4. Fiberglass surfaces except fiberglass piping and piping appurtenances.
5. FRP ductwork unless gel coat color is not acceptable to the Owner.
6. Interior of pipe, ductwork, and conduits.
7. Moving parts of mechanical and electrical units.
8. Code labels and equipment identification and rating plates.
9. Piping, ductwork, or pipe conduit when enclosed between suspended ceiling and overhead slabs or located in pipe chases or surfaces to be lagged.
10. Factory-finished furniture, laboratory casework, metal toilet partitions, kitchen units, lockers, shop and storage equipment or miscellaneous items that have preapproved factory applied finishes.
11. Prefaced masonry, burnished masonry units, or glass masonry.
12. Structural steel or steel deck required to be fireproofed.
13. Contact surfaces of friction-type connections.
14. Pipe and/or duct lagging.

### **3.5 FIELD QUALITY CONTROL**

The Contractor shall be responsible for performing, testing and assuring conformance with all requirements of these Specifications.

The Contractor shall maintain daily records showing:

- Start date of work in each area.
- Date of application for each following coat.
- Moisture content and surface temperature of substrate. Also record weather conditions, ambient air temperature and dew point.
- Provisions utilized to maintain temperature and humidity of work area within paint manufacturer's recommended ranges.

The Contractor shall measure the surface temperature of items to be painted with surface temperature gauges specifically designed for such use. The Contractor shall measure substrate humidity with humidity gauges specifically designed for such use. The Contractor shall measure wet paint with wet film thickness gauges. The Contractor shall measure paint dry film thickness with a Mikrotest gauge calibrated against the National Bureau of Standards "Certified Coating Thickness Calibration Standards." The Engineer may direct measurement of paint thickness at any time during the project to ensure conformance with these Specifications. A sufficient number of dry film thickness measurements shall be made so that there is approximately one measurement for each 100 square feet of surface area painted.

Where a wall or ceiling or other type of surface is disturbed and patched, the Contractor shall repaint entire wall or ceiling. The Contractor shall provide wet paint signs as necessary. The Contractor shall touch up damaged finish coats using the same material as specified for the finish coat.

At the conclusion of all painting activities, Contractor shall submit a painting field test report to the Engineer showing the above information plus results of wet film and dry film thickness tests. Provide four copies of final test report.

### **3.6 PAINTING SITE**

Either shop painting or field painting and surface preparation shall be acceptable when painting work is performed in conformance with this Section, unless the painting is activity specified elsewhere in these Specifications.

### **3.7 PAINT THICKNESS**

All paint thicknesses specified herein are minimum dry film thickness (MDFT). The thickness of paint over metallic surfaces shall be measured with a magnetic thickness gauge; paint thickness over wood or masonry shall vary in accordance with surface texture, but in no case shall the manufacturer's recommended coverage rate be exceeded. The minimum thicknesses given are total coating thickness for the coating specified, including multiple coats of the same material, where applicable.

**\*\*\* END OF SECTION \*\*\***

**DIVISION 13**  
**SPECIAL CONSTRUCTION**

## SECTION 13417

### PRESSURE GAUGES

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section includes furnishing and installing new suction and discharge pressure gauges, as shown on the Plans and specified herein. Discharge pressure gauges shall include all necessary connectors and hardware on all process piping for pumps, blowers, fans, and compressors and at the various locations for a complete and workable installation.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01300	Submittals
15050	Piping Systems
Division 15	Mechanical

##### 1.3 EQUIPMENT LIST

Equipment numbers are as follows:

<u>Item</u>	<u>Quantity</u>	<u>Pressure</u>
PRV Vault Inlet	2	0 – 160 psi
PRV Vault Outlet	2	0 – 100 psi

##### 1.4 PERFORMANCE REQUIREMENTS

Unless otherwise indicated, the discharge pressure gauge scales shall be selected so that the normal operating pressure falls between 50 and 80 percent of full scale. The suction pressure gauges on pumps, blowers, and compressors shall be equivalent to the discharge pressure gauges with a lower range of 30-inch Hg.

Pressure gauges shall be shown on the detailed installation drawings of all piping and connected equipment as specified in Section 15050. Pressure scale range for each pressure gauge shall be in the form of a summary table including all process piping pressure gauges.

##### 1.5 DELIVERY, STORAGE AND HANDLING

All equipment shall be completely factory assembled, skid mounted, crated and delivered to protect against damage during shipment.

All equipment delivered to the site shall be stored as specified in accordance with the manufacturer's instructions.

## **1.6 WARRANTY**

In addition to the warranty required in the General Conditions, the equipment manufacturer shall provide an extended warranty covering defects in material and workmanship for 2 years following the date of substantial completion. The warranty shall be in printed form, shall apply to all similar units, and shall include parts and labor.

## **PART 2 PRODUCTS**

### **2.1 APPROVED MANUFACTURERS**

The pressure gauges shall be Ashcroft Duragage 1279, or approved equal.

The diaphragm seals shall be Ashcroft Type 101, or approved equal.

The structural, mechanical and electrical designs shown on the Plans are based on the equipment manufactured by Ashcroft. Any modifications to the mechanical, structural, electrical, instrumentation and control and other portions of work that may be required to adapt the general layout and details shown on the Plans to the equipment actually furnished shall be at no additional cost to the Owner. All necessary revisions shall be made at Contractor's sole expense. All redesign information prepared by the contractor shall be submitted for review prior to incorporating the redesign into the work.

### **2.2 GENERAL**

The pressure gauges shall be glycerin filled type and shall have all internal parts immersed. Pressure gauges shall be minimum 4 1/2-inch dial size, with non-metallic case, stainless steel bourdon tube with plastic bushings and pinion, and stainless steel selector. Gauges shall be ANSI grade A or better with an accuracy of  $\pm 0.5$  percent.

Gauges measuring liquids shall be supplied with bronze pressure snubber and diaphragm seal. Diaphragm seals shall have silicone DC200 fluid fill and shall have a Type 316 stainless steel body, with 1/4-inch flushing connection and 1/2-inch process connection.

## **2.3 SPARE PARTS**

The Contractor shall provide the manufacturer's recommended spare parts and special tools. All parts and tools shall be suitably identified and effectively protected from moisture and corrosion with appropriate wrappings or coatings or a combination thereof. All parts and tools shall be furnished in sturdy labeled boxes. At a minimum these shall include all special tools and appliances necessary to service, repair, and adjust the equipment.

## **2.4 FACTORY TESTING**

The equipment shall be fully tested at the manufacturer's plant before shipment. Tests shall insure that the equipment will operate as desired under anticipated field conditions. Certified copies of test report(s) shall be submitted to the Engineer prior to shipment.

## **PART 3 EXECUTION**

### **3.1 INSTALLATION**

The pressure gauges and accessories shall be installed as shown on the Plans and as specified herein and in accordance with the manufacturer's instructions.

### **3.3 FIELD TESTING**

The Contractor shall perform the field testing described in Sections 01800 and 11000.

The field test shall insure that the equipment will operate as desired under field conditions. The manufacturer shall provide a formal test procedure and report forms for recording data. The Contractor shall submit the report forms to the Engineer prior to operational testing.

Any defects in the equipment or failure to meet requirements of the Specification shall be promptly corrected by the Contractor.

### **3.4 MANUFACTURER'S SERVICES**

The services of a factory-trained representative of the pressure gauge manufacturer shall be provided. Services shall include a minimum of 1 day onsite. Services shall include inspection of the installation, initial configuration, programming, startup, and adjustments and instruction of the Owner's personnel in operation and maintenance. Instruction and training of the Owner's personnel shall not take place until startup is completed and the pressure gauges are fully

operational and shall be at a time and location agreed to by the Owner. The cost of these services shall be included in the bid price.

**\*\*\* END OF SECTION \*\*\***

**DIVISION 15**  
**MECHANICAL**

**SECTION 15050**  
**PIPING SYSTEMS**

**PART 1 GENERAL**

**1.1 SCOPE**

The work specified in this Section describes process and utility piping, fittings, supports, and accessories shown on the Plans, described in these Specifications and as required to completely interconnect all equipment with piping for complete and operable systems.

The Contractor shall direct the attention of all subcontractors and suppliers of piping systems and related appurtenances for the work to the applicable provisions in the Contract Documents wherever they may occur.

**1.2 RELATED WORK SPECIFIED ELSEWHERE**

<u>Section</u>	<u>Item</u>
01300	Submittals
01800	Testing, Commissioning and Training
02300	Earthwork
Division 13	Special Construction
Division 15	Mechanical

**1.3 STANDARDS FOR THE WORK**

Pipe, fittings, and supports shall be provided to produce complete, operable systems with all elements properly interconnected as shown in schematic diagrams or to provide specified operations. If a specific dimensioned location is not shown for interconnections or smaller system elements, the Contractor shall select appropriate locations and show them on Shop Drawing submittals for review.

Piping systems and materials shall be new and without imperfections and shall be erected in a neat and workmanlike manner; aligned, leveled, cleaned and adjusted for satisfactory operation; installed in accordance with the best standard practices for this type of work so that connecting and disconnecting of piping and accessories can be readily made and so that all parts are easily accessible for inspection, operation, maintenance and repair. In order to meet these requirements minor deviation from the Plans may be made as approved by the Engineer.

## 1.4 PIPE MATERIALS

The materials to be utilized for the various pipe sizes and applications on the project shall be as follows, unless otherwise noted on the Plans or herein:

Process		Inside	Buried
Air	AIR	Galvanized Steel, THD	Galvanized Steel, THD
Drain $\leq 4$ "	D	Solvent Welded PVC (40)	----
Drain $\geq 4$ "	D	----	CPEP
Potable Water	W	Steel, Schedule 40	Ductile Iron

## 1.5 SUBMITTALS

Submittal data shall be supplied in accordance with Section 01300. Detailed installation drawings of all piping and connected equipment shall be submitted. The drawings shall include all piping, valves, fittings, pipe support locations and types, seismic bracing, and appurtenances.

Submit data to show that the following items conform to the Specification requirements:

- A. Pipe, fittings, and accessories.
- B. Valves.
- C. Couplings and couplers.
- D. Pipe supports and seismic braces as required herein.

Submit certified test reports as required herein and by the referenced standards.

## PART 2 PRODUCTS

### 2.1 GENERAL

Pipe sizes are nominal inside diameter unless otherwise noted.

All materials delivered to the job site shall be new, free from defects, and marked to identify the material, class and other appropriate data such as thickness for piping.

Acceptance of materials shall be subject to strength and quality testing in addition to inspection of the complete product. Acceptance of installed piping systems shall be based on inspection and leakage tests as specified in Part 3 Execution of this Section.

All piping in contact with potable water shall be certified under NSF 61 and NSF 372 for potable water use.

All buried, submerged, or intermittently submerged piping that is bolted together or uses bolts to hold materials together shall use 316 stainless steel nuts, bolts, and washers. This requirement applies to a distance of 12 inches above the highest water level in any tank, channel, or structure. Otherwise, bolts, nuts, and washers may be hot-dip galvanized steel.

## **2.2 DUCTILE IRON PIPE AND FITTINGS**

### **A. GENERAL**

Ductile iron pipe shall be centrifugal cast pipe conforming to AWWA C151, Class 52, unless otherwise noted, cement mortar lined in accordance with, AWWA C104. Where flanged spools are utilized, all spools shall be Class 53.

All above ground piping shall be flanged piping unless otherwise specified or indicated.

Below ground piping shall be push on joint or mechanical joints unless otherwise specified or indicated. Mechanical joints shall comply with AWWA C111.

All mechanical joints shall be restrained joints with a retainer. The restrainer shall utilize the full circumference of the pipe for restraining and utilize standard MJ gasket and bolts. The restrainer shall be Grip Ring as manufactured by Romac Industries, Mega-Lug, or equal.

All push on joints shall be restrained with field lock gaskets or TR Flex pipe from US Pipe or equal.

Flanges shall comply with ANSI B16.1, Class 125. Flange gaskets shall be full face. Approved adaptor flanges shall be used instead of flanges where shown on the Plans.

Fittings shall be ductile iron and shall comply with AWWA C110 or AWWA C153, cement mortar lined, 250-psi minimum pressure. Fittings shall be mechanical joint or flanged fittings. Fittings shall not be "Tyton" or other push-on type joint.

The exterior of buried ductile iron pipe and fittings and pipe and fittings in contact with concrete shall be coated with bituminous coating. The exterior surface of ductile iron pipe and fittings inside of buildings,

structures, and vaults shall be painted in accordance with Section 09900 of the Specifications.

All bolts not in contact with potable water shall be coated with Armite Anti-Seize Compound No. 609, or equal, prior to installation. All bolts in contact with potable water shall be coated with an NSF-61 approved anti-seize compound, SAF-T-EZE, or equal, prior to installation.

## **2.3 PVC PIPE AND FITTINGS**

### **A. PRESSURE PIPE**

All PVC pipe 3 inch and smaller shall be Schedule 80. Pipe shall be constructed of material that meets or exceeds ASTM D2241 and D1784 and Commercial Standard CS 256. Joints shall be solvent weld with press fit. Fittings shall conform to ASTM D2466 and D2467 for socket type and ASTM D2464 for threaded pipe.

Provisions for pipe expansion shall be as recommended by the pipe manufacturer.

Bolts for PVC pipe, where required, shall be 316 stainless steel, ASTM A193, Grade B8M, hex head with ASTM A194, Grade 8M hex nuts. Washers of the same material shall be supplied.

## **2.4 GALVANIZED STEEL PIPE AND FITTINGS**

Steel pipe shall be general service, carbon steel pipe conforming to ASTM A53, Grade A, Type E. Pipe shall be Schedule 40 with threaded and coupled fittings. Galvanized pipe and fittings shall be hot-dip galvanized.

## **2.5 CORRUGATED POLYETHYLENE PIPE**

Corrugated polyethylene pipe (CPEP) and fittings shall conform to the requirements of AASHTO M-252 and AASHTO M-294, Type S. Fittings shall be as shown on the Plans and as required to provide a complete piping system and meet the same requirements as the CPEP. The CPEP shall be installed to the lines and grades shown on the Plans.

## **2.6 STAINLESS STEEL TUBING**

Stainless steel tubing shall be seamless welded austenitic Type 304 stainless steel tubing. All tubing materials and connections shall conform to ASTM A269.

Variations in the tubing outside diameter and wall thickness shall not exceed the amounts prescribed in ASTM A 269 Table 3. All Type 304 stainless steel tubing material shall conform to the chemical composition requirements of ASTM A 264 Table 1.

## **2.7 GROOVED PIPING CONNECTIONS**

As stated herein, grooved piping connections may be utilized in lieu of flanged, push-on, mechanical joint, or other above-grade piping connections noted above. For piping types *not* listed below, grooved couplings are not acceptable.

All grooved couplings, fittings, valves, and specialties shall be the products of a single manufacturer. Grooving tools shall be of the same manufacturer as the grooved components.

All castings used for couplings housings, fittings, or valve and specialty bodies shall be date stamped for quality assurance and traceability.

### **A. DUCTILE IRON PIPE & GLASS LINED DUCTILE IRON PIPE**

Grooved couplings shall comply with AWWA C606 and shall be Victaulic Style 31 or equal.

Adapter flanges, where required for pipe connection or where shown on the Plans shall be Victaulic Style 341.

For direct connection between IPS/steel pipe and AWWA / ductile iron pipe, couplings shall Victaulic Style 307.

Where grooved couplings are utilized, spools as shown on the Plans shall be Class 53 materials.

### **B. STAINLESS STEEL PIPE (LIQUID SERVICE)**

Victaulic Rigid Style 89 or W89 with ductile iron housings, or Style 489 with stainless steel housings

### **C. GROOVED PIPE COUPLERS**

Grooved pipe couplers for steel pipe shall consist of two ductile iron housing segments conforming to ASTM A536, pressure responsive elastomer gasket, and ASTM A449 zinc electroplated steel bolts and nuts. Couplings shall comply with ASTM F1476 “Standard Specification for the Performance of Fittings for Use with Gasketed Mechanical Couplings Used in Piping Applications.”

1. Rigid Type

Housings shall be cast with offsetting angle-pattern bolt pads to provide rigidity and system support and hanging in accordance with ANSI B31.1 and B31.9.

a. 2-inch through 12-inch

Installation-Ready, for direct stab installation without field disassembly, with grade EHP center leg gasket with pipe stop to ensure proper groove engagement, alignment, and pipe insertion depth, rated to +250 degrees F. Couplings shall be Victaulic Style 107N, or approved equal.

The gaskets shall be suitable for use with the carrying media.

**2.8 MISCELLANEOUS FITTINGS**

A. FLEXIBLE COUPLINGS

Flexible couplings shall be Romac 501 or approved equal. Middle ring and follower shall have fusion bonded epoxy coating. All buried flexible couplings shall be furnished with stainless steel bolts and nuts.

Harness lugs and tie bolts for harnessed joints on steel pipe shall comply with AWWA M-11, Third Edition and as shown on the Plans. All buried harnessed joints shall be furnished with stainless steel tie bolts and nuts.

B. FLANGED COUPLING ADAPTERS

Flanged coupling adapters shall be Rockwell (Smith-Blair) Type 912, Dresser Style 127, Victaulic, or equal.

C. ADAPTER FLANGES

Adapter flanges for ductile iron pipe shall be manufactured of high strength ductile iron, ASTM A536, Grade 65-45-12. Flange dimensions shall be in accordance with ANSI B16.1, 125-lb. pattern. Gasket shall be Buna-N. Setscrews shall be AISI 4140, high strength, low alloy steel. The adapter flanges shall be Uni-Flange Series 400, or equal.

D. CALDER-TYPE FLEXIBLE COUPLINGS

Flexible couplings shall be Calder-type where specifically indicated on the Plans. Calder-type flexible couplings shall consist of all elastomeric PVC sleeve secured to the pipes with stainless steel clamping bands. Adapter couplings shall be furnished for transitions between piping of different outside diameters as necessary.

Calder-type flexible couplings shall be as manufactured by Calder Co., Fernco, or equal.

E. FLEXIBLE CONNECTORS AND EXPANSION JOINTS

Flexible connectors and expansion joints shall be provided where shown on the Plans. The flexible connectors and expansion joints shall be provided with Class 125 ANSI flanges and be single arch-type multiple ply rubber or synthetic elastomers, complete with steel retaining rings, as manufactured by the Red Valve Company, Inc., the Metraflex Company, or equal.

F. DIELECTRIC INSULATED UNIONS

Dielectric insulated unions shall be used to connect dissimilar metals. They shall separate the metals so that the passage of more than one percent of the galvanic current, which would exist with metal to metal contact, is prevented. Unions shall be of the same material as the pipe to which attached, and pressure and temperature ratings shall be no lower than that of the piping system in which it is installed.

G. WALL SLEEVES AND SEALS

Wall and/or floor pipe penetrations shall be made by means of a sleeve capable of being bolted directly to the formwork to prevent misalignment. Seal of the annular space between the carrier pipe and the sleeve shall be by means of a confined rubber gasket and capable of withstanding 350 psi. Sleeve shall be manufactured from Ductile Iron with an integrally cast waterstop of 1/2-inch minimum thickness and 2-1/2-inch minimum height. Wall sleeves shall be omni\*sleeve or equal.

Seals for pipe sleeves shall be bolt-up type consisting of interlocking synthetic rubber links shaped to continuously fill the annular space between the pipe and the sleeve. When bolts are tightened the rubber sealing elements shall expand to result in a watertight seal. Bolts and pressure plate nuts shall be Type 316 stainless steel in below grade or "wet" locations, and of carbon steel at other installations. Rubber links

shall be suitable for use in water, moist environments, normal atmospheric conditions, and -40 degrees F to 250 degrees F temperatures for standard service.

#### H. STAINLESS STEEL PIPE EXPANSION COUPLINGS

Stainless steel pipe expansion couplings shall be restrained and still allow for expansion. Expansion couplings shall be Type 304 stainless steel body with Type 316 stainless steel sealing plate and end rings. Sealing pad and O-rings shall be silicone and all bolts shall be Type 316 stainless steel. Stainless steel pipe expansion couplings shall be Depend-o-Lok FxF Type 2 Modified Couplings or equal.

### **PART 3 EXECUTION**

#### **3.1 PIPING INSTALLATION**

##### A. GENERAL HANDLING AND PLACING

All piping constructed on this project shall be performed in accordance with the Uniform Plumbing Code. These Plans do not detail all items such as complete venting, etc.; however, it is understood that this work shall be included as a part of this Section and all costs included in the lump sum bid.

Pipe and accessories shall be handled in such a manner as to insure delivery on site in sound, undamaged condition. Particular care taken not to injure pipe coating. No other pipe or material of any kind shall be placed inside of lined pipe or fitting after lining has been applied. All pipe and fittings shall be unloaded, stored, handled in such a manner as to insure against damage. Dropping of pipe or fittings shall be cause for rejection.

The types and sizes of pipes to be used shall be as specified herein and as shown on the Plans. Where sizes of small pipe are omitted from the plans and not mentioned in the Specifications, the sizes to be used shall correspond to plumbing code requirements. In any event, undesignated pipe sizes shall be proper for the function to be performed and as accepted by the Engineer.

All pipe shall be carefully placed and supported at the proper lines and grades and where possible shall be sloped to permit complete drainage. Piping runs shown on the Plans shall be followed as closely as possible, except for minor adjustments to avoid architectural and structural features. If major relocations are required, they shall be approved by the Engineer.

Unions shall be installed in all threaded joint piping to facilitate the removal of sections for maintenance and repair in accordance with the best trade practice. Unions shall be ground joint, malleable iron type. Where unions connect dissimilar materials, the union shall be protected from reaction with dissimilar metals by installation of insulating materials and dielectric unions at contact points.

The interior of all piping shall be cleaned after assembly and before connecting to equipment.

All piping for which no location dimensions are shown shall be installed in a neat and workmanlike manner in accordance with best trade practice. Wherever possible runs and rises shall be grouped and kept parallel. Properly lay out all miscellaneous piping to clear obstructions such as passageways, equipment, larger sized pipes, ventilation ducts, lights, etc.

Whenever pipe requires field cutting to fit in line, work shall be done by a machine in a satisfactory manner so as to leave a smooth end at right angles to axis of pipe.

All piping to be buried below structures, foundations, or slabs shall be installed with extreme care. When all joints have been made, Contractor shall demonstrate to Engineer's satisfaction that all of piping is watertight and that all lines are clear before proceeding with any work above this piping. It shall be Contractor's responsibility to see that these lines are kept clear until final acceptance of the project, providing suitable tight wooden bulkheads or plugs for open end pipes. Any blockage of these systems due to earth, debris, cement slurry or anything else shall be rectified at Contractor's expense before project is accepted.

All pipe shall be installed in strict accordance with manufacturer's recommendations and/or specifications, and best commercial trade practice. Any special tools required for laying, jointing, cutting, etc., shall be supplied and properly used. All pipe shall be kept thoroughly clean until acceptance of completed work, and shall conform accurately to lines and grades given. At all times during pipe laying operations keep trench free of water either by pumping, bailing, or drainage. Seal end of line with a tight-fitting plug when pipe is not being laid.

Valves shall have interiors cleaned of all foreign matter and inspected, both in open and closed positions prior to installation.

All pipes running through concrete walls below water surface or where subject to groundwater pressure shall be assembled as shown on the plans.

Pipes running through concrete not subject to water pressure may be installed through standard steel sleeves, one or two pipe sizes larger than pipe in question. The pipe shall be free of all dirt and grease and thoroughly cleaned to insure a tight bond with the concrete.

All above ground outside pipe carrying liquids shall be insulated.

#### B. GENERAL EXPOSED PIPING INSTALLATION

Unless shown otherwise, piping shall be installed parallel to building lines, plumb, and level.

Piping shall be installed without springing or forcing.

All pipe flanges shall be set level, plumb, and aligned. All flanged fittings shall be true and perpendicular to the axis of the pipe. All bolt holes in flanges shall straddle vertical centerline of pipes.

Flexible couplings shall be provided for all piping connections to motor-driven equipment and where otherwise shown in the Plans. The Contractor may install additional flexible couplings at approved location to facilitate piping installation, provided that he submits complete details describing location, pipe supports, and hydraulic thrust protection.

Unions or flexible couplings shall be installed where shown on the Plans, and at all non-motor-driven equipment to facilitate removal of the equipment.

Where equipment drain connections are provided, they shall be valved, with the discharge pipe carried to the nearest floor drain, drain trench, or sump. Where no receptacle for drain exists, drain valves shall be piped to 1 inch above the floor. Drain piping and valve materials shall conform to the requirements of the system served.

All exposed or submerged piping shall be painted and color-coded in accordance with Section 09900, unless otherwise specified.

### 3.2 PVC PIPING

#### A. GENERAL

PVC piping socket weld connections shall be made up in accordance with the pipe manufacturer's recommendations and as follows:

Where pipe is cut, remove all burrs and ream inside to provide smooth flow line. Bevel the plain end pipe 1/16 inch to 1/32 inch. Joints shall be first cleaned with cleaner before making up. Apply primer to the female joint. Apply primer to the male joint. Reapply primer to the female joint. Apply glue to the male joint. Apply glue to the female joint. Reapply glue to the male joint. Join pipe quickly with a 1/4 turn. If joint cannot be made up to full depth of socket, cut out and discard. Wipe off excessive cement. Hold for 30 seconds and do not move for 15 minutes after making up joint. Pipe joining below 40 degrees F will not be permitted. Cleaner and cement types shall be as recommended by the manufacturer for the size of pipe being used.

### **3.3 FLANGED PIPING**

Flanged joints shall be made in accordance with best trade practice. Screwed flanges for piping shall be run until pipe projects beyond face and no more than one thread is exposed on backside. All flange faces shall then be machined so as to be perfectly parallel. All flanged pipe shall be accurately dimensioned; no “drawing-up” will be allowed. Gaskets shall be full face, rubber.

### **3.4 GROOVED JOINT PIPING**

Grooved joints shall be installed in accordance with the manufacturer’s latest published installation instructions. Grooved ends shall be clean and free from indentations, projections, and roll marks in the area from pipe end to groove. Gaskets shall be of an elastomer grade suitable for the intended service, and shall be molded and produced by the coupling manufacturer. The grooved coupling manufacturer’s factory trained representative shall provide on-site training for Contractor’s field personnel in the use of grooving tools and installation of grooved joint products. The representative shall periodically visit the jobsite and review that the Contractor is following best recommended practices in grooved product installation. (A distributor’s representative is not considered qualified to conduct the training or jobsite visit(s).)

### **3.5 THREADED PIPING**

Threads for threaded joint piping shall be neatly cut with sharp tools and jointing procedure shall conform to best practice. Before jointing, all scale shall be removed from pipe by some suitable means such as pounding. After cutting, all pipe shall be reamed. All pipe shall be screwed together with an application of approved pipe compound applied to all male threads. Once a joint has been tightened, it shall not be backed off unless threads are recleaned and new compound applied. This application neatly made; all compound, dirt thoroughly wiped off outside of every joint.

Unions shall be installed in all threaded joint piping to facilitate removal of sections for maintenance, repair in accordance with best trade practice. All such unions shall be included in bid price whether shown on Plans or not.

### **3.6 MECHANICAL JOINT PIPING**

Mechanical joint piping shall be installed in best trade practice with torque wrenches used to avoid overstressing bolts. Piping shall be installed using recommended procedures outlined in "Handbook of Cast Iron Pipe" as published by Cast Iron Research Association which in part requires that all contact surfaces of rubber seal with pipe be wire brushed, spigot be centrally located in bell. When tightening bolts, it is essential that the gland be brought up toward pipe flange evenly, maintaining approximately same distance between gland and face of flange at all points around socket.

### **3.7 WELDED PIPING**

All welding shall be by the inert gas, MIG, or TIG method. Procedures are in accordance with ASME B31.1. Filler wire shall be added to all welds to provide for a cross section and weld metal equal to or greater than the parent metal. Butt welds shall have full penetration to the interior surface and gas shielding shall be provided to the interior and exterior of the joint mechanically bevel pipe ends.

Interior weld beads shall be smooth, evenly distributed with an interior projection not exceeding 1/16-inch beyond the ID of the air header or fittings.

The outside welds shall be wire brushed. Brushes shall be of stainless steel and used only on stainless steel.

### **3.8 PIPE SUPPORTS**

Provide all necessary supports, tie rods, bracing, brackets or other types of supports which may be required, as shown on the Plans, or as specified in Section 15066.

### **3.9 FLEXIBLE COUPLINGS**

Flexible couplings shall be installed in accordance with recommendations of manufacturer and used where indicated on the Plans. Finished joint shall be airtight or watertight under test pressure of pipeline. Buried flexible couplings shall be coated with asphalt base paint after assembly.

### **3.10 PIPE BEDDING**

All pipe shall be bedded as specified in Section 02300.

### 3.11 TESTING

#### A. GENERAL

All piping shall be tested and inspected in accordance with the provisions of Division 7 APWA/WSDOT, except as modified herein. Where new piping systems are being connected to existing piping systems the existing piping systems shall be tested prior to connecting to the new pipe to the existing piping. Once the new piping system has been connected to the existing piping system the entire system shall be tested again.

All piping systems will be tested to demonstrate leak tightness prior to acceptance. The Contractor shall provide all equipment and labor necessary to perform all testing required herein, the costs to be included in the lump sum bid price.

Each particular piping system shall be tested as hereinafter specified. All leaks shall be repaired or defective material replaced and the test repeated as directed by the Engineer. After compliance with test requirements and approval of the Engineer, the field painting, where required, may be started. All pressure testing shall be done prior to any finish painting or pipe insulating.

The Contractor shall be responsible for repair of any damage resulting from or caused by leak testing.

All thrust blocks shall be in place for at least 7 days to allow concrete to cure before testing. Install adequate blocking or other means of resisting test pressure.

#### B. DISINFECTION

Before being placed into service, all new and modified potable water pipe and appurtenances shall be sterilized and a satisfactory bacteriological report obtained in accordance with Section 7-09.3(24) of the WSDOT Standard Specifications.

As each pipe is laid, sufficient high-test dry calcium Hypochlorite (65 to 70 percent chlorine) shall be placed in the pipe to yield a dosage of not less than 50 mg/l available chlorine, calculated on the volume of water which the pipe and appurtenances will contain. Minimum free chlorine residual after 24 hours shall be 25 mg/l.

During the process of sterilizing, all valves, hydrants, and/or other appurtenances shall be operated to insure complete contact. All closure fittings shall be swabbed with a very strong chlorine solution at least as strong as liquid household bleach (5 to 6 percent chlorine).

Following chlorination, all pipe shall be flushed to remove any solids until a test shows no more than 0.2 parts per million available chlorine. If no hydrant is installed at the end of the main, then a tap shall be provided large enough to develop a velocity of at least 2.5 FPS in the main.

Before placing the lines into service, a satisfactory report shall be received from the local or state health department on samples collected from representative points in the new pipe after the 24-hour sterilization period has elapsed. Samples for bacteriological tests in the presence of the Owner and transported by the Owner.

Should the initial treatment result in an unsatisfactory bacteriological test or should corrective work be required because of testing, then the chlorination procedure shall be repeated by the Contractor at their own expense until satisfactory results are obtained. These repeat procedures shall follow Section 7-09.3(24) of the WSDOT Standard Specifications, as appropriate and as necessary for the addition of chlorine. The cost of disposal of water used for disinfection shall be borne by the Contractor.

**\*\*\* END OF SECTION \*\*\***

## SECTION 15066

### PIPE AND CONDUIT SUPPORT SYSTEM

#### PART 1 GENERAL

##### 1.1 DESCRIPTION OF WORK

The work specified in this Section includes pipe and conduit hangers, brackets, and supports. Pipe and conduit support systems shall be furnished complete with all necessary inserts, bolts, nuts, rods, washers, structural attachments, and other accessories as shown on the Plans and specified herein.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01200	Measurement and Payment
01300	Submittals
01800	Testing, Commissioning, and Training
15050	Piping Systems

##### 1.3 REFERENCES

All pipe and conduit support materials and methods shall conform to the latest, applicable requirements of documents listed hereafter. In case of conflict between this section and the listed documents, the requirements of this Section shall prevail.

ANSI A13.1	Piping and Piping System
ANSI B31.1	Power Piping
ASME	Boiler and Pressure Vessel Code
ANSI/MSS SP-58	Pipe Hangers and Supports C Materials, Design and Manufacture
ANSI/MSS SP-69	Pipe Hangers and Supports C Selection and Application
SMACNA	Seismic Restraint Manual C Guidelines for Mechanical Systems
IPC	International Plumbing Code

## **1.4 SUBMITTALS**

In accordance with the requirements of Section 01300, submit the following project data prepared by a licensed Professional Engineer:

- A. Manufacturer's technical data for all hangers, brackets, supports and documentation of conformance with appropriate standards and these specifications.
- B. Location of pipe and conduit support, including type of structural and pipe attachments, shown on detail drawings and/or specified under paragraph 1.5 of Section 15050.

## **PART 2 PRODUCTS**

### **2.1 GENERAL**

The Contractor shall design, provide, and install pipe and conduit support systems, which include hangers, brackets, supports, anchors, expansion joints, and structural attachments. The support system shall be pipe rack, trapeze pipe hangers or individual pipe clamps, hangers, supports and structural attachments as specified herein. The support system shall be designed in conjunction with the pipe and conduit to be supported. Seismic restraints shall be provided in accordance with SMACNA Manual as referenced in paragraph 1.3.

In certain locations, pipe supports, anchors, and expansion joints have been indicated on the Plans, but no attempt has been made to indicate every pipe support, anchor, and expansion joint. It shall be the Contractor's responsibility to provide a complete system of pipe and conduit supports. Pipe support schedule under paragraph 2.7 of this Section sets forth minimum requirements for pipe supports.

### **2.2 PIPE RACKS AND TRAPEZE HANGERS**

Pipe and conduit racks and trapeze hangers shall be constructed of galvanized steel channels, rods, posts, post base, clamps, brackets, fittings, and accessories for supporting pipes in equipment and pump rooms. All components for pipe and conduit rack and trapeze shall be Unistrut or equal.

### **2.3 PIPE CLAMPS AND HANGERS**

In areas where pipe racks and trapezes are not used, pipe shall be supported with clamp hangers and stanchion saddle support system. The clamps and hangers shall be fastened to threaded rods hanging from structural attachments. Pipe supports shall be selected for the size and type of pipe to which they are applied.

Strap hangers will not be acceptable. Threaded rods shall have sufficient threading to permit the maximum adjustment available in the support item.

All pipe clamps and hangers, including all accessories, shall be galvanized steel for indoor use and Type 316 stainless steel for outdoor use.

Pipe and conduit clamps and hangers shall be as manufactured by Anvil or equal and shall be as follows:

<b>Type</b>	<b>Pipe Size (In.)</b>	<b>Pipe Material</b>	<b>Anvil Figure</b>
Swivel Ring, Split Type	3/4 to 8	All type	104
Split Clamp	1/2 to 3	All type	138R
Adjustable Ring	1/2 to 6	All type	97
Adjustable Ring	1/2 to 4	Copper	CT-269
Adjustable Clevis	3 to 24	All type	590
Pipe Clamp	3 to 42	All type	216
Socket Clamp	4 to 24	Cast Iron	595
Pipe Stanchion	4 to 24	All Type	63
Stanchion Saddle	4 to 36	All type	259
Adjustable Saddle Support	3 to 36	All type	264
Riser Clamp	2 to 24	All type	40
Adjustable Pipe Roll	6 to 12	Stainless Steel	177, 181, or 274

## **2.4 STRUCTURAL ATTACHMENTS**

Structural attachments shall be concrete insert channels or individual inserts for new concrete, surface-mounted channel or individual inserts for existing concrete or where applicable, steel, roof plate supported attachments in the control building, complete with all accessories required. All structural attachments including all accessories shall be galvanized steel for indoor use and stainless steel for outdoor use, and shall be provided by a single manufacturer. Structural attachments shall be as measured by Unistrut Corporation or approved equal.

## **2.5 PIPE SUPPORT ATTACHMENTS TO CONCRETE**

All pipe support attachment to concrete shall be in adhesive anchors unless noted otherwise.

Products which may be incorporated in the work include, but are not limited to, the following:

- A. HIT RE 500 Injection Adhesive Anchor, Hilti, Inc.

- B. HIT HY 150 Injection adhesive Anchor, Hilti, Inc.
- C. Power-Fast, Powers Fasteners, Inc.

**2.6 PROTECTION SADDLES**

Protection saddles shall be used for protecting pipe insulation against damage at pipe supports or as shown on the Plans. The nominal thickness of covering shall be the same as that of pipe insulation. The protection saddles shall be curved carbon steel plate and shall be Anvil Figure 160 through Figure 166 or approved equal.

**2.7 SPACING**

Maximum support spacing shall conform to the following table:

Pipe Size Inches	Pipe Material	Maximum Spacing Feet
1" & Smaller	Iron or Steel	6
	Copper Plastic Tubing	4-1/2 continuous continuous
1-1/4 to 2"	Iron or Steel	8
	Copper or Plastic	5
2-1/2 to 4"	Iron or Steel	10
	Copper or Plastic	6
6 to 8"	Iron or Steel	12
	Plastic	8

**PART 3 EXECUTION**

**3.1 INSTALLATION**

Pipe support system shall be installed strictly in accordance with standards and codes referenced in paragraph 1.3 of this Section and piping support system manufacturer and piping manufacturer’s recommendations.

In addition, all piping shall be rigidly support and anchored so that there is no movement or visible sagging between supports.

Contact between dissimilar metals, including contact between stainless steel and carbon steel, shall be prevented. Supports for brass or copper pipe or tubing shall be copper-plated. Those portions of pipe supports, which contact other dissimilar metals, shall be rubber or vinyl coated.

Anchorage shall be provided to resist thrust due to temperature changes, changes in diameter or direction, or dead-ending. Anchors shall be located as required to force expansion and contract movement to occur at expansion joints, loops, or elbows, and as required to prevent excessive bending stresses and opening of mechanical couplings. Anchorage for temperature changes shall be centered between elbows and mechanical joints used as expansion joints. Anchorage for bellows type expansion joints may be located adjacent to the joint.

Pipe supports and expansion joints are not required in buried piping, but concrete thrust blocking or other approved anchorage shall be provided as indicated on the Plans or specified in other sections.

**\*\*\*END OF SECTION \*\*\***

## SECTION 15100

### VALVES

#### PART 1 GENERAL

##### 1.1 SCOPE

The work specified in this Section shall consist of valves and accessories as shown on the Plans, described in these Specifications, and as required to completely interconnect all equipment with piping for complete operable systems.

##### 1.2 RELATED WORK SPECIFIED ELSEWHERE

<u>Section</u>	<u>Item</u>
01200	Payment
01300	Submittals
01800	Testing, Commissioning and Training
Division 11	Equipment
Division 15	Mechanical

##### 1.3 SUBMITTALS

Submit Catalog cuts and shop drawings in accordance with Section 01300 to demonstrate that the valves and appurtenances conform to the Specifications requirements.

The Contractor shall furnish manufacturer's installation and operation manuals, bulletins, and spare parts lists for all valves.

##### 1.4 QUALITY ASSURANCE

All materials and equipment furnished under this Section shall be by the manufacturer specified.

All materials in contact with potable water shall be NSF 61 and NSF 372 certified for potable water use.

#### PART 2 PRODUCTS

##### 2.1 GATE VALVES

Gate valves 3 inches and smaller shall be bronze, non-rising stem, wedge disc, 125 pound service, Crane No. 438, Kennedy Figure 427, Victaulic, or equal.

Gate valves larger than 3 inches shall be iron body, bronze mounted, resilient seat, wedge disc, left opening, high-strength bronze stem, O-ring with a 2-inch-square operating nut and complying with AWWA C509 or C515. Gate valves shall be non-rising stem unless noted otherwise.

Above ground gate valves shall be provided with handwheels.

## **2.2 COMBINATION AIR AND VACUUM VALVES**

The combination air and vacuum release valve shall allow unrestricted venting or re-entry of air, through it, during filling or draining of the pipeline, to prevent water column separation or pipeline collapse during vacuum. The air-vacuum release valve shall incorporate one upper and one lower stainless steel float connected by a common stainless steel float guide, thereby maintaining an air gap between the bottom float and top shut-off float. The internal baffle shall be fitted with a guide bushing and act to protect the shut-off float from direct air flow. The baffle shall retain the 45 Durometer Buna-N seat in place, without distortion, for thigh shut-off. All internals shall be easily removed through the top cover without removing the main valve from the lines. Both floats shall withstand 1,000 psi or more. Valve shall be fitted with blow off valves, quick disconnect couplings and a minimum of 6 feet of hose, to permit back flushing after installation without dismantling the valve. The combination air-vacuum release valves shall be APCO Model Series Series 100 (Water), or equal, with a shut-off and outlet valve, unless otherwise noted on the Plans.

Air release valves on potable and non-potable water pipes shall be APCO Models 50 or 55, or equal. Each air valve shall be provided with an isolation valve for isolation on the inlet side. A vent pipe shall be routed from the valve to within 12 inches of the floor, unless otherwise noted on the Plans. Orifice shall be sized for maximum system pressure. Valve body shall have a minimum pressure rating of 150 psi. Pins, levers, retaining rings, float ball and internal screws shall be stainless steel.

## **2.3 HYDRAULICALLY OPERATED CONTROL VALVES**

### **A. PRESSURE REDUCING VALVES**

1. Type: Globe
2. Size: 2-inch, 6-inch
3. Pressure Rating: 150 psi
4. Body: Ductile Iron
5. Ends: Flange
6. Trim (Disc Guide, Seat, Cover Bearing): Stainless Steel
7. Manufacturer: Cla-Val, Model 90G-01BCSY

The pressure reducing valve automatically reduces a higher inlet pressure to a steady lower downstream pressure, regardless of changing flow rate and/or varying inlet pressure. The valve is a pilot-operated regulator capable of holding downstream pressure to a pre-determined limit. When downstream pressure exceeds the pressure setting of the control pilot, the main valve and pilot close drip-tight. Valve shall be supplied with position indicator. Valve shall be able to maintain downstream pressure between 2-30 psi.

## **2.4 PRESSURE RELIEF VALVES**

Pressure relief valves 3-inches and larger shall be CLA-VAL 50G-01 BKC with pressure range of 20 to 200 psi. Connections shall be flanged and valves shall be epoxy coated.

## **2.5 VALVE IDENTIFICATION TAGS**

Each shut-off or control valve, shall be provided with a 1-1/2-inch minimum diameter heavy brass tag. Tags shall bear the identifying number of the valve and one or more identifying letter symbols of the service line.

Numbers and letters shall be block type with 1/2-inch-high numbers and 1/4-inch-high letters stamped on the tags and filled with black enamel.

Attach tags to the valves by split-key rings soldered so that the ring and tag cannot be removed.

Furnish a drawing and a neatly typed valve directory listing each valve number, type of valve and its location. Submit the directory and drawing to the Owner for approval.

## **2.6 VALVE BOXES**

There shall be furnished and installed with all valves installed underground, two piece adjustable cast iron valve boxes with a minimum inside diameter of 5 inches. The valve boxes shall be set concentric with the axis of the stem and adjusted to the finish grade. Valve box lids shall be identified with a letter/number code and opening direction designation as shown on the Plans.

## **2.7 VALVE INSULATION**

All new above ground valves carrying liquids shall be insulated with 1-inch-thick fiberglass insulation and 0.16 of an inch anodized aluminum jacket; insulation by Owens-Corning, Certainteed, Johns-Manville or equal, unless otherwise noted.

## **PART 3 EXECUTION**

### **3.1 GENERAL**

All valves and accessories shall be installed in a manner and location as shown on the Plans or as required for the application and in accordance with manufacturer's instructions. Valve size is fully equal to line piping in which the valve is installed unless otherwise noted on the Plans. Support all valves where necessary. In case on conflict between these Specifications and a governing code, the more stringent standard shall prevail.

All valves of the same style or type shall be furnished by a single manufacturer.

Provide all accessories necessary for proper valve operation as specified or required for the application. Buried valves shall be installed with square operating nuts and adjustable cast iron valve boxes with covers. Valve boxes shall be set such that the slots in the boxes are in line with the run of pipe the valves are in. Provide two sets of T wrenches for buried valve operation.

Buried valves shall be provided with 1-inch solid steel extension stems with rock guards if the operating nut will be 18 inches or more below the ground surface.

Valves shall be installed with the operator in a position for convenient operation. Particular care shall be taken to ensure that space is available for operation of lever or handwheel operated valves without interference to walls, piping or equipment. Any valve which is installed, in the opinion of the Engineer, in a manner that operation is inconvenient shall be modified or removed and reinstalled in a manner suitable to the Engineer at the expense of the Contractor. Operations for manual valves shall be lever or handwheel as is standard with the manufacturer unless another type of operator is specified or required by the manufacturer.

For submerged valves, provide stem guides as recommended by the valve manufacturer on a spacing of 6'-0". As an alternate, provide valves with extended bonnets where practical. Provide supports for extended bonnets as required. Stem guides and supports shall be 316 stainless steel. All installation fasteners for submerged valves, guides, and supports (nuts, bolts and washers) shall be 316 stainless steel.

**\*\*\* END OF SECTION \*\*\***

**PART 5**  
**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: 07/20/2023

<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>
Wahkiakum	<a href="#">Asbestos Abatement Workers</a>	Journey Level	\$53.43	6Z	1M		<a href="#">View</a>
Wahkiakum	<a href="#">Boilermakers</a>	Journey Level	\$74.29	5N	1C		<a href="#">View</a>
Wahkiakum	<a href="#">Brick Mason</a>	Brick Finisher	\$44.33	5A	1B		<a href="#">View</a>
Wahkiakum	<a href="#">Brick Mason</a>	Caulker-Pointer-Cleaner	\$68.14	5A	1B		<a href="#">View</a>
Wahkiakum	<a href="#">Brick Mason</a>	Journey Level	\$68.14	5A	1B		<a href="#">View</a>
Wahkiakum	<a href="#">Building Service Employees</a>	Janitor	\$15.74		1		<a href="#">View</a>
Wahkiakum	<a href="#">Building Service Employees</a>	Shampooer	\$15.74		1		<a href="#">View</a>
Wahkiakum	<a href="#">Building Service Employees</a>	Waxer	\$15.74		1		<a href="#">View</a>
Wahkiakum	<a href="#">Building Service Employees</a>	Window Cleaner	\$15.74		1		<a href="#">View</a>
Wahkiakum	<a href="#">Cabinet Makers (In Shop)</a>	Journey Level	\$15.74		1		<a href="#">View</a>
Wahkiakum	<a href="#">Carpenters</a>	Acoustical Worker	\$64.01	5A	1B		<a href="#">View</a>
Wahkiakum	<a href="#">Carpenters</a>	Bridge & Highway Carpenter	\$64.61	5A	1B		<a href="#">View</a>
Wahkiakum	<a href="#">Carpenters</a>	Floor Layer And Floor Finishers	\$64.18	5A	1B		<a href="#">View</a>
Wahkiakum	<a href="#">Carpenters</a>	Journey Level	\$64.01	5A	1B		<a href="#">View</a>
Wahkiakum	<a href="#">Carpenters</a>	Scaffold/Shoring Erecting & Dismantling	\$64.01	7E	4X	8N	<a href="#">View</a>
Wahkiakum	<a href="#">Carpenters</a>	Stationary Power Saw	\$64.18	5A	1B		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Application of all Composition Mastic	\$70.09	15J	4U		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Application of all Epoxy Material	\$69.59	15J	4U		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Application of all Plastic Material	\$70.09	15J	4U		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Application of Sealing Compound	\$69.59	15J	4U		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Application of Underlayment	\$70.09	15J	4U		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Building General	\$69.59	15J	4U		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Composition or Kalman Floors	\$70.09	15J	4U		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Concrete Paving	\$69.59	15J	4U		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Curb & Gutter Machine	\$70.09	15J	4U		<a href="#">View</a>

Wahkiakum	<a href="#">Cement Masons</a>	Curb & Gutter, Sidewalks	\$69.59	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Curing Concrete	\$69.59	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Finish Colored Concrete	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Floor Grinding	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Floor Grinding/Polisher	\$69.59	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Green Concrete Saw, self-powered	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Grouting of all Plates	\$69.59	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Grouting of all Tilt-up Panels	\$69.59	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Gunite Nozzleman	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Hand Powered Grinder	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Journey Level	\$69.59	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Patching Concrete	\$69.59	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Pneumatic Power Tools	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Power Chipping & Brushing	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Sand Blasting Architectural Finish	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Screed & Rodding Machine	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Spackling or Skim Coat Concrete	\$69.59	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Troweling Machine Operator	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Troweling Machine Operator on Colored Slabs	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Cement Masons</a>	Tunnel Workers	\$70.09	<u>15J</u>	<u>4U</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Bell/Vehicle/Submersible Operator (not under pressure)	\$114.53	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Dive Master	\$82.53	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Dive Supervisor	\$82.53	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Diver	\$114.53	<u>5A</u>	<u>1B</u>	<u>8V</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Diver On Standby	\$77.53	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Diver Tender	\$70.53	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Manifold Operator	\$70.53	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Manifold Operator Mixed Gas	\$75.53	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Remote Operated Vehicle Operator/Technician	\$70.53	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Divers &amp; Tenders</a>	Remote Operated Vehicle Tender	\$65.87	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Assistant Engineer	\$64.45	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Assistant Mate (deckhand)	\$59.09	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Boatman (licensed)	\$64.45	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Fill Equipment Operator	\$61.79	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Fireman	\$62.96	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Leverman (hydraulic & Clamshell)	\$67.61	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Mate	\$64.45	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Oiler	\$59.09	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Tenderman (boatman Attending Dredge Plant)	\$62.96	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Dredge Workers</a>	Welder	\$64.45	<u>5D</u>	<u>1N</u>	<u>8D</u>	<a href="#">View</a>

Wahkiakum	<a href="#">Drywall Applicator</a>	Journey Level	\$64.01	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Drywall Tapers</a>	Journey Level	\$62.05	<u>7E</u>	<u>1E</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electrical Fixture Maintenance Workers</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Inside</a>	Journey Level	\$86.49	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Inside</a>	Journeyman, Welder	\$92.40	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Motor Shop</a>	Craftsman	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Motor Shop</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Powerline Construction</a>	Cable Splicer	\$93.00	<u>5A</u>	<u>4D</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Powerline Construction</a>	Certified Line Welder	\$85.42	<u>5A</u>	<u>4D</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Powerline Construction</a>	Groundperson	\$55.27	<u>5A</u>	<u>4D</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Powerline Construction</a>	Heavy Line Equipment Operator	\$85.42	<u>5A</u>	<u>4D</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Powerline Construction</a>	Journey Level Lineperson	\$85.42	<u>5A</u>	<u>4D</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Powerline Construction</a>	Line Equipment Operator	\$73.35	<u>5A</u>	<u>4D</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Powerline Construction</a>	Meter Installer	\$55.27	<u>5A</u>	<u>4D</u>	<u>8W</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Powerline Construction</a>	Pole Sprayer	\$85.42	<u>5A</u>	<u>4D</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electricians - Powerline Construction</a>	Powderperson	\$63.50	<u>5A</u>	<u>4D</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Electronic Technicians</a>	Journey Level	\$70.83	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Elevator Constructors</a>	Mechanic	\$107.93	<u>5N</u>	<u>4A</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Elevator Constructors</a>	Mechanic In Charge	\$116.52	<u>5N</u>	<u>4A</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Fabricated Precast Concrete Products</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Fabricated Precast Concrete Products</a>	Journey Level - In-Factory Work Only	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Fence Erectors</a>	Fence Erector	\$45.69	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Fence Erectors</a>	Fence Laborer	\$45.69	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Flaggers</a>	Journey Level	\$48.83	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Glaziers</a>	Journey Level	\$71.47	<u>7I</u>	<u>11K</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Heat &amp; Frost Insulators And Asbestos Workers</a>	Mechanic	\$80.49	<u>5N</u>	<u>1F</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Heating Equipment Mechanics</a>	Journey Level	\$94.11	<u>7F</u>	<u>1E</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Hod Carriers &amp; Mason Tenders</a>	Journey Level	\$55.45	<u>5D</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Industrial Power Vacuum Cleaner</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inland Boatmen</a>	Boat Operator	\$61.41	<u>5B</u>	<u>1K</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inland Boatmen</a>	Cook	\$56.48	<u>5B</u>	<u>1K</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inland Boatmen</a>	Deckhand	\$57.48	<u>5B</u>	<u>1K</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inland Boatmen</a>	Deckhand Engineer	\$58.81	<u>5B</u>	<u>1K</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inland Boatmen</a>	Launch Operator	\$58.89	<u>5B</u>	<u>1K</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inland Boatmen</a>	Mate	\$57.31	<u>5B</u>	<u>1K</u>		<a href="#">View</a>

Wahkiakum	<a href="#">Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</a>	Cleaner Operator, Foamer Operator	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</a>	Grout Truck Operator	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</a>	Head Operator	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</a>	Technician	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</a>	Tv Truck Operator	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Insulation Applicators</a>	Journey Level	\$64.18	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Ironworkers</a>	Journey Level	\$75.11	<u>15K</u>	<u>11N</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Anchor Machines	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Application (including Pot Power Tender For Same), Applying Protective Material By Hand Or Nozzle On Utility Lines Or Storage Tanks On Project	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Asbestos Removal	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Asphalt Plant Laborers	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Asphalt Raker	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Asphalt Spreaders	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Ballast Regulators	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Batch Weighman	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Bit Grinder	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Brick Pavers (Dry)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Broomers	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Brush (power Saw)	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Brush Burners And Cutters	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Burners	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Car And Truck Loaders	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Carpenter Tender	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Change-house Man Or Dry Shack Man	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Chipping Guns	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Choker Setters	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Choker Splicer	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Chuck Tender	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Clary Power Spreader And Similar Types	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Clean Up Laborers	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Clean-up Nozzleman-green-cutter (concrete Rock, Etc.)	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Concrete Crew, Bull Gang	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Concrete Laborers	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Concrete Nozzlemen	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>

Wahkiakum	<a href="#">Laborers</a>	Concrete Power Buggyman	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Concrete Saw Operator	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Concrete Saw Operator (walls)	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Confined Space / Hole Watch	\$48.83	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Crusher Feeder	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Curing, Concrete	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Demolition And Wrecking Charred Materials	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Demolition, Wrecking And Moving Laborers	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Drill Doctor	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Drill Operators, Air Tracks, Cat Drills, Wagon Drills, Rubber-mounted Drills And Other Similar Types, Including At Crusher Plants	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Dry Pack Machine	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Dry Stack Walls	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Dumpers, Road Oiling Crew	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Dumpmen (for Grading Crew)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Elevator Feeders	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Erosion Control Specialist	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Final Clean-up	\$48.83	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Fine Graders	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Fire Watch	\$48.83	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Form Strippers (not Swinging Stages)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	General Laborer	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Grade Checker	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Guard Rail, Median Rail, Reference Post Guide Post, Right-of-way Marker	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Gunite Nozzleman	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Gunite Nozzleman Tender	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Gunite Or Sand Blasting Pot Tender	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Hand Placed Sand Blasting (wet)	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Handlers Or Mixers Of All Materials Of An Irritating Nature (including Cement & Lime)	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Hazardous Waste Worker	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	High Scalers, Strippers And Drillers Covers Work In Swinging Stages, Chairs Or Belts, Under Extreme Conditions Unusual To Blasting, Barring Down, Or S	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Jackhammer	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>

Wahkiakum	<a href="#">Laborers</a>	Laser Beam	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Laser Beam (pipe Laying) - Applicable When Employee Assigned To Move, Set Up, Align	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Laser Beam (tunnel) - Applicable When Employee Assigned To Move, Set Up, Align	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Lead Abatement	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Leverman Or Aggregate Spreaders (flaherty And Similar Types)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Loading Spotters	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Loop Installation	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Manhole Building	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Material Yard Man (including Electrical)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Miner - Tunnel	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Miner - Tunnel	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Mold Remediation Or Removal	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Multiple Tampers	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Nippers And Timbermen	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Nuclear Plant Worker - Lead Shield	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Paving Breakers	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Pilot Car	\$48.83	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Pipe Doping & Wrapping	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Pipe Layer All Types	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Pittsburgh Chipper Operator Or Similar Types	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Post Hold Digger, Air, Gas Or Electric	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Pot Tender	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Powderman	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Powderman Tender	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Power Jacks	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Power Saw Operators (bucking & Falling)	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Pressure Washer	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Pumpcrete Nozzleman	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Railroad Track Laborers	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Ribbon Setter, Head	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Ribbon Setters (including Steel Forms)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Rigger/Signal Persion	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Rip Rap Man (hand Placed)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Rip Rap Man (head)	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Road Pump Tender	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Sand Blasting (dry)	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>

Wahkiakum	<a href="#">Laborers</a>	Scaffold Tender	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Sewer Labor	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Sewer Timbermen	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Signalman	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Skipman	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Slopers	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Spraymen	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Stake Chaser	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Stake-setter	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Stockpiler	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Tampers	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Tie Back Shoring	\$52.84	<u>6Z</u>	<u>1M</u>	<u>8S</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Timber Faller And Bucker (hand Labor)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Toolroom Man (at Job Site)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Track Liners	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Traffic Control Laborer	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Traffic Control Supervisor	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Tugger Operator	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Tunnel Bullgang (above Ground)	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Tunnel Chuck Tenders	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Tunnel Motorman - Dinky Locomotive	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Tunnel Muckers, Brakemen	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Tunnel Powderman	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Tunnel Shield Operator	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Vibrating Screed	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Vibrators (all Types)	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Water Blaster	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Weight-man-crusher (aggregate When Used)	\$52.06	<u>6Z</u>	<u>1M</u>	<u>8T</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Laborers</a>	Welder	\$53.43	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers - Underground Sewer &amp; Water</a>	General Laborer and Topman	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Laborers - Underground Sewer &amp; Water</a>	Pipe Layer	\$53.93	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Landscape Construction</a>	Landscape Operator	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Landscape Construction</a>	Landscaping or Planting Laborer	\$41.52	<u>6Z</u>	<u>1M</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Landscape Maintenance</a>	Groundskeeper	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Lathers</a>	Journey Level	\$63.65	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Marble Setters</a>	Journey Level	\$69.14	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Metal Fabrication (In Shop)</a>	Fitter	\$16.99		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Metal Fabrication (In Shop)</a>	Laborer	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Metal Fabrication (In Shop)</a>	Machine Operator	\$17.21		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Metal Fabrication (In Shop)</a>	Painter	\$17.03		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Metal Fabrication (In Shop)</a>	Welder	\$16.99		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Millwright</a>	Journey Level	\$69.85	<u>5A</u>	<u>1B</u>		<a href="#">View</a>

Wahkiakum	<a href="#">Modular Buildings</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Painters</a>	Bridge Painter	\$52.67	<u>7E</u>	<u>11L</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Painters</a>	Commercial Painter	\$45.20	<u>7E</u>	<u>11L</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Painters</a>	Industrial Painter	\$47.00	<u>7E</u>	<u>11L</u>	<u>9F</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Pile Driver</a>	Journey Level	\$65.00	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Plasterers</a>	Journey Level	\$60.39	<u>5H</u>	<u>1E</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Playground &amp; Park Equipment Installers</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Plumbers &amp; Pipefitters</a>	Journey Level	\$84.72	<u>5A</u>	<u>1G</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Air Filtration Equipment(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt Plant (any Type) (assistant Engineer Required) (group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Burner & Reconditioner (any Type), (asst To Engineer If Required)(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Extrusion Machine Operator(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Paver (screed Man Required)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Pugmill (any Type)(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Raker(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Roller (any Asphalt Mix)(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Roto-mill, Pavement Profiler Under 8 Ft Lateral Cut(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Roto-mill, Pavement Profiler, 8 Ft Lateral Cut & Over(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Roto-mill, Pavement Profiler, Groundman(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Screed(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Asphalt, Truck Mounted Spreader, With Screed(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Auger Oiler(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Auto Grader Or "trimmer" (grade Checker Required) (group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Back Filling Machine (assistant To Engineer Required)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Backhoe, Robotic, Track And Wheel Type Up To And Including 20,000 Lbs. With Any Attachments(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Band Wagons (in Conjunction With Whell Excavator)(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators</a>	Bell Man (any Type Of Communication)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Blade Any Type(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Blade, Robotic(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Boatman(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Boatman, Licensed(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Bobcat, Skid Steer (< 1yd)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Boom Type Lifting Device, 5 Ton Capacity Or Less(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Boring Machine (asst To Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Broom Self-propelled, Construction Job Site(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Bulldozer Operator, 20,000 Lbs Or Less, Or 100 Horse Or Less(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Bulldozer Operator, Over 20,000 Lbs And More Than 100 Horse Up To 70,000 Lbs(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Bulldozer Over 70,000 Lbs Up To And Including 120,000 Lbs(group 3)	\$67.72	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Bulldozer Over 120,000 Lbs And Above(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Bulldozer Robotic Equipment(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Cable-plow (any Type)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Cableway 25 Ton & Over(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Cableway Up To 25 Ton(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Canal Trimmer (grade Oiler Required)(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Cat Drill (john Henry)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Cement Pump(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Challenger(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Chip Spreading Machine(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Chippers (asst To Engineer If Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Churn Drill & Earth Boring Machine(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Combination Heavy Duty Mechanic-welder, When Required To Do Both(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Compactor Self Propelled Without Blade(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators</a>	Compactor With Blade Self Propelled(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Compactor, Multi-engine(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Compactor, Robotic(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Compressor (any Power) 1,250 Cu Ft And Over Total Capacity(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Compressor Operator (any Power) Under 1,250 Cu Ft Total Capacity(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Batch Plant And/or Wet Mix (3 Units Or More) (group1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Batch Plant And/or Wet Mix Operator (1 & 2 Drums)(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Batch Plant Quality Control(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Breaker (assistant To Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Canal Line, Assistant To Engineer Required(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Curing Machine (riding Type)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Diamond Head Profiler(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Paving Road Mixer(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Planer(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete Saw(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Automatic Slip Form Paver (asst To Engineer Required)(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Combination Mixer & Compressor Operator, Gunite Work(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Curb Machine Mechanical Berm, Curb And/or Curb And Gutter(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Finishing Machine(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Grout Plant(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Grouting Machine(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Joint Machine(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Mixer Mobile(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Mixer Single Drum Any Capacity(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Paving Machine 8' And Less (asst To Engineer Required)(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Placing Boom(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Pump Truck(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Pump(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Pumpcrete Operator (any Type)(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Reinforced Tank Banding Machine (asst To Engineer Required)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Slip Form Pumps, Power Driven Hydraulic Lifting Device For Concrete Forms(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Spreader(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Telebelt(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Concrete, Treated Base Roller Operator, Oiling(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Conveyor Operator Or Assistant(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Conveyored Material Hauler(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Bridge Locomotive, Gantry And Overhead(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Carry Deck(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Chicago Boom & Similar Types(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Floating (derrick Barge) 30 Ton But Less Than 150 Ton (asst To Engineer Required)(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Floating 150 Ton But Less Than 250 Ton (asst To Engineer Required) (group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Floating 250 Ton And Over (asst To Engineer And Deckhand Required)(group 1)	\$72.94	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Floating Clamshell 3 Cu. Yds. & Over (fireman Or Diesel Electric Engineer Required)(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Floating Clamshell, Dragline Etc. Operator Under 3 Cu. Yds. Or Less Than 30 Ton (diesel-electric Engineer Required)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Hydraulic 200 Ton Through 399 Ton (group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Hydraulic 50 Ton Through 89 Ton With Luffing Or Tower Attachment(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Hydraulic 50 Ton Through 89 Tons(group 3)	\$67.72	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Hydraulic 90 Ton Through 199 Ton With Luffing Or Tower Attachment (group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Hydraulic 90 Ton Through 199 Ton(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Hydraulic Crane 200 Ton Through 300 Ton With Luffing Or Tower Attachment(group 1)	\$72.94	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Hydraulic Crane 400 Ton And Over(group 1)	\$75.10	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Hydraulic Crane Over 300 Ton Through 399 Ton With Luffer Or Tower Attachment(group 1)	\$75.10	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Hydraulic Under 50 Ton(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Lattice Boom 200 Ton Through 299 Ton, With Over 200' Boom(group 1)	\$72.94	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Lattice Boom 300 Ton Through 399 Ton(group 1)	\$72.94	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Lattice Boom 300 Ton Through 399 Ton, With Over 200' Boom(group 1)	\$75.10	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Lattice Boom 50 Ton Through 89 Ton With 150' Boom Or Less(group 3)	\$67.72	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Lattice Boom 50 Ton Through 89 Ton With Over 150' Boom	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Lattice Boom 90 Ton Through 199 Ton With 150' - 200' Boom(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Lattice Boom Under 50 Ton(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Lattice Boom, 200 Ton Through 299 Ton With 200' Boom Or Less (group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Lattice Boom, 90 Ton Through 199 Ton With Over 200' Boom (group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Shovel, Dragline Or Clamshell 3 Cu. Yds. But Less Than 5 Cu. Yds. (asst To Engineer Required)(group 3)	\$67.72	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Tower Crane With 175' Tower Or Less And With Less Than 200' Jib(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Tower Crane With Over 175' Tower Or Over 200' Jib (group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Tugger(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Whirley 90 Ton And Over (group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crane, Whirley Under 90 Ton(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crusher Feederman(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crusher Oiler(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Crusher Plant(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Deckhand(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Derrick Operator Under 100 Ton (two Operators Required When Swing Control Is Remote From Hoist)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Diesel-electric Engineer (plant Or Floating)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Directional Drill Over 20,000 Lbs Pullback(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Drill Assistant(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Drill Cat Operator(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Drill Directional Type Less Than 20,000 Lbs Pullback(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Drill Doctor And/or (bit Grinder)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Drill Mud Mixer(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Drill Oscillator(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Drill, Directinal Locator(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Driller, Percussion, Diamond, Core, Cable, Rotary & Similar Type(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Elevating Grader Operator, Tractor Towed Requiring Operator Or Grader(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Elevating Loader Operator (any Type)(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Elevator To Move Personnel Or Materials(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Excavator Over 80,000 Lbs Through 130,000 Lbs(group 3)	\$67.72	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Excavator Operator, Over 20,000 Lbs Through 80,000 Lbs(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Excavator Operator, Over 130,000 Lbs(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Fireman(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Floating, Crane 350 Ton And Over (asst To Engineer And Deckhand Required)(group 1)	\$75.10	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators</a>	Fork Lift(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Fork Lift, Over 10 Ton Or Robotic(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Generator Operator(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Grade Checker(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Grade Setter / Layout From Plans(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Grade-all(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Guardrail Machines, I.e. Punch, Auger, Etc.(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Guardrail Punch Oiler(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hammer Operator (pile Driver)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Heavy Duty Repairman Assistant(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Heavy Equipment Robotics Operator Or Mechanic(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Helicopter Hoist(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Helicopter Radioman (ground)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Helicopter When Used In Erecting Workcrane(group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hoist Operator, Single Drum(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hoist, 2 Drums Or More(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hoist, Stiff Leg, Guy Derrick Or Similar Type, 50 Ton And Over(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hydraulic Backhoe Track Type Up To And Including 20,000 Lbs(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hydraulic Backhoe Wheel Type (any Make)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hydraulic Pipe Press(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hydro Axe (loader Mounted Or Similar Type)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hydrographic Seeder Machine Straw, Pulp Or Seed(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Hydrostatic Pump Operator(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Internal Full Slab Vibrator Operator(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Jack Operator, Elevating Barges, Barge Operator, Self-unloading (asst To Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Laser Screed(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Lattice Boom Crane 400 Ton And Over(group 1)	\$75.10	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators</a>	Lime Spreader, Construction Job Site(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Loaders Operator, Front End & Overhead, 25,000 Lbs And Less Than 60,000 Lbs(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Loaders, 120,000 Lbs And Above(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Loaders, 60,000 Lbs And Less Than 120,000 Lbs(group 3)	\$67.72	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Loaders, Rubber-tire Type, Less Than 25,000 Lbs(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Log Skidders(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Master Environmental Maintenance Mechanic(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Material Handler(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Mechanic, Heavy Duty(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Mixer Box (c.t.b., Dry Batch, Etc.)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Oiler(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Parts Man (tool Room)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Pavement Grinder And Or Grooving Machine (riding Type)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Pile Driver Operator (not Crane Type) (asst To Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Pipe Bending, Cleaning, Doping And Wrapping Machines(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Pipe, Cast In Place Pipe Laying Machine(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Plant Oiler(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Pump (any Power)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Pump Operator, More Than 5 Pumps (any Size)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Ballast Compactor, Regulator Or Tamper Machines(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Ballast Tamper Multi-purpose(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Brakeman, Switchman, Motorman(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Car Mover(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Clip Applicator(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, High Rail Self Loader Truck(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Lo-railer(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Locomotive, 40 Ton And Over (asst To Engineer Required)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Shuttle Car Operator(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Speedswing(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Switchman(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Tamping Machine, Mechanical, Self-propelled(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rail, Track Liner(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Remote Controlled Earth Moving Equipment(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rigger(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Roller Grading (not Asphalt) (group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Rubber-tired Dozers And Pushers(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Scraper All Types(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Service Oiler (greaser)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Shovel, Dragline, Clamshell, 5 Yards And Over(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Side-boom(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Skip Loader, Drag Box(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Stump Grinder (loader Mounted Or Similar Type)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Surface Heater And Planer(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Sweeper Self-propelled, Construction Job Site(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tar Pot Fireman (power Agitated) Or Not(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tractor Rubber-tired, 50 Hp Flywheel & Under(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tractor, Rubber-tired Over 50 Hp Flywheel(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Trenching Machine 3 Ft Depth And Deeper (asst To The Operator If Required) (group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Trenching Machine Operator, Maximum Digging Capacity 3 Ft Depth(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Truck Crane Oiler-driver(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Truck, All Terrain Or Track Type(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Truck, Barrel Type(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Truck, Boom(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators</a>	Truck, Off-road Trucks, Articulated And Non-articulated Trucks(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Truck, Offroad Trucks, Articulated And Non-articulated Trucks(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Truck, Vacuum(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Truck, Water(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tub Grinder(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel Boring Machine Mechanic(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel Boring Machine(group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel Segment Plant(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel Separation Plant(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel Shaef Loader(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel, Locomotive, Dinkey(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel, Micro Boring Tunnel Machine(group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel, Mucking Machine(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel, Power Jumbo Setting Slip Forms, Etc.(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Tunnel, Shield Operator(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Ultra High Pressure Water Jet Cutting Tool System Operator(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Underwater Equipment, Remote Or Otherwise(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Vacuum Blasting Machine Operator(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Water Pulls, Water Wagon(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Welder's Assistant(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Welder; Heavy Duty, Certified Or Not(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Welding Machine(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Wheel Excavation Any Size (grade Oiler Required)(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators</a>	Wire Mat Or Brooming Machine(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Air Filtration Equipment(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt Plant (any Type) (assistant Engineer Required) (group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Burner & Reconditioner (any Type), (asst To Engineer If Required)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Extrusion Machine Operator(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Paver (screed Man Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Pugmill (any Type)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Raker(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Roller (any Asphalt Mix)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Roto-mill, Pavement Profiler Under 8 Ft Lateral Cut(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Roto-mill, Pavement Profiler, 8 Ft Lateral Cut & Over(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Roto-mill, Pavement Profiler, Groundman(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Screed(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Asphalt, Truck Mounted Spreader, With Screed(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Auger Oiler(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Auto Grader Or "trimmer" (grade Checker Required) (group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Back Filling Machine (assistant To Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Backhoe, Robotic, Track And Wheel Type Up To And Including 20,000 Lbs. With Any Attachments(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Band Wagons (in Conjunction With Whell Excavator)(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Bell Man (any Type Of Comunication)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Blade Any Type(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Blade, Robotic(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Boatman(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Boatman, Licensed(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Bobcat, Skid Steer (< 1yd)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Boom Type Lifting Device, 5 Ton Capacity Or Less(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Boring Machine (asst To Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Broom Self-propelled, Construction Job Site(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Bulldozer Operator, 20,000 Lbs Or Less, Or 100 Horse Or Less(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Bulldozer Operator, Over 20,000 Lbs And More Than 100 Horse Up To 70,000 Lbs(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Bulldozer Over 70,000 Lbs Up To And Including 120,000 Lbs(group 3)	\$67.72	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Bulldozer Over 120,000 Lbs And Above(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Bulldozer Robotic Equipment(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Cable-plow (any Type)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Cableway 25 Ton & Over(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Cableway Up To 25 Ton(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Canal Trimmer (grade Oiler Required)(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Cat Drill (john Henry)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Cement Pump(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Challenger(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Chip Spreading Machine(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Chippers (asst To Engineer If Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Churn Drill & Earth Boring Machine(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Combination Heavy Duty Mechanic-welder, When Required To Do Both(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Compactor Self Propelled Without Blade(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Compactor With Blade Self Propelled(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Compactor, Multi-engine(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Compactor, Robotic(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Compressor (any Power) 1,250 Cu Ft And Over Total Capacity(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Compressor Operator (any Power) Under 1,250 Cu Ft Total Capacity(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Batch Plant And/or Wet Mix (3 Units Or More) (group1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Batch Plant And/or Wet Mix Operator (1 & 2 Drums)(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Batch Plant Quality Control(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Breaker (assistant To Engineer Required)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Canal Line, Assistant To Engineer Required(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Curing Machine (riding Type)(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Diamond Head Profiler(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Paving Road Mixer(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Planer(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete Saw(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Automatic Slip Form Paver (asst To Engineer Required)(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Combination Mixer & Compressor Operator, Gunite Work(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Curb Machine Mechanical Berm, Curb And/or Curb And Gutter(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Finishing Machine(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Grout Plant(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Grouting Machine(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Joint Machine(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Mixer Mobile(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Mixer Single Drum Any Capacity(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Paving Machine 8' And Less (asst To Engineer Required)(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<u>View</u>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Placing Boom(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Pump Truck(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Pump(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Pumpcrete Operator (any Type)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Reinforced Tank Banding Machine (asst To Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Slip Form Pumps, Power Driven Hydraulic Lifting Device For Concrete Forms(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Spreader(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Telebelt(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Concrete, Treated Base Roller Operator, Oiling(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Conveyor Operator Or Assistant(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Conveyored Material Hauler(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Bridge Locomotive, Gantry And Overhead(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Carry Deck(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Chicago Boom & Similar Types(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Floating (derrick Barge) 30 Ton But Less Than 150 Ton (asst To Engineer Required)(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Floating 150 Ton But Less Than 250 Ton (asst To Engineer Required) (group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Floating 250 Ton And Over (asst To Engineer And Deckhand Required)(group 1)	\$72.94	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Floating Clamshell 3 Cu. Yds. & Over (fireman Or Diesel Electric Engineer Required)(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Floating Clamshell, Dragline Etc. Operator Under 3 Cu. Yds. Or Less Than 30 Ton (diesel-electric Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Hydraulic 200 Ton Through 399 Ton (group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Hydraulic 50 Ton Through 89 Ton With Luffing Or Tower Attachment(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Hydraulic 50 Ton Through 89 Tons(group 3)	\$67.72	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Hydraulic 90 Ton Through 199 Ton With Luffing Or Tower Attachment (group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Hydraulic 90 Ton Through 199 Ton(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Hydraulic Crane 200 Ton Through 300 Ton With Luffing Or Tower Attachment(group 1)	\$72.94	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Hydraulic Crane 400 Ton And Over(group 1)	\$75.10	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Hydraulic Crane Over 300 Ton Through 399 Ton With Luffer Or Tower Attachment(group 1)	\$75.10	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Hydraulic Under 50 Ton(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Lattice Boom 200 Ton Through 299 Ton, With Over 200' Boom(group 1)	\$72.94	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Lattice Boom 300 Ton Through 399 Ton(group 1)	\$72.94	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Lattice Boom 300 Ton Through 399 Ton, With Over 200' Boom(group 1)	\$75.10	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Lattice Boom 50 Ton Through 89 Ton With 150' Boom Or Less(group 3)	\$67.72	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Lattice Boom 50 Ton Through 89 Ton With Over 150' Boom	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Lattice Boom 90 Ton Through 199 Ton With 150' - 200' Boom(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Lattice Boom Under 50 Ton(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Lattice Boom, 200 Ton Through 299 Ton With 200' Boom Or Less (group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Lattice Boom, 90 Ton Through 199 Ton With Over 200' Boom (group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Shovel, Dragline Or Clamshell 3 Cu. Yds. But Less Than 5 Cu. Yds. (asst To Engineer Required)(group 3)	\$67.72	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Tower Crane With 175' Tower Or Less And With Less Than 200' Jib(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Tower Crane With Over 175' Tower Or Over 200' Jib (group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Tugger(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Whirley 90 Ton And Over (group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crane, Whirley Under 90 Ton(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crusher Feederman(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crusher Oiler(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Crusher Plant(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Deckhand(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Derrick Operator Under 100 Ton (two Operators Required When Swing Control Is Remote From Hoist)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Diesel-electric Engineer (plant Or Floating)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Directional Drill Over 20,000 Lbs Pullback(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Drill Assistant(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Drill Cat Operator(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Drill Directional Type Less Than 20,000 Lbs Pullback(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Drill Doctor And/or (bit Grinder)(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Drill Mud Mixer(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Drill Oscillator(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Drill, Directinal Locator(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Driller, Percussion, Diamond, Core, Cable, Rotary & Similar Type(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Elevating Grader Operator, Tractor Towed Requiring Operator Or Grader(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Elevating Loader Operator (any Type)(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Elevator To Move Personnel Or Materials(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Excavator Over 80,000 Lbs Through 130,000 Lbs(group 3)	\$67.72	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Excavator Operator, Over 20,000 Lbs Through 80,000 Lbs(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Excavator Operator, Over 130,000 Lbs(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Fireman(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Floating, Crane 350 Ton And Over (asst To Engineer And Deckhand Required)(group 1)	\$75.10	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Fork Lift(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Fork Lift, Over 10 Ton Or Robotic(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Generator Operator(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Grade Checker(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Grade Setter / Layout From Plans(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Grade-all(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Guardrail Machines, I.e. Punch, Auger, Etc.(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Guardrail Punch Oiler(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hammer Operator (pile Driver)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Heavy Duty Repairman Assistant(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Heavy Equipment Robotics Operator Or Mechanic(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Helicopter Hoist(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Helicopter Radioman (ground)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Helicopter When Used In Erecting Workcrane(group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hoist Operator, Single Drum(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hoist, 2 Drums Or More(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hoist, Stiff Leg, Guy Derrick Or Similar Type, 50 Ton And Over(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hydraulic Backhoe Track Type Up To And Including 20,000 Lbs(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hydraulic Backhoe Wheel Type (any Make)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hydraulic Pipe Press(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hydro Axe (loader Mounted Or Similar Type)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hydrographic Seeder Machine Straw, Pulp Or Seed(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Hydrostatic Pump Operator(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Internal Full Slab Vibrator Operator(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Jack Operator, Elevating Barges, Barge Operator, Self-unloading (asst To Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Laser Screed(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Lattice Boom Crane 400 Ton And Over(group 1)	\$75.10	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Lime Spreader, Construction Job Site(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Loaders Operator, Front End & Overhead, 25,000 Lbs And Less Than 60,000 Lbs(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Loaders, 120,000 Lbs And Above(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Loaders, 60,000 Lbs And Less Than 120,000 Lbs(group 3)	\$67.72	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Loaders, Rubber-tire Type, Less Than 25,000 Lbs(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Log Skidders(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Master Environmental Maintenance Mechanic(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Material Handler(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Mechanic, Heavy Duty(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Mixer Box (c.t.b., Dry Batch, Etc.)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Oiler(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Parts Man (tool Room)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Pavement Grinder And Or Grooving Machine (riding Type)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Pile Driver Operator (not Crane Type) (asst To Engineer Required)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Pipe Bending, Cleaning, Doping And Wrapping Machines(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Pipe, Cast In Place Pipe Laying Machine(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Plant Oiler(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Pump (any Power)(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Pump Operator, More Than 5 Pumps (any Size)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Ballast Compactor, Regulator Or Tamper Machines(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Ballast Tamper Multi-purpose(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Brakeman, Switchman, Motorman(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Car Mover(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Clip Applicator(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, High Rail Self Loader Truck(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Lo-railer(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Locomotive, 40 Ton And Over (asst To Engineer Required)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Shuttle Car Operator(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Speedswing(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Switchman(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Tamping Machine, Mechanical, Self-propelled(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rail, Track Liner(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Remote Controlled Earth Moving Equipment(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rigger(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Roller Grading (not Asphalt) (group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Rubber-tired Dozers And Pushers(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Scraper All Types(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Service Oiler (greaser)(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Shovel, Dragline, Clamshell, 5 Yards And Over(group 2)	\$68.87	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Side-boom(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Skip Loader, Drag Box(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Stump Grinder (loader Mounted Or Similar Type)(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Surface Heater And Planer(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Sweeper Self-propelled, Construction Job Site(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tar Pot Fireman (power Agitated) Or Not(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tractor Rubber-tired, 50 Hp Flywheel & Under(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tractor, Rubber-tired Over 50 Hp Flywheel(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Trenching Machine 3 Ft Depth And Deeper (asst To The Operator If Required) (group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Trenching Machine Operator, Maximum Digging Capacity 3 Ft Depth(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Truck Crane Oiler-driver(group 6)	\$59.93	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Truck, All Terrain Or Track Type(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Truck, Barrel Type(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Truck, Boom(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Truck, Off-road Trucks, Articulated And Non-articulated Trucks(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Truck, Offroad Trucks, Articulated And Non-articulated Trucks(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Truck, Vacuum(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Truck, Water(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tub Grinder(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel Boring Machine Mechanic(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel Boring Machine(group 1)	\$70.78	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel Segment Plant(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel Separation Plant(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel Shaef Loader(group 4)	\$64.39	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel, Locomotive, Dinkey(group 5)	\$63.15	<a href="#">7B</a>	<a href="#">4G</a>	<a href="#">8U</a>	<a href="#">View</a>

Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel, Micro Boring Tunnel Machine(group 1)	\$70.78	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel, Mucking Machine(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel, Power Jumbo Setting Slip Forms, Etc.(group 5)	\$63.15	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Tunnel, Shield Operator(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Ultra High Pressure Water Jet Cutting Tool System Operator(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Underwater Equipment, Remote Or Otherwise(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Vacuum Blasting Machine Operator(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Water Pulls, Water Wagon(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Welder's Assistant(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Welder; Heavy Duty, Certified Or Not(group 4)	\$64.39	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Welding Machine(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Wheel Excavation Any Size (grade Oiler Required)(group 2)	\$68.87	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Equipment Operators-Underground Sewer &amp; Water</a>	Wire Mat Or Brooming Machine(group 6)	\$59.93	<u>7B</u>	<u>4G</u>	<u>8U</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Power Line Clearance Tree Trimmers</a>	Journey Level In Charge	\$57.22	<u>5A</u>	<u>4A</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Power Line Clearance Tree Trimmers</a>	Spray Person	\$54.32	<u>5A</u>	<u>4A</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Power Line Clearance Tree Trimmers</a>	Tree Equipment Operator	\$57.22	<u>5A</u>	<u>4A</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Power Line Clearance Tree Trimmers</a>	Tree Trimmer	\$51.18	<u>5A</u>	<u>4A</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Power Line Clearance Tree Trimmers</a>	Tree Trimmer Groundperson	\$38.99	<u>5A</u>	<u>4A</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Refrigeration &amp; Air Conditioning Mechanics</a>	Journey Level	\$85.71	<u>5A</u>	<u>1G</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Brick Mason</a>	Journey Level	\$38.27		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Carpenters</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Cement Masons</a>	Journey Level	\$61.14	<u>7E</u>	<u>1H</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Drywall Applicators</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Drywall Tapers</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Electricians</a>	Journey Level	\$30.00		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Glaziers</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Insulation Applicators</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Laborers</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Marble Setters</a>	Journey Level	\$38.27		<u>1</u>		<a href="#">View</a>

Wahkiakum	<a href="#">Residential Painters</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Plumbers &amp; Pipefitters</a>	Journey Level	\$21.92		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Refrigeration &amp; Air Conditioning Mechanics</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Sheet Metal Workers</a>	Journey Level (Field or Shop)	\$56.12	<u>7F</u>	<u>1R</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Soft Floor Layers</a>	Journey Level	\$55.98	<u>7E</u>	<u>5A</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Sprinkler Fitters (Fire Protection)</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Stone Masons</a>	Journey Level	\$38.27		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Terrazzo Workers</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Terrazzo/Tile Finishers</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Residential Tile Setters</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Roofers</a>	Journey Level	\$60.90	<u>5A</u>	<u>3H</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Roofers</a>	Using Irritable Bituminous Materials	\$63.90	<u>5A</u>	<u>3H</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Sheet Metal Workers</a>	Journey Level (Field or Shop)	\$94.11	<u>7F</u>	<u>1E</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Shipbuilding &amp; Ship Repair</a>	New Construction Heat & Frost Insulator	\$80.49	<u>5N</u>	<u>1F</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Shipbuilding &amp; Ship Repair</a>	Ship Repair Heat & Frost Insulator	\$80.49	<u>5N</u>	<u>1F</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Sign Makers &amp; Installers (Electrical)</a>	Journey Level	\$16.88		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Sign Makers &amp; Installers (Non-Electrical)</a>	Journey Level	\$16.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Soft Floor Layers</a>	Journey Level	\$61.51	<u>15J</u>	<u>4C</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Solar Controls For Windows</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Sprinkler Fitters (Fire Protection)</a>	Journey Level	\$70.52	<u>7J</u>	<u>1R</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Stage Rigging Mechanics (Non Structural)</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Stone Masons</a>	Journey Level	\$68.14	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Street And Parking Lot Sweeper Workers</a>	Journey Level	\$15.74		<u>1</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Surveyors</a>	Chain Person	\$59.93	<u>7B</u>	<u>1B</u>	<u>9H</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Surveyors</a>	Instrument Person	\$63.15	<u>7B</u>	<u>1B</u>	<u>9H</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Surveyors</a>	Party Chief	\$68.87	<u>7B</u>	<u>1B</u>	<u>9H</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Telecommunication Technicians</a>	Journey Level	\$70.83	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Telephone Line Construction - Outside</a>	Cable Splicer	\$39.15	<u>5A</u>	<u>2B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Telephone Line Construction - Outside</a>	Hole Digger/Ground Person	\$26.29	<u>5A</u>	<u>2B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Telephone Line Construction - Outside</a>	Telephone Equipment Operator (Light)	\$32.72	<u>5A</u>	<u>2B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Telephone Line Construction - Outside</a>	Telephone Lineperson	\$37.00	<u>5A</u>	<u>2B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Terrazzo Workers</a>	Journey Level	\$59.27	<u>5A</u>	<u>1B</u>		<a href="#">View</a>
Wahkiakum	<a href="#">Tile Setters</a>	Journey Level	\$59.27	<u>5A</u>	<u>1B</u>		<a href="#">View</a>

Wahkiakum	<a href="#">Tile, Marble &amp; Terrazzo Finishers</a>	Finishers	\$44.20	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Traffic Control Stripers</a>	Journey Level	\$53.26	<u>7P</u>	<u>1K</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Truck Drivers</a>	Asphalt Mix Over 10 Yards	\$47.01	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Truck Drivers</a>	Asphalt Mix To 10 Yards	\$46.87	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Truck Drivers</a>	Dump Truck	\$46.87	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Truck Drivers</a>	Dump Truck And Trailer	\$47.01	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Truck Drivers</a>	Other Trucks	\$47.01	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Truck Drivers - Ready Mix</a>	Transit Mix 5 cubic yards and under	\$46.87	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Truck Drivers - Ready Mix</a>	Transit Mix over 11 cubic yards up to 15 cubic yards	\$47.45	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Truck Drivers - Ready Mix</a>	Transit Mix over 5 cubic yards up to 7 cubic yards	\$47.01	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Truck Drivers - Ready Mix</a>	Transit Mix Over 7 cubic yards up to 11 cubic yards	\$47.15	<u>5A</u>	<u>1B</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Well Drillers &amp; Irrigation Pump Installers</a>	Irrigation Pump Installer	\$15.74		<u>1</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Well Drillers &amp; Irrigation Pump Installers</a>	Oiler	\$15.74		<u>1</u>	<a href="#">View</a>
Wahkiakum	<a href="#">Well Drillers &amp; Irrigation Pump Installers</a>	Well Driller	\$15.74		<u>1</u>	<a href="#">View</a>

Benefit Code Key – Effective 3/3/2023 thru 8/30/2023

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**Overtime Codes**

**Overtime calculations** are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.
  - B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
  - G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.
  - J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.
  - K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
  - M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
  - N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

**Overtime Codes Continued**

1. O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.
- P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.
- R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.
- U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.
- V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.
- W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.
- X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.
- Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.
- Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

**Overtime Codes Continued**

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

- B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
- F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.
- M. This code appears to be missing. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.
- O. All hours worked on Sundays and holidays shall be paid at one and one-half times the hourly rate of wage.
- R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.
- U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.

3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

- F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.
- H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.
- J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

**Overtime Codes Continued**

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

- A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage
- C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.
- D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:

On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

- E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.  
  
On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

**Overtime Codes Continued**

4. J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.
- L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.
- U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- S. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, work performed in excess of (10) hours shall be paid at one and one half (1-1/2) times the hourly rate of pay. On Monday through Friday, work performed outside the normal work hours of 6:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations).

All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Multiple Shift Operations: When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. Special Shifts: The Special Shift Premium is the basic hourly rate of pay plus \$2.00 an hour. When due to conditions beyond the control of the employer or when an owner (not acting as the contractor), a government agency or the contract specifications require more than four (4) hours of a special shift can only be performed outside the normal 6am to 6pm shift then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid the special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday).

**Overtime Codes Continued**

4. V. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established or outside the normal shift (5 am to 6pm), and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.

In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

- X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

11. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

- B After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

- C The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage. All non-overtime and non-holiday hours worked between 4:00 pm and 5:00 am, Monday through Friday, shall be paid at a premium rate of 15% over the hourly rate of wage.

**Overtime Codes Continued**

11. D. All hours worked on Saturdays and holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.
- E. The first two (2) hours after eight (8) regular hours Monday through Friday, the first ten (10) hours on Saturday, and the first ten (10) hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, and Sundays shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.
- F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one-half times the hourly rate of wage for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.
- G. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.
- All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of nine (9) hours or more. When an employee returns to work without at least nine (9) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the nine (9) hours rest period.
- H. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.
- All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.
- After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of ten (10) hours or more. When an employee returns to work without at least ten (10) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the ten (10) hours rest period.

**Overtime Codes Continued**

11. J. All hours worked on holidays shall be paid at double the hourly rate of wage.
- K. On Monday through Friday hours worked outside 4:00 am and 5:00 pm, and the first two (2) hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked over 10 hours per day Monday through Friday, and all hours worked on Saturdays, Sundays, and Holidays worked shall be paid at double the hourly rate of wage.
- L. An employee working outside 5:00 am and 5:00 pm shall receive an additional two dollar (\$2.00) per hour for all hours worked that shift. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.
- M. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.
- Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 am to 6:00 pm, then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten shifts.
- On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay. All work performed after 6:00 pm Saturday to 5:00 am Monday, all work performed over twelve (12) hours, and all work performed on holidays shall be paid at double the straight time rate of pay.
- Shift Pay Premium: In an addition to any overtime already required, all hours worked between the hours of 6:00 pm and 5:00 am shall receive an additional two dollars (\$2.00) per hour.
- N. All work performed over twelve hours in a shift and all work performed on Sundays and Holidays shall be paid at double the straight time rate.
- Any time worked over eight (8) hours on Saturday shall be paid double the straight time rate, except employees assigned to work six 10-hour shifts per week shall be paid double the straight time rate for any time worked on Saturday over 10 hours.

Benefit Code Key – Effective 3/3/2023 thru 8/30/2023

**Holiday Codes**

- 5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).
- C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
- D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).
- H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).
- I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).
- L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).
- N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.
- Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).
- R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).
- S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
- 6. G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).
- H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).

Benefit Code Key – Effective 3/3/2023 thru 8/30/2023

**Holiday Codes Continued**

6. T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.
7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

**Holiday Codes Continued**

7. J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.
- P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.
- Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.
- S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.
- X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.
- Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.
- Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, Christmas Eve, and Christmas Day (9). Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday. Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

**Holiday Codes Continued**

15. G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
- H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
- K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

**Note Codes**

8. D. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.
- L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$0.75, Level B: \$0.50, And Level C: \$0.25.
- M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: \$1.00, Levels C & D: \$0.50.
- N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.
- S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.
- T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

**Note Codes Continued**

8. U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: \$2.00, Class B Suit: \$1.50, And Class C Suit: \$1.00. Workers performing underground work receive an additional \$0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional \$0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do “pioneer” work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional \$0.50 per hour.
- V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.
- Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - \$2.00 per foot for each foot over 50 feet. Over 101' to 150' - \$3.00 per foot for each foot over 101 feet. Over 151' to 220' - \$4.00 per foot for each foot over 220 feet. Over 221' - \$5.00 per foot for each foot over 221 feet.
- Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25' to 300' - \$1.00 per foot from entrance. 300' to 600' - \$1.50 per foot beginning at 300'. Over 600' - \$2.00 per foot beginning at 600'.
- W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.
- X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: \$2.00, Class B Suit: \$1.50, Class C Suit: \$1.00, and Class D Suit: \$0.50. Special Shift Premium: Basic hourly rate plus \$2.00 per hour.
- When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)
- Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.
- Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.
- Z. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.
- Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

**Note Codes Continued**

9. A. Workers working with supplied air on hazmat projects receive an additional \$1.00 per hour.

Special Shift Premium: Basic hourly rate plus \$2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid \$0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

(A) – 130’ to 199’ – \$0.50 per hour over their classification rate.

(B) – 200’ to 299’ – \$0.80 per hour over their classification rate.

(C) – 300’ and over – \$1.00 per hour over their classification rate.

- B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

- C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents (\$0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

- D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

- E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. Workers on hazmat projects receive additional hourly premiums as follows -Level A: \$1.00, Level B: \$0.75, Level C: \$0.50, And Level D: \$0.25.

- F. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

**Note Codes Continued**

9. H. One (1) person crew shall consist of a Party Chief. (Total Station or similar one (1) person survey system). Two (2) person survey party shall consist of a least a Party Chief and a Chain Person. Three (3) person survey party shall consist of at least a Party Chief, an Instrument Person, and a Chain Person.

**PART 6**  
**APPENDIX**

**APPENDIX A**

**SUPPLEMENTAL BIDDER RESPONSIBILITY CRITERIA**

**APPENDIX A**

**SUPPLEMENTAL BIDDER RESPONSIBILITY CRITERIA FORMS  
BOEGE ROAD AND STATE ROUTE 4 PRV STATIONS**

**These forms shall be completed in their entirety and submitted by the apparent two lowest Bidders to the Town of Cathlamet by 12:00 p.m. (noon) of the second business day following the bid submittal deadline.**

Failure to submit and meet the requirements as stated in Section 2.01.8 of the General Conditions shall be grounds for rejection of the bid. The Town of Cathlamet will be the sole judge in determining if the prospective contractor meets the minimum experience requirements.

Contractor:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Contact Person: \_\_\_\_\_

**2. Delinquent State Taxes**

Instructions to Bidders: Check the appropriate box

- The Bidder does not owe delinquent taxes to the Washington State Department of Revenue.
- Alternatively, the Bidder does owe delinquent taxes to the Washington State Department of Revenue.

If the Bidder owes delinquent taxes, they must submit a written payment plan approved by the Department of Revenue, to the Contracting Agency.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

**3. Subcontractor Responsibility:**

Instructions to Bidders: Check all boxes that apply

- The Bidder's standard subcontract form includes the subcontractor responsibility language required by RCW 39.06.020.
- The Bidder has a procedure for validating the responsibility of subcontractors with which the Bidder contracts.
- The Bidder's subcontract form includes a requirement that each of its subcontractors shall have and document a similar procedure to determine whether the sub-tier subcontractors with whom it contracts are also "responsible" subcontractors as defined by RCW 39.06.020.

If the Bidder is unable to check all of the above boxes, provide an explanation as to how the bidder will comply with RCW 39.06.020.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

**4. Claims Against Retainage and Bonds:**

Instructions to Bidders: Check the appropriate box

- The Bidder has not had claims against retainage and bonds in the 3 years prior to the bid submittal date.
- Alternatively, the Bidder has had claims against retainage and bonds in the 3 years prior to the bid submittal date.

If the Bidder has had claims against retainage and bonds in the 3 years prior to the bid submittal date, submit a list of public works projects completed during this period that have had claims against retainage and bonds and include name of Project, contact information for the Owner, a list of claims filed against retainage and/or payment bond for any of the projects listed; and a written explanation of circumstances surrounding each claim and the ultimate resolution of the claim.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

**5. Public Bidding Crime:**

Instructions to Bidders: Check the appropriate box

- The undersigned certifies that the Bidder and/or its Owners have not been convicted of a crime involving bidding on a public works contract in the 5 years prior to the bid submittal date.
  
- Alternatively, the undersigned confirms that the Bidder and/or its Owners have been convicted of a crime involving bidding on a public works contract in the 5 years prior to the bid submittal date.

If the Bidder and/or its Owners have been convicted of a crime involving bidding on a public works contract, provide a written explanation identifying the date of the conviction and a description of the circumstances surrounding the conviction.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

**6. Termination for Cause/Termination for Default**

Instructions to Bidders: Check the appropriate box

- The undersigned certifies that the Bidder has not had any public works contracts terminated for cause or terminated for default by a government agency in the 5 years prior to the bid submittal date.
  
- Alternatively, the undersigned confirms that the Bidder has had public works contracts terminated for cause or terminated for default by a government agency in the 5 years prior to the bid submittal date.

If the Bidder has had any public works contracts terminated for cause or terminated for default in the 5 years prior to the bid submittal date, provide a written explanation for all contracts terminated for cause or terminated for default by identifying the project contract that was terminated, the government agency which terminated the Contract, the date of the termination, and a description of the circumstances surrounding the termination.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

**7. Lawsuits**

Instructions to Bidders: Check the appropriate box

- The undersigned certifies that the Bidder has not had any lawsuits with judgments entered against the Bidder in the 5 years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts.
  
- Alternatively, the undersigned confirms that the Bidder has had any lawsuits with judgments entered against the Bidder in the 5 years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts.

If the Bidder has had any lawsuits with judgments entered against the Bidder in the 5 years prior to the bid submittal date that demonstrate a pattern of failing to meet the terms of contracts, submit a list of lawsuits along with a written explanation of the circumstances surrounding each lawsuit. The Contracting Agency shall evaluate these explanations to determine whether the lawsuits demonstrate a pattern of failing to meet the terms of contracts.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

**8. Contract Time (Liquidated Damages)**

Instructions to Bidders: Check the appropriate box

- The undersigned certifies that the Bidder has not had liquidated damages assessed on any project it has completed in the 5 years prior to the bid submittal date.
- Alternatively, the undersigned confirms that the Bidder has had liquidated damages assessed on projects in the 5 years prior to the bid submittal date.

If the Bidder has had liquidated damages assessed against projects in the 5 years prior to the bid submittal date, submit a list of projects along with Owner contact information, and number of days assessed liquidated damages. The Contracting Agency shall determine whether the Contractor has a pattern of failing to complete projects within Contract Time.

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

**9. Capacity and Experience**

The Bidder shall have sufficient current capacity and the Project Superintendent assigned to the Project shall have experience to meet the requirements of this Project. The Bidder and Project Superintendent shall have successfully completed at least two projects as the prime contractor, of a similar size and scope, during the 5-year period immediately preceding the bid submittal deadline for this project. Similar size is defined as a minimum of 70 percent of the bid amount submitted by the Bidder.

A. Capacity

i. Gross dollar amount of work currently under contract:

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ii. Gross dollar amount of contracts currently not completed:

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iii. List five major pieces of equipment which are anticipated to be used on this project by the Contractor and note which items are owned by the Contractor and which are to be leased or rented from others:

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iv. Number of superintendents on Bidder's staff:

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B. Experience

i. General character of work performed by firm:

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---

ii. Identify who will be the superintendent on this project and years of experience. Also, list the number of years this person has been with your firm.

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iii. Similar Size and Scope Projects Completed in the Past 5 Years

#1 Owner's Name and Contact Information: \_\_\_\_\_

---

Owner is a Government Agency? \_\_\_ Yes \_\_\_ No

Superintendent's Name: \_\_\_\_\_

Project Name: \_\_\_\_\_

Awarded Contract Amount: \_\_\_\_\_

Final Contract Amount: \_\_\_\_\_

Completion Date: \_\_\_\_\_

Project Description: \_\_\_\_\_

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#2 Owner's Name and Contact Information: \_\_\_\_\_

\_\_\_\_\_

Owner is a Government Agency? \_\_\_ Yes \_\_\_ No

Superintendent's Name: \_\_\_\_\_

Project Name: \_\_\_\_\_

Awarded Contract Amount: \_\_\_\_\_

Final Contract Amount: \_\_\_\_\_

Completion Date: \_\_\_\_\_

Project Description: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#3 Owner's Name and Contact Information: \_\_\_\_\_

\_\_\_\_\_

Owner is a Government Agency? \_\_\_ Yes \_\_\_ No

Superintendent's Name: \_\_\_\_\_

Project Name: \_\_\_\_\_

Awarded Contract Amount: \_\_\_\_\_

Final Contract Amount: \_\_\_\_\_

Completion Date: \_\_\_\_\_

Project Description: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**APPENDIX B**

**WSDOT PERMITS**