CONTRACT PROVISIONS MILL CREEK FISH PASSAGE PROJECT

April 2020





4-10-2020

Chelan County Natural Resources Department 411 Washington St., Suite 201 Wenatchee, WA 98801

Chelan County Natural Resources Department

MILL CREEK FISH PASSAGE PROJECT

Bid Opening: Monday, May 11, 2020 at 11:00 AM PDT

Notice to All Plan Holders:

The office responsible for answering all questions regarding these bid documents and to show the project to prospective bidders is:

Contact:

Pete Cruickshank Chelan County Natural Resources Department 411 Washington St., Suite 201 Wenatchee, WA 98801

Phone: 509-667-6612 Mobile: 509-699-1754 Email: <u>pete.cruickshank@co.chelan.wa.us</u>

TABLE OF CONTENTS

SECTION TITLE

NUMBER OF PAGES

BID SUBMITTAL PACKAGE

BIDDING CHECKLIST	
BIDDING INSTRUCTIONS	
INVITATION TO BID	
BID FORM	
BID PROPOSAL FORM	
BID PROPOSAL BOND	1
BIDDER INFORMATION SHEET	
NON-COLLUSION DECLARATION	1
CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER	
RESPONSIBILITY MATTERS PRIMARY COVERED TRANSACTIONS	2
CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES	1
PROCUREMENT CONTRACT PACKAGE (to be completed only by successful bidder)	
AGREEMENT	2
PERFORMANCE AND PAYMENT BOND	2
NOTICE OF AWARD	1
NOTICE TO PROCEED	
CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS	
CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS	
CONSENT OF SURETY TO FINAL PAYMENT	1
SPECIAL PROVISIONS	
DIVISION 1 – GENERAL REQUIREMENTS	35
DIVISION 2 – CLEARING	1
DIVISION 5 – SURFACE TREATMENTS AND PAVEMENTS	28
DIVISION 6 – STRUCTURES	
DIVISION 7 – DRAINAGE STRUCTURES	9
DIVISION 8 – MISCELLANEOUS CONSTRUCTION	12
DIVISION 9 – MATERIALS	
APPENDICES	
A. FEDERAL WAGE RATES	49
B. WASHINGTON STATE WAGE RATES & BENEFIT CODE KEY	24
C. GEOTECHNICAL REPORT	0.1

D. HYDRAULIC PROJECT APPROVAL10E. FIRE PROTECTION AND SUPPRESSION10

BID SUBMITTAL PACKAGE

BIDDING CHECKLIST

Bidders must bid on all bid items contained in the Proposal. The omission or deletion of any bid item will be considered non-responsive and shall be cause for rejection of the bid.

Please check to make sure you have accomplished the following:

- □ Has bid bond or certified check been enclosed with your bid?
- \Box Is the amount of the bid guaranty at least five (5) percent of the total amount of the bid?
- \Box Has the proposal been properly signed?
- □ Have you bid on ALL ITEMS and ALL SCHEDULES?
- □ Have you completed the Bidder's Information Sheet?
- □ Have you included the Non-Collusion Declaration?
- Have you completed the Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions?
- □ Have you completed the Certification of Compliance with Wage Payment Statutes?
- □ Have you completed the Certification of Compliance with Prevailing Wage Training?
- □ Have you completed the form regarding Bonding and Claims?
- □ Have you certified receipt of addenda?

BIDDING INSTRUCTIONS

A. BID OPENING

The Chelan County Board of County Commissioners will open sealed bids and publicly read them aloud on Monday, May 11, 2020 at 11:00 AM PDT or as soon thereafter as the matter may be heard, at the Board of Commissioners Office, Chelan County Administration Building, 400 Douglas Street Suite 201, Wenatchee, Washington, for the construction of Chelan County Natural Resources Project <u>Mill Creek</u> <u>Fish Passage Project</u> in Chelan County. Sealed bids must be received by the Clerk of the Board of County Commissioners in a sealed envelope clearly marked "**BID ON MILL CREEK FISH PASSAGE PROJECT**".

Sealed bids may not be submitted by facsimile or other electronic or data transmission.

B. BID CONTENTS

The sealed bid must contain all bidding documents, fully completed and signed. Bidders not fully meeting specifications must identify and list exceptions. All exceptions are subject to review, inspection, testing and approval by Chelan County.

The sealed bid must also contain the following information and materials, completed and signed:

- 1. Bid Proposal (Prices must be shown on every unit item and the total. Quantities, where not listed shall be estimated by the bidder and shown);
- 2. Bid Proposal Form (Executed by Principal or Authorized Officer.);
- 3. Bid Proposal Bond (in lieu of cashier's check, or certified check, a Bid Proposal bond must be executed by the Bidder and the Bidder's Surety.);
- 4. Bidder Information Sheet;
- 5. Non-Collusion Declaration;
- 6. Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions;
- 7. Certification of Compliance with Wage Payment Statutes; and
- 8. Bonding and Claims.

Bid proposal forms are not transferable. Any alteration not initialed by the Bidder will be cause for deeming the bid proposal irregular and rejecting the bid.

In submitting a Bid Proposal, Bidder shall comply with provisions as contained in the Special Provisions, 1-02.6, regarding "Preparation of the Proposal", unless otherwise required herein.

C. CLARIFICATION OF BID

NO CHANGES ARE ALLOWED EXCEPT BY SUBMITTING AN AMENDED SEALED BID PROPOSAL PRIOR TO THE DATE AND TIME SET FOR BID OPENING. Any unsealed clarification information received by the Clerk which discloses price will not be considered by the Board of County Commissioners and shall result in rejection of the entire bid.

D. BID BOND

In accordance with Section 1-02.7 of the Special Provisions and the WSDOT Standard Specifications, all bid proposals shall be accompanied by a bid bond, certified check, cashier's check, made out to Chelan County, or cash in the amount of five percent (5%) of the total bid, conditioned upon the

Bidder's full and complete performance of the terms and conditions of a bid award. The bid bond or equivalent shall be held by Chelan County until acceptable performance and payment bonds and certificate of insurance are provided to Chelan County, and the contract is subsequently fully executed. If the successful bidder abandons the bid award, fails to provide satisfactory performance bond and a certificate of insurance to Chelan County or fails to fully execute the contract, then the bid bond or equivalent shall, in the sole discretion of Chelan County, be forfeited and retained.

E. BID REVIEW AND EVALUATION

The Board of County Commissioners reserves the right to reject any or all bids, waive informalities, and to contract as the best interests of Chelan County may require. When evaluating bids, the following criteria, in addition to price, will be considered:

- 1. The bidder's experience, technical qualifications and skill;
- 2. The guaranteed availability of materials needed for construction;
- 3. The bidder's ability and capacity to fully perform within the time required, taking into account the bidder's existing performance commitments and past performance;
- 4. The bidder's qualifications and eligibility to contract under applicable laws and regulations;
- 5. The bidder's compliance with the terms and conditions of this request for bids;
- 6. Any additional evaluation criteria contained in the plans, specifications and addenda; and
- 7. Any other information as may have a bearing on the bid.
- 8. Not currently be debarred, suspended or under other sanctions pursuant to Executive Order 12549. Disbarment and Suspension 13 CFR Part 145 of the U. S. Small Business Administration. Bidder is required to complete "Certification regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions"

F. CONTRACT DOCUMENTS FOLLOWING AWARD

Each Bidder's attention is especially called to the following documents that must be fully completed, executed and submitted to Chelan County if successful Bidder:

- 1. <u>Notice of Award</u> To be executed by the successful Bidder upon receipt of issuance by the Chelan County Board of Commissioners.
- 2. <u>Agreement</u> To be executed by the successful Bidder.
- 3. <u>Payment and Performance Bond</u> To be executed by the successful Bidder and the Bidder's Surety Company.
- 4. <u>Certificate of Insurance</u> To be executed by the successful Bidder's Insurance Company.
- 5. <u>Notice to Proceed</u> To be executed by the successful Bidder upon receipt of issuance by the Chelan County Board of Commissioners.

G. CANCELLATION BY COUNTY

In its sole discretion, Chelan County may cancel any bid award upon written notification to the successful bidder within 30 (thirty) days after the date of the bid award, without any cost, expense, penalty or damages payable to the successful bidder.

INVITATION TO BID Mill Creek Fish Passage Project

Sealed bids will be received by Chelan County at the Board of County Commissioners Chambers, Chelan County Administration Building, 400 Douglas Street, Wenatchee, Washington until Monday, May 11, 2020 at 11:00 AM PDT for the "MILL CREEK FISH PASSAGE PROJECT".

Chelan County Natural Resources Project: <u>Mill Creek Fish Passage Project</u>, Chelan County. This Contract provides for the improvement of 115 feet of Mill Creek at the location where it flows under Mountain Home Ranch Road, which is owned by Chelan County, by replacing the existing concrete box culvert with an interior span rise high profile arch structural plate culvert and realignment of the stream channel. The Work includes temporary stream diversion, erosion control, dewatering, clearing, structure excavation, removal of the existing culvert, channel grading, installation of footings, construction of the culvert, construction of headwalls and wingwalls, backfill and compaction, base course placement and compaction, guardrail installation, asphalt paving, pavement marking, seeding, traffic control and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

An optional conference call with representatives from the CONTRACTING AGENCY will be held in-lieu of a site meeting on Friday April 24rd at 9:00 A.M. Attendees shall dial in to (360) 407-3780 and use the Pin Code 286246# when prompted.

The project site is located within the Chelan County roadway on Mountain Home Road, approximately ¹/₄ South of its intersection with Highway 97, outside of Peshastin, Wa.

A bid bond, certified check, or cashier's check in the amount of 5% of the bid shall accompany all bids.

The County of Chelan in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color or national origin in consideration for an award.

All bids shall be marked "MILL CREEK FISH PASSAGE PROJECT" on the outside of the envelope. The Board of County Commissioners reserves the right to reject any or all bids for cause. Dated this _____ day of , 2020.

BOARD OF CHELAN COUNTY COMMISSIONERS

DOUG ENGLAND, CHAIRMAN

ATTEST:

KEVIN OVERBAY, COMMISSIONER

CLERK OF THE BOARD

BOB BUGERT, COMMISSIONER

NOTE: The following forms are to be submitted with the Bid

Mill Creek Fish Passage Project

TO: Board of Chelan County Commissioners, Wenatchee, Washington

The Undersigned certify that they have examined the location of the project and read and thoroughly understand the plans, specifications and contract governing the work embraced in this improvement or as much thereof as can be completed with the money available, in accordance with the said plans, specifications, and contract, and the following schedule of rates and prices:

Itm #	Spec #	Description	Unit	Qty	Unit Price	Amount
1	1-09.7	MOBILIZATION	LS	1		
2	2-01	CLEARING	AC	0.25		
3	8-01.3(9)	HIGH VISIBILITY FENCE	LF	1,260		
4	7-06	TEMPORARY STREAM DIVERSION	LS	1		
5	8-19	TEMPORARY DETOUR	LS	1		
6	8-26	TEMPORARY BRIDGE	LS	1		
7	2-09	STRUCTURE EXCAVATION CLASS A INCL. HAUL	CY	1,150		
8	7-08.3(1)B	SHORING OR EXTRA EXCAVATION CL. A	LS	1		
9	7-03	STRUCTURAL PLATE CULVERT	LS	1		
10	7-03.2	GRAVEL BACKFILL FOR PIPE ZONE BEDDING	CY	410		
11	6-13	STRUCTURAL EARTH WALL	SF	535		
12	8-27	CHANNEL GRADING	LS	1		
13	8-27	CHANNEL CONSTRUCTION	LS	1		
14	8-27	STREAMBED SAND	CY	20		
15	4-04	CRUSHED SURFACING BASE COURSE	CY	115		
16	5-04	HMA CL. 3/8 IN. PG 64-28	ΤN	132		
17	8-11	BEAM GUARDRAIL TYPE 31	LF	91		

18	8-11	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	EA	4			
19	8-11	BEAM GUARDRAIL PLACEMENT - 25' SPAN	EA	2			
20	1-05.4(1)	SURVEYING	LS	1			
21	1-10	PROJECT TEMPORARY TRAFFIC CONTROL	LS	1			
22	8-02.3	SEEDING AND MULCHING	AC	0.42			
23	8-01	EROSION CONTROL AND WATER POLLUTION PREVENTION	LS	1			
24	8-28	TEMPORARY FENCE	LS	1			
25	8-22	PAINT LINE	LF	682			
26	1-04.4(1)	MINOR CHANGE	DOL	5,000	NA	<u> </u>	5,000
	Total Base Bid Price						

The aforementioned sum is hereby designated the Total Base Bid. The Total Base Bid shall <u>not</u> include Washington State sales tax.

PRINT BIDDER NAME

DATE

SIGNATURE OF PRINCIPAL OR OFFICER

BID PROPOSAL FORM

To the Chelan County Board of County Commissioners:

The undersigned Bidder hereby certifies that the Bidder has examined the sites upon which the Work is to be performed and has read and thoroughly understands the plans, specifications, addenda and contract governing the work, the manner by which payment will be made for such work and time in which to attain Substantial Completion for the MILL CREEK FISH PASSAGE Project.

The Bidder hereby acknowledges receipt of Addendum No. 1_, No. 2_, No. 3_, No. 4_, No. 5_, No. 6_, No. 7_, No. 8_, No. 9_, and No. 10_.

The Bidder hereby acknowledges that by execution of this Bid Proposal Form the Bidder has agreed to all bidding requirements, has fully executed all required bidding documents, and has agreed to fully and completely perform all work required under the plans, specifications, addenda and Contract within the time period as specified. The Bidder has agreed to pay prevailing wage rates of Federal or State of Washington which are in effect at the time of the execution of the contract and whichever are the higher, in accordance with the requirements of the special provisions.

The undersigned hereby agrees to the indemnification requirements of Section 1-07.28 of the Special Provisions – Division 1. Submission of this Bid Proposal and entering into a Contract for this Work constitutes acknowledgement by the Contractor that said indemnification requirements are specifically and expressly a part of the Bid process and Contract Negotiations, including Contract waiver of immunity under Industrial Insurance, Title 51 RCW.

A bid proposal security of five percent (5%) of the total bid is attached hereto in the following form and in the amount of \$_____.

Bid Proposal Bond _____ Cashier's Check _____ Certified Check _____ Checks must be payable to the Treasurer of Chelan County, Washington.

PRINT BIDDER NAME		SIGNATURE OF PRINC	CIPAL OR OFFICER
MAILING ADDRESS	CITY	STATE	ZIP
PRINT NAME OF SIGNATORY		TITLE	
TELEPHONE	FAX		
STATE REGISTRATION NUMBER		STATE UBI NU	MBER

BID PROPOSAL BOND

KNOW ALL PERSONS 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 Chelan County Commissioners in the full and penal sum of five (5) percent of the total amount of the Bid Proposal of said Principal for the work hereinafter described, for the payment of which, 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 to wit:

<u>Mill Creek Fish Passage Project</u>: This Contract provides for the improvement of 115 feet of Mill Creek at the location where it flows under Mountain Home Ranch Road, which is owned by Chelan County, by replacing the existing concrete box culvert with an interior span rise high profile arch structural plate culvert and realignment of the stream channel. The Work includes temporary stream diversion, erosion control, dewatering, clearing, structure excavation, removal of the existing culvert, channel grading, installation of footings, construction of the culvert, construction of headwalls and wingwalls, backfill and compaction, base course placement and compaction, guardrail installation, asphalt paving, pavement marking, seeding, traffic control and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

NOW, THEREFORE, if the said Bid Proposal 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 Chelan County Commissioners within a period of fourteen (14) 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 ______, 20____.

NOTE: Failure to provide a Bid Proposal Bond renders a bid non-responsive. Acceptable Bid Bond language shall comply with Standard Specifications.

WITNESS our hands this _____ day of _____, 20___.

PRINT PRINCIPAL'S NAME

PRINT SURETY'S NAME

SIGNATURE: AUTHORIZED PRINCIPAL/OFFICER SIGNATURE: SURETY/AUTHORIZED AGENT

ATTORNEY-IN-FACT, SURETY

BIDDER INFORMATION

PROJECT: Mill Creek Fish Passage Project

Contractor registration, bonding and insurance information will be confirmed through Department of Labor and Industries at 1.800.647.0982 and 1.360.902.5230.

CONTRACTOR:

	LEPHONE NO.
STATE	ZIP
FEDERAL TAX ID	UBI NO.
CORPORATION	
_	
_	FEDERAL TAX ID

NON-COLLUSION DECLARATION

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

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

NOTICE TO ALL BIDDERS

To report bid rigging activities call: 1.800.424.9071

The U.S. Department of Transportation (USDOT) operates the above toll0pfree "hotline" Monday through Friday, 8:00 AM to 5:00 PM, Eastern Standard Time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

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

FAILURE TO RETURN THIS DECLARATION AS PART OF THE BID SUBMITTAL PACKAGE WILL MAKE THE BID NONRESPONSIVE AND INELIGIBLE FOR AWARD.

CERTIFICATION REGARDING DEBARMENT

Certification Regarding Debarment, Suspension, and Other Responsibility Matters Primary Covered Transactions

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 13 CFR Part 145. The regulations were published as Part VII of the May 26, 1988 *Federal Register* (pages 19160-19211). Copies of the regulations are available from local offices of the U.S. Small Business Administration.

(BEFORE COMPLETING CERTIFICATION, READ INSTRUCTIONS ON REVERSE)

(1) The prospective primary participant certifies to the best of its knowledge and belief that it and its principals:

- (a) Are not presently debarred, suspended, proposed for disbarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three-year period preceding this application been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective primary participant shall attach an explanation to this proposal.

Business Name		
Date	Ву	Name and Title of Authorized Representative
		Signature of Authorized Representative
SBA Form 1623 (10-88)	Federal Recycling Program	This form was electronically produced by Elite Federal Forms, Inc

INSTRUCTIONS FOR CERTIFICATION

- 1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- 2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
- 3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.
- 4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations (13 CFR Part 145).
- 6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- 7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the ineligibility of its principals. Each participant may, but is not required to, check the Non-Procurement List.
- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date March 23, 2020, the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

BIDDER'S BUSINESS NAME

SIGNATURE OF AUTHORIZED OFFICIAL*

PRINTED NAME

TITLE

DATE	CITY		STATE
<i>Check One:</i> Sole Proprietorship	Partnership 🗆	Joint Venture 🗆	Corporation \Box
State of Incorporation, of	or if not a corpora	tion, State where bu	usiness entity was formed:

If a co-partnership, give firm name under which business is transacted:

* If a corporation, proposal must be executed in the corporate name by the president or vicepresident (or any other corporate officer accompanied by evidence of authority to sign). If a copartnership, proposal must be executed by a partner.

CERTIFICATION OF COMPLIANCE WITH WITH PREVAILING WAGE TRAINING

The bidder hereby certifies that is Responsible within criteria set forth in RCW 39.04.350 and RCW 39.06.020, specifically in regards to ESSHB 1673 which requires all businesses to have prevailing wage training before bidding and/or performing work on public works projects. Online Contractor training is available at https://www.lni.wa.gov/TradesLicensing/PrevWage/Contractors/Training.asp.

Alternatively, Contractors with an active <u>Unified Business Identifier (UBI) for 3 or more years</u> **AND** have performed on <u>3 or more public works projects</u> are exempt from this training requirement. Please provide business information below and either completed training date OR 3 completed public works as reference.

I certify under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

BUSINESS NAME

UNIFIED BUSINESS INDENTIFIER (UBI)

SIGNATURE OF AUTHORIZED OFFICIAL*

PRINTED NAME

*Check one option below and provide details

Option A
Labor and Industries Prevailing Wage Training Completion

LnI Prevailing Wages Training Completion Date

Option B
Exemption from Training Requirement

1. Project Name, Contracting Agency, Completion Date of Public Works Project

2. Project Name, Contracting Agency, Completion Date of Public Works Project

3. Project Name, Contracting Agency, Completion Date of Public Works Project

CONSTRUCTION CONTRACT PACKAGE

NOTE: The following forms are to be executed by the successful bidder, after the Contract Award, and are included here for Bidder's information only.

AGREEMENT

THIS AGREEMENT, made thisday of, 2020, by and between Chelan County hereinafter called "CONTRACTING AGENCY" anddoing business as (an individual) or (a partnership) or (a corporation) hereinafter called "CONTRACTOR".	
WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:	
1. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the demolition of <u>Mill Creek Fish Passage Project</u> in accordance with the CONTRACT DOCUMENTS.	
2. The CONTRACTOR will commence the work required by this contract in Year 1 on a date to be specified in the NOTICE TO PROCEED.	
3. The CONTRACTOR shall complete all work indicated on the Drawings for Year 1 prior to October 1, 2020.	
 4. The CONTRACTOR shall attain Substantial Completion of all work by September 30, 2020. 5. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$ or as shown in the BID schedule (<i>Not including Washington State Sales Tax</i>). 	
 The CONTRACTOR shall submit applications for payment in accordance with the 2020 Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction (Standard Specifications). Applications for payment shall be submitted to the CONTRACTING AGENCY. 	
7. The term "CONTRACT DOCUMENTS" means and includes the following:	
 (A) BIDDING INSTRUCTIONS (B) INVITATION TO BID (C) BID FORM (D) BID PROPOSAL FORM (E) PROPOSAL FORM 	
 (E) BID PROPOSAL BOND (F) BIDDER INFORMATION (G) NON-COLLUSION DECLARATION (H) CERTIFICATION REGARDING DEBARMENT (I) BONDING AND CLAIMS 	
(J) CERTIFICATE OF COMPLIANCE WITH WAGE PAYMENT STATUTES(K) PERFORMANCE AND PAYMENT BOND(L) NOTICE OF AWARD	
(M)NOTICE TO PROCEED (N) CHANGE ORDER(s) (O) ADDENDA:	

(O) ADDENDA:

No.	Dated	, 2020
No.	Dated	, 2020
No.	Dated	, 2020

8. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

CONTRACTING AGENCY	CONTRACTOR
SIGNATURE	SIGNATURE
PRINT NAME	PRINT NAME
TITLE (SEAL) ATTEST:	ADDRESS
Clerk of the Board	TITLE (SEAL)
SIGNATURE	EMPLOYER ID NUMBER:
PRINT NAME	ATTEST:
TITLE	SIGNATURE
	PRINT NAME
	TITLE
PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS: that whereas Chelan County, Wenatchee, Washington a municipal corporation has awarded to:

CONTRACTOR NAME

hereinafter designated as the "CONTRACTOR" a contract for work items, which contract consists of the Proposal/Agreement, together with the Contract Documents, Specifications, Addenda and Plans, all as hereto attached and made a part hereof, and more particularly described as:

Mill Creek Fish Passage Project

and whereas said CONTRACTOR is required under the terms of said contract to furnish a bond for the faithful performance of said contract:

NOW, THEREFORE, we the CONTRACTOR and

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

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bonded CONTRACTOR, his or its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in said contract, and shall faithfully perform all the provisions of such contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said contract that may hereafter be made, at the time and in the manner therein specified; and shall pay all laborers, mechanics, subcontractors and materialmen, and all persons who shall supply such person or persons, or subcontractors, with provisions and supplies for the carrying on of such work on his or their parts; and shall indemnify and save harmless the CONTRACTING AGENCY, its officers and agents, from any loss or damage occasioned to any person or property by reason of any carelessness or negligence on the part of said principal, or any subcontractor, in the performance of said contract or any modifications thereof; and shall further indemnify and save harmless Chelan County, its officers and agents, from any damage or expense by reason of failure of performance as required by said contract, or any modifications thereof, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

And the said surety, for value received, hereby further stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this bond, and it does hereby waive notice of any change, extension of time, alternations or additions to the terms of the contract or the work or to the specifications. This Bond is provided pursuant to and shall be construed in accordance with Ch. 39.08 RCW.

IN WITNESS THEREOF, the said CONTRACTOR and the said surety caused this bond and three (3) counterparts thereof to be signed and sealed by their duly authorized officers, this _____ day of _____, 20___.

PRINCIPAL	
BY	_
TITLE	
ATTEST (If Corporation)	WITNESSES (If Individual or Partnership)
CORPORATE SEAL	
BY	_
TITLE	
APPROVED AS TO FORM	
SURETY	
BY	BY
(Attorney for)
Address of local office and agent of Surety Company is:	
	-

ADDRESS

NOTICE OF AWARD

DATED		
ТО		
ТО	 	

PROJECT Mill Creek Fish Passage Project

The CONTRACTING AGENCY has considered the BID submitted by you for the above described WORK in response to its Advertisement for Bids dated April 13, 2020, and Information for Bidders.

You are hereby notified that your BID	has been accepted for items in the amount of
\$	(not including Washington State Sales Tax).

You are required by the Bidding Instructions to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND, Payment BOND and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) calendar days from the date of this Notice, said CONTRACTING AGENCY will be entitled to consider all your rights arising out of the CONTRACTING AGENCY'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The CONTRACTING AGENCY will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the CONTRACTING AGENCY. Dated this _____ day of _____, 2020.

CONTRACTING OFFICER

SIGNATURE

TITLE

ACCEPTANCE OF NOTICE			
Receipt of the above NOTICE OF AWARD is hereby acknowledged by			
	this	day of	, 2020.
SIGNATURE		TITLE	

PAGE LEFT BLANK INTENTIONALLY

NOTICE TO PROCEED

DATED

ТО

PROJECT Mill Creek Fish Passage Project

You are hereby notified to commence WORK in accordance with the Agreement dated _____, 2020, on or before ______, 2020, and you are to attain Substantial Completion, as determined by the Contracting Agency, on or before September 30, 2020.

CONTRACTING OFFICER

SIGNATURE

TITLE

ACCEPTANCE OF	NOTICE			
Receipt of the above NOTICE	TO PROCEED is h	ereby acknowledged b	у	
	this	day of	, 2020.	
SIGNATURE		TITLE		

PAGE LEFT BLANK INTENTIONALLY

NOTE: The following forms are to be submitted by the Contractor upon substantial completion, and are included here for Bidder's Information only

PAGE LEFT BLANK INTENTIONALLY

CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

			CONTRACTING AGENC	Y
PROJECT:	Mill Creek Fish Passage Proj	ect	[
		EN	GINEER [
	Chelan County	CO	NTRACTOR	
ТО	Natural Resources Departme	nt SU	RETY	
CONTRACTING	411 Washington Street, Suite	e 201 OT	HER	
AGENCY:	Wenatchee, WA 98801			
STATE OF:	WASHINGTON	CONTRACT FOR:		
		CONTRACT		
COUNTY OF:	CHELAN	DATED:		

The undersigned hereby certifies that, except as listed below, payment has been paid in full and all obligations have otherwise been satisfied for all equipment and materials furnished, for all work, labor and services performed, and for all known indebtedness and claims against the CONTRACTOR for damages arising in any manner in connection with the performance of the CONTRACT referenced above for which the CONTRACTING AGENCY might in any way be held responsible for encumbered.

Exceptions are as follows:

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Consent of Surety to Final Payment. Whenever surety is involved, Consent of Surety is required. Indicate attachment: (YES) (NO).

The following supporting documents should be attached hereto if required by the CONTRACTING AGENCY:

- a. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.
- b. Separate Releases or Waivers of Liens from subcontractors and material and equipment suppliers to the extent required by the CONTRACTING AGENCY, accompanied by a list thereof.
- c. Contractor's Affidavit of Release of Liens.

CONTRACTOR:	
ADDDRESS:	

Subscribed and sworn to before me this __day of _____ 20__.

SIGNATURE OF AUTHORIZED REPRESENTATIVE SIGNATURE OF NOTARY PUBLIC

PRINTED NAME

PRINTED NAME OF NOTARY PUBLIC

PRINTED TITLE

COMMISSION EXPIRATION DATE

PAGE LEFT BLANK INTENTIONALLY

CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

PROJECT:	Mill Creek Fish Passage Proj	ect	CONTRACTING AGENCY	
TO CONTRACTING AGENCY:	Chelan County Natural Resources Departme 411 Washington Street, Suite Wenatchee, WA 98801		ENGINEER CONTRACTOR SURETY OTHER	
STATE OF:	WASHINGTON	CONTRACT FO		
COUNTY OF:	CHELAN	CONTRA DATI		

The undersigned hereby certifies that to the best of their knowledge, information and beliefs, except as listed below, the Releases or Waivers of Lien attached hereto include the CONTRACTOR, all subcontractors, all suppliers of equipment and materials, and all performers of work, labor and/or services who have or may have liens or encumbrances or the right to assert liens or encumbrances against any property of the CONTRACTING AGENCY arising in any manner out of the performance of the CONTRACT referenced above.

Exceptions are as follows:

SUPPORTING DOCUMENTS ATTACHED HERETO:

- 1. Contractor's Release or Waivers of Liens, condition upon receipt of final payment.
- 2. Separate Releases or Waivers of Liens from Subcontractors and equipment and material suppliers, to the extent required by the CONTRACTING AGENCY, accompanied by a list thereof.

CONTRACTOR:ADDDRESS:	Subscribed and sworn to before me thisday of 20
SIGNATURE OF AUTHORIZED REPRESENTATIVE	SIGNATURE OF NOTARY PUBLIC
PRINTED NAME	PRINTED NAME OF NOTARY PUBLIC
PRINTED TITLE	COMMISSION EXPIRATION DATE

PAGE LEFT BLANK INTENTIONALLY

CONSENT OF SURETY TO FINAL PAYMENT

PROJECT:	Mill Creek Fish Passage	Project	CONTRACTING AGENCY
TO CONTRACTING AGENCY:	Chelan County Natural Resources Depar 411 Washington Street, S Wenatchee, WA 98801	tment ENGINEER CONTRACTOR	
STATE OF:	WASHINGTON	CONTRACT FO	
COUNTY OF:	CHELAN	CONTRA	
	ndicated above, the (insert	name and address of Si	ONTRACTING AGENCY and the <i>urety Company</i>) _, SURETY COMPANY,
on bond of (insert na	me and address of Contrac	ctor)	
	, CONTRA	CTOR,	
shall not relieve th CONTRACTING AG	e Surety Company of a	ny of its obligations	nat final payment to the Contractor to (insert name and address of
	SURE	ГҮ COMPANY NAME	3
Attest:	SIGNA	ATURE OF AUTHORIZ	ZED REPRESENTATIVE
(SEAL)	PRINT	ED NAME AND TITL	.E

PAGE LEFT BLANK INTENTIONALLY

CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT:

TO CONTRACTING AGENCY:	Chelan County Natural Resources Department 411 Washington Street, Suite 201 Wenatchee, WA 98801		
STATE OF:	WASHINGTON	CONTRACT FOR:	Construction
COUNTY OF:	CHELAN	CONTRACT DATED:	
		DATE OF ISSUANCE:	

Project or Designated Portion Shall Include:

The work performed under this CONTRACT has been reviewed and found to be substantially complete. The date of substantial completion of the project or portion thereof designated above is hereby established

as _____ which is also the date of commencement of applicable warranties as required by the Contract Documents, except as stated below.

Definition of Date of Substantial Completion

The Date of Substantial Completion of the Work or designated portion thereof is the date certified by the project administrator when construction is sufficiently complete in accordance with the Contract Documents, so the CONTRACTING AGENCY can occupy or utilize the work or designated portion thereof for the use for which it is intended, as expressed in the Contract Documents.

CONTRACTOR

ΒY

DATE

The CONTRACTING AGENCY accepts the Work or designated portion thereof a substantially complete and will assume full possession thereof at on _____.

CHELAN COUNTY COMMISIONER

BY

DATE

The responsibilities of the CONTRACTING AGENCY and CONTRACTOR for security, maintenance, heat, utilities, damage to the work, and insurance shall be as follows:

NOTE: Contracting Agency's and Contractor's legal and insurance counsel should determine and review insurance requirements and coverage; Contractor shall secure consent of surety company, if any.

SPECIAL PROVISIONS

PAGE LEFT BLANK INTENTIONALLY

INTRODUCTION TO THE SPECIAL PROVISIONS

(August 14, 2013 APWA GSP)

The work on this project shall be accomplished in accordance with the *Standard Specifications for Road, Bridge and Municipal Construction*, 2020 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter "Standard Specifications"). The Standard Specifications, as modified or supplemented by the Amendments to the Standard Specifications and these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

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

The project-specific Special Provisions are not labeled as such. The GSPs are labeled under the headers of each GSP, with the effective date of the GSP and its source. For example:

(March 8, 2013 APWA GSP) (April 1, 2013 WSDOT GSP) (May 1, 2013 Chelan County GSP)

Also incorporated into the Contract Documents by reference are:

- *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently adopted edition, with Washington State modifications, if any
- Standard Plans for Road, Bridge and Municipal Construction, WSDOT/APWA, current edition
- Geotechnical Design Manual M 46-03, WSDOT, current edition
- Bridge Design Manual LRFD M 23-50, WSDOT, current edition
- Bridge Design Specifications, AASHTO LRFD, current edition

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

Division 1 General Requirements

DESCRIPTION OF WORK

(March 13, 1995)

This Contract provides for the improvement of *** 115 feet of Mill Creek at the location where it flows under Mountain Home Ranch Road, which is owned by Chelan County, by replacing the existing 4' by 5' concrete box culvert with a 20'-8" interior span, 12'-1" rise high profile arch structural plate culvert and realignment of the stream channel. The Work includes temporary stream diversion, erosion control, dewatering, clearing, structure excavation, removal of the existing culvert, channel grading, installation of footings, construction of the culvert, construction of headwalls and wingwalls, backfill and compaction, base course placement and compaction, guardrail installation, asphalt paving, pavement marking, seeding, traffic control *** and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

1-01.3 Definitions

(January 4, 2016 APWA GSP)

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

Dates

Bid Opening Date

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

Award Date

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

Contract Execution Date

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

Notice to Proceed Date

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

Substantial Completion Date

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

Physical Completion Date

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

Completion Date

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

Final Acceptance Date

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

Supplement this Section with the following:

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

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

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

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

Additive

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

Alternate

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

Business Day

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

Contract Bond

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

Contract Documents

See definition for "Contract".

Contract Time

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

Notice of Award

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

Notice to Proceed

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

Traffic

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

(*****)

All references to Engineer and Contracting Officer are equivalent.

1-02 Bid Procedures and Conditions

1-02.1 Prequalification of Bidders

Delete this section and replace it with the following:

1-02.1 Qualifications of Bidder

(January 24, 2011 APWA GSP)

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

1-02.2 Plans and Specifications

(June 27, 2011 APWA GSP)

Delete this section and replace it with the following:

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

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

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	2	Furnished automatically upon award.
Contract Provisions	2	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	1	Furnished only upon request.

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

1-02.4 Examination of Plans, Specifications, and Site of Work

Section 1-02.4 is supplemented with the following:

(*****)

In light of the Governor's 20-25 Stay Home – Stay Healthy Proclamation an optional Pre-Bid conference call with representatives from the CONTRACTING AGENCY will be held in-lieu of a site meeting on Friday April 24rd at 9:00 A.M. Attendees shall dial in to (360) 407-3780 and use the Pin Code 286246# when prompted.

The project site is located within the Chelan County roadway on Mountain Home Road, approximately ¼ South of its intersection with Highway 97, outside of Peshastin, Wa. The project area is open to independent examination by prospective bidders at any time.

1-02.4(2) Subsurface Information

(March 8, 2013 APWA GSP)

The second sentence in the first paragraph is revised to read:

The Summary of Geotechnical Conditions and the boring logs, <u>if and when included</u> as an appendix to the Special Provisions, shall be considered as part of the Contract.

1-02.5 Proposal Forms

1-02.5 Proposal Forms

(July 31, 2017 APWA GSP)

Delete this section and replace it with the following:

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

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

1-02.6 Preparation of Proposal

(July 11, 2018 APWA GSP)

Supplement the second paragraph with the following:

- 4. If a minimum bid amount has been established for any item, the unit or lump sum price must equal or exceed the minimum amount stated.
- 5. Any correction to a bid made by interlineation, alteration, or erasure, shall be initialed by the signer of the bid.

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

If no Subcontractor is listed, the Bidder acknowledges that it does not intend to use any Subcontractor to perform those items of work.

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

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

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

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

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

1-02.7 Bid Deposit

Supplement this section with the following:

(*****)

A certified check or bid bond made payable to the Chelan County Natural Resources Department (CCNRD), for an amount equal to at least five (5%) percent of the total amount of the bid, must accompany each bid as evidence of good faith, and as a guarantee that, if awarded the contract, the bidder will execute the contract and give bond, as required. Should the successful bidder fail to enter into such a contract and furnish satisfactory performance bond within the time stated in the specifications, the bid proposal deposit may be forfeited to CCNRD.

Bid bonds shall contain the following:

- 1. Contracting Agency-assigned number for the project;
- 2. Name of the project;
- 3. The Contracting Agency named as obligee;
- 4. The amount of the bid bond stated either as a dollar figure or as a percentage which represents five percent of the maximum bid amount that could be awarded;

- 5. Signature of the bidder's officer empowered to sign official statements. The signature of the person authorized to submit the bid should agree with the signature on the bond, and the title of the person must accompany the said signature;
- 6. The signature of the surety's officer empowered to sign the bond and the power of attorney.

If so stated in the Contract Provisions, bidder must use the bond form included in the Contract Provisions.

If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.

1-02.9 Delivery of Proposal

(December 19, 2019 APWA GSP, Option A)

Delete this section and replace it with the following:

Each Proposal shall be submitted in a sealed envelope, with the Project Name and Project Number as stated in the Call for Bids clearly marked on the outside of the envelope, or as otherwise required in the Bid Documents, to ensure proper handling and delivery. To be considered responsive on a FHWA-funded project, the Bidder may be required to submit the following items, as required by Section 1-02.6:

- UDBE Written Confirmation Document from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification (WSDOT 272-056U)
- Good Faith Effort (GFE) Documentation
- UDBE Bid Item Breakdown (WSDOT 272-054)
- UDBE Trucking Credit Form (WSDOT 272-058)

These documents, if applicable, shall be received either with the Bid Proposal or as a supplement to the Bid. These documents shall be received **no later than 48 hours** (not including Saturdays, Sundays and Holidays) after the time for delivery of the Bid Proposal.

If submitted after the Bid Proposal is due, the document(s) must be submitted in a sealed envelope labeled the same as for the Proposal, with "Supplemental Information" added. All other information required to be submitted with the Bid Proposal must be submitted with the Bid Proposal itself, at the time stated in the Call for Bids.

Board of Chelan County Commissioners Chelan County Administration Building 400 Douglas St Wenatchee, WA 98801

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

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

1-02.10 Withdrawing, Revising, or Supplementing Proposal

(July 23, 2015 APWA GSP)

Delete this section, and replace it with the following:

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

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

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

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

1-02.12 Public Opening of Proposals

Section 1-02.12 is supplemented with the following:

(*****) Date of Opening Bids

The bid opening date for this project is *** May 11, 2020*** Bids received will be publicly opened and read after 11:00:59 AM Pacific Time on this date.

1-02.13 Irregular Proposals

(December 19, 2019 APWA GSP)

Delete this section and replace it with the following:

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

- b. The authorized Proposal form furnished by the Contracting Agency 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, as required in Section 1-02.6;
- h. The Bidder fails to submit or properly complete an Underutilized Disadvantaged Business Enterprise Certification, if applicable, as required in Section 1-02.6;
- i. The Bidder fails to submit written confirmation from each UDBE firm listed on the Bidder's completed UDBE Utilization Certification that they are in agreement with the bidder's UDBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
- j The Bidder fails to submit UDBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award was made;
- k. The Bidder fails to submit a UDBE Bid Item Breakdown form, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
- I. The Bidder fails to submit UDBE Trucking Credit Forms, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;
- m. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation; or
- n. 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 Contracting Agency;
 - 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.

1-02.14 Disqualification of Bidders

(May 17, 2018 APWA GSP, Option A)

Delete this section and replace it with the following:

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

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

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

1-02.15 Pre-Award Information

(August 14, 2013 APWA GSP)

Revise this section to read:

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

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

1-03 Award and Execution of Contract

1-03.1 Consideration of Bids

(January 23, 2006 APWA GSP)

Revise the first paragraph to read:

After opening and reading proposals, the Contracting Agency will check them for correctness of extensions of the prices per unit and the total price. If a discrepancy exists between the price per unit and the extended amount of any bid item, the price per unit will

control. If a minimum bid amount has been established for any item and the bidder's unit or lump sum price is less than the minimum specified amount, the Contracting Agency will unilaterally revise the unit or lump sum price, to the minimum specified amount and recalculate the extension. The total of extensions, corrected where necessary, including sales taxes where applicable and such additives and/or alternates as selected by the Contracting Agency, will be used by the Contracting Agency for award purposes and to fix the Awarded Contract Price amount and the amount of the contract bond.

1-03.3 Execution of Contract

(October 1, 2005 APWA GSP)

Revise this section to read:

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

Within ***<u>14 (fourteen)***</u> calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the contract by the Contracting Agency, the successful bidder shall provide any pre-award information the Contracting Agency may require under Section 1-02.15.

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

If the bidder experiences circumstances beyond their control that prevents return of the contract documents within <u>the</u> calendar days after the award date <u>stated above</u>, the Contracting Agency may grant up to a maximum of ***<u>14 (fourteen)***</u> additional calendar days for return of the documents, provided the Contracting Agency deems the circumstances warrant it.

1-03.4 Contract Bond

(July 23, 2015 APWA GSP)

Delete the first paragraph and replace it with the following:

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

- 1. Be on Contracting Agency-furnished form(s);
- 2. Be signed by an approved surety (or sureties) that:
 - a. Is registered with the Washington State Insurance Commissioner, and
 - b. Appears on the current Authorized Insurance List in the State of Washington published by the Office of the Insurance Commissioner,
- 3. Guarantee that the Contractor will perform and comply with all obligations, duties, and

conditions under the Contract, including but not limited to the duty and obligation to indemnify, defend, and protect the Contracting Agency against all losses and claims related directly or indirectly from any failure:

- a. Of the Contractor (or any of the employees, subcontractors, or lower tier subcontractors of the Contractor) to faithfully perform and comply with all contract obligations, conditions, and duties, or
- b. Of the Contractor (or the subcontractors or lower tier subcontractors of the Contractor) to pay all laborers, mechanics, subcontractors, lower tier subcontractors, material person, or any other person who provides supplies or provisions for carrying out the work;
- 4. Be conditioned upon the payment of taxes, increases, and penalties incurred on the project under titles 50, 51, and 82 RCW; and
- 5. Be accompanied by a power of attorney for the Surety's officer empowered to sign the bond; and
- 6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or vice president, unless accompanied by written proof of the authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

1-03.7 Judicial Review

(November 30, 2018 APWA GSP)

Revise this section to read:

Any decision made by the Contracting Agency regarding the Award and execution of the Contract or Bid rejection shall be conclusive subject to the scope of judicial review permitted under Washington Law. Such review, if any, shall be timely filed in the Superior Court of <u>the county where the Contracting Agency headquarters is located</u>, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction.

1-04 Scope of Work

1-04.2 Coordination of Contract Documents, Plans, Special Provisions, Specifications, and Addenda

(March 13, 2012 APWA GSP)

Revise the second paragraph to read:

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

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

1-04.11 Final Cleanup

Supplement this section with the following:

(*****)

The Contractor shall repair, at no additional cost to the Contracting Agency, any damage to existing access routes, fences, gates, utilities, structures, and driveways that occurred as a result of activities conducted by the Contractor. All costs associated with performing the final cleanup shall be made incidental to other bid items in the Contract.

1-05 Control of Work

1-05.4 Conformity with and Deviations from Plans and Stakes

Add the following new subsection:

1-05.4(1) Contractor Surveying

The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes, slope stakes, and grades necessary for the construction of the project. All calculations, surveying, and measuring required for setting and maintaining the necessary lines and grades shall be the Contractor's responsibility. Electronic copies of alignments, surfaces, and/or points will be made available upon request by the Contractor.

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.

The survey Work shall include but not be limited to the following:

- 1. Establishing or verifying primary horizontal and vertical control and expanding into secondary control by adding stakes and hubs as well as additional survey control needed for the project. Provide descriptions of all control to the Contracting Agency. The description shall include coordinates and elevations of all control points.
- 2. Establish the centerline and edge of traveled way for the temporary detour as shown on the Plans.
- 3. Establish the centerline of the proposed streambed channel and all locations and elevations of boulder steps.
- 4. Establish the locations and elevations for all subgrade foundation and footing corners by placing hubs, stakes, or marks at the corners and/or offsets to the corners.
- 5. For all other types of construction included in the Plans, provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.

The Contractor shall provide the Contracting Agency copies of any calculations and staking data when requested.

To Contractor shall ensure a surveying accuracy of within the following tolerances:

Vertical

<u>Horizontal</u>

Structure subgrade	±0.05 ft	±0.25 ft
Structure footings	±0.05 ft	±0.25 ft
Boulder steps	±0.10 ft	±0.50 ft

The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will not change the requirements for normal checking by the Contractor.

1-05.4(2) Measurement

No unit of measurement shall apply to the lump sum bid item for "Surveying".

1-05.4(3) Payment

The lump sum contract price for "Surveying" shall be full pay for all labor, equipment, materials, and supervision utilized to perform the Work specified, including any resurveying, checking, correction of errors, replacement of missing or damaged stakes, and coordinating efforts with the Contracting Agency.

1-05.7 Removal of Defective and Unauthorized Work

(October 1, 2005 APWA GSP)

Supplement this section with the following:

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

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

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

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

The rights exercised under the provisions of this section shall not diminish the Contracting

Agency's right to pursue any other avenue for additional remedy or damages with respect to the Contractor's failure to perform the work as required.

1-05.8 Vacant

Section 1-05.5 content and title is deleted and replaced with the following:

1-05.8 Required Submittals

(*****)

The following is a list of required submittals to the Contracting Agency as detailed in the respective section of the Standard Plans or the Special Provisions.

- 1-07.1 COVID-19 Health & Safety Plan (CHSP)
- 1-07.15 SPCC Plan
- 1-08.3 Project Schedule
- 1-10.2(2) Traffic Control Plan
- 1-10.3(3)K Portable Temporary Traffic Control Signal Working Drawings (if used in lieu of flagging)
- 2-09.3(3)B Excavation Working Drawings
- 2-09.3(3)D Structural Shoring Working Drawings (if used in lieu of extra excavation)
- 7-03.0(2) Structural Plate Culvert Working Drawings
- 7-03.0(2) Headwall and Wingwall Structural Earth Wall Working Drawings
- 7-06.3(2) Temporary Stream Diversion Plan
- 8-01.3(1)A Temporary Erosion and Sediment Control Plan
- 8-01.3(1)C6 Hydraulic Fluid Catalog Cut
- 8-26.3(1) Temporary Bridge Working Drawings

1-05.13 Superintendents, Labor and Equipment of Contractor (August 14, 2013 APWA GSP)

Delete the sixth and seventh paragraphs of this section.

1-05.15 Method of Serving Notices

(March 25, 2009 APWA GSP)

Revise the second paragraph to read:

All correspondence from the Contractor shall be directed to the Project Engineer. <u>All</u> <u>correspondence from the Contractor constituting any notification, notice of protest, notice of</u> <u>dispute, or other correspondence constituting notification required to be furnished under the</u> <u>Contract, must be in paper format, hand delivered or sent via mail delivery service to the</u> <u>Project Engineer's office. Electronic copies such as e-mails or electronically delivered copies</u> <u>of correspondence will not constitute such notice and will not comply with the requirements of</u> <u>the Contract.</u>

Add the following new section:

1-05.18 Record Drawings (******)

The Contractor shall maintain one set of 11 x 17 plans for Record Drawings, updated with clear and accurate red-lined field revisions on a daily basis, and within 2 business days after receipt of information that a change in Work has occurred. The Contractor shall not conceal any work until the required information is recorded.

This Record Drawing set shall be used for this purpose alone, shall be kept separate from other Plan sheets, and shall be clearly marked as Record Drawings. These Record Drawings shall be kept on site at the Contractor's field office, and shall be available for review by the Contracting Agency at all times. The Contractor shall bring the Record Drawings to each progress meeting for review.

The preparation and upkeep of the Record Drawings is to be the assigned responsibility of a single, experienced, and qualified individual. The quality of the Record Drawings, in terms of accuracy, clarity, and completeness, is to be adequate to allow the Contracting Agency to modify the computer-aided drafting (CAD) Contract Drawings to produce a complete set of Record Drawings for the Contracting Agency without further investigative effort by the Contracting Agency.

The Record Drawing markups shall document all changes in the Work, both concealed and visible. Items that must be shown on the markups include but are not limited to:

- Actual dimensions, arrangement, and materials used when different than shown in the Plans.
- Changes made by Change Order or Field Order.
- Changes made by the Contractor.
- Accurate locations of storm sewer, sanitary sewer, water mains and other water appurtenances, structures, conduits, light standards, vaults, width of roadways, sidewalks, landscaping areas, building footprints, channelization and pavement markings, etc. Include pipe invert elevations, top of castings (manholes, inlets, etc.).

If the Contract calls for the Contracting Agency to do all surveying and staking, the Contracting Agency will provide the elevations at the tolerances the Contracting Agency requires for the Record Drawings.

When the Contract calls for the Contractor to do the surveying/staking, the applicable

tolerance limits include, but are not limited to the following:

	Vertical	Horizontal
As-built sanitary & storm invert and grate elevations	± 0.01 foot	± 0.01 foot
As-built monumentation	± 0.001 foot	± 0.001 foot
As-built waterlines, inverts, valves, hydrants	± 0.10 foot	± 0.10 foot
As-built ponds/swales/water features	± 0.10 foot	± 0.10 foot
As-built buildings (fin. Floor elev.)	± 0.01 foot	± 0.10 foot
As-built gas lines, power, TV, Tel, Com	± 0.10 foot	± 0.10 foot
As-built signs, signals, etc.	N/A	± 0.10 foot

Making Entries on the Record Drawings:

- Use erasable colored pencil (not ink) for all markings on the Record Drawings, conforming to the following color code:
- Additions Red
- Deletions Green
- Comments Blue
- Dimensions- Graphite
- Provide the applicable reference for all entries, such as the change order number, the request for information (RFI) number, or the approved shop drawing number.
- Date all entries.
- Clearly identify all items in the entry with notes similar to those in the Contract Drawings (such as pipe symbols, centerline elevations, materials, pipe joint abbreviations, etc.).

The Contractor shall certify on the Record Drawings that said drawings are an accurate depiction of built conditions, and in conformance with the requirements detailed above. The Contractor shall submit final Record Drawings to the Contracting Agency. Contracting Agency acceptance of the Record Drawings is one of the requirements for achieving Physical Completion.

All Work associated with producing Record Drawings shall be incidental to other bid items included in the Contract.

1-06.6 Recycled Materials

(January 4, 2016 APWA GSP)

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

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

Prior to Physical Completion the Contractor shall report the quantity of recycled materials that

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

1-07 Legal Relations and Responsibilities to the Public

1-07.1 Laws to be Observed

(October 1, 2005 APWA GSP)

Supplement this section with the following:

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

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

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

The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the Contractor's plant, appliances, and methods, and for any damage or injury resulting from their failure, or improper maintenance, use, or operation. The Contractor shall be solely and completely responsible for the conditions of the project site, including safety for all persons and property in the performance of the work. This requirement shall apply continuously, and not be limited to normal working hours. The required or implied duty of the Engineer to conduct construction review of the Contractor's performance does not, and shall not, be intended to include review and adequacy of the Contractor's safety measures in, on, or near the project site.

(April 6, 2020)

In response to COVID-19, the Contractor shall prepare a project specific COVID-19 health and safety plan (CHSP) in conformance with Section 1-07.4(2) as supplemented in these specifications, **COVID-19 Health and Safety Plan (CHSP)**. A copy of the CHSP developed by the Contractor shall be submitted to the Engineer as a Type 2 Working Drawing.
1-07.2 State Taxes

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

1-07.2 State Sales Tax

(June 27, 2011 APWA GSP)

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

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

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

(*****)

The Work on this Contract is to be performed upon lands whose ownership obligates the Contractor to pay Sales Tax. The provisions of Section 1-07.2(1) apply.

1-07.2(1) State Sales Tax — Rule 171

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

1-07.2(2) State Sales Tax — Rule 170

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

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

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

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

1-07.2(3) Services

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

1-07.3 Fire Prevention and Merchantable Timber Requirements

(August 2, 2004)

Section 1-07.3 is supplemented with the following:

The Forest Service Provisions, included in the Appendix to these Special Provisions, are made a part of this contract. The Contractor shall comply with the requirements of these Forest Service provisions at no additional cost to the Contracting Agency.

(February 2, 2018 Chelan County GSP)

In case of fire emergency within USFS Okanogan and/or Wenatchee National Forest boundaries, contact shall be directed to the following:

Central Washington Inter-Agency Communication Center 1-509-884-3473 (8:00 a.m. to 4:30 p.m. Monday-Friday), or 1-800-826-3383 (after hours and weekends)

1-07.5 Environmental Regulations

(September 20, 2010)

Section 1-07.5 is supplemented with the following:

Environmental Commitments

The following Provisions summarize the requirements, in addition to those required elsewhere in the Contract, imposed upon the Contracting Agency by the various documents referenced in the Special Provisions **Permits and Licenses**. Throughout the work, the Contractor shall comply with the following requirements:

(April 1, 2019)

Section 1-07.5 is supplemented with the following:

The Contractor shall notify the Engineer a minimum of ***5*** calendar days prior to commencing any work in sensitive areas, mitigation areas, and wetland buffers. Installation of construction fencing is excluded from this notice requirement.

(August 3, 2009)

Section 1-07.5 is supplemented with the following:

Payment

All costs to comply with this special provision for the environmental commitments and requirements are incidental to the contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the associated bid prices of the contract.

1-07.5(2) State Department of Fish and Wildlife

(April 2, 2018)

Section 1-07.5(2) is supplemented with the following:

The Contractor may begin Work below the Ordinary High Water Line on ***July 15, 2020*** and must complete all the Work by ***September 30, 2020***.

(April 2, 2018)

All costs to comply with this special provision are incidental to the Contract and are the responsibility of the Contractor. The Contractor shall include all related costs in the associated bid prices of the Contract.

1-07.6 Permits and Licenses

(January 2, 2018)

Section 1-07.6 is supplemented with the following:

The Contracting Agency has obtained the below-listed permit(s) for this project. A copy of the permit(s) is attached as an appendix for informational purposes. Copies of these permits, including a copy of the Transfer of Coverage form, when applicable, are required to be onsite at all times. Contact with the permitting agencies, concerning the below-listed permit(s), shall be made through the Engineer with the exception of when the Construction Stormwater General Permit coverage is transferred to the Contractor, direct communication with the Department of Ecology is allowed. The Contractor shall be responsible for obtaining Ecology's approval for any Work requiring additional approvals (e.g. Request for 12 Chemical Treatment Form). The Contractor shall obtain additional permits as necessary. All costs to obtain and comply with additional permits shall be included in the applicable Bid items for the Work involved.

NAME OF DOCUMENT	PERMITTING AGENCY	PERMIT REFERENCE NO.
Department of the Army Section 404 Nationwide 27	Corps of Engineers Seattle District	NWS-2019-1055
Hydraulic Project Approval	Department of Fish & Wildlife	HPA 2020-2-28+01

1-07.9 Wages

(January 6, 2020)

Section 1-07.9(1) is supplemented with the following:

The Federal wage rates incorporated in this contract have been established by the Secretary of Labor under United States Department of Labor General Decision No. WA190001.

The State rates incorporated in this contract are applicable to all construction activities associated with this contract.

1-07.13 Contractors' Responsibility for Work

(August 6, 2001)

Section 1-07.13(4) is revised to read

The Contractor shall promptly repair all damage to either temporary or permanent work as directed by the Engineer. For damage qualifying for relief under Sections 1-07.13(1), 1-07.13(2) or 1-97.13(3), payment will be made in accordance with Section 1-04.4. Payment will be limited to repair of damaged work only. No payment will be made for delay or disruption of work.

1-07.17 Utilities and Similar Facilities

Supplement this section with the following:

(*****)

Locations and dimensions of utilities shown in the Plans are approximate and are included for reference only. The Contractor shall verify all utility locations prior to beginning construction. Sign installation/relocation and other work that conflicts with existing utilities shall be relocated to a non-conflicting location approved by the Engineer. The Contractor will not be responsible for costs associated with temporary relocation or alternation of overhead utilities within Public Works Right of Way. The Contractor shall coordinate with utility owners regarding temporary protection, removal, and/or temporary relocation during construction. Utility owners have indicated measures that include removing/relocating overhead utilities will require a minimum of six (6) weeks notice. Determination of the appropriate measures will be made by utility owners and will depend on the Contractor's selected means, methods, and equipment. The Project Schedule submitted by the Contractor will be provided to utility owners to determine mutually acceptable windows for utility related work. This provision does not exempt the Contractor from requirements of protecting utilities. The following are the points of contact of utility owners and supplied for the Contractor's convenience:

Power, Water, & Fiber Optic

Chelan County PUD No. 1 327 N. Wenatchee Ave. Wenatchee, WA 98801 Attn: Chris Moser Phone: 509-661-4128

<u>Fiber Optic</u> Sprint 2210 S. 35th St. Tacoma, WA 98409 Attn: Steve Schauer Phone: 253-476-6655

Telephone & Fiber Optic

Frontier Communications 320 East Penny Road PO Box 139 Wenatchee, WA 98801 Attn: Steve Johnston Phone: 509-662-1142

Cable Television & Fiber Optic Charter Communications 145 Easy Street Wenatchee, WA 98801 Attn: Justen Harkness Phone: 509-667-1142

CALL BEFORE YOU DIG

Utility Notification Center 1-800-424-55555

1-07.18 Public Liability and Property Damage Insurance

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

1-07.18 Insurance

(January 4, 2016 APWA GSP)

1-07.18(1) General Requirements

A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.

- B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.
- C. If any insurance policy is written on a claims made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made, and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.
- D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.
- E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.
- G. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency
- H. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency.
- 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.

1-07.18(2) Additional Insured

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

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

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

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

1-07.18(3) Subcontractors

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

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

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

1-07.18(4) Verification of Coverage

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

Verification of coverage shall include:

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

Upon request by the Contracting Agency, the Contractor shall forward to the Contracting Agency a full and certified copy of the insurance policy(s). If Builders Risk insurance is

required on this Project, a full and certified copy of that policy is required when the Contractor delivers the signed Contract for the work.

1-07.18(5) Coverages and Limits

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

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

1-07.18(5)A Commercial General Liability

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

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

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

Such policy must provide the following minimum limits:

\$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 each accident

1-07.18(5)B Automobile Liability

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

Such policy must provide the following minimum limit: \$1,000,000 Combined single limit each accident

1-07.18(5)C Workers' Compensation

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

1-07.23 Public Convenience and Safety

1-07.23(1). Construction Under Traffic

(February 3, 2020)

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

Work Zone Clear Zone

The Work Zone Clear Zone (WZCZ) applies during working and nonworking hours. The WZCZ applies only to temporary roadside objects introduced by the Contractor's operations and does not apply to preexisting conditions or permanent Work. Those work operations that are actively in progress shall be in accordance with adopted and approved Traffic Control Plans, and other contract requirements.

During nonworking hours equipment or materials shall not be within the WZCZ unless they are protected by permanent guardrail or temporary concrete barrier. The use of temporary concrete barrier shall be permitted only if the Engineer approves the installation and location.

During actual hours of work, unless protected as described above, only materials absolutely necessary to construction shall be within the WZCZ and only construction vehicles absolutely necessary to construction shall be allowed within the WZCZ or allowed to stop or park on the shoulder of the roadway.

The Contractor's nonessential vehicles and employees private vehicles shall not be permitted to park within the WZCZ at any time unless protected as described above.

Deviation from the above requirements shall not occur unless the Contractor has requested the deviation in writing and the Engineer has provided written approval.

Minimum WZCZ distances are measured from the edge of traveled way and will be determined as follows:

Regulatory Posted Speed	Distance From Traveled Way (Feet)
35 mph or less	10
40 mph	15
45 to 50 mph	20
55 to 60 mph	30
65 mph or greater	35

Minimum Work Zone Clear Zone Distance

(January 5, 2015)

Lane closures are subject to the following restrictions:

*** Lane closures will only be allowed from 6:00 a.m. to 6:00 p.m. Monday through Thursday of any week, subject to the holiday restrictions below. Lane closure duration shall not exceed 15 minutes. Lane closure duration will be measured from the time a flagger at one station stops traffic to the time the same flagger releases traffic. If multiple lane closures are used concurrently on the same road and/or on intersecting roads, the combined lane closure duration of all lane closures shall not exceed 15 minutes for each direction of travel. ***

If the Engineer determines the permitted closure hours adversely affect traffic, the Engineer may adjust the hours accordingly. The Engineer will notify the Contractor in writing of any change in the closure hours.

Lane closures are not allowed on any of the following:

- 1. A holiday,
- 2. A holiday weekend; holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend. A holiday weekend includes Saturday, Sunday, and the holiday.
- 3. After *** 12:01 am *** on the day prior to a holiday or holiday weekend, and
- 4. Before *** 12:01 am *** on the day after the holiday or holiday weekend.

1-08 Prosecution and Progress

1-08.0 Preliminary Matters

(May 25, 2006 APWA GSP)

Add the following new section:

1-08.0(1) Preconstruction Conference

Prior to the Contractor beginning the work, a preconstruction conference will be held between the Contractor, the Contracting Agency, a representative from the culvert manufacturer, and a representative from the SEW manufacturer are required attendees. Additional interested parties of the Contractor's choosing may also be invited. The purpose of the preconstruction conference will be:

- 1. To review the initial progress schedule;
- 2. To establish a working understanding among the various parties associated or affected by the work;
- 3. To establish and review procedures for progress payment, notifications, approvals, submittals, etc.;

- 4. To establish normal working hours for the work;
- 5. To review safety standards and traffic control; and
- 6. To discuss such other related items as may be pertinent to the work.

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

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

Add the following new section:

1-08.0(2) Hours of Work

Except in the case of emergency or unless otherwise approved by the Engineer, the normal working hours for the Contract shall be between 7:00 a.m. and 6:30 p.m. Monday through Friday. If the Contractor desires different than the normal working hours stated above, the request must be submitted in writing prior to the preconstruction conference, subject to the provisions below. The working hours for the Contract shall be established at or prior to the preconstruction conference.

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

If the Contractor wishes to deviate from the established working hours, the Contractor shall submit a written request to the Engineer for consideration. This request shall state what hours are being requested, and why. Requests shall be submitted for review no later than 3 (three) working days prior to the day(s) the Contractor is requesting to change the hours.

1-08.1 Subcontracting

(May 30, 2019 APWA GSP, Option B)

Delete the ninth paragraph, beginning with "On all projects, the Contractor shall certify...".

1-08.5 Time for Completion

(March 13, 1995)

Section 1-08.5 is supplemented with the following:

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

(November 30, 2018 APWA GSP, Option B)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the \$\$\$<u>50\$\$</u> calendar day after <u>the Notice to Proceed date</u>. If the Contractor starts work on the project at an earlier date, then contract time shall begin on the first working day when onsite work begins.

Revise the sixth paragraph to read:

The Engineer will give the Contractor written notice of the completion date of the contract after all the Contractor's obligations under the contract have been performed by the Contractor. The following events must occur before the Completion Date can be established:

- 1. The physical work on the project must be complete; and
- 2. The Contractor must furnish all documentation required by the contract and required by law, to allow the Contracting Agency to process final acceptance of the contract. The following documents must be received by the Project Engineer prior to establishing a completion date:
 - a. Certified Payrolls (per Section 1-07.9(5)).
 - b. Material Acceptance Certification Documents
 - c. Monthly Reports of Amounts Credited as DBE Participation, as required by the Contract Provisions.
 - d. Final Contract Voucher Certification
 - e. Copies of the approved "Affidavit of Prevailing Wages Paid" for the Contractor and all Subcontractors
 - f. A copy of the Notice of Termination sent to the Washington State Department of Ecology (Ecology); the elapse of 30 calendar days from the date of receipt of the Notice of Termination by Ecology; and no rejection of the Notice of Termination by Ecology. This requirement will not apply if the Construction Stormwater General Permit is transferred back to the Contracting Agency in accordance with Section 8-01.3(16).
 - g. Property owner releases per Section 1-07.24

1-09 Measurement and Payment

1-09.2(1) General Requirements for Weighing Equipment

(July 23, 2015 APWA GSP, Option 2)

Revise item 4 of the fifth paragraph to read:

4. Test results and scale weight records for each day's hauling operations are provided to the Engineer daily. Reporting shall utilize WSDOT form 422-027, Scaleman's Daily Report, <u>unless the printed ticket contains the same information that is on the Scaleman's Daily</u> <u>Report Form. The scale operator must provide AM and/or PM tare weights for each truck on the printed ticket.</u>

1-09.9 Payments

(March 13, 2012 APWA GSP)

Delete the first four paragraphs and replace them with the following:

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

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

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

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

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

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

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

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

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

1-09.11 Disputes and Claims

1-09.11(3) Time Limitation and Jurisdiction (November 30, 2018 APWA GSP)

Revise this section to read:

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 Contracting Agency arising from the Contract shall be brought within 180 calendar days from the date of final acceptance (Section 1-05.12) of the Contract by the Contracting Agency; and it is further agreed that any such claims or causes of action shall be brought only in the Superior Court of the county where the Contracting Agency headquarters is located, provided that where an action is asserted against a county, RCW 36.01.050 shall control venue and jurisdiction. The parties understand and agree that the Contractor's failure to bring suit within the time period provided, shall be a complete bar to 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 Contracting Agency arising from the Contract are filed with the Contracting Agency to have timely access to any records deemed necessary by the Contracting Agency to assist in evaluating the claims or action.

1-09.13 Claims Resolution

1-09.13(3) Claims \$250,000 or Less

(October 1, 2005 APWA GSP)

Delete this section and replace it with the following:

The Contractor and the Contracting Agency mutually agree that those claims that total \$250,000 or less, submitted in accordance with Section 1-09.11 and not resolved by nonbinding ADR processes, shall be resolved through litigation unless the parties mutually agree in writing to resolve the claim through binding arbitration.

1-09.13(3)A Administration of Arbitration

(November 30, 2018 APWA GSP)

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

1-10 Temporary Traffic Control 1-10.2 Traffic Control Management

General

(January 3, 2017)

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

Only training with WSDOT TCS card and WSDOT training curriculum is recognized in the State of Washington. The Traffic Control Supervisor shall be certified by one of the following:

The Northwest Laborers-Employers Training Trust

27055 Ohio Ave.

Kingston, WA 98346

(360) 297-3035

Evergreen Safety Council

12545 135th Ave. NE

Kirkland, WA 98034-8709

1-800-521-0778

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

1-10.2(3) Conformance to Established Standards (*February 3, 2020*)

Section 1-10.2(3) is revised to read:

Flagging, signs, and all other traffic control devices and procedures furnished or provided shall conform to the standards established in the latest WSDOT adopted edition (in accordance with WAC 468-95) of the MUTCD, published by the U.S. Department of Transportation, and the 2005 draft version of the *Public Rights-of-Way Accessibility Guidelines* (PROWAG): https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/background/revised-draft-guidelines. Judgment of the quality of devices furnished will be based upon *Quality Guidelines for Temporary Traffic Control Devices*, published by the American Traffic Safety Services Association. Copies of the MUTCD and *Quality Guidelines for Temporary Control Devices* may be purchased from the American Traffic Safety Services Association, 15 Riverside Parkway, Suite 100, Fredericksburg, VA 22406-1022.

In addition to the standards of the MUTCD described above, the Contracting Agency enforces crashworthiness requirements for most work zone devices. The AASHTO Manual for Assessing Safety Hardware (MASH) has superseded the National Cooperative Highway Research Project (NCHRP) Report 350 as the established requirements for crash testing. Temporary traffic control devices manufactured after December 31, 2019 shall be compliant with the 2016 edition of the Manual for Assessing Safety Hardware (MASH 16) crash test requirements, as determined by the Contracting Agency, except as follows:

1. In situations where a MASH 16 compliant traffic control device does not exist and there are no available traffic control devices that were manufactured on or before December 31, 2019, then a traffic control device manufactured after December 31, 2019 that is compliant with either NCHRP 350 or the 2009 edition of the Manual for Assessing Safety Hardware (MASH 09) is allowed for use with approval of the Engineer.

2. Temporary traffic control devices that were manufactured on or before December 31, 2019, and were successfully tested to National Cooperative Highway Research Program (NCHRP) Report 350 or MASH 09 may continue to be used on WSDOT projects throughout their normal service life.

3. Small and lightweight channelizing and delineating devices, including cones, tubular markers, flexible delineator posts, and plastic drums, shall meet the requirements of either NCHRP 350, MASH 09, or MASH 16, as determined by the manufacturer of the device.

4. A determination of crashworthiness for acceptance of trailer-mounted devices such as arrow displays, temporary traffic signals, area lighting supports, and portable changeable message signs is currently not required.

The condition of signs and traffic control devices shall be acceptable or marginal as defined in the book *Quality Guidelines for Temporary Traffic Control Devices*, and will be accepted based on a visual inspection by the Engineer. The Engineer's decision on the condition of a sign or traffic control device shall be final. A sign or traffic control device determined to be unacceptable shall be removed from the project and replaced within 12 hours of notification.

1-10.4 Measurement

1-10.4(1) Lump Sum Bid for Project (No Unit Items) (August 2, 2004)

Section 1-10.4(1) is supplemented with the following:

The proposal contains the item "Project Temporary Traffic Control", lump sum. The provisions of Section 1-10.4(1) shall apply.

Division 2 Earthwork

2-01 Clearing, Grubbing, and Roadside Cleanup

2-01.1 Description

This section is revised to read:

The Contractor shall clear within the Temporary and Stabilized Access Routes, as well as other clearing locations identified on the Plans. Vegetation will be cleared as close to the groundline as practical, but no grubbing shall occur. This Work includes protecting from harm all trees, bushes, shrubs, or other objects selected to remain outside of identified clearing areas and earthwork areas.

"Clearing" means removing and disposing of all unwanted material from the surface, such as trees, brush, down timber, or other natural material.

"Grubbing" means removing and disposing of all unwanted vegetative matter from underground, such as sod, stumps, roots, buried logs, or other debris.

"Debris" means all unusable natural material produced by clearing and grubbing.

2-01.4 Measurement

This section is supplemented with the following:

(*****)

Clearing will be measured by the acre of land cleared. If all areas shown on the Plans to be cleared are cleared, and if the Contractor agrees the area listed on the Bid Proposal Form is an accurate value for the area cleared, then no physical measurement will be made and the value on the Bid Proposal Form will be adopted as the measured value.

2-01.5 Payment

This section is supplemented with the following:

(*****)

"Clearing", per acre.

The unit Contract price per acre "Clearing" shall be full pay for all Work described in this Section except "Roadside Cleanup".

Division 5 Surface Treatments and Pavements

5-04 Hot Mix Asphalt

(July 18, 2018 APWA GSP)

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

5-04.1 Description

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

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

5-04.2 Materials

Materials shall meet the requirements of the following sections:

Asphalt Binder	9-02.1(4)
Cationic Emulsified Asphalt	9-02.1(6)
Anti-Stripping Additive	9-02.4
HMA Additive	9-02.5
Aggregates	9-03.8
Recycled Asphalt Pavement	9-03.8(3)B
Mineral Filler	9-03.8(5)
Recycled Material	9-03.21
Portland Cement	9-01
Sand	9-03.1(2)
(As noted in 5-04.3(5)C	for crack sealing)
Joint Sealant	9-04.2
Foam Backer Rod	9-04.2(3)A

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

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

The Contractor may use up to 20 percent RAP by total weight of HMA with no additional sampling or testing of the RAP. The RAP shall be sampled and tested at a frequency of one sample for every 1,000 tons produced and not less than ten samples per project. The asphalt content and gradation test data shall be reported to the Contracting Agency when submitting the mix design for approval on the QPL. The Contractor shall include the RAP as part of the mix design as defined in these Specifications.

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

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

Production of aggregates shall comply with the requirements of Section 3-01. Preparation of stockpile site, the stockpiling of aggregates, and the removal of aggregates from stockpiles shall comply with the requirements of Section 3-02.

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

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

5-04.2(1)A Vacant

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

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

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

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

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

• The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of the mix design verification certifications listed below.

- The proposed HMA mix design on WSDOT Form 350-042 with the seal and certification (stamp & sig-nature) of a valid licensed Washington State Professional Engineer.
- The Mix Design Report for the proposed HMA mix design developed by a qualified City or County laboratory that is within one year of the approval date.**

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

Mix designs for HMA accepted by Nonstatistical evaluation shall;

- Have the aggregate structure and asphalt binder content determined in accordance with WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the Engineer, and 9-03.8(6).
- Have anti-strip requirements, if any, for the proposed mix design determined in accordance with AASHTO T 283 or T 324, or based on historic anti-strip and aggregate source compatibility from previous WSDOT lab testing.

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

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

For the Bid Item Commercial HMA, the Contractor shall select a class of HMA and design level of Equivalent Single Axle Loads (ESAL's) appropriate for the required use.

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

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

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

5-04.3 Construction Requirements

(*****)

Add the following new section:

5-04.3(0) Removal of Existing Pavement

Where removal of existing pavement outside the limits of structure excavation is shown on the Plans, the Contractor shall remove existing pavement prior to placement of new HMA. Full depth removal of existing pavement shall be performed between the limits of structure excavation and the pavement removal limits shown on the Plans using a method of the Contractor's choosing. Existing subgrade material shall be preserved.

5-04.3(1) Weather Limitations

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

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

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

Minimum Surface Temperature for Paving

5-04.3(2) Paving Under Traffic

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

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

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

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

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

5-04.3(3) Equipment

5-04.3(3)A Mixing Plant

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

- Equipment for Preparation of Asphalt Binder Tanks for the storage of asphalt binder shall be equipped to heat and hold the material at the required temperatures. The heating shall be accomplished by steam coils, electricity, or other approved means so that no flame shall be in contact with the storage tank. The circulating system for the asphalt binder shall be designed to ensure proper and continuous circulation during the operating period. A valve for the purpose of sampling the asphalt binder shall be placed in either the storage tank or in the supply line to the mixer.
- 2. Thermometric Equipment An armored thermometer, capable of detecting temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed line at a location near the charging valve at the mixer unit. The thermometer location shall be convenient and safe for access by Inspectors. The plant shall also be equipped with an approved dial-scale thermometer, a mercury actuated thermometer, an electric pyrometer, or another approved thermometric instrument placed at the discharge chute of the drier to automatically register or indicate the temperature of the heated aggregates. This device shall be in full view of the plant operator.
- 3. Heating of Asphalt Binder The temperature of the asphalt binder shall not exceed the maximum recommended by the asphalt binder manufacturer nor shall it be below the minimum temperature required to maintain the asphalt binder in a homogeneous state. The asphalt binder shall be heated in a manner that will avoid local variations in heating. The heating method shall provide a continuous supply of asphalt binder to the mixer at a uniform average temperature with no individual variations exceeding 25°F. Also, when a WMA additive is included in the asphalt binder, the temperature of the asphalt binder shall not exceed the maximum recommended by the manufacturer of the WMA additive.
- 4. **Sampling and Testing of Mineral Materials** The HMA plant shall be equipped with a mechanical sampler for the sampling of the mineral materials. The mechanical sampler shall meet the requirements of Section 1-05.6 for the crushing and screening operation. The Contractor shall provide for the setup and operation of the field testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).
- 5. **Sampling HMA** The HMA plant shall provide for sampling HMA by one of the following methods:
 - a. A mechanical sampling device attached to the HMA plant.
 - b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

5-04.3(3)B Hauling Equipment

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

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

5-04.3(3)C Pavers

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

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

The screed shall be operated in accordance with the manufacturer's recommendations and shall effectively produce a finished surface of the required evenness and texture without tearing, shoving, segregating, or gouging the mixture. A copy of the manufacturer's recommendations shall be provided upon request by the Contracting Agency. Extensions will be allowed provided they produce the same results, including ride, density, and surface texture as obtained by the primary screed. Extensions without augers and an internally heated vibratory screed shall not be used in the Traveled Way.

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

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

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

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

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

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

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

To be approved for use, an MTV:

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

To be approved for use, an MTD:

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

5-04.3(3)E Rollers

Rollers shall be of the steel wheel, vibratory, oscillatory, or pneumatic tire type, in good condition and capable of reversing without backlash. Operation of the roller shall be in accordance with the manufacturer's recommendations. When ordered by the Engineer for any roller planned for use on the project, the Contractor shall provide a copy of the

manufacturer's recommendation for the use of that roller for compaction of HMA. The number and weight of rollers shall be sufficient to compact the mixture in compliance with the requirements of Section 5-04.3(10). The use of equipment that results in crushing of the aggregate will not be permitted. Rollers producing pickup, washboard, uneven compaction of the surface, displacement of the mixture or other undesirable results shall not be used.

5-04.3(4) Preparation of Existing Paved Surfaces

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

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

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

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

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

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

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

5-04.3(4)A Crack Sealing

5-04.3(4)A1 General

When the Proposal includes a pay item for crack sealing, seal all cracks 1/4 inch in width and greater.

Cleaning: Ensure that cracks are thoroughly clean, dry and free of all loose and foreign material when filling with crack sealant material. Use a hot compressed air lance to dry and warm the pavement surfaces within the crack immediately prior to filling a crack with the sealant material. Do not overheat pavement. Do not use direct flame dryers. Routing cracks is not required.

Sand Slurry: For cracks that are to be filled with sand slurry, thoroughly mix the components and pour the mixture into the cracks until full. Add additional CSS-1 cationic emulsified asphalt to the sand slurry as needed for workability to ensure the mixture will completely fill the cracks. Strike off the sand slurry flush with the existing pavement surface and allow the mixture to cure. Top off cracks that were not completely filled with additional sand slurry. Do not place the HMA overlay until the slurry has fully cured.

The sand slurry shall consist of approximately 20 percent CSS-1 emulsified asphalt, approximately 2 percent portland cement, water (if required), and the remainder clean Class 1 or 2 fine aggregate per section 9-03.1(2). The components shall be thoroughly mixed and then poured into the cracks and joints until full. The following day, any cracks or joints that are not completely filled shall be topped off with additional sand slurry. After the sand slurry is placed, the filler shall be struck off flush with the existing pavement surface and allowed to cure. The HMA overlay shall not be placed until the slurry has fully cured. The requirements of Section 1-06 will not apply to the portland cement and sand used in the sand slurry.

In areas where HMA will be placed, use sand slurry to fill the cracks.

In areas where HMA will not be placed, fill the cracks as follows:

- 1. Cracks ¹/₄ inch to 1 inch in width fill with hot poured sealant.
- 2. Cracks greater than 1 inch in width fill with sand slurry.

Hot Poured Sealant: For cracks that are to be filled with hot poured sealant, apply the material in accordance with these requirements and the manufacturer's recommendations. Furnish a Type 1 Working Drawing of the manufacturer's product information and recommendations to the Engineer prior to the start of work, including the manufacturer's recommended heating time and temperatures, allowable storage time and temperatures after initial heating, allowable reheating criteria, and application temperature range. Confine hot poured sealant material within the crack. Clean any overflow of sealant from the pavement surface. If, in the opinion of the Engineer, the Contractor's method of sealing the cracks with hot poured sealant results in an excessive amount of material on the pavement surface, stop and correct the operation to eliminate the excess material.

5-04.3(4)A2 Crack Sealing Areas Prior to Paving

In areas where HMA will be placed, use sand slurry to fill the cracks.

5-04.3(4)A3 Crack Sealing Areas Not to be Paved

In areas where HMA will not be placed, fill the cracks as follows:

- A. Cracks 1/4 inch to 1 inch in width fill with hot poured sealant.
- B. Cracks greater than 1 inch in width fill with sand slurry.

5-04.3(4)B Vacant

5-04.3(4)C Pavement Repair

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

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

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

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

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

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

5-04.3(5)A Vacant

5-04.3(6) Mixing

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

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

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

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

5-04.3(7) Spreading and Finishing

The mixture shall be laid upon an approved surface, spread, and struck off to the grade and elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture. Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

HMA Class 1"0.35 feetHMA Class ¾" and HMA Class ½"

wearing course	0.30 feet
other courses	0.35 feet
HMA Class ℁"	0.15 feet

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

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

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

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

5-04.3(9) HMA Mixture Acceptance

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

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

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

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

HMA Tolerances and Adjustments

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

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

Property	Non-Statistical Evaluation	Commercial Evaluation

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

For Aggregates in the mixture:

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

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

- b. Second, adjust the preliminary upper and lower acceptance limits determined from step (a) the minimum amount necessary so that none of the aggregate properties are outside the control points in Section 9-03.8(6). The resulting values will be the upper and lower acceptance limits for aggregates, as well as the USL and LSL required in Section 1-06.2(2)D2.
- Job Mix Formula Adjustments An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.
 - a. **Aggregates** –2 percent for the aggregate passing the 1½", 1", ¾", ½", ¾", 12", №, 14, №, 1
 - b. Asphalt Binder Content The Engineer may order or approve changes to asphalt binder content. The maximum adjustment from the approved mix design for the asphalt binder content shall be 0.3 percent

5-04.3(9)A Vacant

5-04.3(9)B Vacant

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

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

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

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A sublot shall be equal to

one day's production or 800 tons, whichever is less except that the final sublot will be a minimum of 400 tons and may be increased to 1200 tons.

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

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

5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling

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

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

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

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

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

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

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

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

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

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

Table of Price Adjustment Factors		
Constituent	Factor "f"	
All aggregate passing: $1\frac{1}{2}$ ", 1", $\frac{3}{4}$ ", $\frac{1}{2}$ ", $\frac{3}{8}$ " and No.4 sieves	2	
All aggregate passing No. 8 sieve	15	
All aggregate passing No. 200 sieve	20	
Asphalt binder	40	
Air Voids (Va) (where applicable)	20	

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

5-04.3(9)C5 Vacant

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

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

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

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

The Contractor may request a sublot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample

will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, V_a . The results of the retest will be used for the acceptance of the HMA in place of the original sublot sample test results. The cost of testing will be deducted from any monies due or that may come due the Contractor under the Contract at the rate of \$500 per sample.

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

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

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

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

5-04.3(10) HMA Compaction Acceptance

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

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

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

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

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

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

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

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

Test Results

For a sublot that has been tested with a nuclear density gauge that did not meet the minimum of 92 percent of the reference maximum density in a compaction lot with a CPF below 1.00 and thus subject to a price reduction or rejection, the Contractor may request that a core be used for determination of the relative density of the sublot. The relative density of the core will replace the relative density determined by the nuclear density gauge for the sublot and will be used for calculation of the CPF and acceptance of HMA compaction lot.

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

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

Compaction shall take place when the mixture is in the proper condition so that no undue displacement, cracking, or shoving occurs. Areas inaccessible to large compaction equipment shall be compacted by other mechanical means. Any HMA that becomes loose,

broken, contaminated, shows an excess or deficiency of asphalt, or is in any way defective, shall be removed and replaced with new hot mix that shall be immediately compacted to conform to the surrounding area.

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

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

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

5-04.3(10)C Vacant

5-04.3(10)D HMA Nonstatistical Compaction

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

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

A lot is represented by randomly selected samples of the same mix design that will be tested for acceptance. A lot is defined as the total quantity of material or work produced for each Job Mix Formula placed. Only one lot per JMF is expected. A sublot shall be equal to one day's production or 400 tons, whichever is less except that the final sublot will be a minimum of 200 tons and may be increased to 800 tons. Testing for compaction will be at the rate of 5 tests per sublot per WSDOT T 738.

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

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

HMA for preleveling shall be thoroughly compacted. HMA that is used to prelevel wheel ruts shall be compacted with a pneumatic tire roller unless otherwise approved by the Engineer.
5-04.3(10)D2 HMA Compaction Nonstatistical Evaluation – Acceptance Testing

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

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

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

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

5-04.3(11) Reject Work

5-04.3(11)A Reject Work General

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

5-04.3(11)B Rejection by Contractor

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

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

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

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

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

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

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

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

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

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

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

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

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

5-04.3(12) Joints

5-04.3(12)A HMA Joints

5-04.3(12)A1 Transverse Joints

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

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

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

5-04.3(12)A2 Longitudinal Joints

The longitudinal joint in any one course shall be offset from the course immediately below by not more than 6 inches nor less than 2 inches. All longitudinal joints constructed in the wearing course shall be located at a lane line or an edge line of the Traveled Way. A notched wedge joint shall be constructed along all longitudinal joints in the wearing surface of new HMA unless otherwise approved by the Engineer. The notched wedge joint shall have a vertical edge of not less than the maximum aggregate size or more than ½ of the compacted lift thickness and then taper down on a slope not steeper than 4H:1V. The sloped portion of the HMA notched wedge joint shall be uniformly compacted.

5-04.3(12)B Bridge Paving Joint Seals

5-04.3(12)B1 HMA Sawcut and Seal

Prior to placing HMA on the bridge deck, establish sawcut alignment points at both ends of the bridge paving joint seals to be placed at the bridge ends, and at interior joints within the bridge deck when and where shown in the Plans. Establish the sawcut alignment points in a manner that they remain functional for use in aligning the sawcut after placing the overlay.

Submit a Type 1 Working Drawing consisting of the sealant manufacturer's application procedure.

Construct the bridge paving joint seal as specified ion the Plans and in accordance with the detail shown in the Standard Plans. Construct the sawcut in accordance with the detail shown in the Standard Plan. Construct the sawcut in accordance with Section 5-05.3(8)B and the manufacturer's application procedure.

5-04.3(12)B2 Paved Panel Joint Seal

Construct the paved panel joint seal in accordance with the requirements specified in section 5-04.3(12)B1 and the following requirement:

1. Clean and seal the existing joint between concrete panels in accordance with Section 5-01.3(8) and the details shown in the Standard Plans.

5-04.3(13) Surface Smoothness

The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown and grade, and free from defects of all kinds. The completed surface of the wearing course shall not vary more than $\frac{1}{6}$ inch from the lower edge of a 10-foot straightedge placed on the surface parallel to the centerline. The transverse slope of the completed surface of the wearing course shall vary not more than $\frac{1}{4}$ inch in 10 feet from the rate of transverse slope shown in the Plans.

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

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

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

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

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

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

5-04.3(14) Planing (Milling) Bituminous Pavement

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

Locations of existing surfacing to be planed are as shown in the Drawings.

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

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

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

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

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

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

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

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

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

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

Should such metal be identified, promptly notify the Engineer.

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

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

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

5-04.3(14)B1 General

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

1. Intersections:

a. Keep intersections open to traffic at all times, except when paving or planing operations through an intersection requires closure. Such closure must be kept to the minimum time required to place and compact the HMA mixture, or plane as appropriate. For paving, schedule such closure to individual lanes or portions thereof that allows the traffic volumes and schedule of traffic volumes required in the approved traffic control plan. Schedule work so that adjacent intersections are not impacted at the same time and comply with the traffic control restrictions required by the Traffic Engineer. Each individual intersection closure or partial closure, must be addressed in the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).

b. When planing or paving and related construction must occur in an intersection, consider scheduling and sequencing such work into quarters of the intersection, or half or more of an intersection with side street detours. Be prepared to sequence the work to individual lanes or portions thereof.

c. Should closure of the intersection in its entirety be necessary, and no trolley service is impacted, keep such closure to the minimum time required to place and compact the HMA mixture, plane, remove asphalt, tack coat, and as needed.

d. Any work in an intersection requires advance warning in both signage and a number of Working Days advance notice as determined by the Engineer, to alert traffic and emergency services of the intersection closure or partial closure.

e. Allow new compacted HMA asphalt to cool to ambient temperature before any traffic is allowed on it. Traffic is not allowed on newly placed asphalt until approval has been obtained from the Engineer.

- 2. Temporary centerline marking, post-paving temporary marking, temporary stop bars, and maintaining temporary pavement marking must comply with Section 8-23.
- 3. Permanent pavement marking must comply with Section 8-22.

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

The Contractor must submit a separate planing plan and a separate paving plan to the Engineer at least 5 Working Days in advance of each operation's activity start date. These plans must show how the moving operation and traffic control are coordinated, as they will be discussed at the pre-planing briefing and pre-paving briefing. When requested by the

Engineer, the Contractor must provide each operation's traffic control plan on 24×36 inch or larger size Shop Drawings with a scale showing both the area of operation and sufficient detail of traffic beyond the area of operation where detour traffic may be required. The scale on the Shop Drawings is 1 inch = 20 feet, which may be changed if the Engineer agrees sufficient detail is shown.

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

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

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

- 1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's traffic control as it relates to the specific requirements of that day's planing and paving. Briefly describe the sequencing of traffic control consistent with the proposed planing and paving sequence, and scheduling of placement of temporary pavement markings and channelizing devices after each day's planing, and paving.
- 2. A copy of each intersection's traffic control plan.
- 3. Haul routes from Supplier facilities, and locations of temporary parking and staging areas, including return routes. Describe the complete round trip as it relates to the sequencing of paving operations.
- 4. Names and locations of HMA Supplier facilities to be used.
- 5. List of all equipment to be used for paving.
- 6. List of personnel and associated job classification assigned to each piece of paving equipment.
- 7. Description (geometric or narrative) of the scheduled sequence of planing and of paving, and intended area of planing and of paving for each day's work, must include the directions of proposed planing and of proposed paving, sequence of adjacent lane paving, sequence of skipped lane paving, intersection planing and paving scheduling and sequencing, and proposed notifications and coordinations to be timely made. The plan must show HMA joints relative to the final pavement marking lane lines.
- 8. Names, job titles, and contact information for field, office, and plant supervisory personnel.
- 9. A copy of the approved Mix Designs.
- 10. Tonnage of HMA to be placed each day.
- 11. Approximate times and days for starting and ending daily operations.

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

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

- 1. General for both Paving Plan and for Planing Plan:
 - a. The actual times of starting and ending daily operations.
 - b. In intersections, how to break up the intersection, and address traffic control and signalization for that operation, including use of peace officers.
 - c. The sequencing and scheduling of paving operations and of planing operations, as applicable, as it relates to traffic control, to public convenience and safety, and to other con-tractors who may operate in the Project Site.
 - d. Notifications required of Contractor activities, and coordinating with other entities and the public as necessary.
 - e. Description of the sequencing of installation and types of temporary pavement markings as it relates to planning and to paving.
 - f. Description of the sequencing of installation of, and the removal of, temporary pavement patch material around exposed castings and as may be needed
 - g. Description of procedures and equipment to identify hidden metal in the pavement, such as survey monumentation, monitoring wells, street car rail, and castings, before planning, see Section 5-04.3(14)B2.
 - h. Description of how flaggers will be coordinated with the planing, paving, and related operations.
 - i. Description of sequencing of traffic controls for the process of rigid pavement base repairs.
 - j. Other items the Engineer deems necessary to address.
- 2. Paving additional topics:
 - a. When to start applying tack and coordinating with paving.
 - b. Types of equipment and numbers of each type equipment to be used. If more pieces of equipment than personnel are proposed, describe the sequencing of the personnel operating the types of equipment. Discuss the continuance of operator personnel for each type equipment as it relates to meeting Specification requirements.
 - c. Number of JMFs to be placed, and if more than one JMF how the Contractor will ensure different JMFs are distinguished, how pavers and MTVs are distinguished if more than one JMF is being placed at the time, and how pavers and MTVs are cleaned so that one JMF does not adversely influence the other JMF.
 - d. Description of contingency plans for that day's operations such as equipment breakdown, rain out, and Supplier shutdown of operations.

e. Number of sublots to be placed, sequencing of density testing, and other sampling and testing.

5-04.3(15) Sealing Pavement Surfaces

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

5-04.3(16) HMA Road Approaches

HMA approaches shall be constructed at the locations shown in the Plans or where staked by the Engineer. The Work shall be performed in accordance with Section 5-04.

5-04.4 Measurement

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

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

Preparation of untreated roadway will be measured by the mile once along the centerline of the main line Roadway. No additional measurement will be made for ramps, Auxiliary Lanes, service roads, Frontage Roads, or Shoulders. Measurement will be to the nearest 0.01 mile.

Soil residual herbicide will be measured by the mile for the stated width to the nearest 0.01 mile or by the square yard, whichever is designated in the Proposal.

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

Asphalt for prime coat will be measured by the ton in accordance with Section 1-09.2.

Prime coat aggregate will be measured by the cubic yard, truck measure, or by the ton, whichever is designated in the Proposal.

Asphalt for fog seal will be measured by the ton, as provided in Section 5-02.4.

Longitudinal joint seals between the HMA and cement concrete pavement will be measured by the linear foot along the line and slope of the completed joint seal.

Planing bituminous pavement will be measured by the square yard.

Temporary pavement marking will be measured by the linear foot as provided in Section 8-23.4.

Water will be measured by the M gallon as provided in Section 2-07.4.

5-04.5 Payment

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

"HMA CI. ____ PG ____", per ton.

"HMA for Approach CI. ____ PG ____", per ton.

"HMA for Preleveling Cl. ____ PG ____", per ton.

"HMA for Pavement Repair CI. ____ PG ____", per ton.

"Commercial HMA", per ton.

The unit Contract price per ton for "HMA CI. ____PG ____", "HMA for Approach CI. ____PG ____", "HMA for Preleveling CI. ____PG ____", "HMA for Pavement Repair CI. ____PG ____", and "Commercial HMA" shall be full compensation for all costs, including anti-stripping additive, incurred to carry out the requirements of Section 5-04 except for those costs included in other items which are included in this Subsection and which are included in the Proposal.

"Preparation of Untreated Roadway", per mile.

The unit Contract price per mile for "Preparation of Untreated Roadway" shall be full pay for all Work described under 5-04.3(4) , with the exception, however, that all costs involved in patching the Roadway prior to placement of HMA shall be included in the unit Contract price per ton for "HMA CI. ____ PG ____" which was used for patching. If the Proposal does not include a Bid item for "Preparation of Untreated Roadway", the Roadway shall be prepared as specified, but the Work shall be included in the Contract prices of the other items of Work.

"Preparation of Existing Paved Surfaces", per mile.

The unit Contract Price for "Preparation of Existing Paved Surfaces" shall be full pay for all Work described under Section 5-04.3(4) with the exception, however, that all costs involved in patching the Roadway prior to placement of HMA shall be included in the unit Contract price per ton for "HMA CI. PG " which was used for patching. If the Proposal does not include a Bid item for "Preparation of Untreated Roadway", the Roadway shall be prepared as specified, but the Work shall be included in the Contract prices of the other items of Work.

"Crack Sealing", by force account.

"Crack Sealing" will be paid for by force account as specified in Section 1-09.6. For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become a part of the total Bid by the Contractor.

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

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

"Asphalt for Prime Coat", per ton.

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

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

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

"Asphalt for Fog Seal", per ton.

Payment for "Asphalt for Fog Seal" is described in Section 5-02.5.

"Longitudinal Joint Seal", per linear foot.

The unit Contract price per linear foot for "Longitudinal Joint Seal" shall be full payment for all costs incurred to perform the Work described in Section 5-04.3(12).

"Planing Bituminous Pavement", per square yard.

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

"Temporary Pavement Marking", per linear foot.

Payment for "Temporary Pavement Marking" is described in Section 8-23.5.

"Water", per M gallon.

(*****)

Supplement this section with the following:

Payment for pavement removal outside the limits of structure excavation required for placement of HMA as shown on the Plans shall be made incidental to other bid items.

If existing subgrade material is found to be insufficient in depth, quality, or compaction, the material shall be removed and replaced with Crushed Surfacing Base Course. Payment for this additional Work shall be made in accordance with section 1-04.4.

Division 6 Structures

6-13 Structural Earth Walls

6-13.2 Materials

Section 6-13.2 is supplemented with the following:

(January 2, 2018) Concrete Block Faced Structural Earth Wall Materials General Materials Concrete Block Acceptability of the blocks will be determined based on the following:

- 1. Visual inspection.
- 2. Compressive strength tests, conforming to Section 6-13.3(4).
- 3. Water absorption tests, conforming to Section 6-13.3(4).
- 4. Manufacturer's Certificate of Compliance in accordance with Section 1-06.3.
- 5. Freeze-thaw tests conducted on the lot of blocks produced for use in this project, as specified in Section 6-13.3(4).
- 6. Copies of results from tests conducted on the lot of blocks produced for this project by the concrete block fabricator in accordance with the quality control program required by the structural earth wall manufacturer.

The blocks shall be considered acceptable regardless of curing age when compressive test results indicate that the compressive strength conforms to the 28-day requirements, and when all other acceptability requirements specified above are met.

Testing and inspection of dry cast concrete blocks shall conform to ASTM C 140, and shall include block fabrication plant approval by WSDOT prior to the start of block production for this project.

Mortar

Mortar shall conform to ASTM C 270, Type S, with an integral water repellent admixture as accepted by the Engineer. The amount of admixture shall be as recommended by the admixture manufacturer. To ensure uniform color, texture, and quality, all mortar mix components shall be obtained from one manufacturer for each component, and from one source and producer for each aggregate.

Geosynthetic Soil Reinforcement

Geogrid reinforcement shall conform to Section 9-33.1, and shall be a product listed in Appendix D of the current WSDOT Qualified Products List (QPL). The values of T_{al} and T_{ult} as listed in the QPL for the products used shall meet or exceed the values

required for the wall manufacturer's reinforcement design as specified in the structural earth wall design calculation and working drawing submittal.

The minimum ultimate tensile strength of the geogrid shall be a minimum average roll value (the average test results for any sampled roll in a lot shall meet or exceed the values shown in Appendix D of the current WSDOT QPL). The strength shall be determined in accordance with ASTM D 6637, for multi-rib specimens.

The ultraviolet (UV) radiation stability, in accordance with ASTM D 4355, shall be a minimum of 70 percent strength retained after 500 hours in the weatherometer.

The longitudinal (i.e., in the direction of loading) and transverse (i.e., parallel to the wall or slope face) ribs that make up the geogrid shall be perpendicular to one another. The maximum deviation of the cross-rib from being perpendicular to the longitudinal rib (skew) shall be no more than 1 inch in 5 feet of geogrid width. The maximum deviation of the cross-rib at any point from a line perpendicular to the longitudinal ribs located at the cross-rib (bow) shall be 0.5 inches.

The gap between the connector and the bearing surface of the connector tab crossrib shall not exceed 0.5 inches. A maximum of 10 percent of connector tabs may have a gap between 0.3 inches and 0.5 inches. Gaps in the remaining connector tabs shall not exceed 0.3 inches.

The Engineer will take random samples of the geogrid materials at the job site. Acceptance of the geogrid materials will be based on testing of samples from each lot. A "lot" shall be defined as all geogrid rolls sent to the project site produced by the same manufacturer during a continuous period of production at the same manufacturing plant having the same product name. The Contracting Agency will require 14 calendar days maximum for testing the samples after their arrival at the WSDOT Materials Laboratory in Tumwater, WA.

The geogrid samples will be tested for conformance to the specified material properties. If the test results indicate that the geogrid lot does not meet the specified properties, the roll or rolls which were sampled will be rejected. Two additional rolls for each roll tested which failed from the lot previously tested will then be selected at random by the Engineer for sampling and retesting. If the retesting shows that any of the additional rolls tested do not meet the specified properties, the entire lot will be rejected. If the test results from all the rolls retested meet the specified properties, the entire lot will be rejected. If the test results from all the rolls retested meet the specified properties, the entire lot minus the roll(s) which failed will be accepted.

All geogrid materials which have defects, deterioration, or damage, as determined by the Engineer, will be rejected. All rejected geogrid materials shall be replaced at no expense to the Contracting Agency.

Except as otherwise noted, geogrid identification, storage and handling shall conform to the requirements specified in Section 2-12.2. The geogrid materials shall not be exposed to temperatures less than –20F and greater than 122F.

Drainage Geosynthetic Fabric

Drainage geosynthetic fabric shall be a non-woven geosynthetic conforming to the requirements in Section 9-33.1, for Construction Geotextile for Underground Drainage, Moderate Survivability, Class B.

Proprietary Materials

Allan Block Wall

Wall backfill material placed in the open cells of the precast concrete blocks and placed in the one to three foot zone immediately behind the precast concrete blocks shall be crushed granular material conforming to Section 9-03.9(3).

GEOWALL Structural Earth Retaining Wall System

Connection pins shall be fiberglass conforming to the requirements of Basalite Concrete Products, LLC.

KeyGrid Wall

KeyStone connection pins shall be fiberglass conforming to the requirements of Keystone Retaining Wall Systems, Inc.

Landmark Retaining Wall

Lock bars shall be made of a rigid polyvinyl chloride polymer conforming to the following requirements:

Property	Value	Specification
Specific Gravity	1.4 minimum	ASTM D 792
Tensile Strength at yield	2,700 psi minimum	ASTM D 638

Lock bars shall remain sealed in their shipping containers until placement into the wall. Lock bars exposed to direct sunlight for a period exceeding two months shall not be used for construction of the wall.

Mesa Wall

Block connectors for block courses with geogrid reinforcement shall be glass fiber reinforced high-density polypropylene conforming to the following minimum material specifications:

Property	Specification	Value
Polypropylene	ASTM D 4101	
	Group 1 Class 1 Grade 2	2 73 ± 2 percent
Fiberglass Content	ASTM D 2584	25 ± 3 percent
Carbon Black	ASTM D 4218	2 percent minimum
Specific Gravity	ASTM D 792	1.08 ± 0.04
Tensile Strength	ASTM D 638	
at yield		8,700 ± 1,450 psi
Melt Flow Rate	ASTM D 1238	0.37 ± 0.16 ounces/10 min.

Block connectors for block courses without geogrid reinforcement shall be glass fiber reinforced high-density polyethylene (HDPE) conforming to the following minimum material specifications:

Property	Specification	<u>Value</u>
-----------------	----------------------	--------------

HDPE	ASTM D 1248	
	Type III Class A Grade 5	5 68 ± 3 percent
Fiberglass Content	ASTM D 2584	30 ± 3 percent
Carbon Black	ASTM D 4218	2 percent minimum
Specific Gravity	ASTM D 792	1.16 ± 0.06
Tensile Strength	ASTM D 638	
at yield		8,700 ± 725 psi
Melt Flow Rate	ASTM D 1238	0.11 ± 0.07 ounces/10 min.

6-13.3 Construction Requirements

Section 6-13.3 is supplemented with the following:

(January 2, 2018)

Concrete Block Faced Structural Earth Wall

Concrete block faced structural earth walls shall be constructed of only one of the following wall systems. The Contractor shall make arrangements to purchase the concrete blocks, soil reinforcement, attachment devices, joint filler, and all necessary incidentals from the source identified with each wall system:

Allan Block Wall Allan Block Wall is a registered trademark of the Allan Block Corporation

Allan Block Corporation 7424 W 78th Street Bloomington, MN 55439 (800) 899-5309 FAX (952) 835-0013 www.allanblock.com

GEOWALL Structural Earth Retaining Wall System GEOWALL is a registered trademark of Basalite Concrete Products, LLC

Basalite Concrete Products LLC 3299 International Place Du Pont, WA 98327-7707 (800) 964-9424 FAX: (253) 964-5005 www.basalite.com

Redi-Rock Positive Connection System Redi-Rock Positive Connection System is a registered trademark of Redi-Rock International, LLC

Redi-Rock International, LLC 05481 US 31 South Charlevoix, MI 49720 (866) 222-8400 FAX (231) 237-9521 www.redi-rock.com Mesa Wall

Mesa Wall is a registered trademark of Tensar Corporation

Tensar Corporation 2500 Northwinds Parkway Suite 500 Atlanta, GA 30009 (770) 334-2090 FAX (678) 281-8546 www.tensarcorp.com

Landmark Retaining Wall System

Landmark Retaining Wall System is a registered trademark of Anchor Wall Systems, Inc.

Anchor Wall Systems, Inc. 5959 Baker Road, Suite 390 Minnetonka, MN 55345-5996 (877) 295-5415 FAX (952) 979-8454 www.anchorwall.com

KeyGrid Wall

KeyGrid is a registered trademark of Keystone Retaining Wall Systems, Inc.

Keystone Retaining Wall Systems, Inc. 4444 West 78th Street Minneapolis, MN 55435 (800) 747-8971 FAX (952) 897-3858 www.keystonewalls.com

6-13.3(2) Submittals

Section 6-13.3(2) is supplemented with the following:

(January 3, 2011) The following geotechnical design parameters shall be used for the design of the structural earth wall(s):

Wall Name or No.: *** All SEW Wingwalls and Headwalls ***

Soil	Wall	Retained	Foundation
Properties	Backfill	Soil	Soil
Unit Weight			
(pcf)	***130***	***125***	***125***
Friction Angle			
(deg)	***38***	***32***	***32***
Cohesion (psf)	***0***	***0***	***0***

For the Service Limit State, the wall shall be designed to accommodate a differential settlement of *** 2 inches *** per 100 feet of wall length.

For the Extreme Event I Limit State, the wall shall be designed for a horizontal seismic acceleration coefficient k_h of *** 0.085 *** g and a vertical seismic acceleration coefficient k_v of *** 0.0 *** g.

6-13.3(3) Excavation and Foundation Preparation

The second paragraph of this section is revised to read:

At the foundation level of the bottom course of precast concrete facing panels and concrete blocks, a leveling pad of culvert bedding material shall be placed as shown in the Plans. The leveling pad shall be compacted to a minimum of approximately 90% maximum density. Approval of compaction shall be by Engineer's approval of compaction effort or the Contractor may elect to test compacted backfill and demonstrate that material has been compacted to 90% maximum density. If structural earth wall designs submitted and approved by the Contractor require more stringent compaction or different leveling pad requirements, the approved design shall be utilized.

6-13.3(5) Precast Concrete Facing Panel and Concrete Block Erection

Section 6-13.3(5) is supplemented with the following:

(April 2, 2012)

Specific Erection Requirements for Precast Concrete Block Faced Structural Earth Walls

Landmark Retaining Wall

When placing each course of concrete blocks, the Contractor shall pull the blocks towards the front face of the wall until the male key of the bottom face of the upper block contacts and fits into the female key of the top face of the supporting block below.

A maximum gap of 1/8-inch is allowed between adjacent concrete blocks, except for the base course set of concrete blocks placed on the leveling pad. A maximum gap of 1-inch is allowed between adjacent base course concrete blocks, provided geosynthetic reinforcement for drains is in place over the gap at the back face of the concrete blocks.

Lock bars shall be installed in the female key of the top face of all concrete block courses receiving geogrid reinforcement. Gaps between adjacent lock bars in the key shall not exceed 3-inches. The lock bar shall be installed flat side up, with the angled side to the back of the concrete block, as shown in the shop drawings.

Geogrid reinforcement shall be placed and connected to concrete block courses specified to receive soil reinforcement. The leading edge of the geogrid reinforcement shall be maintained within 1-inch of the front face of the supporting concrete blocks below. Geogrid panels shall be abutted for 100 percent backfill coverage with less than a 4-inch gap between adjacent panels.

Backfill shall be placed and compacted level with the top of each course of concrete blocks, and geogrid reinforcement placed and connected to concrete block courses

specified to receive soil reinforcement, before the Contractor may continue placing the next course of concrete blocks.

Mesa Wall

For all concrete block courses receiving geogrid reinforcement, the fingers of the block connectors shall engage the geogrid reinforcement apertures, both in the connector slot in the block, and across the block core. For all concrete block courses with intermittent geogrid coverage, a #3 steel reinforcing bar shall be placed, butt end to butt end, in the top block groove, with the butt ends being placed at a center of a concrete block.

6-13.3(7) Backfill

Add the following new sentence to the end of the first paragraph of Section 6-13.3(7):

Backfill for SEW may be Gravel Borrow for Structural Earth Walls, or the Contractor may elect to utilize Gravel Backfill for Pipe Zone Bedding.

6-13.4 Measurement

Delete the second paragraph of this Section and replace it with the following:

Backfill for structural earth walls, whether Gravel Borrow for Structural Earth Wall or Gravel Backfill for Pipe Zone Bedding will not be measured.

6-13.5 Payment

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

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

"Structural Earth Wall", per square foot.

The unit Contract price per square foot for "Structural Earth Wall" shall be full payment for all costs to perform the Work in connection with constructing structural earth walls including placement of the leveling pad, any geotextile reinforcement required, as well as placement and compaction of appropriate backfill.

Division 7 Drainage Structures, Storm Sewers, Sanitary Sewers, Water Mains, and Conduits

7-03 Structural Plate Pipe, Pipe Arch, Arch, and Underpass

Add the following new section:

7-03.0 Design Criteria

Structural plate structures, including foundations and footings, shall be designed in accordance with the WSDOT *Geotechnical Design Manual* M 46-03, WSDOT *Bridge Design Manual* LRFD M 23-50, and AASHTO LRFD *Bridge Design Specifications*, latest edition and current interims in effect on the Bid advertising date, including HL-93 vehicular live load. Live load for the Extreme Event-I Limit State shall be applied in accordance with WSDOT *Bridge Design Manual* LRFD M 23-50 Section 3.5. Structural design calculations for the culvert shall also be documented in a load rating report in accordance with WSDOT *Bridge Design Manual* LRFD M 23-50 Section 13.4.

Wingwalls and headwalls used in conjunction with structural plate culverts shall be designed in accordance with the WSDOT *Geotechnical Design Manual* M 46-03 and Chapter 11 of AASHTO LRFD *Bridge Design Specifications*, latest edition and current interims in effect on the Bid advertising date. Wingwalls and headwalls shall be concrete block faced structural earth walls designed and constructed in accordance with Section 6-13 of the Standard Specifications and these Special Provisions. Headwalls and wingwalls shall be designed such that they leave no gap between the blocks and the structural plate structure. The Contractor is encouraged to select a structural earth wall system that is compatible with the structural plate structure, has established connection details available, and has been implemented for this purpose in the past.

Footings shall be pre-cast reinforced concrete spread footings with dimensions and reinforcement sufficient to withstand the loadings specified in this section while limiting settlement of footings to 1" (one inch) or less. The design and supporting calculations shall reference the project geotechnical report for recommended design coefficients and values.

7-03.0(1) Dimensions

The minimum dimensions for structural plate structures included in the Contract shall be as listed below, as determined from the inside of the corrugations:

<u>Span</u>: Minimum span shall be 20'-0" (twenty feet) measured at four feet above top of the footing <u>Rise</u>: Minimum rise shall be 12'-0" (twelve feet)

7-03.0(2) Submittals

The Contractor shall submit Type 2E Working Drawings with supporting calculations for the proposed structural plate structure documenting exact dimensions, configuration, and connection details for the structure as well as footings. The Working Drawings shall include all details and dimensions for any required stiffeners, longitudinal thrust beams, and transverse ring beams if required. Working Drawings for the structural plate structure and calculations shall be stamped by a professional structural engineer licensed in the State of Washington.

7-03.1 Description

Supplement this section with the following:

(*****)

Structural plate culverts shall be multi-centered shape made up of multiple circular arcs tangent to each other at their junctions and symmetrical about the vertical axis and of the design, type, gage or thickness, and dimensions specified.

7-03.2 Materials

Supplement this section with the following:

(*****)

Structural plate culverts shall be galvanized corrugated steel with corrugation depths larger than five inches; plates shall be 8 gage or thicker. All fasteners shall conform with the culvert manufacturer's recommendations for type and protective coating.

Backfill material for structural plate culverts shall meet the requirements of Section 9-03.12(3) and shall have a resistivity of at least 3,000 ohm-cm as determined by WSDOT T 417 testing methods.

7-03.3 Construction Requirements

7-03.3(3) Backfilling

Supplement this section with the following:

(*****)

The Contractor shall arrange for a Shape Control Inspector provided through the culvert manufacturer to monitor the shape of the structure prior to and during backfill operations to ensure installation meets manufacturer recommendations. The Shape Control Inspector shall:

- 1) Take initial measurements of the assembled structure.
- 2) Observe all backfill materials and placement, record the compaction density of the backfill as lifts are placed and report any results that do not meet the requirements of the Plans and the Specifications.
- 3) Monitor the placement of backfill to the specified minimum height of cover over the structure.

7-03.3(5) Headwalls

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

7-03.3(5) Headwalls and Wingwalls

Headwalls and wingwalls shall be Structural Earth Walls as shown in the Plans and

installed per Section 6-13.

7-03.4 Measurement

Supplement this section with the following:

(*****)

No unit of measure shall apply to lump sum bid items for structural plate structures when they are included in the Plans.

Gravel backfill for pipe zone bedding will be measured by the cubic yard as specified in Section 2-09.4.

7-03.5 Payment

Supplement this section with the following:

(*****)

"Gravel Backfill for Pipe Zone Bedding", per cubic yard.

Payment for "Structural Plate Culvert" shall include all costs for designing and providing WSDOT Load Rating, furnishing, hauling, and constructing, and manufacturer provided shape inspection of the structural plate culvert shown in the Plans.

All costs in connection with furnishing precast footings, including connection to the Structural Plate Culvert, preparing the base, and furnishing and placing culvert bedding material, shall be included by the Contractor in the lump sum Contract price for "Structural Plate Culvert".

7-06 Vacant

Section 7-06 is revised to read:

7-06 Temporary Stream Diversion

7-06.1 Description

This work shall include designing, installing, operating, maintaining, removing, and disposing of the temporary stream diversion, environmental compliance and other Work as detailed in these Specifications.

7-06.2 Materials

All materials shall be as detailed in the Contractor's Temporary Stream Diversion (TSD) Plan.

7-06.3 Construction Requirements

7-06.3(1) General

The Work shall include compliance with Washington State Water Quality Standards in WAC 173-201A, project permits, environmental commitments and these Provisions.

The temporary stream diversion may be either a gravity or a pumped system; the system included in the Plans is one acceptable means of achieving temporary stream diversion. If pumps are used, pump screens shall comply with the requirements in Section 7-06.3(4) of these Special Provisions. Once a pumped diversion begins, pumping must continue non-stop until it is no longer necessary to bypass flows. All pumps and associated equipment (e.g. generators) used for continuous bypass shall have a maximum noise level of 70 dB measured at a distance of 50 feet from the equipment. The Contractor shall have back-up pumps on site and shall provide monitoring of the pumping operation. Monitoring can be achieved by providing monitoring personnel on site or through remote sensing and instrumentation to verify operation of the bypass. If the Contractor elects to monitor by remote sensing and instrumentation, a Type 2 Working Drawing shall be submitted outlining how system operation will be monitored, how alerts will be made and how personnel will respond to a diversion system failure. The Contractor shall bear full responsibility for maintaining the TSD. Any damage, mitigation, or extra work required as a result of a failure in the TSD shall be corrected by the Contractor at no additional cost to the Contracting Agency.

The temporary stream diversion including water that is retained by the temporary stream diversion and any dewatering system shall be located within the permitted impact areas as shown in the Plans. The upstream diversion dam shall be constructed to a height sufficient to prevent stream flow from entering the work area. Scour protection shall be provided at the outfall of the temporary stream diversion systems and dewatering system to prevent flow re-entering the stream channel from mobilizing streambed and embankment sediments. When a temporary stream diversion is located in or near an intertidal zone the temporary stream diversion design shall take tidal influence into consideration.

The Contractor shall arrange a meeting with the Contracting Officer prior to implementation of the TSD Plan. At this meeting the Contractor shall explain to the Contracting Officer the Work to be completed for the temporary stream diversion. The meeting shall be a minimum of 7 calendar days prior to start of the temporary stream diversion work.

The TSD shall be operational prior to performing any other work below the Ordinary High Water Line.

7-06.3(2) Temporary Stream Diversion Plan

7-06.3(2) A General Plan Requirements

The Contractor shall submit a Temporary Stream Diversion Plan in accordance with the requirements of a Type 2 Working Drawing and these Specifications. A separate TSD Plan shall be prepared and submitted for each temporary stream diversion that is required. The TSD Plan shall consist of a narrative and drawings detailing all temporary stream diversion requirements and shall encompass and protect all the areas affected by the Contractor's temporary stream diversion Work.

The Contractor shall fully implement the TSD Plan throughout the duration of the associated Work. The Contractor shall update the TSD Plan throughout project construction to reflect actual site conditions and the Contractor's Work. Changes to plan shall comply with WAC 196-23-020. At the request of the Engineer an updated TSD Plan shall be submitted as a Type 2 Working Drawing. A copy of the TSD Plan shall be on the project site at all times.

The TSD Plan shall describe measures that will be taken to comply with Washington State Water Quality Standards in WAC 173-201A, applicable permits, environmental commitments and these Provisions.

The Contractor shall incorporate the Diversion Schedule and Sequence into their Project Schedule.

7-06.3(2)B Stream Flows

Minimum Stream Flows

At all times of operation the Contractor's temporary stream diversion shall be designed to convey a flow rate of at least 2 cubic feet per second (898 gallons per minute) of water.

During all phases of the bypass installation and decommissioning, the Contractor shall maintain flows downstream of the project site.

7-06.3(2)C Plan Requirements

The TSD Plan shall provide the following information in the following order:

- 1. Description and Location of the temporary stream diversion
 - a. Identify the name of the water body where the temporary stream diversion will be placed. Provide a description of the temporary stream diversion.
 - b. Provide drawings showing the location of the temporary stream diversion, including proposed access routes and equipment to be used to construct the diversion.
- 2. Schedule and Sequence
 - a. Provide a sequence of Work, dates, and durations for when the following will occur, in accordance with the in-water work window in the Special Provisions:
 - i. Fish exclusion (performed by the Contracting Agency).
 - ii. TSD Plan Implementation Meeting
 - iii. TSD installation.

- iv. Dewatering of the isolated Work area.
- v. Restoration and stabilization of the temporary stream diversion Work area to prevent erosion.
- vi. Any relocations of the temporary stream diversion to accommodate the Work sequence (if needed).
- vii. Channel rewatering.
- viii. Removal of the TSD.
- ix. Fish block removal (performed by Contracting Agency).
- b. Include other Work that needs to be coordinated with the TSD (e.g., temporary erosion control).
- 3. Calculations and Materials
 - a. Detail all elements of the temporary stream diversion; including but not limited to pipes, pumps, and other equipment.
 - b. Calculations shall demonstrate the diversion system conveys the minimum peak flow specified by the Contracting Agency and include tidal influence where applicable.
 - c. Temporary stream diversion shall include a water conveyance system to be used for dewatering and rewatering that is capable of conveying the flow required for the temporary stream diversion.
 - d. Methods for anchoring temporary stream diversion pipe and associated hardware; include calculations to demonstrate the devices ability to anchor the pipe and associated hardware.
 - e. Specifications for all materials and equipment to be used as part of the diversion including pump or diversion capacities and hose sizes. For example, provide the type, profile, and size of pipe.
 - f. Provide the size of fish screens (mesh size and surface area) to be used, in accordance with Section 7-06.3(5) of these Special Provisions.
- 4. Stream Flow Blocking and Dewatering
 - a. Provide the method(s), including locations and details (narrative and drawings) for blocking both the upstream and downstream ends of the diversion. Describe how minor leakage from upstream and downstream will be addressed.
 - b. Include provisions for scour protection at the temporary stream diversion outfalls.

- c. Identify the means and methods for dewatering water and disposal of the water.
- 5. Inspection and Maintenance
 - a. Provide the schedule and frequency for inspection of the temporary stream diversion; include weekends and holidays.
 - b. Describe how maintenance will be conducted when inspections identify deficiencies in the temporary stream diversion. These include, but are not limited to removal and disposal of trapped sediment or debris and repairing leaks.
 - c. The Contractor shall keep a record of all inspections and maintenance of the temporary stream diversion.
- 6. Rewatering the Stream Channel
 - a. Detail how the stream channel will be rewatered to comply with water quality requirements.
 - b. Identify measures that will prevent the stranding of fish during rewatering (i.e. describe methods, rates, and durations of the rewatering process knowing that flows downstream of the fish block must be maintained to protect fish).
- 7. Removal of the Temporary Stream Diversion
 - a. Describe the sequence that will be used for removing the temporary stream diversion and methods to prevent water quality impacts.
 - b. Describe how disturbed soil will be permanently stabilized.
 - c. Describe any temporary pipes to remain (requires approval of the Engineer): their type, pipe class, size, location, and plugging procedure.
- 8. Other Work required for the Contractor's temporary stream diversion

7-06.3(3) Fish and Aquatic Species Exclusion and Notifications

Prior to installing a temporary stream diversion, the Contractor shall notify the Contracting Officer 5 calendar days prior to beginning the Work. This is to allow the Contracting Agency to: (1) install fish block nets upstream and downstream of the inwater Work area; and (2) safely capture and relocate any fish and other aquatic organisms that become trapped between the block nets. No Work within the limits of the Ordinary High Water Line will be allowed prior to installation of fish block nets and completion of fish exclusion activities.

7-06.3(4) Dewatering Work Area

Dewatering the isolated in-water Work area (between the upstream and downstream diversion dams) shall occur at a rate slow enough to allow the Contracting Agency to

safely capture and relocate all fish species and other aquatic organisms to avoid stranding, as determined by the Engineer.

All pumps used for dewatering shall have an intake covered with a fish screen, operated, and maintained in accordance with RCW 77.57.010 and RCW 77.57.070. Appropriate fish screens are as follows:

- 1. Perforated plate: 0.094 inch (maximum opening diameter);
- 2. Profile bar: 0.069 inch (maximum width opening); or
- 3. Woven wire: 0.094 inch (maximum opening measured on the diagonal).

The minimum open area for all types of fish screens is twenty-seven percent. The screened intake facility must have enough surface area to ensure that the velocity through the screen is less than 0.4 feet per second. The fish screen must remain in place whenever water is withdrawn until the Contracting Agency Biologists confirm all fish have been removed. At that point, the Contractor may remove the fish screen to finish dewatering the work area.

7-06.3(5) Inspection and Maintenance

At a minimum, the Contractor shall perform the following activities once per day (including weekends and holidays):

- 1. Check for and correct leaks;
- 2. Ensure the fish block nets remain sealed to the channel substrate.

The fish block nets shall be kept clear of debris that could jeopardize the integrity of the nets. The Contractor shall perform the following activities a minimum of three times per day or when requested by the Engineer. On working days, these activities shall be performed at the start, middle, and at the end of the working day. On non-working days, these activities shall be performed between 6:00 am and 8:00 am, and between 4:00 pm and 6:00 pm:

- 1. Inspect the upstream and downstream fish block nets and remove debris;
- 2. Inspect the upstream fish block net and all screens and similar facilities for impinged fish;
 - a. The Contractor shall immediately notify the Contracting Agency when impinged fish are discovered.
 - b. Removal of impinged fish will be performed by the Contracting Agency.

The Contractor shall maintain a written record of all inspection and maintenance activities; record to be available at the request of the Engineer.

7-06.3(6) Rewatering the Stream Channel

The Contractor shall notify the Engineer a minimum of 7 calendar days in advance of rewatering the stream channel.

The Contractor shall introduce water to the new stream channel section and trap sediments until the stream section meets the requirements of these Provisions. Rewatering shall occur at a rate to avoid loss of surface water downstream while the new channel section is rewatered.

7-06.3(7) Removal of the Temporary Stream Diversion

The Contractor shall notify the Engineer two business days in advance of beginning the temporary stream diversion removal sequence.

Once the water in the new stream channel will meet the applicable turbidity standards the Contractor may begin removal of the temporary stream diversion and the stream channel opened to flows.

The Contractor shall immediately take all corrective actions necessary to prevent the water from exceeding the turbidity standards should the stream turbidity increase. All Work within the channel, except for removal of the temporary erosion control items, shall be completed before the temporary stream diversion is removed. The Contractor must finish all construction activities within the limits of the Ordinary High Water Line, including but not limited to culvert installation and creek bed channel restoration, before the Contracting Agency will remove the fish block nets.

All materials used for the diversion shall become the property of the Contractor and removed from the project limits, with the exception of any materials supplied by the Contracting Agency, unless otherwise specified by the Engineer.

7-06.4 Measurement

No unit of measure shall apply to the lump sum bid item for Temporary Stream Diversion.

7-06.5 Payment

Payment will be made for the following Bid items when included in the proposal:

"Temporary Stream Diversion", lump sum.

The lump sum Contract price for "Temporary Stream Diversion" shall be full payment to perform the Work as specified. Progress payments for the lump sum item "Temporary Stream Diversion" will be made as follows:

- 1. Twenty-five percent of the bid amount will be paid following completion of the TSD Plan including resolution of all Contracting Agency review comments.
- 2. The remaining seventy-five percent of the bid amount shall be paid in accordance with Section 1-09.9.

Division 8 Miscellaneous Construction

8-02 Roadside Restoration

8-02.3 Construction Requirements

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

8-02.3(9) A Dates for Application of Seed

This section is revised to read:

Seeding and Mulching shall be completed as soon as possible following completion of ground disturbing activities. When environmental conditions are not conducive to satisfactory results, the Contracting Officer may suspend the seeding Work until such time that the desired results are likely to be obtained.

8-02.3(9)B Seeding and Fertilizing

Supplement this section with the following:

(*****)

Any seeding areas that have become compacted prior to seeding shall be scarified to a depth of 2 inches by acceptable means prior to seeding.

All bags of seed shall be brought to the site sealed and shall have seed labels attached showing the seed meets the species and quantities shown on the Plans. Seed which has become wet, moldy, or otherwise damaged in transit or storage will not be accepted.

Seed shall be placed at the rate, mix and analysis specified in the Plans. All seed listed in the seed mix on the plans shall have been collected from plants native to and growing in Idaho, Oregon or Washington. Seeds shall not contain weed seeds listed as secondary noxious by Washington State Seed Law single or collective in excess of the labeling tolerance specified by the Washington State Seed Law. The seeding surface shall be raked or chained to ensure a friable surface free of soil clumps larger than 2" in diameter. No fertilizer shall be included in the seed mixes or mulch.

Composition, proportion, and quantity shown on the Plans shall be applied at all areas above the ordinary high-water level that were disturbed by construction activities.

8-02.3(11) Mulch

8-02.3(11)A Mulch for Seeding Areas

Supplement this section with the following:

(*****)

After seed is applied and incorporated in the soil, straw mulch shall be applied at a rate of 2,000 pounds per acre, spread evenly through seeding areas at a minimum of 2 inches thick. Straw mulch shall be air-dried and free from undesirable weed seed and coarse material

8-19 Vacant

Section 8-19 is revised to read:

8-19 Temporary Detour

8-19.1 Description

This work shall include grading, compaction, maintenance, and removal of the temporary detour shown on the Plans or an approved alternative detour which provides at least one-way traffic throughout construction.

8-19.2 Materials

The driving surface of the temporary detour shall be composed of Crushed Surfacing Base Course. Native material excavated for temporary detour construction may be reused as a base for the driving surface when fill is required, provided it meets the requirements for Native Material for Trench Backfill. If native material is unsuitable for use as base material, the Contractor shall import Common Borrow, or Select Borrow for use in temporary detour construction.

8-19.3 Construction Requirements

8-19.3(1) Preparation for Detour

Prior to construction of the temporary detour, the Contractor shall clearly stake the centerline of the detour for review and approval by the Contracting Officer. Horizontal temporary detour alignment data are provided below. Digital alignment data are available upon request.

Begin Station N 186,378.9493 E 1,689,968.4658 30+00.00

<u>Line (1)</u> N56° 25' 12.66"E 15.299' N 186,387.4112 E 1,689,981.2118 30+15.30

<u>Curve (2)</u> BC N 186,387.4112 E 1,689,981.2118 30+15.30 CTR N 186,470.7228 E 1,689,925.9020 PI N 186,408.0293 E 1,690,012.2683

Direction Back N56° 25' 12.66"E Radius 100.000' Delta 40°53'18"(LT) Length 71.364' Tangent 37.277' Chord Direction N35° 58' 33.64"E Distance 69.859' Direction Ahead N15° 31' 54.63"E

EC N 186,443.9454 E 1,690,022.2502 30+86.66

<u>Line (3)</u> N15° 31' 54.63"E 55.356' N 186,497.2797 E 1,690,037.0730 31+42.02

<u>Curve (4)</u> BC N 186,497.2797 E 1,690,037.0730 31+42.02 CTR N 186,483.2757 E 1,690,087.4611 PI N 186,520.2984 E 1,690,043.4704

Direction Back N15° 31' 54.63"E Radius 52.298' Delta 49°06'16"(RT) Length 44.821' Tangent 23.891' Chord Direction N40° 05' 02.64"E Distance 43.462' Direction Ahead N64° 38' 10.64"E

EC N 186,530.5325 E 1,690,065.0586 31+86.84

<u>Line (5)</u> N64° 38' 10.64"E 102.085' N 186,574.2621 E 1,690,157.3037 32+88.93

<u>Curve (6)</u>

BC N 186,574.2621 E 1,690,157.3037 32+88.93 CTR N 186,483.9014 E 1,690,200.1400 PI N 186,579.8525 E 1,690,169.0965

Direction Back N64° 38' 10.64"E Radius 100.000' Delta 14°52'16"(RT) Length 25.955' Tangent 13.051' Chord Direction N72° 04' 18.62"E Distance 25.882' Direction Ahead N79° 30' 26.59"E

EC N 186,582.2292 E 1,690,181.9291 33+14.88

Line (7) N79° 30' 26.59"E 77.131' N 186,596.2754 E 1,690,257.7700 33+92.01

Curve (8)

BC N 186,596.2754 E 1,690,257.7700 33+92.01 CTR N 186,684.7705 E 1,690,241.3803 PI N 186,601.1556 E 1,690,284.1202

Direction Back N79° 30' 26.59"E Radius 90.000' Delta 33°09'46"(LT) Length 52.092' Tangent 26.798' Chord Direction N62° 55' 33.66"E Distance 51.368' Direction Ahead N46° 20' 40.72"E

EC N 186,619.6550 E 1,690,303.5090 34+44.10

<u>Line (9)</u> N46° 20' 40.72"E 1.792' N 186,620.8923 E 1,690,304.8057 34+45.90

End Station N 186,620.8923 E 1,690,304.8057 34+45.90

Clearing of the area required for temporary detour construction shall occur as described in Section 2-01. Several large boulders are present and are protruding above the ground surface along the approximate detour alignment. The Contractor shall remove and stockpile these boulders at a location and in a manner identified by the property owners.

8-19.3(2) Detour Excavation, Fill, and Compaction

The temporary detour shall be constructed such that the finished surface lies at the lines and grades shown in the Plans. This Work will include excavation, overexcavation, fill, and compaction. If the finished grade elevation is less than 3 inches (0.25 feet) above the existing ground elevation, the Contractor shall overexcavate to allow placement of the Crushed Surfacing Base Course lift.

When fill is required, fill shall be placed on top of cleared existing ground in lifts of no more than 6 inches. Each lift shall be compacted to 90 percent maximum density.

The driving surface of the temporary detour shall be a 3-inch lift of Crushed Surfacing Base Course compacted to 90 percent maximum density. No crowning of the temporary surface is required. The temporary driving surface shall be free of ruts and loose gravel. The driving surface width shall be constructed to match the design vehicle sweep path shown on the Plans.

8-19.3(3) Testing of Detour Navigability

The temporary detour is intended to provide access for emergency vehicles to nearby residences in the event of an emergency while avoiding damage to existing utilities and mature vegetation. The site conditions and limited space available make this a difficult task. Detour curves and profiles were designed to allow emergency vehicles to safely navigate the detour at a slow speed. The Contractor shall test navigability of the detour prior to utilizing it for traffic. The test shall be conducted using a street legal dump truck or

other vehicle with a length of at least 30 ft. The Contractor shall drive the test vehicle along the entire length of the detour in both directions to test navigability. The intent is to simulate a long emergency vehicle such as a fire truck and identify any modifications to the detour that may be required to allow such a vehicle to safely navigate the detour. Any modifications to the detour that are required shall be paid for according to Section 1-04.4.

Following completion of a successful test the detour may be opened to traffic provided all applicable traffic control measures are in place and functioning properly.

8-19.3(4) Maintenance

The temporary detour shall be inspected, monitored, and maintained on a regular basis the entire time the detour is in operation. Daily inspections of the detour shall be made to identify any areas of rutting, sloughing, or erosion of the road surface or base. Any deficiencies identified shall be repaired at no additional cost to the Contracting Officer.

8-19.3(5) Detour Removal

The temporary detour may be decommissioned and removed when at least one-way traffic through the project site is provided and the Contracting Officer has approved decommissioning in writing. The Contractor shall notify the Contracting Officer at least 5 (five) calendar days prior to decommissioning the temporary detour. The Contracting Officer reserves the right to reject the Contractor's request for decommissioning if it is determined that additional Work is required prior to decommissioning.

Once approval for decommissioning has been granted, the Contractor shall fully remove the detour and restore the disturbed ground as close to existing conditions as is practicable. All Crushed Surfacing Base Course material shall be removed from the site. Native material or imported material used as temporary fill shall be used to backfill excavated areas to match existing ground.

8-19.3(6) Alternative Detour Designs

The temporary detour included in the Plans is one means of providing safe, one-way traffic around the Work area. The Contractor may choose to develop an alternative means of providing one-way traffic through the Work area. Should the Contractor elect to utilize an alternate approach the Contractor shall develop Type 3E Working Drawings to illustrate all aspects of the proposed alternate temporary detour design. The Working Drawings shall include details on the proposed alignment, profile, materials, construction method, construction sequence, and a narrative of anticipated Work sequence. All temporary fills, bridges, or other structures included in the alternate design shall be designed to withstand HL-93 or HS 20-44 loading. A minimum traveled way width of 12 feet shall be used and the detour shall be navigable by a WB-40 design vehicle.

8-19.4 Measurement

No unit of measurement shall apply to the lump sum bid item "Temporary Detour".

8-19.5 Payment

Payment for "Temporary Detour" shall be full compensation for all excavation,

overexcavation, fill, grading, placement of gravel base, compaction, detour testing, inspection, routine maintenance, correction of faulty Work, and full removal and decommissioning of the detour. The Contractor may request payment for half of the lump sum bid price once the temporary detour has been constructed and is fully operational. Payment for the balance of the lump sum bid price will be made following decommissioning and removal of the temporary detour.

If imported fill material is required or modifications to the detour design included in the Plans are required and approved by the Contracting Office, this Work will be paid for according to Section 1-04.4.

8-26 Vacant

Section 8-26 is revised to read:

8-26 Temporary Bridge

8-26.1 Description

This Work shall include furnishing, installing, maintaining, and removing a temporary bridge in association with the temporary detour plan shown in the Plans. This Work also includes preparing and constructing abutments, foundations, wingwalls, and other accessory items to the temporary bridge as required.

8-26.2 Materials

The Contractor may provide a timber or steel bridge for use as a temporary bridge, provided it meets the requirements set forth in this section.

8-26.3 Construction Requirements

8-26.3(1) Temporary Bridge Submittal

The temporary bridge shown in the Plans is shown for reference only. The Contractor shall submit Type 3E Working Drawings for the proposed temporary bridge documenting exact dimensions, abutments, deck, and other parts, pieces, or materials necessary to construct the temporary bridge including backfill and subgrade preparation requirements. A geotechnical report is available to reference for design of foundation elements of the temporary bridge and associated components.

The temporary bridge and associated components, collectively referred to as the temporary bridge system, shall be designed to withstand HL-93 or HS 20-44 loading and shall bear certification from a Structural Engineer licensed to practice in the state of Washington that said temporary bridge system meets these requirements. The deck of the temporary bridge shall be a minimum of 16 feet wide to allow for a 12-foot travel lane and 2 feet of shy distance on either side of the travel lane. The temporary bridge shall include longitudinal traffic barrier which satisfies the requirements for NCHRP TL-1 rated barriers.

Temporary bridge span may vary from that shown in the Plans provided the alignment and profile for the temporary detour can be constructed as shown in the Plans, and the minimum

span is 17 feet such that no portion of the temporary bridge system sits below the Ordinary High Water Mark. The low beam of the temporary bridge shall provide at least 2 feet of freeboard over the water surface elevation in Mill Creek following construction of cofferdams for temporary stream diversion.

8-26.3(2) Temporary Bridge Installation, Maintenance and Removal

The temporary bridge system shown on the approved temporary bridge Working Drawings shall be delivered to the project and installed per details in the Working Drawings.

The Contractor shall prepare the subgrade, construct abutments or other foundation elements, erect the superstructure, and place the deck and longitudinal barrier in accordance with the approved Working Drawings.

The temporary bridge system shall be inspected daily for defects or flaws which may lead to unsafe conditions. Any flaws or defects discovered shall be corrected immediately at no additional cost to the Contracting Agency. Any flaw or defect discovered which poses a threat to the structural integrity of the temporary bridge system shall be brought to the attention for the Contracting Officer immediately to identify an alternate approach for routing traffic through the project site.

Once approval for temporary detour decommissioning has been granted, the Contractor shall remove all components of the temporary bridge system.

8-26.4 Measurement

No unit of measure shall apply to the lump sum bid item "Temporary Bridge".

8-26.5 Payment

Payment for "Temporary Bridge" shall be full compensation for design, furnishing, installing, maintaining, decommissioning, and removing a temporary bridge system meeting the requirements of these Special Provisions. The Contractor may request payment for half of the lump sum bid price once the temporary bridge has been installed and is fully operational. Payment for the balance of the lump sum bid price will be made following removal of the temporary bridge.

If the temporary bridge system selected requires material that differs in type or volume from that required for construction of the temporary detour, all costs associated with furnishing, placing as required in the approved Working Drawings, and removing said material shall become incidental to the costs for the temporary bridge.

8-27 Vacant

Section 8-27 is revised to read:

8-27 Streambed Construction

8-27.1 Description

This Work includes furnishing and placing all materials required for streambed construction to the lines and grades shown in the Plans including construction of boulder steps and addition streambed boulders of the type and quantity shown in the Plans, any grading outside the limits of structure excavation required to prepare the bed for streambed construction and "washing in" or "sealing" the constructed channel with Streambed Sand.

8-27.2 Materials

Boulder steps shall be constructed using Two Man and Three Man Streambed Boulders which meet the requirements of Section 9-03.11(3).

Streambed Mix shall be used to construct the remainder of the channel between boulder steps. Streambed Mix shall be comprised of a mix of 12" streambed cobbles (Section 9-03.11(2)), streambed sediment (Section 9-03.11(1)), and One Man Streambed Boulders (Section 9-03.11(3)) mixed in approximately 3:2:1 volumetric proportions, respectively. The blended aggregates shall be well mixed into a single well graded stockpile prior to placement. The combined Streambed Mix shall meet the gradation below, regardless of exact proportions used to generate said mix. Streambed Mix which does not meet the gradation shown below shall be replaced with a suitable mix at no additional cost to the Contracting Agency.

Percent Passing	<u>Diameter</u>
100	18 inches
84	9 – 12 inches
50	3 – 6 inches
16	1⁄4 - 3⁄4 inches
10 min.	#40 sieve
5 min.	#200 sieve

Streambed Sand shall meet the requirements of Section 9-03.13 of backfill for sand drains.

The grading of the aggregate for Streambed Mix and Streambed Sand shall be approved by the Contracting Officer by visual inspection of the load before it is placed. The Contractor is encouraged to provide specifications for each gradation used, samples of aggregates, or visit the source quarry(ies) with the Contracting Officer prior to importing streambed aggregate to the project site. Replacement of materials that does not meet the requirements of this section shall be at no additional cost to the Contracting Agency.

8-27.3 Construction Requirements

The foundation for the streambed shall be prepared such that the finished channel is constructed to the elevations and grades shown on the Plans after construction of boulder steps and placement of streambed mix. The Contractor shall perform all grading necessary to prepare the streambed foundation for streambed construction. If fill placement is necessary to prepare the streambed foundation, native material is acceptable for use; any fill placed shall be compacted to approximately 90% maximum density as determined by the Contracting Officer evaluating compaction effort. The Contractor shall clearly stake or otherwise mark the locations of boulder steps for review and approval by the Contracting Officer prior to initiating construction of the streambed.

The lowest points of boulder steps shall be centered on the proposed stream alignment at
the elevation shown on the Plans. Proposed stream alignment data in the vicinity of streambed grading are provided below. Digital alignment data are available upon request.

<u>Station</u>	<u>Northing</u>	<u>Easting</u>
13+00.00	186,569.4604'	1,690,119.3845'
13+05.00	186,565.8002'	1,690,122.7654'
13+10.00	186,561.7543'	1,690,125.7032'
13+15.00	186,557.7904'	1,690,128.7497'
13+20.00	186,554.0263'	1,690,132.0255'
13+25.00	186,550.5334'	1,690,135.6032'
13+30.00	186,547.0405'	1,690,139.1808'
13+35.00	186,543.5040'	1,690,142.7145'
13+40.00	186,539.6522'	1,690,145.8986'
13+45.00	186,535.4763'	1,690,148.6439'
13+50.00	186,531.0260'	1,690,150.9178'
13+55.00	186,526.4037'	1,690,152.8237'
13+60.00	186,521.7729'	1,690,154.7092'
13+65.00	186,517.1420'	1,690,156.5947'
13+70.00	186,512.5111'	1,690,158.4803'
13+75.00	186,507.8803'	1,690,160.3658'
13+80.00	186,503.2494'	1,690,162.2513'
13+85.00	186,498.6186'	1,690,164.1368'
13+90.00	186,493.9877'	1,690,166.0224'
13+95.00	186,489.3569'	1,690,167.9079'
14+00.00	186,484.7260'	1,690,169.7934'
14+05.00	186,480.0043'	1,690,171.4180'
14+10.00	186,475.0523'	1,690,172.0348'
14+15.00	186,470.0833'	1,690,171.5750'
14+20.00	186,465.2419'	1,690,170.3544'
14+25.00	186,460.3567'	1,690,171.0998'
14+30.00	186,456.5169'	1,690,174.2113'
14+35.00	186,453.5021'	1,690,178.2003'
14+40.00	186,450.6036'	1,690,182.2736'
14+45.00	186,447.7655'	1,690,186.3895'
14+50.00	186,445.1894'	1,690,190.6748'

8-27.3(1) Boulder Steps

Boulder steps shall be constructed and placed at the locations and elevations shown on the Plans. Boulder steps shall be constructed prior to placement of streambed mix. Construction of boulder steps shall proceed by placing single boulders at a time; with each boulder selected being of an appropriate size and shape to construct the boulder step such that contact between adjacent rocks is maximized. The Contractor shall exercise care when placing boulders, especially at the low point, or crest, of each boulder step. Boulders shall be placed such that the crest of each step is within +/- 0.1 feet vertically of the elevation identified on the Plans. No one boulder steps shall protrude more than 1 foot above the lines and grades shown on the Plans. Boulder steps shall extend laterally to the inside edge of the culvert when constructed within the culvert and shall extend at least 2 feet into the floodplain bench when constructed outside the culvert. If necessary, to remove native material for extending boulder steps into the existing bank, this excavation and subsequent backfill is included as part of this Work.

When boulder steps are constructed in areas with a 3-foot-thick or greater layer of

Streambed Mix (i.e. four foot thick boulder steps), the boulder steps shall be comprised of at least 30 percent (by number of boulders placed) of Three Man Streambed Boulders; this requirement does not apply to two foot thick boulder steps. Two foot thick boulder steps may be constructed using Two Man or Three Man Streambed Boulders provided the finished lines match those shown in the Plans as described in this section.

8-27.3(2) Streambed Mix

Streambed Mix shall be placed between boulder steps following construction of boulder steps. Streambed Mix shall be placed in the prepared streambed foundation such that the finished surface matches the lines and grades shown on the Plans with a thalweg as shown on the Plans. The thalweg location may be adjusted in the field by the Contracting Officer to provide additional hydraulic diversity. Streambed Mix shall be placed and compacted in lifts no larger than 12-inches. Compaction shall be achieved through use of an excavator bucket; the backside of the excavator bucket shall be used to smoothly press on the placed Streambed Mix and minimize void spaces. Repeated blows with an excavator bucket are not necessary. No specific measure of compaction will be required, rather compaction effort will be approved by the Contracting Officer. When particles larger than 12-inches are present within a lift, compaction shall proceed to the extent practicable around these larger particles.

Following placement and compaction of a lift of Streambed Mix, the Contractor shall apply water to the lift to "seal" the lift by washing finer particles into void spaces left between larger particles. Washing in fine particles is typically best achieved through application of high-pressure water to the compacted lift of Streambed Mix, though exact methods utilized are up to the Contractor to determine. Washing in shall continue until the entirety of the flow rate being applied to the lift flows above the surface of the lift; the intent is to have all water in the completed channel flowing above the finished channel surface (no subsurface flow through voids in Streambed Mix).

It may be necessary to apply additional fine material to a given lift to achieve satisfactory sealing of the lift. When this is required, the Contractor shall place and wash in additional fine material to seal the lift. The Contractor shall import Streambed Sand for this purpose. Streambed Sand shall be applied as necessary to seal the bed; application of Streambed Sand shall not change the finished channel elevation shown on the Plans. Once Streambed Sand has been placed, it shall be washed in as described in this section.

8-27.3(3) Additional Streambed Boulders

Additional Streambed Boulders shall be placed in the finished channel as described in this Section. The Contractor shall place a minimum of two and a maximum of four additional Two Man Streambed Boulders in the finished channel between each constructed boulder step. Each boulder shall be placed such than no more than half of its intermediate axis is protruding from the finished streambed. The Contractor shall place these additional boulders following placement, but before compaction and sealing of the final lift of Streambed Mix.

8-27.4 Measurement

No unit of measure shall apply to the lump sum bid item for "Channel Grading". The quantity of excavation and backfilling required to construct the channel as shown in the Plans will

depend on the Contractor's exact means and methods; structure excavation in particular will play a big role in determining exact quantities as some of the necessary excavation may already be completed if extra excavation is used in lieu of shoring and the Contractor may have to actually backfill to satisfactorily prepare a base for the channel and boulder steps. Assuming a reasonable cut slope of 1.5H:1V approximately 75 additional cubic yards of material required to be excavated for preparation of the streambed outside the anticipated limits of structure excavation will be required to prepare the streambed foundation. This estimated quantity is provided for informational purposes only; the Contractor shall bear full responsibility for determining anticipated level of effort required to complete the Work and submit a lump sum bid accordingly.

No unit of measure shall apply to the lump sum bid item for "Channel Construction". Construction of the channel as shown in the Plans is estimated to require 260 cubic yards of streambed mix. Each two foot boulder step is estimated to require 5 tons of Two Man Streambed Boulders. Four foot depth boulder steps are estimated to require 5 tons of Two Man Boulders as well as an additional estimated 5 tons of Three Man Streambed Boulders. These estimated quantities are provided for informational purposes only; the Contractor shall bear full responsibility for determining anticipated level of effort required to complete the Work and submit a lump sum bid accordingly.

"Streambed Sand" shall be measured by the cubic yard.

8-27.5 Payment

All preparatory grading outside the limits of Structure Excavation required to prepare the streambed foundation, any excavation required to extend boulder steps into the existing bank, and any incidental excavation or backfilling required to construct the channel bed foundation shall be included in the lump sum bid item for "Channel Grading".

All costs associated with furnishing and placing all materials for streambed construction including construction of boulder steps, additional streambed boulders, placement and compaction of streambed mix, and initial washing in of fine materials within streambed mix shall be included in the lump sum bid item for "Channel Construction"

Payment for "Streambed Sand" shall be by the cubic yard of sand imported, placed, and washed in as described in this Section.

8-28 Vacant

Section 8-28 is revised to read:

8-28 Temporary Fencing

8-28.1 Description

This Work shall include removal and temporary replacement of an existing livestock fence as well as removal of the temporary fence and construction of permanent fencing that matches the existing fence type and location as closely as possible.

8-26.2 Materials

Materials shall meet the requirements of the following sections:

Wire Fence and Gates

9-16.2

Materials not specifically included in Section 9-16.2 shall be approved by the Contracting Officer prior to use.

8-28.3 Construction Requirements

The Contractor shall consult with the landowner through the Contracting Officer to determine acceptable times for temporary fence construction, removal of the existing fence, and reconstruction of permanent fencing following decommissioning of the temporary detour.

Temporary fencing shall be similar in kind to that of the existing fence (3-strand barbed wire fence with pressure treated wooden posts), or an alternate fence type approved by the Contracting Officer. Construction of temporary fencing (approximately 120 feet as shown in the Plans) shall follow procedures outlined in Section 8-12.3 and applicable subsections except that clearing is limited to the extent necessary for temporary fence construction. The Contractor may also suggest alternate construction methods for review and approval, but shall not construct temporary or permanent fencing until approved by the Contracting Officer. Temporary fencing shall be inspected at least daily and maintained in good working order throughout construction; any necessary repairs or replacements shall be completed immediately by the Contractor at no additional cost to the Contracting Agency. Permanent fencing shall also be similar in kind to the existing fence (3-strand barbed wire fence with wooden posts) and shall be constructed as outlined in Section 8-12.3. As shown in the Plans, approximately 160 feet of permanent fence will be required to replace existing fence which is removed for the temporary detour.

8-28.4 Measurement

No unit of measure shall apply to the lump sum bid item "Temporary Fence". All quantities referenced in this section are for information only. The Contractor bears full responsibility for determining quantities and determining a bid amount sufficient to cover all costs regardless of differences in quantities provided herein.

8-28.5 Payment

Payment for "Temporary Fence" shall be full compensation for all labor, equipment, materials, and supervision utilized to perform the Work specified in this provision including removal and disposal of a portion of the existing fence, construction, inspection, any required maintenance, removal of temporary fencing, and construction of permanent fencing of a similar type and location as the existing fence.

Division 9 Materials

Appendices

(January 2, 2012)

The following appendices are attached and made a part of this Contract:

APPENDIX A: Federal Prevailing Wage Rates

APPENDIX B:

State Prevailing Wage Rates and Benefit Key Code

APPENDIX C:

WDFW Hydraulic Project Approval

APPENDIX D:

Geotechnical Report – Mill Creek Fish Passage Project.

APPENDIX E:

Pacific Northwest Region Fire Protection and Suppression

_ ^ ^ ^ ^

(February 5, 2020) Standard Plans

The State of Washington Standard Plans for Road, Bridge and Municipal Construction M21-01 transmitted under Publications Transmittal No. PT 16-048, effective September 3, 2019 is made a part of this contract.

The Standard Plans are revised as follows:

<u>A-50.10</u>

Sheet 2 of 2, Plan, with Single Slope Barrier, reference C-14a is revised to C-70.10

A-50.20

Sheet 2 of 2, Plan, with Anchored Barrier, reference C-14a is revised to C-70.10

<u>A-50.30</u>

Sheet 2 of 2, Plan (top), reference C-14a is revised to C-70.1

<u>B-10.60</u> DELETED

B-82.20 DELETED

<u>B-90.40</u> Valve Detail – DELETED <u>C-1</u> Delete Note 1.

Revise Note 2 to read "Remove all rail washers, also called "Snow Load Rail Washers", when encountered during raising beam guardrail work and the guardrail raising work requires removal of the rail.

Re-number all notes.

<u>C-4b</u> DELETED

<u>C-4e</u> DELETED

<u>C-8a</u> Delete "Section A-A, Type 4 Detail

<u>C-20.11</u> Delete Notes 1 & 2. Re-Number all notes. Delete "Snow Load Post Washer" and "Snow Load Rail Washer" details.

<u>C-20.19</u> DELETED

<u>C-22.14</u> DELETED

<u>C-22.16</u>

Note 3, formula, was: "Elevation G = (Elevation S – D x (0.1) + 31" is revised to read: "Elevation G = (Elevation S – D x (0.1) + 31/12"

<u>C-22.45</u>

For the SOFTSTOP (TL-2) elevation view detail, the callout "SOFTSTOP (TL-2) SYSTEM LENGTH = 38' - 4 1/2" is revised to read "SOFTSTOP (TL-2) SYSTEM LENGTH = 38' - 3 1/2".

<u>C-40.14</u> DELETED

<u>C-60.10</u>

Sheet 1, Side Elevation: The bottom set of (1) - #4 horizontal rebar (2x) located at the base of the barrier is repositioned to be aligned with the bottom of (2) - #4 stirrup bars to match the bar positioning shown on Sheet 1, Section A.

Sheet 1, Reinforcing Steel Bending Diagram, ③ - Pin Slot Bar detail: Add the following callout to the detail, "HOT DIP GALVANIZE AFTER FABRICATION (ASTM A123 OR AASHTO M 111)".

Sheet 2, ANCHORING PIN ASSEMBLY DETAIL: The first line of the description under the title was "1 1/2" DIAMETER (ASTM A36), COLD ROLL" is now changed to "1 1/2" DIAMETER (ASTM A36), HOT ROLL".

<u>C-70.10</u>

Sheet 1, Note 1 was - "1. PERMANENT INSTALLATION requirements: Embed barrier 3" (in) minimum; ..." is revised to read: "1. Installation requirements: Embed barrier 3" (in) minimum in asphalt or concrete; embed barrier 10" (in) minimum in soil; ..."

Sheet 1, existing Notes 2 and 4 are deleted. Existing Note 3 is renumbered to Note 2.

Sheet 1, add new Note 3, "3. See Sheet 2 for barrier with a 2'-10" reveal installed in asphalt or concrete. See Sheet 3 for barrier with a 3'-6" reveal installed in asphalt or concrete."

Sheet 1, Elevation: The dimension from the barrier end to the barrier lifting slot was "3' - 4" (TYP)" is now changed to "4' - 8" (TYP)", and the barrier lifting slot dimension was "5' - 0" (TYP)" is now changed to "3' - 0" (TYP)".

Sheet 2, the detail titled "3' – 6" BARRIER FOR USE WITH A 0" (IN) TO 5" (IN) MAX. GRADE SEPARATION" has the following changes:

1. The detail title is changed to "3' – 6" BARRIER FOR USE WITH A 0" (IN) TO 4" (IN) MAX. GRADE SEPARATION".

2. The callout "GRADE SEPARATION--5" MAX." is changed to "GRADE SEPARATION--4" MAX."

<u>C-75.10</u>

Note 2 is deleted. Renumber subsequent notes.

<u>C-75.20</u>

Note 2 is deleted. Renumber subsequent notes.

<u>C-75.30</u>

Note 2 is deleted. Renumber subsequent notes.

<u>C-85.11</u>

Add new Note 3 "3. The intended use of this plan is for placing concrete barrier in front of bridge piers on bridge retrofit projects only. Contact the HQ Bridge traffic barrier specialist before using this barrier placement plan for projects involving new or reconstructed bridges."

<u>C-85.14</u> DELETED

<u>C-90.10</u> DELETED

<u>D-10.10</u>

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

<u>D-10.15</u>

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

<u>D-10.30</u>

Wall Type 5 may be used in all cases.

<u>D-10.35</u>

Wall Type 6 may be used in all cases.

<u>D-10.40</u>

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

<u>D-10.45</u>

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

<u>D-15.10</u>

STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

<u>D-15.20</u>

STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

<u>D-15.30</u>

STD Plans D-15 series "Traffic Barrier Details for Reinforced Concrete Retaining Walls" are withdrawn. Special designs in accordance with the current WSDOT BDM are required in place of these STD Plans.

F-10.12

Section Title, was – "Depressed Curb Section" is revised to read: "Depressed Curb and Gutter Section"

<u>F-10.40</u>

"EXTRUDED CURB AT CUT SLOPE", Section detail - Deleted

<u>F-10.42</u>

DELETE – "Extruded Curb at Cut Slope" View

<u>G-25.10</u>

Key Note 3, second sentence, was – "For single-post installations, divide the (#2w/diamond shape symbol) post MAX. XYZ in half." Is revised to read: "For single-post installations, divide the two-post MAX. XYZ in half."

<u>G-60.10</u> DELETED <u>G-60.20</u> DELETED <u>G-60.30</u>

DELETED

<u>G-70.10</u> DELETED

<u>G-70.20</u> DELETED

<u>H-70.20</u>

Sheet 2, Spacing Detail, Mailbox Support Type 1, reference to Standard Plan I-70.10 is revised to H-70.10

<u>J-10.21</u>

Note 18, was – "When service cabinet is installed within right of way fence, see Standard Plan J-10.22 for details." Is revised to read; "When service cabinet is installed within right of way fence, or the meter base is mounted on the exterior of the cabinet, see Standard Plan J-10.22 for details."

<u>J-10.22</u>

Key Note 1, was – "Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305." Is revised to read; "Meter base per serving utility requirements~ as a minimum, the meter base shall be safety socket box with factory-installed test bypass facility that meets the requirements of EUSERC drawing 305. When the utility requires meter base to be mounted on the side or back of the service cabinet, the meter base enclosure shall be fabricated from type 304 stainless steel."

Key Note 4, "Test with (SPDT Snap Action, Positive close 15 Amp – 120/277 volt "T" rated). Is revised to read: "Test Switch (SPDT snap action, positive close 15 amp – 120/277 volt "T" rated)."

Key Note 14, was – "Hinged dead front with $\frac{1}{4}$ turn fasteners or slide latch." Is revised to read; "Hinged dead front with $\frac{1}{4}$ turn fasteners or slide latch. ~ Dead front panel bolts shall not extend into the vertical limits of the breaker array(s)."

Key Note 15, was – "Cabinet Main Bonding Jumper. Buss shall be 4 lug tinned copper. See Cabinet Main bonding Jumper detail, Standard Plan J-3b." is revised to read; "Cabinet Main Bonding Jumper Assembly ~ Buss shall be 4 lug tinned copper ~ See Standard Plan J-10.20 for Cabinet Main Bonding Jumper Assembly details."

Note 1, was – "...socket box mounting detail, see Standard Plan J-3b." is revised to read to read: "...socket box mounting detail, see Standard Plan J-10.20."

Note 6, was – "...See door hinge detail, Standard Plan J-3b." is revised to read: "...See door hinge detail, Standard Plan J-10.20."

<u>J-20.26</u>

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

<u>J-20.16</u>

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

<u>J-21.10</u>

Sheet 1, Elevation View, Round Concrete Foundation Detail, callout – "ANCHOR BOLTS ~ <u>34</u>" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY" IS REVISED TO READ: "ANCHOR BOLTS ~ <u>34</u>" (IN) x 30" (IN) FULL THREAD ~ FOUR REQ'D. PER <u>ASSEMBLY</u>"

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

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

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

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

Detail F, callout, "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam. Torque Clamping Bolts (see Note 3)" is revised to read; "Heavy Hex Clamping Bolt (TYP.) ~ 3/4" (IN) Diam. Torque Clamping Bolts (see Note 1)"

Detail F, callout, "3/4" (IN) x 2' - 6" Anchor Bolt (TYP.) ~ Four Required (See Note 4)" is revised to read; "3/4" (IN) x 2' - 6" Anchor Bolt (TYP.) ~ Three Required (See Note 2)"

<u>J-21.15</u>

Partial View, callout, was – LOCK NIPPLE ~ 1 $\frac{1}{2}$ " DIAM., is revised to read; CHASE NIPPLE ~ 1 $\frac{1}{2}$ " (IN) DIAM.

<u>J-21.16</u>

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

<u>J-22.15</u>

Ramp Meter Signal Standard, elevation, dimension 4' - 6" is revised to read; 6'-0" (2x) Detail A, callout, was – LOCK NIPPLE ~ 1 $\frac{1}{2}$ " DIAM. is revised to read; CHASE NIPPLE ~ 1 $\frac{1}{2}$ " (IN) DIAM.

<u>J-28.24</u>

Case E and Case F Section View dimension callout, "3' - 0" MIN. FOR BEAM GUARDRAIL, 4' - 0" MIN. FOR CONC. BARRIER TYPE 2" is revised to read, "5' - 0" MIN. FOR BEAM

GUARDRAIL, 8' – 0" MIN. FOR UNANCHORED TYPE F CONC. BARRIER, 4' – 0" MIN. FOR ANCHORED TYPE F CONC. BARRIER".

<u>J-40.10</u>

Sheet 2 of 2, Detail F, callout, " $12 - 13 \times 1 \frac{1}{2}$ " S.S. PENTA HEAD BOLT AND 12" S. S. FLAT WASHER" is revised to read; " $12 - 13 \times 1 \frac{1}{2}$ " S.S. PENTA HEAD BOLT AND 1/2" (IN) S. S. FLAT WASHER"

<u>J-75.20</u>

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

<u>J-81.10</u>

Power Distribution Block Diagram, lower left corner, Sheet 1 of 3; Switch Pack 2; circuit 623 (T4-5) [middle ckt] is revised to read; circuit **622 (T4-5)**.

<u>K-80.10</u>

SIGN INSTALLATION (BEHIND TRAFFIC BARRIER) detail dimension callout, "3' MIN." is revised to read, "5' MIN.".

K-80.30

DELETED

<u>K-80.35</u>

Add New Note 1 - "1. The intended use of this plan is for the temporary installation of Type 2 concrete barrier (See Standard Plan C-8) on cement concrete pavement, bridge decks, or hot mix asphalt pavement, and Type F concrete barrier on cement concrete pavement or bridge decks.

Re-number all notes.

The TYPE 1 ANCHOR detail description "TEMPORARY INSTALLATION OF PRECAST CONC. BARRIER TYPE 2 (STD. PLAN C-8) AND TEMPORARY CONC. BARRIER (F-SHAPE) (STD. PLAN K-80.30) ON CEMENT CONC. PAVEMENT OR BRIDGE DECK" is revised to read, "TEMPORARY INSTALLATION OF PRECAST CONC. BARRIER TYPE F (STD. PLAN C-60.10) OR PRECAST CONC. BARRIER TYPE 2 (STD. PLAN C-8) ON CEMENT CONC. PAVEMENT OR BRIDGE DECK."

The TYPE 3 ANCHOR detail description "TEMPORARY INSTALLATION OF PRECAST CONC. BARRIER TYPE 2 (STD. PLAN C-8) AND TEMPORARY CONC. BARRIER (F-SHAPE) (STD. PLAN K-80.30) ON HOT MIX ASPHALT PAVEMENT" is revised to read, "TEMPORARY INSTALLATION OF PRECAST CONC. BARRIER TYPE 2 (STD. PLAN C-8) ON HOT MIX ASPHALT PAVEMENT."

<u>K-80.37</u>

Revise Note 1 to read:"1. The intended use of this plan is for the temporary installation of Type F NARROW BASE concrete barrier (See Standard Plan C-60.10) or Type 4 (Type 2 Narrow Base – See Std. Plan C-8a) Concrete Barrier on cement concrete pavement, bridge decks."

Replace all callouts stating "NARROW BASE, ALTERNATIVE TEMPORARY CONCRETE BARRIER SEGMENT" with "Type F NARROW BASE or Type 4 (Type 2 Narrow Base) concrete barrier segment."

<u>M-3.50</u>

Double-Left Turn Channelization (with Right Turn Pocket) view, dimension, upper left corner, "taper" dimension; callout – was "40' if Posted Speed is 40 MPH or less 100' if Posted Speed is more than 40 MPH" is revised to read; "See Contract"

<u>M-5.10</u>

Right-Turn Channelization view, dimension, upper right corner, "taper" dimension; callout – was "50' MIN." is revised to read; "See Contract"

<u>M-12.10</u>

Add Note 5. "Check with Region Traffic Office for RPM and Guidepost placements."

M-24.50 DELETED

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

A-10.10-008/7/07 A-10.20-0010/5/07 A-10.30-0010/5/07 A-20.10-008/31/07 A-30.10-0011/8/07 A-30.30-016/16/11 A-30.35-0010/12/07	A-40.00-008/11/09 A-40.10-047/31/19 A-40.15-008/11/09 A-40.20-041/18/17 A-40.50-0212/23/14 A-50.10-0011/17/08 A-50.20-019/22/09	A-50.30-0011/17/08 A-50.40-0011/17/08 A-60.10-0312/23/14 A-60.20-0312/23/14 A-60.30-016/28/18 A-60.40-008/31/07
B-5.20-021/26/17 B-5.40-021/26/17 B-5.60-021/26/17 B-10.20-023/2/18 B-10.40-011/26/17 B-10.70-001/26/17 B-15.20-012/7/12 B-15.40-012/7/12 B-15.60-021/26/17 B-20.20-023/16/12 B-20.40-042/27/18 B-25.60-022/27/18 B-25.60-022/27/18 B-30.10-032/27/18 B-30.20-042/27/18	B-30.50-032/27/18 B-30.70-042/27/18 B-30.80-012/27/18 B-30.90-021/26/17 B-35.20-006/8/06 B-35.40-006/8/06 B-40.20-006/1/06 B-40.40-021/26/17 B-45.20-017/21/17 B-50.20-006/1/06 B-55.20-022/27/18 B-60.20-012/27/18 B-65.20-014/26/12 B-65.40-006/1/06 B-70.20-006/1/06	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

B-30.40-03......2/27/18

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} C-20.15-026/11/1\\ C-20.18-038/12/1\\ C-20.19-038/12/1\\ C-20.40-078/12/1\\ C-20.40-078/12/1\\ C-20.42-057/14/1\\ C-20.45.028/12/1\\ C-20.45.028/12/19\\ C-22.16-067/21/17\\ C-22.40-078/12/19\\ C-22.45-048/12/19\\ C-23.60-047/21/17\\ C.24.10-028/12/19\\ C-25.20-067/14/15\\ C-25.22-057/14/15\\ C-25.22-057/14/15\\ C-25.26-048/12/19\\ C-25.30-006/28/18\\ C-25.80-058/12/19\\ C-40.16-027/2/12\\ \end{array}$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
$\begin{array}{l} D-2.04-00. \\ 11/10/05\\ D-2.06-01. \\ 1/6/09\\ D-2.08-00. \\ 11/10/05\\ D-2.14-00. \\ 11/10/05\\ D-2.16-00. \\ 11/10/05\\ D-2.18-00. \\ 11/10/05\\ D-2.20-00. \\ 11/10/05\\ D-2.32-00. \\ 11/10/05\\ D-2.34-01. \\ 1/6/09\\ D-2.36-03. \\ 6/11/14\\ D-2.42-00. \\ 11/10/05\\ D-2.60-00. \\ 11/10/05\\ D-2.62-00. \\ 11/10/05\\ D-2.46-01. \\ 6/11/14\\ \end{array}$	$\begin{array}{l} D-2.48-00. \\ 11/10/05\\ D-2.64-01. \\ 1/6/09\\ D-2.66-00. \\ 11/10/05\\ D-2.68-00. \\ 11/10/05\\ D-2.80-00. \\ 11/10/05\\ D-2.82-00. \\ 11/10/05\\ D-2.84-00. \\ 11/10/05\\ D-2.86-00. \\ 11/10/05\\ D-2.88-00. \\ 11/10/05\\ D-2.92-00. \\ 11/10/05\\ D-3.09-00. \\ 5/17/12\\ D-3.10-01. \\ 5/29/13\\ D-3.11-03. \\ 6/11/14\\ D-3.15-02. \\ 6/10/13\\ D-3.16-02. \\ 5/29/13\\ \end{array}$	$\begin{array}{l} D-3.17-025/9/16\\ D-412/11/98\\ D-66/19/98\\ D-10.10-0112/2/08\\ D-10.15-0112/2/08\\ D-10.20-018/7/19\\ D-10.25-018/7/19\\ D-10.30-007/8/08\\ D-10.35-007/8/08\\ D-10.45-0112/2/08\\ D-10.45-0112/2/08\\ \end{array}$
E-25/29/98 F-10.12-036/11/14	E-4	F-40.15-036/29/16
F-10.16-0012/20/06 F-10.18-017/11/17 F-10.40-036/29/16 F-10.42-001/23/07	F-10.64-034/22/14 F-30.10-036/11/14 F-40.12-036/29/16 F-40.14-036/29/16	F-40.16-036/29/16 F-45.10-027/15/16 F-80.10-047/15/16
G-10.10-009/20/07 G-20.10-026/23/15 G-22.10-046/28/18 G-24.10-0011/8/07	G-25.10-046/10/13 G-26.10-007/31/19 G-30.10-046/23/15 G-50.10-036/28/18	G-95.10-026/28/18 G-95.20-036/28/18 G-95.30-036/28/18

G-24.20-012/7/12 G-24.30-026/28/18 G-24.40-076/28/18 G-24.50-058/7/19 G-24.60-056/28/18	G-90.10-037/11/17 G-90.11-004/28/16 G-90.20-057/11/17 G-90.30-047/11/17 G-90.40-024/28/16
H-10.10-007/3/08 H-10.15-007/3/08 H-30.10-0010/12/07	H-32.10-009/20/07H-70.10-012/7/12H-60.10-017/3/08H-70.20-012/16/12H-60.20-017/3/08H-70.30-022/7/12
I-10.10-018/11/09 I-30.10-023/22/13 I-30.15-023/22/13 I-30.16-017/11/19 I-30.17-016/12/19	I-30.20-009/20/07I-40.20-009/20/07I-30.30-026/12/19I-50.20-016/10/13I-30.40-026/12/19I-60.10-016/10/13I-30.60-026/12/19I-60.20-016/10/13I-40.10-009/20/07I-80.10-027/15/16
$\begin{array}{c} J-10. &$	$\begin{array}{llllllllllllllllllllllllllllllllllll$

J-28.26-0112/02/08 J-28.30-036/11/14	• • • • • • • • • • • • • • • • • • • •	-
K-70.20-016/1/16 K-80.10-016/1/16 K-80.20-0012/20/06 K-80.35-002/21/07 K-80.37-002/21/07		
L-10.10-026/21/12	L-40.10-026/21/12	L-70.10-015/21/08
L-20.10-037/14/15	L-40.15-016/16/11	L-70.20-015/21/08
L-30.10-026/11/14	L-40.20-026/21/12	
M-1.20-036/24/14	M-11.10-038/7/19	M-40.20-0010/12/07
M-1.40-026/3/11	M-12.10-016/28/18	M-40.30-017/11/17
M-1.60-026/3/11	M-15.10-012/6/07	M-40.40-009/20/07
M-1.80-036/3/11	M-17.10-027/3/08	M-40.50-009/20/07
M-2.20-037/10/15	M-20.10-026/3/11	M-40.60-009/20/07
M-2.21-007/10/15	M-20.20-024/20/15	M-60.10-016/3/11
M-3.10-036/3/11	M-20.30-042/29/16	M-60.20-026/27/11
M-3.20-026/3/11	M-20.40-036/24/14	M-65.10-025/11/11
M-3.30-036/3/11	M-20.50-026/3/11	M-80.10-016/3/11
M-3.40-036/3/11	M-24.20-024/20/15	M-80.20-006/10/08
M-3.50-026/3/11	M-24.40-024/20/15	M-80.30-006/10/08
M-5.10-026/3/11	M-24.60-046/24/14	
M-7.50-011/30/07	M-24.65-007/11/17	
M-9.50-026/24/14	M-24.66-007/11/17	
M-9.60-002/10/09	M-40.10-036/24/14	

PAGE LEFT BLANK INTENTIONALLY

APPENDICES

PAGE LEFT BLANK INTENTIONALLY

APPENDIX A: FEDERAL WAGE RATES

"General Decision Number: WA20200001 03/13/2020

Superseded General Decision Number: WA20190001

State: Washington

Construction Type: Highway

Counties: Washington Statewide.

HIGHWAY (Excludes D.O.E. Hanford Site in Benton and Franklin Counties)

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification	Number	Publication	Date
0		01/03/2020	
1		02/14/2020	
2		02/28/2020	
3		03/06/2020	
4		03/13/2020	

CARP0003-006 06/01/2018

SOUTHWEST WASHINGTON: CLARK, COWLITZ, KLICKITAT, LEWIS(Piledriver only), PACIFIC (South of a straight line made by extending the north boundary line of Wahkiakum County west to Willapa Bay to the Pacific Ocean), SKAMANIA, and WAHKIAKUM Counties.

]	Rates	Fringes
Carpenters:		
CARPENTERS\$	37.64	16.83
DIVERS TENDERS\$	43.73	16.83
DIVERS\$	87.73	16.83
DRYWALL\$	37.64	16.83
MILLWRIGHTS\$	38.17	16.83
PILEDRIVERS\$	38.71	16.83

DEPTH PAY: 50 TO 100 FEET \$1.00 PER FOOT OVER 50 FEET 101 TO 150 FEET \$1.50 PER FOOT OVER 101 FEET 151 TO 200 FEET \$2.00 PER FOOT OVER 151 FEET

```
Zone Differential (Add up Zone 1 rates):
Zone 2 - $0.85
Zone 3 - 1.25
Zone 4 - 1.70
Zone 5 - 2.00
Zone 6 - 3.00
```

BASEPOINTS: ASTORIA, LONGVIEW, PORTLAND, THE DALLES, AND VANCOUVER, (NOTE: All dispatches for Washington State Counties: Cowlitz, Wahkiakum and Pacific shall be from Longview Local #1707 and mileage shall be computed from that point.)

ZONE 1: Projects located within 30 miles of the respective city hall of the above mentioned cities ZONE 2: Projects located more than 30 miles and less than 40 miles of the respective city of the above mentioned cities ZONE 3: Projects located more than 40 miles and less than 50 miles of the respective city of the above mentioned cities ZONE 4: Projects located more than 50 miles and less than 60 miles of the respective city of the above mentioned cities. ZONE 5: Projects located more than 60 miles and less than 70 miles of the respective city of the above mentioned cities. ZONE 6: Projects located more than 70 miles of the respected city of the above mentioned cities

CARP0030-004 06/01/2019

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,

MASON, PACIFIC (North of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM Counties

Ι	Rates	Fringes
CARPENTER		
BRIDGE CARPENTERS\$	45.92	16.52
CARPENTERS ON CREOSOTE		
MATERIAL\$		16.52
CARPENTERS\$	45.92	16.52
DIVERS TENDER\$	50.79	16.52
DIVERS\$	99.68	16.52
MILLWRIGHT AND MACHINE		
ERECTORS\$	47.42	16.52
PILEDRIVER, DRIVING,		
PULLING, CUTTING, PLACING		
COLLARS, SETTING, WELDING		
OR CRESOTE TREATED		
MATERIAL, ALL PILING\$	46.17	16.52

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIVERS

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee
Ellensburg	Everett	Port Angeles
Centralia	Mount Vernon	Sunnyside
Chelan	Pt. Townsend	

Zone Pay: 0 -25 radius miles Free 26-35 radius miles \$1.00/hour 36-45 radius miles \$1.15/hour 46-55 radius miles \$1.35/hour Over 55 radius miles \$1.55/hour

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT AND PILEDRIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center

Zone Pay:

0 -25 radius miles Free 26-45 radius miles \$.70/hour Over 45 radius miles \$1.50/hour

CARP0059-002 06/01/2019

ADAMS, ASOTIN, BENTON, CHELAN (East of 120th meridian), COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT (East of 120th meridian), KITTITAS (East of 120th meridian), LINCOLN, OKANOGAN (East of 120th meridian), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN, and YAKIMA (East of 120th meridian) Counties

Rates

Fringes

CARPENTER

GROUP	1\$	35.47	16.88
GROUP	2\$	47.42	18.96
GROUP	3\$	36.66	16.88
GROUP	4\$	36.66	16.88
GROUP	5\$	83.96	16.88
GROUP	6\$	40.23	16.88
GROUP	7\$	41.23	16.88
GROUP	8\$	37.66	16.88
GROUP	9\$	44.23	16.88

CARPENTER & DIVER CLASSIFICATIONS:

GROUP 1: Carpenter

GROUP 2: Millwright, Machine Erector

GROUP 3: Piledriver - includes driving, pulling, cutting, placing collars, setting, welding, or creosote treated material, on all piling

GROUP 4: Bridge, Dock, and Wharf carpenters

GROUP 5: Diver Wet

GROUP 6: Diver Tender, Manifold Operator, ROV Operator

GROUP 7: Diver Standby

GROUP 8: Assistant Diver Tender, ROV Tender/Technician

GROUP 9: Manifold Operator-Mixed Gas

ZONE PAY: ZONE 1 0-45 MILES

FREE

ZONE	2	45-100	\$4.00/PER HOUR
ZONE	3	OVER 100 MILES	\$6.00/PER HOUR

DISPATCH POINTS:

CARPENTERS/MILLWRIGHTS: PASCO (515 N Neel Street) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

CARPENTERS/PILEDRIVER: SPOKANE (127 E. AUGUSTA AVE.) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

CARPENTERS: WENATCHEE (27 N. CHELAN) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

CARPENTERS: COEUR D' ALENE (1839 N. GOVERNMENT WAY) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

CARPENTERS: MOSCOW (306 N. JACKSON) or Main Post Office of established residence of employee (Whichever is closest to the worksite).

DEPTH PAY FOR DIVERS BELOW WATER SURFACE: 50-100 feet \$2.00 per foot 101-150 feet \$3.00 per foot 151-220 feet \$4.00 per foot 221 feet and deeper \$5.00 per foot

PREMIUM PAY FOR DIVING IN ENCLOSURES WITH NO VERTICAL ASCENT: 0-25 feet Free 26-300 feet \$1.00 per Foot

SATURATION DIVING:

The standby rate applies until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. the diver rate shall be paid for all saturation hours.

WORK IN COMBINATION OF CLASSIFICATIONS: Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

HAZMAT PROJECTS:

Anyone working on a HAZMAT job (task), where HAZMAT certification is required, shall be compensated at a premium, in addition to the classification working in as

follows:

LEVEL D + \$.25 per hour - This is the lowest level of protection. No respirator is used and skin protection is minimal.

LEVEL C + \$.50 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B + \$.75 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical ""splash suit"".

LEVEL A +\$1.00 per hour - This level utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line.

CARP0770-003 06/01/2019

WEST OF 120TH MERIDIAN FOR THE FOLLOWING COUNTIES: CHELAN, DOUGLAS, GRANT, KITTITAS, OKANOGAN, and YAKIMA

Ι	Rates	Fringes
CARPENTER CARPENTERS ON CREOSOTE MATERIAL\$ CARPENTERS\$ DIVERS TENDER\$ DIVERS\$	45.92 50.79	16.52 16.52 16.52 16.52
MILLWRIGHT AND MACHINE ERECTORS\$ PILEDRIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE TREATED	47.42	16.52
MATERIAL, ALL PILING\$	46.17	16.52

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIVERS

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee
Ellensburg	Everett	Port Angeles

Centralia Mount Vernon Sunnyside Chelan Pt. Townsend Zone Pay: 0 -25 radius miles Free 26-35 radius miles \$1.00/hour 36-45 radius miles \$1.15/hour 46-55 radius miles \$1.35/hour Over 55 radius miles \$1.55/hour (HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT AND PILEDRIVER ONLY) Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center Zone Pav: 0 -25 radius miles Free 26-45 radius miles \$.70/hour Over 45 radius miles \$1.50/hour _____ * ELEC0046-001 02/03/2020 CALLAM, JEFFERSON, KING AND KITSAP COUNTIES Rates Fringes CABLE SPLICER.....\$ 59.91 3%+21.46 ELECTRICIAN.....\$ 57.51 3%+22.06 _____ * ELEC0048-003 01/01/2020 CLARK, KLICKITAT AND SKAMANIA COUNTIES Rates Fringes CABLE SPLICER.....\$ 44.22 21.50 24.41 ELECTRICIAN.....\$ 47.85 HOURLY ZONE PAY: Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities: Portland, The Dalles, Hood River, Tillamook, Seaside and Astoria Zone Pay: Zone 1: 31-50 miles \$1.50/hour Zone 2: 51-70 miles \$3.50/hour

Mill Creek Fish Passage Project Page 169 Zone 3: 71-90 miles \$5.50/hour Zone 4: Beyond 90 miles \$9.00/hour *These are not miles driven. Zones are based on Delorrne Street Atlas USA 2006 plus.

ELEC0048-029 01/01/2020

COWLITZ AND WAHKIAKUM COUNTY

	Rates	Fringes	
CABLE SPLICER		21.50 24.41	

ELEC0073-001 01/01/2020

ADAMS, FERRY, LINCOLN, PEND OREILLE, SPOKANE, STEVENS, WHITMAN COUNTIES

	Rates	Fringes	
CABLE SPLICER	\$ 34 10	16.68	
ELECTRICIAN		19.23	

ELEC0076-002 08/31/2018

GRAYS HARBOR, LEWIS, MASON, PACIFIC, PIERCE, AND THURSTON COUNTIES

	Rates	Fringes
CABLE SPLICER		23.23
ELECTRICIAN	\$ 43.69	23.10

ELEC0112-005 06/01/2019

ASOTIN, BENTON, COLUMBIA, FRANKLIN, GARFIELD, KITTITAS, WALLA WALLA, YAKIMA COUNTIES

	Rates	Fringes	
CABLE SPLICER		21.13	
ELECTRICIAN	\$ 46.05	21.06	
ELEC0191-003 06/01/2019			

ISLAND, SAN JUAN, SNOHOMISH, SKAGIT AND WHATCOM COUNTIES

	Rates	Fringes
CABLE SPLICER	\$ 44.23	17.73
ELECTRICIAN	\$ 46.45	23.66

ELEC0191-004 06/01/2018

CHELAN, DOUGLAS, GRANT AND OKANOGAN COUNTIES

	Rates	Fringes	
CABLE SPLICER		17.63	
ELECTRICIAN	> 42.45 	21.34	_
* ENGI0302-003 06/01/2019			

CHELAN (WEST OF THE 120TH MERIDIAN), CLALLAM, DOUGLAS (WEST OF THE 120TH MERIDIAN), GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, KITTITAS, MASON, OKANOGAN (WEST OF THE 120TH MERIDIAN), SAN JUNA, SKAGIT, SNOHOMISH, WHATCOM AND YAKIMA (WEST OF THE 120TH MERIDIAN) COUNTIES

```
Zone 1 (0-25 radius miles):
```

Rates Fringes

POWER	EQUIPMENT	OPERATOR
- 011-11		or minition.

Group	1A\$	46.78	21.22
Group	1AA\$	47.46	21.22
Group	1AAA\$	48.14	21.22
Group	1\$	46.09	21.22
Group	2\$	45.50	21.22
Group	3\$	44.98	21.22
Group	4\$	42.10	21.22

Zone Differential (Add to Zone 1 rates): Zone 2 (26-45 radius miles) - \$1.00 Zone 3 (Over 45 radius miles) - \$1.30

BASEPOINTS: Aberdeen, Bellingham, Bremerton, Everett, Kent, Mount Vernon, Port Angeles, Port Townsend, Seattle, Shelton, Wenatchee, Yakima

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-over 300 tons, or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes 200 to 300 tons, or 250 ft of boom (including jib with attachments); Tower crane over 175 ft in height, base to boom

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft in height base to boom; Loaders-overhead, 8 yards and over; Shovels, excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes 45 tons thru 99 tons, under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Derricks on building work; Excavator, shovel, backhoes over 3 yards and under 6 yards; Hard tail end dump articulating off-road equipment 45 yards and over; Loader- overhead 6 yards to, but not including 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9, HD 41, D-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapers-self propelled 45 yards and over; Slipform pavers; Transporters, all truck or track type

GROUP 2 - Barrier machine (zipper); Batch Plant Operaor-Concrete; Bump Cutter; Cranes, 20 tons thru 44 tons with attachments; Crane-overhead, bridge type-20 tons through 44 tons; Chipper; Concrete Pump-truck mount with boom attachment; Crusher; Deck Engineer/Deck Winches (power); Drilling machine; Excavator, shovel, backhoe-3yards and under; Finishing Machine, Bidwell, Gamaco and similar equipment; Guardrail punch; Horizontal/directional drill operator; Loaders-overhead under 6 yards; Loaders-plant feed; Locomotives-all; Mechanics-all; Mixers-asphalt plant; Motor patrol graders-finishing; Piledriver (other than crane mount); Roto-mill,roto-grinder; Screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self propelled, hard tail end dump, articulating off-road equipment-under 45 yards; Subgrade trimmer; Tractors, backhoes-over 75 hp; Transfer material service machine-shuttle buggy, blaw knox-roadtec; Truck crane oiler/driver-100 tons and over; Truck Mount portable conveyor; Yo Yo Pay dozer

GROUP 3 - Conveyors; Cranes-thru 19 tons with attachments; A-frame crane over 10 tons; Drill oilers-auger type, truck or crane mount; Dozers-D-9 and under; Forklift-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/boom trucks over 10 tons; Loader-elevating type, belt; Motor patrol grader-nonfinishing; Plant oiler- asphalt, crusher; Pumps-concrete; Roller, plant mix or multi-lift materials; Saws-concrete; Scrpers-concrete and carry-all; Service engineer-equipment; Trenching machines; Truck Crane Oiler/Driver under 100 tons; Tractors, backhoe 75 hp and under

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete finish mahine-laser screed; Cranes-A frame-10 tons and under; Elevator and Manlift-permanent or shaft type; Gradechecker, Stakehop; Forklifts under 3000 lbs. with attachments; Hydralifts/boom trucks, 10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Posthole digger, mechanical; Power plant; Pumps, water; Rigger and Bellman; Roller-other than plant mix; Wheel Tractors, farmall type; Shotcrete/gunite equipment operator

HANDLING OF HAZARDOUS WASTE MATERIALS:

Personnel in all craft classifications subject to working inside a federally designated hazardous perimeter shall be elgible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing

H-2 Class ""C"" Suit - Base wage rate plus \$.25 per hour.

H-3 Class ""B"" Suit - Base wage rate plus \$.50 per hour.

H-4 Class ""A"" Suit - Base wage rate plus \$.75 per hour.

ENGI0370-002 07/01/2019

ADAMS, ASOTIN, BENTON, CHELAN (EAST OF THE 120TH MERIDIAN), COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN (EAST OF THE 120TH MERIDIAN), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA (EAST OF THE 120TH MERIDIAN) COUNTIES

ZONE 1:

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1	\$ 28.46	17.25
GROUP 2	\$ 28.78	17.25
GROUP 3	\$ 29.39	17.25
GROUP 4	\$ 29.55	17.25

5\$	29.71	17.25
6\$	29.99	17.25
7\$	30.26	17.25
8\$	31.36	17.25
	6\$ 7\$	6\$ 29.99 7\$ 30.26

ZONE DIFFERENTIAL (Add to Zone 1 rate): Zone 2 - \$2.00

Zone 1: Within 45 mile radius of Spokane, Pasco, Washington; Lewiston, Idaho

Zone 2: Outside 45 mile radius of Spokane, Pasco, Washington; Lewiston, Idaho

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Bit Grinders; Bolt Threading Machine; Compressors (under 2000 CFM, gas, diesel, or electric power); Deck Hand; Fireman & Heater Tender; Hydro-seeder, Mulcher, Nozzleman; Oiler Driver, & Cable Tender, Mucking Machine; Pumpman; Rollers, all types on subgrade, including seal and chip coatings (farm type, Case, John Deere & similar, or Compacting Vibrator), except when pulled by Dozer with operable blade; Welding Machine; Crane Oiler-Driver (CLD required) & Cable Tender, Mucking Machine

GROUP 2: A-frame Truck (single drum); Assistant Refrigeration Plant (under 1000 ton); Assistant Plant Operator, Fireman or Pugmixer (asphalt); Bagley or Stationary Scraper; Belt Finishing Machine; Blower Operator (cement); Cement Hog; Compressor (2000 CFM or over, 2 or more, gas diesel or electric power); Concrete Saw (multiple cut); Distributor Leverman; Ditch Witch or similar; Elevator Hoisting Materials; Dope Pots (power agitated); Fork Lift or Lumber Stacker, hydra-lift & similar; Gin Trucks (pipeline); Hoist, single drum; Loaders (bucket elevators and conveyors); Longitudinal Float; Mixer (portable-concrete); Pavement Breaker, Hydra-Hammer & similar; Power Broom; Railroad Ballast Regulation Operator (self-propelled); Railroad Power Tamper Operator (self-propelled); Railroad Tamper Jack Operator (self-propelled; Spray Curing Machine (concrete); Spreader Box (self-propelled); Straddle Buggy (Ross & similar on construction job only); Tractor (Farm type R/T with attachment, except Backhoe); Tugger Operator

GROUP 3: A-frame Truck (2 or more drums); Assistant Refrigeration Plant & Chiller Operator (over 1000 ton); Backfillers (Cleveland & similar); Batch Plant & Wet Mix Operator, single unit (concrete); Belt-Crete Conveyors with power pack or similar; Belt Loader (Kocal or similar); Bending Machine; Bob Cat (Skid Steer); Boring Machine (earth); Boring Machine (rock under 8 inch bit) (Quarry Master, Joy or similar); Bump Cutter (Wayne, Saginau or

Mill Creek Fish Passage Project Page 174

similar); Canal Lining Machine (concrete); Chipper (without crane); Cleaning & Doping Machine (pipeline); Deck Engineer; Elevating Belt-type Loader (Euclid, Barber Green & similar); Elevating Grader-type Loader (Dumor, Adams or similar); Generator Plant Engineers (diesel or electric); Gunnite Combination Mixer & Compressor; Locomotive Engineer; Mixermobile; Mucking Machine; Posthole Auger or Punch; Pump (grout or jet); Soil Stabilizer (P & H or similar); Spreader Machine; Dozer/Tractor (up to D-6 or equivalent) and Traxcavator; Traverse Finish Machine; Turnhead Operator

GROUP 4: Concrete Pumps (squeeze-crete, flow-crete, pumpcrete, Whitman & similar); Curb Extruder (asphalt or concrete); Drills (churn, core, calyx or diamond); Equipment Serviceman; Greaser & Oiler; Hoist (2 or more drums or Tower Hoist); Loaders (overhead & front-end, under 4 yds. R/T); Refrigeration Plant Engineer (under 1000 ton); Rubber-tired Skidders (R/T with or without attachments); Surface Heater & Plant Machine; Trenching Machines (under 7 ft. depth capacity); Turnhead (with re-screening); Vacuum Drill (reverse circulation drill under 8 inch bit)

GROUP 5: Backhoe (under 45,000 gw); Backhoe & Hoe Ram (under 3/4 yd.); Carrydeck & Boom Truck (under 25 tons); Cranes (25 tons & under), all attachments including clamshell, dragline; Derricks & Stifflegs (under 65 tons); Drilling Equipment(8 inch bit & over) (Robbins, reverse circulation & similar); Hoe Ram; Piledriving Engineers; Paving (dual drum); Railroad Track Liner Operaotr (self-propelled); Refrigeration Plant Engineer (1000 tons & over); Signalman (Whirleys, Highline Hammerheads or similar); Grade Checker

GROUP 6: Asphalt Plant Operator; Automatic Subgrader (Ditches & Trimmers) (Autograde, ABC, R.A. Hansen & similar on grade wire); Backhoe (45,000 gw and over to 110,000 gw); Backhoes & Hoe Ram (3/4 yd. to 3 yd.); Batch Plant (over 4 units); Batch & Wet Mix Operator (multiple units, 2 & incl. 4); Blade Operator (motor patrol & attachments); Cable Controller (dispatcher); Compactor (self-propelled with blade); Concrete Pump Boom Truck; Concrete Slip Form Paver; Cranes (over 25 tons, to and including 45 tons), all attachments including clamshell, dragline; Crusher, Grizzle & Screening Plant Operator; Dozer, 834 R/T & similar; Drill Doctor; Loader Operator (front-end & overhead, 4 yds. incl. 8 yds.); Multiple Dozer Units with single blade; Paving Machine (asphalt and concrete); Quad-Track or similar equipment; Rollerman (finishing asphalt pavement); Roto Mill (pavement grinder); Scrapers, all, rubber-tired; Screed Operator; Shovel(under 3 yds.); Trenching Machines (7 ft. depth & over); Tug Boat Operator Vactor guzzler, super sucker; Lime Batch Tank Operator (REcycle Train);

Lime Brain Operator (Recycle Train); Mobile Crusher Operator (Recycle Train)

GROUP 7: Backhoe (over 110,000 gw); Backhoes & Hoe Ram (3 yds & over); Blade (finish & bluetop) Automatic, CMI, ABC, Finish Athey & Huber & similar when used as automatic; Cableway Operators; Concrete Cleaning/Decontamination machine operator; Cranes (over 45 tons to but not including 85 tons), all attachments including clamshell and dragine; Derricks & Stiffleys (65 tons & over); Elevating Belt (Holland type); Heavy equipment robotics operator; Loader (360 degrees revolving Koehring Scooper or similar); Loaders (overhead & front-end, over 8 yds. to 10 yds.); Rubber-tired Scrapers (multiple engine with three or more scrapers); Shovels (3 yds. & over); Whirleys & Hammerheads, ALL; H.D. Mechanic; H.D. Welder; Hydraulic Platform Trailers (Goldhofer, Shaurerly and Similar); Ultra High Pressure Wateriet Cutting Tool System Operator (30,000 psi); Vacuum Blasting Machine Operator

GROUP 8: Cranes (85 tons and over, and all climbing, overhead, rail and tower), all attachments including clamshell, dragline; Loaders (overhead and front-end, 10 yards and over); Helicopter Pilot

BOOM PAY: (All Cranes, Including Tower) 180 ft to 250 ft \$.50 over scale Over 250 ft \$.80 over scale

NOTE:

In computing the length of the boom on Tower Cranes, they shall be measured from the base of the Tower to the point of the boom.

HAZMAT:

Anyone working on HAZMAT jobs, working with supplied air shall receive \$1.00 an hour above classification.

ENGI0612-001 09/28/2018

PIERCE County

ON PROJECTS DESCRIBED IN FOOTNOTE A BELOW, THE RATE FOR EACH GROUP SHALL BE 90% OF THE BASE RATE PLUS FULL FRINGE BENEFITS. ON ALL OTHER WORK, THE FOLLOWING RATES APPLY.

Zone 1 (0-25 radius miles):

Rates Fringes

POWER EQUIPMENT OPERATOR

GROUP	1A\$	44.44	19.97
GROUP	1AA\$	45.09	19.97
GROUP	1AAA\$	45.73	19.97
GROUP	1\$	43.79	19.97
GROUP	2\$	43.23	19.97
GROUP	3\$	42.74	19.97
GROUP	4\$	40.01	19.97

Zone Differential (Add to Zone 1 rates): Zone 2 (26-45 radius miles) = \$1.00 Zone 3 (Over 45 radius miles) - \$1.30

BASEPOINTS: CENTRALIA, OLYMPIA, TACOMA

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1 AAA - Cranes-over 300 tons or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes- 200 tonsto 300 tons, or 250 ft of boom (including jib with attachments; Tower crane over 175 ft in height, bas to boom

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft in height base to boom; Loaders-overhead, 8 yards and over; Shovels, excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes 45 tons thru 99 tons under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Derricks on building work; Excavator, shovel, backhoes over 3 yards and under 6 yards; Hard tail end dump articulating off-road equipment 45 yards and over; Loader- overhead, 6 yards to, but not including, 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9 HD 41, D-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapersself-propelled 45 yards and over; Slipform pavers; Transporters, all track or truck type

GROUP 2 - Barrier machine (zipper); Batch Plant Operatorconcrete; Bump Cutter; Cranes, 20 tons thru 44 tons with attachments; Crane-Overhead, bridge type, 20 tons through 44 tons; Chipper; Concrete pump-truck mount with boom attachment; Crusher; Deck engineer/deck winches (power); Drilling machine; Excavator, shovel, backhoe-3 yards and under; Finishing machine, Bidwell, Gamaco and similar equipment; Guardrail punch; Loaders, overhead under 6 yards; Loaders-plant feed; Locomotives-all; Mechanics- all; Mixers, asphalt plant; Motor patrol graders, finishing; Piledriver (other than crane mount); Roto-mill, rotogrinder; Screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self- propelled, hard tail end dump, articulating off-road equipment- under 45 yards; Subgrader trimmer; Tractors, backhoe over 75 hp; Transfer material service machine-shuttle buggy, Blaw Knox- Roadtec; Truck Crane oiler/driver-100 tons and over; Truck Mount Portable Conveyor; Yo Yo pay

GROUP 3 - Conveyors; Cranes through 19 tons with attachments; Crane-A-frame over 10 tons; Drill oilers-auger type, truck or crane mount; Dozer-D-9 and under; Forklift-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside Hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/boom trucks over 10 tons; Loaders-elevating type, belt; Motor patrol grader-nonfinishing; Plant oiler- asphalt, crusher; Pump-Concrete; Roller, plant mix or multi-lfit materials; Saws-concrete; Scrapers, concrete and carry all; Service engineers-equipment; Trenching machines; Truck crane oiler/driver under 100 tons; Tractors, backhoe under 75 hp

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete Finish Machine-laser screed; Cranes A-frame 10 tons and under; Elevator and manlift (permanent and shaft type); Forklifts-under 3000 lbs. with attachments; Gradechecker, stakehop; Hydralifts/boom trucks, 10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Posthole digger-mechanical; Power plant; Pumps-water; Rigger and Bellman; Roller-other than plant mix; Wheel Tractors, farmall type; Shotcrete/gunite equipment operator

FOOTNOTE A- Reduced rates may be paid on the following: 1. Projects involving work on structures such as buildings and bridges whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.

2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.

3. Marine projects (docks, wharfs, etc.) less than \$150,000.

HANDLING OF HAZARDOUS WASTE MATERIALS: Personnel in all craft classifications subject to working inside a federally designated hazardous perimeter shall be elgible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing, Class ""D"" Suit - Base wage rate plus \$.50 per hour.
H-2 Class ""C"" Suit - Base wage rate plus \$1.00 per hour.
H-3 Class ""B"" Suit - Base wage rate plus \$1.50 per hour.
H-4 Class ""A"" Suit - Base wage rate plus \$2.00 per hour.

```
-----
```

ENGI0612-012 09/28/2018

LEWIS, PACIFIC (portion lying north of a parallel line extending west from the northern boundary of Wahkaikum County to the sea) AND THURSTON COUNTIES

ON PROJECTS DESCRIBED IN FOOTNOTE A BELOW, THE RATE FOR EACH GROUP SHALL BE 90% OF THE BASE RATE PLUS FULL FRINGE BENEFITS. ON ALL OTHER WORK, THE FOLLOWING RATES APPLY.

Rates

Zone 1 (0-25 radius miles):

Fringes

POWER EQUIPMENT OPERATOR

GROUP	1A\$	44.44	19.97
GROUP	1AA\$	45.09	19.97
GROUP	1AAA\$	45.73	19.97
GROUP	1\$	43.79	19.97
GROUP	2\$	43.23	19.97
GROUP	3\$	42.74	19.97
GROUP	4\$	40.01	19.97

Zone Differential (Add to Zone 1 rates): Zone 2 (26-45 radius miles) = \$1.00 Zone 3 (Over 45 radius miles) - \$1.30

BASEPOINTS: CENTRALIA, OLYMPIA, TACOMA

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1 AAA - Cranes-over 300 tons or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes- 200 tonsto 300 tons, or 250 ft of boom (including jib with attachments; Tower crane over 175 ft in height, bas to boom

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom (including jib with attachments); Crane-overhead, bridge

type, 100 tons and over; Tower crane up to 175 ft in height base to boom; Loaders-overhead, 8 yards and over; Shovels, excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes 45 tons thru 99 tons under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Derricks on building work; Excavator, shovel, backhoes over 3 yards and under 6 yards; Hard tail end dump articulating off-road equipment 45 yards and over; Loader- overhead, 6 yards to, but not including, 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9 HD 41, D-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapersself-propelled 45 yards and over; Slipform pavers; Transporters, all track or truck type

GROUP 2 - Barrier machine (zipper); Batch Plant Operatorconcrete; Bump Cutter; Cranes, 20 tons thru 44 tons with attachments; Crane-Overhead, bridge type, 20 tons through 44 tons; Chipper; Concrete pump-truck mount with boom attachment; Crusher; Deck engineer/deck winches (power); Drilling machine; Excavator, shovel, backhoe-3 yards and under; Finishing machine, Bidwell, Gamaco and similar equipment; Guardrail punch; Loaders, overhead under 6 yards; Loaders-plant feed; Locomotives-all; Mechanics- all; Mixers, asphalt plant; Motor patrol graders, finishing; Piledriver (other than crane mount); Roto-mill, rotogrinder; Screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self- propelled, hard tail end dump, articulating off-road equipment- under 45 yards; Subgrader trimmer; Tractors, backhoe over 75 hp; Transfer material service machine-shuttle buggy, Blaw Knox- Roadtec; Truck Crane oiler/driver-100 tons and over; Truck Mount Portable Conveyor; Yo Yo pay

GROUP 3 - Conveyors; Cranes through 19 tons with attachments; Crane-A-frame over 10 tons; Drill oilers-auger type, truck or crane mount; Dozer-D-9 and under; Forklift-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside Hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/boom trucks over 10 tons; Loaders-elevating type, belt; Motor patrol grader-nonfinishing; Plant oiler- asphalt, crusher; Pump-Concrete; Roller, plant mix or multi-lfit materials; Saws-concrete; Scrapers, concrete and carry all; Service engineers-equipment; Trenching machines; Truck crane oiler/driver under 100 tons; Tractors, backhoe under 75 hp

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete Finish Machine-laser screed; Cranes A-frame 10 tons and under; Elevator and manlift (permanent and shaft
type); Forklifts-under 3000 lbs. with attachments; Gradechecker, stakehop; Hydralifts/boom trucks, 10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Posthole digger-mechanical; Power plant; Pumps-water; Rigger and Bellman; Roller-other than plant mix; Wheel Tractors, farmall type; Shotcrete/gunite equipment operator

FOOTNOTE A- Reduced rates may be paid on the following: 1. Projects involving work on structures such as buildings and bridges whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.

2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.

3. Marine projects (docks, wharfs, etc.) less than \$150,000.

HANDLING OF HAZARDOUS WASTE MATERIALS: Personnel in all craft classifications subject to working inside a federally designated hazardous perimeter shall be elgible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing, Class ""D"" Suit - Base wage rate plus \$.50 per hour.
H-2 Class ""C"" Suit - Base wage rate plus \$1.00 per hour.
H-3 Class ""B"" Suit - Base wage rate plus \$1.50 per hour.
H-4 Class ""A"" Suit - Base wage rate plus \$2.00 per hour.

ENGI0701-002 01/01/2018

CLARK, COWLITZ, KLICKKITAT, PACIFIC (SOUTH), SKAMANIA, AND WAHKIAKUM COUNTIES

POWER ROUIPMENT OPERATORS: ZONE 1

	A	Rates	Fringes
POWER EQUIPM	IENT OPERATOR		
GROUP 1	L\$	41.65	14.35
GROUP 1	LA\$	43.73	14.35
GROUP 1	LB\$	45.82	14.35
GROUP 2	2\$	39.74	14.35

GROUP	3\$	38.59	14.35
GROUP	4\$	37.51	14.35
GROUP	5\$	36.27	14.35
GROUP	6\$	33.05	14.35

```
Zone Differential (add to Zone 1 rates):
Zone 2 - $3.00
Zone 3 - $6.00
```

For the following metropolitan counties: MULTNOMAH; CLACKAMAS; MARION; WASHINGTON; YAMHILL; AND COLUMBIA; CLARK; AND COWLITZ COUNTY, WASHINGTON WITH MODIFICATIONS AS INDICATED:

All jobs or projects located in Multnomah, Clackamas and Marion Counties, West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Highway 26 and West of Mile Post 30 on Highway 22 and all jobs or projects located in Yamhill County, Washington County and Columbia County and all jobs or porjects located in Clark & Cowlitz County, Washington except that portion of Cowlitz County in the Mt. St. Helens ""Blast Zone"" shall receive Zone I pay for all classifications.

All jobs or projects located in the area outside the identified boundary above, but less than 50 miles from the Portland City Hall shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the Portland City Hall, but outside the identified border above, shall receive Zone III pay for all classifications.

For the following cities: ALBANY; BEND; COOS BAY; EUGENE; GRANTS PASS; KLAMATH FALLS; MEDFORD; ROSEBURG

All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone I pay for all classifications.

All jobs or projects located more than 30 miles and less than 50 miles from the respective city hall of the above mentioned cities shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone III pay for all classifications.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

Group 1

Concrete Batch Plan and or Wet mix three (3) units or more; Crane, Floating one hundred and fifty (150) ton but less than two hundred and fifty (250) ton; Crane, two hundred (200) ton through two hundred ninety nine (299) ton with two hundred foot (200') boom or less (including jib, inserts and/or attachments); Crane, ninety (90) ton through one hundred ninety nine (199) ton with over two hundred (200') boom Including jib, inserts and/or attachments); Crane, Tower Crane with one hundred seventy five foot (175') tower or less and with less than two hundred foot (200') jib; Crane, Whirley ninety (90) ton and over; Helicopter when used in erecting work

Group 1A

Crane, floating two hundred fifty (250) ton and over; Crane, two hundred (200) ton through two hundred ninety nine (299) ton, with over two hundred foot (200') boom (including jib, inserts and/or attachments); Crane, three hundred (300) ton through three hundred ninety nine (399) ton; Crane, Tower Crane with over one hundred seventy five foot (175') tower or over two hundred foot (200') jib; Crane, tower Crane on rail system or 2nd tower or more in work radius

Group 1B

Crane, three hundred (300) ton through three hundred ninety nine (399) ton, with over two hundred foot (200') boom (including jib, inserts and/or attachments); Floating crane, three hundred fifty (350) ton and over; Crane, four hundred (400) ton and over

Group 2

Asphalt Plant (any type); Asphalt Roto-Mill, pavement profiler eight foot (8') lateral cut and over; Auto Grader or ""Trimmer""; Blade, Robotic; Bulldozer, Robotic Equipment (any type); Bulldozer, over one hundred twenty thousand (120,000) lbs. and above; Concrete Batch Plant and/or Wet Mix one (1) and two (2) drum; Concrete Diamond Head Profiler; Canal Trimmer; Concrete, Automatic Slip Form Paver (Assistant to the Operator required); Crane, Boom Truck fifty (50) ton and with over one hundred fifty foot (150') boom and over; Crane, Floating (derrick barge) thirty (30) ton but less than one hundred fifty (150) ton; Crane, Cableway twenty-five (25) ton and over; Crane, Floating Clamshell three (3) cu. Yds. And over; Crane, ninety (90) ton through one hundred ninety nine (199) ton up to and including two hundred foot (200') of boom (including jib inserts and/or attachments); Crane, fifty (50) ton through eighty nine (89) ton with over one hundred fifty foot (150') boom (including jib inserts and/or

attachments); Crane, Whirley under ninety (90) ton; Crusher Plant; Excavator over one hundred thirty thousand (130,000) lbs.; Loader one hundred twenty thousand (120,000) lbs. and above; Remote Controlled Earth Moving Equipment; Shovel, Dragline, Clamshell, five (5) cu. Yds. And over; Underwater Equipment remote or otherwise, when used in construction work; Wheel Excavator any size

Group 3

Bulldozer, over seventy thousand (70,000) lbs. up to and including one hundred twenty thousand (120,000) lbs.; Crane, Boom Truck fifty (50) ton and over with less than one hundred fifty foot (150') boom; Crane, fifty (50) ton through eighty nine (89) ton with one hundred fifty foot (150') boom or less (including jib inserts and/or attachments); Crane, Shovel, Dragline or Clamshell three (3) cu. yds. but less than five (5) cu. Yds.; Excavator over eighty thousand (80,000) lbs. through one hundred thirty thousand (130,000) lbs.; Loader sixty thousand (60,000) lbs. and less than one hundred twenty thousand (120,000) lbs.

Group 4

Asphalt, Screed; Asphalt Paver; Asphalt Roto-Mill, pavement profiler, under eight foot (8') lateral cut; Asphalt, Material Transfer Vehicle Operator; Back Filling Machine; Backhoe, Robotic, track and wheel type up to and including twenty thousand (20,000) lbs. with any attachments; Blade (any type); Boatman; Boring Machine; Bulldozer over twenty thousand (20,000) lbs. and more than one hundred (100) horse up to seventy thousand (70,000) lbs.; Cable-Plow (any type); Cableway up to twenty five (25) ton; Cat Drill (John Henry); Chippers; Compactor, multi-engine; Compactor, Robotic; Compactor with blade self-propelled; Concrete, Breaker; Concrete, Grout Plant; Concrete, Mixer Mobile; Concrete, Paving Road Mixer; Concrete, Reinforced Tank Banding Machine; Crane, Boom Truck twenty (20) ton and under fifty (50) ton; Crane, Bridge Locomotive, Gantry and Overhead; Crane, Carry Deck; Crane, Chicago Boom and similar types; Crane, Derrick Operator, under one hundred (100) ton; Crane, Floating Clamshell, Dragline, etc. Operator, under three (3) cu. yds. Or less than thirty (30) ton; Crane, under fifty (50) ton; Crane, Quick Tower under one hundred foot (100') in height and less than one hundred fifty foot (150') jib (on rail included); Diesel-Electric Engineer (Plant or Floating); Directional Drill over twenty thousand (20,000) lbs. pullback; Drill Cat Operator; Drill Doctor and/or Bit Grinder; Driller, Percussion, Diamond, Core, Cable, Rotary and similar type; Excavator Operator over twenty thousand (20,000) lbs. through eighty thousand (80,000) lbs.; Generator Operator; Grade-all; Guardrail

Machines, i.e. punch, auger, etc.; Hammer Operator (Piledriver); Hoist, stiff leg, guy derrick or similar type, fifty (50) ton and over; Hoist, two (2) drums or more; Hydro Axe (loader mounted or similar type); Jack Operator, Elevating Barges, Barge Operator, self-unloading; Loader Operator, front end and overhead, twenty five thousand (25,000) lbs. and less than sixty thousand (60,000) lbs.; Log Skidders; Piledriver Operator (not crane type); Pipe, Bending, Cleaning, Doping and Wrapping Machines; Rail, Ballast Tamper Multi-Purpose; Rubber-tired Dozers and Pushers; Scraper, all types; Side-Boom; Skip Loader, Drag Box; Strump Grinder (loader mounted or similar type); Surface Heater and Planer; Tractor, rubber-tired, over fifty (50) HP Flywheel; Trenching Machine three foot (3') depth and deeper; Tub Grinder (used for wood debris); Tunnel Boring Machine Mechanic; Tunnel, Mucking Machine; Ultra High Pressure Water Jet Cutting Tool System Operator; Vacuum Blasting Machine Operator; Water pulls, Water wagons

Group 5

Asphalt, Extrusion Machine; Asphalt, Roller (any asphalt mix); Asphalt, Roto-Mill pavement profiler ground man; Bulldozer, twenty thousand (20,000) lbs. or less, or one hundred (100) horse or less; Cement Pump; Chip Spreading Machine; Churn Drill and Earth Boring Machine; Compactor, self-propelled without blade; Compressor, (any power) one thousand two hundred fifty (1,250) cu. ft. and over, total capacity; Concrete, Batch Plant Quality control; Concrete, Combination Mixer and compressor operator, gunite work; Concrete, Curb Machine, Mechanical Berm, Curb and/or Curb and Gutter; Concrete, Finishing Machine; Concrete, Grouting Machine; Concrete, Internal Full Slab Vibrator Operator; Concrete, Joint Machine; Concrete, Mixer single drum, any capacity; Concrete, Paving Machine eight foot (8') or less; Concrete, Planer; Concrete, Pump; Concrete, Pump Truck; Concrete, Pumpcrete Operator (any type); Concrete, Slip Form Pumps, power driven hydraulic lifting device for concrete forms; Conveyored Material Hauler; Crane, Boom Truck under twenty (20) tons; Crane, Boom Type lifting device, five (5) ton capacity or less; Drill, Directional type less than twenty thousand (20,000) lbs. pullback; Fork Lift, over ten (10) ton or Robotic; Helicopter Hoist; Hoist Operator, single drum; Hydraulic Backhoe track type up to and including twenty thousand (20,000) lbs.; Hydraulic Backhoe wheel type (any make); Laser Screed; Loaders, rubber-tired type, less than twenty five thousand (25,000) lbs.; Pavement Grinder and/or Grooving Machine (riding type); Pipe, cast in place Pipe Laying Machine; Pulva-Mixer or similar types; Pump Operator, more than five (5) pumps (any size); Rail, Ballast Compactor, Regulator, or Tamper machines; Service Oiler (Greaser); Sweeper Self-Propelled;

Tractor, Rubber-Tired, fifty (50) HP flywheel and under; Trenching Machine Operator, maximum digging capacity three foot (3') depth; Tunnel, Locomotive, Dinkey; Tunnel, Power Jumbo setting slip forms, etc.

Group 6

Asphalt, Pugmill (any type); Asphalt, Raker; Asphalt, Truck Mounted Asphalt Spreader, with Screed; Auger Oiler; Boatman; Bobcat, skid steed (less than one (1) yard); Broom, self-propelled; Compressor Operator (any power) under 1,250 cu. ft. total capacity; Concrete Curing Machine (riding type); Concrete Saw; Conveyor Operator or Assistant; Crane, Tugger; Crusher Feederman; Crusher Oiler; Deckhand; Drill, Directional Locator; Fork Lift; Grade Checker; Guardrail Punch Oiler; Hydrographic Seeder Machine, straw, pulp or seed; Hydrostatic Pump Operator; Mixer Box (CTB, dry batch, etc.); Oiler; Plant Oiler; Pump (any power); Rail, Brakeman, Switchman, Motorman; Rail, Tamping Machine, mechanical, self-propelled; Rigger; Roller grading (not asphalt); Truck, Crane Oiler-Driver

IRON0014-005 07/01/2019

ADAMS, ASOTIN, BENTON, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND ORIELLE, SPOKANE, STEVENS, WALLA WALLA AND WHITMAN COUNTIES

	Rates	Fringes
IRONWORKER	\$ 33.59	29.26

IRON0029-002 05/01/2018

CLARK, COWLITZ, KLICKITAT, PACIFIC, SKAMANIA, AND WAHKAIKUM COUNTIES

 Rates
 Fringes

 IRONWORKER......\$ 37.00
 27.87

 IRON0086-002
 07/01/2019

YAKIMA, KITTITAS AND CHELAN COUNTIES

	Rates	Fringes
IRONWORKER	\$ 33.59	29.26

IRON0086-004 07/01/2019

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PIERCE, SKAGIT, SNOHOMISH, THURSTON, AND WHATCOM COUNTIES

 Rates
 Fringes

 IRONWORKER......\$ 42.35
 29.56

 LABO0238-004 06/01/2019
 29.56

PASCO AREA: ADAMS, BENTON, COLUMBIA, DOUGLAS (East of 120th Meridian), FERRY, FRANKLIN, GRANT, OKANOGAN, WALLA WALLA

SPOKANE AREA: ASOTIN, GARFIELD, LINCOLN, PEND OREILLE, SPOKANE, STEVENS & WHITMAN COUNTIES

1	Rates	Fringes
LABORER (PASCO)		
GROUP 1\$	25.84	13.00
GROUP 2\$	27.94	13.00
GROUP 3\$	28.21	13.00
GROUP 4\$	28.48	13.00
GROUP 5\$	28.76	13.00
LABORER (SPOKANE)		
GROUP 1\$	25.84	13.00
GROUP 2\$	27.94	13.00
GROUP 3\$	28.21	13.00
GROUP 4\$	28.48	13.00
GROUP 5\$		13.00

- Zone Differential (Add to Zone 1 rate): \$2.00
- BASE POINTS: Spokane, Pasco, Lewiston
- Zone 1: 0-45 radius miles from the main post office. Zone 2: 45 radius miles and over from the main post office.

LABORERS CLASSIFICATIONS

GROUP 1: Flagman; Landscape Laborer; Scaleman; Traffic Control Maintenance Laborer (to include erection and maintenance of barricades, signs and relief of flagperson); Window Washer/Cleaner (detail cleanup, such as, but not limited to cleaning floors, ceilings, walls, windows, etc. prior to final acceptance by the owner)

GROUP 2: Asbestos Abatement Worker; Brush Hog Feeder;

Carpenter Tender; Cement Handler; Clean-up Laborer; Concrete Crewman (to include stripping of forms, hand operating jacks on slip form construction, application of concrete curing compounds, pumpcrete machine, signaling, handling the nozzle of squeezcrete or similar machine,6 inches and smaller); Confined Space Attendant; Concrete Signalman; Crusher Feeder; Demolition (to include clean-up, burning, loading, wrecking and salvage of all material); Dumpman; Fence Erector; Firewatch; Form Cleaning Machine Feeder, Stacker; General Laborer; Grout Machine Header Tender; Guard Rail (to include guard rails, guide and reference posts, sign posts, and right-of-way markers); Hazardous Waste Worker, Level D (no respirator is used and skin protection is minimal); Miner, Class ""A"" (to include all bull gang, concrete crewman, dumpman and pumpcrete crewman, including distributing pipe, assembly & dismantle, and nipper); Nipper; Riprap Man; Sandblast Tailhoseman; Scaffold Erector (wood or steel); Stake Jumper; Structural Mover (to include separating foundation, preparation, cribbing, shoring, jacking and unloading of structures); Tailhoseman (water nozzle); Timber Bucker and Faller (by hand); Track Laborer (RR); Truck Loader; Well-Point Man; All Other Work Classifications Not Specially Listed Shall Be Classified As General Laborer

GROUP 3: Asphalt Roller, walking; Cement Finisher Tender; Concrete Saw, walking; Demolition Torch; Dope Pot Firemen, non-mechanical; Driller Tender (when required to move and position machine); Form Setter, Paving; Grade Checker using level; Hazardous Waste Worker, Level C (uses a chemical ""splash suit"" and air purifying respirator); Jackhammer Operator; Miner, Class ""B"" (to include brakeman, finisher, vibrator, form setter); Nozzleman (to include squeeze and flo-crete nozzle); Nozzleman, water, air or steam; Pavement Breaker (under 90 lbs.); Pipelayer, corrugated metal culvert; Pipelayer, multi- plate; Pot Tender; Power Buggy Operator; Power Tool Operator, gas, electric, pneumatic; Railroad Equipment, power driven, except dual mobile power spiker or puller; Railroad Power Spiker or Puller, dual mobile; Rodder and Spreader; Tamper (to include operation of Barco, Essex and similar tampers); Trencher, Shawnee; Tugger Operator; Wagon Drills; Water Pipe Liner; Wheelbarrow (power driven)

GROUP 4: Air and Hydraulic Track Drill; Aspahlt Raker;Brush Machine (to include horizontal construction joint cleanup brush machine, power propelled); Caisson Worker, free air; Chain Saw Operator and Faller; Concrete Stack (to include laborers when laborers working on free standing concrete stacks for smoke or fume control above 40 feet high); Gunite (to include operation of machine and nozzle); Hazardous Waste Worker, Level B (uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical ""splash suit""); High Scaler; Laser Beam Operator (to include grade checker and elevation control); Miner, Class C (to include miner, nozzleman for concrete, laser beam operator and rigger on tunnels); Monitor Operator (air track or similar mounting); Mortar Mixer; Nozzleman (to include jet blasting nozzleman, over 1,200 lbs., jet blast machine power propelled, sandblast nozzle); Pavement Breaker (90 lbs. and over); Pipelayer (to include working topman, caulker, collarman, jointer, mortarman, rigger, jacker, shorer, valve or meter installer); Pipewrapper; Plasterer Tender; Vibrators (all)

GROUP 5 - Drills with Dual Masts; Hazardous Waste Worker, Level A (utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line); Miner Class ""D"", (to include raise and shaft miner, laser beam operator on riases and shafts)

LABO0238-006 06/01/2019

COUNTIES EAST OF THE 120TH MERIDIAN: ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND OREILLE, STEVENS, SPOKANE, WALLA WALLA, WHITMAN

LABO0242-003 06/01/2019

KING COUNTY

Rates

Fringes

LABORER

GROUP 1\$	27.10	11.94
GROUP 2A\$	31.03	11.94
GROUP 3\$	38.78	11.94
GROUP 4\$	39.72	11.94
GROUP 5\$	40.36	11.94
Group 6\$	40.36	12.04

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective city hall

ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall ZONE 3 - More than 45 radius miles from the respective city hall ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES): ZONE 2 - \$1.00 ZONE 3 - \$1.30 BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE, AND YAKIMA ZONE 1 - Projects within 25 radius miles of the respective city hall ZONE 2 - More than 25 radius miles from the respective city hall ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES): ZONE 2 - \$2.25 LABORERS CLASSIFICATIONS GROUP 1: Landscaping and Planting; Watchman; Window Washer/Cleaner (detail clean-up, such as but not limited to cleaning floors, ceilings, walls, windows, etc., prior to final acceptance by the owner) GROUP 2A: Batch Weighman; Crusher Feeder; Fence Laborer; Flagman; Pilot Car GROUP 3: General Laborer; Air, Gas, or Electric Vibrating Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C: uses a chemical ""splash suit"" and air purifying respirator); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B: uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical ""splash suit""); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Mortarman and Hodcarrier; Powderman; Re-Timberman; Hazardous Waste Worker (Level A: utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line).

Group 6: Miner

LABO0252-010 06/01/2019

CLALLAM, GRAYS HARBOR, JEFFERSON, KITSAP, LEWIS, MASON, PACIFIC (EXCLUDING SOUTHWEST), PIERCE, AND THURSTON COUNTIES

Rates

Fringes

LABORER

GROUP	1\$	27.10	11.94
GROUP	2\$	31.03	11.94
GROUP	3\$	38.78	11.94
GROUP	4\$	39.72	11.94
GROUP	5\$	40.36	11.94

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective city hall ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall ZONE 3 - More than 45 radius miles from the respective city hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES): ZONE 2 - \$1.00 ZONE 3 - \$1.30 BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE, AND YAKIMA

ZONE 1 - Projects within 25 radius miles of the respective city hall ZONE 2 - More than 25 radius miles from the respective city hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES): ZONE 2 - \$2.25

LABORERS CLASSIFICATIONS

GROUP 1: Landscaping and Planting; Watchman; Window Washer/Cleaner (detail clean-up, such as but not limited to cleaning floors, ceilings, walls, windows, etc., prior to final acceptance by the owner)

GROUP 2: Batch Weighman; Crusher Feeder; Fence Laborer; Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C: uses a chemical ""splash suit"" and air purifying respirator); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B: uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical ""splash suit""); Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power;

Federal Wage Rates

Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft);
Spreader (concrete); Tamper and Similar electric, air and
glas operated tool; Timber Person-sewer (lagger shorer and
cribber); Track Liner Power; Tugger Operator; Vibrator;
Well Point Laborer

GROUP 5: Caisson Worker; Miner; Mortarman and Hodcarrier; Grade Checker and Transit Person; High Scaler; Powderman; Re-Timberman; Hazardous Waste Worker (Level A: utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line).

```
_____
```

LABO0292-008 06/01/2019

ISLAND, SAN JUAN, SKAGIT, SNOHOMISH, AND WHATCOM COUNTIES

	Rates	Fringes	
LABORER GROUP 1 GROUP 2 GROUP 3 GROUP 4 GROUP 5	.\$ 31.03 .\$ 38.78 .\$ 39.72	11.94 11.94 11.94 11.94 11.94	
BASE POINTS: BELLINGHAM, MT. W TACOMA, OLYMPIA, CENTRALIA, AE TOWNSEND, PT. ANGELES, AND BRE	BERDEEN, SHELTON,		
ZONE 1 - Projects within 25 ra city hall ZONE 2 - More than 25 but less respective city hall ZONE 3 - More than 45 radius m hall	s than 45 radius	miles from the	
ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES): ZONE 2 - \$1.00 ZONE 3 - \$1.30			
BASE POINTS: CHELAN, SUNNYSIDE,	WENATCHEE, AND Y	AKIMA	
ZONE 1 - Projects within 25 ra city hall ZONE 2 - More than 25 radius m hall		_	
ZONE DIFFERENTIAL (ADD TO ZONE 1 ZONE 2 - \$2.25	RATES):		
LABORERS CLASSIFICATIONS			

GROUP 1: Landscaping and Planting; Watchman; Window Washer/Cleaner (detail clean-up, such as but not limited to cleaning floors, ceilings, walls, windows, etc., prior to final acceptance by the owner)

GROUP 2: Batch Weighman; Crusher Feeder; Fence Laborer; Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C: uses a chemical ""splash suit"" and air purifying respirator); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B: uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical ""splash suit""); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Miner; Mortarman and Hodcarrier; Powderman; Re-Timberman; Hazardous Waste Worker (Level A: utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line). _____

LABO0335-001 06/01/2018

CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH OF A STRAIGHT LINE MADE BY EXTENDING THE NORTH BOUNDARY LINE OF WAHKIAKUM COUNTY WEST TO THE PACIFIC OCEAN), SKAMANIA AND WAHKIAKUM COUNTIES

	Rates	Fringes
Laborers: ZONE 1:		
GROUP 1	\$ 31.72	11.49
GROUP 2	\$ 32.38	11.49
GROUP 3	\$ 32.87	11.49
GROUP 4	\$ 33.29	11.49
GROUP 5	\$ 28.98	11.49
GROUP 6	\$ 26.31	11.49
GROUP 7	\$ 22.78	11.49
Zone Differential (Add to Zone Zone 2 \$ 0.65	1 rates):	

Zone 3 - 1.15 Zone 4 - 1.70

Zone 5 - 2.75

BASE POINTS: LONGVIEW AND VANCOUVER

ZONE 1: Projects within 30 miles of the respective city all. ZONE 2: More than 30 miles but less than 40 miles from the respective city hall. ZONE 3: More than 40 miles but less than 50 miles from the respective city hall. ZONE 4: More than 50 miles but less than 80 miles from the respective city hall. ZONE 5: More than 80 miles from the respective city hall.

LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Plant Laborers; Asphalt Spreaders; Batch Weighman; Broomers; Brush Burners and Cutters; Car and Truck Loaders; Carpenter Tender; Change-House Man or Dry Shack Man; Choker Setter; Clean-up Laborers; Curing, Concrete; Demolition, Wrecking and Moving Laborers; Dumpers, road oiling crew; Dumpmen (for grading crew); Elevator Feeders; Median Rail Reference Post, Guide Post, Right of Way Marker; Fine Graders; Fire Watch; Form Strippers (not swinging stages); General Laborers; Hazardous Waste Worker; Leverman or Aggregate Spreader (Flaherty and similar types); Loading Spotters; Material Yard Man (including electrical); Pittsburgh Chipper Operator or Similar Types; Railroad Track Laborers; Ribbon Setters (including steel forms); Rip Rap Man (hand placed); Road Pump Tender; Sewer Labor; Signalman; Skipman; Slopers; Spraymen; Stake Chaser; Stockpiler; Tie Back Shoring; Timber Faller and Bucker (hand labor); Toolroom Man (at job site); Tunnel Bullgang (above ground); Weight-Man- Crusher (aggregate when used)

GROUP 2: Applicator (including pot power tender for same), applying protective material by hand or nozzle on utility lines or storage tanks on project; Brush Cutters (power saw); Burners; Choker Splicer; Clary Power Spreader and similar types; Clean- up Nozzleman-Green Cutter (concrete, rock, etc.); Concrete Power Buggyman; Concrete Laborer; Crusher Feeder; Demolition and Wrecking Charred Materials; Gunite Nozzleman Tender; Gunite or Sand Blasting Pot Tender; Handlers or Mixers of all Materials of an irritating nature (including cement and lime); Tool Operators (includes but not limited to: Dry Pack Machine; Jackhammer; Chipping Guns; Paving Breakers); Pipe Doping and Wrapping; Post Hole Digger, air, gas or electric; Vibrating Screed; Tampers; Sand Blasting (Wet); Stake-Setter; Tunnel-Muckers, Brakemen, Concrete Crew, Bullgang (underground)

GROUP 3: Asbestos Removal; Bit Grinder; Drill Doctor; Drill Operators, air tracks, cat drills, wagon drills, rubber-mounted drills, and other similar types including at crusher plants; Gunite Nozzleman; High Scalers, Strippers and Drillers (covers work in swinging stages, chairs or belts, under extreme conditions unusual to normal drilling, blasting, barring-down, or sloping and stripping); Manhole Builder; Powdermen; Concrete Saw Operator; Pwdermen; Power Saw Operators (Bucking and Falling); Pumpcrete Nozzlemen; Sand Blasting (Dry); Sewer Timberman; Track Liners, Anchor Machines, Ballast Regulators, Multiple Tampers, Power Jacks, Tugger Operator; Tunnel-Chuck Tenders, Nippers and Timbermen; Vibrator; Water Blaster

GROUP 4: Asphalt Raker; Concrete Saw Operator (walls); Concrete Nozzelman; Grade Checker; Pipelayer; Laser Beam (pipelaying)-applicable when employee assigned to move, set up, align; Laser Beam; Tunnel Miners; Motorman-Dinky Locomotive-Tunnel; Powderman-Tunnel; Shield Operator-Tunnel

GROUP 5: Traffic Flaggers

GROUP 6: Fence Builders

GROUP 7: Landscaping or Planting Laborers

LAB00335-019 06/01/2018

	Rates	Fringes
Hod Carrier	•	11.49
LABO0348-003 06/01/2019		
CHELAN, DOUGLAS (W OF 12TH MERIDI COUNTIES	AN), KITTITAS, Z	AND YAKIMA
	Rates	Fringes
LABORER GROUP 1\$ 23.12 11.94 GROUP 2\$ 26.51 11.94 GROUP 3\$ 29.01 11.94 GROUP 4\$ 29.71 11.94 GROUP 5\$ 30.22 11.94 BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON ZONE 1 - Projects within 25 radius miles of the respective city hall ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall		
ZONE 3 – More than 45 radius mi hall	les from the rea	spective city
ZONE DIFFERENTIAL (ADD TO ZONE 1 ZONE 2 - \$1.00 ZONE 3 - \$1.30	RATES):	
BASE POINTS: CHELAN, SUNNYSIDE, W	ENATCHEE, AND Y.	AKIMA
ZONE 1 - Projects within 25 rad city hall ZONE 2 - More than 25 radius mi hall		_
ZONE DIFFERENTIAL (ADD TO ZONE 1 ZONE 2 - \$2.25	RATES):	
LABORERS CLASSIFICATIONS		
GROUP 1: Landscaping and Plant Washer/Cleaner (detail clean-up cleaning floors, ceilings, wall final acceptance by the owner)	, such as but n	ot limited to

GROUP 2: Batch Weighman; Crusher Feeder; Fence Laborer; Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C: uses a chemical ""splash suit"" and air purifying respirator); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B: uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical ""splash suit""); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Miner; Mortarman and Hodcarrier; Powderman; Re-Timberman; Hazardous Waste Worker (Level A: utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line).

PAIN0005-002 07/01/2019

STATEWIDE EXCEPT CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH), SKAMANIA, AND WAHKIAKUM COUNTIES

	Rates	Fringes
Painters: STRIPERS	•	16.07
PAIN0005-004 03/01/2009		
CLALLAM, GRAYS HARBOR, ISLAND, J MASON, PIERCE, SAN JUAN, SKAGIT, WHATCOM COUNTIES		
	Rates	Fringes
PAINTER	.\$ 20.82	7.44
* PAIN0005-006 07/01/2018		
ADAMS, ASOTIN; BENTON AND FRANKL CHELAN, COLUMBIA, DOUGLAS, FERRY LINCOLN, OKANOGAN, PEND OREILLE, WHITMAN AND YAKIMA COUNTIES	, GARFIELD, GRAN	NT, KITTITAS,
	Rates	Fringes
PAINTER Application of Cold Tar Products, Epoxies, Polyure thanes, Acids, Radiation Resistant Material, Water and Sandblasting Over 30'/Swing Stage Work. Brush, Roller, Striping, Steam-cleaning and Spray Lead Abatement, Asbestos Abatement	.\$ 22.20 .\$ 22.94 .\$ 21.50	11.71 7.98 11.61 7.98
*\$.70 shall be paid over and a listed for work on swing stage feet.		-
PAIN0055-003 07/01/2019		
CLARK, COWLITZ, KLICKITAT, PACIF COUNTIES	IC, SKAMANIA, AN	ID WAHKIAKUM
	Rates	Fringes

PAINTER Brush & Roller.....\$ 25.14 12.90 Spray and Sandblasting.....\$ 25.14 12.90 All high work over 60 ft. = base rate + \$0.75_____ PAIN0055-006 07/01/2019 CLARK, COWLITZ, KLICKITAT, SKAMANIA and WAHKIAKUM COUNTIES Rates Fringes Painters: HIGHWAY & PARKING LOT STRIPER.....\$ 35.45 12.56 _____ PLAS0072-004 06/01/2019 ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN, AND YAKIMA COUNTIES Rates Fringes CEMENT MASON/CONCRETE FINISHER ZONE 1.....\$ 30.21 14.93 Zone Differential (Add to Zone 1 rate): Zone 2 - \$2.00 BASE POINTS: Spokane, Pasco, Lewiston; Wenatchee Zone 1: 0 - 45 radius miles from the main post office Zone 2: Over 45 radius miles from the main post office _____ PLAS0528-001 06/01/2019 CLALLAM, COWLITZ, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PACIFIC, PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON, WAHKIAKUM AND WHATCOM COUNTIES Rates Fringes CEMENT MASON CEMENT MASON.....\$ 44.43 18.04 COMPOSITION, TROWEL MACHINE, GRINDER, POWER TOOLS, GUNNITE NOZZLE.....\$ 44.93 18.04 TROWELING MACHINE OPERATOR

ON COMPOSITION.....\$ 44.93 18.04 _____ PLAS0555-002 07/01/2019 CLARK, KLICKITAT AND SKAMANIA COUNTIES ZONE 1: Rates Fringes CEMENT MASON CEMENT MASONS DOING BOTH COMPOSITION/POWER MACHINERY AND SUSPENDED/HANGING SCAFFOLD..\$ 37.32 18.77 CEMENT MASONS ON SUSPENDED, SWINGING AND/OR HANGING SCAFFOLD.....\$ 36.58 18.77 CEMENT MASONS.....\$ 35.85 18.77 COMPOSITION WORKERS AND POWER MACHINERY OPERATORS...\$ 36.58 18.77 Zone Differential (Add To Zone 1 Rates): Zone 2 - \$0.65 Zone 3 - 1.15 Zone 4 - 1.70 Zone 5 - 3.00 BASE POINTS: BEND, CORVALLIS, EUGENE, MEDFORD, PORTLAND, SALEM, THE DALLES, VANCOUVER ZONE 1: Projects within 30 miles of the respective city hall ZONE 2: More than 30 miles but less than 40 miles from the respective city hall. ZONE 3: More than 40 miles but less than 50 miles from the respective city hall. ZONE 4: More than 50 miles but less than 80 miles from the respective city hall. ZONE 5: More than 80 miles from the respective city hall _____ TEAM0037-002 06/01/2019 CLARK, COWLITZ, KLICKITAT, PACIFIC (South of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), SKAMANIA, AND WAHKIAKUM COUNTIES

Rates

Fringes

Truck drivers: ZONE 1

GROUP	1\$	29.08	15.27
GROUP	2\$	29.20	15.27
GROUP	3\$	29.34	15.27
GROUP	4\$	29.62	15.27
GROUP	5\$	29.85	15.27
GROUP	6\$	30.03	15.27
GROUP	7\$	30.24	15.27

Zone Differential (Add to Zone 1 Rates): Zone 2 - \$0.65 Zone 3 - 1.15 Zone 4 - 1.70 Zone 5 - 2.75

BASE POINTS: ASTORIA, THE DALLES, LONGVIEW AND VANCOUVER

ZONE 1: Projects within 30 miles of the respective city hall.

ZONE 2: More than 30 miles but less than 40 miles from the respective city hall.

ZONE 3: More than 40 miles but less than 50 miles from the respective city hall.

ZONE 4: More than 50 miles but less than 80 miles from the respective city hall.

ZONE 5: More than 80 miles from the respective city hall.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: A Frame or Hydra lifrt truck w/load bearing surface; Articulated Dump Truck; Battery Rebuilders; Bus or Manhaul Driver; Concrete Buggies (power operated); Concrete Pump Truck; Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations there of: up to and including 10 cu. yds.; Lift Jitneys, Fork Lifts (all sizes in loading, unloading and transporting material on job site); Loader and/or Leverman on Concrete Dry Batch Plant (manually operated); Pilot Car; Pickup Truck; Solo Flat Bed and misc. Body Trucks, 0-10 tons; Truck Tender; Truck Mechanic Tender; Water Wagons (rated capacity) up to 3,000 gallons; Transit Mix and Wet or Dry Mix - 5 cu. yds. and under; Lubrication Man, Fuel Truck Driver, Tireman, Wash Rack, Steam Cleaner or combinations; Team Driver; Slurry Truck Driver or Leverman; Tireman

GROUP 2: Boom Truck/Hydra-lift or Retracting Crane; Challenger; Dumpsters or similar equipment all sizes; Dump Trucks/Articulated Dumps 6 cu to 10 cu.; Flaherty Spreader Driver or Leverman; Lowbed Equipment, Flat Bed Semi-trailer or doubles transporting equipment or wet or dry materials; Lumber Carrier, Driver-Straddle Carrier (used in loading, unloading and transporting of materials on job site); Oil Distributor Driver or Leverman; Transit mix and wet or dry mix trcuks: over 5 cu. yds. and including 7 cu. yds.; Vacuum Trucks; Water truck/Wagons (rated capacity) over 3,000 to 5,000 gallons

GROUP 3: Ammonia Nitrate Distributor Driver; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 10 cu. yds. and including 30 cu. yds. includes Articulated Dump Trucks; Self-Propelled Street Sweeper; Transit mix and wet or dry mix truck: over 7 cu yds. and including 11 cu yds.; Truck Mechanic-Welder-Body Repairman; Utility and Clean-up Truck; Water Wagons (rated capacity) over 5,000 to 10,000 gallons

GROUP 4: Asphalt Burner; Dump Trucks, side, end and bottom cumps, including Semi-Trucks and Trains or combinations thereof: over 30 cu. yds. and including 50 cu. yds. includes Articulated Dump Trucks; Fire Guard; Transit Mix and Wet or Dry Mix Trucks, over 11 cu. yds. and including 15 cu. yds.; Water Wagon (rated capacity) over 10,000 gallons to 15,000 gallons

GROUP 5: Composite Crewman; Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 50 cu. yds. and including 60 cu. yds. includes Articulated Dump Trucks

GROUP 6: Bulk Cement Spreader w/o Auger; Dry Pre-Batch concrete Mix Trucks; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains of combinations thereof: over 60 cu. yds. and including 80 cu. yds., and includes Articulated Dump Trucks; Skid Truck

GROUP 7: Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 80 cu. yds. and including 100 cu. yds., includes Articulated Dump Trucks; Industrial Lift Truck (mechanical tailgate)

* TEAM0174-001 06/01/2019

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PACIFIC (North of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES

Rates

Fringes

Truck drivers: ZONE A:	
GROUP 1:\$ 40.38	20.46
GROUP 2:\$ 39.54	20.46
GROUP 3:\$ 36.73	20.46
GROUP 4:\$ 31.76	20.46
GROUP 5:\$ 39.93	20.46
ZONE B (25-45 miles from center of listed cit per hour to Zone A rates. ZONE C (over 45 miles from centr of listed ci	

\$1.00 per hour to Zone A rates.

*Zone pay will be calculated from the city center of the following listed cities:

BELLINGHAM	CENTRALIA	RAYMOND	OLYMPIA
EVERETT	SHELTON	ANACORTES	BELLEVUE
SEATTLE	PORT ANGELES	MT. VERNON	KENT
TACOMA	PORT TOWNSEND	ABERDEEN	BREMERTON

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 - ""A-frame or Hydralift"" trucks and Boom trucks or similar equipment when ""A"" frame or ""Hydralift"" and Boom truck or similar equipment is used; Buggymobile; Bulk Cement Tanker; Dumpsters and similar equipment, Tournorockers, Tournowagon, Tournotrailer, Cat DW series, Terra Cobra, Le Tourneau, Westinghouse, Athye Wagon, Euclid Two and Four-Wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump Trucks, side, end and bottom dump, including semi-trucks and trains or combinations thereof with 16 yards to 30 yards capacity: Over 30 yards \$.15 per hour additional for each 10 yard increment; Explosive Truck (field mix) and similar equipment; Hyster Operators (handling bulk loose aggregates); Lowbed and Heavy Duty Trailer; Road Oil Distributor Driver; Spreader, Flaherty Transit mix used exclusively in heavy construction; Water Wagon and Tank Truck-3,000 gallons and over capacity

GROUP 2 - Bulllifts, or similar equipment used in loading or unloading trucks, transporting materials on job site; Dumpsters, and similar equipment, Tournorockers, Tournowagon, Turnotrailer, Cat. D.W. Series, Terra Cobra, Le Tourneau, Westinghouse, Athye wagon, Euclid two and four-wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump trucks, side, end and bottom dump, including semi-trucks and trains or combinations thereof with less than 16 yards capacity; Flatbed (Dual Rear Axle); Grease Truck, Fuel Truck, Greaser, Battery Service Man and/or Tire Service Man; Leverman and loader at bunkers and batch plants; Oil tank transport; Scissor truck; Slurry Truck; Sno-Go and similar equipment; Swampers; Straddler Carrier (Ross, Hyster) and similar equipment; Team Driver; Tractor (small, rubber-tired)(when used within Teamster jurisdiction); Vacuum truck; Water Wagon and Tank trucks-less than 3,000 gallons capacity; Winch Truck; Wrecker, Tow truck and similar equipment

GROUP 3 - Flatbed (single rear axle); Pickup Sweeper; Pickup Truck. (Adjust Group 3 upward by \$2.00 per hour for onsite work only)

GROUP 4 - Escort or Pilot Car

GROUP 5 - Mechanic

HAZMAT PROJECTS

Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows: LEVEL C: +\$.25 per hour - This level uses an air purifying respirator or additional protective clothing. LEVEL B: +\$.50 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical ""splash suit."" LEVEL A: +\$.75 per hour - This level utilizes a fullyencapsulated suit with a self-contained breathing apparatus or a supplied air line.

TEAM0690-004 01/01/2019

ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA COUNTIES

Rates

Fringes

Truck drivers: (AREA 1: SPOKANE ZONE CENTER: Adams, Chelan, Douglas, Ferry, Grant, Kittitas, Lincoln, Okanogan, Pen Oreille, Spokane, Stevens, and Whitman Counties

AREA 1: LEWISTON ZONE CENTER:

Asotin, Columbia, and Garfield Counties		
AREA 2: PASCO ZONE CENTER: Benton, Franklin, Walla Walla and Yakima Counties) AREA 1:	22.01	15 40
GROUP 1\$		17.40
GROUP 2\$		17.40
GROUP 3\$	26.68	17.40
GROUP 4\$	27.01	17.40
GROUP 5\$	27.12	17.40
GROUP 6\$	27.29	17.40
GROUP 7\$	27.82	17.40
GROUP 8\$		17.40
AREA 2:		
GROUP 1\$	26.05	17.40
GROUP 2\$		17.40
GROUP 3\$		17.40
GROUP 4\$		17.40
GROUP 5\$		17.40
		17.40
GROUP 6\$		
GROUP 7\$		17.40
GROUP 8\$	30.10	17.40

Zone Differential (Add to Zone 1 rate: Zone 1 + \$2.00)

BASE POINTS: Spokane, Pasco, Lewiston
Zone 1: 0-45 radius miles from the main post office.
Zone 2: Outside 45 radius miles from the main post office

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Escort Driver or Pilot Car; Employee Haul; Power Boat Hauling Employees or Material

GROUP 2: Fish Truck; Flat Bed Truck; Fork Lift (3000 lbs. and under); Leverperson (loading trucks at bunkers); Trailer Mounted Hydro Seeder and Mulcher; Seeder & Mulcher; Stationary Fuel Operator; Tractor (small, rubber-tired, pulling trailer or similar equipment)

GROUP 3: Auto Crane (2000 lbs. capacity); Buggy Mobile & Similar; Bulk Cement Tanks & Spreader; Dumptor (6 yds. & under); Flat Bed Truck with Hydraullic System; Fork Lift (3001-16,000 lbs.); Fuel Truck Driver, Steamcleaner & Washer; Power Operated Sweeper; Rubber-tired Tunnel Jumbo; Scissors Truck; Slurry Truck Driver; Straddle Carrier (Ross, Hyster, & similar); Tireperson; Transit Mixers & Truck Hauling Concrete (3 yd. to & including 6 yds.); Trucks, side, end, bottom & articulated end dump (3 yards to and including 6 yds.); Warehouseperson (to include shipping & receiving); Wrecker & Tow Truck

GROUP 4: A-Frame; Burner, Cutter, & Welder; Service Greaser; Trucks, side, end, bottom & articulated end dump (over 6 yards to and including 12 yds.); Truck Mounted Hydro Seeder; Warehouseperson; Water Tank truck (0-8,000 gallons)

GROUP 5: Dumptor (over 6 yds.); Lowboy (50 tons & under); Self- loading Roll Off; Semi-Truck & Trailer; Tractor with Steer Trailer; Transit Mixers and Trucks Hauling Concrete (over 6 yds. to and including 10 yds.); Trucks, side, end, bottom and end dump (over 12 yds. to & including 20 yds.); Truck-Mounted Crane (with load bearing surface either mounted or pulled, up to 14 ton); Vacuum Truck (super sucker, guzzler, etc.)

GROUP 6: Flaherty Spreader Box Driver; Flowboys; Fork Lift (over 16,000 lbs.); Dumps (Semi-end); Mechanic (Field); Semi- end Dumps; Transfer Truck & Trailer; Transit Mixers & Trucks Hauling Concrete (over 10 yds. to & including 20 yds.); Trucks, side, end, bottom and articulated end dump (over 20 yds. to & including 40 yds.); Truck and Pup; Tournarocker, DWs & similar with 2 or more 4 wheel-power tractor with trailer, gallonage or yardage scale, whichever is greater Water Tank Truck (8,001- 14,000 gallons); Lowboy(over 50 tons)

GROUP 7: Oil Distributor Driver; Stringer Truck (cable oeprated trailer); Transit Mixers & Trucks Hauling Concrete (over 20 yds.); Truck, side, end, bottom end dump (over 40 yds. to & including 100 yds.); Truck Mounted Crane (with load bearing surface either mounted or pulled (16 through 25 tons);

GROUP 8: Prime Movers and Stinger Truck; Trucks, side, end, bottom and articulated end dump (over 100 yds.); Helicopter Pilot Hauling Employees or Materials

Footnote A - Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in additon to the classification working in as follows:

LEVEL C-D: - \$.50 PER HOUR (This is the lowest level of protection. This level may use an air purifying respirator or additional protective clothing.

LEVEL A-B: - \$1.00 PER HOUR (Uses supplied air is conjunction with a chemical spash suit or fully encapsulated suit with a self-contained breathing apparatus.

Employees shall be paid Hazmat pay in increments of four(4) and eight(8) hours.

NOTE:

Trucks Pulling Equipment Trailers: shall receive \$.15/hour over applicable truck rate

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current

negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an

interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

> Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION"

PAGE LEFT BLANK INTENTIONALLY

APPENDIX B: WASHINGTON STATE WAGE RATES & BENEFIT CODE

Benefit Code Key for 4/9/2020

Note: Select View under *Risk Class to verify workers compensation insurance on your project. Use this tool to find and understand the insurance risk classifications to pay for the trade and occupations you are utilizing on your project. Workers' compensation risk classifications are determined by the nature of your project, nature of business or phase of construction.

County	Trade	Job Classification	Wage	Holiday	Overtime	Note	*Risk Class
Chelan	Brick Mason	Journey Level	\$50.44	<u>5A</u>	<u>1M</u>		<u>View</u>
Chelan	Carpenters	Acoustical Worker	\$47.37	<u>7E</u>	<u>4X</u>	<u>8N</u>	<u>View</u>
Chelan	Carpenters	Bridge, Dock And Wharf Carpenters	\$62.44	<u>7A</u>	<u>4C</u>		<u>View</u>
Chelan	Carpenters	Floor Layer & Floor Finisher	\$47.37	<u>7E</u>	<u>4X</u>	<u>8N</u>	<u>View</u>
Chelan	Carpenters	Form Builder	\$47.37	<u>7E</u>	<u>4X</u>	<u>8N</u>	<u>View</u>
Chelan	Carpenters	General Carpenter	\$47.37	<u>7E</u>	<u>4X</u>	<u>8N</u>	<u>View</u>
Chelan	Carpenters	Heavy Construction Carpenter	\$52.35	<u>7E</u>	<u>4X</u>	<u>9E</u>	<u>View</u>
Chelan	Carpenters	Scaffold/Shoring Erecting & Dismantling	\$52.35	<u>7E</u>	<u>4X</u>	<u>8N</u>	<u>View</u>
Chelan	Cement Masons	Journey Level	\$45.14	<u>7B</u>	<u>1N</u>		<u>View</u>
Chelan	Fabricated Precast Concrete Products	Journey Level	\$13.50		<u>1</u>		<u>View</u>
Chelan	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$13.50		<u>1</u>		<u>View</u>
Chelan	Fence Erectors	Fence Erector	\$38.59	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Fence Erectors	Fence Laborer	\$38.59	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>

Chelan	Flaggers	Journey Level	\$38.59	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Ironworkers	Journeyman	\$63.06	<u>7N</u>	<u>10</u>		<u>View</u>
Chelan	Laborers	Erosion Control Worker	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Air, Gas Or Electric Vibrating Screed	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Airtrac Drill Operator	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Ballast Regular Machine	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Batch Weighman	\$38.59	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Brick Pavers	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Brush Cutter	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Brush Hog Feeder	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Burner	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Caisson Worker	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Carpenter Tender	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Cement Dumper-paving	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Cement Finisher Tender	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Change House Or Dry Shack	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Chipping Gun (30 Lbs. And Over)	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Chipping Gun (Under 30 Lbs.)	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Choker Setter	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Chuck Tender	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Clary Power Spreader	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Clean-up Laborer	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>

Chelan	Laborers	Concrete Dumper/Chute Operator	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Concrete Form Stripper	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Concrete Placement Crew	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Concrete Saw Operator/Core Driller	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Crusher Feeder	\$38.59	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Curing Laborer	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Demolition: Wrecking & Moving (Incl. Charred Material)	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Ditch Digger	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Diver	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Drill Operator (Hydraulic, Diamond)	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Dry Stack Walls	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Dump Person	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Epoxy Technician	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Faller & Bucker Chain Saw	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Fine Graders	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Firewatch	\$38.59	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Form Setter	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Gabian Basket Building	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Gaurdrail Erector	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	General Laborer	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Grade Checker & Transit	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>

		Person					
Chelan	Laborers	Grinders	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Grout Machine Tender	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Groutmen (Pressure) Including Post Tension Beams	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Hazardous Waste Worker (Level A)	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Hazardous Waste Worker (Level B)	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Hazardous Waste Worker (Level C)	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	High Scaler	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Jackhammer	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Laserbeam Operator	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Maintenance Person	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Manhole Builder-Mudman	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Material Yard Person	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Motorman-Dinky Locomotive	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Nozzleman (Concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete & Rock, Sandblast, Gunite, Shotcrete, Water Blaster, Vacuum Blaster)	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Pavement Breaker	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Pilot Car	\$38.59	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Pipe Later Lead	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Pipe Layer/Tailor	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
--------	----------	----------------------------------	---------	-----------	-----------	-----------	-------------
Chelan	Laborers	Pipe Pot Tender	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Pipe Reliner	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Pipe Wrapper	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Pot Tender	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Powderman	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Powderman's Helper	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Power Jacks	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Railroad Spike Puller - Power	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Raker - Asphalt	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Re-timberman	\$42.30	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Remote Equipment Operator	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Rigger/Signal Person	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Rip Rap Person	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Rivet Buster	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Rodder	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Scaffold Erector	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Scale Person	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Sloper (Over 20")	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Sloper Sprayer	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Spreader (Concrete)	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Stake Hopper	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Stock Piler	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
L	1	1				L	

Chelan	Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Tamper (Multiple & Self- propelled)	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Toolroom Person (at Jobsite)	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Topper	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Track Laborer	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Track Liner (Power)	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Traffic Control Laborer	\$40.90	<u>7A</u>	<u>4V</u>	<u>9C</u>	<u>View</u>
Chelan	Laborers	Traffic Control Supervisor	\$40.90	<u>7A</u>	<u>4V</u>	<u>9C</u>	<u>View</u>
Chelan	Laborers	Truck Spotter	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Tugger Operator	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Tunnel Work-Guage and Lock Tender	\$42.40	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Tunnel Work-Guage and Lock Tender	\$42.40	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Vibrator	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Vinyl Seamer	\$41.09	<u>7A</u>	<u>4V</u>	<u>8Y</u>	View
Chelan	Laborers	Watchmen	\$35.20	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Welder	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Well Point Laborer	\$41.79	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Laborers	Window Washer/Cleaner	\$35.20	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>
Chelan	Landscape Construction	Landscape Construction/landscaping Or	\$35.20	<u>7A</u>	<u>4V</u>	<u>8Y</u>	<u>View</u>

		Planting Laborers					
Chelan	Landscape Construction	Landscape Operator	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Metal Fabrication (In Shop)	Fitter	\$15.04		<u>1</u>		<u>View</u>
Chelan	Metal Fabrication (In Shop)	Laborer	\$13.50		<u>1</u>		<u>View</u>
Chelan	Metal Fabrication (In Shop)	Machine Operator	\$13.50		<u>1</u>		<u>View</u>
Chelan	Metal Fabrication (In Shop)	Painter	\$13.50		<u>1</u>		<u>View</u>
Chelan	Metal Fabrication (In Shop)	Welder	\$13.50		<u>1</u>		<u>View</u>
Chelan	Millwright	Journey Level	\$66.83	<u>7E</u>	<u>4X</u>	<u>8N</u>	<u>View</u>
Chelan	Power Equipment Operators	Asphalt Plant Operators	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Assistant Engineer	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Barrier Machine (zipper)	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Batch Plant Operator: concrete	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Bobcat	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Brooms	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Bump Cutter	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment	Cableways	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

	Operators						
Chelan	Power Equipment Operators	Chipper	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Compressor	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Concrete Finish Machine - Laser Screed	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Conveyors	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Cranes friction: 200 tons and over	\$69.20	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$67.84	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$68.53	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$69.20	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment	Cranes: 45 Tons Through 99	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

	Operators	Tons, Under 150' Of Boom (including Jib With Attachments)					
Chelan	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
Chelan	Power Equipment Operators	Cranes: Friction cranes through 199 tons	\$68.53	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
Chelan	Power Equipment Operators	Cranes: through 19 tons with attachments, A-frame over 10 tons	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Crusher	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Deck Engineer/Deck Winches (power)	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Derricks, On Building Work	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	View
Chelan	Power Equipment Operators	Dozers D-9 & Under	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Drilling Machine	\$67.84	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

Chelan	Power Equipment Operators	Gradechecker/Stakeman	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Guardrail Punch	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Horizontal/Directional Drill Locator	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Horizontal/Directional Drill Operator	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Hydralifts/Boom Trucks Over 10 Tons	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Hydralifts/Boom Trucks, 10 Tons And Under	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	\$67.84	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Loaders, Plant Feed	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Loaders: Elevating Type Belt	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Locomotives, All	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Material Transfer Device	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	View

Power Equipment Operators	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$67.84	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Motor Patrol Graders	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Outside Hoists (Elevators And Manlifts), Air Tuggers, Strato	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	\$67.84	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Pavement Breaker	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Posthole Digger, Mechanical	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Power Plant	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Power Equipment Operators	Pumps - Water	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
	OperatorsPower Equipment OperatorsPower Equipment Operators	Operators\$0.50 Per Hour Over Mechanic)Power Equipment OperatorsMotor Patrol GradersPower Equipment OperatorsMucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or ShieldPower Equipment OperatorsOil Distributors, Blower Distribution & Mulch Seeding OperatorPower Equipment OperatorsOutside Hoists (Elevators And Manlifts), Air Tuggers, StratoPower Equipment OperatorsOverhead, Bridge Type Crane: 20 Tons Through 44 TonsPower Equipment OperatorsOverhead, Bridge Type: 100 Tons And OverPower Equipment OperatorsPavement BreakerOperatorsPavement BreakerOperatorsPavement BreakerOperatorsPile Driver (other Than Crane Mount)Power Equipment OperatorsPlant Oiler - Asphalt, CrusherPower Equipment OperatorsPosthole Digger, Mechanical OperatorsPower Equipment OperatorsPower Plant	Operators\$0.50 Per Hour Over Mechanic)\$67.16Power Equipment OperatorsMotor Patrol Graders\$67.16Power Equipment OperatorsMucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield\$67.16Power Equipment OperatorsOil Distributors, Blower Distribution & Mulch Seeding Operator\$63.17Power Equipment OperatorsOutside Hoists (Elevators And Manlifts), Air Tuggers, Strato\$66.05Power Equipment OperatorsOverhead, Bridge Type Crane: 20 Tons Through 44 Tons\$67.16Power Equipment OperatorsOverhead, Bridge Type: 100 Tons And Over\$67.84Power Equipment OperatorsOverhead, Bridge Type: 100 Tons And Over\$67.16Power Equipment OperatorsOverhead, Bridge Type: 45 Tons Through 99 Tons\$67.16Power Equipment OperatorsPavement Breaker\$63.17Power Equipment OperatorsPavement Breaker\$63.17Power Equipment OperatorsPlant Oiler - Asphalt, Crusher\$66.05Power Equipment OperatorsPlant Oiler - Asphalt, Crusher\$63.17Power Equipment OperatorsPosthole Digger, Mechanical \$63.17\$63.17Power Equipment OperatorsPower Plant\$63.17Power Equipment OperatorsPower Plant\$63.17Power Equipment OperatorsPower Plant\$63.17Power Equipment OperatorsPower Plant\$63.17	Operators\$0.50 Per Hour Over Mechanic)\$67.167APower Equipment OperatorsMotor Patrol Graders Tunnel Drill, Boring, Road Header And/or Shield\$67.167APower Equipment OperatorsOil Distributors, Blower Distribution & Mulch Seeding Operator\$63.177APower Equipment OperatorsOil Distributors, Blower Distribution & Mulch Seeding Operator\$66.057APower Equipment OperatorsOutside Hoists (Elevators And Manlifts), Air Tuggers, Strato\$66.577APower Equipment OperatorsOverhead, Bridge Type Crane: 20 Tons Through 44 Tons\$67.167APower Equipment OperatorsOverhead, Bridge Type: 100 Tons And Over\$67.847APower Equipment OperatorsOverhead, Bridge Type: 100 Tons And Over\$67.167APower Equipment OperatorsOverhead, Bridge Type: 100 Tons Through 99 Tons\$67.167APower Equipment OperatorsOverhead, Bridge Type: 45 Tons Through 99 Tons\$63.177APower Equipment OperatorsPavement Breaker Crane Mount)\$63.177APower Equipment OperatorsPile Driver (other Than Crane Mount)\$66.057APower Equipment OperatorsPosthole Digger, Mechanical S63.17\$63.177APower Equipment OperatorsPosthole Digger, Mechanical S63.17\$63.177APower Equipment OperatorsPower Plant Operators\$63.177APower Equipment OperatorsPower Plant Power Equipment\$6	Operators\$0.50 Per Hour Over Mechanic)Image: Constraint of the second	OperatorsS0.50 Per Hour Over Mechanic)Image: Constraint of the c

Chelan	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Rigger and Bellman	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Rigger/Signal Person, Bellman (Certified)	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Rollagon	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Roller, Other Than Plant Mix	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Roller, Plant Mix Or Multi- lift Materials	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Roto-mill, Roto-grinder	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Saws - Concrete	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Scrapers - Concrete & Carry All	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Service Engineers - Equipment	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Shotcrete/Gunite Equipment	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

Chelan	Power Equipment Operators	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$67.84	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$68.53	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Slipform Pavers	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Spreader, Topsider & Screedman	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Subgrader Trimmer	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Tower Bucket Elevators	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Tower Crane Up To 175' In Height Base To Boom	\$67.84	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	\$68.53	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	\$69.20	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Transporters, All Track Or Truck Type	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Trenching Machines	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>

Chelan	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Truck Crane Oiler/Driver Under 100 Tons	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Truck Mount Portable Conveyor	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Welder	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Wheel Tractors, Farmall Type	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Power Equipment Operators	Yo Yo Pay Dozer	\$66.57	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Sign Makers & Installers (Electrical)	Journey Level	\$75.25	<u>7F</u>	<u>1E</u>		<u>View</u>
Chelan	Sign Makers & Installers (Non-Electrical)	Journey Level	\$17.48		<u>1</u>		<u>View</u>
Chelan	Surveyors	Assistant Construction Site Surveyor	\$66.05	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Surveyors	Chainman	\$63.17	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Surveyors	Construction Site Surveyor	\$67.16	<u>7A</u>	<u>3K</u>	<u>8X</u>	<u>View</u>
Chelan	Traffic Control Stripers	Journey Level	\$47.68	<u>7A</u>	<u>1K</u>		<u>View</u>
Chelan	Truck Drivers	Asphalt Mix Over 20 Yards	\$46.42	<u>5D</u>	<u>1V</u>	<u>8M</u>	<u>View</u>
Chelan	Truck Drivers	Asphalt Mix To 20 Yards	\$46.05	<u>5D</u>	<u>1V</u>	<u>8M</u>	<u>View</u>
Chelan	Truck Drivers	Dump Truck	\$46.05	<u>5D</u>	<u>1V</u>	<u>8M</u>	<u>View</u>
Chelan	Truck Drivers	Dump Truck & Trailer	\$46.42	<u>5D</u>	<u>1V</u>	<u>8M</u>	<u>View</u>
Chelan	Truck Drivers	Other Trucks	\$45.94	<u>5D</u>	<u>1V</u>	<u>8M</u>	<u>View</u>
Chelan	Truck Drivers - Ready Mix	Transit Mixers 20 yards and under	\$46.42	<u>5D</u>	<u>1V</u>	<u>8M</u>	<u>View</u>

	Chelan	Truck Drivers -	Ready Mix	Transit Mixers over 20 yards	\$46.75	<u>5D</u>	<u>1V</u>	<u>8M</u>	<u>View</u>
--	--------	-----------------	-----------	------------------------------	---------	-----------	-----------	-----------	-------------

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 fourten 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.
 - S. 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 hours worked on holidays and 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.
 - 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.
 - C. All hours worked on Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at two 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.
 - G. 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 hours worked on Sunday shall be paid at two 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.
 - 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.
 - W. 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, tenhour 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 first eight (8) hours worked on the fifth day shall be paid at one and one-half times the hourly rate of wage. All other hours worked on the fifth, sixth, and seventh days and on 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.

- A. 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 shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. Hours worked over twelve hours (12) in a single shift and all work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay. Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar (\$1.00) per hour for all hours worked that shift. The employer shall have the sole discretion to assign overtime work to employees. Primary consideration for overtime work shall be given to employees regularly assigned to the work to be performed on overtime situations. 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.
- C. 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 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 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.

Overtime Codes Continued

- 3. E. All hours worked Sundays and holidays shall be paid at double the hourly rate of wage. Each week, once 40 hours of straight time work is achieved, then any hours worked over 10 hours per day Monday through Saturday shall be paid at double the hourly wage rate.
 - 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.

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.
- B. All hours worked over twelve (12) hours per day and all hours worked on 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.

4

Overtime Codes Continued

4. 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 fourday, ten hour work week, and Saturday shall be paid at one and one half $(1\frac{1}{2})$ 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.

- F. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 20% over the hourly rate of wage. All hours worked on 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.
- 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.
- H. 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.
- 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.
- 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.

Overtime Codes Continued

- 4. 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.
 - M. All hours worked on Sunday and Holidays shall be paid at double the hourly rate. Any employee reporting to work less than nine (9) hours from their previous quitting time shall be paid for such time at time and one-half times the hourly rate.
 - N. 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, and all work performed between the hours of midnight (12:00 AM) and eight AM (8:00 AM) every day shall be paid at double the hourly rate of wage.
 - O. All hours worked between midnight Friday to midnight Sunday shall be paid at one and one-half the hourly rate of wage. After an employee has worked in excess of eight (8) continuous hours in any one or more calendar days, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of six (6) hours or more. All hours worked on Holidays shall be paid at double the hourly rate of wage.
 - P. All hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage.
 - Q. The first four (4) 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 hours worked over twelve (12) hours Monday through Saturday shall be paid at double the hourly rate. All hours worked on Sundays and holidays shall be paid at double the hourly rate.
 - R. All hours worked on Saturdays 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 on Sundays and holidays shall be paid at double the hourly rate of wage.
 - S. 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.
 - T. The first two (2) hours of overtime for hours worked Monday-Friday 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 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. For work on Saturday which is scheduled prior to the end of shift on Friday, the first six (6) hours work shall be paid at one and one-half times the hourly rate of wage, and all hours over (6) shall be paid double the hourly rate of wage. For work on Saturday which was assigned following the close of shift on Friday, all work shall be paid at double the hourly rate of wage.
 - 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.

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 ¹/₂) 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.

W. 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.

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.

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.

Overtime Codes Continued

4. Y. 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 shift, and all work on Saturdays shall be paid at time and one-half the straight time rate. All work performed after 6:00 pm Saturday to 6:00 am Monday and holidays shall be paid at double the straight time rate of pay.

Any shift starting between the hours of 6:00 pm and midnight shall receive an additional one dollar (\$1.00) per hour for all hours worked that shift.

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.

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).
 - J. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Eve Day, And Christmas Day (7).
 - 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).

Holiday Codes Continued

- 5. 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).
 - T. Paid Holidays: New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, Christmas Day, And The Day Before Or After Christmas (9).
 - 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. A. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).
 - E. Paid 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 a Half-Day On Christmas Eve Day. (9 1/2).
 - 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).
 - I. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, And Christmas Day (7).
 - 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.

Holiday Codes Continued

- 7. 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.
 - 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.
 - M. Paid Holidays: New Year's Day, The Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, And the Day after or before Christmas Day (10). 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.

Holiday Codes Continued

- 7. 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.
 - R. Paid Holidays: New Year's Day, the day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day after or before Christmas Day (10). If any of the listed holidays fall on Saturday, the preceding Friday shall be observed as the holiday. If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.
 - 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.
 - T. Paid Holidays: New Year's Day, the Day after or before New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and The Day after or before Christmas Day. (10). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.
 - 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, President's Day, Independence Day, Memorial 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.
- 15. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the 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.
 - B. Holidays: New Year's Day, Martin Luther King Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day. (9)
 - C. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the day before Christmas Day and Christmas Day. (8)

Holiday Codes Continued

- 15. D. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, and the day after Christmas.
 - E. Holidays: the day before New Years's Day, New Year's Day, Martin Luther King, Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day. (12)

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.
 - P. 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.
 - Q. 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.
 - 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.
 - 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.

Note Codes Continued

8. 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.
- 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.

APPENDIX C: FINAL GEOTECHNICAL REPORT

FINAL GEOTECHNICAL REPORT Mill Creek Fish Passage Project Chelan County, Washington

PROJECT NO. 14-095 March 23, 2020



Prepared for:

Natural Systems Design



CHELAN COUNTY Natural Resources Department



Geotechnical & Earthquake Engineering Consultants

TABLE OF CONTENTS

1.0 PROJECT DESCRIPTION	1
2.0 SITE DESCRIPTION	1
3.0 GEOLOGY	2
4.0 FIELD EXPLORATION	2
5.0 SUBSURFACE CONDITIONS	3
5.1 Soils	
5.2 GROUNDWATER	
6.0 GEOTECHNICAL DESIGN RECOMMENDATIONS	5
6.1 SITE SEISMICITY	5
6.1.1 Seismic Design Parameters	
6.1.2 Liquefaction Potential	
6.2 LATERAL AND VERTICAL EARTH PRESSURES	
6.3 LATERAL RESISTANCE	
6.4 BEARING RESISTANCE.	
6.6 Uplift Resistance	
6.8 EARTHWORKS	
6.8.1 Culvert and Headwall Backfill	
6.8.2 Permanent Cut and Fill Slopes	
7.0 CONSTRUCTION CONSIDERATIONS	
7.1 TEMPORARY EXCAVATION SLOPES	
7.2 DEWATERING	
7.3 MATERIAL REUSE	
7.4 SUBGRADE PROTECTION	
7.5 Obstructions	
8.0 ADDITIONAL SERVICES	
9.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS	
10.0 REFERENCES	

LIST OF TABLES

TABLE

Page No.

Table 1 Spread Footing Sliding Resistance	8
Table 2 Recommended Spread Footing Spring Constants	8

LIST OF FIGURES (follows text)

Figure 1 Site Vicinity Map
Figure 2A Site and Exploration Plan – Existing Condition
Figure 2B Site and Exploration Plan – Proposed Improvements
Figure 3 Generalized Subsurface Profile – Culvert Alignment
Figure 4A Nominal Bearing Resistance: Spread Footings (Settlement Limited to 1/2-inch)
Figure 4B Nominal Bearing Resistance: Spread Footings (Settlement Limited to 1-inch)

APPENDIX A: FIELD EXPLORATIONS

- Figure A-1 Terms and Symbols for Boring and Test Pit Logs
- Figure A-2 Log of Test Boring BH-1-14

FINAL GEOTECHNICAL REPORT MILL CREEK FISH PASSAGE PROJECT MT. HOME RANCH ROAD CHELAN COUNTY, WASHINGTON

1.0 PROJECT DESCRIPTION

Chelan County plans to replace an existing concrete box culvert that conveys Mill Creek beneath Mountain Home Ranch Road with a new steel arch structural plate culvert. The proposed culvert is expected to be approximately 50 feet in length, 20³/₄ feet in width, and 12 feet in height, with at least 2¹/₂ feet of soil cover. The proposed culvert will be constructed beneath the existing Mountain Home Ranch Road alignment using cut-and-cover construction methods. A temporary detour for traffic on Mountain Home Ranch Road is planned on the upstream side of the existing culvert. Our understanding of the project is based on our review of 90% design plans prepared by Natural Systems Design, dated February 28, 2020.

2.0 SITE DESCRIPTION

The following site description is based in part on a visual reconnaissance of the project area on April 23, 2014. The project site is located in the southern portion of Chelan County, Washington, approximately 4 miles south of the intersection of U.S. Highway 2 and State Route 97 (Figure 1, Vicinity Map). From its summit at Blewett Pass, State Route 97 (SR-97) eventually descends into the canyon of Peshastin Creek and follows it northward on its way to the confluence with the Wenatchee River. Mountain Home Ranch Road branches west off SR-97 approximately 0.1 mile north of the existing Mill Creek culvert location, which is in turn approximately 200 feet upstream of the confluence with Peshastin Creek. The site is located in the SE ¼ of Section 6, Township 23N, Range 18E.

The topography around the existing culvert location is variable and appears to be disturbed from its original, natural condition by the construction of Mountain Home Ranch Road and / or other land modification. Mounds of boulders are abundant in the area, some of them many feet in diameter. Off the alluvial valley floors of Mill Creek and Peshastin Creek, the topography rapidly becomes very steep with bedrock outcrops and cliffs visible in many locations. The streambed of Mill Creek is also relatively steep and consists mostly of a series of boulder pools alternating with small cascades and riffles. The Mill Creek drainage is in the semi-arid region on the eastern (lee) side of the Stuart Range of the Cascade Mountains. The hillsides support a

growth of conifers, while the valley bottoms have both coniferous and deciduous trees with generally arid-climate brush understory and grasses. Several rural residential structures and outbuildings are located on the flood plain of Peshastin Creek. The nearest of these is located north of Mill Creek and west of Mountain Home Ranch Road and is readily visible from the existing culvert location. Agriculture and animal husbandry are also common in the area.

Both communication and electrical lines are supported above ground on timber poles on the west side of Mountain Home Ranch Road. It appears that the proposed temporary detour alignment may conflict with the pole on the south side of Mill Creek and may require temporary re-location of the pole for construction of the detour.

3.0 GEOLOGY

The project site is located in the southern portion of Chelan County, on the west side of the Peshastin Creek watershed, a north-draining tributary of the Wenatchee River. Mill Creek, a tributary of Peshastin Creek, drains a watershed with headwaters in the Stuart Range west of the project site. According to both Tabor et al. (1987) and Whetten (1980), the valley bottoms of both Mill Creek and Peshastin Creek contain Quaternary-age alluvium, with the surrounding valley walls consisting of sedimentary sandstone, shale and conglomerate of the Chumstick Formation. Whetten (1980) maps a right lateral strike-slip fault following the general north-south trend of Peshastin Creek, indicating that the canyon has cut along the lineament of the fault trace. The fault is mapped as hidden below the valley alluvium with the exception of an exposure of the fault trace in the Chumstick Formation on the eastern canyon wall of Peshastin Creek, roughly opposite the project location. The fault is not currently thought to be active (WSDOT, 2013).

The abundant boulders in the immediate vicinity of the project site are, for the most part, not derived from the Chumstick Formation, as their lithologies are igneous and metamorphic (not sedimentary) in nature. The parent material of these boulders appears to be the Stuart batholith and surrounding rock to the west of the site. This implies considerable transport distance.

4.0 FIELD EXPLORATION

The subsurface exploration program consisted of drilling one test boring as near as practical to the likely location of the southern abutment of the new proposed culvert as shown on the Site and Exploration Plans (Figures 2A and 2B). The test boring was drilled using a BK-81 truck-

mounted drill rig owned and operated by Holocene Drilling of Puyallup, Washington, under a subcontract to PanGEO. The test boring was designated BH-1-14 and was advanced to a maximum depth of 25³/₄-feet below the ground surface on April 28, 2014 using mud rotary drilling methods.

Standard Penetration Tests (SPT) were performed at 5-foot depth intervals using a 2-inch diameter split-spoon sampler. The sampler was driven into the soil a distance of 18-inches below the bottom of the auger using a 140-pound auto-trip safety hammer falling a distance of 30 inches for each strike, in general accordance with ASTM D-1586, Standard Test Method for Penetration Test and Split Barrel Sampling of Soils. The number of blows required for each 6-inch increment of sampler penetration was recorded. The number of blows required to achieve the last 12-inches of sample penetration is defined as the SPT N-value.

The boring was logged by a geotechnical engineer from PanGEO. The soil samples were described using the system outlined in Figure A-1 in Appendix A. A summary boring log is included as Figure A-2. The stratigraphic contacts indicated on the boring log represent the approximate depth to boundaries between soil units. Actual transitions between soil units may be more gradual or occur at different elevations. The descriptions of groundwater conditions and depths are likewise approximate.

5.0 SUBSURFACE CONDITIONS

5.1 Soils

The site soils, as encountered in the test boring mainly consisted of basalt gravel in a silt and clay matrix, which is not consistent with the sandstone bedrock of the Chumstick Formation mapped near the project site. It is also important to note that the drilling depth and sampling were limited by the large diameter material (cobbles and boulders) encountered in the test boring. The standard penetration test (SPT) blowcounts obtained are likely affected by the gravels, cobbles, and boulders encountered during drilling and therefore may not be representative of the relative density as the blowcounts are likely overstated.

The following is a generalized description of the soils encountered in our test borings. A generalized subsurface profile is included in Figure 3 of this report.

Unit I, Fill / Re-worked Alluvium (Hf): Mountain Home Ranch Road bed was underlain by very dense, dark grey, fine to coarse grained basalt gravel with dark brown silt and clay matrix. In general, the material appeared to consist mainly of basalt with medium to high plasticity fines and scattered quartz. This layer is interpreted as fill or re-worked alluvium which appears to be disturbed from its original, natural condition by the construction of Mountain Home Ranch Road and / or dredge or placer mine workings in the alluvial valley bottoms, or both. This unit extended to a depth of roughly 12- to 13-feet below the surface at the location of test boring BH-1-14.

Unit IIa, Colluvium / Mass Wasting Deposit (Hc /Hls): Underlying the fill / re-worked alluvium, test boring BH-1-14 encountered medium dense, dark grey, clayey basalt gravel with a grey and tan clay and silt matrix. This soil unit was characterized by its medium to highly plastic fines, which appeared weathered with white and reddish mottles. This layer is interpreted as Colluvium / Mass Wasting deposits that were most likely deposited as a result of a large, prehistoric mass wasting event. This unit is approximately 6- to 7-feet thick.

Unit IIb, Colluvium / Mass Wasting Deposit (Hc /Hls): Underlying the clayey basalt gravel, we encountered very dense, dark grey, basalt gravels, cobbles, and bounders with some fines. This soil unit was characterized by its very dense / massive state, soil cuttings and extremely difficult drilling action. This is the deepest soil unit encountered in our test boring due to practical refusal on a very large basalt boulder, or possibly bedrock, at approximately 26 feet below the ground surface.

5.2 GROUNDWATER

Groundwater appeared to be perched above the clayey gravel layer, which roughly coincided with the thalweg of the creek. It should be noted that the groundwater level could not be accurately measured due to the wet (mud) drilling method and coarse grained nature of the soils. Groundwater is expected to fluctuate closely with the flow levels in the creek.

6.0 GEOTECHNICAL DESIGN RECOMMENDATIONS

6.1 SITE SEISMICITY

The subject site is located along the eastern margin of the Cascade Range where it joins with the Columbia Plateau Basalt province. This area is not as seismically active as is the area west of the Cascades, but does experience seismic activity. The project area is situated in an area that may be associated with the Yakima Fold Belt, or an extension of Stuart Range. These folds began to develop originally in the late Miocene and deformation may continue into the present day. Seismicity on the Columbia Plateau tends to be generally shallow and associated with thrust faults along the north limbs of the anticlinal structures.

Seismicity in the fold belt is generally limited to micro-earthquake swarms that may contain up to 100 individual events in a limited time frame. These occur at shallow depths, normally 3 to 5 kilometers (Tillson, 1989). These events rarely exceed 3.5 in magnitude. Concentrations of swarms have occurred in the area of the Saddle Mountains on the north margin of the Pasco Basin, and in the Walla Walla area. One of the most active areas for shallow earthquake swarms is along the north side of the Whiskey Dick/Frenchman Hills anticline, located approximately 50 miles southeast of the project area. This structure is apparently truncated by the southeast trending cross-structure of the Naneum Ridge anticline.

The largest historical earthquake recorded to date in Washington, with a magnitude of approximately 7.3, occurred on December 14, 1972 in the northern Cascade Mountains. Some recent thinking suggests that this event may have taken place on a postulated Chelan Seismic Zone (Crider and others, 2003), which is located about 45 miles northwest of the Colockum drainage.

6.1.1 Seismic Design Parameters

For seismic design, an acceleration coefficient of 0.17g is recommended per the current acceleration map in AASHTO (2017). The recommended acceleration coefficient is based on expected ground motion at the project site that has a 7 percent probability of exceedance in a 75-year period (approximately 1000-year return period).

Design response spectra presented in AASHTO (2017) are considered appropriate for seismic design of the proposed culvert. A horizontal response spectral acceleration coefficient at a

period of 0.2 seconds (S_S) is 0.40. The horizontal response spectral acceleration coefficient at a period of 1.0 seconds (S_1) is 0.14.

The soils at the site are considered Site Class C, with associated site factors F_{pga} , F_a and F_v equal to 1.20, 1.20 and 1.66, respectively. The sites are therefore in Seismic Performance Zone 2.

6.1.2 Liquefaction Potential

Simplified screening was used to assess the liquefaction susceptibility of the site soils in accordance with 6.4.2.1 of the Geotechnical Design Manual (WSDOT, 2012b). Based on our analyses, liquefaction is not expected to develop at the site under the design earthquake conditions due to the sufficiently high SPT-blowcounts in the alluvial valley deposits and the relatively low peak ground acceleration of the design event. Therefore, no special design considerations are recommended regarding liquefaction.

6.2 LATERAL AND VERTICAL EARTH PRESSURES

We understand that the headwalls will be constructed on both ends of the proposed culvert. The headwalls may consist of cast-in-place concrete wall, or gravity walls using precast concrete blocks. The headwalls may be supported conventional footings. The footings should be embedded sufficiently deep to mitigate the risk of erosion and scouring. Recommendations for footings outlined in Sections 6.3 and 6.4 of this report are also applicable for headwall footings.

If a joint is provided at the culvert headwall so that the headwall wall is free to deflect slightly, active pressures can be used in design of the headwalls. An equivalent fluid pressure of 35 pounds per cubic foot (pcf) may be used to calculate lateral earth pressures on the abutments. This equivalent fluid pressure does not include live load surcharge. A lateral earth pressure coefficient, K_A , of 0.28 may be used to calculate the lateral load due to surcharge.

If culvert headwalls are fixed against lateral deflection, at-rest pressures will be appropriate for design. An equivalent, at-rest fluid pressure of 55 pcf may be used to calculate at-rest passive earth pressures on the abutments. This equivalent fluid pressure does not include live load surcharge. An at-rest lateral earth pressure coefficient, K_0 , of 0.44 may be used to calculate the lateral load due to surcharge.

The culvert structure should also be designed for vertical surcharges such as soil cover and vehicle/traffic loads. The weight of the soil cover should be estimated based on a soil unit weight of 130 pounds per cubic foot (pcf). In addition, a minimum uniform vertical pressure of 250 psf should be included to account for the traffic loads.

The headwalls should also be designed for traffic surcharge. A uniform lateral pressure of 80 psf is considered adequate to account for the traffic loads for wall design.

The seismic earth pressure is computed according to the Mononobe-Okabe method described in the LRFD Bridge Design Specifications (AASHTO, 2017). The walls are assumed free to move and to develop the active earth pressure conditions during a seismic event. For this project we recommend that the seismic earth pressure increment be taken as 6H psf, where H is the height of the soil behind the structure. The seismic earth pressure increment is in addition to the active static earth pressure, and is in a trapezoidal distribution, applied at 0.6H from the bottom of the pressure distribution.

The above lateral earth pressures assume that the new structures are backfilled with good quality, granular material such as Gravel Backfill for Pipe Zone Bedding, Gravel Borrow or Gravel Backfill for Walls per the *Standard Specifications* (WSDOT, 2018) within 5 feet of the structures. Beyond 5 feet of the proposed structures, the backfill may consist of Select Borrow or on-site soils, provided that the on-site soils can be properly compacted to meet the project specifications.

6.3 LATERAL RESISTANCE

Resistance to lateral loads on the spread footings may be resisted by passive earth pressure developed against the embedded portion of the foundation system and by frictional resistance between the bottom of the foundation and the supporting subgrade soils. The recommended values in Table 1 are considered nominal values. The base friction coefficient assumes concrete cast directly against soil or directly atop a rat slab. The passive pressure assumes foundations are backfilled with properly compacted structural fill.
	°P-	cuu i ooung shung i	tesistanee	
Load Case	Base Friction Coefficient	Base Friction Resistance Factor	Passive Pressure	Passive Resistance
				Factor
Service	0.65	1.0	200 psf	1.0
Strength	0.65	0.8	200 psf	0.8
Extreme	0.65	1.0	200 psf	1.0

Table 1Spread Footing Sliding Resistance

6.4 BEARING RESISTANCE

It is our understanding that new spread footings would bear approximately at the thalweg elevation of Mill Creek. Based on this depth of bearing, the foundations may be proportioned using the nominal bearing resistances provided in Figures 4A and 4B.

The nominal bearing resistance at the service limit state was developed to limit the foundation settlement to less than ¹/₂-inch and 1-inch in Figures 4a and 4b, respectively. Differential settlement between the two headwalls is not expected to exceed the total settlement. All settlement is expected to occur rapidly, as loads are applied.

We recommend that at least one foot of well compacted, coarse bedding material be placed below the footings as a levelling course, and to provide a firm uniform support surface for the structure, and to provide a firm working surface.

Spring Constant for Spread Footings - Recommended parameters for computing spring constants for spread footing foundations are shown in Table 2, below. The shear modulus may be linearly interpolated for intermediate strain values.

Recommended Spread Footing Spring Constants					
Strain	G (ksf)	ν			
0.02%	1500	0.35			
0.2%	500	0.35			

Table 2Recommended Spread Footing Spring Constants

6.6 UPLIFT RESISTANCE

The proposed fish passage structure is an open-bottom culvert. Therefore, buoyancy (uplift) forces are expected to be self-relieving. As such, design considerations for the uplift resistance of the culvert are not required.

6.7 CORROSION POTENTIAL

Corrosion potential and the impact to proposed metal structures should been evaluated by the structure designers in accordance with Chapter 8 of the Hydraulics Manual (WSDOT, 2019). Section 8-2.3.3 of the manual indicates the steel structural plate culverts are not permitted in salt water of Corrosion Zone III. Based on our review of Figure 8-7 in section 8.4 of the Hydraulics, manual, the project site is mapped in Corrosion Zone I.

The current design calls for a steel arch structural plate culvert bearing on concrete footings with concrete stem walls. As such, the proposed structure design meets the requirements for design for Corrosion Zone I, as described in section 8-4 (WSDOT, 2019).

In addition, the proposed fish passage structure is planned to bear in colluvium soils below existing fills along the entire structure. The fill soils will be removed during the excavation and the structure will be backfilled on the sides and immediately above the culvert with Gravel Backfill for Pipe Zone Bedding (Article 9-03.12(1), WSDOT, 2018). Therefore, it is our opinion that no special corrosion protection design considerations are necessary for the proposed fish passage structure.

6.8 EARTHWORKS

6.8.1 Culvert and Headwall Backfill

It is our understanding that, within 5 feet of the culvert and headwalls, the backfill will consists of imported, free draining granular material, such as Gravel Backfill for Pipe Zone Bedding (Article 9-03.12(1), WSDOT, 2018). Away from the culvert and headwalls, the fill may consist of Select Borrow or on-site soils, provided that the on-site soils can be adequately compacted to meet the project specifications.

The backfill should be moisture conditioned to within about 3 percent of optimum moisture content, placed in loose, horizontal lifts less than about a foot in thickness, and systematically compacted to a dense and relatively unyielding condition and to at least 95 percent of the maximum dry density, as determined using test method ASTM D-1557 (Modified Proctor). Within 5 feet of the walls, the backfill should be compacted with hand-operated equipment to at least 90 percent of the maximum dry density. Inadequate compaction of the backfill may lead to significant differential settlement of the pavement at the soil-culvert transition.

6.8.2 Permanent Cut and Fill Slopes

We recommend that permanent cut and fill slopes, where applicable, be constructed no steeper than 2H:1V (horizontal:vertical). For fill slopes constructed at 2H:1V or flatter, comprised of structural fill soils placed and compacted as recommended in this report, we anticipate that adequate factors of safety against global failure will be maintained.

Prior to placing compacted fill against an existing slope, all loose/soft soils must first be removed from the slope face. In addition, adequate benching must be maintained for existing slopes with angles steeper than 3H:1V. The removal of loose surficial soils is typically accomplished during the benching process, as fill placement progresses upwards. Each bench should be at least 6 feet wide and may be about 2 to 3 feet high.

Measures should be taken to prevent surficial instability and/or erosion. For a permanent fill slope, this can be accomplished by conscientious compaction of the embankment fills all the way out to the slope face, by maintaining adequate drainage, and by planting the slope face as soon as possible following construction. To achieve the specified relative compaction at the slope face, it may be necessary to overbuild the slopes several feet, and then trim back to design finish grade. In our experience, compaction of slope faces by "track-walking" is generally not as effective.

7.0 CONSTRUCTION CONSIDERATIONS

We anticipate earthwork operations will consist of removing the existing culvert, excavating to achieve the replacement culvert subgrade elevation, installing the culvert and backfilling to restore the road profile.

7.1 TEMPORARY EXCAVATION SLOPES

The inclination of temporary excavation slopes is dependent on many variables, including the depth of the excavation, the soil type and density, the presence of groundwater seepage, construction timing, weather conditions, and surcharge loads from adjacent structures, soil stockpiles, roads and equipment. Because of the many variables involved, the inclination of temporary excavation slopes should be evaluated during construction, as the actual soil conditions are exposed.

Temporary excavations should be performed in accordance with Part N of WAC (Washington Administrative Code) 296-155. The contractor is responsible for maintaining safe excavation slopes and/or shoring. For preliminary planning purposes, the temporary excavations may be sloped as steep as 1½H:1V. During wet weather, the cut slopes may need to be flattened to reduce potential erosion. In areas where excessive sloughing, groundwater seepage or unstable soils conditions are encountered, a shallower temporary slope inclination or shoring may be needed.

We anticipate the maximum depth of excavations for the culvert installation to be about 18 feet deep. To limit the areal extent of the temporary excavation, the contractor may install an excavation shoring system to support the excavation. The selection and design of the excavation shoring system should be the responsibility of the contractor.

The contractors should be aware that large cobbles and boulders are often present in colluvium and mass waiting deposits and may be encountered during excavation and/or installation of excavation shoring system.

7.2 DEWATERING

Groundwater will likely be encountered in excavations for the construction of the culvert and headwalls. Due to the coarse grained nature of the alluvial soils expected within the depths of excavation for the new structure, groundwater inflow may be significant. Large trash pumps or similar may be needed in order to control groundwater inflows. Groundwater seepage is also expected to be strongly dependent on the seasonal flow in Mill Creek.

7.3 MATERIAL REUSE

The soils underlying the site have a high fines content. These soils are moderately to highly moisture sensitive, and will become disturbed and soft when exposed to inclement weather conditions. In our opinion, the site soils probably should not be used in wet weather conditions. However, if the on-site soils can be properly moisture conditioned and compacted to meet the project specifications, the on-site soils may be re-used to backfill areas that are located at least 5 feet away from the proposed culvert and headwalls.

7.4 SUBGRADE PROTECTION

Rat slabs (unreinforced concrete mats) may facilitate forming and construction of the new castin-place footing. Rat slabs may be used without alteration of the foundation design parameters provided in this report.

7.5 OBSTRUCTIONS

Both natural and man-made obstructions are potentially present in the subsurface and may consist of cobbles or boulders or wood debris in the alluvial deposits, as well as the existing culvert and its appurtenances. The Contractor should be prepared to remove or clear obstructions if encountered during new abutment construction. The contract special provisions should alert the contractor to the potential presence of boulders or wood debris and the possible need to remove obstructions during foundation excavations.

8.0 ADDITIONAL SERVICES

PanGEO should review the final project plans and specifications to confirm that our geotechnical recommendations were properly incorporated into the contract documents.

9.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

PanGEO, Inc. (PanGEO) prepared this report for Natural Systems Design and Chelan County. The recommendations contained in this report are based on a site reconnaissance, a subsurface exploration program, review of pertinent subsurface information, and our understanding of the project.

Variations in soil conditions may exist between the locations of the explorations and the actual conditions underlying the site. The nature and extent of soil variations may not be evident until construction occurs. If any soil conditions are encountered at the site that are different from those described in this report, PanGEO should be immediately notified to review the applicability of the recommendations presented herein. Additionally, PanGEO should also be notified to review the applicability of these recommendations if there are any changes in the project scope.

This report may be used only by the client and for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both off and on-site), or other factors including advances in our understanding of applied science, may change over time and could materially affect our findings. Therefore, this report should not be relied upon after 36 months from its issuance. PanGEO should be notified if the project is delayed by more than 36 months from the date of this report so that the applicability of the conclusions and recommendations presented herein may be evaluated considering the time lapse.

Within the limitations of scope, schedule and budget, PanGEO engages in the practice of geotechnical engineering and endeavors to perform its services in accordance with generally accepted professional principles and practices at the time this report and/or its contents was prepared. No warranty, express or implied, is made. The scope of PanGEO's work did not include environmental assessments or evaluations regarding the presence or absence of wetlands or hazardous or toxic substances in the soil, surface water or groundwater at this site. PanGEO does not practice or consult in the field of safety engineering. PanGEO does not direct the contractor's operations, and cannot be held responsible for the safety of personnel other than our own on the site; the safety of others is the responsibility of the contractor.

It is the client's responsibility to see that all parties to this project, including the designer, contractor, subcontractors, etc., are made aware of this report in its entirety. The use of information contained in this report for bidding purposes shall be at the contractor's sole option and risk. Any party other than the client who wishes to use this report shall notify PanGEO of such intended use and for permission to copy this report. Based on the intended use of the report, PanGEO may require that additional work be performed and that an updated report be reissued. Noncompliance with any of these requirements will release PanGEO from any liability resulting from the use this report.

PanGEO is pleased to support the design team and Chelan County with geotechnical engineering recommendations. If you have any questions regarding this report, please call (206) 262-0370.

Sincerely,

PanGEO, Inc.



Mar Weikel

Nicholas Weikel, E.I.T. Project Geotechnical Engineer

Principal Geotechnical Engineer

10.0 REFERENCES

- AASHTO, 2009. Guide Specifications for LRFD Seismic Bridge Design, 1st edition, American Association of State Highway and Transportation Officials. Washington, D.C.
- AASHTO, 2017. LRFD Bridge Design Specifications, 8th edition, American Association of State Highway and Transportation Officials. Washington, D.C.
- ASTM D1586-11, Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils, ASTM International, West Conshohocken, PA, 2011, <u>www.astm.org</u>
- ASTM D2488-17, Standard Practice for Description and Identification of Soils (Visual-Manual Procedures), ASTM International, West Conshohocken, PA, 2017, www.astm.org.
- Crider, J.G.; Crosson, R.S.; Brooks, J., 2003, The Chelan seismic zone, the great terrace and the December 1872 Washington State Earthquake (abst). Geological Society of America Abstracts with Programs, 2003.
- Tabor, R. W.; Frizzell, V. A., Jr.; Whetten, J. T.; Waitt, R. B.; Swanson, D. A.; Byerly, G. R.; Booth, D. B.; Hetherington, M. J.; Zartman, R. E., 1987, Geologic map of the Chelan 30minute by 60-minute quadrangle, Washington: U.S. Geological Survey Miscellaneous Investigations Series Map I-1661.
- Tillson, D.D., 1989. Geology and seismic considerations of the Hanford nuclear site. In Galster, R.W., chairman. Engineering Geology in Washington. Washington Division of Geology and Earth Sciences., p. 569-588.
- WSDOT, 2013. Geotechnical Design Manual (GDM), M 46-03, Washington State Department of Transportation
- WSDOT, 2014. Bridge Design Manual (BDM), M 23-50, Washington State Department of Transportation
- WSDOT, 2018. Standard Specifications for Road, Bridge and Municipal Construction, M 41-10, Washington State Department of Transportation
- WSDOT, 2019. Hydraulics Manual, M 23-03, Washington State Department of Transportation
- Whetten, J. T., 1980, Preliminary bedrock geologic map of the east half of the Chiwaukum 4 SW quadrangle, Chiwaukum graben, Washington: U.S. Geological Survey Open-File Report 80-616, 6 p., 1 plate. Geologic map: Plate, scale 1:24,000

FIGURES











oject shington	GENERALIZED				
	SUBSURFA	CE PROFILE			
	CULVERT A	ALIGNMENT			
	PROJECT NO. 14-095	FIGURE NO. 3			





APPENDIX A

FIELD EXPLORATIONS

APPENDIX A: FIELD EXPLORATIONS

Appendix A contains a summary of exploration methods and borehole log presenting the factual and interpretive results of our exploratory drilling program on the subject site. The descriptions of the materials encountered in the subsurface explorations are based on the soil samples extracted from the boring. The sample descriptions are augmented by observation of the drilling action and drill cuttings brought to the surface during field operations. The paragraphs below describe the field operations and sampling procedures used during the geotechnical field explorations.

FIELD EXPLORATIONS

The subsurface exploration program consisted of drilling one test boring as near as practical to the likely location of the southern abutment of the new proposed culvert as shown on the Site and Exploration Plan (Figures 2A & 2B). The test boring was drilled using a BK-81 truck-mounted drill rig owned and operated by Holocene Drilling of Puyallup, Washington, under a subcontract to PanGEO. The test boring was designated BH-1-14 and was advanced to a maximum depth of 25³/₄ feet below the ground surface on April 28, 2014 using mud rotary drilling methods.

The drilling was performed near the northern edge of the driving surface. Two representatives from Chelan County provided traffic control along Mountain Home Ranch Road. The location was chosen based on accessibility, and to avoid impacts to overhead and underground utilities. The boring met effective refusal on a large basalt boulder or possibly bedrock, short of the planned depth of 40 feet.

A representative of PanGEO logged the test boring. Soil samples were collected from selected intervals in the boring. The location of the boring was measured from existing site features and should be considered approximate.

SAMPLING METHODS

Standard penetration tests were taken at 5-foot depth intervals, starting at 5 feet below ground surface and continuing to the bottom of the boring. The number of blows to drive the sampler each 6 inches over an 18-inch interval was recorded and indicated on the boring log. The number of blows to drive the sampler the final 12 inches is termed the SPT resistance, or N-value, and is used to evaluate the strength and consistency/relative density of the soil. The

hammer used to perform SPT sampling was an automatic trip-release mechanism, which generally delivers a higher energy than a "standard" hammer equipped with a rope and cathead mechanism. The efficiency of the hammer mechanism is considered when evaluating the liquefaction potential of a soil. The SPT N-values reported on the borehole logs are field values, and are therefore not corrected for hammer efficiency, overburden stress or rod lengths.

An engineer from PanGEO was present throughout the field exploration program to observe the boring, assist in sampling, and to prepare a descriptive log of the exploration. Soils were classified in general accordance with the guidelines shown on Figure A-1. A summary boring log is included as Figure A-2. The stratigraphic contacts shown on the summary log represents the approximate boundaries between soil types; actual stratigraphic contacts encountered at other locations in the field may differ from the contact elevations shown on the logs, and may be gradual rather than abrupt. The soil and groundwater conditions depicted are only for the specific date and locations reported, and therefore, are not necessarily representative of other locations and times.

		RELATIVE DE	NSITY	/ CO			EST SYMBOLS Situ and Laboratory Tests	
S	AND / GRA				SILT	for In Situ and Laboratory Tests listed in "Other Tests" column.		
Density	SPT N-values	Approx. Relative Density (%)	Consist	ency	SPT N-values	Approx. Undrained Shear Strength (psf)	ATT Comp	Atterberg Limit Test Compaction Tests
Very Loose	<4	<15	Very Soft	t	<2	<250	Con	Consolidation
Loose	4 to 10	15 - 35	Soft		2 to 4	250 - 500	DD	Dry Density
Med. Dense	10 to 30	35 - 65	Med. Stif	f	4 to 8	500 - 1000	DS	Direct Shear
Dense	30 to 50	65 - 85	Stiff		8 to 15	1000 - 2000	%F	Fines Content
Very Dense	>50	85 - 100	Very Stiff	F	15 to 30	2000 - 4000	GS	Grain Size
			Hard		>30	>4000	Perm	Permeability
		JNIFIED SOIL C	LASSIF			M	J PP	Pocket Penetrometer
		DIVISIONS		:		DESCRIPTIONS		R-value
							SG TV	Specific Gravity Torvane
Gravel		GRAVEL (<5% fine	s)		GW Well-graded		TXC	Triaxial Compression
50% or more o		`	, 	50°C	GP Poorly-grad		UCC	Unconfined Compression
fraction retain sieve. Use dua	al symbols (eq.	GRAVEL (>12% fin	(201		GM Silty GRAVE	EL		
GP-GM) for 5%	6 to 12% fines.		63)		GC Clayey GRA	VEL	Semale #	SYMBOLS
• •	• • • • • • • • • • • • • • • • • • • •		•••••		SW Well-graded	ISAND		Situ test types and inter
Sand 50% or more of	f the coarse	SAND (<5% fines)			SP Poorly-grad	ed SAND	1 IXI	2-inch OD Split Spoon, S (140-lb. hammer, 30" dro
fraction passi	ng the #4 sieve.		• • • • • • • • • • • • • •		SM Silty SAND			(140-10. Hallinet, 30 010
Use dual symbol for 5% to 12%	ools (eg. SP-SM) fines.	SAND (>12% fines)		SC : Clayey SAN	 N		3.25-inch OD Spilt Spoon
•••••					• • • • • • • • • • • • • • • • • • • •		🗖	(300-lb hammer, 30" drop
					ML : SILT			Manufacture 1, 1, 1, 2, 2
		Liquid Limit < 50			CL : Lean CLAY			Non-standard penetration test (see boring log for de
Silt and Clay 50%or more passing #200 sieve Liquid Limit > 50				OL Organic SILT or CLAY			↓ L■	
		•			MH Elastic SILT			Thin wall (Shelby) tube
				CH Fat CLAY				
		•			OH Organic SIL	T or CLAY		Creh
•••••	Highly Organi	c Soils		7 77 7 77 77	PT PEAT	•••••••••••••••••••••••••••••••••••••••	. m	Grab
c 2	conducted (as noted liscussions in the re 2. The graphic syn	d in the "Other Tests" colu eport text for a more comp nbols given above are not	imn), unit de plete descrij inclusive o	escription of	ons may include a cla the subsurface cond	nd field tests using a system oratory tests have been assification. Please refer to the ititions. ar on the borehole loos		Rock core
			ivations inc	dicated	mixed soil constituer	nts or dual constituent materials		Vane Shear
				dicated	mixed soil constituer	nts or dual constituent materials.		Vane Shear
		DESCRIPTIONS	OF SC	dicated	mixed soil constituer	nts or dual constituent materials. S] MOI	
			OF SC	dicated	mixed soil coństituer TRUCTURE: Fissured: Brea	nts or dual constituent materials. S aks along defined planes	\Box	NITORING WELL Groundwater Level at
Layere	ed: Units of materi composition fro ed: Layers of soil t	DESCRIPTIONS al distinguished by color a om material units above a ypically 0.05 to 1mm thick	OF SC and/or nd below	dicated DIL S	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac	nts or dual constituent materials. S	\Box	NITORING WELL Groundwater Level at
Layere Laminate Len	ed: Units of materi composition fro ed: Layers of soil t ns: Layer of soil th	DESCRIPTIONS al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally	and/or nd below a, max. 1 cm	dicated DIL S	mixed soil coństituer TRUCTURE Fissured: Brea Slickensided: Frac Blocky: Angu	nts or dual constituent materials. S Iks along defined planes ture planes that are polished or glossy	⊥ ⊥ ⊥	NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level
Layero Laminato Lei Interlayero	ed: Units of materi composition fro ed: Layers of soil the ns: Layer of soil the ed: Alternating lay	DESCRIPTIONS al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia	and/or nd below x, max. 1 cn	dicated DIL S	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Angu Disrupted: Soil Scattered: Less	Its or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed is than one per foot	⊻ ⊈	NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal
Layerd Laminate Len Interlayerd Pock	ed: Units of materi composition fro ed: Layers of soil th ns: Layer of soil th ed: Alternating lay et: Erratic, discon	DESCRIPTIONS al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia tinuous deposit of limited	and/or nd below a, max. 1 cm al extent	dicated DIL S	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Angu Disrupted: Soil Scattered: Less Numerous: More	Its or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed than one per foot e than one per foot	⊻ ⊻	NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal Bentonite grout / seal
Layerd Laminate Len Interlayerd Pock	ed: Units of materi composition fro ed: Layers of soil th ns: Layer of soil th ed: Alternating lay et: Erratic, discon	DESCRIPTIONS al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia	and/or nd below a, max. 1 cm al extent	dicated DIL S	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Angu Disrupted: Soil Scattered: Less Numerous: More	Its or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed is than one per foot	⊻ ⊻	NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal
Layerd Laminate Len Interlayerd Pock	ed: Units of materi composition fro ed: Layers of soil th ns: Layer of soil th ed: Alternating lay et: Erratic, discon	al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia tinuous deposit of limited rm color and composition	and/or nd below a, max. 1 cm al extent throughout	n	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Angu Disrupted: Soil Scattered: Less Numerous: More BCN: Angu	Its or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed than one per foot e than one per foot		NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal Bentonite grout / seal
Layerd Laminato Leo Interlayerd Pock Homogeneod	ed: Units of materi composition fro ed: Layers of soil the ns: Layer of soil the ed: Alternating lay et: Erratic, discon- us: Soil with unifor	DESCRIPTIONS al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia tinuous deposit of limited m color and composition COMPON	and/or nd below a, max. 1 cm al extent throughout	n EFIN	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Angu Disrupted: Soil Scattered: Less Numerous: More BCN: Angl nom	Its or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed a than one per foot that one per foot that one per foot be between bedding plane and a plane to core axis		NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal Bentonite grout / seal Silica sand backfill
Layerd Laminate Len Interlayerd Pock	ed: Units of materi composition fro ed: Layers of soil the ns: Layer of soil the ed: Alternating lay et: Erratic, discon- us: Soil with unifor	al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia tinuous deposit of limited rm color and composition	and/or nd below a, max. 1 cm al extent throughout	n EFIN	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Angu Disrupted: Soil Scattered: Less Numerous: More BCN: Angu	Its or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed than one per foot e than one per foot		NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal Bentonite grout / seal Silica sand backfill Slotted tip Slough
Layerd Laminate Interlayerd Pock Homogeneod COMPC Boulder	ed: Units of materi composition fro ed: Layers of soil the s: Layer of soil the ed: Alternating lay et: Erratic, discon- us: Soil with unifor	DESCRIPTIONS al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia tinuous deposit of limited m color and composition COMPON SIZE / SIEVE RA > 12 inches	and/or nd below a, max. 1 cm al extent throughout	EFIN CO San	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Angu Disrupted: Soil Scattered: Less Numerous: More BCN: Angl nom ITTIONS MPONENT d	nts or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed a than one per foot that one per foot that one per foot be between bedding plane and a plane nal to core axis SIZE / SIEVE RANGE		NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal Bentonite grout / seal Silica sand backfill Slotted tip Slough Bottom of Boring
Layerd Laminato Lei Interlayerd Pock Homogeneou	ed: Units of materi composition fro ed: Layers of soil the s: Layer of soil the ed: Alternating lay et: Erratic, discon- us: Soil with unifor	A distinguished by color a commaterial units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia tinuous deposit of limited m color and composition COMPON SIZE / SIEVE RA	and/or nd below a, max. 1 cm al extent throughout	EFIN CO Sand	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Ang Disrupted: Soil Scattered: Less Numerous: More BCN: Ang norm ITTIONS MPONENT d Coarse Sand:	tts or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed a than one per foot be than one per foot he between bedding plane and a plane nal to core axis SIZE / SIEVE RANGE #4 to #10 sieve (4.5 to 2.0 mm)		NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal Bentonite grout / seal Silica sand backfill Slotted tip Slough Bottom of Boring
Layerd Laminate Interlayerd Pock Homogeneou COMPC Boulder Cobbles Gravel	ed: Units of materi composition fro ed: Layers of soil th ed: Alternating lay et: Erratic, discon- us: Soil with unifor DNENT S	al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia tinuous deposit of limited m color and composition COMPON SIZE / SIEVE RA > 12 inches 3 to 12 inches	and/or nd below a, max. 1 cm al extent throughout	EFIN CO Sand	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Angu Disrupted: Soil Scattered: Less Numerous: More BCN: Angu norm ITTIONS MPONENT d Coarse Sand: Medium Sand:	nts or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed is than one per foot than one per foot the between bedding plane and a plane nal to core axis SIZE / SIEVE RANGE #4 to #10 sieve (4.5 to 2.0 mm) #10 to #40 sieve (2.0 to 0.42 mm)		NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal Bentonite grout / seal Silica sand backfill Slotted tip Slough Bottom of Boring
Layerd Laminate Interlayerd Pock Homogeneou COMPC Boulder Cobbles Gravel Ca	ed: Units of materic composition fro ed: Layers of soil th ed: Alternating lay et: Erratic, discon- us: Soil with unifor DNENT S : : : :	A distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia tinuous deposit of limited or color and composition COMPON BIZE / SIEVE RA > 12 inches 3 to 12 inches 3 to 3/4 inches	and/or nd below a, max. 1 cm al extent throughout	EFIN CO San	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Ang Disrupted: Soil Scattered: Less Numerous: More BCN: Ang norm ITTIONS MPONENT d Coarse Sand:	nts or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed is than one per foot that is between bedding plane and a plane hal to core axis SIZE / SIEVE RANGE #4 to #10 sieve (4.5 to 2.0 mm) #10 to #40 sieve (2.0 to 0.42 mm) #40 to #200 sieve (0.42 to 0.074 mm)		NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal Bentonite grout / seal Silica sand backfill Slotted tip Slough Bottom of Boring STURE CONTEN Dusty, dry to the touch
Layerd Laminate Interlayerd Pock Homogeneou COMPC Boulder Cobbles Gravel Ca	ed: Units of materi composition fro ed: Layers of soil th ed: Alternating lay et: Erratic, discon- us: Soil with unifor DNENT S	al distinguished by color a om material units above a ypically 0.05 to 1mm thick at pinches out laterally ers of differing soil materia tinuous deposit of limited m color and composition COMPON SIZE / SIEVE RA > 12 inches 3 to 12 inches	and/or nd below a, max. 1 cm al extent throughout	EFIN CO Sand	mixed soil coństituer TRUCTURES Fissured: Brea Slickensided: Frac Blocky: Angu Disrupted: Soil Scattered: Less Numerous: More BCN: Angl norm ITTIONS MPONENT d Coarse Sand: Medium Sand: Fine Sand:	nts or dual constituent materials. S aks along defined planes ture planes that are polished or glossy ular soil lumps that resist breakdown that is broken and mixed is than one per foot than one per foot the between bedding plane and a plane nal to core axis SIZE / SIEVE RANGE #4 to #10 sieve (4.5 to 2.0 mm) #10 to #40 sieve (2.0 to 0.42 mm)	✓ ✓ MOIS Dry	NITORING WELL Groundwater Level at time of drilling (ATD) Static Groundwater Level Cement / Concrete Seal Bentonite grout / seal Silica sand backfill Slotted tip Slough Bottom of Boring STURE CONTEN



Terms and Symbols for Boring and Test Pit Logs

Figure A-1

Project: Job Nu Location Coordin	mber: n:	14-0 Chel	Creek Bri 95 an Coun hing: , Ea	ty, Was	shington		Surface Elevation: Top of Casing Elev.: Drilling Method: Sampling Method:	~1397 N/A BK-81 SPT	ft , Mud Rotary			
Depth, (ft) Sample No.	Sample Type	Blows / 6 in.	Other Tests	Symbol	MATERIAL DE	ESC	CRIPTION			N-Val Mois	ture	LL I very
- 0		20 40 29	0		2.5-inch layer of ASPHALT. Observe cobbles in the vicinity of the project a Very dense, dark grey, fine to coarse dark brown silt and clay matrix: angu scattered quartz [FILL / RE-WORKE - Observed severe rig chatter and au 0 to 5.5 ft BGS. - Driller reports smoother drilling acti	area e gra ilar, D Al udibl	ained basalt GRAVEL with medium to high plastic fin LLUVIUM]. e grinding on gravels betw	n ies,		50		
- 10 - - 5-; - 15 -	2	8 9 8			- Becomes medium dense with mino clay. Medium dense, dark grey, clayey fin grey and tan clay and silt: wet, angul white and reddish mottles, medium t [COLLUVIUM / MASS WASTING DE	e gra lar to	ained basalt GRAVEL wit o sub-angular, weathered gh plastic fines, disrupted					
- 20 - S-4		10 11 8 31 50/4			Very dense, dark grey, basalt GRAV with some fines: massive [COLLUVII - Observed severe rig chatter and au 19 ft BGS.	UM .	/ MASS WASTING DEPC	ISIT].			/	× // *
- 25 - S-t	5	31 50/2.5			 Drilling became extremely difficult became extremely difficult became extremely difficult became and the second sec	bou et be	lder. low the ground surface.	r.				>>4
	orehol orehol I By:	e Starte e Comp	leted:	25.0ft 4/28/1 4/28/1 N. We Holoce	4	30	RING BH-1-14	4	<u></u>	::		<u></u>
INC	OR	POR	ATE	D							Figi	ire A-2

APPENDIX D: HYDRAULIC PROJET APPROVAL



Issued Date: February 20, 2020 Project End Date: February 18, 2025 Permit Number: 2020-2-28+01 FPA/Public Notice Number: N/A Application ID: 20121

PERMITTEE	AUTHORIZED AGENT OR CONTRACTOR
Chelan County Natural Resource Department	Chelan County Natural Resource Department
ATTENTION: Erin McKay	ATTENTION: Mike Kaputa
411 Washington St	411 Washington St., Suite 201
Wenatchee, WA 98801-2854	Wenatchee, WA 98801

Project Name: Mill Creek Culvert Replacement

Project Description: This project will remove a current fish passage barrier box culvert along a county road and replace it with an arch culvert designed to meet fish passage criteria. The current culvert does not meet WDFW fish passage criteria for salmonids and is considered a 33% passable barrier, due to a large hydraulic outfall drop. This project involves the removal of the current 48' long and 5'x4' diameter concrete box culvert and the installation of a structural pipe culvert with a high radius arch with a 20' 8" span, 12' 1" rise and 50' length.

The existing culvert was placed at a much lower gradient than the average stream gradient (2.8% as opposed to the 5-7% average gradient of lower Mill Creek), resulting in deposition upstream of the culvert and scour and a hydraulic drop at the outlet of the culvert. To restore fish passability and create a stable channel that can accommodate 100 year flow events and the possible effects of climate change, a structural plate pipe arch culvert was chosen. This design will accommodate a stream simulation step-pool channel and can be tailored to this specific site, and is economically feasible.

The project also includes amelioration of a possible fish passage barrier approximately 600' upstream of the culvert replacement area, caused by installation of log weirs under a previous habitat project. This element of the project involves placement of one large wood element in combination with smaller diameter wood and slash to aggrade channel below the log weir project bringing WSE up to the degree that the hydraulic drop at the last weir is lessened to a degree that allows improved fish passage.

PROVISIONS

TIMING - PLANS - INVASIVE SPECIES CONTROL

1. TIMING LIMITATION: You may begin the project on February 20, 2020 and you must complete the project by February 18, 2025; PROVIDED all in-water work is completed between July 15-September 30 of any calendar year.

2. APPROVED PLANS: You must accomplish the work per plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, entitled Appendix A - 60% Design Drawings.pdf, dated December 11, 2019, MillCreek.JARPA.2019.updated.pdf, date January 10, 2020, and App ID 20121 Response to comments 02062020.pdf, dated February 6, 2020, except as modified by this Hydraulic Project Approval. Updated plans will be uploaded to APPS prior to the pre-construction contractor meeting. You must have a copy of these plans available on site during all phases of the project construction.

3. INVASIVE SPECIES CONTROL: Follow Method 1 for low risk locations (i.e. clean/drain/dry). Thoroughly remove visible dirt and debris from all equipment and gear (including drive mechanisms, wheels, tires, tracks, buckets, and undercarriage) before arriving and leaving the job site to prevent the transport and introduction of invasive species. For contaminated or high risk sites please refer to the Method 2 Decontamination protocol. Properly dispose of any water



Issued Date: February 20, 2020 Project End Date: February 18, 2025 Permit Number: 2020-2-28+01 FPA/Public Notice Number: N/A Application ID: 20121

and chemicals used to clean gear and equipment. You can find this and additional information in the Washington Department of Fish and Wildlife's "Invasive Species Management Protocols", available online at https://wdfw.wa.gov/species-habitats/invasive/prevention.

NOTIFICATION REQUIREMENTS

4. PRE-CONSTRUCTION CONTRACTOR MEETING: You, your agent, or contractor must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 at least fourteen business days before starting work to arrange a pre-construction contractor meeting onsite. The notification must include the permittee's name, project location, starting date, and the Hydraulic Project Approval permit number.

5. PRE-, DURING, AND POST-CONSTRUCTION NOTIFICATION: You, your agent, or contractor must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 at least three business days before starting work, one day before removing the temporary bypass and again within seven days after completing the work. The notification must include the permittee's name, project location, starting date for work or date the work was completed, and the permit number. The Washington Department of Fish and Wildlife may conduct inspections during and after construction; however, the Washington Department of Fish and Wildlife will notify you or your agent before conducting the inspection.

6. PHOTOGRAPHS: You, your agent, or contractor must take photographs of the job site before the work begins and after the work is completed. You must upload the photographs to the post-permit requirement page in the Aquatic Protection Permitting System (APPS) or mail them to Washington Department of Fish and Wildlife at Post Office Box 43234, Olympia, Washington 98504-3234 within 30-days after the work is completed.

7. FISH KILL/ WATER QUALITY PROBLEM NOTIFICATION: If a fish kill occurs or fish are observed in distress at the job site, immediately stop all activities causing harm. Immediately notify the Washington Department of Fish and Wildlife of the problem. If the likely cause of the fish kill or fish distress is related to water quality, also notify the Washington Military Department Emergency Management Division at 1-800-258-5990. Activities related to the fish kill or fish distress must not resume until the Washington Department of Fish and Wildlife gives approval. The Washington Department of Fish and Wildlife may require additional measures to mitigate impacts.

STAGING, JOB SITE ACCESS, AND EQUIPMENT

8. Establish staging areas (used for equipment storage, vehicle storage, fueling, servicing, and hazardous material storage) in a location and manner that will prevent contaminants such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.

9. This Hydraulic Project Approval authorizes the construction of no more than one new temporary access roads.

10. Design and locate new temporary access roads to prevent erosion and sediment delivery to waters of the state.

11. Clearly mark boundaries to establish the limit of work associated with site access and construction.

12. Limit the removal of native bankline vegetation to the minimum amount needed to construct the project.

13. Retain all natural habitat features on the bed or banks including large woody material and boulders. You may move these natural habitat features during construction but you must place them near the preproject location before leaving the job site.

14. Confine the use of equipment to the specific access and work corridor shown in the approved plans.

15. Equipment used for this project may operate waterward of the ordinary high water line, provided the drive mechanisms (wheels, tracks, tires, etc.) do not enter or operate waterward of the ordinary high water line.

16. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.



Issued Date: February 20, 2020 Project End Date: February 18, 2025 Permit Number: 2020-2-28+01 FPA/Public Notice Number: N/A Application ID: 20121

17. Use environmentally acceptable lubricants composed of biodegradable base oils such as vegetable oils, synthetic esters, and polyalkylene glycols in equipment operated in or near the water.

CONSTRUCTION-RELATED SEDIMENT, EROSION AND POLLUTION CONTAINMENT

18. Work in the dry watercourse (when no natural flow is occurring in the channel, or when flow is diverted around the job site).

19. Protect all disturbed areas from erosion. Maintain erosion and sediment control until all work and cleanup of the job site is complete.

20. All erosion control materials that will remain onsite must be composed of 100% biodegradable materials.

21. Straw used for erosion and sediment control, must be certified free of noxious weeds and their seeds.

22. Stop all hydraulic project activities except those needed to control erosion and siltation, if flow conditions arise that will result in erosion or siltation of waters of the state.

23. Prevent project contaminants, such as petroleum products, hydraulic fluid, fresh concrete, sediments, sedimentladen water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.

24. Route construction water (wastewater) from the project to an upland area above the limits of anticipated floodwater. Remove fine sediment and other contaminants before discharging the construction water to waters of the state.

25. Deposit waste material from the project, such as construction debris, silt, excess dirt, or overburden, in an upland area above the limits of anticipated floodwater unless the material is approved by the Washington Department of Fish and Wildlife for reuse in the project.

26. Deposit all trash from the project at an appropriate upland disposal location.

CONSTRUCTION MATERIALS

27. Store all construction and deconstruction material in a location and manner that will prevent contaminants such as petroleum products, hydraulic fluid, fresh cement, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.

28. Do not stockpile construction material waterward of the ordinary high water line.

29. Use only clean, suitable material as fill material (no trash, debris, car bodies, tires, asphalt, concrete, etc.).

IN-WATER WORK AREA ISOLATION USING BLOCK NETS

30. Isolate fish from the work area by using block nets.

31. Block net openings must not exceed 0.37 inches.

32. Install block nets at sites with reduced flow volume or velocity, uniform depth, and good accessibility.

33. Do not install block nets at sites with heavy vegetation, large cobble or boulders, undercut banks, or deep pools unless you can secure and maintain them.

34. Install block nets at an angle to the direction of flow (not perpendicular to the flow) to avoid entrapping fish in the nets.

35. After the first block net is secured at the upstream end, use a second block net to herd fish downstream and out of the project area.

36. Install a downstream block net if fish may reenter the work area from downstream.

37. To anchor block nets, place bags filled with clean round gravel along the bottom of the nets.

38. Secure block nets along both banks and the channel bottom to prevent failure from debris accumulation, high flows, and/or flanking.

39. To keep fish out of the job site, leave block nets in place until the work is complete and conditions are suitable for



Issued Date: February 20, 2020 Project End Date: February 18, 2025 Permit Number: 2020-2-28+01 FPA/Public Notice Number: N/A Application ID: 20121

fish.

40. Check block nets at least three times a day for entangled fish and accumulated debris.

IN-WATER WORK AREA ISOLATION USING A TEMPORARY BYPASS

41. Isolate fish from the work area by using either a total or partial bypass to reroute the stream through a temporary channel or pipe.

42. Provide fish passage during times of the year when fish are expected to migrate.

43. Sequence the work to minimize the duration of dewatering.

44. Use the least-impacting feasible method to temporarily bypass water from the work area. Consider the physical characteristics of the site and the anticipated volume of water flowing through the work area.

45. The hydraulic capacity of the stream bypass must be equal to or greater than the peak flow event expected when the bypass will be operated.

46. Design the temporary bypass to minimize the length of the dewatered stream channel.

47. During all phases of bypass installation and decommissioning, maintain flows downstream of the project site to ensure survival of all downstream fish.

48. Install the temporary bypass before starting other construction work in the wetted perimeter using the piped or pumped bypass method approved by the Washington Department of Fish and Wildlife.

49. Install a cofferdam or similar device at the upstream and downstream end of the bypass to prevent backwater from entering the work area.

50. Return diverted water to the channel immediately downstream of the work area. Dissipate flow energy from the diversion to prevent scour or erosion of the channel and bank.

51. If the diversion inlet is a gravity diversion that provides fish passage, place the diversion outlet where it facilitates gradual and safe reentry of fish into the stream channel.

52. If the bypass is a pumped diversion, once started it must run continuously until it is no longer necessary to bypass flows. This requires back-up pumps on-site and twenty-four-hour monitoring for overnight operation.

53. If the diversion inlet is a pump diversion in a fish-bearing stream, the pump intake structure must have a fish screen installed, operated, and maintained in accordance with RCW 77.57.010 and 77.57.070. Screen the pump intake with one of the following:

a) Perforated plate: 0.094 inch (maximum opening diameter);

b) Profile bar: 0.069 inch (maximum width opening); or

c) Woven wire: 0.087 inch (maximum opening in the narrow direction).

The minimum open area for all types of fish screens is twenty-seven percent. The screened intake facility must have enough surface area to ensure that the velocity through the screen is less than 0.4 feet per second. Maintain fish screens to prevent injury or entrapment of fish.

54. The fish screen must remain in place whenever water is withdrawn from the stream through the pump intake.

55. Remove fish screens on dewatering pumps in the isolated work area only after all fish are safe and excluded from the work area.

56. Isolate pump hose intakes with block nets so that fish cannot get near the intake.

FISH LIFE REMOVAL

57. All persons participating in capture and removal must have training, knowledge, and skills in the safe handling of fish life.

58. If electrofishing is conducted, a person with electrofishing training must be on-site to conduct or direct all electrofishing activities.



Issued Date: February 20, 2020 Project End Date: February 18, 2025 Permit Number: 2020-2-28+01 FPA/Public Notice Number: N/A Application ID: 20121

59. If personnel are available, the Washington Department of Fish and Wildlife and affected tribes may help capture and move fish life from the job site.

60. Place block nets upstream and downstream of the in-water work area before capturing and removing fish life.

61. Capture and safely move fish life from the work area to the nearest suitable free-flowing water.

CULVERT

62. Install and maintain the culvert to ensure unimpeded fish passage.

63. Establish the culvert invert elevation with reference point(s) or benchmark(s) created before to starting work on this project. Clearly mark and preserve the reference point(s) for post-project compliance. Before backfilling, confirm the invert elevation, as stated on the plans, relative to the reference points with at least a construction-grade leveling device (such as an optical auto-level or laser level).

64. The authorized culvert is a stream simulation design.

65. The length of the culvert must not exceed 50 feet.

66. The width of the channel-bed inside a stream simulation culvert at the elevation of the stream bed must be equal to or greater than 15.2 feet which is 1.2 times the average channel bed width plus two feet.

67. Since the prevailing stream gradient exceeds 4%, boulder steps will placed approximately every 14 feet within the constructed channel to limit drop between steps to 0.8 feet.

68. Countersink the stream simulation culvert a minimum of thirty percent and a maximum of fifty percent of the culvert rise, but not less than two feet.

69. Size streambed material to mimic the stream's natural gradation as found in nearby reference channel reaches. Place a minimum of 24 inches deep of clean, rounded and well-graded (includes all size classes) material. Angular rock is not permitted within the channel or culvert.

70. The streambed must include a sinuous low-flow channel expected under common conditions in the reach and a high-flow bench on both sides of the culvert.

71. Protect structural fill associated with the culvert installation from erosion to the 100-year peak flow.

72. Approach material must be structurally stable and composed of material that if eroded into the water will not harm fish life.

73. The owner(s) must maintain the culvert to ensure it provides continued, unimpeded fish passage. If the culvert becomes a hindrance to fish passage, the owner must obtain an Hydraulic Project Approval and provide prompt repair.

DEMOBILIZATION AND CLEANUP

74. Do not relocate removed or replaced structures within waters of the state. Remove and dispose of these structures in an upland area above the limits of anticipated floodwater.

75. Upon completion of the project, restore the disturbed bed, banks, and riparian zone to preproject condition to the extent possible.

76. Completely remove any temporary fill before the end of the in-water timing window if the fill material could erode and deliver sediment-laden water into waters of the state.

77. To prevent fish from stranding, backfill trenches, depressions, and holes in the bed that may entrain fish during high water or wave action.

78. To minimize sediment delivery to the stream or stream channel, do not return in-stream flows to the work area until all in-channel work is completed and the bed and banks are stabilized.

79. Seed areas disturbed by construction activities with a native seed mix suitable for the site that has at least one quick-establishing plant species.



Issued Date: February 20, 2020 Project End Date: February 18, 2025 Permit Number: 2020-2-28+01 FPA/Public Notice Number: N/A Application ID: 20121

80. Replant the job site with the plant species composition and planting densities approved by the Washington Department of Fish and Wildlife. Final planting plan will be uploaded to APPS prior to construction.

81. Complete replanting of riparian vegetation during the first dormant season (late fall through late winter) after project completion per the approved plan. Maintain plantings for at least three years to ensure at least eighty percent of the plantings survive. Failure to achieve the eighty percent survival in year three will require you to submit a plan with follow-up measures to achieve requirements or reasons to modify requirements.

82. Upon completion of the project, remove all materials or equipment from the site and dispose of all excess spoils and waste materials in an upland area above the limits of anticipated floodwater.

83. Return water flow slowly to the in-water work area to prevent the downstream release of sediment laden water. If necessary, install silt fencing above the bypass outlet to capture sediment during re-watering of the channel.

84. Remove temporary erosion and sediment control methods after job site is stabilized or within three months of project completion, whichever is sooner.

LOCATION #1:	Site Name: Mill Creek Culvert Mountain Home Ranch Road at Mill Creek crossing, Peshastin, WA 98847					
WORK START:	February 20, 2	2020	WORK END:	February 18, 2025		
<u>WRIA</u>		Waterbody:			Tributary to:	
45 - Wenatchee		Mill Creek (lb)			Peshastin Creek	
<u>1/4 SEC:</u>	Section:	<u>Township:</u>	Range:	Latitude:	Longitude:	County:
SE 1/4	06	23 N	23 N 18 E 47.511125			Chelan
Location #1 Driving Directions						
From the entrance to Highway 97 just east of Peshastin, proceed south 3.8 miles and then turn right onto Mountain Home Ranch Rd. Proceed approximately 500 feet to Mill Creek crossing.						

APPLY TO ALL HYDRAULIC PROJECT APPROVALS

This Hydraulic Project Approval pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW. Additional authorization from other public agencies may be necessary for this project. The person(s) to whom this Hydraulic Project Approval is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state and/or federal) that may be necessary for this project.

This Hydraulic Project Approval shall be available on the job site at all times and all its provisions followed by the person (s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234 (360) 902-2200

Issued Date: February 20, 2020 Project End Date: February 18, 2025 Permit Number: 2020-2-28+01 FPA/Public Notice Number: N/A Application ID: 20121

The person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in civil action against you, including, but not limited to, a stop work order or notice to comply, and/or a gross misdemeanor criminal charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.

MINOR MODIFICATIONS TO THIS HPA: You may request approval of minor modifications to the required work timing or to the plans and specifications approved in this HPA unless this is a General HPA. If this is a General HPA you must use the Major Modification process described below. Any approved minor modification will require issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics or construction of your project that does not alter the project's impact to fish life or habitat and does not require a change in the provisions of the HPA to mitigate the impacts of the modification. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification through APPS. A link to APPS is at http://wdfw.wa.gov/licensing/hpa/. If you did not use APPS you must submit a written request that clearly indicates you are seeking a minor modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234, or by email to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.

MAJOR MODIFICATIONS TO THIS HPA: You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require issuance of a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at http://wdfw.wa.gov/licensing/hpa/. If you did not use APPS you must submit a written request that clearly indicates you are requesting a major modification to an existing HPA. Written requests must include the name of the applicant, the name of the authorized agent if one is acting for the applicant, the APP ID number of the HPA, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You may email your request for a major modification to HPAapplications@dfw.wa.gov. You should allow up to 45 days for the department to process your request.

APPEALS INFORMATION



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234 (360) 902-2200

Issued Date: February 20, 2020 Project End Date: February 18, 2025 Permit Number: 2020-2-28+01 FPA/Public Notice Number: N/A Application ID: 20121

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by department management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.

A. INFORMAL APPEALS: WAC 220-660-460 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee may conduct an informal hearing or review and recommend a decision to the Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.



Washington Department of Fish & Wildlife PO Box 43234 Olympia, WA 98504-3234 (360) 902-2200

Issued Date: February 20, 2020 Project End Date: February 18, 2025 Permit Number: 2020-2-28+01 FPA/Public Notice Number: N/A Application ID: 20121

Habitat Biologist

Amanda.Barg@dfw.wa.gov

Amanda R. Barg

for Director

Amanda Barg

509-429-9285

APPENDIX E: FIRE PROTECTION AND SUPPRESSION

1 2 3		Pacific Northwest Region Fire Protection and Suppression
4	1.	Fire Period and Closed Season
5 6 7 8 9 10 11		Specific fire prevention measures are listed below and shall be effective for the period April 1 to October 31 of each year. The Forest Service may change the dates of the said period by advance written notice if justified by unusual weather or other conditions. Required tools and equipment shall be kept currently in serviceable condition and immediately available for initial attack on fires.
13	2.	Fire Plan
14 15 16 17 18 19		Before starting any operations on the project, the Contractor, Permittee, Licensee, or Purchaser, hereinafter referred to as the "Contractor," shall prepare a fire plan in cooperation with the Contracting officer providing for the prevention and control of fires in the project area.
20 21 22 23		The Contractor shall certify compliance with fire protection and suppression requirements before beginning operations during the fire period and closed season, and shall update such certification when operations change.
24 25	3.	Substitute Measures
26 27 28 29		The Contracting officer may by written notice, authorize substitute measures or equipment or may waive specific requirements during periods of low fire danger.
30	4.	Emergency Measures
31 32 33 34 35 36		The Forest Service may require emergency measures, including the necessary shutting down of equipment or portions of operations in the project area during periods of fire emergency created by hazardous climatic conditions.
37	5.	Fire Control
38 39 40 41 42		The Contractor shall, independently and in cooperation with the Forest Service, take all reasonable action to prevent and suppress fires in a project area. Independent initial action shall be prompt and shall include the use of all personnel and equipment available in the project area.
43 44 45 46 47 48 49 50 51		For the purpose of fighting forest fires on or in the vicinity of the project, which are not caused by the Contractor's operations, the Contractor shall place employees and equipment temporarily at the disposal of the Forest Service. Any individual hired by the Forest Service will be employed in accordance with the Interagency Pay Plan for Emergency Firefighters. The Forest Service will compensate the Contractor for equipment rented at fire fighting equipment rates common in the area or at prior agreed to rates.

1 2	6.	<u>Complia</u>	ance with State Forest Laws
2 3 4 5 6 7		the Con fire prev	of specific fire precautionary measures herein is not intended to relieve atractor in any way from compliance with the State Fire Laws covering vention and suppression equipment, applicable to operations under this at, permit or license.
8 9	7.	<u>Fire Pre</u>	cautions
10		Specific	fire precautionary measures are as follows:
11 12		a.	Smoking and Open Fires
13 14 15 16 17			Smoking and fires shall be permitted only at the option of the Contractor. The Contractor shall not allow open fires on the project area without advance permission in writing from the Forest Service.
17 18 19 20 21 22 23 24			Unless restricted by State Law or Federal Regulation, smoking shall be permitted only in such portions of the project area that are free of flammable material. Smokers shall sit down to smoke in such a position that any burning material will fall within a cleared area, and shall extinguish and press out in mineral soil all burning material before leaving the cleared area.
25		b.	Fire Extinguishers and Equipment on Trucks, Tractors, etc.
26 27 28 29 30 31 32 33 34			All power-driven equipment operated by the Contractor on National Forest land, except portable fire pumps, shall be equipped with one fire extinguisher having a UL rating of at least 5 BC, and one "D" handled or long handled round point shovel, size "O" or larger. In addition, each motor patrol, truck, and passenger-carrying vehicle shall be equipped with a double-bit axe or Pulaski, 3-1/2 pounds or larger.
35 36			Equipment shall be kept in a serviceable condition and shall be readily available.
37 38		C.	Power Saws
39 40 41 42 43 44 45 40			Each gasoline power saw operator shall be equipped with a pressurized chemical fire extinguisher of not less than 8-ounce capacity by weight, and one long-handled round point shovel, size "o" or larger. The extinguisher shall be kept in possession of the saw operator at all times. The shovel shall be accessible to the operator within one (1) minute.
46 47		d.	Extinguishers
48 49 50 51 52			One refill for each type or one extra extinguisher sufficient to replace each size extinguisher required on equipment shall be safely stored in the fire tool box or other agreed upon place on the project area that is protected and readily available.

1		
2	е	 Spark Arresters and Mufflers
3		
4		Each internal combustion engine shall be equipped with a spark
5		arrester meeting either (1) USDA Forest Service Standard 5100-1a,
6		or (2) appropriate Society of Automotive Engineers (SAE)
7		recommended practice J335 (b) and J350 (a) as now or hereafter
8		amended unless it is:
9		
10		(1) Equipped with a turbine-driven exhaust supercharger such
11		as the turbocharger. There shall be no exhaust bypass.
12		•
13		(2) A passenger-carrying vehicle or light truck, or medium truck
14		up to 40,000 GVW, used on roads and equipped with a
15		factory-designed muffler complete with baffles and an
16		exhaust system in good working condition.
17		
18		(3) A heavy truck, such as a dump or log truck, or other vehicle
19		used for commercial hauling, used only on roads and
20		equipped with a factory designed muffler and with a vertical
21		stack exhaust system extending above the cab.
22		
23		Exhaust equipment described in this subsection, including spark
24		arresters and mufflers, shall be properly installed and constantly
25		maintained in serviceable condition.
26		
27	f.	Emergency Fire Precautions
28		
29		The Contractor shall restrict operations in accordance with the
30		Industrial Fire Precaution Levels listed below. The Forest Service may
31		change the Industrial Fire Precaution Levels to other values upon
32		revision of the National Fire Danger Rating System and may change
33		the specific Industrial Fire Precaution Levels when such changes are
34		necessary for the protection of the National Forest. When sent to the
35		Contractor, the revised Industrial Fire Precaution Levels will
36		supersede the attached levels.
37		
38	Industrial	Fire Precautions Schedule
39	Level Ir	ndustrial Fire Precaution (IFPL)
40		
41	I. Close	d season- Fire Precaution requirements are in effect. A fire
42	watch	/security is required at this and all higher levels unless otherwise waived.
43		
44	II. Partia	al hoot-owl- The following may operate only between the hours of 8 p.m.
45	and 1	p.m., local time:
46		
47	a	· · · · · · · · · · · · · · · · · · ·
48	b	
49	С	O ⁷
50	d	l. welding or cutting of metal.
51		
52	III. Partia	al shutdown- The following shall be prohibited except as indicated:

1 2 3 4 5 6 7 8 9 10 11	<u>Cable Yarding</u> – except that gravity operated logging systems employing non-motorized carriages may be operated between the hours of 8 p.m. and 1 p.m., local time, when all block and moving lines, except the line between the carriage and the chokers, are suspended 10 feet above the ground. <u>Power Saws</u> – except power saws may be used at loading sites and on the tractor/skidder operations between the hours of 8 p.m. and 1 p.m., local time.
12 13 14	In addition, the following are permitted between the hours of 8 p.m. and 1 p.m., local time:
15 16 17 18 19	 a. tractor/skidder operations; b. mechanized loading and hauling of any product or material; c. blasting; d. welding or cutting of metal; e. any other spark-emitting operation not specifically mentioned.
20 21	IV. General shutdown – All operations are prohibited.
22 23	The following definitions shall apply to those Industrial Fire Precaution Levels:
24 25 26 27 28	Cable yarding systems: A yarding system employing cables and winches in a fixed position. Closed Season (Fire Precautionary Period): That season of the year when a fire hazard exists as declared by the responsible agency official.
29 30 31 32 33	Contracting officer: The person executing the contract, permit or license on behalf of the Government and includes that person's designated representative, acting within the limits of their authority or the duly appointed successor to the individuals.
34 35 36 37	Loading sites/woods site/project area: A place where any product or material (including but not limited to logs, firewood, slash, soil, rock, poles, posts, etc.) is placed in or upon a truck or other vehicle.
38 39 40 41	Low hazard area: Means any area where the responsible agency representative (WDNR, ORF, BIA, BLM) determines the combination of elements reduces the probability of fire starting and/or spreading.
42 43 44 45	Tractor/skidder operations: Include a harvesting operation, or portion of a harvesting operation, where tractors, skidders, or other harvesting equipment capable of constructing fireline, are actively yarding forest products and can quickly reach and effectively attack a fire start.
46 47 48	Waivers, written in advance, may be used for any and all activities. Activities for which waivers may be issued include, but are not limited to:
49 50 51	a. mechanized loading and hauling;b. road maintenance such as sprinkling, graveling, grading, and paving;

1 2 3 4 5 6 7 8	 c. cable yarding using gravity systems or suspended lines and blocks, or other yarding systems where extra prevention measures will significantly reduce the risk of fire; d. power saws at loading sites or in felling and bucking where extra prevention measures will significantly reduce the risk of fire; e. maintenance of equipment (other than metal cutting and welding) or improvements such as structures, fences, and powerlines.
9 10 11 12 13 14 15 16	Such waiver, or substitute precautions will prescribe measures to be taken by the Contractor to reduce the risk of ignition, and/or the spread of fire. The Contracting officer shall consider site-specific weather factors, fuel conditions, and specific operations that result in less risk of fire ignition and/or spread than contemplated when precaution level was predicted. Consideration shall also be given to measures that reduce the precaution levels above. The Contractor shall assure that all conditions of such waivers or substitute precautions are met.
17 18 19 20 21 22	The Contractor shall obtain the predicted Industrial Fire Precaution Level daily, prior to the start of work, from the appropriate Ranger District headquarters. If predictions made after 6:00 p.m., local time, are significantly different than the original prediction, the Forest Service will inform the Contractor when changes in restrictions or industrial precautions are made.
23 24	<u>NOTE</u> : The IFPL system does not apply on lands protected by ODF east of the summit of the Cascades.
25 26 27 28 29 20	Where hauling involves transit through more than one shutdown/regulated use area, the precaution level at the woods loading site shall govern the level of haul restriction, unless otherwise prohibited by other than industrial precaution level system.
30 31	8. <u>Fire Tools</u>
32 33 34 35 36 37 38 39 40	 The contractor shall furnish serviceable fire fighting tools in a readily accessible fire tool box or compartment of sound construction with a hinged lid and hasp so arranged that the box can be secured or sealed. The box shall be red and marked "Fire Tools" in letters one inch high. It shall contain a minimum of: a. 2 axes or Pulaski's with a 32-inch handles; b. 3 adze eye hoes, one Pulaski may be substituted for one adze eye
41 42	hoe; c. 3 long-handled, round point shovels, size "o" or larger.
43 44 45	9. <u>Fire Security</u>
45 46 47 48 49 50 51 52	When the Industrial Fire Precaution Level is "I" or higher, unless a waiver is granted, the Contractor shall designate a person who shall perform fire security services listed below on the project area and vicinity. The designated person shall be capable of operating the Contractor's communications and fire fighting equipment specified in the contract, excluding helicopters and of directing the activities of the Contractor's personnel on forest fires. In lieu of having the designated person perform the required supervisory duties, the

Contractor may provide another person meeting the qualifications stated above to direct the activities of Contractor's personnel and equipment during all firefighting activities.
Services described shall be for at least one hour from the time the Contractor's operations are shut down. For the purposes of this provision, personnel servicing equipment, and their vehicles, who are not engaged in cutting or welding metal, are excluded.
Fire security services shall consist of moving throughout the operation area or areas constantly looking, reporting, and taking suppression action on any fires detected. Where possible, the designated person shall observe inaccessible portions of helicopter operating areas from vantage points within or adjacent to project area.
Blasting
Whenever the Industrial Fire Precaution Level is "I" or greater, a fire security person equipped with a long handled, round point, No. "O" or larger, shovel, and a five-gallon backpack pump can filled with water will stay at location of blast for 1 hour after blasting is done. Blasting may be suspended by Forest Service in writing, in an area of high rate of spread and resistance to control.
Fuses shall not be used for blasting. Explosive cords shall not be used without written permission of Forest Service, which may specifiy conditions under which such explosives may be used and precautions to be taken.
Additional Fire Precautionary Measure 1- Tank Truck
Contractor shall provide a tank truck or trailer, containing not less than 300 gallons of water, during yarding, loading, land clearing, right-of-way clearing and mechanical treatment of slash. A tank truck or trailer will not be required if power saw falling and bucking is the only operation. Such tank truck or trailer shall be maintained in a serviceable condition and located within 10 minutes, round trip, from each project area during fire period and closed season.
The tank truck or trailer shall be equipped with a pump capable of discharging 20 gallons of water per minute, using a ¼ inch nozzle tip, through a 50 foot length of rubber lined hose. In addition, 500 feet of serviceable fabric jacket rubber lined hose of not less than 1 inch outside diameter, fitted with a nozzle capable of discharging a straight stream of ¼ inch diameter and a spray pattern shall be immediately available for use. The tank, pump and at least 250 feet of hose and nozzle shall be connected and ready for use at all times.
If a trailer is used, it shall be equipped with a hitch to facilitate prompt movement. A serviceable tow vehicle shall be immediately available for attachment to the trailer and must meet the time requirements stated above. Such truck or trailer shall be equipped to operate for a minimum of 8 hours. Tank truck or trailer shall be available from the start of work to the end of the Fire Watch/Fire Security service.

1 2	12.	Additional Fire Precautionary Measure 2 - Communications						
2 3 4 5 6 7 8 9		The Contractor shall provide adequate to-way communication facilities to report a fire to Forest Service within 15 minutes of detection. FCC Regulations prohibit commercial use of Citizen Band (CB) radios. (CB's are not considered adequate two-way communications). Such communications shall be operable during periods of operation of power-driven equipment; including the time fire security is required.						
10	USDA	Forest Serv	ice – Region (6				
11		e Plan						
12		or use with forms R6-FS-6300-50,						
13	R6-	FS-6300-51,	and R6-FS-630	0-52)				
14 15	Cor	ntractor		Contract	t Number			
16								
17	Pro	ject Name		Contract Performance Period				
18	_							
19	<u>Cor</u>	ntractor's Rep	resentative for I	Fire Matters				
20	No	~ ~	Title		Talanhan	Number		
21 22	<u>Nar</u>	ne	<u>Title</u>		<u>Telephone</u> Office			
22 23					Once	<u>Residence</u>		
23 24								
25								
26	<u>Cor</u>	ntracting Offic	er's Representa	<u>ative</u>				
27	N		T :0 -		Talaahaa	Ni wali an		
28	<u>Nar</u>	ne	<u>Title</u>		<u>Telephone</u>			
29 30					<u>Office</u>	<u>Residence</u>		
30 31								
32								
33	For	est Service In	spector(s)					
34								
35	<u>Nar</u>	<u>ne</u>	<u>Title</u>		<u>Telephone</u>	<u>e Number</u>		
36					<u>Office</u>	<u>Residence</u>		
37								
38								
39								
40	Act	ion by Contractor						
41 42	The							
42 43		he contractor shall take all reasonable and practical action to prevent and						
43 44		ppress fires in the project area. The Contractor shall take suppression action						
45		mediately upon discovery of or becoming aware of such fire.						
46	Act	tion by Forest Service						
40 47	<u>/////</u>	<u></u>	001100					
48	The	e forest servic	e may counsel	with the Cont	tractor on suppre	ssion action and	will.	
49		The forest service may counsel with the Contractor on suppression action and will, when necessary, supplement the Contractor's efforts by furnishing personnel and						
50		equipment not available to the Contractor. In the event that a fire is not suppressed						
51		by the Contractor and will require appreciable reinforcements, the Forest Service						
	•		•					

 may take over suppression of the fire and may employ the Contractor's and equipment. 								
4	Fire Prevention and Suppression							
5 6 7	Predicted fire precautions class may be obtained from the following local so							
8 9		as employed or des luty is the detection			named individual(s) as s:			
10 11 12 13	<u>Name</u>	<u>Title</u>		<u>Telephon</u> Office	ne Number <u>Residence</u>			
14 15 16 17					·			
18 19 20 21 22 23	area. Open fires w activities may be p allowed without Representative.	ill [], will not [], k permitted by the Co being authorized	be permitted ontractor, it i in writing	I by the con s understoc by the	ke while in the project tractor. Although these od that neither shall be Contracting Officer's			
24 25	Fires shall be reported to one of the following Forest Service employees:							
26 27 28 29	<u>Name</u>	<u>Title</u>		<u>Telephor</u> Office	ne Number Residence			
30					·			
31								
32 33								
34	Contractor's Emplo	oyees Possessing S	Special Fires	s Qualification	ons			
35 36 37 38 39 40 41 42 43 44 45 46	Name Qualifications		Best Fire A	Assignment	Other			
47 48	Total number of en	nployees who could	l perform fire	efighting du	ties			
49								

1	Contractor's Equipment Available for Firefighting					
2 3	Description, Type	Number				
4	Make, Model, Size	Units	Location			
5		er ne	Location			
6						
7						
8						
9						
10						
11						
12						
13						
14						
15	Joint Preparation of this fire plan is acknow	ledged:				
16		5				
17						
18	Contractor or Designated Representative	Contracting Officer's R	epresentative			
19	č	Ū.	•			
20	Date:	Date:				