



Washington
Department of
**FISH and
WILDLIFE**

COULTER CREEK HATCHERY REARING POND REPAIR AND BIRD PREDATION

DIRECTOR:
KELLY SUSEWIND

PROGRAM DIRECTOR:
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CHIEF ENGINEER:
GLENN F. GERTH, P.E.



DATE:
MAY 2022

PROJECT NO.
MN:H40:2021-1

PROJECT MANAGER:
RAY MOSBERGER

WDFW Title VI Clause

It is the policy of Washington Department of Fish and Wildlife (WDFW) to provide equal access to its programs, services, activities, and facilities under Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and the Architectural Barriers Act of 1968. WDFW is a recipient of state and federal financial assistance.

WDFW prohibits discrimination on the basis of race, color, religion, national origin, including language, sex, age, mental or physical disability, reprisal, sexual orientation, status as a parent, and genetic information.

If you believe you have been discriminated against, please contact the WDFW Title VI Manager, PO Box 43139, Olympia, WA 98504, or online at: <https://wdfw.wa.gov/accessibility/grievances> within 20 calendar days of the alleged incident to file a formal complaint, or you can file with the Washington State Human Rights Commission directly at: 1-800-233-3247, or you can write to: Chief, Public Civil Rights Division, Department of the Interior, 1849 C Street NW, Washington DC 20240.

Persons who need to receive this information in an alternative format, different language, or who need a reasonable accommodation to participate in WDFW sponsored public meetings, or other activities, may contact the Title VI Manager by phone at: (360) 902-2349, or TDD (711), or email Title6@dfw.wa.gov.

If you need further assistance or information, please contact the Olympia office of the Washington Department of Fish and Wildlife: (360) 902-2464, or Telecommunications Device for the Deaf, TDD (711).

**COULTER CREEK HATCHERY REARING POND REPAIR AND BIRD PREDATION
TABLE OF CONTENTS**

**DIVISION 0 - BID DOCUMENTS, INFORMATION
& AND GENERAL CONDITIONS**

00030	Notice to Contractors Vicinity Map to Bid Opening Site
00100	Instructions to Bidders
00110	Prebid Requirements
00120	Required Bid Documents
00130	Bid Format
00135	Bid Opening
00140	Bid Submittal Deadline
00145	Reasonable Accommodations
00150	Mandatory Responsibility Criteria
00155	Basis of Award
00160	Period of Acceptance
00170	Payment and Performance Bonds
00175	Builders Risk Insurance
00180	Interpretations
00190	Minority and Women's Business Enterprise (MWBE) Participation
00195	Contract Responsiveness
00200	Contractor Checklist
00230	Prior to Contract Execution
00235	Prior to Notice to Proceed
00240	Submit With Pay Request
00250	During Progress of Contract
00260	For Substantial Completion
00270	For Final Completion
00280	For Retainage to be Released
00300	Bid Form
00400	Supplements to Bid Form
00420	Qualification Questionnaire
00440	Supplemental Bidder Responsibility Criteria
00500	Agreement Form
00600	Bond and Certificates
00620	Retainage in Lieu of Performance Bonds Option on Contracts of \$150,000 or Less
00630	Retainage Options
00640	Certificate of Liability Insurance
00650	Schedule of Values
00660	Verification of Monthly Payments to MWBEs Form
00670	Statement of Apprentice Journeyman Participation Form

00700	General Conditions
00701	Definitions
00702	Insurance and Bonds
00703	Time and Schedule
00704	Specifications, Drawings, and Other Documents
00705	Performance
00706	Payments and Completion
00707	Changes
00708	Claims and Dispute Resolution
00709	Termination of the Work
00710	Miscellaneous Provisions

00800 Supplemental Conditions

00802	Builders Risk Insurance
00810	Abbreviations of Administrative Organizations

DIVISION 1 – GENERAL REQUIREMENTS

01010	Summary of Work
01011	Owner Furnished Items
01012	Contract Time
01025	Unit Price Measurement & Payment
01030	Schedule of Values
01040	Coordination
01060	Regulatory Requirements
01100	Special Project Procedures
01200	Project Meetings
01300	Contractor Submittals
01510	Temporary Utilities
01730	Operations and Maintenance (O&M) Manual

ATTACHMENT 1 – PERMITS

- Road Access Permit (Pending)
- Shoreline Exemption

ATTACHMENT 2 – CULTURAL RESOURCES

- Inadvertent Discovery Plan (IDP)

DIVISION 2 – SITE WORK

02000	General Site Work Provisions
02010	Subsurface Investigation
02050	Demolition
02100	Site Preparation
02140	Dewatering
02220	Excavation, Backfill, and Compaction
02510	Hot Mix Asphalt

DIVISION 3 – CONCRETE

- 03000 General Concrete Provisions
- 03210 Reinforcing Steel
- 03300 Cast-in-Place Concrete
- 03370 Concrete Curing

DIVISION 5 – METALS

- 05000 General Metal Provisions
- 05050 Fasteners
- 05091 Welding
- 05126 Galvanizing
- 05990 Miscellaneous Metals

DIVISION 15 – MECHANICAL

- 15060 Pipe, Fittings, & Accessories
- 15100 Valves and Accessories

DIVISION 0 – BID AND CONTRACT DOCUMENTS

**SECTION 00030
NOTICE TO CONTRACTORS**

Sealed bids for the following Public Works Project will be received until 2:00 p.m. on July 7, 2022 at 600 Capitol Way North, MS: 43158, Olympia, Washington, 98501-1091, and will be publicly opened and read.

Due to the safety and health of the public and employees WDFW CAMP is temporarily closing Bid Openings to public attendance. Bid opening results will be made public within 24 hours of opening. Please Note: The Public will not be able to attend this bid opening.

PROJECT:

Coulter Creek Hatchery Rearing Pond Repair and Bird Predation

NUMBER:

MN:H40:2021-1

Provide all labor, material, equipment, and permits to remove and reconstruct the bird predation structure and replace the asphalt in the rearing ponds at the Washington Department of Fish and Wildlife's Coulter Creek Hatchery, located at E 41 Coulter Creek Road Belfair, WA 98528, Washington, in Mason County.

Engineer's Estimate: \$250,000

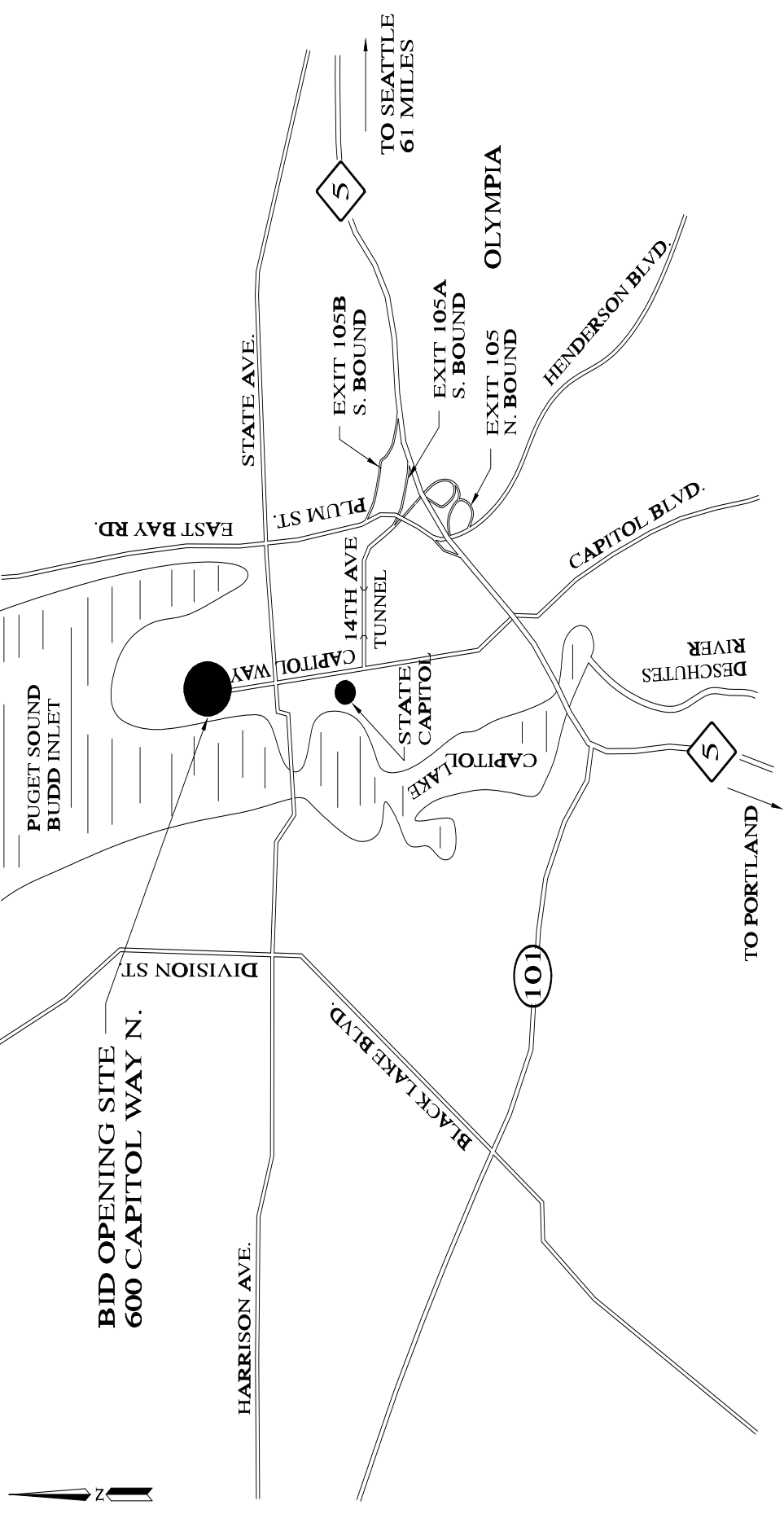
No pre-bid walkthrough is scheduled, **Contractors are strongly encouraged to independently visit the site.**

For access to Drawings, Specifications, Addenda, plan holders list, and additional information for this project, please visit Builders Exchange of Washington, Inc. at <http://www.bxwa.com> – the official projects bidding affiliate for WA Department of Fish and Wildlife Public Works bidding projects. Click on “Posted Projects”; “Public Works”, “Washington State Department of Fish and Wildlife”, “Projects Bidding.”

For information or technical questions regarding this project, email CAMP.Bids@dfw.wa.gov with the project title and project number in subject line. This email may also be used to request copies of the project's posted documents (Drawings, Specifications, Addenda).

Minority and Women's Business Enterprises (MWBE) are encouraged to participate in the bidding as prime contractors, subcontractors, or suppliers.

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE
Timothy Burns, Capital and Asset Management Program Director
By
Glenn F. Gerth, P.E., Chief Engineer
Capital and Asset Management Program



**BID OPENING SITE
600 CAPITOL WAY N.**

**BID OPENING SITE
600 CAPITOL WAY N.
OLYMPIA, WA 98501-1091**

**STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE**

DATE DRAWN: 04-10-95 SCALE: N.T.S.

DIVISION 0 – BID AND CONTRACT DOCUMENTS

**SECTION 00100
INSTRUCTIONS TO BIDDER**

00110 PREBID REQUIREMENTS

- A. Carefully examine all project documents.
- B. Be fully informed of all existing conditions and limitations, including any activities by City, County, State, Federal or private entities affecting access to the project.
- C. Include in the bid sufficient amount to cover all costs required by Bid Documents to complete the work, but not limited to applicable federal, state, and local taxes (except State Retail Sales Tax), insurance, bonding license(s), payment of prevailing wage rates, L&I filing fees, and all costs that may be necessary to complete the work.
- D. No Apprenticeship Participation requirements for projects estimated less than \$1,000,000.
- E. The project is not federally funded.

00120 REQUIRED BID DOCUMENTS

Failure to submit ALL PAGES of the following forms is sufficient cause to reject the bid.

- A. **Bid Form**: The ENTIRE current Bid Form Section 00300 must be signed. Check for addenda at Builders Exchange of Washington, Inc. (<http://www.bxwa.com>) before submitting bid.
- B. **Standard Questionnaire for Qualification of Contractors Form**: Submit the completed form with bid form.
- C. **Bid Bond**: For bids of \$35,000 or less, no bid guarantee is required. Bids greater than \$35,000 shall be accompanied by a certified check, cashier's check, or bid bond payable to the Treasurer of the State of Washington in an amount equal to at least five-percent of the bid as evidence of good faith and as a guarantee that, if awarded the Contract, the bidder will execute the Contract and give separate bond as required, see Section 00702.06.

00130 BID FORMAT

- A. Each bid must be submitted on the current Bid Form, Section 00300 contained in these Bid Documents. Place your required bid documents into an envelope clearly marked on the outside with "BID ENCLOSED", the project name, and project number. Envelope shall clearly identify your Company's name and address as shown below.

Company Name Address City, State Zip	BID ENCLOSED PROJECT NAME PROJECT NUMBER BID OPENING
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- B. No oral, email, telephonic, faxed bids or modifications will be accepted or considered.

00135 BID OPENING

Bidders must submit their bid to the Washington Department of Fish and Wildlife, Capital and Asset Management Program, located at 600 Capitol Way North, MS: 43158, Olympia, Washington 98501-1091 before the bid submittal deadline for this solicitation. Sending your bid through the United States Postal Services (USPS) or United States Express Mail will not guarantee your bid will be received at the above location on time.

PLEASE NOTE: As a state agency, USPS mail is routed through the State’s Consolidated Mail Service with unpredictable delivery times. We encourage the following:

- Hand delivery;
- Courier service;
- Allow sufficient amount of time;
- Third party (i.e. Federal Express, United Parcel Service) for overnight delivery;
- Clearly label the outside of your envelope using the format in Section 00130.

00140 BID SUBMITTAL DEADLINE

- A. Sealed bids for this project will be received by an authorized representative within the Washington Department of Fish and Wildlife, Capital and Asset Management Program located at 600 Capitol Way North, MS: 43158, Olympia, Washington, 98501-1091 until the time and date indicated on the current Bid Form, Section 00300. **Due to the safety and health of the public and employees, WDFW CAMP has temporarily closed Bid Openings to public attendance. Bid opening results will be made public within 24-hours of opening.**
- B. Bids submitted after deadline will not be accepted.

00145 REASONABLE ACCOMMODATIONS

- A. Persons with disabilities who need reasonable accommodations to participate in the bid openings are invited to contact Capital and Asset Management Program at (360) 902-8300 or CAMP.Bids@dfw.wa.gov. Reasonable accommodation requests should be received at least three business days prior to the bid opening to ensure availability.
- B. **Bid Results:** After bid opening, bidders may obtain bid results from Builders Exchange of Washington, Inc. at <http://bxwa.com> the next business day.

00150 MANDATORY RESPONSIBILITY CRITERIA

Before award of a public works contract, a bidder must meet the following mandatory responsibility criteria under RCW 39.04.350 (1) to be considered a responsible bidder and qualified to be awarded a public works project. The bidder must:

- A. At time of bid submittal, have a certificate of registration in compliance with Chapter 18.27 RCW;
- B. Have a current state Unified Business Identifier (UBI) number;
- C. If applicable, have industrial insurance coverage for the bidder’s employees working in Washington as required in Title 51 RCW; an employment security department number as required in Title 50 RCW; and a state excise tax registration number as required in Title 82 RCW;

DIVISION 0 – BID AND CONTRACT DOCUMENTS

- D. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065(3);
- E. If bidding on a public works project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington State apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under Chapter 49.04 RCW for the one-year period immediately preceding the date of the bid solicitation;
- F. Have received training on the requirements related to public works and prevailing wage under this chapter and Chapter 39.12 RCW. The bidder must designate a person or persons to be trained on these requirements. The training must be provided by the Department of Labor and Industries or by a training provider whose curriculum is approved by the department. The department, in consultation with the prevailing wage advisory committee, must determine the length of the training. Bidders that have completed three or more public works projects and have had a valid business license in Washington for three or more years are exempt from this subsection. The Department of Labor and Industries must keep records of entities that have satisfied the training requirement or are exempt and make the records available on its web site. Responsible parties may rely on the records made available by the department regarding satisfaction of the training requirement or exemption; and

Labor and Industries (LNI) Training Information Link:

<https://www.lni.wa.gov/TradesLicensing/PrevWage/Contractors/Training.asp>

- G. Within the three-year period immediately preceding the date of the bid solicitation, not have been 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 to have willfully violated, as defined in RCW 49.48.082, and provision of Chapter 49.46, 49.48 or 49.52 RCW.

00155 BASIS OF AWARD

The lowest responsive bid and responsible bidder is based upon the Base Bid. The Owner reserves the right to award the contract amount based on any or all of the bid items listed, to restrict the contract amount to the funds available, and to reject any or all bids for any reason whatsoever and waive informalities.

00160 PERIOD OF ACCEPTANCE

All bids may be held 45 calendar days from bid opening date. At the end of this period, the three lowest bids may be retained for 15 additional days, or as may be further extended by the Owner with the approval of the bidding companies.

00170 PAYMENT AND PERFORMANCE BONDS

- A. Base bids greater than \$150,000; Contractor shall provide separate Payment and Performance Bonds, each executed by Contractor and Contractor's Surety.
- B. Base bids \$150,000 or less, Contractor shall provide separate Payment and Performance Bonds, each executed by Contractor and Contractor's Surety, unless the Contractor agrees Owner may, in lieu of the bond(s), retain 10 percent of the Contract Sum for the period allowed by RCW 39.08.010.

DIVISION 0 – BID AND CONTRACT DOCUMENTS

C. For additional information see Section 00702.04.

00175 BUILDERS RISK INSURANCE

Builders Risk Insurance is not required, see Section 00802.07.

00180 INTERPRETATIONS

For information or technical questions regarding this project email CAMP.Bids@dfw.wa.gov with the project title and project number in subject line and address questions to the Project Manager. Questions resulting in changes to the scope or nature of the drawings, specifications, or bid documents will be answered by addendum/addenda reflective of the Owner's process.

The Owner will **NOT** answer questions received after 2:00 p.m. on June 30, 2022. All addenda issued are part of the bid documents. The Owner will not be responsible for any oral interpretations.

00190 MINORITY AND WOMEN'S BUSINESS ENTERPRISE (MWBE) PARTICIPATION

Minority and Women's Business Enterprises (MWBE) are encouraged to participate in the bidding as prime contractors, subcontractors, or suppliers.

00195 CONTRACT RESPONSIVENESS

Contractor shall return all required contract documents and signed contract no later than 21 calendar days from date of Award Letter.

END OF SECTION 00100

DIVISION 0 – BID AND CONTRACT DOCUMENTS

SECTION 00200 CONTRACTOR CHECKLIST

00230 PRIOR TO CONTRACT EXECUTION

Submit the following to WDFW's Contract Administrator within 21 calendar days from the date of the Award Letter:

- A. Signed Public Works Contract Agreement.
- B. Performance and Payment Bonds Forms: Separate performance and payment bonds executed by Contractor and Contractor's Surety.
- C. Retainage in Lieu of Performance Bond Option on Contracts of \$150,000 or Less: If Contractor elects, Owner may retain ten percent of the Contract Sum in lieu of the Performance and Payment Bonds, see Section 00620.
- D. Retainage Options Form, see Section 00630.
- E. Certificate of Liability Insurance Form, see Section 00640.
- F. Statewide Payee Form, Form W-9, Request for Taxpayer ID Number and Certification: for General Contractors and Subcontractors.

00235 PRIOR TO NOTICE TO PROCEED

- A. Provide to the Project Manager:
 - 1. List of subcontractors and major suppliers of work and materials greater than \$2,500.
 - 2. Construction Schedule for approval, see Section 00703.2.
 - 3. Schedule of Values for approval, see Section 00650.
- B. Attend preconstruction conference.

00240 SUBMIT WITH PAY REQUEST

- A. First invoice: include Statement of Intent to Pay Prevailing Wage Rates for Contractor and all Subcontractors, filed and approved by the Department of Labor and Industries (L&I). Information regarding Prevailing Wages is found at the L&I website: <http://www.lni.wa.gov/TradesLicensing/PrevWage/IntentAffidavits/File/default.asp>.
- B. All invoices: include Verification of Monthly Payments to MWBEs, see Section 00660.
- C. For contract sums of \$1,000,000 or more include Statement of Apprentice/Journeyman Participation, see Section 00670.

00250 DURING PROGRESS OF CONTRACT

- A. Provide Submittals and Shop Drawings as required, see Section 01300.
- B. If work exceeds 30 calendar days, Contractor may request partial payment once per month. If work is 30 calendar days or less, Contractor requests payment when project is complete.

00260 FOR SUBSTANTIAL COMPLETION

- A. Owner/operator training completed.
- B. Submit Operation and Maintenance Manual draft to Owner, see Section 01730.
- C. Written Certificate of Occupancy received by Owner.
- D. Owner provides Contractor final punch list.
- E. Owner provides written Substantial Completion.

00270 FOR FINAL COMPLETION

- A. Contractor completes final punch list.
- B. Owner completes walkthrough and validates final punch list.
- C. Contractor submits final Operation and Maintenance Manuals to Owner, see Section 01730.
- D. Contractor submits Project Record to Owner if required in the contract.
- E. Contractor provides all signed permits to the Owner.
- F. Contractor provides all expressed warranties greater than one year to Owner.
- G. Owner issues Final Completion Letter to Contractor.
- H. Contractor submits final invoice after receipt of the Final Completion Certificate.
- I. Contractor submits Affidavit of Wages Paid to L&I.
- J. L&I approves the Affidavit of Wages Paid for Contractor and all Subcontractors working on the project.
- K. Owner submits a Notice of Completion Form to L&I, the Department of Revenue, and the Employment Security Department.
- L. Owner's Contract Administrator receives the notarized Contractor's Release of Claims Form.

00280 FOR RETAINAGE TO BE RELEASED

- A. Contract must not be in dispute.
- B. Owner processes final progress payment.
- C. Owner administers 60-day legal lien period.
- D. Owner's Contract Administrator receives releases from Department of Revenue, Employment Security Department, and Labor & Industries.

END OF SECTION 00200

SECTION 00300
BID FORM

FAILURE TO SUBMIT ALL PAGES OF BID FORM SHALL BE SUFFICIENT CAUSE TO REJECT THE BID.

To: Washington Department of Fish & Wildlife
Chief Engineer
600 Capitol Way North, MS: 43158
Olympia, WA 98501-1091

Project Title: Coulter Creek Hatchery Rearing Pond
Repair and Bird Predation

Project No.: MN:H40:2021-1

Bid Opening: 2:00 p.m. July 7, 2022

00310 BID

Pursuant to and in compliance with the Bid Documents, the undersigned Bidder agrees to submit all bid form pages and perform the Work for the following Base Bid amount for the above referenced project:

Lump Sum Items	
Bid Item 1: Construct Bird Predation Structure	\$
Bid Item 2: Asphalt Removal and Subgrade Prep	\$
Bid Item 3: New Asphalt Installation	\$
Base Bid – Sum of bid items: 1 through 3. (Do not include Washington State Sales Tax)	\$

TRENCH EXCAVATION SAFETY PROVISIONS

If the bid amounts contain any work in which trench excavation will exceed a depth of four feet, all costs for adequate trench safety systems amount shall be included in base bid in compliance with RCW 39.04.180. The Bidder agrees to comply with all the relevant trench safety requirements of Chapter 49.17 RCW and WAC 296-155-66411.

If trench excavation safety provisions do not pertain to this project, enter “N/A” for the dollar amount. Failure to complete this requirement shall be sufficient cause to reject the bid.

Trench Excavation Safety Provisions	\$
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00320 CONTRACT COMPLETION TIME

Substantial Completion shall be achieved by October 4, 2022.

Final Completion shall be achieved by October 11, 2022.

00330 LIQUIDATED DAMAGES

The undersigned agrees to pay the Owner as liquidated damages the sum of \$595 for each consecutive calendar day that is in default after the Contract Time. Liquidated damages shall be deducted from the Contract by Change Order.

00340 MINORITY AND WOMEN’S BUSINESS ENTERPRISES (MWBE) UTILIZATION CERTIFICATION

The bidder certifies they have, in good faith, afforded maximum opportunities to MWBEs, and if they are the successful bidder on this project, the following MWBE firms or approved substitutes shall be utilized on the project and compensated in the amounts shown. **If the bidder does not expect to utilize MWBE firms, enter “N.A.” on line one below.**

Firm Name, Address and Federal I.D. #	Telephone Number	Type of Work	Certificate Number	MBE%	WBE%
1					
2					
TOTALS					

00350 IDENTIFICATION OF SUBCONTRACTORS FOR PROJECTS GREATER THAN \$1,000,000

Not Used.

00360 CONTRACT EXECUTION

- A. Contract Execution: If the Owner awards a contract based on this bid within 60 calendar days (unless otherwise negotiated) of the bid submission deadline, the Bidder agrees to execute a contract for the above work, for compensation computed from the above stated bid amounts, on the WDFW Public Works Contract Form.
- B. Bonds and Insurance: If Bidder fails to submit the documents listed in Section 00230, within 21 calendar days after date on the Award Letter, the Owner may revoke the award.
- C. Failure to Execute Contract: If the successful bidder, fails to submit the documents listed in Section 00230, the Owner may revoke the award. The bid guarantee may be retained by Owner as liquidated damages, not as penalty.

If a contract is not awarded within 60 calendar days (unless otherwise negotiated) after the bid submission deadline or Contractor fails to submit the documents listed in Section 00230, the certified or cashier’s check submitted as the bid guarantee shall be returned to the bidder, or the Bid Bond shall become void.

00370 DECLARATION

- A. Familiarity with Bid Document and Site: The undersigned Bidder hereby certifies to have personally and carefully examined the Bid Documents issued for the above referenced project, the site where the Work is to be performed and the conditions affecting the Work.
- B. Proposal to Perform Work: The Bidder hereby proposes to furnish all labor, materials, equipment, and services and to perform all work which may be required to complete the Work within the time fixed and in strict accordance with the Contract Documents for the above-referenced project for the Base Bid indicated above. The bid prices cover all expenses of the Bidder, including but not limited to, overhead, profit, insurance, and bonding, to perform the Work in accordance with the Contract Documents.

DIVISION 0 – BID AND CONTRACT DOCUMENTS

- C. Non-Collusion: The Bidder affirms that the bid is a genuine and not a sham or collusive bid or made in the interest or on behalf of any person not therein named. The Bidder has not directly or indirectly induced or solicited any bidder on the work to put in a sham bid, or any other person or corporation to refrain from bidding, and that the Bidder has not in any manner sought by collusion to secure for itself an advantage over any other bidder or bidders. The Bidder has not entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in the preparation and submission of this bid to the Owner for the project described in the Bid Documents.
- D. Certification of Compliance with Wage Payment Statutes: The bidder hereby certifies that, within the 3 year period immediately preceding the bid solicitation date the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of Chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

00380 ACKNOWLEDGEMENT

I certify by signing the current Bid Form that all Addendum/Addenda, Contract Execution and Declarations have been acknowledged. Contractor shall review online bid documents at Builders Exchange of Washington, Inc. <http://www.bxwa.com> to ensure all information is considered in bid proposal.

Bidder's Business Name:		
Unified Business Number (UBI):	Contractor's License Number:	
Physical Business Street Address		
City:	State:	Zip Code:
Phone Number:		
Email Address:		
If the above address is not in Washington State, check ONE of the boxes below:		
<input type="checkbox"/> Physical office in WA: _____ <div style="display: flex; justify-content: space-around; width: 100%;"> Street Address City Zip Code </div>		
OR		
<input type="checkbox"/> State of incorporation or where business entity was formed, if not corporation: _____		

OFFICIAL AUTHORIZED TO SIGN FOR BIDDER:

"I certify (or declare) under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct":	
Signature of Authorized Official:	Date:
Print Name	Title

FAILURE TO SUBMIT ALL PAGES OF BID FORM SHALL BE SUFFICIENT CAUSE TO REJECT THE BID.

END OF SECTION 00300

**SECTION 00400
SUPPLEMENTS TO BID FORM**

00420 QUALIFICATION QUESTIONNAIRE

- A. Information and Instructions - Standard Questionnaire for Qualification of Contractors:
1. Any person, firm, or corporation bidding on this project shall execute and submit with their bid a Standard Questionnaire for Qualification of Contractors Form. Failure to submit the completed form may be sufficient cause to reject the bid.
 2. The Chief Engineer will make the sole determination as to the adequacy of the experience and responsibility of the bidder.
 3. All information furnished will be treated as confidential to the extent that such policy is compatible with the provisions of the general statutes affecting the conduct of public offices.
- B. Preparation of Standard Questionnaire for Qualification of Contractors Form:
1. Bidder shall submit the Standard Questionnaire for Qualification of Contractors Form only in the exact name under which the bid is submitted. Answers and entries shall be specific and complete in detail.
 2. Bidder shall verify that Representative or Project Manager Contact information is current and valid prior to submission.
- C. Joint Ventures: The bids of Joint Ventures will be accepted if qualification has been satisfactorily established by each of the firms bidding in the name of the Joint Venture.

**STANDARD QUESTIONNAIRE
FOR QUALIFICATION OF CONTRACTORS**

PROJECT NO. _____

Submitted by: _____
Name Title

Street Address City State Zip () Phone Number

Signature

QUESTIONNAIRE

A. How many years has your organization been in business under your present business name?

B. List three projects your organization has completed or has underway on this date reflecting the type of work for which you desire to qualify.

1.	Owner	Owner's Representative or PM	Representative or PM Phone Number
Project Name		Contract Amount	
Class of Work Performed			
2.	Owner	Owner's Representative or PM	Representative or PM Phone Number
Project Name		Contract Amount	
Class of Work Performed			
3.	Owner	Owner's Representative or PM	Representative or PM Phone Number
Project Name		Contract Amount	
Class of Work Performed			

C. Has your organization ever failed to complete a construction contract?

YES NO

If Yes, state reason why:

00440 SUPPLEMENTAL BIDDER RESPONSIBILITY CRITERIA

Not Used.

END OF SECTION 00400



SECTION 00500

PUBLIC WORKS CONTRACT

TITLE: [REDACTED]

CONTRACT NUMBER: [REDACTED]

CONTRACTOR: [REDACTED]

ENGINEERING #: [REDACTED]

CONTRACT AMOUNT: [REDACTED]

MASTER INDEX: [REDACTED]

TYPE: Payable / Engineering / Public Works

PROJECT MANAGER: [REDACTED]

CONTRACT PERIOD: [REDACTED]

A. PARTIES TO THIS CONTRACT

This Contract is entered into under the authority of Chapter 39.04 of the Revised Code of Washington (RCW) between the Washington State Department of Fish and Wildlife (WDFW), 600 Capitol Way North, Olympia, WA 98501-1091; and (Contractor), Company Address, Company City, Company State, Company Postal Code; and shall be binding upon the agents and all persons acting by or through the parties.

B. PURPOSE OF CONTRACT

The Contractor shall provide those goods and /or services in accordance with and as described in the plans and drawings designated as "State of Washington Department of Fish & Wildlife Engineer Number XX:XX:XXXX together with the Contractor's bid opened at 2:00 P.M. Pacific Time on XX/XX/XXXX; and in full compliance with terms, conditions and stipulations of the General Conditions of the Contract, Release of Claims, the Special Conditions of the contract and material, Rights-of-Way and Easements (other than those provided by the State), licenses, permits, for this contract, now referred to and by this reference incorporated herein and made a part hereof as fully, for all purposes as if here set forth at length.

C. DESCRIPTION OF PROJECT

The Contractor shall perform the project as described in Attachments, which are incorporated herein by this reference:
Attachment "A" Specifications and Drawings (WDFW Engineer Number: XX/XXXX/XXXX)

D. PERIOD OF PERFORMANCE

The Contractor shall begin work as stated in the Notice to Proceed letter from WDFW; and shall complete all work under this contract not later than **DATE**. No expenditures made before or after this period are eligible for reimbursement unless incorporated by written amendment into this Contract. The Contract may be terminated or the performance period extended pursuant to terms set forth in Attachment "A."

WDFW may suspend the work of the Contractor due to weather or other needs of WDFW. The Contractor shall suspend all work on the contract upon the receipt of a Notice to Suspend from WDFW; and shall not re-commence work until a Notice to Resume Work is received from WDFW.

E. COMPENSATION / PAYMENT

WDFW hereby promises and agrees with the Contractor to employ, and does employ the Contractor to provide the materials and to do and cause to be done the above-described work, and to complete and finish the same according to the plans designated, and the attached specifications and the terms and conditions herein contained, and hereby contracts to pay for the same in the manner set out in the specifications the sum of **\$00.00** plus applicable Washington State sales tax at the time and upon the conditions provided for in this contract and every part thereof.

DIVISION 0 – BID AND CONTRACT DOCUMENTS

That WDFW further agrees to employ the Contractor to perform any alterations in or additions to the work covered by this contract and any force account work that may be ordered, if the construction or labor required by such changes or force work is to be executed during the period specified herein for the completion of the work under this contract, and to pay for the same under the terms of this contract. Except as otherwise provided in Section 00707 of Attachment "A" of the contract, no alteration or modification of any of the terms, conditions, price, quality, quantity or specifications of this contract will be effective if not in writing and signed by WDFW.

The Contractor is required to be registered in the Statewide Vendor Payment System prior to submitting a request for payment under this contract. The Washington State Office of Financial Management (OFM) maintains the Statewide Vendor Payment System; to obtain registration materials, forms are available on the OFM payee registration [website](#) or contact the Statewide Payee Help Desk at HereToHelp@ofm.wa.gov (360) 407.9100.

F. RIGHTS AND OBLIGATIONS

All rights and obligations of the parties of this Contract are subject to this Contract, including the Attachments, which are incorporated herein by this reference. By signing this Contract the Contractor acknowledges that they have read, fully understand, and agree to be bound by all terms and conditions set forth in this Contract.

G. ORDER OF PRECEDENCE

In the event of an inconsistency in this contract, unless otherwise provided herein, the inconsistency shall be resolved by giving precedence in the following order:

- Applicable Federal and State of Washington statutes and regulations;
- Special Terms and Conditions as contained in this basic contract instrument;
- Attachment "A" Specifications and Drawings (WDFW Engineer Number: XX/XXXX/XX); and
- Any other provision, term or material incorporated herein by reference or otherwise incorporated.

H. CONTRACT REPRESENTATIVES

The below named representatives for each of the parties shall be the contact people for all communications and billings regarding the performance of this Contract. All written communications regarding this Contract shall be sent to the designated representatives at the addresses below unless notified in writing of any change.

Contractor's Representative

Name:
Company Name:
Address:
Office Phone:
Email:

WDFW's Representative

Project Manager:
Capital and Asset Management Program
PO Box 43158
Olympia, WA 98504-3158
(360) 902-8300
Email:

I. ENTIRE CONTRACT

This Contract, along with all attachments and exhibits, constitutes the entire agreement of the parties. No other understandings, verbal or otherwise, regarding this Contract shall exist or bind any of the parties.

J. APPROVAL

This contract shall be subject to the written approval of WDFW'S authorized representative and shall not be binding until so approved. This Contract may be altered, amended, or waived only by a written amendment executed by both parties.

DIVISION 0 – BID AND CONTRACT DOCUMENTS

IN WITNESS WHERE, WDFW and the Contractor have signed this contract.

CONTRACTOR NAME

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

Signature and Date

Signature and Date

Printed Name and Title

Timothy W. Burns, PE
Program Director
Capital and Asset Management Program

APPROVED AS TO FORM BY THE OFFICE OF THE ATTORNEY GENERAL 12/19/2014

DIVISION 0 – BID AND CONTRACT DOCUMENTS

SECTION 00600

00620 RETAINAGE IN LIEU OF PERFORMANCE BOND OPTION ON CONTRACTS
OF \$150,000 OR LESS



Contract No. _____

Project Name: _____

Agency: DEPARTMENT OF FISH AND WILDLIFE _____

Contractor: _____

Pursuant to *RCW 39.08.010* you are permitted to exercise your option, IN WRITING, on whether to provide a performance bond, or in lieu of bond to have retention increased to 10 percent. You are therefore requested to complete and return this form prior to receiving the *Notice to Proceed*.

OPTION 1:

Provide a performance bond in accordance with *SECTION 00702.04* of the *GENERAL CONDITIONS*.

I request Option #1 _____

OPTION 2:

Retain 10 percent of the contract payments in lieu of providing a performance bond in accordance with *SECTION 00702.04* of the *GENERAL CONDITIONS*.

I request Option #2 _____

Signature

Title

Date

00630 RETAINAGE OPTIONS



Contract No.: _____ Project: _____

Chapter 60.28 RCW requires in part that all contracts for public improvements or work by a public body must provide for retention from the amounts earned by the Contractor. Such monies are to be retained in accordance with the provision of the law for the protection and payment of any person supplying labor or material for such work and the State for taxes due from the Contractor.

The monies reserved from amounts due a Contractor at his/her option shall be: (Contractor mark choice):

- _____ A. Retained in a fund by the public body until 60 days following the final acceptance of said improvement or work as completed; or
- _____ B. Deposited by the public body in an interest bearing account in a bank, mutual savings bank, or savings and loan association, not subject to withdrawal until 60 days after the final acceptance of said improvement or work as completed, or until agreed to by both parties: Provided, that interest on such account shall be paid to the Contractor.
- _____ C. Placed in escrow with a bank or trust company until 60 days following final acceptance of said work or improvement as completed.
- _____ D. Contractor will submit a retainage bond for all or any portion of funds to be retained by Washington State Department of Fish and Wildlife.

The warrant or check representing monies to be placed in escrow shall be made payable jointly to the bank or trust company and the Contractor. Such monies must be converted into bonds and securities and held in escrow. The bonds and securities are to be chosen by the Contractor and approved by the State. When interest on such investments accrues and is paid, it must be forwarded to the Contractor.

The escrow agreement, in the form prescribed by WAC Chapter 82-32 and in addition to other requirements, must also provide for payment of all escrow costs and fees by the Contractor. A copy of the completed escrow agreement shall be provided by the escrow agent, the Contractor and the state agency prior to the time the first progress payment is made.

This completed option must be returned with the signed Contract Documents. No progress payment shall be made until the Contractor has exercised this option in writing.

Contractor	Signature	Date
------------	-----------	------



00640

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME:	
	PHONE (A/C, No. Ext):	FAX (A/C, No):
	E-MAIL ADDRESS:	
	INSURER(S) AFFORDING COVERAGE	NAIC #
INSURED	INSURER A :	
	INSURER B :	
	INSURER C :	
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A				<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE

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**STATE OF WASHINGTON
00650 SCHEDULE OF VALUES**

CERTIFICATE FOR PAYMENT. For period from: date to date
 Contract for: **project title** Date: 01/00/00
 Location: **project location** Certificate No.: _____
 Contractor: _____ Contract No.: _____

Original Contract Amount: \$0.00
 Net change in Contract Amount to Date: \$0.00
 Adjusted Contract amount **\$0.00**

ITEM NO.	SCHEDULE OF VALUES DETAIL	ESTIMATED VALUE	AMOUNT EARNED	%	PREVIOUSLY CLAIMED	THIS INVOICE
1		\$0.00	\$0.00	#####	\$0.00	\$0.00
2		\$0.00	\$0.00	#####	\$0.00	\$0.00
3		\$0.00	\$0.00	#####	\$0.00	\$0.00
4		\$0.00	\$0.00	#####	\$0.00	\$0.00
5		\$0.00	\$0.00	#####	\$0.00	\$0.00
6		\$0.00	\$0.00	#####	\$0.00	\$0.00
7		\$0.00	\$0.00	#####	\$0.00	\$0.00
8		\$0.00	\$0.00	#####	\$0.00	\$0.00
9		\$0.00	\$0.00	#####	\$0.00	\$0.00
10		\$0.00	\$0.00	#####	\$0.00	\$0.00
11		\$0.00	\$0.00	#####	\$0.00	\$0.00
12		\$0.00	\$0.00	#####	\$0.00	\$0.00
13		\$0.00	\$0.00	#####	\$0.00	\$0.00
14		\$0.00	\$0.00	#####	\$0.00	\$0.00
15		\$0.00	\$0.00	#####	\$0.00	\$0.00
16		\$0.00	\$0.00	#####	\$0.00	\$0.00
17		\$0.00	\$0.00	#####	\$0.00	\$0.00
18		\$0.00	\$0.00	#####	\$0.00	\$0.00
19	Change Orders:					
20	1.	\$0.00	\$0.00	#####	\$0.00	\$0.00
21	2.	\$0.00	\$0.00	#####	\$0.00	\$0.00
22	3.	\$0.00	\$0.00	#####	\$0.00	\$0.00
23	4.	\$0.00	\$0.00	#####	\$0.00	\$0.00
24	5.	\$0.00	\$0.00	#####	\$0.00	\$0.00
25	6.	\$0.00	\$0.00	#####	\$0.00	\$0.00
26	7.	\$0.00	\$0.00	#####	\$0.00	\$0.00
27	8.	\$0.00	\$0.00	#####	\$0.00	\$0.00
28	6.	\$0.00	\$0.00	#####	\$0.00	\$0.00
	SUBTOTAL	\$0.00	\$0.00	#####	\$0.00	\$0.00
TAX	SALES TAX	\$0.00	\$0.00		\$0.00	\$0.00
	TOTAL	\$0.00	\$0.00		\$0.00	\$0.00
Less Retainage..	5%		\$0.00		\$0.00	\$0.00
	NET		\$0.00		\$0.00	\$0.00
	Less Previous Payments...		\$0.00			
Additional Tax	0.00%	\$0.00			\$0.00	
	AMOUNT DUE THIS ESTIMATE		\$0.00			\$0.00

check
\$0.00
\$0.00
\$0.00
\$0.00
\$0.00

This is to certify that the contractor, having complied with the terms and conditions of the above mentioned contract, is due and payable from the State of Washington, the amount set after "AMOUNT DUE THIS ESTIMATE."

0

 (Contracting Firm) (Architect or Engineer)

By _____ By _____
 [SIGN IN INK] [SIGN AND DATE]



00660 VERIFICATION OF MONTHLY PAYMENTS TO MWBES

State of Washington Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington, 98501-1091, (360) 902-8300

Project No _____ Project Title _____ Sheet _____ of _____

Contractor _____ Payment # _____

Federal Tax Identification #	Contractor/Supplier	WBE or MBE	Nature of Work or Type of Supplies	Bid Total Utilization Dollars	Amount Paid This Month	Amount Paid to Date

CONTRACTOR: _____
 Authorized Signature

DATE: _____

Washington Department of Fish and Wildlife

STATEMENT OF APPRENTICE/JOURNEYMAN PARTICIPATION

Firm Name, Address, City, State & ZIP+4	Project Name (Title)	Contract No.
	Contract Award Amount:	Notice to Proceed Date
	\$	
Reporting Period from: _____ to _____		Required Apprenticeship Percentage: 15%

APPRENTICE SUMMARY

Apprentice Name	Craft or Trade	Apprentice Registration Number	Name of Contractor or Sub-Contractor	Apprentice	
				Total Number	Hours Worked

JOURNEYMEN SUMMARY

Journeymen Name	Craft or Trade	Journeymen Registration Number	Name of Contractor or Sub-Contractor	Journeymen	
				Total Number	Hours Worked

Apprentice total hours worked this period:	0				
Journeymen total hours worked this period:	0				
Cumulative Apprenticeship hour Total brought forward from last reporting period:	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%;">Previous Total</th> <th style="width:50%;">New Total</th> </tr> <tr> <td style="text-align: center;">previous total</td> <td> </td> </tr> </table>	Previous Total	New Total	previous total	
Previous Total	New Total				
previous total					
Cumulative Journeymen hour Total brought forward from last reporting period:	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%;">Previous Total</th> <th style="width:50%;">New Total</th> </tr> <tr> <td style="text-align: center;">previous total</td> <td> </td> </tr> </table>	Previous Total	New Total	previous total	
Previous Total	New Total				
previous total					
Percentage					

I, the undersigned, do hereby certify under penalty of perjury that the items listed herein represent the proper hourly totals for Apprenticeship/Journeyman participation during this reporting period.

Printed Name: _____	Signature: _____	Date: _____	Title: _____
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DES Labor Form 100412

END OF SECTION 00600

**SECTION 00700
TABLE OF CONTENTS**

00701	Definitions		00705.12	Layout of Work
	00701.01	Definitions	00705.13	Material and Equipment
	00701.02	Order of Precedence	00705.14	Availability and Use of Utility Services
	00701.03	Execution and Intent		
00702	Insurance and Bonds		00705.15	Tests and Inspection
	00702.01	Contractor's Liability Insurance	00705.16	Correction of Nonconforming Work
	00702.02	Coverage Limits		
	00702.03	Insurance Coverage Certificates	00705.17	Cleanup
	00702.04	Payment and Performance Bonds	00705.18	Access to Work
	00702.05	Additional Bond Security	00705.19	Other Contracts
	00702.06	Bid Bond or Proposal Guarantee	00705.20	Subcontractors and Suppliers
	00702.07	Builder's Risk	00705.21	Warranty of Construction
00703	Time and Schedule		00705.22	Indemnification
	00703.01	Progress and Completion	00705.23	Required Payroll Documents
	00703.02	Construction Schedule	00705.24	Statement of Apprentice/Journeyman Participation
	00703.03	Owner's Right to Suspend the Work for Convenience		
	00703.04	Owner's Right to Stop the Work for Cause	00705.25	Federally Funded Contract Conditions
	00703.05	Delay		
	00703.06	Notice to Owner of Labor Disputes	00706	Payments and Completion
	00703.07	Damages for Failure to Achieve Timely Completion	00706.01	Contract Sum
00704	Specifications, Drawings, and Other Documents		00706.02	Schedule of Values
	00704.01	Discrepancies and Contract Document Review	00706.03	Application for Payment
	00704.02	Project Record	00706.04	Progress Payments
	00704.03	Shop Drawings	00706.05	Payments Withheld
	00704.04	Organization of Specifications	00706.06	Retainage and Bond Claim Rights
	00704.05	Ownership and Use of Drawings, Specifications, and Other Documents	00706.07	Substantial Completion
00705	Performance		00706.08	Prior Occupancy
	00705.01	Contractor Control and Supervision	00706.09	Final Completion, Acceptance, and Payment
	00705.02	Permits, Fees, and Notices	00707	Changes
	00705.03	Patents and Royalties	00707.01	Changes in the Work
	00705.04	Prevailing Wages	00707.02	Change in the Contract Sum
	00705.05	Hours of Labor	00707.03	Change in the Contract Time
	00705.06	Nondiscrimination	00708	Claims and Dispute Resolution
	00705.07	Safety Precautions	00708.01	Claims Procedure
	00705.08	Operations, Material Handling, and Storage Areas	00708.02	Arbitration
	00705.09	Prior Notice of Excavation	00708.03	Claims Audits
	00705.10	Unforeseen Physical Conditions	00709	Termination of the Work
	00705.11	Protection of Existing Structures, Equipment, Vegetation, Utilities, and Improvements	00709.01	Termination by Owner for Cause
			00709.02	Termination by Owner for Convenience
			00710	Miscellaneous Provisions
			00710.01	Governing Law
			00710.02	Successors and Assigns
			00710.03	Abbreviations of Administrative Organizations
			00710.04	Rights and Remedies
			00710.05	Contractor Registration
			00710.06	Time Computations

- 00710.07 Records Retention
- 00710.08 Third-Party Agreements
- 00710.09 Antitrust Assignment
- 00710.10 Identification of Subcontractor
for Projects Greater than
\$1,000,000

PART 1 - 00701.00 DEFINITIONS

00701.01 DEFINITIONS

- A. Application for Payment: A written request submitted by Contractor to A/E for payment of Work completed, in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner or A/E may require.
- B. Architect, Owner, or A/E: A person or entity lawfully entitled to practice architecture or engineering, representing Owner within the limits of its delegated authority.
- C. Change Order: A written instrument signed by Owner and Contractor stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Sum, if any; and (3) the extent of the adjustment in the Contract Time, if any.
- D. Claim: Contractor's exclusive remedy for resolving disputes with Owner regarding the terms of a Change Order or a request for equitable adjustment, as more fully set forth in *SECTION 00708 - CLAIMS AND DISPUTE RESOLUTION*.
- E. Contract Documents: The Advertisement for Bids, Instructions to Bidders, completed Form of Proposal, *GENERAL CONDITIONS*, Modifications to the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS*, Public Works Contract, other Special Forms, Drawings and Specifications, and all addenda and modifications thereof.
- F. Contract Sum: The total amount payable by Owner to Contractor for performance of the Work in accordance with the Contract Documents.
- G. Contract Time: The number of calendar days allotted in the Contract Documents for achieving Substantial Completion of the Work.
- H. Contractor: The person or entity who has agreed with Owner to perform the Work in accordance with the Contract Documents.
- I. Drawings: The graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, and may include plans, elevations, sections, details, schedules, and diagrams.
- J. Final Acceptance: The written acceptance issued to Contractor by Owner after Contractor has completed the requirements of the Contract Documents.
- K. Final Completion: The Work is fully and finally completed in accordance with the Contract Documents.

DIVISION 0 – GENERAL CONDITIONS

- L. Force Majeure: Those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in *SECTION 00703.05A*.
- M. Notice: A written notice that has been delivered in person to the individual or a member of the firm or entity, or to an officer of the corporation for which it was intended, or, if delivered or sent by registered or certified mail, to the last business address known to the party giving notice.
- N. Notice to Proceed: A notice from Owner to Contractor that defines the date on which the Contract Time begins to run.
- O. Owner: The state agency, institution, or its authorized representative with the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents and make related determinations and findings.
- P. Person: A corporation, partnership, business association of any kind, trust, company, or individual.
- Q. Prior Occupancy: Owner's use of all or parts of the Project before Substantial Completion.
- R. Construction Schedule: A schedule of the Work, in a form satisfactory to Owner, as further set forth in *SECTION 00703.02*.
- S. Project: The total construction of which the Work performed in accordance with the Contract Documents may be the whole or a part and which may include construction by Owner or by separate contractors.
- T. Project Manual: The volume usually assembled for the Work, which may include documents such as the bidding requirements, sample forms, and other Contract Documents.
- U. Project Record: The separate set of Drawings and Specifications as further set forth in *SECTION 00704.02A*
- V. Schedule of Values: A written breakdown allocating the total Contract Sum to each principle category of Work, in such detail as requested by Owner.
- W. Specifications: That portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards, and workmanship for the Work, and performance of related services.
- X. Subcontract: A contract entered between the Contractor and a Subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind for, or in connection with, the Work.
- Y. Subcontractor: Any person other than the Contractor who agrees to furnish or furnishes any supplies, materials, equipment, or services of any kind in connection with the Work.
- Z. Substantial Completion: That stage in the progress of the Work where Owner has full and unrestricted use and benefit of the facilities for the purposes intended, as more fully set forth in *SECTION 00706.07*.

DIVISION 0 – GENERAL CONDITIONS

- AA. Work: The construction and services required by the Contract Documents, and includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents.

00701.02 ORDER OF PRECEDENCE

Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order:

- A. Signed Public Works Contract, including any Change Orders and any Special Forms
- B. *SUPPLEMENTAL CONDITIONS*
- C. *GENERAL CONDITIONS*
- D. Specifications: Provisions in *DIVISION 1* shall take precedence over provision of any other division.
- E. Drawings: In case of conflict within the Drawings, large-scale drawings (24" x 36" shall take precedence over reduced scale drawings.
- F. Signed and Completed *Bid Form*
- G. Instructions to Bidder
- H. Notice to Contractor

00701.03 EXECUTION AND INTENT

Contractor makes the following representations to Owner:

- A. The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents.
- B. Contractor has carefully reviewed the Contract Documents, visited and examined the Project site, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, labor, materials, equipment, goods, supplies, services, and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof.
- C. Contractor is financially solvent, able to pay its debts as they mature, and possesses sufficient working capital to complete the Work and perform Contractor's obligations required by the Contract Documents.
- D. Contractor is able to furnish the plants; tools, materials, supplies, equipment, and labor required to complete the Work and perform the obligations required by the Contract Documents and have sufficient experience and competence to do so.

PART 2 - 00702.00 INSURANCE AND BONDS

00702.01 CONTRACTOR'S LIABILITY INSURANCE

Prior to commencement of the Work, Contractor shall obtain all the insurance required by the Contract Documents and provide evidence satisfactory to Owner that such insurance has been procured. Review of the Contractor's insurance by Owner shall not relieve or decrease the liability of Contractor. Companies writing the insurance to be obtained by this section shall be licensed to do business under *Chapter 48 RCW* or comply with the *Surplus Lines Law* of the State of Washington. Contractor shall include in its bid the cost of all insurance and bonds required to complete the base bid work and accepted alternates. Insurance carriers providing insurance in accordance with the Contract Documents shall be rated "B+" or better by A.M. Best and ratings shall be indicated on the insurance certificates.

- A. Contractor shall maintain the following insurance coverage during the Work and for 1 year after Final Acceptance. Contractor shall also maintain the following insurance coverage during the performance of any corrective Work required by *SECTION 00705.16*.
 - 1. General liability on the *ISO 1986 New Occurrence Form* or its equivalent, which will include:
 - a. Completed operations/products liability
 - b. Explosion, collapse, and underground
 - c. Employer's liability coverage
 - 2. Automobile liability
- B. Contractor shall comply with the *Washington State Industrial Insurance Act*, and, if applicable, the *Federal Longshoremen's and Harbor Workers' Act*, and the *Jones Act*.
- C. All insurance coverages shall protect against claims for damages for personal and bodily injury or death, as well as claims for property damage, which may arise from operations in connection with the Work whether such operations are by Contractor or any Subcontractor.
- D. All insurance coverages shall be endorsed to include Owner as an additional named insured for Work performed in accordance with the Contract Documents, and all insurance certificates shall evidence the Owner as an additional insured.

00702.02 COVERAGE LIMITS

- A. Required Insurance Coverages:
 - 1. For a contract less than \$100,000.00, the coverage required is:
 - a. Comprehensive General Liability Insurance – The Contractor shall at all times during the term of this contract, at its cost and expense, carry and maintain general public liability insurance, including contractual liability, against claims for bodily injury, personal injury, death or property damage occurring or arising out of services provided under this contract.

DIVISION 0 – GENERAL CONDITIONS

This insurance shall cover claims caused by any act, omission, or negligence of the Contractor or its officers, agents, representatives, assigns or servants. The limits of liability insurance, which may be increased as deemed necessary by the contracting parties, shall be:

Each Occurrence	\$1,000,000.00
General Aggregate Limits (other than products – commercial operations)	\$1,000,000.00
Products – Commercial Operations Limited	\$1,000,000.00
Personal and Advertising Injury Limit	\$1,000,000.00
Fire Damage Limit (any one fire)	\$50,000.00
Medical Expenses Limit (any one person)	\$5,000.00

- b. If the contract is for underground utility work the Contractor shall provide proof of insurance for that above in the form of Explosion, Collapse and Underground (XCU) coverage.
 - c. Employers Liability on an occurrence basis in an amount not less than \$1,000,000.00 per occurrence.
2. For contracts over \$100,000.00 but less than \$5,000,000.00 the Contractor shall obtain the coverage limits as listed for contracts below \$100,000.00 and General Aggregate and Products – Commercial Operations Limit of not less than \$2,000,000.00.

3. Coverage for Comprehensive General Bodily Injury Liability Insurance for a contract over \$5,000,000.00 is:

Each Occurrence	\$2,000,000.00
General Aggregate Limits (other than products – commercial operations)	\$4,000,000.00
Products – Commercial Operations Limited	\$4,000,000.00
Personal and Advertising Injury Limit	\$2,000,000.00
Fire Damage Limit (any one fire)	\$50,000.00
Medical Expenses Limit (any one person)	\$5,000.00

4. For all Contracts – Automobile Liability; in the event that services delivered pursuant to this contract involve the use of vehicles or the transportation of clients, automobile liability insurance shall be required. If Contractor owned personal vehicles are used, a Business Automobile Policy covering at a minimum Code 2 “owned autos only” must be secured. If Contractor employee’s vehicles are used, the Contractor must also include under the Business Automobile Policy Code 9, coverage for non-owned autos. The minimum limits for automobile liability is: \$1,000,000.00 per occurrence, using a combined single limit for bodily injury and property damage.

DIVISION 0 – GENERAL CONDITIONS

- 5. For contracts for Hazardous Substance Removal (Asbestos Abatement, PCB Abatement, etc.)
 - a. In addition to providing insurance coverage for the project as outlined above, the Contractor shall provide Pollution Liability insurance for the hazardous substance removal as follows:

<u>EACH OCCURRENCE</u>	<u>AGGREGATE</u>
\$500,000.00	1,000,000.00

Or \$1,000,000.00 each occurrence/aggregate bodily injury and property damage combined single limit.

- 1) Insurance certificate must state that the insurer is covering hazardous substance removal.
- 2) Should this insurance be secured on a “claims made” basis, the coverage must be continuously maintained for 1 year following the project’s “final completion” through official completion of the project, plus 1 year following.

For contracts where hazardous substance removal is a subcomponent of contracted work, the general contractor shall provide to the Owner a certificate of insurance for coverage as defined in 5a above. The State of Washington must be listed as an additional insured. This certificate of insurance must be provided to the Owner prior to commencing work.

00702.03 INSURANCE COVERAGE CERTIFICATES

- A. Prior to the commencement of the Work, Contractor shall furnish acceptable proof of insurance on the State of Washington Certificate of Insurance Form SF500A, as well as copies of insurance policies.
- B. All insurance certificates shall name Owner's Project number and Project title.
- C. All insurance certificates shall specifically require 45 days prior notice to Owner of cancellation or any material change, except 30 days for surplus line insurance.

702.04.1 PAYMENT AND PERFORMANCE BONDS

- A. Contractor shall provide separate performance and payment bonds, each executed by the Contractor and the Contractor’s Surety.
- B. Option: Contract sums of \$150,000 or less, Owner will not require performance and payments bonds; if Contractor agrees Owner may, in lieu of the bond, retain 10 percent of the Contract Sum.

00702.05 ADDITIONAL BOND SECURITY

Contractor shall promptly furnish additional security required to protect Owner and persons supplying labor or materials required by the Contract Documents if:

- A. Owner has a reasonable objection to the surety; or
- B. Any surety fails to furnish reports on its financial condition if requested by Owner.

00702.06 BID BOND OR PROPOSAL GUARANTEE

- A. For bids of \$35,000 or less, no bid bond is required. Bids greater than \$35,000 shall be accompanied by a certified check, cashier's check, or bid bond payable to the Treasurer of the State of Washington in an amount equal to at least 5 percent of the bid as evidence of good faith and as a guarantee that, if awarded the Contract, the bidder will execute the Contract and give Performance Bond as required. All proposal guarantees may be held a maximum of 30 calendar days, and the 3 lowest bids may be held 45 calendar days from the date of the bid opening. At the end of the 30 calendar day period, all proposal guarantees, except those accompanying the 3 lowest bids, will be returned to the respective bidders. After the Contract and bonds have been executed, the remaining 3 proposal guarantees will be returned to their respective bidders.
- B. Only a cashier's check or certified check will be accepted in lieu of a bid bond. State statute requires deposit of negotiable receipts at the time of receipt. The bidder should be prepared to accept an additional 60 to 90 day delay in obtaining repayment from the State Treasurer.
- C. Fiscal procedures in preparing repayment are time consuming, and result in the requirement for additional time. Failure to comply with this section will cause bid to be considered nonresponsive.

00702.07 BUILDER'S RISK

- A. Contractor shall purchase and maintain property insurance in the amount of the Contract Sum including all Change Orders for the Work on a replacement cost basis until Final Completion. The insurance shall cover the interest of Owner, Contractor, and any Subcontractors, as their interests may appear.
- B. Contractor property insurance shall be placed on an "all risk" basis and insure against the perils of fire and extended coverage and physical loss or damage including theft, vandalism, malicious mischief, collapse, false work, temporary buildings, debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for A/Es' services and expenses required as a result of an insured loss.

DIVISION 0 – GENERAL CONDITIONS

- C. Owner and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/Es' sub consultants, separate contractors described in *SECTION 00705.20*, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this section or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

PART 3 - 00703.00 TIME AND SCHEDULE

00703.01 PROGRESS AND COMPLETION

Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion within a reasonable period thereafter.

00703.02 CONSTRUCTION SCHEDULE

- A. The Contractor shall, at the Preconstruction Conference and prior to Notice to Proceed, submit a Construction Schedule showing the sequence in which the Contractor proposes to perform the work, including dates on which the contractor plans to start and finish major portions of the work, dates for submitting shop drawings and other submittals, and dates for acquisition of materials and equipment.
- B. The Construction Schedule shall be in the form of a bar chart, or a critical path method analysis, as specified by Owner. The preliminary Construction Schedule may be general, showing the major portions of the Work, with more specific Construction Schedules in subsequent months as directed by Owner.
- C. Owner shall return comments on the preliminary Construction Schedule to Contractor within 14 days of receipt. Review by Owner of Contractor's schedule does not constitute an approval or acceptance of Contractor's construction means, methods, or sequencing, or its ability to complete the Work within the Contract Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold progress payments until a Construction Schedule has been submitted that meets the requirements of this section.
- D. Contractor shall utilize and comply with the Construction Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Construction Schedule at its own expense to Owner indicating actual progress. If, in the opinion of the Owner, Contractor is not in conformance with the Construction Schedule for reasons other than acts of *force majeure* as identified in *SECTION 00703.05*, Contractor shall take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Construction Schedule, or revise the Construction Schedule to reconcile with the actual progress of the Work.

DIVISION 0 – GENERAL CONDITIONS

- E. Contractor shall promptly notify Owner in writing of any actual or anticipated event that is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor shall indicate the expected duration of the delay, the anticipated effect of the delay on the Construction Schedule, and the action being or to be taken to correct the problem. Provision of such notice does not relieve Contractor of its obligation to complete the Work within the Contract Time.
- F. The Contractor shall notify the Owner or Owner at least 2 weeks in advance if work is to be performed on a Saturday, Sunday, and/or state holiday.
- G. No excavation work, as defined by *SECTION 00705.09*, will be allowed on Saturdays, Sundays and/or state holidays unless specifically authorized by the Owner.

00703.03 OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE

- A. Owner may, at its sole discretion, order the Contractor in writing to suspend all or any part of the Work for up to 90 days, or for such longer period as mutually agreed.
- B. Upon receipt of a written notice suspending the Work, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of cost of performance directly attributable to such suspension. Within a period up to 90 days after the notice is delivered to Contractor, or within any extension of that period to which the parties shall have agreed, Owner shall either:
 - 1. Cancel the written notice suspending the Work; or
 - 2. Terminate the Work covered by the notice as provided in the termination provisions of *SECTION 00709.00*.
- C. If a written notice suspending the Work is canceled or the period of the notice or any extension thereof expires, Contractor shall resume the Work.
- D. Contractor shall be entitled to an equitable adjustment in the Contract Time, or Contract Sum, or both, for increases in the time or cost of performance directly attributable to such suspension, provided Contractor complies with all requirements set forth in *SECTION 00707.00*.

00703.04 OWNER'S RIGHT TO STOP THE WORK FOR CAUSE

- A. If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order the Contractor in writing to stop the Work, or any portion thereof, until satisfactory corrective action has been taken.
- B. Contractor shall not be entitled to an equitable adjustment in the Contract Time or Contract Sum for any increased cost or time of performance attributable to Contractor's failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.

00703.05 DELAY

- A. Any delay in or failure of performance by Owner or Contractor, other than the payment of money, shall not constitute a default hereunder if and to the extent the cause for such delay or failure of performance was unforeseeable and beyond the control of the party (*force majeure*). Acts of *force majeure* include, but are not limited to:
1. Acts of God or the public enemy
 2. Acts or omissions of any government entity
 3. Fire or other casualty for which Contractor is not responsible
 4. Quarantine or epidemic
 5. Strike or defensive lockout
 6. Unusually severe weather conditions that could not have been reasonably anticipated
 7. Unusual delay in receipt of supplies or products which were ordered and expedited and for which no substitute reasonably acceptable to Owner was available.
- B. Contractor shall be entitled to an equitable adjustment in the Contract Time for changes in the time of performance directly attributable to an act of *force majeure*, provided it makes a request for equitable adjustment according to *SECTION 00707.03*. Contractor shall not be entitled to an adjustment in the Contract Sum resulting from an act of *force majeure*.
- C. Contractor shall be entitled to an equitable adjustment in Contract Time, and may be entitled to an equitable adjustment in Contract Sum, if the cost or time of Contractor's performance is changed due to the fault or negligence of Owner, provided the Contractor makes a request according to *SECTIONS 00707.02* and *00707.03*.
- D. Contractor shall not be entitled to an adjustment in Contract Time or in the Contract Sum for any delay or failure of performance to the extent such delay or failure was caused by Contractor or anyone for whose acts Contractor is responsible.
- E. To the extent any delay or failure of performance was concurrently caused by the Owner and Contractor, Contractor shall be entitled to an adjustment in the Contract Time for that portion of the delay or failure of performance that was concurrently caused, provided it makes a request for equitable adjustment according to *SECTION 00707.03*, but shall not be entitled to an adjustment in Contract Sum.
- F. Contractor shall make all reasonable efforts to prevent and mitigate the effects of any delay, whether occasioned by an act of *force majeure* or otherwise.

00703.06 NOTICE TO OWNER OF LABOR DISPUTES

If Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay timely performance in accordance with the Contract Documents, Contractor shall immediately give notice, including all relevant information, to Owner.

Contractor agrees to insert a provision in its Subcontracts and to require insertion in all Sub-subcontracts, that in the event timely performance of any such contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier Subcontractor or Contractor, as the case may be, of all relevant information concerning the dispute.

00703.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION

A. Liquidated Damages:

1. Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work does not occur within the Contract Time. However, it would be difficult if not impossible to determine the exact amount of such damages. Consequently, provisions for liquidated damages are included in the Contract Documents.
2. The liquidated damage amounts set forth in the Contract Documents will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from periodic payments to the Contractor.
3. Assessment of liquidated damages shall not release Contractor from any further obligations or liabilities pursuant to the Contract Documents.

B. Actual Damages:

Actual damages will be assessed for failure to achieve Final Completion within the time provided. Actual damages will be calculated on the basis of direct architectural, administrative, and other related costs attributable to the Project from the date when Final Completion should have been achieved, based on the date Substantial Completion is actually achieved, to the date Final Completion is actually achieved. Owner may offset these costs against any payment due Contractor.

PART 4 - 00704.00 SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS

00704.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW

- A. The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.

DIVISION 0 – GENERAL CONDITIONS

- B. The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.
- C. Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Owner. If during the performance of the Work Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly and before proceeding with the Work affected thereby report such conflict, error, inconsistency, or omission to A/E in writing.
- D. Contractor shall do no Work without applicable Drawings, Specifications, or written modifications, or shop drawings where required, unless instructed to do so in writing by Owner. If Contractor performs any construction activity, and it knows or should have known that any of the Contract Documents contain a conflict, error, inconsistency, or omission, Contractor shall be responsible for the performance and shall bear the cost for its correction.
- E. Contractor shall provide any work or materials the provision of which is clearly implied in the Contract Documents even if the Contract Documents do not mention them specifically.
- F. Questions regarding interpretation of the requirements of the Contract Documents shall be referred to the A/E.

00704.02 PROJECT RECORD

- A. Contractor shall legibly mark in ink on a separate set of the Drawings and Specifications all actual construction including depths of foundations, horizontal and vertical locations of internal and underground utilities and appurtenances referenced to permanent visible and accessible surface improvements, field changes of dimensions and details, actual suppliers, manufacturers and trade names, models of installed equipment, and Change Order proposals. This separate set of Drawings and Specifications shall be the "Project Record."
- B. The Project Record shall be maintained on the project site throughout the construction and shall be clearly labeled "PROJECT RECORD." The Project Record shall be updated at least weekly noting all changes and shall be available to Owner at all times.
- C. Contractor shall submit the completed and finalized Project Record to A/E prior to Final Acceptance.

00704.03 SHOP DRAWINGS

- A. "Shop Drawings" means documents and other information required to be submitted to A/E by Contractor pursuant to the Contract Documents, showing in detail: the proposed fabrication and assembly of structural elements; and the installation (i.e. form, fit, and attachment details) of materials and equipment. Shop drawings include, but are not limited to, drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, samples, and similar materials furnished by Contractor to explain in detail specific portions of the Work required by the Contract Documents.

DIVISION 0 – GENERAL CONDITIONS

For materials and equipment to be incorporated into the Work, Contractor submittal shall include the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the item. When directed, Contractor shall submit all samples at its own expense. Owner may duplicate, use, and disclose shop drawings provided in accordance with the Contract Documents.

- B. Contractor shall coordinate all shop drawings and review them for accuracy, completeness, and compliance with the Contract Documents and shall indicate its approval thereon as evidence of such coordination and review. Where required by law, shop drawings shall be stamped by an appropriate professional licensed by the State of Washington. Shop drawings submitted to A/E without evidence of Contractor's approval shall be returned for resubmission.

Contractor shall review, approve, and submit shop drawings with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or separate contractors. Contractor's submittal schedule shall allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the shop drawings. Contractor shall perform no portion of the Work requiring submittal and review of shop drawings until the respective submittal has been reviewed and the A/E has approved or taken other appropriate action. Owner and A/E shall respond to shop drawing submittals with reasonable promptness. Any Work by Contractor shall be in accordance with reviewed shop drawings. Submittals made by Contractor that are not required by the Contract Documents may be returned without action.

- C. Approval or other appropriate action with regard to shop drawings by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such shop drawings, nor from responsibility for compliance with the requirements of the Contract Documents. Unless specified in the Contract Documents, review by Owner or A/E shall not constitute an approval of the safety precautions employed by Contractor during construction, or constitute an approval of Contractor's means or methods of construction. If Contractor fails to obtain approval before installation and the item or work is subsequently rejected, Contractor shall be responsible for all costs of correction.
- D. If shop drawings show variations from the requirements of the Contract Documents, Contractor shall describe such variations in writing, separate from the shop drawings, at the time it submits the shop drawings containing such variations. If A/E approves any such variation, an appropriate Change Order will be issued. If the variation is minor and does not involve an adjustment in the Contract Sum or Contract Time, a Change Order need not be issued; however, the modification shall be recorded on the Project Record.
- E. Unless otherwise provided in *DIVISION 1*, Contractor shall submit to A/E for approval one electronic or paper copy of all shop drawings and submittals, unless otherwise indicated.

00704.04 ORGANIZATION OF SPECIFICATIONS

Specifications are prepared in sections that conform generally with trade practices. These sections are for Owner and Contractor convenience and shall not control Contractor in dividing the Work among the Subcontractors or in establishing the extent of the Work to be performed by any trade.

DIVISION 0 – GENERAL CONDITIONS

00704.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS

- A. Drawings, Specifications, and other documents prepared by A/E are instruments of A/E's service through which the Work to be executed by Contractor is described. Neither Contractor nor any Subcontractor shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E shall be deemed the author of them and will, along with any rights of Owner, retain all common law, statutory, and other reserved rights, in addition to the copyright. All copies of these documents, except Contractor's set, shall be returned or suitably accounted for to A/E, on request, upon completion of the Work.
- B. The Drawings, Specifications, and other documents prepared by the A/E, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by A/E appropriate to and for use in the execution of their Work.
- C. Contractor and all Subcontractors grant a nonexclusive license to Owner, without additional cost or royalty, to use for its own purposes (including reproduction) all shop drawings, together with the information and diagrams contained therein, prepared by Contractor or any Subcontractor. In providing shop drawings, Contractor and all Subcontractors warrant that they have authority to grant to Owner a license to use the shop drawings, and that such license is not in violation of any copyright or other intellectual property right.
- D. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in *SECTION 00705.22* from any violations of copyright or other intellectual property rights arising out of Owner's use of the shop drawings hereunder, or to secure for Owner, at Contractor's own cost, licenses in conformity with this section.
- E. The shop drawings and other submittals prepared by Contractor, Subcontractors, or its or their equipment or material suppliers, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors of any tier, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the shop drawings and other submittals appropriate to and for use in the execution of their Work under the Contract Documents.

PART 5 - 00705.00 PERFORMANCE

00705.01 CONTRACTOR CONTROL AND SUPERVISION

- A. Contractor shall supervise and direct the Work, using its best skill and attention, and shall perform the Work in a skillful manner. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, unless the Contract Documents give other specific instructions concerning these matters. Contractor shall disclose its means and methods of construction when requested by Owner.

DIVISION 0 – GENERAL CONDITIONS

- B. Performance of the Work shall be directly supervised by a competent superintendent who is satisfactory to Owner, and has authority to act for Contractor. The superintendent shall not be changed without the prior written consent of Owner.
- C. Contractor shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, and their employees and agents.
- D. Contractor shall enforce strict discipline and good order among Contractor's employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Contractor's employees shall at all times, conduct business in a manner that assures fair, equal, and nondiscriminatory treatment of all persons. Owner may, by written notice, request Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.
- E. Contractor shall keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed shop drawings, and permits and permit drawings.
- F. Contractor shall ensure that its owner(s) and employees, and those of its Subcontractors, comply with the *Executive Conflict of Interest Act, RCW 42.18*, which, among other things, prohibits state employees from having an economic interest in any Public Works Contract that was made by, or supervised by, that employee. Contractor shall remove at its sole cost and expense any of its or its Subcontractors', employees if they are in violation of this Act.

00705.02 PERMITS, FEES, AND NOTICES

- A. Unless otherwise provided in the Contract Documents, Contractor shall pay for and obtain all permits, licenses, and inspections necessary for proper execution and completion of the Work. Prior to Final Acceptance, the approved, signed permits shall be delivered to Owner.
- B. If allowances for permits or utility fees are called for in the Contract Documents and set forth in Contractor's bid, and the actual costs of those permits or fees differ from the allowances in the Contract Documents, the difference shall be adjusted by Change Order.
- C. Contractor shall comply with and give notices required by all federal, state, and local laws, ordinances, rules, regulations, and lawful orders of public authorities applicable to performance of the Work.
- D. The Contractor shall conform to all local, state, and national codes in all phases of this project. Where conflicts arise between the code requirements and Drawings or Specifications requirements, the code shall govern and prevail unless the Drawings or Specifications impose requirements or limitations that are more stringent than the code requirements, in which case the more stringent requirements or limitations shall govern and prevail...

00705.03 PATENTS AND ROYALTIES

Contractor is responsible for, and shall pay, all royalties and license fees. Contractor shall defend, indemnify, and hold Owner harmless from any costs, expenses, and liabilities arising out of the infringement by Contractor of any patent, copyright, or other intellectual property right used in the Work; however, provided that Contractor gives prompt notice, Contractor shall not be responsible for such defense or indemnity when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents. If Contractor has reason to believe that use of the required design, process, or product constitutes an infringement of a patent or copyright, it shall promptly notify Owner of such potential infringement.

00705.04 PREVAILING WAGES

- A. Contractor shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with *RCW 39.12* and the rules and regulations of the Department of Labor and Industries (L&I). The schedule of prevailing wage rates for the locality or localities of the Work, as determined by the Industrial Statistician of L&I, is by reference made a part of the Contract Documents as though fully set forth herein.
1. Before commencing the Work, Contractor shall file a statement under oath with Owner and with the Director of L&I certifying the rate of hourly wage paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Contractor and Subcontractors. Such rates of hourly wage shall not be less than the prevailing wage rate.
 2. Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of L&I. The arbitration decision shall be final and conclusive and binding on all parties involved in the dispute as provided for by *RCW 39.12.060*.
 3. Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the prefiled statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of L&I where a complaint or inquiry concerning prevailing wages may be made.
 4. In compliance with *CHAPTER 296-127 WAC*, Contractor shall pay to L&I the currently established fee for each statement of intent and/or affidavit of wages paid submitted to L&I for certification.
 5. Per EHB 2805, public works contracts estimated to cost over \$1 million requires the Contractor and Subcontractor to submit information regarding any off-site, pre-fabricated, non-standard, project-specific items produced under each contract and produced outside Washington.
 6. Contractor and Subcontractor must have the following information on their Affidavit of Wages Paid form:
 - a. The estimated cost of the public works project;
 - b. The name of the awarding agency and the title of the public works project;

DIVISION 0 – GENERAL CONDITIONS

- c. The contract value of the off-site, pre-fabricated, non-standard, project specific items produced outside Washington; and
 - d. The name, address, and federal employer identification number of the contractor that produced the off-site, pre-fabricated, non-standard, project specific items.
- B. Projects identified as having federal financing, excluding FEMA shall comply with *Federal Davis Bacon Act* requirements.
- 1. All laborers, mechanics, and other workers employed by the Contractor or Subcontractors to work on construction projects financed by federal assistance must be paid wages not less than those established for the locality of the project by the U.S. Secretary of Labor (40 Stat 1494, Mar, 3, 1921, Chap, 411, 40 USC276A 276A S).
 - 2. When the project is subject to both state and federal wage rates, and when the rates differ for similar kinds of labor, the Contractor shall not pay less than the higher rate. The area in which the worker is physically employed shall determine which federal wage and fringe benefit rate shall be used to compare against the state wage and fringe benefit rate.
 - 3. Washington State's prevailing wage rate for this project can be found at the Department of Labor and Industries' (L&I) website: <https://fortress.wa.gov/lni/wagelookup/prvwagelookup.aspx>.
- C. Projects identified as having FEMA funding shall comply with Stafford Act Requirements. Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, 42 U.S.C. 5121 et seq., and Related Authorities.
- 1. All laborers and mechanics employed by contractors or subcontractors in the performance of construction work financed with the assistance of any contribution of Federal funds made by the Administrator under this subsection shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with sections 3141-3144, 3146, and 3147 of title 40, and every such employee shall receive compensation at a rate not less than one and 1/2 times the basic rate of pay of the employee for all hours worked in any workweek in excess of 8-hours in any workday or 40 hours in the workweek, as the case may be. The Administrator shall make no contribution of Federal funds without first obtaining adequate assurance that these labor standards will be maintained upon the construction work. The Secretary of Labor shall have, with respect to the labor standards specified in this subsection, the authority and functions set forth in Reorganization Plan Numbered 14 of 1950 (5 U.S.C. App.) and section 3145 of title 40.
 - 2. When the project is subject to both state and federal wage rates, and when the rates differ for similar kinds of labor, the Contractor shall not pay less than the higher rate. The area in which the worker is physically employed shall determine which federal wage and fringe benefit rate shall be used to compare against the state wage and fringe benefit rate.

00705.05 HOURS OF LABOR

- A. Contractor shall comply with all applicable provisions of *RCW 49.28*, and they are incorporated herein by reference. Pursuant to that statute no laborer, worker, or mechanic employed by Contractor, any Subcontractor, or any other person performing or contracting to do the whole or any part of the Work shall be permitted or required to work more than 8 hours in any one calendar day, provided that in cases of extraordinary emergency, such as danger to life or property, the hours of work may be extended, but in such cases the rate of pay for time employed in excess of 8 hours of each calendar day shall be not less than 1½ times the rate allowed for this same amount of time during 8 hours of service.
- B. Notwithstanding the preceding paragraph, *RCW 49.28* permits a Contractor or Subcontractor in any Public Works Contract subject to those provisions to enter into an agreement with its employees in which the employees work up to 10 hours in a calendar day. No such agreement may provide that the employees work 10 hour days for more than 4 calendar days a week. Any such agreement is subject to approval by the employees. The overtime provisions of *RCW 49.28* shall not apply to the hours, up to 40 hours per week, worked pursuant to any such agreement.

00705.06 NONDISCRIMINATION

- A. Discrimination in all phases of employment is prohibited by, among other laws and regulations, *Title VII of the Civil Rights Act of 1964*, the *Vietnam Era Veterans Readjustment Act of 1974*, *Sections 503 and 504 of the Vocational Rehabilitation Act of 1973*, the *Equal Employment Act of 1972*, the *Age Discrimination Act of 1967*, the *Americans with Disabilities Act of 1990*, the *Civil Rights Act of 1991*, *Presidential Executive order 11246*, *Presidential Executive Order 11375*, *Presidential Executive Order 13672*, the *Washington State Law Against Discrimination, RCW 49.60*, and *Gubernatorial Executive Order 85-09*. These laws and regulations establish minimum requirements for affirmative action and fair employment practices which Contractor must meet.
- B. During Performance of the Work:
 - 1. Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, nor commit any other unfair practices as defined in *RCW 49.60*.
 - 2. Contractor shall, in all solicitations or advertisements for employees placed by or for it, state that all qualified applicants will be considered for employment without regard to race, creed, color, national origin, sex, sexual orientation, age, marital status, or the presence of any physical, sensory, or mental disability.
 - 3. Contractor shall send to each labor union, employment agency, or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency, or workers' representative of Contractor's obligations according to the Contract Documents and *RCW 49.60*.

DIVISION 0 – GENERAL CONDITIONS

4. Contractor shall permit access to its books, records, and accounts, and to its premises by Owner, and by the Washington State Human Rights Commission, for the purpose of investigation to ascertain compliance with this section of the Contract Documents.
5. Contractor shall include the provisions of this section in every Subcontract.

00705.07 SAFETY PRECAUTIONS

- A. Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work.
- B. In carrying out its responsibilities according to the Contract Documents, Contractor shall protect the lives and health of employees performing the Work and other persons who may be affected by the Work; prevent damage to materials, supplies, and equipment whether onsite or stored offsite; and prevent damage to other property at the site or adjacent thereto. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property, or to protect them from damage, injury, or loss; shall erect and maintain all necessary safeguards for such safety and protection; and shall notify owners of adjacent property and utilities when prosecution of the Work may affect them.
- C. Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report any such incident to Owner. Owner shall, at all times, have a right of access to all records of exposure.
- D. Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.
 1. Information: At a minimum, Contractor shall inform persons working on the Project site of:
 - a. The requirements of *CHAPTER 296-62 WAC, General Occupational Health Standards*
 - b. Any operations in their work area where hazardous chemicals are present
 - c. The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and Safety Data Sheets (SDS) required by *CHAPTER 296-62 WAC*.
 2. Training: At a minimum, Contractor shall provide training for persons working on the project site, which includes:
 - a. Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.).
 - b. The physical and health hazards of the chemicals in the work area.

DIVISION 0 – GENERAL CONDITIONS

- c. The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used.
 - d. The details of the hazard communication program developed by Contractor or its Subcontractors, including an explanation of the labeling system and the SDS, and how employees can obtain and use the appropriate hazard information.
- E. Contractor's responsibility for hazardous, toxic, or harmful substances shall include the following duties:
 - 1. Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site any substances now or hereafter designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or harmful by any federal, state, or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances"), in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored more than 90 days on the Project site.
 - 2. Contractor shall promptly notify Owner of all spills or releases of any hazardous substances that are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.
- F. All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.
- G. In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall so act if so authorized or instructed.
- H. Nothing provided in this section shall be construed as imposing any duty upon Owner or A/E with regard to, or as constituting any express or implied assumption of control or responsibility over, Project site safety, or over any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public.

00705.08 OPERATIONS, MATERIAL HANDLING, EASEMENTS AND STORAGE AREAS

- A. Contractor shall confine all operations, including storage of materials, to Owner-approved areas. The Owner has acquired ownership and/or easement of lands for the construction as indicated on the Drawings without cost to the Contractor. It is understood and agreed by the Contractor that if it should appear at any time that the Owner has not acquired title to all of the right-of-ways and lands necessary for the performance of the Work under the provisions of this Contract, and that if any delay in the performance of said Work occasioned by the failure of the Owner, its officers, or employees to acquire a title of any of said lands or right-of-way, such failure shall extend the Contract completion date the number of days equal to the period of such delay. The Contractor waives any and all claims for damages against the Owner, its officers, and employees which the Contractor may sustain by reason of delay in the Work.
- B. Temporary buildings (e.g. storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Owner and without expense to Owner. The temporary buildings and utilities shall remain the property of Contractor and shall be removed by Contractor at its expense upon completion of the Work.
- C. Contractor shall use only established roadways or temporary roadways authorized by Owner. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by federal, state, or local law or regulation.
- D. Ownership and control of all materials or facility components to be demolished or removed from the Project site by Contractor shall immediately vest in Contractor upon severance of the component from the facility or severance of the material from the Project site. Contractor shall be responsible for compliance with all laws governing the storage and ultimate disposal. Contractor shall provide Owner with a copy of all manifests and receipts evidencing proper disposal when required by Owner or applicable law.
- E. Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site. Materials and equipment may be stored on the premises subject to approval of Owner. When Contractor uses any portion of the Project site as a shop, Contractor shall be responsible for any repairs, patching, or cleaning arising from such use.
- F. Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Substantial Completion, and shall repair or replace without cost to Owner any damage or loss that may occur, except damages or loss caused by the acts or omissions of Owner. Contractor shall also protect and be responsible for any damage or loss to the Work, or to the materials or equipment, after the date of Substantial Completion, and shall repair or replace without cost to Owner any such damage or loss that might occur, to the extent such damages or loss are caused by the acts or omissions of Contractor, or any Subcontractor.

00705.09 PRIOR NOTICE OF EXCAVATION

"Excavation" means an operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than 12 inches in depth for agricultural purposes, or road ditch maintenance that does not change the original road grade or ditch flow line. Before commencing any excavation, Contractor shall provide notice of the scheduled commencement of excavation to all owners of underground facilities and utilities through locator services.

00705.10 UNFORSEEN PHYSICAL CONDITIONS

- A. If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly before conditions are disturbed and in no event later than 7 days after the first observance of the conditions.
- B. If such conditions differ materially and cause a change in Contractor's cost of, or time required for, performance of any part of the Work, the Contractor may be entitled to an equitable adjustment in the Contract Time or Contract Sum or both, provided it makes a request thereof as provided in *SECTION 00707.00 - CHANGES*.

00705.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, STOCK, VEGETATION, UTILITIES, AND IMPROVEMENTS

- A. Contractor shall protect from damage all existing structures, equipment, improvements, utilities, and vegetation at or near the Project site, and on adjacent property of a third party, the locations of which are made known to or should be known by Contractor. Contractor shall repair any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage promptly, Owner may have the necessary work performed and charge the cost to Contractor.
- B. Contractor shall only remove trees when specifically authorized to do so, and shall protect vegetation that will remain in place.
- C. Damage to facility production resulting in death or sickness of stock shall result in claims against the Contractor for loss of production or costs incurred by any extraordinary measures required to save production.

00705.12 LAYOUT OF WORK

- A. Contractor shall plan and lay out the Work in advance of operations so as to coordinate all work without delay or revision.

DIVISION 0 – GENERAL CONDITIONS

- B. Contractor shall do all cutting, fitting, or patching that may be required to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonable implied by, the Contract Documents. Contractor shall not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner.
- C. Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this work, in whatever state of completion, may be rejected by Owner.

00705.13 MATERIAL AND EQUIPMENT

- A. All equipment, material, and articles incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in the Contract Documents. References in the Specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard quality and shall not be construed as limiting competition. Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of A/E, is equal to that named in the Specifications, unless otherwise specifically provided in the Contract Documents.
- B. It shall be the responsibility of the Contractor to furnish proof of equality in all respects to specified items when proposing alternate brands or items. Any significant deviations from Specifications, Drawings, or equality must be noted by the Contractor when submitting alternate materials for approval. The Owner shall be the sole judge of the equality and suitability of any products, materials, or components proposed by the Contractor as alternates to specified items. The Contractor shall, at their own expense, make any secondary changes required to incorporate an approved substitute or alternate into the project. No offers for substitution will be acknowledged from suppliers, distributors, manufacturers, or Subcontractors.
- C. Contractor shall do all cutting, fitting, or patching that may be required to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonably implied by, the Contract Documents. Contractor shall not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner.
- D. Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this work, in whatever stage of completion, may be rejected by Owner.

00705.14 AVAILABILITY AND USE OF UTILITY SERVICES

- A. Owner shall make all reasonable utilities available to Contractor from existing outlets and supplies, as specified in the Contract Documents. Unless otherwise provided in the Contract Documents, the utility service consumed shall be charged to or paid for by Contractor at prevailing rates charged to Owner or, where the utility is produced by Owner, at reasonable rates determined by Owner. Contractor will carefully conserve any utilities furnished.

DIVISION 0 – GENERAL CONDITIONS

- B. Contractor shall, at its expense and in a skillful manner satisfactory to Owner, install and maintain all necessary temporary connections and distribution lines, together with appropriate protective devices and all meters required to measure the amount of each utility used for the purpose of determining charges. Prior to Final Completion, Contractor shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

00705.15 TESTS AND INSPECTION

- A. Contractor shall maintain an adequate testing and inspection program and perform such tests and inspections as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents. Contractor shall be responsible for inspection and quality surveillance of all its Work and all Work performed by any Subcontractor. Unless otherwise provided, Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. Contractor shall give Owner timely notice of when and where tests and inspections are to be made. Contractor shall maintain complete inspection records and make them available to Owner.
- B. Owner may, at any reasonable time, conduct such inspections and tests, as it deems necessary to ensure that the Work is in accordance with the Contract Documents. Owner shall promptly notify Contractor if an inspection or test reveals that the Work is not in accordance with the Contract Documents. Unless the subject items are expressly accepted by Owner, such Owner inspection and tests are for the sole benefit of Owner and do not:
 - 1. Constitute or imply acceptance
 - 2. Relieve Contractor of responsibility for providing adequate quality control measures
 - 3. Relieve Contractor of responsibility for risk of loss or damage to the Work, materials, or equipment
 - 4. Relieve Contractor of its responsibility to comply with the requirements of the Contract Documents
 - 5. Impair Owner's right to reject defective or nonconforming items or to avail itself of any other remedy to which it may be entitled.
- C. In addition to any inspections required by local authorities or permitting agencies, the State will appoint its own inspector for the project. Construction inspectors employed by the State shall assist the Owner in making all necessary inspections and measurements and shall enforce a strict compliance with the terms of the Contract and the orders of the Owner. The Inspector will have the authority to reject materials or workmanship which do not fulfill the requirements of these Specifications. In case of dispute, the Contractor may appeal to the Owner whose decision shall be final. The acceptance of any material by the Inspector shall not hinder its subsequent rejection if found defective. Rejected materials and workmanship shall be replaced promptly or be remedied by the Contractor, without additional cost to the Owner.

DIVISION 0 – GENERAL CONDITIONS

- D. Neither observations by an inspector retained by Owner, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, shall relieve Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.
- E. Contractor shall promptly furnish, without additional charge, all facilities, labor, material, and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Owner. Owner may charge Contractor any additional cost of inspection or testing when Work is not ready at the time specified by Contractor for inspection or testing, or when prior rejection makes re-inspection or retest necessary. Owner shall perform its inspections and tests in a manner that will cause no undue delay in the Work.

00705.16 CORRECTION OF NONCONFORMING WORK

- A. If a portion of the Work is covered contrary to the requirements of the Contract Documents, it must, if required in writing by Owner, be uncovered for Owner's observation and be replaced at the Contractor's expense and without change in the Contract Time.
- B. If any time prior to Final Completion Owner desires to examine the Work or any portion of it that has been covered, Owner may request to see such Work, and it shall be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an adjustment in the Contract Sum for the costs of uncovering and replacement, and if completion of the Work is thereby delayed, an adjustment in the Contract Time, provided it makes a request therefore as provided in *SECTION 00707.00 - CHANGES*. If such Work is not in accordance with the Contract Documents, the Contractor shall pay the costs of examination and reconstruction.
- C. Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. Contractor shall bear all costs of correcting such nonconforming Work, including additional testing and inspections.
- D. If, within 1 year after the date of Substantial Completion of the Work, or designated portion thereof, or within 1 year after the date for commencement of any system warranties established under *SECTION 00706.08*, or within the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, Contractor shall correct it promptly after receipt of written notice from Owner to do so. Owner shall give such notice promptly after discovery of the condition. This period of 1 year shall be extended, with respect to portions of Work first performed after Substantial Completion, by the period of time between Substantial Completion and the actual performance of the Work. Contractor's duty to correct with respect to Work repaired or replaced shall run for 1 year from the date of repair or replacement. Obligations under this paragraph shall survive Final Acceptance.
- E. Contractor shall remove from the Project site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.

DIVISION 0 – GENERAL CONDITIONS

- F. If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.
- G. Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.
- H. Nothing contained in this section shall be construed to establish a period of limitation with respect to other obligations that Contractor might have according to the Contract Documents. Establishment of the time period of 1 year, as described in *SECTION 00705.16D*, relates only to the specific obligation of Contractor to correct the Work, and has no relationship to the time within which the Contractor's obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.
- I. If Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract sum may be reduced as appropriate and equitable.

00705.17 CLEANUP

Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor.

00705.18 ACCESS TO WORK

Contractor shall provide Owner and A/E access to the Work in progress wherever located.

00705.19 OTHER CONTRACTS

Owner may undertake or award other contracts for additional work at or near the Project site. Contractor shall reasonably cooperate with the other contractors and Owner's employees and shall carefully adapt scheduling and perform the Work in accordance with Contract Documents to reasonably accommodate the other work.

00705.20 SUBCONTRACTORS AND SUPPLIERS

- A. Before submitting its first Application for Payment, Contractor shall furnish in writing to Owner the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of \$2,500. Contractor shall utilize Subcontractors and suppliers which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor shall not utilize any Subcontractor or supplier to whom the Owner has a reasonable objection, and shall obtain Owner's written consent before making any substitutions or additions.

DIVISION 0 – GENERAL CONDITIONS

- B. All Subcontracts must be in writing. By appropriate written agreement, Contractor shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Contractor by terms of the Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.
- C. Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.
- D. Each subcontract agreement for a portion of the Work is hereby assigned by Contractor to Owner provided that:
 - 1. The assignment is effective only after termination by Owner for cause pursuant to *SECTION 00709.01* and only for those Subcontracts which Owner accepts by notifying the Subcontractor in writing; and
 - 2. After the assignment is effective, Owner will assume all future duties and obligations toward the Subcontractor that Contractor assumed in the Subcontract.
 - 3. The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

00705.21 WARRANTY OF CONSTRUCTION

- A. In addition to any special warranties provided elsewhere in the Contract Documents, Contractor warrants that all Work conforms to the requirements of the Contract Documents and is free of any defect in equipment, material, or design furnished, or workmanship performed by Contractor.
- B. With respect to all warranties, express or implied, for Work performed or materials furnished according to the Contract Documents, Contractor shall:
 - 1. Obtain all warranties that would be given in normal commercial practice.
 - 2. Require all warranties to be executed, in writing, for the benefit of Owner.
 - 3. Enforce all warranties for the benefit of Owner, if directed by Owner.
 - 4. Be responsible to enforce any subcontractor's, manufacturers', or supplier's warranty should they extend beyond the period specified in the Contract Documents.
- C. The obligations under this section shall survive Final Acceptance.

00705.22 INDEMNIFICATION

- A. Contractor shall defend, indemnify, and hold Owner and A/E harmless from and against all claims, demands, losses, damages, or costs, including but not limited to damages arising out of bodily injury or death to persons and damage to property, caused by or resulting from:
 - 1. The sole negligence of Contractor or any of its Subcontractors
 - 2. The concurrent negligence of Contractor, or any Subcontractor, but only to the extent of the negligence of Contractor or such Subcontractor
 - 3. The use of any design, process, or equipment which constitutes an infringement of any United States patent presently issued or violates any other proprietary interest, including copyright, trademark, and trade secret.

- B. In any action against Owner and any other entity indemnified in accordance with this section by any employee of Contractor, its Subcontractors, Sub-subcontractors, agents, or anyone directly or indirectly employed by any of them, the indemnification obligation of this section shall not be limited by a limit on the amount or type of damages, compensation, or benefits payable by or for Contractor or any Subcontractor under *RCW Title 51, the Industrial Insurance Act*, or any other employee benefit acts. In addition, Contractor waives immunity as to Owner and A/E only, in accordance with *RCW Title 51*.

00705.23 REQUIRED PAYROLL DOCUMENTS

- A. The Contractor shall submit to the Owner the following for itself and for each subcontractor and each agent to a Subcontractor that performed work on the Contract:
 - 1. *A Statement of Intent to Pay Prevailing Wages.* The Contracting Agency will make no payment under this Contract for the work performed until this statement has been completed and submitted.
 - 2. *An Affidavit of Wages Paid with the Final Contract Voucher Certification.* The Contracting Agency will not release to the Contractor any funds retained under *RCW 60.28.010* until all of the *Affidavit of Wages Paid* forms have been completed and submitted.

- B. In addition, the Prime Contractor shall submit a Request for Release to the Washington State Labor and Industries (L&I), (L&I provides the form).

- C. Certified payrolls are required to be submitted by the Contractor to the Owner for the Contractor and all Subcontractors or agents on all federally funded projects, and when requested in writing by the Owner, on projects funded with only Contracting Agency funds. If these payrolls are not supplied within 10 calendar days of the end of the proceeding weekly payroll period for federally funded projects, or within 10 calendar days from the date of the written request on projects with only Contracting Agency funds, any or all payments may be withheld until compliance is achieved. Also, failure to provide these payrolls could result in other sanctions as provided by state laws (*RCW 39.12.050*) and/or federal regulations (*29 CFR 5.12*). All certified payrolls shall be complete and explicit.

DIVISION 0 – GENERAL CONDITIONS

Employee work classification codes used on certified payrolls shall coincide exactly with the occupation codes listed on the minimum wage schedule, unless the Owner specifically approves an alternate method to identify the occupation coding used by the Contractor to compare with the codes listed. When an apprentice is shown on the certified payroll at a rate less than the minimum prevailing journey wage rate, the apprenticeship registration number for that employee from the State Apprenticeship and Training Council shall be shown, along with the correct employee classification code.

00705.24 STATEMENT OF APPRENTICE/JOURNEYMAN PARTICIPATION

In accordance with *RCW 39.04.320*, the State of Washington requires a mandatory 15 percent apprenticeship (labor hours) participation for projects estimated to cost \$1,000,000 or more. Apprentice participation under this contract may be counted towards the required percentage (%) only if the apprentices are from an apprenticeship program registered and approved by the Washington State Apprenticeship and Training Council (*RCW 49.04* and *WAC 296-04*).

- A. For each project that has apprentice requirements, the contractor shall submit a **“Statement of Apprentice/Journeyman Participation (See SECTION 00670)”** on forms provided by the Washington Department of Fish and Wildlife, with every request for progress payment. The Contractor shall submit consolidated and cumulative data collected by the Contractor and collected from all Subcontractors by the Contractor. The submitted data includes the following:
1. Contractor name and address;
 2. Contract number;
 3. Project name;
 4. Contract value;
 5. Reporting period “Notice to Proceed” through “Invoicing Date”;
 6. Name and registration number of each apprentice;
 7. Total number of apprentices and labor hours worked by them, categorized by trade or craft;
 8. Total number of journeymen and labor hours worked by them, categorized by trade or craft;
 9. Cumulative combined total of apprentice and journeymen labor hours; and
 10. Total percentage of apprentice hours worked.
- B. No changes to the required percentage (%) of apprentice participation shall be allowed without written approval of the Owner. In any request for the change the Contractor shall clearly demonstrate a good faith effort to comply with the requirements for apprentice participation.

DIVISION 0 – GENERAL CONDITIONS

- C. Any substantive violation of the mandatory requirements of this part of the contract may be a material breach of the contract by the Contractor.

00705.25 FEDERALLY FUNDED CONTRACT CONDITIONS

A. Equal Employment Opportunity :

1. The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation, religion, marital status, age, Vietnam era and disabled veteran's status, or other presence of any sensory, mental, or physical handicap. The Contractor will take affirmative action to ensure that applications are employed and that employees are treated during employment without regard to their race, creed, color, national origin, sex, sexual orientation, religion, marital status, age, Vietnam era and disabled veteran's status or the presence of any sensory, mental, or physical handicap.

Such action shall include, but not be limited to the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, national origin, sex, sexual orientation, religion, marital status, age, Vietnam era and disabled veteran's status, or the presence of any sensory, mental, or physical handicap.
3. The Contractor will send to each labor union, or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer advising the labor union or workers' representative of the Contractor's commitments under *Section 202 of Executive Order No. 11246 of September 24, 1965*, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
4. The Contractor will comply with all provisions of *Executive Order No. 11246 of September 24, 1965*, and the rules, regulations, and relevant orders of the Secretary of Labor.
5. The Contractor will furnish all information and reports required by *Executive Order No. 11246 of September 24, 1965*, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

DIVISION 0 – GENERAL CONDITIONS

6. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further government contracts in accordance with procedures authorized in *Executive Order No. 11246 of September 24, 1965*, and such other sanctions may be imposed and remedies invoked as provided in the said Executive Order, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
 7. The Contractor will include the provisions of *Paragraphs "1" through "7"* in every Subcontract or Purchase Order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to *Section 204 of Executive Order No. 11246 of September 24, 1965*, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including the sanctions for noncompliance, provided however that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.
- B. *Civil Rights Act of 1964 (P.L. 88-352, 78 STAT. 241)*:
1. *Section 601 (In General)*: No person in the United States shall, on the grounds of race, color, national origin, sex, religion, marital status, age, Vietnam era and disabled veteran status, or the presence of any sensory, mental, or physical handicap be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.
 2. *Section 602 (Effecting Compliance)*: Each federal department and agency which is empowered to extend federal financial assistance to any program or activity by way of grant, loan, or contract other than a contract of insurance or guaranty, is authorized and directed to effectuate the provisions of *Section 601* with respect to such program or activity by issuing rules, regulations, or orders of general applicability which shall be consistent with achievement of the objectives the statute authorizing the financial assistance in connection with which the action is taken. No such rule, regulation, or order shall become effective unless and until approved by the President. Compliance with any requirement adopted pursuant to this section may be effected by:
 - a.) The termination of or refusal to grant or to continue assistance under such programs or activity to any recipient as to whom there has been an express finding on the record, after opportunity for hearing, of a failure to comply with such requirement, but such termination or refusal shall be limited to the particular political entity, or part thereof, or other recipient as to whom such a finding has been made, and shall be limited in its effect to the particular program, or part thereof, in which such noncompliance has been so found, and;

DIVISION 0 – GENERAL CONDITIONS

- b.) By any other means authorized by law, provided, however, that no such action shall be taken until the department or agency concerned has advised the appropriate person or persons of the failure to comply with a requirement imposed pursuant to this section, the head of the federal department or agency shall file with the committees of the House and Senate having legislative jurisdiction over the program or activity involved a full written report of the circumstances and the grounds for such action. No such action shall become effective until 30 days have elapsed after the filing of such report.
3. **Section 603 (Judicial Review):** Any department or agency action taken pursuant to Section 602 shall be subject to such judicial review as may otherwise be provided by law for similar action taken by such department or agency on other grounds. In the case of action not otherwise subject to judicial review, terminating or refusing to grant or to continue financial assistance upon finding or failure to comply with any requirement imposed pursuant to Section 602, any assistance upon a finding or failure to comply with any requirement imposed pursuant to Section 602, any person aggrieved (including any State or political subdivision thereof or any agency of either) may obtain judicial review of such action in accordance with Section 10 of the Administrative Procedure Act, and such action shall not be deemed committed to unreviewable agency discretion within the meaning of that section.
4. **Section 604 (Restriction on Action):** Nothing contained in this title shall be construed to authorized action under this title by any department or agency with respect to any employment practice of any employer, employment agency, or labor organization except where a primary objective of the federal financial assistance is to provide employment.
5. **Section 605 (Existing Authority Not Impaired):** Nothing in this title shall add to or detract from any existing authority with respect to any program or activity under which federal financial assistance is extended by way of a contract of insurance or guaranty.
- C. Contracts in excess of \$10,000 shall comply with *Executive Order No. 11246*, entitled *Equal Employment Opportunity*, as amended by *Executive Order No. 11375*, *Executive Order No., 13672* and as supplemented in *Department of Labor Regulations (41 CFR, Part 60)*.
- D. This Contract shall comply with the *Copeland Anti-Kick Back Act (18 U.S.C. 874)* as supplemented in *Department of Labor Regulations (29 CFR, Part 3)*. The Contractor shall not induce by any means any person employed in the construction, completion, or repair of public work to give up any part of the compensation to which he is otherwise entitled.
- E. Contracts in excess of \$2,000 shall comply with the *Davis-Bacon Act (40 U.S.C. 276a to a-7)* and as supplemented by *Department of Labor Regulations (29 CFR, Part 5)*. Contractors shall pay wages to laborers and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor, and shall pay wages not less often than once a week.

DIVISION 0 – GENERAL CONDITIONS

- F. Contracts in excess of \$2,000 which involve the employment of mechanics or laborers shall comply with *Section 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330)* as supplemented by *Department of Labor Regulations (29 CFR, Part 5)*. Each Contractor shall compute the wages of every mechanic and laborer on the basis of a standard workday of eight hours, and a standard workweek of 40 hours. Work in excess of the standard workday or workweek is permissible, provided that the worker is compensated at a rate of not less than 1½ times the basic rate of pay for all hours worked in excess of eight hours in any calendar day of 40 hours in the workweek. No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction, safety, and health standards promulgated by the Secretary of Labor.
- G. Contracts in excess of \$100,000 require the recipient to agree to comply with applicable standards, orders, or regulations pursuant to the Clean Air Act of 1970 (42 U.S.C. 1857 et seq.) and the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), amended.
- H. Contractor shall submit Certified Payrolls as described in *Section 00705.23*.

PART 6 - 00706.00 PAYMENTS AND COMPLETION

00706.01 CONTRACT SUM

Owner shall pay Contractor the Contract Sum for performance of the Work in accordance with the Contract Documents. The Contract Sum shall include all taxes imposed by law and properly chargeable to the Project, including sales tax.

00706.02 SCHEDULE OF VALUES

Prior to Notice to Proceed, Contractor shall submit to Owner for approval a breakdown allocating the total Contract Sum to each principle category of work, in such detail as requested by Owner ("Schedule of Values"). The approved Schedule of Values shall include appropriate amounts for demobilization, record drawings, operation and maintenance manuals, and any other requirements for Project closeout and shall be used by Owner as the basis for progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

00706.03 APPLICATION FOR PAYMENT

- A. At monthly intervals, unless determined otherwise by Owner, Contractor shall submit to Owner an itemized Application for Payment for Work completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require.
- B. By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with *RCW 60.28.010*, as their interests appeared in the last preceding certificate of payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in *SECTION 00701.03* are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment.

DIVISION 0 – GENERAL CONDITIONS

- C. At the time the Contractor submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Construction Schedule.
- D. If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off the Project site, provided Contractor complies with or furnishes satisfactory evidence of the following:
 - 1. The material will be placed in a warehouse that is structurally sound, dry, lighted, and suitable for the materials to be stored.
 - 2. The warehouse is located within a 10-mile radius of the Project. Other locations may be utilized if approved in writing by Owner.
 - 3. Only materials for the Project are stored within the warehouse (or secure portion of a warehouse set aside for the Project).
 - 4. Contractor furnishes Owner a Certificate of Insurance extending Contractor's insurance coverage for damage, fire, and theft to cover the full value of all materials stored or in transit.
 - 5. The warehouse (or secure portion thereof) is continuously under lock and key, and only Contractor's authorized personnel shall have access.
 - 6. Owner shall at all times have the right of access in company of Contractor.
 - 7. The Contractor and its surety assume total responsibility for the stored materials.
 - 8. Contractor furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish notice to Owner when materials are moved from storage to the Project site.

00706.04 PROGRESS PAYMENTS

- A. Owner shall make progress payments, in such amounts as Owner determines are properly due, within 30 days after receipt of a properly executed Application for Payment. Owner shall notify Contractor in accordance with *RCW 39.76* if the Application for Payment does not comply with the requirements of the Contract Documents.
- B. Owner shall retain 5 percent of the amount of each progress payment until 30 days after Final Acceptance and receipt of all documents required by law or the Contract Documents including, at Owner's request, consent of surety to release of the retainage. In accordance with *RCW 60.28*, Contractor may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Contractor. Owner may permit Contractor to provide an appropriate bond in lieu of the retained funds.
- C. For Base Bids of \$150,000 or less, Owner may at Contractor Request, retain 10% of the amount of each progress payment, in lieu of payment and performance bonds.

DIVISION 0 – GENERAL CONDITIONS

- D. Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to insist on full compliance by Contractor with the Contract Documents.
- E. Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in *RCW 39.76*.

00706.05 PAYMENTS WITHHELD

- A. Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including but not limited to:
 - 1. Work not in accordance with the Contract Documents
 - 2. Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum
 - 3. Work by Owner to correct defective Work or complete the Work in accordance with *SECTION 00705.16*
 - 4. Failure to perform in accordance with the Contract Documents
 - 5. Cost or liability that may occur to Owner as the result of Contractor's fault or negligent acts or omissions.
- B. In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Owner shall notify Contractor in accordance with *RCW 39.76*.

00706.06 RETAINAGE AND BOND CLAIM RIGHTS

RCW CHAPTERS 39.08 and 60.28, concerning the rights and responsibilities of Contractor and Owner with regard to the performance and payment bonds and retainage, are made a part of the Contract Documents by reference as though fully set forth herein.

00706.07 SUBSTANTIAL COMPLETION

Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner can fully occupy the Work (or the designated portion thereof) for the use for which it is intended. All Work other than incidental corrective or punch list work shall have been completed. Substantial Completion shall not have been achieved if all systems and parts are not functional, if utilities are not connected and operating normally, if all required occupancy permits have not been issued, or if the Work is not accessible by normal vehicular and pedestrian traffic routes. The date Substantial Completion is achieved shall be established in writing by Owner. Contractor may request an early date of Substantial Completion, which must be approved by Change Order. Owner's occupancy of the Work or designated portion thereof does not necessarily indicate that Substantial Completion has been achieved.

0706.08 PRIOR OCCUPANCY

- A. Owner may, upon written notice thereof to Contractor, take possession of or use any completed or partially completed portion of the Work ("prior occupancy") at any time prior to Substantial Completion. Unless otherwise agreed in writing, prior occupancy shall not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Owner provided by any insurance, bond, guaranty, or the Contract Documents; relieve Contractor of the risk of loss or any of the obligations established by the Contract Documents; establish a date for termination or partial termination of the assessment of liquidated damages; or constitute a waiver of claims.
- B. Notwithstanding anything in the preceding paragraph, Owner shall be responsible for loss or damage to the Work resulting from its prior occupancy. Contractor's 1 year duty to repair and any system warranties shall begin on building systems activated and used by Owner as agreed in writing by Owner and Contractor.

00706.09 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT

- A. Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing.
- B. Final Acceptance is the formal action of Owner acknowledging Final Completion. Prior to Final Acceptance, Contractor shall, in addition to all other requirements in the Contract Documents, submit to Owner a written notice of any outstanding disputes or claims between Contractor and any of its Subcontractors, including the amounts and other details thereof. Neither Final Acceptance nor final payment shall release Contractor or its sureties from any obligations of these Contract Documents or the Public Works Bond, or constitute a waiver of any claims by Owner arising from Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Acceptance of final payment by Contractor or any Subcontractor shall constitute a waiver and release to Owner of all claims by Contractor or any such Subcontractor for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in *SECTION 00708.00*.

PART 7 - 00707.00 CHANGES

00707.01 CHANGES IN THE WORK

- A. Owner may at any time and without notice to Contractor's surety order additions, deletions, revisions, or other changes in the Work. These changes in the Work shall be incorporated into the Contract Documents through the execution of Change Orders. If any change in the Work ordered by Owner causes an increase or decrease in the Contract Sum or the Contract Time, an equitable adjustment shall be made as provided in *SECTION 00707.02* or *00707.03*, respectively, and such adjustment(s) shall be incorporated into a Change Order.

DIVISION 0 – GENERAL CONDITIONS

- B. If Owner desires to order a change in the Work, it may request a written Change Order proposal from Contractor. Contractor shall submit a Change Order proposal within 14 days of the request from Owner, or within such other period as mutually agreed. Contractor's Change Order proposal shall be full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time, and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.
- C. Upon receipt of the Change Order proposal, or a request for equitable adjustment in the Contract Sum or Contract Time, or both, as provided in *SECTIONS 00707.02 and 00707.03*, Owner may accept or reject the proposal, request further documentation, or negotiate acceptable terms with Contractor. Pending agreement on the terms of the Change Order, Owner may direct Contractor to proceed immediately with the Change Order Work. Contractor shall not proceed with any change in the Work until it has obtained Owner's approval. All Work done pursuant to any Owner-directed change in the Work shall be executed in accordance with the Contract Documents.
- D. If Owner and Contractor reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, such agreement shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment.
- E. If Owner and Contractor are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, Contractor may at any time, in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 30 days of Contractor's request. Owner may also provide Contractor with a final offer at any time. If Contractor rejects Owner's final offer or the parties are otherwise unable to reach agreement, Contractor's only remedy shall be to file a Claim as provided in *SECTION 00708.00*.

00707.02 CHANGE IN THE CONTRACT SUM

- A. General Application:
 - 1. The Contract Sum shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Sum in its Change Order proposal.
 - 2. If the cost of Contractor's performance is changed due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Sum in accordance with the following procedure. No change in the Contract Sum shall be allowed to the extent that Contractor's changed cost of performance is due to the fault or negligence of Contractor or anyone for whose acts Contractor is responsible; the change is concurrently caused by Contractor and Owner; or the change is caused by an act of force majeure, as defined in *SECTION 00703.05*.

DIVISION 0 – GENERAL CONDITIONS

- a. A request for an equitable adjustment in the Contract Sum shall be based on written notice delivered to Owner within 7 days of the occurrence of the event-giving rise to the request. For purposes of this part, "occurrence" means when Contractor knew, or in its diligent prosecution of the Work should have known, of the event-giving rise to the request. If Contractor believes it is entitled to an adjustment in the Contract Sum, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such records and, if requested, shall promptly furnish copies of such records to Owner.
- b. Contractor shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than 7 days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Contractor and its Subcontractors, if any; and, to the extent possible, the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
- c. Within 30 days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement written notice provided in accordance with Subparagraph "a" (above) with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Contractor for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis of the request by Owner.

When the request for compensation relates to a delay or other change in Contract Time, Contractor shall demonstrate the impact on the critical path, in accordance with *SECTION 00707.03C*. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

- d. Pending final resolution of any request made in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- e. Any requests by Contractor for an equitable adjustment in the Contract Sum and in the Contract Time that arise out of the same event(s) shall be submitted together.

DIVISION 0 – GENERAL CONDITIONS

3. The value of any work covered by a Change Order or of any request for an equitable adjustment in the Contract Sum shall be determined by one of the following methods:
 - a. On the basis of a fixed price as determined in *SECTION 00707.02B*.
 - b. By application of unit prices to the quantities of the items involved as determined *SECTION 00707.02C*.
 - c. On the basis of time and material as determined in *SECTION 00707.02D*.
 4. When Owner has requested Contractor to submit a Change Order proposal, Owner may direct Contractor as to which method in Subparagraph 3 (above) to use when submitting its proposal. Otherwise, Contractor shall determine the value of the Work or of a request for an equitable adjustment, on the basis of the fixed price method.
- B. Change Order Pricing - Fixed Price: When the fixed price method is used to determine the value of any Work covered by a Change Order or of a request for an equitable adjustment in the Contract Sum, the following procedures shall apply:
1. Contractor's Change Order Proposal or request for adjustment in the Contract Sum shall be accompanied by a complete itemization of the costs including labor, materials, subcontractor costs, and overhead and profit. The costs shall be itemized in the manner set forth below and shall be submitted on breakdown sheets in a form approved by Owner.
 2. All costs shall be calculated based on appropriate industry standard methods of calculating labor, material quantities, and equipment costs.
 3. If any of Contractor's pricing assumptions are contingent upon anticipated actions of Owner, Contractor shall clearly state them in the proposal or request for an equitable adjustment.
 4. The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by the same Contractor or Subcontractor, small tools, overhead, profit, bond, and insurance markups will apply to the net difference.
 5. If the total cost of the change in the Work or request for equitable adjustment does not exceed \$1,000, Contractor shall not be required to submit a breakdown if the description of the change in the Work or request for equitable adjustment is sufficiently definitive for Owner to determine fair value.
 6. If the total cost of the change in the Work or request for equitable adjustment is between \$1,000 and \$2,500, Contractor may submit a breakdown in the following level of detail if the description of the change in the Work or if the request for equitable adjustment is sufficiently definitive to permit the Owner to determine fair value:
 - a. Lump sum labor

DIVISION 0 – GENERAL CONDITIONS

- b. Lump sum material
 - c. Lump sum equipment usage
 - d. Overhead and profit as set forth below
 - e. Insurance and bond costs as set forth below
7. Any request for adjustment of Contract Sum based upon the fixed price method shall include only the following items:
- a. Craft Labor Costs: These are the labor costs determined by multiplying the estimated or actual additional number of craft hours needed to perform the change in the Work by the hourly labor costs. Craft hours should cover direct labor as well as indirect labor due to trade inefficiencies. The hourly costs shall be based on the following:
 - 1) Basic Wages and Benefits: Hourly rates and benefits as stated on the L&I approved Statement of Intent to Pay Prevailing Wages. Direct supervision shall be a reasonable percentage not to exceed 15 percent of the cost of direct labor. No supervision markup shall be allowed if a working supervisor's hours are included in the breakdown.
 - 2) Worker's Insurance: Direct contributions to the State of Washington for industrial insurance, medical aid, and supplemental pension by the class and rates established by L&I.
 - a. Federal Insurance: Direct contributions required by the *Federal Insurance Compensation Act*, *Federal Unemployment Tax Act*, and the *State Unemployment Compensation Act*.
 - 4) Safety: Costs incurred due to the *Washington Industrial Safety and Health Act*, which shall be a reasonable percentage not to exceed 2 percent of the sum of the amounts calculated in SUBPARAGRAPHS (1), (2), and (3) above.
 - 5) Travel Allowance: Travel allowance and/or subsistence, if applicable, not exceeding those allowances established by regional labor union agreements, which are itemized and identified separately.
 - b. Material Costs: This is an itemization of the quantity and cost of materials needed to perform the change in the Work. Material costs shall be developed from actual known costs, supplier quotations or standard industry pricing guides. Material costs shall consider all available discounts. Freight costs, express charges, or special delivery charges shall be itemized.

DIVISION 0 – GENERAL CONDITIONS

- c. Equipment Costs: This is an itemization of the type of equipment and the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work. Costs will be allowed for construction equipment only if used solely for the changed Work or for additional rental costs actually incurred by the Contractor. Equipment charges shall be developed from the current edition of one of the following sources:
- 1) *Associated General Contractors - Washington State Department of Transportation Equipment Rental Agreement; latest edition.*
 - 2) *The State of Washington Utilities and Transportation Commission for trucks used on highways.*
 - 3) *The National Electrical Contractors Association for equipment used on electrical work.*
 - 4) *The Mechanical Contractors Association of America for equipment used on mechanical work.*
 - 5) *Equipment Watch Rental Rate (Blue Book) for Construction Equipment* shall be used as a basis for establishing rental rates of equipment not listed in the above sources. The maximum rate for standby equipment shall not exceed 50 percent of the applicable rate.
- d. Allowance for Small Tools, Expendables, and Consumable Supplies: Small tools consist of tools that cost \$250 or less and are normally furnished by the performing Contractor. The maximum rate for small tools shall not exceed the following:
- 1) For Contractor, 3 percent of direct labor costs.
 - 2) For Subcontractors, 5 percent of direct labor costs.
- Expendables and consumable supplies directly associated with the change in Work must be itemized.
- e. Subcontractor Costs: This is defined as payments Contractor makes to Subcontractors for changed Work performed by Subcontractors of any tier. The Subcontractors' cost of Work shall be calculated and itemized in the same manner as prescribed herein for Contractor.

DIVISION 0 – GENERAL CONDITIONS

- f. Allowance for Overhead and Profit: This is defined as costs of any kind attributable to direct and indirect delay, acceleration, or impact, added to the total cost to Owner of any Change Order, or any request for additional Work or extra payment of any kind on the Project. This allowance shall compensate Contractor for all non-craft labor, temporary construction facilities, field engineering, schedule updating, as-built drawings, home office cost, Business and Occupation taxes, office engineering, estimating costs, additional overhead because of extended time, and any other cost incidental to the change in the Work. It shall be strictly limited in all cases to a reasonable amount, mutually acceptable, or if none can be agreed upon to an amount not to exceed the following:
- 1) For Contractor, for any Work actually performed by Contractor's own forces, 22 percent of the first \$50,000 of the cost and 10 percent of the remaining cost, if any.
 - 2) For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 22 percent of the first \$50,000 of the cost and 10 percent of the remaining cost, if any.
 - 3) For Contractor, for any Work performed by its Subcontractor(s), 8 percent of the first \$50,000 of the amount due each Subcontractor and 6 percent of the remaining amount, if any.
 - 4) For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 8 percent of the first \$50,000 of the amount due the sub-Subcontractor and 6 percent of the remaining amount, if any.
 - 5) The cost to which overhead and profit is to be applied shall be determined in accordance with *SUBPARAGRAPHS a-e* above.
- g. Cost of Change in Insurance or Bond Premium: This is defined as:
- 1) Contractor's Liability Insurance: The cost of any changes in Contractor's liability insurance arising directly from execution of the Change Order; and
 - 2) Public Works Bond(s): The cost of the additional premium for Contractor's bond arising directly from the changed Work.

The costs of any change in insurance or bond premium shall be added after overhead and profit are calculated in accordance with *SUBPARAGRAPH "f"* above.

C. Change Order Pricing - Unit Prices:

1. Whenever Owner authorizes Contractor to perform Work on a unit-price basis, Owner's authorization shall clearly state:
 - a. Scope of work to be performed

DIVISION 0 – GENERAL CONDITIONS

- b. Type of reimbursement including pre-agreed rates for material quantities
 - c. Cost limit of reimbursement
2. Contractor shall:
- a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, Contractor shall identify workers assigned to the Change Order Work and areas in which they are working.
 - b. Leave access as appropriate for quantity measurement.
 - c. Not exceed any cost limit(s) without Owner's prior written approval.
3. Contractor shall submit costs in accordance with *SECTION 00707.02B* and satisfy the following requirements:
- a. Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead and profit and bond and insurance costs.
 - b. Quantities must be supported by field measurement statements signed by Owner.
- D. Change Order Pricing - Time and Material Prices:
1. Whenever Owner authorizes Contractor to perform work on a time-and-material basis, Owner's authorization shall clearly state:
- a. Scope of work to be performed
 - b. Type of reimbursement including pre-agreed rates, if any, for material quantities or labor
 - c. Cost limit of reimbursement
2. Contractor shall:
- a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, identify workers assigned to the Change Order Work and areas in which they are working.
 - b. Identify on daily timesheets all labor performed in accordance with this authorization. Submit copies of daily timesheets within 2 working days for Owner's review.
 - c. Leave access as appropriate for quantity measurement.
 - d. Perform all Work in accordance with this section as efficiently as possible.
 - e. Not exceed any cost limit(s) without Owner's prior written approval.

DIVISION 0 – GENERAL CONDITIONS

3. Contractor shall submit costs in accordance with *SECTION 00707.02B* and additional verification supported by:
 - a. Labor detailed on daily timesheets
 - b. Invoices for material

00707.03 CHANGE IN THE CONTRACT TIME

- A. The Contract Time shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Time in its Change Order proposal.
- B. If the time of Contractor's performance is changed due to an act of force majeure or due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Time in accordance with the following procedure. No adjustment in the Contract Time shall be allowed to the extent Contractor's changed time of performance is due to the fault or negligence of Contractor or anyone for whose acts Contractor is responsible.
 1. A request for an equitable adjustment in the Contract Time shall be based on written notice delivered within 7 days of the occurrence of the event-giving rise to the request. If Contractor believes it is entitled to adjustment of Contract Time, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such records and, if requested, shall promptly furnish copies of such records to Owner.
 2. Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 7 days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Time; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and, to the extent possible, the amount of the adjustment in Contract Time requested. Failure to properly give such written notice shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.
 3. Within 30 days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with *SECTION 00707.03B.2* with additional supporting data. Such additional data shall include, at a minimum: the amount of delay claimed, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition complained of, and that the Contract Documents provide entitlement to an equitable adjustment in Contract Time for such act, event, or condition; and supporting documentation sufficiently detailed to permit an informed analysis of the request by Owner. Failure to provide such additional information and documentation within the time allowed or within the format required shall, to the extent Owner's interests are prejudiced, constitute a waiver of Contractor's right to an equitable adjustment.

DIVISION 0 – GENERAL CONDITIONS

4. Pending final resolution of any request in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- C. Any change in the Contract Time covered by a Change Order or based on a request for an equitable adjustment in the Contract Time shall be limited to the change in the critical path of Contractor's schedule attributable to the change of Work or event(s) giving rise to the request for equitable adjustment. Any Change Order proposal or request for an adjustment in the Contract Time shall demonstrate the impact on the critical path of the schedule. Contractor shall be responsible for showing clearly on the Construction Schedule that the change or event: had a specific impact on the critical path, and except in case of concurrent delay, was the sole cause of such impact; and could not have been avoided by re-sequencing of the Work or other reasonable alternatives.
- D. Contractor may request compensation for the cost of a change in Contract Time in accordance with this section, *00707.03D*, subject to the following conditions:
1. The change in Contract Time shall solely be caused by the fault or negligence of Owner or A/E.
 2. Compensation under this paragraph is limited to changes in Contract Time for which Contractor is not entitled to be compensated under *SECTION 00707.02*.
 3. Contractor shall follow the procedure set forth in *SECTION 00707.03B*.
 4. Contractor shall establish the extent of the change in Contract Time in accordance with *SECTION 00707.03C*.
 5. The daily cost of any change in Contract Time shall be limited to:
 - a. Cost of nonproductive field supervision or labor extended because of the delay
 - b. Cost of weekly meetings or similar indirect activities extended because of the delay
 - c. Cost of temporary facilities or equipment rental extended because of the delay
 - d. Cost of insurance extended because of the delay
 - e. General and administrative overhead in an amount to be agreed upon, but not to exceed 3 percent of Contract Sum divided by the Contract Time for each day of the delay.

PART 8 - 00708.00 CLAIMS AND DISPUTE RESOLUTION

00708.01 CLAIMS PROCEDURE

- A. If the parties fail to reach agreement on the terms of any Change Order for Owner-directed Work as provided in *SECTION 00707.01*, or on the resolution of any request for an equitable adjustment in the Contract Sum as provided in *SECTION 00707.02* or the Contract Time as provided in *SECTION 00707.03*, Contractor's only remedy shall be to file a Claim with Owner as provided in this section.
- B. Contractor shall file its Claim within the earlier of: 120 days from Owner's final offer in accordance with *SECTION 00707.01E*, or the date of Final Acceptance.
- C. The Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor may be entitled. It shall be fully substantiated and documented. At a minimum, the Claim shall contain the following information:
 - 1. A detailed factual statement of the Claim for additional compensation and time, if any, providing all necessary dates, locations, and items of Work affected by the Claim
 - 2. The date on which facts arose which gave rise to the Claim
 - 3. The name of each employee of Owner or A/E knowledgeable about the Claim
 - 4. The specific provisions of the Contract Documents that support the Claim
 - 5. The identification of any documents and the substance of any oral communications that support the Claim
 - 6. Copies of any identified documents, other than the Contract Documents, that support the Claim;
 - 7. If an adjustment in the Contract Time is sought: the specific days and dates for which it is sought; the specific reasons Contractor believes an extension in the Contract Time should be granted; and Contractor's analysis of its Construction Schedule to demonstrate the reason for the extension in Contract Time.
 - 8. If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories set forth in, and in the detail required by, *SECTION 00707.02*.
 - 9. A statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes Owner is liable.

DIVISION 0 – GENERAL CONDITIONS

- D. After Contractor has submitted a fully documented Claim that complies with all applicable provisions of *SECTIONS 00707.00* and *00708.00*, Owner shall respond, in writing, to Contractor as follows:
1. If the Claim amount is less than \$50,000, with a decision within 60 days from the date the Claim is received; or
 2. If the Claim amount is \$50,000 or more, with a decision within 60 days from the date the Claim is received or, with notice to Contractor, of the date by which it will render its decision. Owner will then respond with a written decision in such additional time.
- E. To assist in the review of Contractor's Claim, Owner may visit the Project site or request additional information in order to fully evaluate the issues raised by the Claim. Contractor shall proceed with performance of the Work pending final resolution of any Claim. Owner's written decision, as set forth above, shall be final and conclusive as to all matters set forth in the Claim unless Contractor follows the procedure set forth in *SECTION 00708.02*.
- F. Any Claim of the Contractor against the Owner for damages, additional compensation, or additional time shall be conclusively deemed to have been waived by the Contractor unless timely made in accordance with the requirements of this section.

00708.02 ARBITRATION

- A. If Contractor disagrees with Owner's decision rendered in accordance with *SECTION 00708.01D*, Contractor shall provide Owner with a written demand for arbitration. No demand for arbitration of any such Claim shall be made later than 30 days after the date of Owner's decision on such Claim. Failure to demand arbitration within said 30 day period shall result in Owner's decision being final and binding upon Contractor and its Subcontractors.
- B. Notice of the demand for arbitration shall be filed with the *American Arbitration Association (AAA)*, with a copy provided to Owner. The parties shall negotiate or mediate under the *Voluntary Construction Mediation Rules* of the AAA or mutually acceptable service before seeking arbitration in accordance with the *Construction Industry Arbitration Rules of AAA* as follows:
1. Disputes involving \$30,000 or less shall be conducted in accordance with the *Northwest Region Expedited Commercial Arbitration Rules*; or
 2. Disputes over \$30,000 shall be conducted in accordance with the *Construction Industry Arbitration Rules of the AAA*, unless the parties agree to use the expedited rules.
- C. All Claims arising out of the Work shall be resolved by arbitration. The judgment upon the arbitration award may be entered, or review of the award may occur, in the superior court having jurisdiction thereof. No independent legal action relating to or arising from the Work shall be maintained.

DIVISION 0 – GENERAL CONDITIONS

- D. Claims between Owner and Contractor, Contractor and its Subcontractors, Contractor and A/E, and Owner and A/E shall, upon demand by Owner, be submitted in the same arbitration or mediation.
- E. If the parties resolve the Claim prior to arbitration judgment, the terms of the resolution shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of the Claim, including all claims for time and for direct, indirect, or consequential costs including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity.

00708.03 CLAIMS AUDITS

- A. All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Contractor, or Subcontractors of any tier, to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim or to permit Owner access to the books and records of Contractor, or Subcontractors of any tier, shall constitute a waiver of the Claim and shall bar any recovery.
- B. In support of Owner's audit of any Claim, Contractor shall, upon request, promptly make available to Owner the following documents:
 - 1. Daily time sheets and supervisor's daily reports
 - 2. Collective bargaining agreements
 - 3. Insurance, welfare, and benefits records
 - 4. Payroll registers
 - 5. Earnings records
 - 6. Payroll tax forms
 - 7. Material invoices, requisitions, and delivery confirmations
 - 8. Material cost distribution worksheet
 - 9. Equipment records (list of company equipment, rates, etc.)
 - 10. Vendors', rental agencies', Subcontractors', and agents' invoices
 - 11. Contracts between Contractor and each of its Subcontractors, and all lower-tier Subcontractor contracts and supplier contracts
 - 12. Subcontractors' and agents' payment certificates
 - 13. Canceled checks (payroll and vendors)
 - 14. Job cost report, including monthly totals
 - 15. Job payroll ledger

DIVISION 0 – GENERAL CONDITIONS

16. Planned resource loading schedules and summaries
 17. General ledger
 18. Cash disbursements journal
 19. Financial statements for all years reflecting the operations on the Work. In addition, the Owner may require, if it deems it appropriate, additional financial statements for 3 years preceding execution of the Work.
 20. Depreciation records on all company equipment, whether these records are maintained by the company involved, its accountant, or others.
 21. If a source other than depreciation records is used to develop costs for Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
 22. All non-privileged documents which relate to each and every Claim together with all documents which support the amount of any adjustment in Contract Sum or Contract Time sought by each Claim.
 23. Worksheets or software used to prepare the Claim establishing the cost components for items of the Claim including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, all documents which establish the time periods, individuals involved, hours for the individuals, and rates for individuals.
 24. Worksheets, software, and all other documents used by Contractor to prepare its bid.
- C. The audit may be performed by employees of Owner or a representative of Owner. Contractor and its Subcontractors shall provide adequate facilities acceptable to Owner for the audit during normal business hours. Contractor and all Subcontractors shall make a good-faith effort to cooperate with Owner's auditors.

PART 9 - 00709.00 TERMINATION OF THE WORK

00709.01 TERMINATION BY OWNER FOR CAUSE

- A. Owner may, upon 7 days written notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Owner) the Work or any part of it for cause upon the occurrence of any one or more of the following events:
1. Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time.
 2. Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors or a receiver is appointed on account of its insolvency.

DIVISION 0 – GENERAL CONDITIONS

3. Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents.
 4. Contractor repeatedly fails to supply skilled workers or proper materials or equipment.
 5. Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor.
 6. Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction.
 7. Contractor is otherwise in material breach of any provision of the Contract Documents.
- B. Upon termination, Owner may at its option:
1. Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of and to finish the Work
 2. Accept assignment of subcontracts pursuant to *SECTION 00705.21*.
 3. Finish the Work by whatever other reasonable method it deems expedient.
- C. Owner's rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.
- D. When Owner terminates the Work in accordance with this section, Contractor shall take the actions set forth in *SECTION 00709.02B* and shall not be entitled to receive further payment until the Work is accepted.
- E. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E's services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of Contractor's actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. These obligations for payment shall survive termination.
- F. Termination of the Work in accordance with this section shall not relieve Contractor or its surety of any responsibilities for Work performed.
- G. If Owner terminates Contractor for cause and it is later determined that none of the circumstances set forth in *SECTION 00709.01A* exist, then such termination shall be deemed a termination for convenience pursuant to *SECTION 00709.02*.

00709.02 TERMINATION BY OWNER FOR CONVENIENCE

- A. Owner may, upon written notice, terminate (without prejudice to any right or remedy of Owner) the Work or any part of it for the convenience of Owner.

DIVISION 0 – GENERAL CONDITIONS

- B. Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor shall promptly:
1. Stop performing Work on the date and as specified in the notice of termination.
 2. Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated.
 3. Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated.
 4. Assign to Owner all of the rights, title, and interest of Contractor in all orders and subcontracts.
 5. Take such action as may be necessary or as directed by Owner to preserve and protect the work, Project site, and any other property related to this Project in the possession of Contractor in which Owner has an interest.
 6. Continue performance only to the extent not terminated.
- C. If Owner terminates the Work or any portion thereof for convenience, Contractor shall be entitled to make a request for an equitable adjustment for its reasonable direct costs incurred prior to the effective date of the termination plus a reasonable allowance for overhead and profit on Work performed prior to termination and the reasonable administrative costs of the termination but shall not be entitled to any other costs or damages whatsoever, provided however, the total sum payable upon termination shall not exceed the Contract Sum reduced by prior payments. Contractor shall be required to make its request in accordance with the provisions of *SECTION 00707.00*.
- D. If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

PART 10 - 00710.00 MISCELLANEOUS PROVISIONS

00710.01 GOVERNING LAW

The Contract Documents and the rights of the parties herein shall be governed by the laws of the State of Washington. Venue shall be in Thurston County unless otherwise specified by the Owner.

00710.02 SUCCESSORS AND ASSIGNS

Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party shall assign the Work without written consent of the other, except that Contractor may assign the Work for security purposes, to a bank or lending institution authorized to do business in the State of Washington. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents.

00710.03 MEANING OF WORDS

Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or the code of any governmental authority, whether such reference be specific or by implication, shall be to the latest standard specification, manual, or code in effect on the date for submission of bids, except as may be otherwise specifically stated. Wherever in these Drawings and Specifications an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such articles as are shown on the Drawings or are required to complete the installation.

00710.04 RIGHTS AND REMEDIES

No action or failure to act by Owner or A/E shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of an acquiescence in a breach therein, except as may be specifically agreed in writing.

00710.05 CONTRACTOR REGISTRATION

Pursuant to *RCW 39.06*, Contractor shall be registered or licensed as required by the laws of the State of Washington, including but not limited to *RCW 18.27*.

00710.06 TIME COMPUTATIONS

When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday, in which event the period runs until the end of the next day that is not a weekend or holiday. When the period of time allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

0710.07 RECORDS RETENTION

The wage, payroll, and cost records of Contractor and its Subcontractors, and all records subject to audit in accordance with *SECTION 00708.03*, shall be retained for a period of not less than 6 years after the date of Final Acceptance.

00710.08 THIRD-PARTY AGREEMENTS

The Contract Documents shall not be construed to create a contractual relationship of any kind between: A/E and Contractor; Owner and any Subcontractor; or any persons other than Owner and Contractor.

00710.09 ANTITRUST ASSIGNMENT

Owner and Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Contractor hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges that result from antitrust violations commencing after the Contract Sum is established and that are not passed on to Owner under a Change Order. Contractor shall put a similar clause in its Subcontracts and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Contractor.

00710.10 IDENTIFICATION OF SUBCONTRACTORS FOR PROJECTS GREATER THAN \$1,000,000

When an Owner's Estimate is in excess of \$1,000,000 for Public Works described in these documents, the bidder must as part of the bid, submit the names of the subcontractors with whom the bidder, if awarded the contract, will subcontract for performance of the work of the following:

- A. Heating, Ventilation, and Air Conditioning (HVAC);
- B. Plumbing, per RCW Chapter 18.106; and
- C. Electrical, per RCW Chapter 19.28 or to name itself for the work.

The Prime Contractor shall not list more than one subcontractor, or self, for each category of work identified.

Failure of the Prime Contractor to submit, as part of the bid names of such sub-contractors or itself to perform such work, or naming two (2) or more subcontractors to perform such work shall render the Contract bidder's bid as non-responsive and therefore void, in accordance with RCW 39.30.060.

END OF SECTION 00700

**SECTION 00800
TABLE OF CONTENTS**

00800 SUPPLEMENTAL CONDITIONS

In accordance with the *GENERAL CONDITIONS*, *SUPPLEMENTAL CONDITIONS* take precedence over *GENERAL CONDITIONS*.

00802.07	Builders Risk Insurance
00810.13	Abbreviations of Administrative Organizations

00802.07 BUILDERS RISK INSURANCE

This section supersedes Section 00702.07.
Builders Risk Insurance is not required.

00810.13 ABBREVIATIONS OF ADMINISTRATIVE ORGANIZATIONS

This section supplements SECTION 00710.03 of the GENERAL CONDITIONS.

TABLE 00810.13	
ABBREVIATIONS OF ADMINISTRATIVE ORGANIZATIONS	
<i>AASHTO</i>	<i>American Association of State Highway and Transportation Officials</i>
<i>ACI</i>	<i>American Concrete Institute</i>
<i>AF&PA</i>	<i>American Forest & Paper Association</i>
<i>AIA</i>	<i>American Institute of Architects</i>
<i>AISC</i>	<i>American Institute of Steel Construction</i>
<i>AISI</i>	<i>American Iron and Steel Institute</i>
<i>AITC</i>	<i>American Institute of Timber Construction</i>
<i>ANSI</i>	<i>American National Standards Institute</i>
<i>APA</i>	<i>APA – The Engineered Wood Association</i>
<i>APWA</i>	<i>American Public Works Association</i>
<i>AREMA</i>	<i>American Railway Engineering and Maintenance-of-Way Association</i>
<i>ASCE</i>	<i>American Society of Civil Engineers</i>
<i>ASME</i>	<i>American Society of Mechanical Engineers</i>
<i>ASTM</i>	<i>ASTM International (formerly American Society of Testing and Materials)</i>
<i>AWPA</i>	<i>American Wood Protection Association</i>
<i>AWPI</i>	<i>American Wood Preservers Institute</i>
<i>AWS</i>	<i>American Welding Society</i>
<i>AWWA</i>	<i>American Water Works Association</i>
<i>CSI</i>	<i>Construction Specifications Institute</i>
<i>NEC</i>	<i>National Electrical Code</i>
<i>IAPMO</i>	<i>International Association of Plumbing and Mechanical Officials</i>
<i>IBC</i>	<i>International Building Code</i>
<i>IEEE</i>	<i>Institute of Electrical and Electronics Engineers</i>
<i>NEMA</i>	<i>National Electrical Manufacturers Association</i>
<i>NFPA</i>	<i>National Fire Protection Association</i>
<i>OSHA</i>	<i>Occupational Safety and Health Administration</i>
<i>RCW</i>	<i>Revised Code of Washington</i>
<i>SAE</i>	<i>SAE International (formerly Society of Automotive Engineers)</i>
<i>SSPC</i>	<i>Society of Protective Coatings (formerly Steel Structures Painting Council)</i>
<i>TAA</i>	<i>The Aluminum Association</i>
<i>UL</i>	<i>Underwriters Laboratories, Inc.</i>
<i>UMC</i>	<i>Uniform Mechanical Code (developed by the IAPMO)</i>
<i>UPC</i>	<i>Uniform Plumbing Code (developed by the IAPMO)</i>
<i>WAC</i>	<i>Washington Administrative Code</i>
<i>WISHA</i>	<i>Washington Industrial Safety and Health Administration</i>
<i>WSDOT</i>	<i>Washington State Department of Transportation</i>
<i>WWPA</i>	<i>Western Wood Products Association</i>

Reference herein to specifications issued by the above named or other organization shall mean the latest edition of said specifications, unless otherwise noted.

DIVISION 1 – GENERAL REQUIREMENTS

SECTION 01000 GENERAL REQUIREMENTS

01010 SUMMARY OF WORK

The goal of this project is to replace the asphalt and bird predation structure at the Coulter Creek Hatchery. Dewatering will be necessary in areas of the ponds that are perpetually wet. King tides inundate the pond floors with water. The Contractor will be responsible for scheduling work, dewatering, and maintaining the work area to prevent stormwater or sediment runoff into the adjoining water body.

Remove and properly dispose of existing predation structure, netting, and cabling. A section of the galvanized walkways and support posts may be cut, removed, and saved for paver equipment access. Remove and properly dispose of existing water distribution pipes for asphalt replacement. Remove 2' walkways attached to the slope and save for reinstallation. Saw cut, remove, and properly dispose of the existing asphalt near fence posts as indicated on the plans. Repair subgrade with crushed surfacing top course. A portion of the driveway between the two ponds will be cut in height to provide a wider working space for fish fin clipping trailers. Take care not to disturb the pond bank slopes. Prepare the area subgrade with a crushed surfacing top course to accept the new asphalt. Provide new pressure relief valves with valve top modification. Prep subgrade with herbicide treatment. Install 3-inch-thick new asphalt. Reinstall 2' walkways attached to the slope in the same location as removed. Provide new water distribution pipes in kind. Install and support water distribution pipes in the manner of the existing pipes. The walkway and support post sections that are removed shall be welded back in place upon completion. Repair all galvanizing damaged or removed for welding.

Install Owner supplied predation structure. Remove fence and posts as required to install Tie-Back footings and posts. Reinstall fence upon completion. Provide and construct all items not listed as Owner supplied in the drawings and specifications, including reinforcing steel, concrete, and cables.

Bid Item 1: Construct Bird Predation Structure: Includes the removal of the existing predation system and the construction of the new bird predation structure including reinforcing steel, concrete, cables, and all related items as contained in the Drawings and Specifications.

Bid Item 2: Asphalt Removal and Subgrade Prep: Includes the removal and disposal of the existing asphalt cutting driveway fill between ponds with new subgrade repair as required and cutting the driveway between the ponds and new subgrade as contained in the Drawings and Specifications.

Bid Item 3: New Asphalt Installation: Includes installation of pressure relief valves, herbicide treatment, asphalt surface preparation and placement, sealing all joints, reinstallation of walkways, replacement of pressure relief valves and all related items as contained in the Drawings and Specifications.

01011 OWNER FURNISHED ITEMS

Units	Size	Item
20	6 inch diameter	Tower Posts and Collars
30	4 inch diameter	Tie Back Posts

DIVISION 1 – GENERAL REQUIREMENTS

01012 CONTRACT TIME

Substantial Completion shall be achieved by October 4, 2022.

Final Completion shall be achieved by October 11, 2022.

01030 SCHEDULE OF VALUES

Upon contract award, the Owner will provide an electronic copy of the Schedule of Values shown in Section 00650. At or before the preconstruction meeting, complete and submit this form to the Owner for approval.

- A. Show in detail all items performed on this Project. For each major line item, list sub-values of material and installation.
- B. Include a line item identified as "Submittal of Signed Permits, Project Record, and Operation and Maintenance Manuals" with an assigned value of \$1,000. This amount will be withheld from the final payment until Project Engineer has received and approved the above-mentioned document(s).
- C. The sum of all values listed in the Schedule shall equal the total Base Bid.

01040 COORDINATION

- A. The Contractor shall, before preparing the construction schedule, consult with the Owner to determine any particular scheduling or operational coordination conditions that will arise during the course of construction and coordinate work accordingly to minimize disruption to Owner or to progress of the work.
- B. The Contractor shall coordinate all materials, supplies, subcontract work, and its own work to ensure conflict-free and uniform flow of construction activities to completion within time set forth in Paragraph 01012.

01060 REGULATORY REQUIREMENTS

- A. Washington Department of Fish and Wildlife has obtained the following listed permits:
 - Road Access Permit (Pending)
 - Shoreline Exemption
1. The permits with provisions affecting the construction methods or schedule of this project have been incorporated in Attachment 1 at the end of this division. The Contractor shall abide by all restrictions noted in these permits as the construction is in progress.
2. All other permits or fees required by local, state, or federal governmental agencies necessary for the accomplishment of this project shall be obtained and paid for by the Contractor, except that any utility company costs for new permanent service shall be paid directly to the utility company by the State.
3. All costs associated with obtaining the permits, including labor, materials, and equipment shall be included in the Base Bid, except for permit fees.

DIVISION 1 – GENERAL REQUIREMENTS

4. The Contractor shall pay all permit fees. The Contractor shall not include any permit fees in the Base Bid. The State shall reimburse the Contractor by Change Order for the actual fees charged by city, state, or county authorities with no Contractor markup. The Contractor shall provide to the State documentation regarding costs for fees paid.
- B. The Contractor shall notify city, county, and state authorities of any inspections and/or approvals required.
- C. The Washington Department of Fish and Wildlife has obtained an exemption from the Shoreline Substantial Development Permit for this Project. The Letter of Exemption is incorporated in Attachment 1 at the end of this Division.
- D. Contractor shall follow the Cultural Resource plan including Inadvertent Discovery Plan shown in Attachment 2.

01100 SPECIAL PROJECT PROCEDURES

- A. Contractors working on WDFW property will adhere to these COVID-19 Requirements:
 1. Face coverings
 - a. Encouraged but not required in indoor public areas. Public areas include lobbies, reception or customer service areas, or other settings where interaction with customers or others with unknown vaccination status occurs.
 - b. Required for indoor, non-public, controlled-access areas, such as back offices and residences. Exception for those with verified vaccination per Business Partner Access Agreement, available by request.
 - c. Not required outdoors, unless in close proximity to persons of unknown vaccination status or other transmission risk factors are present.
 2. The Contractor must also be aware of and comply with current L&I and local/county COVID-19 requirements.
 3. These requirements are subject to change. Always follow applicable requirements in effect throughout the project duration.
- B. To reduce wildfire risk, the following conditions apply on the project site, when Industrial Fire Precaution Levels (IFPL) are activated. If any conditions are lifted, it shall be done in writing by the Owner. If any additional conditions are required it shall be done in writing by the Owner.
 1. No smoking except in an enclosed vehicle, per WAC 232-13-07000A.
 2. No fires or campfires, per WAC 232-1307000A.
 3. No open flame, welding, metal cutting, chainsaw operation, or any activity that may cause a spark or hot metal, per WAC 232-13-05000A.
 4. No operation or parking of a motor vehicle (road vehicles and off-road vehicles) off developed roadways. However, it is permissible to park in an area devoid of vegetation within 10 feet of a developed roadway. For purposes of this paragraph, a developed roadway is a roadway constructed for standard highway vehicles with an asphalt, gravel or dirt surface with no vegetation, 14 feet wide or more. Trails or tracks are not such roadways.
 5. A violation of these provisions is punishable under RCW 77.15.160(5)(b). A violation of these provisions may result in removal of offending personnel from the work, per General Conditions Section 00705.01 Contractor Control and Supervision.

DIVISION 1 – GENERAL REQUIREMENTS

6. All vehicles shall be equipped with a fire extinguisher, 2 gallons of water, and a shovel. All worksites shall have a fire extinguisher and shovel present. The Contractor shall take all reasonable precautions to prevent fires.
7. The Contractor shall have an employee remain at the worksite with sufficient firefighting capability, for at least one hour after work has ceased for the day, or if leaving for more than one hour, to ensure no fires have started.
8. The Contractor shall contact the Site/Facility Manager at the beginning of each week; Monday mornings, for any special instructions.

01200 PROJECT MEETINGS

- A. Contractor shall attend a preconstruction meeting with the Owner's representative prior to receiving the Notice to Proceed, to discuss the work and contracting procedures.
- B. Weekly project progress meetings, attended by key representatives of the Contractor and Owner, will be held on-site throughout the duration of work. The agenda will include: updates to the Construction Schedule, 3-week look ahead schedule, status of Submittals and requests for information (RFIs), Project Record review, pay request verification, and any issues brought forth by the Contractor, Project Manager, Inspector, and/or Hatchery Staff. Other potential topics may include safety, phasing or sequencing, coordination, review of procedures for testing, inspecting, and acceptance.

01300 CONTRACTOR SUBMITTALS

A. Preliminary Submittals

Within 7 calendar days after the date of Notice to Proceed, the Contractor shall submit the following items to the Owner for review:

1. A preliminary schedule of submittals. The schedule of submittals shall be based on Contractor's priority, planned construction sequence and schedule, long lead items, and size of submittal package. Allow time for project resubmittals. The Owner is not responsible for any delay associated with project resubmittals. The schedule shall include at a minimum the submittal number, Specification section and description of the submittal contents.
2. A list of permits and licenses the Contractor shall obtain, indicating the agency required to grant the permit, such as building permits, equipment or clearance permits, etc. and the expected date of submittal for the permit and required date for receipt of the permit.

B. Preconstruction Conference Submittals

At or before the preconstruction conference of Paragraph 01010 - Summary of Work, submit the following items in accordance with Division 0 – General Conditions 00703.2. to the Owner for review and approval:

1. List of subcontractors and suppliers of work and materials greater than \$2,500.
2. A preliminary Construction Schedule.
3. A preliminary Schedule of Values.

C. Shop Drawings

Not Used.

DIVISION 1 – GENERAL REQUIREMENTS

D. Samples

Not Used.

E. Record Drawings

1. The Contractor shall maintain one set of Drawings at the Project Site for the preparation and weekly update of Record Drawings.
2. The Record Drawings shall mark every project condition, location, configuration, and any other change or deviation which may differ from the Contract Drawings at the time of award, including buried or concealed construction and utility features that are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of buried utilities that differ from the locations indicated, or that were not indicated on the Contract Drawings.
3. Record Drawings shall be supplemented by any detailed sketches as necessary or as Contractor is directed, to fully indicate the work as actually constructed. These record drawings are the Contractor's representation of as-built conditions, shall include revisions made by addenda and change orders, and shall be maintained up-to-date during the progress of the work.

F. Quality Control ("QC") Submittals

1. Quality control submittals are defined as those required by the Specifications to present documentary evidence to the Owner that the Contractor has satisfied certain requirements of the Contract.
2. Unless otherwise indicated, submit QC submittals before delivery and unloading, for the following types of submittals:
 - a. Manufacturers' installation instructions
 - b. Manufacturers' and Installers' experience qualifications
 - c. Ready mix concrete delivery tickets
 - d. Design calculations
 - e. Affidavits and manufacturers' certification of compliance with indicated product requirements
 - f. Laboratory analysis results
 - g. Factory test reports
 - h. Inspection results and reports of Contractor's testing firm for special inspections.
3. Unless otherwise indicated, submit QC submittals within 30 business days of the event documented for the following types of submittals:
 - a. Manufacturer's field representative certification of proper installation
 - b. Field measurement
 - c. Field test reports
 - d. Receipt of permit
 - e. Receipt of regulatory approval
4. The Owner will record the date that a QC submittal was received and review it for compliance with submittal requirements, but the review procedures and Owner time limits above for Shop Drawings and samples will not apply.

DIVISION 1 – GENERAL REQUIREMENTS

01510 TEMPORARY UTILITIES

- A. The State will pay the energy costs for construction power used from any of the existing state services, but the Contractor shall provide any required connections or extensions.
- B. The Contractor shall provide adequate temporary toilet facilities, where directed, when work is started for all those connected with the work. The Contractor shall keep the toilet facilities in a sanitary condition and remove the toilet facilities at the end of the project and disinfect the premises.
- C. Drinking water is not available at the site. Provide single-service containers or a sanitary drinking device from a proven safe source for all those connected with the work.
- D. Water for construction purposes is not available at the site.

01730 OPERATIONS AND MAINTENANCE (O&M) MANUALS

Not Used.

END OF SECTION 01000

ATTACHMENT 1 – PERMITS

**Road Access Permit (Pending)
Shoreline Exemption**



Mason County
Planning Division of Community Development

615 W. Alder St. Bldg. 8
Shelton, WA 98584
360-427-9670 ext 352
www.co.mason.wa.us

SHX2022-00008

SHORELINE EXEMPTION

PROJECT DESCRIPTION:
SITE ADDRESS: 31 E COULTER CREEK RD BELFAIR

ISSUED: 03/01/2022
EXPIRES: 03/01/2027

PARCEL: 122093360020

APPLICANT: STATE OF WASHINGTON
DEPT OF FISH & WILDLIFE
OLYMPIA, WA 98501
360-902-8376

OWNER: STATE OF WASHINGTON
DEPT OF FISH & WILDLIFE
OLYMPIA, WA 98501

CONDITIONS

- * Application acknowledges that the structure is only permitted for a use consistent with the current zoning of the parcel.
- * All construction and demolition debris must be removed from the site after project completion. Proper disposal of construction debris must be on land in such a manner that debris cannot enter or cause water quality degradation of State waters.
- * A Hydraulic Project Approval from the Washington Department of Fish and Wildlife may be required prior to work on the banks of or within the waters of the State.
- * Proper erosion and sediment control practices must be used on the construction site and adjacent areas to prevent upland sediments from entering shoreline waters. Erosion control measures must be in place prior to any clearing, grading, or construction. These control measures must be effective to prevent soil from being carried into surface water by stormwater runoff. Sand, silt, and soil will damage aquatic habitats and are considered pollutants.

I hereby certify that I have read and examined this application and know the same to be true and correct. All provisions of Laws and Ordinances governing this type of work will be complied with whether specified herein or not. The granting of a permit does not presume to give authority to violate or cancel the provisions of any other state/local law regulating construction or the performance of construction.

Issued By: Scott Ruedy

Contractor or Authorized Agent: _____ **Date:** _____



Mason County
Planning Division of Community Development

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SHORELINE EXEMPTION SHX2022-00008

ATTACHMENT 2 – CULTURAL RESOURCES
Inadvertent Discovery Plan (IDP)

**WASHINGTON STATE DEPARTMENT OF FISH & WILDLIFE
INADVERTENT DISCOVERY PLAN FOR CULTURAL RESOURCES
FOR COULTER CREEK REARING POND REPAIR AND BIRD PREDATION NET PROJECT
IN MASON COUNTY, WASHINGTON**

This Inadvertent Discovery Plan (IDP) provides clear guidance for managing an unexpected discovery or unearthing of cultural materials, cultural features, human remains, and/or skeletal materials of unknown original during WDFW projects not governed by a DAHP issued excavation permit, or an Archaeological Monitoring or Site Protection Plan for a specific project area or activity.

This plan is to be implemented without exception whenever such discoveries occur. The plan applies to WDFW staff, contractors, subcontractors, volunteers, and others who may be involved with projects initiated by WDFW, or occurring on WDFW managed land. This plan does not supersede or satisfy requirements for Monitoring, Site Protection, or any other management plans developed to address concerns at known archaeological and historic sites.

PRE-FIELD ACTIONS

Prior to ground disturbance, the WDFW project or program manager (PM) will notify work crews/machine operators that they are obligated to cease work in the immediate area and notify supervisory personnel upon discovery of any bones or objects of human manufacture, particularly suspected Native American artifacts. This action will be repeated prior to commencement of work in new locations, after significant changes in field staff, and if work is re-started after a hiatus. Field supervisors will be made aware of their responsibilities for interim protection and notification as detailed below.

FIELD ACTIONS

Specific Procedures for the Inadvertent Discovery of Archaeological Resources

In the event that cultural resources (not including human remains) are encountered during project implementation, the following actions will be taken:

1. All work within the discovery area and a surrounding buffer adequate and sufficient to prevent further disturbance will cease. The field supervisor will notify the PM immediately.
2. The PM will immediately contact WDFW archaeologist or archaeological monitor. If an archaeological monitor is present, they will notify the WDFW archaeologist.
3. If the WDFW archaeologist determines that potentially significant archaeological materials or historic sites are present, the PM will be advised of interim protective measures. Work may resume outside the buffer, unless the WDFW archaeologist directs otherwise.

4. The WDFW archaeologist will initiate Tribal and DAHP consultation regarding evaluation of the find's significance, potential for effects caused by the project, and subsequent treatment plans or Memoranda of Agreement (MOA).
5. Wherever possible, the preferred treatment of significant archaeological resources and historic sites will be in situ preservation. If a treatment plan requires that such resources be excavated or removed, an agreement must first be reached between WDFW and the consulting parties.

Specific Procedures for the Inadvertent Discovery of Human Remains

Inadvertent finds of what appear to be human remains introduce cultural concerns and legal requirements that initiate a different response than cultural resources. Human remains must be treated with utmost respect. The following language is to be followed to the letter:

Inadvertent Discovery of Human Skeletal Remains on Non-Federal and Non-Tribal Land in the State of Washington (RCWs 68.50.645, 27.44.055, and 68.60.055)

If ground disturbing activities encounter human skeletal remains during the course of construction, then all activity will cease that may cause further disturbance to those remains. The area of the find will be secured and protected from further disturbance until the State provides notice to proceed. The finding of human skeletal remains will be reported to the county medical examiner/coroner and local law enforcement in the most expeditious manner possible. The remains will not be touched, moved, or further disturbed. The county medical examiner/coroner will assume jurisdiction over the human skeletal remains and make a determination of whether those remains are forensic or non-forensic. If the county medical examiner/coroner determines the remains are non-forensic, then they will report that finding to the Department of Archaeology and Historic Preservation (DAHP) who will then take jurisdiction over the remains. The DAHP will notify any appropriate cemeteries and all affected tribes of the find. The State Physical Anthropologist will make a determination of whether the remains are Indian or Non-Indian and report that finding to any appropriate cemeteries and affected tribes. The DAHP will then handle all consultation with the affected parties as to the future preservation, excavation, and disposition of the remains.

Under no conditions are WDFW staff or other project personnel to make the location or contents of inadvertent human remains finds public, unless specifically authorized to do so in the burial treatment plan.

CONTACTS

WASHINGTON STATE DEPARTMENT OF FISH & WILDLIFE

Department Archaeologists

Adam Rorabaugh, WDFW CAMP Archaeologist 360-789-3290
Katherine Kelly, WDFW Archaeologist 360-688-0676

Project Manager

Webster Bergford, WDFW Project Manager 360-790-8374

TRIBAL CONTACTS

Squaxin Island Tribe

Shaun Dinubilo, Tribal Archaeologist 360-870-6324
The Kristopher Peters, Chair kpeters@squaxin.us
Rhonda Foster, THPO 360-432-3850 rfoster@squaxin.us

Skokomish Tribe

Kris Miller, Tribal Historic Preservation Officer 360-426-4232 x 215
The Honorable Charles Miller, Chairman gmiller@skokomish.org

WASHINGTON STATE DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION

Allyson Brooks, State Historic Preservation Officer 360-586-3066
Rob Whitlam, State Archaeologist 360-586-3080
Guy Tasa, State Physical Anthropologist 360-586-3534

MASON COUNTY

Mason County Sheriff's Office 360-427-9670
Mason County Coroner 360-427-9670 x 752

Definitions:

Archaeological Features are physical alterations in the natural environment such as pits or house foundations.

Archaeological materials are the physical remains of human cultural behavior, including artifacts and features left on the landscape.

Artifacts are the physical objects of a culture, including tools with evidence of intentional modification (such as flaked stone blades) as well as those objects such as fire-cracked rock that reflect human activity.

Burial statutes include the 2008 Washington State legislation that established current practices for inadvertent burial treatment through additions and amendments to the code, including 27.44 RCW (Indian Graves and Records, as amended), 27.53 (Archaeological Sites and Resources, as amended), as well as chapters 27.34, 43.334, 68.60, and 68.60 RCW.

Consulting parties are those which have a legal right to comment on determinations of significance and NRHP eligibility, project effects on cultural resources, and human remains. This may vary according to projects, but typically includes DAHP and Tribes whose Ceded Lands or Usual and Accustomed areas include the project area.

Coroner refers to the office of the local county coroner or medical examiner, and is responsible for confirming that the remains are human and determining whether they are forensic (dead less than 50 years, and therefore a law enforcement matter) or non-forensic (more than 50 years, and therefore subject to burial statutes).

Cultural Deposits are layers or features of sediment containing cultural materials.

Cultural Resources include archaeological resources and historic sites.

Historic sites are locations 50 years old or older, where native or non-native events and activities have taken place since the arrival of Euro-Americans, and which are considered by DAHP to be historic site types.

Human remains are any physical remains that are known to be human, or could be human but have not yet been positively identified.

Physical anthropologist in this case refers to the professional physical anthropologist employed at DAHP, who determines whether human remains are Native American (if possible), and is the individual responsible for handling human remains.

**SECTION 02000
GENERAL SITE WORK PROVISIONS**

PART 1 - GENERAL

1.01 SECTION INCLUDES

This section specifies general requirements for all sections of Division 2 – Site Work.

1.02 RELATED SECTIONS

Not Used.

1.03 REFERENCES

References listed in Division 2 are from the following organizations' publications and reference standards:

AASHTO – American Association of State Highway and Transportation Officials

ANSI – American National Standards Institute

ASTM – ASTM International (formerly American Society for Testing and Materials)

OSHA – Occupational Safety and Health Administration Construction Standards

RCW – Revised Code of Washington

IBC – International Building Code

WAC – Washington Administrative Code

WISHA – Washington Industrial Safety and Health Act

WSDOT – Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction, latest edition

1.04 SUBMITTALS

Make submittals for items in all sections of Division 2 in accordance with Sections 00704.03 Shop Drawings and 01300 Contractor Submittals.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Protect all materials from exposure to moisture, wind, sunlight, or other excessive weather conditions that will render them unsuitable for usage as intended and be cause for rejection.

B. Stockpile or store in areas protected from contamination and physical damage.

C. Contractor is responsible for all costs associated with replacement of all rejected items.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 02000

02000 - 1

**SECTION 02010
SUBSURFACE INVESTIGATION**

PART 1 - GENERAL

1.01 SECTION INCLUDES

This section summarizes available soil investigations and requirements for additional subsurface investigation, at Contractor's option.

1.02 SOILS INVESTIGATIONS

- A. A geotechnical engineering report was not prepared for the design of this project.
- B. It is the responsibility of the Contractor to satisfy themselves as to actual field conditions.
- C. Subject to Owner's approval, Contractor may conduct their own independent subsurface investigation at Contractor's expense following the Notice to Proceed. Receive Owner's written approval prior to performing onsite investigation.
- D. Contractor is responsible for use or interpretations of subsurface information and recommendations.

1.03 SUBMITTALS

- A. Prior to any onsite soil investigation work, submit the following:
 - 1. Proposed test locations, depths, and equipment to be used;
 - 2. Work schedule;
 - 3. Proposed backfill placement techniques and levels of compaction equipment to be used.
- B. Submit copies of any reports, results, and findings to Owner.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 02010

**SECTION 02050
DEMOLITION**

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Removing and disposing of or salvaging existing structures, utilities and materials. Underground structures and utilities may not be in the exact locations shown. The work includes the requirements for the removal, wholly or in part, and satisfactory disposal of utilities, pipelines, fences, structures, light fixtures, conduits, wires and other obstructions which are designated to be demolished on the drawings or within these Specifications.
- B. The Demolition work is included on the drawings for guidance only to indicate typical general construction features of the various types of structures and is not to be construed as definitive or adequate to supplant the actual on-site inspection by the Contractor.

1.02 RELATED SECTIONS

Placing and compacting of fill material in holes or pits created by the removals (see Section 02220).

1.03 JOB CONDITIONS

The Contractor represents that it has visited the site to become familiar with the quantity and character of all materials to be demolished. The Contractor agrees that the premises were made available prior to deadline for submission of bids for whatever inspection and tests the Contractor deemed appropriate. The Contractor assumes full responsibility for the proper disposal, reuse, recycling or salvage of all demolition materials.

1.04 SUBMITTALS

The Contractor shall submit a demolition plan that at a minimum, addresses the following:

- A. Worker safety.
- B. Protection of the public.
- C. Work sequence.
- D. Means and methods to minimize waste and maximize salvage.
- E. Disposal procedures.
- F. Protection of the environment.
- G. Disposal site(s) approved by all environmental agencies, including permits and permissions as necessary.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 DEMOLITION

- A. Prior to demolition, the method of demolition shall be determined by the Contractor and approved by the Owner.
- B. Blasting is not permitted.

3.02 REMOVAL

- A. Remove all structures or designated portions thereof, and other materials without disturbing adjoining facilities.
- B. Where concrete or asphaltic concrete walks, roadways, or floors are to be removed, saw cutting or other approved method shall be performed. Saw cutting shall be to the full thickness of the structure and shall be straight and true.

3.03 DISPOSAL

- A. Materials designated to be salvaged shall be carefully and neatly stockpiled in a location shown on the Drawings, or as approved by the Owner.
- B. All materials not designated to be salvaged shall become the property of the Contractor. Remove from the project site and dispose of legally. Prior to disposal, the Contractor shall provide the Owner with the locations of all disposal sites to be used and copies of applicable permits and approvals for each site.
- C. Burning shall not be allowed at the designated disposal site.

3.04 BACKFILLING

Holes and pits created by removing existing structures and materials shall be backfilled with structural fill material in accordance with Section 02220.

END OF SECTION 02050

**SECTION 02100
SITE PREPARATION****PART 1 - GENERAL**

1.01 SECTION INCLUDES

The work of this section consists of clearing, grubbing, stripping, and storage of topsoil and protection of vegetation to remain, including other related work.

1.02 JOB CONDITIONS

Bidders shall examine the work site to determine the character of materials to be encountered, trees to be removed or protected, and nature of the work in general. All required excavation is unclassified.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 SITE CLEARING

- A. Clearing: Clear all trees, stumps, brush, roots, rubbish and other objectionable matter within clearing limits shown on the Drawings, staked in the field, or as directed by the Owner. Do not disturb any vegetation or roots thereof designated to remain more than absolutely necessary to assure completion of new construction.
- B. Grubbing: Remove all stumps and roots within clearing limits to a depth of at least 12 inches below natural ground.
- C. Stripping: Remove all humus, vegetation, existing roadway aggregate or other objectionable material encountered within the top 6 inches of soil in areas of project construction, areas to be excavated, and areas where embankment or excess earth will be placed. Upon removal of objectionable material, the top 6 inches of soil shall be stripped and stockpiled as topsoil at a site designed by the Owner. This material is to be stockpiled separately and not mixed with any other material.

3.02 PROTECTION

Trees, shrubs, roots, and other landscape features designated on Drawings or in the field for preservation, or those located outside of the construction limits shall be carefully protected from marring or damage during construction operations. Continual parking and/or servicing of equipment within areas designated for preservation will not be permitted. Trees and shrubs designated for preservation and pruning shall be trimmed as directed. At no time shall excavation be within the drip line of trees designated to remain.

3.03 DISPOSAL

All debris resulting from clearing and grubbing shall be removed from the project site and disposed of properly. Prior to disposal, the Contractor shall provide the Owner with the locations of all disposal sites to be used.

END OF SECTION 02100

02100 - 1

**SECTION 02140
DEWATERING**

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Design, furnish, install, operate and maintain all pumps, piping, drains, well points, wells, and other facilities for the control, collection and disposal of groundwater or surface water for the proper construction of all work specified herein.
- B. The dewatering system shall prevent loss of fines, boiling, quick conditions, and softening of foundation strata and shall maintain stability of excavation bottoms.

1.02 DEFINITIONS

- A. Special Dewatering: Dewatering by single or multiple stage well points or deep wells.
- B. Hydrostatic Groundwater Level: The groundwater level at any location at the time of construction and prior to dewatering.

1.03 REFERENCES

ASTM D4632 – Standard test method for grab breaking load and elongation of geotextiles

NMFS Screen Criteria – National Marine Fisheries Service, Specific criteria and guidelines for pump intake screen meshes

WAC 173-201A-200 – Fresh water designated uses and criteria

1.04 SUBMITTALS

- A. 21 days prior to the start of construction, the Contractor shall submit a written plan that provides specific dewatering and sediment control measures to minimize delivery of soil and turbidity into the stream during the construction period including a channel diversion and dewatering plan where dewatering is required. Include the sequence of operations and information on equipment, materials and suppliers. Include details regarding the anticipated types and locations of various dewatering features, as well as appropriate design calculations to substantiate the dewatering plan. The plan shall also indicate discharge treatment, discharge location, and receiving body.
- B. Measures given in the Drawings and Specifications are minimum requirements, the Contractor shall supplement the measures described to the extent necessary to achieve the required results. Owner's review of the Contractor's proposed dewatering system does not relieve the Contractor of the full responsibility for the adequacy of the dewatering system.
- C. Submit a Water Quality Monitoring Plan to measure water quality per WAC 173-201A-200.

1.05 REGULATORY REQUIREMENTS

- A. All dewatering activities shall comply with all local, state, and federal regulations, including the requirements of the Washington State Department of Ecology (WDOE).
- B. No in-water work may begin until WDFW biologists have approved work areas and performed trapping and transporting of aquatic species within work areas. The Contractor shall be responsible coordinating in-water work schedules and notifying the Owner not less than 14 days prior to the anticipated beginning of in-water work so that WDFW biologists can perform trapping and transporting.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 02140

**SECTION 02220
EXCAVATION, BACKFILL, AND COMPACTION**

PART 1 - GENERAL

1.01 SECTION INCLUDES

The work under this Section includes providing all labor, materials, tools, and equipment necessary for excavation, filling, compaction, grading, trenching, bedding and backfilling, and placement of excess earth, as shown on the Drawings and described in the Specifications.

1.02 RELATED SECTIONS

Section 02100 - Site Preparation
Section 02140 - Dewatering
Section 02510 - Hot Asphalt Mix

1.03 REFERENCES

ASTM C136 – Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates

ASTM D1557 – Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort

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

RCW 49.17 – Washington State Industrial Safety and Health Act

WSDOT M 41-10 – Standard Specifications for Roads, Bridges, and Municipal Construction, latest edition

1.04 SUBMITTALS

- A. Safety plan.
- B. Authorization for use of selected disposal areas.
- C. Gradation analysis and certified test results for all imported fill material and onsite material to be incorporated into the work.
- D. Compaction test results.

1.05 JOB SITE CONDITIONS

- A. Do not perform earthwork operations if the weather conditions, in the opinion of the Owner, are inappropriate. Work in muddy or frozen ground will not be allowed.
- B. Maintain proper drainage, and stormwater and erosion controls at all times.

1.06 STOCKPILES

- A. Locate all stockpiles so as not to interfere with other work or disturb adjoining property owners. Obtain Owner's prior approval for stockpile locations.
- B. Maximum stockpile height is ten feet.

1.07 SAFETY AND PROTECTION

- A. Barricade open excavations occurring as part of this work and post warning lights. Operate warning lights during hours from dusk to dawn each day and as otherwise required by applicable safety regulations.
- B. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining washout, and other hazards created by all earthwork related operations.
- C. Contact utility companies to locate service lines prior to any excavation.
- D. Proceed with caution in the excavation so that damage to underground structures, both known and unknown, may be avoided.
- E. Take extreme precautions for the protection of utility lines and other subsurface improvements. Repair any improvements damaged by construction operations at the Contractor's expense in compliance with the requirements of the utility owner and to the Owner's satisfaction.
- F. Sheet, shore, and brace trenches and excavations where required in a manner consistent with established safe practices and in accordance with all applicable safety regulations.
- G. Comply with Chapter 49.17 RCW, the Washington State Industrial Safety and Health Act, if trench excavation exceeds four feet in depth. Include the cost of required safety systems in all bid schedules and list as a separate Bid Item on the Bid Proposal Form.
- H. Provide all materials, equipment, and labor necessary to provide support to manholes, footings, and foundation walls during excavation and backfilling at all locations.

PART 2 - PRODUCTS

2.01 EXCAVATION MATERIALS

- A. Common Excavation: Includes all material other than rock as described below required for the construction of this project. It includes, but is not restricted to earth, gravel, hardpan, cemented gravel, soft or disintegrated rock, and boulders or detached pieces of solid rock not exceeding one cubic yard in volume.
- B. Rock Excavation: consists of rock boulders greater than one cubic yard in volume and bedrock. Rock excavation shall be approved by the Owner and will be considered a change in the work.
- C. For bidding purposes, assume all excavated material meets the specifications for common borrow.

- D. Excavated materials may be used for fill and backfill applications required for construction of this project; provided the material meets the specifications for the intended use and has been properly protected from water conditions that would render it undesirable.

2.02 FILL MATERIALS

- A. Common Borrow: Fill required to raise existing grade or backfill excavations beyond five feet of a structure or as trench backfill above pipes or conduits. Common borrow shall be material from common excavation or from a borrow site which is free of deleterious materials. Deleterious material includes wood, organic waste, or any other objectionable material greater than three percent by weight.
- B. Sand: Clean, uniformly graded sand with the gradation of WSDOT 9-03.1(2)B, Class 1.
- C. Ballast Rock: Hard, sound, and durable rock with at least one face fractured. Rock shall be free of frozen material, debris, and organics, and meet the gradation of WSDOT 9-03.9(1).
- D. Crushed Surfacing Base Course (CSBC) and Top Course (CSTC): Manufactured from ledge rock, talus or gravel, uniform in quality, substantially free of wood and other extraneous material, meeting the requirements of WSDOT 9-03.9(3).
- E. Trench Backfill shall meet the requirements of WSDOT 9-03.10 with 100% of material passing through two 1/2-inch screens.
- F. Structural Fill shall meet the following requirements for Gravel Backfill:

TABLE 02220 - 2.02F	
Sieve Designation	Percent Passing by Weight
2 Inches	100
1/2 Inch	60-80
No. 4	30 Maximum
No. 200	0-5
Sand Equivalent	45 Minimum

- 1. Foundations: WSDOT 9-03.12(1) A or B.
- 2. Walls: WSDOT 9-03.12(2).
- G. Pipe Bedding: Clean sand/gravel mixture free from wood waste or other extraneous materials and conforming to the gradation of WSDOT 9-03.12(3) when tested in accordance with ASTM C136.
- H. Drain Rock: Washed rock with the gradation of WSDOT 9-03.12(4).
- I. Gravel Borrow: Selected granular material, free-draining mineral soil, free from organic matter, frozen or lumpy material, meeting the requirements of WSDOT 9-03.14(1).
- J. Quarry Spalls: Meet the gradation of WSDOT 9-13.1(5).

PART 3 - EXECUTION

3.01 EXCAVATION

- A. Excavation consists of the removal of material required to establish the proposed subgrade surface elevations. Conduct excavations in such a manner as to avoid disturbance to all materials located outside the limits of the work area, unless specifically identified by the Owner as an acceptable borrow source. Methods of excavation will be the Contractor's option. Exercise care when approaching final grade. If final grade is disturbed, replace it with suitable materials and compact at Contractor's expense.
- B. Large rocks, which size qualifies them as common excavation, encountered during excavation or trenching may be partially removed as required to reach subgrade elevations. With Owner's approval, Contractor has the option to remove these rocks by excavation and subsequent backfilling the over excavated portions. No extras will be paid for such over excavations.
- C. Protect bottoms of all excavations from freestanding water and frost. Protect excavations from caving, flooding, or other source of damages. Damage to excavation shall be repaired at the Contractor's expense.
- D. Any excess excavation performed by the Contractor for his convenience shall be at the expense of the Contractor.
- E. Dispose of excavated materials at a permitted offsite location. Provide the Owner with a letter authorizing disposal at selected locations prior to disposal.
- F. Dispose of excavated materials of any nature if quantities exceed the fill or backfill needs of this project. This disposal will not be considered a change in work, and no extra payment will be made.
- G. Dispose of excavated materials determined by the Owner to be unsuitable for use as common borrow. This disposal shall be considered a change in work with extra payment determined per General Conditions Section 00707.00 Changes. The disposal quantity considered for extra payment will be limited to the amount of common borrow imported to replace the unsuitable material.
- H. Any excavation and replacement of unsuitable materials below final grade will be as directed by the Owner. "Unsuitable material" is any type of soil such as clays, silts, or organic materials that will not compact to specified compaction percentage or does not meet the specification for its intended use.

3.02 ROCK REMOVAL

- A. Large rocks greater than one cubic yard encountered within the excavation limits may be partially or entirely removed; however, the subsequent backfill for such over excavation shall be done at the Contractor's expense.
- B. Blasting is not allowed.

3.03 BACKFILL AND COMPACTION

- A. Dewater and prepare foundations prior to placing backfill materials.
- B. When backfilling, extra care must be taken so that no damage will occur to foundations or related structures.
 - 1. Where backfill is to be placed against both sides of concrete walls, bring the backfill up evenly on both sides of the wall.
 - 2. Where backfill is to be placed against one side of concrete walls, abutting concrete walls, or beams, do not place backfill until the concrete has developed sufficient strength to resist the loading imposed by the backfill. Unless high-early strength concrete has been approved for use, place backfill at least 72 hours after concrete placement and do not exceed the following schedule:

TABLE 02220 - 3.03B			
Backfill Depth:	1/2 wall height	2/3 wall height	Full wall height
Concrete Age:	72 hours	7 days	28 days

- C. Each lift of fill material shall be spread uniformly in horizontal layers and compacted in accordance with the following table:

TABLE 02220 - 3.03C			
Type of Material	Max. Loose Lift Placed (inches)	Percent Compaction*	Application
Common borrow	24	90	General fill**
Sand	6	95	Pipe and conduit bedding, fill under structures
Ballast rock	8	90	Fill under other materials, where noted
Crushed surfacing base course	<u>Total Depth</u> 2	95	Subgrade for crushed rock or asphalt pavement surface/finished crushed rock surface such as parking lots, driving areas
Trench backfill	6	95	Fill above pipe bedding to pipe centerline
Trench backfill	12	90	Pipe centerline to top of trench
Structural fill	6	95	Fill under structures and wall backfill***
Structural fill	12	90	Fill around structures**
Pipe bedding	6	95	Pipe and conduit bedding
Drain rock	6	95	Backfill in drain trenches
Gravel borrow	12	90	Select Fill****
Quarry spalls	12	90	Rock lining for outfall channel

* Percent compaction at maximum dry density as determined in accordance with ASTM D1557.
 ** All fill and backfill not under structures and beyond 5-foot concrete slabs, walls, and footings.
 *** All fill and backfill under concrete slabs and footings (interior and exterior) and all fill and backfill within 5 feet of concrete slabs, walls and footings.
 **** All fill under roadways and trench backfill under paving.

DIVISION 2 - SITE WORK

- D. Compact with power-operated tampers, rollers, idlers, or vibratory equipment. Water jetting for compaction purposes is not permitted.
- E. Any application of water or any working of fill material required to bring it within acceptable moisture content and density limits during compaction operations shall be done at the Contractor's expense.
- F. Do not place, spread, or compact backfill materials at an unsuitably high moisture content or during adverse weather conditions. When work is interrupted by heavy rain, do not resume backfill operations until field tests indicate the moisture content density of the backfill areas are within specified limits.

3.04 TRENCH EXCAVATION

- A. Do not excavate more than 200 feet of open trench in advance of laying pipe, unless approved by the Owner. All operations shall be carried out in an orderly fashion.
- B. Width of trenches for pipes shall not be less than outside pipe diameter plus 16 inches, nor greater than outside pipe diameter plus 36 inches of the pipe installed unless otherwise shown on the Drawings.
- C. Side walls of the trench shall be vertical from the trench bottom to at least the height of the top of the pipe.
- D. Where soil encountered in the bottom of the trench is unstable or unsuitable as a base, remove such soil to a depth specified by the Owner and replace with compacted common borrow or other material as directed by the Owner. This overexcavation and replacement shall only be done as directed by the Owner and will be paid for as an extra.
- E. Excavate bottom of trench to the lines and grades shown on the Drawings with proper allowance for thickness and type of pipe bedding specified.
- F. Excavation below designated lines shall be filled at the Contractor's expense. Replace excess excavation below pipes with gravel borrow or as directed by the Owner.
- G. Place excavated material a sufficient distance from the trench walls to avoid sliding of materials into the trench.
- H. Notify the Owner at least 48 hours in advance of excavating across existing roads.

3.05 PIPE BEDDING PLACEMENT

- A. After bottom of trench has been excavated to proper depth and grade, brought to a reasonably flat surface, and dewatered, place bedding material as shown on the Drawings.
- B. Place pipe bedding in trench without causing any excavated material to slide into trench or any cave in of trench walls. Place and compact pipe bedding into a six-inch minimum depth and provide a continuous, uniform bedding for the full length of the pipe.
- C. Backfill utility lines and flexible pipe, such as PVC, to six inches above the top of pipe or line using bedding material only. Rigid pipe, such as steel, may be backfilled using gravel material as specified.

- D. Remove and replace pipe bedding material required due to unauthorized overexcavation or made unsuitable due to mixture with trench side material or excavated material.

3.06 TRENCH BACKFILL.

- A. Test pipeline prior to backfilling trenches at pipe joints.
- B. Remove screeds, shoring, wood forms, debris, and other decomposable matter from areas to be filled.
- C. Pipe bedding shall contact entire periphery of pipe.
- D. Place material evenly on both sides of pipe and compact each subsequent lift so that pipe is not displaced. Repair misalignment of pipe or other damage.
- E. Neatly mound excess trench material no more than three inches high over trenches, except in roadways or parking areas, so that a depression will not be formed if backfill settles. The Contractor is responsible for filling settlement depressions formed within one year after final acceptance.

3.07 ROAD AND PARKING FILL

- A. Place base course and top course each in two lifts on top of a prepared and compacted subgrade.
- B. Provide the water and equipment necessary for adequately distributing moisture on the material. Apply water lightly and frequently to avoid having free water running out of the material and building up on the subgrade.
- C. Do not place materials when snow is falling or blowing or when the weather is such that, in the Owner's opinion, satisfactory results cannot be obtained.

3.08 FIELD QUALITY CONTROL

- A. Perform field observation and testing as required to control the work.
- B. Density and moisture-content testing of embankment fill and excess earth placements, in accordance with Section 00705.15, shall follow ASTM D6938.
- C. Level surface check: Unless otherwise shown on the Drawings, the variation above or below a 10-foot straightedge placed between any two contacts with the finished surface shall not exceed one-tenth of a foot.
- D. Any area which has been tested and shown to not meet the requirements of these Specifications shall be reworked and retested at the Contractor's expense until it complies.

END OF SECTION 02220

**SECTION 02510
HOT MIX ASPHALT**

PART 1 - GENERAL

1.01 SECTION INCLUDES

This section consists of hot mix asphalt (HMA) paving, including preparation, soil residual herbicide, striping, curbing, and related items.

1.02 RELATED SECTIONS

Section 02220 – Excavation, Backfill and Compaction

1.03 REFERENCES

Washington State Department of Transportation – Standard Specifications for Roads, Bridges, and Municipal Construction (M41-10), latest edition

1.04 SUBMITTALS

Prior to commencement of other work in this Section, submit material certifications stating conformance with the requirements of this Section. Mix design must be currently approved on the WSDOT Qualified Products List (QPL).

1.05 SEQUENCING

Contractor shall notify Owner at least 72 hours prior to work layout. During Owner's inspection of the site, arrangements will be made for the beginning of paving.

1.06 ESTABLISHMENT OF GRADES AND LAYOUT

A. Finished grades shall be as shown on Drawings or as determined by the Owner, slope to drain as shown. Contractor is responsible for all layout subject to Owner's approval.

B. Maintain all survey benchmarks, monuments, and other reference points. If disturbed or destroyed, replace without cost to the State. Protect existing objects designated to remain.

1.07 TRAFFIC CONTROL

The Contractor will be responsible for establishing and maintaining traffic control (flagmen, signs, etc.). Site closures shall be approved 2 weeks in advance by Owner. Include all costs in Schedule I – Base Bid.

PART 2 - PRODUCTS

2.01 CRUSHED SURFACING

CSBC and CSTC shall meet the requirements of WSDOT 9-03.9(3).

2.02 SOIL RESIDUAL HERBICIDE

- A. Soil residual herbicide shall be nonselective, wettable, powder herbicide approved for use under pavement by the Washington State Department of Agriculture shall be applied to all areas to be paved. A recommended soil sterilant for treatment of paved areas is a non-organic water-soluble herbicide "Polyborchlorate" by Chemtura, Casoron G-4, or approved equal.
- B. Materials shall be specifically approved by the Owner prior to application.

2.03 HOT MIX ASPHALT

Hot mix asphalt aggregate shall meet the requirements of WSDOT 9-03.8(6) HMA Class 3/8 inch. Hot mix asphalt binder shall be 58-22 for Western Washington , meeting the requirements listed in WSDOT 9-02.1(4).

2.04 PERFORMANCE GRADED ASPHALT BINDER

Binder shall meet the specification requirements listed in WSDOT 9-02.1(4).

2.05 TACK COAT

A tack coat shall be applied between any existing asphalt pavement and new asphalt pavement. Polymerized Cationic Emulsified Asphalt shall be CRS-1 and meet the requirements of WSDOT Section 9-02.1(6).

2.06 JOINT SEALER

The joint sealer shall meet the requirements of WSDOT Specification 9-04.2 for rubberized sealant. A sand-slurry mixture shall be placed on any exposed portion of the joint sealer material.

2.07 SAMPLING AND TESTING

Contractor shall furnish nuclear density testing for subgrade and HMA compaction. Contractor shall furnish, for test and analysis, representative samples of materials used in work, including core samples, if requested by the Owner. All sampling and testing shall be in accordance with latest revisions of the American Association of State Highway and Transportation Officials (AASHTO) or ASTM International (formerly American Society of Testing and Materials) standard procedures for sampling and testing materials being used in project.

2.08 STRIPING PAINT

All striping paint shall meet WSDOT 9-34.2 for solvent based paint and be on the current WSDOT QPL for Paint Pavement Marking or Owner approved equal.

2.09 CONCRETE CURBING

- A. Extruded curbing shall meet WSDOT 8-04.3(1), and shall be Type 6 as detailed in WSDOT Standard Plan F-10 42-00.
- B. Precast reinforced bumper curbing shall be 6 inches high, 10 inches wide, 6 feet in length, and located as shown on the Drawings.

PART 3 - EXECUTION

3.01 EQUIPMENT

All equipment, tools, and machines used in performance of the work are subject to approval of the Owner and shall be maintained in satisfactory working condition at all times.

3.02 PREPARATION OF PAVING SURFACE

- A. Contractor shall over excavate and remove any subgrade material deemed unsuitable by Owner. Once suitable bearing is reached (as determined by Owner), the Contractor shall proceed in placing additional CSBC and compacting in 6 inch lifts until final subgrade elevation is reached.
- B. Compact surfacing material to at least 95 percent of standard density. Determination of in-place density may be made by the Nuclear Gauge or Washington Densimeter methods as outlined by WSDOT.
- C. Vibratory compactors and/or rollers shall be adequate in design and number to provide required compaction. A mist spray of water shall be applied during compaction effort as needed to replace moisture in crushed rock lost by evaporation. The completed surfacing layer shall be smooth, tight, and uniform and reasonably true to line, grade, and depth as shown on the Drawings.
- D. Any areas that do not have a minimum thickness of 2 inches of compacted CSTC after fine grading and compacting shall be brought up to the required depth with new material as directed by the Owner.

3.03 SOIL RESIDUE HERBICIDE

- A. Contractor shall apply one application of an approved soil residual herbicide to all crushed rock areas to receive pavement. Application shall be in accordance with the manufacturer's recommendations.
- B. Applications shall comply with WSDOT 5-04.3(5)D.

Application of chemical herbicides shall be by an experienced applicator licensed by the Washington State, Department of Agriculture for the class of herbicide used.

3.04 HOT MIX ASPHALT

- A. All asphalt concrete shall achieve a uniform compacted thickness. Compact HMA to at least 90 percent of theoretical maximum density. Determination of in-place density may be made by the Nuclear Density Gauge per WSDOT FOP for AASHTO T355 or by core testing per WSDOT SOP 734 and FOP for AASHTO T166.
- B. Care shall be taken to ensure no bituminous materials enter surface water body during placing. Do not place asphalt when ground temperature is below 45°F or upon a wet surface without Owner's permission. Place in accordance with applicable requirements of WSDOT 5-04.

- C. Surface of completed work when tested with a 10 foot straightedge shall contain no irregularities in excess of 1/4 inch. All surface deficiencies shall be corrected to the satisfaction of the Owner. All costs for correcting deficiencies shall be paid by the Contractor.

3.05 SHOULDER ROCK

- A. After the asphalt surface has been rolled and compacted, apply CSTC against all exposed asphalt edges to prevent distortion of the pavement edge from the specified line and grade.
- B. Shoulder rock shall be flush with top of pavement for a minimum width of 12 inches unless otherwise shown on the Drawings. Grade and compact materials to 95 percent maximum density.
- C. Provide an even grade at locations with vehicle transition from pavement to gravel. Extend CSTC 10 feet into gravel or as approved by Owner. Grade and compact materials to 95 percent.

3.06 PAVEMENT MARKING

- A. Lay out and mark parking area as indicated on the Drawings with 4 inch wide white stripe. Pavement marking shall conform to WSDOT 8-22.
- B. Handicapped accessible parking stall symbol shall be painted, white in color, 2 feet tall, of standard design, with blue square background and centered in the bottom of the stall not at curb.
- C. Directional arrows shall be painted and 4 feet long, 18 inches wide at the flare, and placed where shown on the Drawings.
- D. Apply 2 coats of pavement marking conforming to the requirements of WSDOT 8-22.

3.07 CONCRETE CURBING

- A. Install extruded concrete curbing in the locations shown on the Drawings. Curbing shall be placed so that a uniform cross section and grade are maintained. No surface irregularities shall be permitted. Joints in curb shall be spaced at 10 foot intervals.
- B. Manufactured Wheel Stop: Install precast bumper curbing in locations shown on the Drawings. Bumper curbing shall be pinned at each end of curbing. Recess pins 1 inch below top of curb and then grout anchor pin hole. Anchor pins shall consist of No. 4 rebar driven a minimum of 2 feet into the ground surface.
- C. Any damage incurred to the curbing prior to acceptance by the State shall be removed and replaced at the Contractor's expense.

3.08 DAMAGE TO EXISTING FACILITIES

The Contractor shall protect existing facilities from spills or over spray. Any damage to existing facilities caused by the Contractor shall be repaired to the satisfaction of Owner at no additional cost to the State.

3.09 CLEANUP

- A. Contractor is responsible for leaving construction area in a clean condition free of construction material and debris. All paving shall be reasonably free of gravel and/or dirt prior to final inspection.
- B. All spilled and sprayed bituminous products on existing facilities shall be removed and the surface cleaned as directed by the Owner.

3.10 TRAFFIC CONTROL

This site has a limited area for staging. The Contractor shall be responsible for establishing and maintaining traffic control (signs, flag person(s), etc.) as required by Owner or local governmental authorities. Include all costs in the Base Bid.

END OF SECTION 02510

**SECTION 03000
GENERAL CONCRETE PROVISIONS**

PART 1 - GENERAL

1.01 SECTION INCLUDES

This section specifies general requirements for all sections of Division 3 - Concrete.

1.02 RELATED SECTIONS

Provisions of the General Conditions, Supplemental Conditions, and Division 1 of the Contract are by this reference a part of this division and shall govern work under this Division where applicable.

1.03 REFERENCES

References listed in Division 3 are from the following organizations' latest editions of their publications and reference standards (unless indicated otherwise):

AASHTO American Association of State Highway and Transportation Officials (Standard Specifications for Highway Bridges, 17th Edition)

ACI American Concrete Institute (ACI 318-02-318-02)

APA American Plywood Association

ASTM ASTM International (formerly American Society for Testing and Materials)

AWS American Welding Society

CRSI Concrete Reinforcing Steel Institute

IBC International Building Code, Latest Washington State Approved Edition

WSDOT Washington State Department of Transportation (Standard Specification for Road, Bridge, and Municipal Construction)

1.04 SUBMITTALS

Submit shop drawings in all sections of Division 3 in accordance with the General Conditions.

A. Product Data: Submit manufacturer's data for all items in Division 3 indicating shapes, sizes, and chemical, physical, and structural properties.

B. Shop Drawings: Submit shop drawings including complete plan and profiles, size, details, spacings, splicing details, supporting and spacing devices, schedules for fabrication, and assembly of members, and other pertinent data. Indicate welds by AWS symbols and show size, length, and type of weld. Identify details by reference to sheet and detail number on the Drawings.

1.05 QUALITY ASSURANCE

All installation and product use shall be in accordance with the manufacturer's written instructions.

PART 2 - PRODUCTS

2.01 MATERIALS

See other sections of Division 3.

PART 3 - EXECUTION

3.01 See other sections of Division 3.

END OF SECTION 03000

**SECTION 03210
REINFORCING STEEL**

PART 1 - GENERAL

1.01 SECTION INCLUDES

This section specifies reinforcing steel and accessories for concrete work.

1.02 QUALITY ASSURANCE

Contractor shall perform concrete reinforcement work in accordance with the current ACI 318.

1.03 SHOP DRAWINGS

- A. Contractor shall submit mill test certificates of supplied concrete reinforcing, indicating physical and chemical composition.
- B. Contractor shall indicate on the shop drawings sizes, spacings, locations, and quantities of reinforcing steel, bending and cutting schedules, splicing, stirrup spacing, and supporting and spacing devices.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Uncoated-finish steel reinforcing bars shall consist of Grade 60 (unless noted otherwise) round, deformed bars. Deformed reinforcing bars for concrete reinforcement shall conform to the requirements of ASTM A615. Reinforcing bars requiring welding as shown on the Drawings shall conform to ASTM A706.
- B. Epoxy-coated reinforcing bars, when specified by the Owner, shall be coated in accordance with ASTM A775. Epoxy-coated bar supports, form ties, and nylon, epoxy, or plastic-coated tie wire shall be used when epoxy-coated reinforcing bars are specified.
- C. Reinforcing steel shall be protected at all times from injury, and when placed in the formwork be free from dirt, loose mill scale, rust scale, paint, oil, or any other foreign substance.

2.02 ACCESSORY MATERIALS

- A. General: Chairs, bolsters, bar supports, and spacers shall be sized and shaped for strength and support of reinforcement during installation and placement of concrete. Materials shall be manufactured from standard bright basic wire.
- B. Bar Supports:
 - 1. Girder and slab reinforcement steel shall be supported on mortar blocks not more than 1 1/2 inches square. The blocks shall be constructed of mortar mixed in the same proportions of sand and cement as used in the concrete.

DIVISION 3 - CONCRETE

2. Mortar blocks shall have a tie wire embedded, and the protruding ends shall be tied to the reinforcing steel to hold the mortar blocks in place. Mortar blocks with a grooved top may be used for supporting steel in slabs. If metal chair supports are used as steel supports for reinforcing bars, all surfaces of the chair supports not covered by at least 1/2 inch of concrete shall be treated by one of the following methods:
 - a. Hot-dip galvanized after fabrication in accordance with ASTM A153 Class D.
 - b. Plastic coating, provided that the plastic is firmly bonded to the metal, has a minimum thickness of 3/32 inch at point of contact with the form and is not chemically reactive with the concrete. The plastic shall not shatter or crack at temperatures down to -5°F, nor will it deform sufficiently to expose the metal at a temperature of 200°F. Plastic coatings that have shattered, cracked, or deformed enough to expose the metal will be rejected.
 - c. Stainless steel conforming to the requirements of ASTM A493 Type 302.

C. Tie Wire:

1. Ties shall be made with a minimum 16 gauge, annealed-type tie wire.
2. Use epoxy-coated tie wire when using epoxy-coated reinforcement.

2.03 FABRICATION AND BENDING

- A. All bars shall be bent cold. If approved by the Owner, welding shall be performed by certified welders in accordance with AWS D1.4.
- B. Unless otherwise shown on the Drawings, the Contractor shall fabricate reinforcing to provide clearances as listed under Minimum Cover.
- C. Reinforcement partially embedded in concrete shall not be field bent, except as permitted by the Owner, or as shown on the Drawings.

2.04 HOOKS AND BENDS

Hooks and bends of steel reinforcing bars shall be bent to the inside diameters specified in ACI 318, as shown below.

TABLE 03210 - 2.04	
Stirrups and Ties:	
Sizes No. 5 and Smaller	4 Bar Diameters
Sizes No. 6 through No. 8	6 Bar Diameters
Sizes No. 9 through No. 11	8 Bar Diameters
Sizes No. 14 and No. 18	10 Bar Diameters
Other than for Stirrups and Ties:	
Sizes No. 3 through No. 8	6 Bar Diameters
Sizes No. 9 through No. 11	8 Bar Diameters
Sizes No. 14 and No. 18	10 Bar Diameters

2.05 SPLICING

- A. General: All steel bars used for concrete reinforcement shall be furnished in the full lengths where possible. Splices that are permitted or shown on the Drawings shall be well distributed or located at points of low tensile stress. Locate reinforcing lap splices not indicated on the Drawings at points of minimum stress. Indicate location of splices on shop drawings. No splices will be permitted at points where the section is not sufficient to provide a minimum distance of 2 inches between the splice and the nearest adjacent bar or the surface of the concrete. The bars shall be rigidly clamped or wired at all splices. Bars that are lapped for splicing shall be placed in contact for the length of the splice and tied together. Splices shall be staggered where possible.
- B. Seismic: (for regions of low, moderate or high seismic risk) see the Drawings for specific seismic detailing requirements.
- C. Unless otherwise detailed on the Drawings, the minimum splice lengths shall be as follows:

TABLE 03210 - 2.05C				
BAR#	GRADE 60 PLAIN		GRADE 60 EPOXY COATED	
	Concrete Compressive Strength		Concrete Compressive Strength	
	3000 psi	4500 psi	3000 psi	4500 psi
3 & under	2'	2'	2'-3"	2'-3"
4	2'	2'	2'-3"	2'-3"
5	2'-4"	2'-4"	2'-10"	2'-10"
6	3'	2'-9"	3'-7"	3'-4"
7	4'	3'-6"	4'-11"	4'-3"
8	5'-3"	4'-7"	6'-5"	5'-7"
9	6'-8"	5'-9"	8'-1"	7'

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Placing Reinforcing Steel:
 - 1. Reinforcing steel shall be accurately placed in the positions shown on the Drawings and held securely during the pouring of the concrete. In general, all reinforcement shall be put in proper position and securely wired and blocked before concrete is poured in any section. Stirrups and ties shall always pass around and be securely tied to the main flexural/tension steel members. Girder and slab reinforcing steel shall be supported on mortar blocks or other approved means of support. Tack welding of reinforcing bars shall not be allowed. If approved by the Owner, welding shall be performed by certified welders in accordance with AWS D1.4.

DIVISION 3 - CONCRETE

2. Before placing concrete, clean reinforcement of foreign particles, loose scale, or coatings. The Contractor shall place, support, and secure reinforcement against displacement. Do not deviate from alignment or measurement.
3. At all openings in structural slabs and walls, provide a minimum of 1 No. 4 bar at each of the top and bottom of slab or faces of wall or slab at 45 degrees on all 4 corners, in addition to a minimum of 1 No. 4 bar on all sides of square or rectangular openings, and hoops at each face for each round opening, unless otherwise shown on the Drawings.
4. The Contractor shall notify the Owner when reinforcing is in place for inspection of reinforcement prior to placement of concrete. No concrete shall be placed until the Owner or his representative has inspected the placing of the reinforcing steel and has given permission to pour concrete. All concrete placed in violation of this provision may be rejected and removal required.

B. Minimum Cover:

1. The minimum clear space between reinforcing bars shall be as follows (unless otherwise shown on the Drawings):

TABLE 03210 - 3.01 - B1	
Between parallel bars in a layer	Bar Diameter (1 inch minimum)
Between adjacent layers	1 inch

2. Except as otherwise shown on the Drawings, the minimum thickness of concrete cover over reinforcing bars shall be as shown in the following tables:

TABLE 03210 - 3.01 - B2 CAST IN PLACE CONCRETE (NON-PRESTRESSED)	
Concrete cast against and permanently exposed to earth	3 inches
Concrete exposed to earth or weather: No. 6 through No. 18 bar No. 5 bar, W31 or D31 wire, and smaller	2 inches 1 1/2 inches
Concrete not exposed to weather or in contact with ground: Slabs, walls, joists: No. 11 bar and smaller Beams, columns: Primary reinforcement, ties, stirrups, spirals Shells, folded plate members: No. 6 bar and larger No. 5 bar, W31 or D31 wire, and smaller	3/4 inch 1 1/2 inches 3/4 inch 1/2 inch

DIVISION 3 - CONCRETE

TABLE 03210 - 3.01 – B3 CAST-IN-PLACE CONCRETE (PRESTRESSED CONCRETE) Minimum Cover 1"	
Concrete cast against and permanently exposed to earth	3 inches
Concrete exposed to earth or weather: Walls, panels, slabs, joists Other members	1 inch 1 1/2 inches
Concrete not exposed to weather or in contact with ground: Slabs, walls, joists Beams, columns: Primary reinforcement Ties, stirrups, spirals Shells, folded plate members: No. 5 bar, W31 or D31 wire, and smaller Other reinforcement	3/4 inch 1 1/2 inches 1 inch 3/8 inch d_b , but not less than 3/4 inch

TABLE 03210 - 3.01 – B4 PRECAST CONCRETE (Manufactured under plant control conditions)	
Concrete exposed to earth or weather: Wall panels: No. 14 and No. 18 bars, pre-stressing tendons larger than 1 1/2 inch diameter No. 11 bar and smaller, pre-stressing tendons 1 1/2 inch diameter and smaller W31 and D31 wire and smaller	1 1/2 3/4
Other members: No. 14 and No. 18 bars, pre-stressing tendons larger than 1 1/2 inch diameter No. 6 through No. 11 bars, pre-stressing tendons larger than 5/8 inch diameter through 1 1/2 inch diameter No. 5 bar and smaller, pre-stressing tendons 5/8 inch diameter and smaller, W31 and D31 wire, and smaller	2 1 1/2 1 1/4
Concrete not exposed to weather or in contact with ground: Slabs, Walls, Joists: No. 14 and No. 18 bars, pre-stressing tendons larger than 1 1/2 inch diameter Pre-stressing tendons 1 1/2 inch diameter and smaller No. 11 bar and smaller, W31 or D31 wire, and smaller	1 1/4 3/4 5/8
Beams, columns: Primary reinforcement d_b but not less than 5/8 and need no exceed Ties, stirrups, spirals	1 1/2 3/8
Shells, folded plate members: Pre-stressing tendons No. 6 bar and larger No. 5 bar and smaller, W31 or D31 wire, and smaller	3/4 5/8 3/8

C. Bar Placement Tolerances:

1. Between bars: 1/4 inch, plus or minus.
2. Vertical position of bars in slabs and beams:
 - a. Members 8 inches deep or less: 3/8 inch, plus or minus.
 - b. Members over 8 inches deep: 1/2 inch, plus or minus.
3. Bars may be moved to avoid interference with other reinforcing steel, conduits, or embedded items. If moved more than 1 bar diameter or stipulated tolerances, consult with the Owner to determine final placement.

D. Tie Wire: At a minimum, 50 percent of reinforcing steel intersections shall be connected with tie wire.

E. Welding: Welding of reinforcing shall be prohibited unless explicitly allowed by the Owner in writing or as shown on the Drawings. If approved by the Owner, welding shall be performed by certified welders in accordance with AWS D1.4.

END OF SECTION 03210

**SECTION 03300
CAST-IN-PLACE CONCRETE**

PART 1 - GENERAL

1.01 SECTION INCLUDES

Cast-in-place concrete slabs, walls, footings, grade beams, columns, beams, and piers.

1.02 QUALITY ASSURANCE

- A. Perform work in accordance with ACI 301.
- B. Obtain materials from same source throughout the work.

1.03 REGULATORY REQUIREMENTS

Conform to the IBC, WSDOT Standard Specifications and ACI.

1.04 TESTING

- A. Testing and analysis of concrete shall be performed by the contractor under provisions of ACI 301 and/or WSDOT Standard Specifications. Concrete testing and analysis shall include, at a minimum, compressive strength cylinders, temperature, slump, and air entrainment.
- B. The Owner's representative may also perform tests at will in accordance with the above standards. The cost of tests conducted by the State shall be paid by the State. Additional testing costs resulting from substandard concrete as indicated by the State's tests, shall be paid by the Contractor at no additional cost to the State.
- C. During placement of concrete, the Contractors testing agency shall prepare standard test cylinders in accordance with AASHTO T-23, which shall represent concrete poured during the job. Concrete testing and analysis shall occur at a minimum at the following frequencies:
 - 1. For placement of one class of concrete, 50 cubic yards or less:
 - a. Sample each truck, after 1/2 cy has been discharged from truck, until one truck meets all applicable acceptance test requirements.
 - b. After one truck meets the acceptance test requirements, the remaining concrete may be visually inspected.
 - 2. For placement of one class of concrete greater than 50 cubic yards:
 - a. Sample initial truck after 1/2 cy has been discharged from the truck (this material may not be placed in the forms).

DIVISION 3 – CONCRETE

- b. Sample each truck until two successive loads meet all applicable acceptance tests requirements. Once two loads meet the acceptable standard, the sampling and testing frequency may decrease to one for every five truck loads.
 - c. For all trucks, after the initial truck, sample the concrete after a minimum of $1/2 \text{ yd}^3$ ($1/2 \text{ m}^3$) of concrete has been discharged into the forms.
- D. Two cylinders shall be tested for strength at the end of 28 days in accordance with ASTM C39 or WSDOT Standard Test Methods as set forth in the WSDOT Materials Manual. Additional cylinders may be taken in sets of two (2), to verify concrete strength prior to 28 days at the contractor's discretion and cost.
- E. During cold or hot weather, one additional test cylinder shall be taken and cured at the site under the same conditions as the concrete pour from which it was taken.
- F. Concrete not conforming to the Specifications, concrete damaged from any cause, or concrete found to be defective for any reason shall be replaced by the Contractor with acceptable concrete at no additional cost to the State. Any concrete test that shows concrete in place that is below the specified requirements shall be reason for removal of the entire pour, and any subsequent concrete deposited will also be jeopardized. The concrete shall be removed and replaced by the Contractor at no additional cost to the State.

1.05 SUBMITTALS

- A. Manufacturer's Data - Concrete Work: Submit manufacturer's data with application and installation instructions for proprietary materials and items, including admixtures, patching compounds, water stops, joint systems, dry-shake finish materials, grout, and others as requested by the Owner.
- B. Placement Schedule: Prepare a placement schedule and submit it for review prior to start of concrete placement operations.
- C. Delivery Tickets: Furnish copies of delivery tickets for each load of concrete delivered to the site. Provide items of information to the Owner as specified under ASTM C94 - Certification.
- D. Submit proposed mix design to the Owner for review and acceptance prior to commencement of work.
- E. Furnish results of tests certifying conformance made by a recognized testing laboratory acceptable to the Owner.

PART 2 - PRODUCTS

2.01 CONCRETE MATERIALS

- A. Cement:
 - 1. Cement shall be classified as Portland Cement or blended hydraulic cement.

DIVISION 3 – CONCRETE

2. Portland cement shall conform to ASTM C150 Type I or II (low alkali), gray color.
3. Blended hydraulic cement shall conform to ASTM C595, Type IP(X) or Type IS(X).
 - a. For Type IP(X), X shall be a maximum 35% fly ash, or 50% ground granulated blast furnace slag.
 - b. For Type IS(X), X shall be a maximum of 50% ground granulated blast furnace slag.
4. All cement used in this work shall be taken from stock bins at the place of manufacture.
5. Cement delivered to the site of the work shall at all times be suitably stored or protected from exposure to the atmosphere. If the cement shows signs of deterioration, it shall be removed from the work site unless additional tests show that it conforms to the requirements stated above.

B. Fine and Coarse Aggregates:

1. Fine Aggregate: Fine aggregate shall conform to WSDOT Standard Specifications 9-03.1(2)B and shall consist of sand or other inert materials or combinations thereof having hard, strong, durable particles free from adherent coating. Fine aggregate shall be washed thoroughly to remove clay, loam, alkali, organic matter, or other deleterious matter.
2. Coarse Aggregate: Coarse aggregate shall conform to WSDOT Standard Specifications 9-03.1(4)C, AASHTO Grading No. 67 or 57 and shall consist of gravel, crushed stone, or other inert material or combinations thereof having hard, strong, durable pieces free from adherent coatings. It shall be washed thoroughly to remove clay, silt, bark, sticks, alkali, organic matter, or other deleterious material. Use of pit or bank-run gravel is not permitted.
3. Combined Aggregate Gradation: As an option to using coarse and fine graded aggregates, aggregate gradation may consist of a combined gradation with a nominal maximum size of 1 inch or 3/4 inch per WSDOT Standard Specifications 9-03.1(5)B.
4. Approved aggregates shall be so stored as to prevent deterioration, segregation, or intrusion of foreign matter. Improper storage will be considered a reason for rejection of affected aggregate.

- C. Water: Water shall be any potable water, clean and free of injurious amounts of oil, acid, alkali, and organic material. Water containing 2 percent or more common salt shall not be used.

2.02 ADMIXTURES

- A. Air Entrainment: An air-entraining admixture meeting ASTM C260 shall be used when specified in Paragraph 2.05 – Concrete Mix.
- B. Chemical Admixture: Water-reducing, retarding, and/or accelerating admixtures shall be used when specified in Paragraph 2.05 – Concrete Mix, meeting ASTM C494 or as approved by the Owner.

C. Calcium chloride shall not be used.

2.03 GROUT

A. Nonshrink grout shall consist of a hydraulic cementitious system conforming to ASTM C 1107 (Grade C), specially graded and composed of processed natural fine aggregate and additives as required. The material shall meet all of the following requirements:

1. 28 day compressive strength: $f'_c = 7500$ psi.
2. Nonmetallic.
3. Free of gas-producing or releasing agents.
4. Free of oxidizing catalysts.
5. Free of inorganic accelerators, including chlorides.
6. SikaGrout 212, or approved equal.

B. Epoxy grout for embedding rebar, brick ties, and bolts shall be a 2-component mixture conforming to IBC seismic requirements, Hilti HIT-RE 500-SD or Owner approved equal. Application of all epoxy grout shall be in accordance with the manufacturer's specifications or instructions.

C. General-purpose grout for grout fills shall consist of 1 part Portland cement, 1 part fine aggregate, and 2 parts coarse aggregate by volume. The aggregate in the nominal mix may be varied slightly to give the most workable mix, but in no case shall the volume of the coarse material be less than 1 1/2 times the volume of the fine. No more than 5 gallons of mixing water, including moisture in the aggregate, shall be used for each sack of Portland cement. The consistency shall be the driest consistency possible.

D. Grout used for anchoring reinforcing bars into rock shall be cementitious with Sika Intraplast-N grouting aid as an expansion/fluidifying water-reducing admixture, or Owner approved equal. The grout mix design shall be in accordance with the admixture manufacturer's recommendations for the intended use. Contractor shall submit mix design for Owner's approval.

2.04 MORTAR

Mortar for build-up at various surfaces and hand-sack rubbing shall be composed of approximately 1 part Type II Portland Cement, 1 1/2 to 2 parts Silica Sand (for sack finishing) or sand passing No. 16 sieve (for build-up), an amount of air-entraining admixture per sack of cement to produce an air content of 9 percent by volume, and sufficient water to make a workable mix with consistency like thick cream. Masonry Sand shall not substitute for Silica Sand for sack finishing. Thicker mix is required for filling voids. Sand, cement, water, and air-entraining admixture shall be as specified for concrete.

2.05 CONCRETE MIX

- A. Mix concrete in accordance with ASTM C94. The specified compressive strength at 28 days are listed below. The Contractor shall ensure that the water/cement ratio does not exceed the specified amount. Refer to Paragraph 3.03.G for slump requirements.

For this project, use Mix # 1.

TABLE 03300 - 2.05- A				
	Mix Design			
	1	2	3	4
Specified Compressive Strength at 28 days, minimum psi	4500	4500	3000	3000
Air Entrainment	None¹	4.5-7.5%	None ¹	4.5-7.5%
Cementitious, pounds per cubic yard, minimum pounds	564	564	540	540
Water/cement by weight, maximum	0.44 0.38²	0.44 0.38 ²	0.50 0.45 ²	0.50 0.45 ²

¹No entrained-air content entrapped air only.

²Reduced water/cement ratio applies to concrete for underwater placement (4000W) or low-shrink concrete (LS) requirements. Use of a water-reducing admixture is mandatory for these applications. Increase coarse and fine aggregate weights to adjust the yield.

³Aggregate weights listed are based on a specific gravity of 2.67. The concrete plant shall adjust aggregate proportions for the specific gravity of the aggregates used and note the changes on the Submittal.

- B. Use accelerating admixtures in cold weather only when reviewed and accepted by the Owner. Use of admixtures will not relax cold weather placement requirements.
- C. Use set-retarding admixtures during hot weather only when reviewed and accepted by the Owner.
- D. Use water-reducing admixtures as reviewed and accepted by the Owner.
- E. Contractor may use flyash or ground granulated blast furnace slag (GGBFS) as a constituent of the concrete. A mix design shall be provided for Owner's approval before usage.
- F. Failure of any concrete to meet the specified 28 day strength in place as determined by test cylinders shall be reason for removal of the entire pour, and any subsequently placed concrete will be thereby jeopardized. All work necessary for correction will be at the Contractor's expense.
- G. Should the concrete not meet the 28 day test strength, the Contractor may at his option and expense make test corings and tests to the satisfaction of the Owner.

2.06 BONDING AGENT

- A. Bonding agent for bonding new concrete to hardened concrete shall conform to ASTM-C-881.
- B. Bonding agent shall be Symons Rescon Epoxy Bonder MV, or Owner approved equal.

2.07 WATER STOP

Waterstop shall be 4 inches wide, PVC, 4 inch x 3/16 inch Ribbed Center Bulb, manufactured by Sika/Greenstreak Group, Inc. – Model Number 702 – Type CH2M Hill; or Owner approved equal. Corners shall be miter, shop manufactured. Splices shall be welded in accordance with manufacturer's requirements and recommendations.

2.08 EXPANSION JOINT MATERIAL

- A. Pre-formed expansion joint material shall be rubber compound, conforming to ASTM D1752, Type 1, and be full depth of the joint, less expansion joint sealant and backer rod, 1/2 inch thick. A.P.S., Rubber Expansion Joint Filler or Owner approved equal.
- B. Pre-formed expansion joint material for driveways, sidewalks, etc. shall be asphalt impregnated fiber, conforming to ASTM D994, full depth of joint, 1/2 inch thick. A.P.S. Fiber Board or Owner approved equal.

2.09 EXPANSION JOINT SEALANT

Sealant shall be one part cold applied, non-sagging silicone. Color shall be gray. Movement capability shall be +100%/-50% per ASTM C719. Dow Corning NS Parking Structure Sealant or Owner approved equal. Depth of sealant shall be 1/2 the joint width, utilizing closed-cell foam back rod under the sealant.

2.10 CYLINDRICAL CONCRETE FORM

Cylindrical Concrete Form to be Sonotube, Quik-Tube Form or approved equal.

PART 3 - EXECUTION

3.01 INSPECTION

Verify anchors, seats, plates, reinforcements, and other items to be cast into concrete are accurately placed, held securely, and will not be detrimental in placing concrete.

3.02 EMBEDMENTS

- A. Embedded items shall be installed where shown on the Drawings or as described in these Specifications. Expansion anchors shall not be acceptable substitution for anchor bolts.
- B. Any embedded items shall be accurately positioned prior to concrete placement and firmly held in place until concrete has set.
- C. Waterstops shall be installed in required joints as close to the center of the joint as possible, on the water side of the reinforcing. Flexible-type waterstop should be firmly tied and/or fixed in position to prevent movement during placement of concrete. Install waterstop in accordance with manufacturer's recommended forming procedures.
- D. All waterstops shall be heat-welded at all joints.

3.03 BATCHING AND MIXING

- A. Except for hand-mixed concrete, all concrete shall be batched in a prequalified manual, semi-automatic, or automatic plant. The prequalification shall consist of a current, annual certification inspection by WSDOT or as approved by the Owner. If the plant has not been prequalified, the Contractor shall provide written notification to the Owner 2 weeks prior to the anticipated use of the batch plant to allow for the necessary prequalification. The Owner is not responsible for any delays to the Contractor due to problems in getting the plant certified.
- B. The Contractor has the option to site mix, transit mix, or plant mix the concrete. In all cases, concrete shall be mixed until a uniform distribution of the materials produces a homogeneous batch.
- C. Site-mixed concrete operations larger than 5 cubic yards total shall be subject to the prior approval of the Owner.
- D. Transit-mixed concrete may be used provided it complies with these Specifications and ASTM C94 or WSDOT Standard Specifications. The concrete supplier shall have adequate equipment to ensure weight and quality control.
- E. Concrete shall only be mixed in the quantities required for immediate use. The concrete shall be used while fresh before initial set has taken place. Any concrete that has developed initial set shall not be used. Partially hardened concrete shall not be retempered or remixed. One batch of mixed concrete shall be entirely discharged before the following batch is charged.
- F. Temperature and Time for placement (WSDOT Standard Specification 6-02.3(4) D).
Concrete temperature shall remain between 55 F and 90 F while it is being placed.
The batch of concrete shall be discharged:
 - 1. Not later than 1 1/2 hour after the cement is added to the concrete.
 - 2. Not later than 1 3/4 hour if the temperature of the concrete being placed is less than 75 F.
 - 3. Not later than 2 hours with the approval of the Owner if the concrete being placed is below 75 F.
 - 4. Dry batch mix procedures may be used, but only as approved by the Owner.
- G. The maximum slump for vibrated concrete shall be 4 1/2 inches. When a high range water reducer is used, the slump may be increased an additional 2 inches. Minimum slump is that required for proper placement and compaction. The maximum slump for non-vibrated concrete shall be 7 inches.
- H. Conformance to Mix Design
Weights of the mix components shall be within the following tolerances of the mix design:
Cement; +5%, -1%
Fly Ash, Ground Granulated Blast Furnace Slag; +5%, -5%
Aggregates; +5%, -1% for batch volumes greater than 4 cubic yards
Aggregates; +10%, -2% for batch volumes equal to or less than 4 cubic yards
Water; +0%

3.04 CONCRETE JOINTS

- A. Waterstop shall be installed in all joints for outside walls of ponds, raceways, and other water-holding or containing structures.
- B. Expansion Joints:
 - 1. Expansion (isolation) joints shall be placed and constructed as shown on the Drawings.
 - 2. The length of a joint material shall match the required length in the Drawings without splicing or stretching.
 - 3. Open joints shall be formed with a template made of wood, metal, or other suitable material. Insertion and removal of the template shall be done without chipping or breaking the edges, or otherwise injuring the concrete.
 - 4. Any part of an expansion joint running parallel to the direction of expansion shall provide a clearance of at least 1/2 inch (produced by inserting and removing a spacer strip) between the 2 surfaces. The Contractor shall ensure that the surfaces are precisely parallel to prevent any wedging from expansion and contraction.
- C. Crack-Control Joints:
 - 1. Crack-control joints shall be installed as shown on the Drawings or where designated by the Owner. Crack control joints are intended to have cracking occur in the joints to prevent uncontrolled transverse cracks from occurring in walls and slabs.
 - 2. Crack-control joints shall be straight and true. Crack-control joints shall have a formed crack a minimum depth of 1/4 of the concrete thickness (for walls, half from each side of the section) and may be formed using a plastic strip anchored to the form or other method approved by the Owner. Slabs may be sawcut 1/4 of the concrete thickness before curing. Contractor shall inform Owner of his cutting schedule.
 - 3. The Contractor may use a construction (stop pour) joint in place of the crack-control joint when approved by the Owner.
- D. Construction Joints:
 - 1. Construction joints are stopping places in the process of concrete placement and shall be made only where shown on the Drawings or as approved by the Owner.
 - 2. All construction joints shall be neatly formed as shown on the Drawings. Irregular or undulating joint lines shall not be allowed. All construction joints shall be either horizontal or vertical, or if the main reinforcement is inclined, the joints shall be normal to the direction of the main reinforcement.
 - 3. When the Drawings call for a construction joint with roughened surface, the surface shall be struck off to leave surface irregularities approximately 1/2 inch wide and 1/4 inch deep. Surface irregularities shall not exceed 1/2 inch in depth. If the desired roughness is not obtained by the initial strike-off, the surface shall be roughened prior to the concrete reaching its initial set in such a manner as to leave grooves approximately 1/4 inch deep at 1/2 to 1 inch centers in both transverse and longitudinal directions. The rough surface shall be clean and free of laitance and loose material. Shear keys are required where shown on the Drawings.
 - 4. Waterstops shall be installed in all outside walls and slab construction joints in ponds, raceways, and other water-holding or containing structures.

3.05 PLACING CONCRETE - GENERAL

- A. Notify the Owner a minimum of 48 hours prior to commencement of concreting operations. Placement of concrete shall occur only after the forms and reinforcing bar placement have been inspected and approved by the Owner or his representative. The Contractor shall place concrete only when the Owner or his representative is present.
- B. All building slabs, floor slabs, and pond floor slabs shall be placed over a 6-mil clear polyethylene vapor barrier (unless noted otherwise).
- C. Concrete shall be placed as soon as possible after mixing and shall be plastic and readily workable when placed in the forms. See Division 03300 3.03F. The method and manner of placing concrete shall avoid segregation of the aggregates or displacement of reinforcement.
- D. Immediately before concrete placement against existing hardened concrete, bonding agent shall be applied to existing clean concrete surface. New concrete shall be placed while agent is still tacky.
- E. Concrete shall not be placed if other work in the area, such as driving piles or sheets, causes vibrations that adversely affect the initial set or strength of the concrete.
- F. Aluminum conduits shall not be used in the pumping or placing of concrete.
- G. Ensure reinforcement, inserts, embedded parts, and formed joints are not disturbed during concrete placement.
- H. Place crack-control joints prior to initial set.
- I. Excessive honeycomb or embedded debris in concrete is not acceptable.

3.06 PLACING CONCRETE INTO FORMS

- A. Before placement of concrete, forms shall be cleaned and free of all debris and ice. The foundations and forms shall be dampened prior to placing concrete. Care must be taken to see there is no standing water on the foundation or in the forms when the concrete is placed. Where possible, all foundation excavations shall be pumped dry and concrete deposited in the dry. If it is not possible to proceed in this manner, a seal of concrete of sufficient thickness to resist any possible uplift shall be deposited underwater in accordance with the requirements specified in Paragraph 3.08 – Placing Concrete in Water.
- B. Deposit concrete in forms in continuous horizontal layers not deeper than 24 inches and in a manner to avoid inclined construction joints. Where placement consists of several layers, place each layer while preceding layer is still plastic to avoid cold joints. Insert vibrator into previous layer to ensure homogeneous concrete placement.
- C. Remove temporary spreaders in forms when concrete being placed has reached the elevation of such spreaders.
- D. Concrete shall not be dropped more than 3 feet. This is to avoid material segregation. When placing operations would involve dropping the concrete more than 3 feet, it shall be deposited through sheet metal or other approved conduit. In sloping forms where concrete, if dropped, will tend to slide down one side of the form as it is placed, the concrete shall be placed through approved conduit without dropping. After initial set of the concrete, the forms shall not be jarred, and no strain shall be placed on the ends of the projecting reinforcement bars.

- E. The method of depositing and consolidating concrete shall be conducted so as to form a compact, dense, and impervious concrete that will show smooth faces on exposed surfaces. If any section of concrete is found to be defective, it shall be removed by the Contractor at no additional expense to the State. Plastering will not be permitted.

3.07 PLACING CONCRETE SLABS

- A. Deposit and consolidate concrete slabs in a continuous operation within the limits of construction joints until the placing of a panel or section is completed. When concrete is in place has sufficiently set up (at least 24 hours), an alternate section shall be placed. The edges of all sections shall be tooled with a minimum radius edging tool.
- B. Slope all exterior concrete slabs and interior slabs with floor drains in a manner to prevent the collection of water.
- C. Bring slab surfaces to the correct level with a straightedge and strike off. Use bullfloats or derbies to smooth the surface, leaving it free from humps or hollows. Do not sprinkle water on the plastic surface. Do not disturb the slab surfaces prior to beginning finishing operations.
- D. Maintain reinforcing steel in the proper position continuously during concrete placement operations.

3.08 PLACING CONCRETE IN WATER

- A. In no case shall concrete be placed in running water. Whenever permission is given to place concrete underwater, it shall be so placed within the confines of a watertight compartment such as a cofferdam, tube, or caisson.
- B. Concrete placed underwater shall include a water-reducing admixture within the manufacturer's recommended dose range as approved by the Owner. Concrete placed in still water inside an open crib or cofferdam shall be placed by means of a tremie. The width of section of footing being poured shall not exceed 18 feet for each tremie or bucket used.
- C. When the concrete is to be placed by a tremie, the methods of construction shall comply with the following requirements:
 - 1. All tremies shall consist of a tube having a diameter not less than 10 inches and a hopper adequate to perform the work, or a method using a straight tremie tube on the end of a concrete pumper hose may be developed provided prior approval of the proposed method and procedure is obtained from the Owner.
 - 2. A satisfactory method of expelling the water and first filling the tremie shall be used.
 - 3. The end of the tremie tube shall be kept deep enough into the seal concrete, and the concrete maintained in the tube at the elevation required to prevent water from entering the tremie tube at any time during the concrete placement. In placing concrete through a tremie, 2 distinct handling devices shall be used: one to raise, lower, and place the tremie, and the other to deliver concrete to the tremie. When a batch is dumped into the hopper at the top, the tremie shall be raised slightly (but not out of the concrete at the bottom) until the batch discharges to the bottom of the hopper or the top of the tremie tube. The flow shall then be stopped by lowering the tremie.

4. The seal shall be completed by placing full thickness as the seal advances from one end of the placement to the other, keeping the finished surface of the concrete as level as possible.
 5. The concrete shall be placed continuously until the required seal is placed. If for any unavoidable reason it becomes necessary to discontinue the placing before the required seal is completed, the Contractor may be required to remove all concrete placed in the seal at no cost to the State.
- D. When concrete is placed underwater, the Contractor may use methods whereby the aggregates are preplaced within the cofferdam before the introduction of the cement grout, provided prior approval of the proposed method and procedure is obtained from the Owner.

3.09 PLACING CONCRETE IN HOT WEATHER

- A. Concrete shall be placed when anticipated 24 hour range will exceed 89°F and shall conform to ACI 305R. Contractor shall submit a hot weather plan to the Owner for review and approval prior to commencement of any work.
- B. The temperature of the concrete equipment and ingredients shall be maintained at such a level that the temperature of the concrete at the time it is placed shall not exceed 85°F.
- C. Water-reducing admixtures shall be used so that the maximum amount of water or slump shall not be exceeded. The mixing of the concrete and the time between mixing and placing shall be kept to a minimum. Mixer trucks shall not be exposed to the sun while waiting to be unloaded. Chutes, conveyors, and pump lines shall be shaded. To keep the forms and reinforcing steel cool prior to placing the concrete, the top layer of reinforcing steel shall be completely covered with clean, wet burlap and the forms and reinforcing steel shall be sprinkled with cool water immediately prior to placing the concrete or as ordered by the Owner. The concrete shall be finished without delays. Equipment for applying a water-fog spray shall be available in case it is needed to prevent plastic cracks.
- D. When the combination of air temperature, humidity, temperature of the surface of the concrete, and the wind velocity produces an evaporation of 0.2 or more pounds per hour per square foot of surface as determined by the Owner, the Contractor shall provide a windbreaker enclosure to protect the concrete from winds blowing over the surface of the concrete until the curing compound is applied.

3.10 PLACING CONCRETE IN COLD WEATHER

- A. When air temperature is expected to fall below 37°F during placement or within 7 days thereafter, the Contractor shall place and cure concrete in accordance with ACI 306R. Contractor shall submit a cold weather concreting plan to the Owner for review and approval no less than 7 days prior to the proposed cold weather concreting.
- B. The following provisions shall govern cold weather concreting:
 1. Concrete shall not be mixed or placed while the atmospheric temperature is below 37°F.
 2. Concrete shall not be placed on frozen ground or against frozen forms.
- C. Frozen concrete shall be immediately removed when Contractor is directed to do so by the Owner and replaced with new work at no cost to the State.

3.11 VIBRATION OF CONCRETE

- A. The Contractor shall provide suitable internal vibrating tampers for use in placing and compacting all concrete except that which is placed underwater. The vibrators shall be of the type designed to be placed directly in the concrete, and the vibrator's frequency of vibration shall be not less than 7,000 impulses per minute when in actual operation. The type of vibrator and its method of use shall be subject to the approval of the Owner.
- B. Insert and withdraw vibrators vertically at uniformly spaced locations not farther than the visible effectiveness of the machine (between 2 to 3 feet). Place vibrators to rapidly penetrate the layer of concrete and at least 6 inches into the preceding layer. Do not insert vibrators into lower layers of concrete that have begun to set. At each insertion, limit the duration of vibration to the time necessary for consolidation around reinforcement and other embedded items without causing segregation of the mix. Generally, this will be from 5 to 15 seconds in accordance with ACI 301. Do not use vibrators to transport concrete inside of forms.
- C. Vibrators shall not be applied directly to steel that extends into partially hardened concrete.
- D. Vibration shall not continue in any one spot to the extent that pools of grout are formed. When vibrating and finishing top surfaces that are exposed to weather or wear, extreme care shall be exercised to avoid drawing water or laitance to the surface. For relatively high lifts, the top layer shall be comparatively shallow, and the concrete mix shall be as stiff as can be effectively vibrated into place and properly finished.
- E. The Contractor shall supply a sufficient number of vibrating tampers to effectively vibrate all of the concrete placed. Hand tamping shall be required wherever necessary to secure a smooth and dense concrete on the outside surfaces.
- F. Vibration of forms and reinforcing will not be allowed.

3.12 FINISHING CONCRETE SURFACES - GENERAL

- A. Forms on walls shall be removed not more than 72 hours after placing concrete.
- B. After removal of the forms, all concrete shall show a smooth, dense face. Any concrete that is porous shall be removed by the Contractor and replaced at no additional cost to the State.
- C. At the discretion of the Owner, cracks in concrete work not covered by Paragraph 3.16 – Defective Concrete and Repair of Concrete and 0.010 inch wide and wider shall be repaired at the Contractor's expense by an ACI-recommended method as approved by the Owner. Criteria for an acceptable method of repair will be based on the following elements:
 - 1. Structural or nonstructural crack.
 - 2. Exposure level/conditions of structures.
 - 3. Appearance.
 - 4. Cause of cracking.
- D. Unsightly stains and coloring caused by the Contractor's operations, equipment, or materials, or resulting because of unfinished construction either before or after a surface has been finished in accordance with this section shall be cleaned and refinished prior to final acceptance of the project and at no additional cost to the State.

3.13 FINISH OF SLABS

- A. Screed all slabs.
- B. Trowel by hand or machine to hard, dense, and mark-free surface. Do not absorb wet spots with neat cement or mixture of cement and sand. Wait until surfaces are dry enough for proper troweling. Chemical dryers not permitted.
- C. Interior concrete slabs to receive flooring materials or carpet shall be steel troweled. Slabs not receiving flooring materials shall also be light-broom finished across the direction of slope or flow to achieve a nonslip surface or as otherwise shown on the Drawings.
- D. Slabs in hatchery trough rooms shall be light-broom finished in the direction of floor slope.
- E. Exterior slabs and slabs in contact with fish rearing water, shall receive a light-broom finish.

3.14 FINISH OF FORMED SURFACES

- A. Surfaces Not Exposed to View, Not in Contact with Water:
 - 1. This includes formed concrete surfaces not exposed to view in the finish work or covered by other construction unless otherwise shown or specified.
 - 2. Provide as-cast rough form finish.
 - 3. Standard rough-form finish shall be the concrete surface having the texture imparted by the form-facing material used with tie holes and defective areas repaired and patched, and all fins and other projections exceeding 1/4 inch in height rubbed down or chipped off.
- B. Surfaces Exposed to View or in Contact with Fish-Bearing Water:
 - 1. This includes concrete surfaces that are visible but not in contact with water and all concrete water contacting surfaces that may come in contact with fish rearing water.
 - 2. Grind entire surface of all interior and exterior walls with a rotary grinder to expose all air pockets, voids, and other imperfections to create a smooth wall surface.
 - 3. Immediately after all required patching, grinding, and correction of major imperfections have been completed, hand sack-rub all vertical surfaces. The sacking process and desired finish quality shall conform to WSDOT Class 1 Surface Finish (WSDOT 6-02.3 (14) (A)). The sack finish process shall be accomplished immediately after the 7 day cure period or as approved in writing by the Owner. No other methods/finishes will be accepted.
 - 4. All pits, after being filled, that shows signs of air pockets or still show an indentation in the wall, shall be reopened (as necessary), refilled, and finished by repeating the hand-sacking process. The intent of the finish is to be very smooth and nonabrasive with no pinholes visible.
 - 5. Top of walls in contact with fish bearing water shall be steel troweled, edged and light broom finished.

3.15 FINISHED CONCRETE TOLERANCES

A. Formed concrete tolerances shall conform to the following requirements:

TABLE 03300 - 3.15A	
1. Variation from plumb:	
a. In lines and surfaces of columns, piers, walls:	1/8 inch in any 10 feet 1/2 inch maximum for the entire length/height
b. For exposed corner columns, crack control joint grooves, and other conspicuous lines:	1/4 inch in any 20-foot length 1/2 inch maximum for the entire length
2. Variation from the level or the grades:	
a. In slabs and beams soffits:	1/4 inch in any 10-foot length 3/8 inch in any bay or in any 20-foot length 3/4 inch maximum for the entire length
b. In exposed lintels, sills, parapets, horizontal grooves, and other conspicuous lines:	1/4 inch in any bay or in any 20-foot length 1/2 inch maximum for the entire length
3. Variation of the linear building lines from established position in plan and related position of columns, walls, and partitions:	1/2 inch in any bay 1/2 inch in any 20-foot length 1 inch maximum for the entire length
4. Variation in the sizes and location of sleeves, floor openings, and wall openings:	1/4 inch plus or minus
5. Variation in cross-sectional dimensions of columns and beams and in the thickness of slabs and walls:	1/4 inch minus 1/2 inch plus
6. Footings:	
a. Variation in dimension in plan:	1/2 inch minus 2 inches plus
b. Misplacement or eccentricity:	2 percent of the footing width in the direction of misplacement, 2 inches maximum
c. Thickness:	
1. Decrease in specified thickness:	5 percent
2. Increase in specified thickness:	No limit
7. Variation in steps:	
a. In a flight of stairs:	
1. Rise:	1/8 inch plus or minus
2. Tread:	1/4 inch plus or minus
b. In consecutive steps:	
1. Rise:	1/16 inch plus or minus
2. Tread:	1/8 inch plus or minus

B. Tolerances apply to concrete dimensions only, not to positioning of vertical reinforcing steel, dowels, or embedded items.

3.16 DEFECTIVE CONCRETE AND REPAIR OF CONCRETE

- A. Concrete that is not formed as shown on the Drawings, or for any reason is out of alignment, level, tolerances, or shows a defective surface shall be removed from the job at the Contractor's expense, unless the Owner grants permission to patch the defective area. Permission to patch in such an area shall not be considered a waiver of the Owner's right to require complete removal of defective work if patching does not, in his opinion, satisfactorily restore quality and appearance of the surface.
- B. Repair or replace concrete not properly placed or of the specified type.
- C. All concrete shall be inspected and all pour joints, rough sections, cracks, and honeycombed areas shall be repaired by cutting back to solid concrete. Apply cement mortar fill after coating surface with bonding agent.
- D. Fill all tie holes and small imperfections with cement mortar fill.

3.17 PLACING ANCHOR BOLTS AND EMBEDDED METALWORK

- A. Cast-in-place anchor bolts and embedded metalwork shall be accurately placed as shown on the Drawings. The Contractor shall secure the cast-in-place anchor bolts and metalwork to the forms or reinforcing steel to prevent misalignment of these items while placing the concrete.
- B. Conduits, pipes, and other fabrications made of aluminum shall not be embedded in concrete unless effectively coated or covered to prevent aluminum-concrete reaction.

3.18 WATER-HOLDING STRUCTURE TEST

- A. Description: All concrete structures that are designed to hold, treat, or pass water or wastewater shall be constructed to be watertight. All structures shall be hydraulically tested for pressure and leakage after concrete has cured and obtained design strength. Leakage testing shall be performed at the expense of the Contractor prior to backfilling the structure.
- B. Testing Procedure:
 - 1. The structure shall be filled with water to the normal operating static level and maintained at that level for 7 days to allow for absorption and stabilization. For testing purposes, all inlets and outlets shall be closed or plugged. At the end of the 7 day period, the change in the volume shall be measured after 24 hours without any water flowing into or out of the structure. Acceptable water leakage criteria are as follows:
 - a. No visible leakage or visibly damp areas.
 - b. A leakage rate no greater than .001 of total tank volume in a 24 hour period.
 - 2. Failure to meet these criteria will require repairs of the structure at the Contractor's expense by a method approved by the Owner. The structure shall be tested after repairs. This process will be repeated until the leakage volume criteria are met.

3.19 CYLINDRICAL CONCRETE FORM BACKFILL

The annular space around the concrete form shall be backfilled per IBC section 1807.3.3 with either clean sand compacted in layers not more than 8" thick or with controlled low-strength material (CLSM).

END OF SECTION 03300

**SECTION 03370
CONCRETE CURING**

PART 1 - GENERAL

1.01 SECTION INCLUDES

Concrete curing materials and methods.

1.02 ENVIRONMENTAL CONDITIONS

When the air temperature is expected to fall below 37°F during the 7 day initial cure period, the Contractor shall submit a written cold weather concreting plan conforming with ACI 306R to the Owner for approval prior to the commencement of any concrete work.

1.03 QUALITY ASSURANCE

Contractor shall conform to requirements of ACI 301.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Water shall be clean, potable and not detrimental to concrete.
- B. Absorptive mat shall be burlap-polyethylene, 8 ounces per square yard, bonded to prevent separation during use.
- C. Concrete curing compound shall be of a standard and uniform quality, ready for use as shipped by the manufacturer. Contractor shall verify curing compound compatibility with required concrete surface finishes as specified in Section 03300 – Cast in Place Concrete and as noted on the Drawings. The curing compound shall conform to ASTM C309, Type 1, Class A or B, and shall be clear with no discoloring. Curing compounds shall be certified nontoxic to fish, or approved by the Owner.
- D. Curing compound for interior slabs and interior walls shall be WR Meadows 1300 Clear or Owner approved equal.
- E. Polyethylene Film shall conform to ASTM D2103 and shall be 6 millimeter thick and white in color.

PART 3 - EXECUTION

3.01 CURING METHODS

- A. All concrete surfaces shall be cured by one of the following methods for not less than 7 days after the concrete is placed.

B. Using one of the methods listed below, the Contractor shall determine the best method for the project, as approved by the Owner:

1. Walls:

- a. General: Where walls are to receive coating, painting, cementitious material, or other similar finishes or where curing compound is not permitted, do not use curing compounds. Use only water-curing procedures.
- b. Method 1: Leave concrete forms in place and keep entire exposed surfaces wet at all times.
- c. Method 2: Apply curing compound as specified, where allowed, immediately after finishing of surfaces. Concrete shall be kept moist while finishing is accomplished.
- d. Method 3: Continuously sprinkle 100 percent of all exposed surfaces.
- e. Method 4: Leave concrete forms in place and apply curing compound to top of wall.

2. Slabs, Curbs and Tops of exposed Footings:

- a. Method 1: Cover surface by water ponding.
- b. Method 2: Cover with absorptive mats and keep continuously wet.
- c. Method 3: Continuously sprinkle exposed surface.
- d. Method 4: Apply specified curing compound to exposed surfaces.
- e. Other agreed upon method that will provide moisture to be present and uniform at all times on all surface of slabs.

C. Onset of Curing:

- 1. Slabs-on-Grade: Apply curing compound, if used, as soon as free water has disappeared from concrete surface after placing and finishing.
- 2. Formed Concrete: Remove forms as specified in Section 03100, and patch and finish immediately. Apply curing method immediately to finished sections of the work.

3.02 MEMBRANE CURING COMPOUND

- A. Apply immediately after finishing of slabs and walls, etc. in accordance with manufacturer's instructions.
- B. Surfaces that have their forms removed after concrete has reached two-thirds of its design strength by test will not require curing compound applied.

3.03 ABSORPTIVE MAT

Contractor shall saturate burlap side of absorptive mat, place over slab areas burlap side down, lap edges and ends 12 inches, and maintain in place for duration of curing period.

3.04 POLYETHYLENE FILM

- A. Contractor shall spread polyethylene film over slab areas, lap edges and ends 3 inches, and seal with pressure-sensitive polyester tape.
- B. Contractor shall maintain polyethylene film in place with plywood sheets for duration of curing period.

END OF SECTION 03370

**SECTION 05000
GENERAL METAL PROVISIONS**

PART 1 - GENERAL

1.01 SECTION INCLUDES

This section specifies general requirements for all sections of Division 5 – Metals.

1.02 RELATED SECTIONS

Not Used.

1.03 REFERENCES

References listed in Division 5 are from the following organizations' latest editions of their publications and reference standards.

AISC – American Institute of Steel Construction: Steel Construction Manual, ASD

AISI – American Iron and Steel Institute

ASTM – ASTM International (formerly American Society of Testing and Materials)

AWCI – Association of the Wall and Ceiling Industry

AWS – American Welding Society: Structural Welding Code

IBC – International Building Code

MFMA – Metal Framing Manufacturers Association

TAA – The Aluminum Association: ADM – Aluminum Design Manual

1.04 SUBMITTALS

Provide submittals for items in all sections of Division 5 in accordance with Sections 00704.03 Shop Drawings and 01300 Contractor Submittals.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

END OF SECTION 05000

**SECTION 05050
FASTENERS**

PART 1 - GENERAL

1.01 SECTION INCLUDES

The work under this Section includes providing all labor, materials, tools, and equipment necessary for connectors, fasteners, welded metal, and miscellaneous items required to complete the work, including but not limited to embedded and nonembedded metal work, fasteners for grating or aluminum fabricated items, anchor bolts, expansion anchors, bolts, nuts, washers, sheet metal screws, and steel epoxy-grouted anchors, as shown on the Drawings and described in the Specifications.

1.02 RELATED SECTIONS

Section 05000 - General Metal Provisions

1.03 REFERENCES

ASTM A108 – Standard Specification for Steel Bar, Carbon and Alloy, Cold-Finished

ASTM A193 – Standard Specification for Alloy-Steel and Stainless Steel Bolting for High Temperature or High Pressure Service and Other Special Purpose Applications

ASTM A194 – Standard Specification for Carbon Steel, Alloy Steel, and Stainless Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both

ASTM A307 – Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60,000 PSI Tensile Strength

ASTM A563 – Standard Specification for Carbon and Alloy Steel Nuts

ASTM F3125 – Standard Specification for High Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated

1.04 SUBMITTALS

Fasteners to be used with precast structure installation.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Unless otherwise indicated, use fasteners and connectors of the same material as the attached metal.

B. Stainless steel fasteners are required

1. Where connecting aluminum components.

2. For connections to be used in submerged or wet locations, where water or other liquids may drip, splash, or flow on or against the components.

C. Unless otherwise indicated, hot-dip galvanize after fabrication.

2.02 FASTENERS FOR ALUMINUM FABRICATED ITEMS

- A. All bolts, nuts, washers, and screws used for assembly or mounting of aluminum fabricated items shall be stainless steel grade 304 or 316. Do not use plated or galvanized assembly hardware with aluminum-fabricated items.
- B. All connections for assembly of head troughs and denil fishways such as bolts, washers, lock washers, shall be grade 304 stainless steel. Furnish all hardware necessary to assemble the troughs and fishways.

2.03 ANCHOR BOLTS AND EXPANSION ANCHORS

- A. Anchor bolts embedded in concrete and subjected to intermittent or continuous submergence during hatchery operations shall be stainless steel.
- B. Other anchor bolts and studs shall be ASTM A307 carbon steel, 60,000 psi tensile strength. Anchor bolts, nuts, expansion anchors, bolts, and washers shall be hot-dip galvanized unless otherwise noted.
- C. Expansion anchors set in holes drilled in the concrete after the concrete is placed will not be permitted in substitution for anchor bolts except with the prior written acceptance of the Owner.

2.04 BOLTS, NUTS, WASHERS, AND SHEET METAL SCREWS

- A. All bolts and nuts that will be continuously or intermittently in contact with water during hatchery or other facility operations shall be stainless steel conforming to ASTM A193 and ASTM A194 for type 304 or 316 as approved.
- B. All other general use bolts, nuts, and washers shall be ASTM A307 and A563 respectively, hot-dip galvanized, unless noted otherwise.
- C. All assembly hardware for aluminum fabrication shall be stainless steel. No galvanized, plated, or anodized materials shall be used with aluminum.
- D. Fasten structural steel members with high strength bolts conforming to ASTM F3125 unless otherwise indicated.
- E. Furnish washers and lock washers for all bolted connections unless otherwise noted. This includes washers for flange bolts. Washers and lock washers shall be of the same material as fasteners and connectors.

2.05 HEADED CONCRETE ANCHORS

ASTM A108 or AISI Type 304.

PART 3 - EXECUTION

3.01 INSTALLATION

Install all fasteners and connectors in accordance with industry standards.

3.02 ANCHOR BOLTS

Protect the threads of embedded anchor bolts with fitted nuts or by other accepted means until the equipment or metalwork is installed.

END OF SECTION 05050

**SECTION 05091
WELDING**

PART 1 - GENERAL

1.01 SECTION INCLUDES

This work includes furnishing all necessary material, labor, and equipment for completing welding required for metal fabrications.

1.02 RELATED SECTIONS

Section 05000 - General Metal Provisions
Section 05126 - Galvanizing

1.03 REFERENCES

AWS A5, Classification of carbon steel electrodes for shielded metal arc welding

AWS D1.1, Structural Welding Code – Steel

AWS D1.2, Structural Welding Code – Aluminum

AWS D1.6, Structural Welding Code – Stainless Steel

AWS D19.0, Welding Zinc-Coated Steel

WABO Standard No. 27-13, WABO Welder and Welding Operator Performance Qualification Standard for Structural Steel, Sheet Steel, and Reinforcing Steel

1.04 QUALITY ASSURANCE

A. Welder Qualifications: all welders are required to be currently certified by AWS and WABO for structural welding. Contractor shall submit proof of certification. Welders shall be qualified in accordance with AWS D1.1 and WABO Standard 27-13 for the processes and positions to be performed for structural steel. Welders shall be qualified in accordance with AWS D1.2 for Aluminum Welding. Welders shall be qualified in accordance with AWS D1.6 for stainless steel.

B. Submit all Welding Procedure Specifications (WPSs) to be used on the project. For WPSs that are not prequalified per AWS D1.1, the supporting Procedure qualification Record (PQR) shall also be submitted with the WPS.

C. Certifications:

1. The Contractor supplying welding filler metal and shielding gas products shall submit copies of all Manufacturers' certifications for all electrodes, fluxes, and shielding gases to be used. Certifications shall satisfy the applicable AWS A5 requirements. The Contractor shall also submit the manufacturer's product data sheets for all welding material to be used. The data sheets shall describe the product, limitations of use, recommended welding parameters, and storage and exposure requirements, including baking and rebaking, if applicable.

2. Certificate of Compliance: For all welding electrodes used on the project the contractor shall submit a Certificate of Compliance. The certificate of compliance shall be a letter stating that the Contractor has reviewed the submitted manufacturer's certifications and test reports, and that the materials being furnished for the project are in conformance with the applicable standards, specifications, and project documents.

D. Testing and Inspection: NDT and inspection of welds will be performed by the State in accordance with this section.

1. Verification Inspection

- a. The State will engage an independent testing agency to perform verification inspection and testing on all field and shop welding. Field and shop welding will be considered all welding not performed at the manufacturing plant.
- b. The independent testing agency will perform testing and inspection of 100 percent of all (field and shop) butt splice welds and 10 percent of all field and shop partial joint penetration (PJP) welds.
- c. The inspection procedures, techniques, and methods will be in accordance with AWS D1.1, Section 6.
- d. All (field and shop) butt splice welds will be 100 percent tested by the following methods:
 - 1) Full-time visual inspection.
 - 2) Ultrasonic Inspection: ASTM E164.
- e. All (field and shop) PJP welds will have a minimum of 10 percent of the total length tested by the following methods:
 - 1) Full-time visual inspection.
 - 2) Magnetic Particle Inspection: ASTM E709.
- f. All (field and shop) butt splice and PJP welds shall meet the acceptance criteria set forth in AWS D1.1, Section 6.
- g. The State's Welding Inspector shall have the authority to determine compliance with the above acceptance criteria and order repairs or replacements of unacceptable welds at no additional cost to the State. All welds whether made at the manufacturing plant, or in the shop or field shall be subject to the acceptance of the State's Welding Inspector.
- h. All welds will be visually inspected.

1.05 SUBMITTALS

Prior to commencement of other Work in this Section, the Contractor shall submit the following items to the Owner:

- A. Welder qualifications/certifications.
- B. Welding Procedure Specifications (WPSs) and Procedure Qualification Records (PQRs).
- C. Electrode manufacturer's certifications and data sheets.
- D. Certificates of Compliance.

1.06 PRODUCT HANDLING

Welding electrodes shall be packaged, stored, and used in a manner consistent with AWS standards and the electrode manufacturer's specifications.

PART 2 - PRODUCTS

2.01 ELECTRODES

- A. All electrodes, fluxes, and shielding gases shall meet the requirements of the applicable sections of ANSI/AWS A5.
- B. Welding electrode classifications.
 - 1. Carbon steel: E70XX "low hydrogen" electrodes.
 - 2. Stainless steel: E316L-XX

PART 3 - EXECUTION

3.01 PREPARATION

- A. Fabrication and joint preparation shall be in accordance with the applicable AWS standard.
- B. Hold back or remove all galvanizing a sufficient distance from the joint to prevent inclusion of the material into the weld. Remove galvanizing from the joint in accordance with AWS D19.0.
- C. Protection:
 - 1. Comply with all municipal, state, and federal regulations regarding safety, including all applicable portions of OSHA and State safety standards for construction work.
 - 2. Conform to ANSI Z49.1, "Safety in Welding, Cutting, and Allied Processes," published by the American Welding Society.
 - 3. Follow "Safe Practices" recommended in Annex R of AWS D1.1.

3.02 WELDING PROCEDURES

- A. Perform all work in accordance with procedures written and qualified in accordance with AWS requirements.

- B. Use a prequalified welding process in accordance with AWS, whenever possible.
- C. Use prequalified partial and complete joint penetration details in accordance with AWS, wherever possible.
- D. Qualify non-prequalified welds in accordance with AWS. Prepare Procedure Qualification Records (PQR's) and Welding Procedure Specifications (WPS's) and complete all welding in conformance with the WPS's.
- E. Qualify WPS's in accordance with AWS D1.1, Section 4.

3.03 FIELD QUALITY CONTROL

- A. Field welding shall meet the requirements of AWS.
- B. Verification Inspection will be performed by an independent testing agency provided by the State.
- C. The Contractor shall provide access to the State's Welding Inspector at all times while the work is being performed.

3.04 SCHEDULING

Coordinate the work with the State's Welding Inspector, provide the State with a proposed work schedule, and coordinate the work to meet the contract delivery schedule.

3.05 CLEANING

Clean surfaces to be welded in accordance with AWS requirements.

3.06 REPAIR

- A. Making weld repairs or replacements shall be the responsibility of the Contractor, and shall be at no additional cost to the State.
- B. Perform weld repairs or replacements on PJP welds in accordance with AWS D1.1, Section 6.
- C. Repair all galvanizing removed or damaged during welding in accordance with Section 05126, Galvanizing and as directed by the Owner, or replace damaged items at no additional cost to State.

END OF SECTION 05091

**SECTION 05126
GALVANIZING**

PART 1 - GENERAL

1.01 SECTION INCLUDES

The Work includes the requirements to provide a galvanized coating as specified with all handling, prefinishing, cleaning, pickling, rinsing, dipping, cooling, draining, vibrating, centrifuging, inspection, and other processes or materials required.

1.02 RELATED SECTIONS

Not Used.

1.03 REFERENCES

ASTM A123 Standard Specification for Zinc (Hot-Dipped Galvanized) Coatings on Iron and Steel Products

ASTM A153 Standard Specification for Zinc (Hot-Dipped Galvanized) Coatings on Iron and Steel Hardware

ASTM A143 Standard Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedures for Detecting Embrittlement

ASTM A384 Standard Practice for Safeguarding Against Warpage and Distortion During Hot-Dip Galvanizing of Steel Assemblies

ASTM A385 Standard Practice for Providing High-Quality Zinc Coatings (Hot-Dip)

ASTM A780 Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings

1.04 SUBMITTALS

Prior to commencement of other Work in this Section, submit the following items:

- A. sample of galvanizing repair rod to be used.
- B. rod manufacturer's product data sheets.

1.05 QUALITY ASSURANCE

- A. The Manufacturer shall be required to test the finished product for thickness, uniformity of the coating, and adhesion in accordance with the applicable ASTM standard.
- B. Conform to manufacturers' specifications, directions, and recommendations for best results in the use of each of their products for each condition. If results are at variance with these specifications, report the discrepancy to the Owner for decision.

PART 2 - PRODUCTS

2.01 GALVANIZING

- A. All carbon steel elements, including fasteners, shall be hot-dip galvanized after fabrication in conformance with ASTM A123, A143, A153, A384, and A385 to a thickness Grade 100.
- B. Galvanizing repair shall be performed with zinc-based alloy solder rods in conformance with ASTM A780.

PART 3 - EXECUTION

3.01 FABRICATION

Any drain or vent holes required to produce a high quality galvanized coating with minimal warpage and distortion not indicated on the contract plans shall be identified by the coating manufacturer, clearly shown on the shop drawings, and shall be subject to approval by the Owner. Fabrication shall be in accordance with ASTM A384 and ASTM A385.

3.02 REPAIR OF GALVANIZED COATING

- A. Repair all galvanized surfaces removed or damaged during welding, shipping, or erection in accordance with ASTM A780, Annex A.1. The zinc-based solder repair rod shall be “Zaclon Repair Alloy” or approved equal. The minimum thickness of the coating shall be 4 mils.
- B. Galvanized coating damaged or removed during welding on items that will have the galvanizing embedded in concrete shall be repaired by the application of a cold galvanizing compound in accordance with ASTM A780, Annex A.2. The cold galvanizing compound shall be “ZRC Cold Galvanizing Compound” or approved equal. The final thickness of the coating shall be 3 mils.

3.03 REPLACEMENTS

Repair or replace damaged work as necessary to the approval of the Owner and at no additional cost to the State.

END OF SECTION 05126

**SECTION 05990
MISCELLANEOUS METALS**

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Work consists of furnishing all labor, materials and equipment for the fabrication and erection of all metal fabrications shown on the Drawings and as specified which are not part of structural steel or other metal systems specified in Division 5.
- B. Work includes, but is not limited to, embedded and non-embedded metal work and fabrication of the following:
 - 1. Grating – aluminum and galvanized steel.
 - 2. Aluminum angles, brackets, hangers, frames, channels, and assemblies.
 - 3. Steel – angles, brackets, hanger, frame and channels, assemblies, and miscellaneous steel fabricated items.
 - 4. Anchor bolts and expansion anchors.
 - 5. Bolts, nuts and washers.
 - 6. Ladders and steps (rungs).
 - 7. Stair assembly.
 - 8. Handrails.
 - 9. Guardrails.
 - 10. Guides and other embedded items.
 - 11. Metal Framing Systems.

1.02 RELATED SECTIONS

Section 05000 - General Metal Provisions
Section 05125 - Galvanizing

1.03 REFERENCES

- A36 Structural Steel
- A53 Steel pipe, Grade B
- A90 Test Method for Weight of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings
- A123 Zinc (Hot-dip Galvanized) Coatings on Products Fabricated from Rolled, Pressed and Forged Steel Shapes, Plates, Bars and Strip
- A167 Stainless Steel Plate, Sheet and Strip, Type 302, 304 and 316
- A193 Stainless Steel Bolts
- A194 Stainless Steel Nuts

- A307 Carbon Steel Externally Threaded Standard Fasteners
- A386 Zinc Coating (Hot-dip) on Assembled Steel Products
- A526 Steel Sheet, Zinc-coated (Galvanized) by the Hot-dip Process, Commercial Quality
- A1023 Stranded Carbon Steel Wire Ropes for General Purposes
- B308 Aluminum-alloy, 6061-t6, Standard Structural Shapes, Rolled or Extruded
- F468 Nonferrous Bolts, Hexcap Screws and Studs for General Use
- AWS B3.0-41 Standard Qualification Procedure
- AWS D1.0.72 Code for Welding in Building Construction
- AWS D1.1. Structural Welding Code – Steel

1.04 SUBMITTALS

- A. Product Data: Contractor shall submit manufacturer's descriptive literature and installation instructions.
- B. Shop Drawings: verify field dimensions for metal fabrications for the Owner's review and acceptance of all fabricated items prior to shop fabrication. Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, welded connections (using standard AWS welding symbols), and weld lengths. Include erection drawings, elevations, details and data for welding materials and methods to be used.
- C. Written certifications for welders performing work, demonstrating AWS 83.0-41 qualification within the past 12 months.

1.05 QUALITY ASSURANCE

- A. Provide aluminum products with mill-spot markings indicating alloy and temper. If such markings are obliterated or eliminated in fabrication, furnish a certificate from the fabricator verifying the information.
- B. Test waterproof welds to ensure proper function for intended applications.

PART 2 - PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. Furnish all connectors, fasteners, welded metal and miscellaneous items required to complete and construct the items shown on the Drawings.
- B. Unless otherwise shown, the fasteners and connectors shall be of the same material as the attached metal, except for aluminum where fasteners and connectors shall be stainless steel. All fasteners used for submerged or "wet locations" shall be stainless steel.
- C. Furnish washers and lock washers for all bolted connections unless otherwise noted. Washers and lock washers shall be of the same material as fasteners and connectors.

- D. Anchor bolts embedded in concrete and subjected to intermittent or continuous submergence during hatchery operations shall be stainless steel. Other anchor bolts shall be hot-dip galvanized unless otherwise noted.
- E. Hot-Dip Galvanizing: Unless otherwise specified, shall be after fabrication.
- F. Welded Studs and Anchors: Provide anchor units or approved equivalent of diameter and length indicated on the Drawings. Install in accordance with manufacturer's recommendations and as shown on the Drawings.

2.02 GRATING

Not Used.

2.03 ALUMINUM ANGLES, BRACKETS, FRAMES, LIGHT STRUCTURAL ALUMINUM FRAMING AND RELATED MISCELLANEOUS ALUMINUM FABRICATED ITEMS (NIC)

Not Used.

2.04 STEEL ANGLES, BRACKETS, HANGERS, FRAMES, CHANNELS, ASSEMBLIES AND MISCELLANEOUS STEEL FABRICATED ITEMS

- A. General: Work consists of providing all steel fabricated items shown on the Drawings in the numbers, sizes, dimensions, and configuration as indicated on the Drawings.
- B. Structural steel shapes and plates shall be fabricated from A36 steel unless otherwise noted or approved by the Owner.

2.05 ANCHOR BOLTS, EXPANSION ANCHORS & ADHESIVE ANCHORS

- A. Anchor bolts, nuts, expansion anchors, bolts and washers shall be hot-dip galvanized coated except where noted on the Drawings or when the application results in the bolts being continuously, or intermittently submerged in water or in contact with aluminum fabricated items. In such cases, the anchor assembly shall be stainless steel.
- B. Structural steel shapes and plates shall be fabricated from A36 steel unless otherwise noted or approved by the Owner.

2.06 BOLTS, NUTS, WASHERS, AND SHEET METAL SCREWS

All bolts and nuts that will be continuously or intermittently in contact with water during hatchery operations shall be stainless steel conforming to ASTM A193 and ASTM A194 for the type approved. Type shall be 304-316. All other bolts, nuts and washers shall be hot-dip galvanized unless specifically identified as other materials, with the exception that all assembly hardware for aluminum fabrication shall be stainless steel. No galvanized, plated or anodized material shall be used with aluminum as specified in Paragraph 2.03.

2.07 LADDERS AND STEPS

Not Used.

2.08 HANDRAIL AND GUARDRAIL

Not Used.

2.09 METAL TRASH RACK

Not Used.

2.10 CABLE AND ACCESSORIES

- A. Cables shall be type 302/304 Stainless Steel 7x7 strand aircraft cable. 1/4-inch diameter cable shall have a minimum break strength of 6100 pounds and a minimum working load of 1220 pounds. 1/8-inch diameter cable shall have a minimum break strength of 1700 pounds and a minimum working load of 340 pounds.
- B. Cable Accessories such as turnbuckles or wire thimbles shall be Stainless Steel and have a working load limit of greater than or equal to the working load limit of the cable.

PART 3 – EXECUTION

3.01 CONSTRUCTION – GENERAL REQUIREMENTS

- A. Carefully install metalwork as shown on the Drawings or as directed by the Owner. Repair or replace metalwork that is bent, broken, or otherwise damaged to the satisfaction of the Owner, at no additional cost to the State.
- B. Metalwork to be embedded in concrete is to be placed accurately and held in the correct position while the concrete is placed, or if shown or accepted, recesses or blockouts shall be formed in the concrete and the metalwork shall be grouted in place. The surfaces of all metalwork in contact with or embedded in concrete shall be thoroughly cleaned of all rust, dirt, grease, loose scale, grout, mortar and other foreign matter and coated with a coal tar epoxy coat. Job-measure all metalwork as necessary for proper fit-up.

3.02 SURFACE TREATMENT, SHOP APPLIED

- A. Steel Galvanized Surfaces: Unless otherwise specified, all elements shall be hot-dip galvanized conforming to the applicable requirements of ASTM A123, A153, A385 and A525. Provide minimum of 2.3 ounces per square foot galvanizing on all surfaces.
- B. Aluminum: Unless otherwise specified, aluminum shall have a smooth, polished finish and be cleaned of oils, chemical or other foreign matter using acid wash after fabrication. No rough grinding marks or welding splatters shall be permitted on aluminum items. In all cases, edges shall be radiused to remove sharp edges.
- C. Stainless Steel: standard mill finished with smooth polished surfaces and edges, cleaned of all foreign matter before delivery to the job.

3.03 INSTALLATION

- A. Bearing Plates, Guides, and Angles: Set units with edges flush and square with the floor and/or wall. Use extreme care to ensure the embedded items are set at correct spacing and are perpendicular as shown. Cut and/or grind all metal to match chamfer of concrete.
- B. Anchor bolts:
 - 1. Unless noted on the Drawings, expansion anchors set in holes drilled in the concrete after the concrete is placed will not be permitted in substitution for anchor bolts except with the prior written acceptance of the Owner.
 - 2. After anchor bolts have been embedded, protect their threads by screwing on the nuts or by other accepted means until the equipment or metal work is installed.
- C. After fabrication, each screen, baffle and other miscellaneous metal items that are removable shall be tested in their intended location. Operation shall be verified fit by approval of the Owner.

END OF SECTION 05990

**SECTION 15060
PIPE, FITTINGS, AND ACCESSORIES**

PART I - GENERAL

1.01 SECTION INCLUDES

This Section describes the various piping systems including fittings, supports, and accessories as shown on the Drawings, described in the Specifications, and as required to completely interconnect all equipment with piping to provide a complete and operable system.

1.02 RELATED SECTIONS

Not Used.

1.03 REFERENCES

ASTM D1785 - Standard Specification for Poly(Vinyl Chloride) (PVC) Plastic Pipe

1.04 SUBMITTALS

Provide in accordance with Sections 00704.03 Shop Drawings and 01300 Contractor Submittals:

- A. Catalog cuts or specification sheets of piping and connected equipment demonstrating compliance with these Specifications.
- B. Detailed installation drawings of the following.
- C. Pipes, fittings, supports, and accessories.
- D. Flexible couplings and flanged adapters.
- E. Locations and types of appurtenances.

PART 2 - PRODUCTS

2.01 GENERAL

- A. Pipe sizes are nominal inside diameter unless otherwise noted.
- B. All material delivered to the job site shall be new, free from defects, and marked to identify the material, class, and other appropriate data, such as thickness for piping.

2.02 - 2.04 NOT USED

2.05 PVC PIPE AND FITTINGS

Unless indicated otherwise on the Drawings, all PVC pipe and fittings will be ASTM D1785, Schedule 40 and 80 as shown on the Drawings, manufactured from Type I, Grade I material. Joints will be plain end, solvent-welded, flanged or threaded as shown on the Drawings.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install all pipe fittings and couplings as recommended by the manufacturer, the Drawings, these Specifications, and in accordance with the best commercial trade practices. Any special tools required for laying, jointing, cutting, etc., shall be supplied and properly used. All pipes shall be thoroughly cleaned before installation and be kept clean until accepted in the completed work. Inspect each pipe for defects before installation.
- B. Replace PVC Pipe indicated on the drawings in kind and length. Support PVC Piping in the same manner that the existing pipe is supported.

END OF SECTION 15060

**SECTION 15100
VALVES AND ACCESSORIES**

PART 1 - GENERAL

1.01 SECTION INCLUDES

This Section describes valves and accessories as shown on the Drawings described in the Specifications and as required to completely interconnect all piping and equipment for a complete and operable systems.

1.02 SUBMITTALS

Provide in accordance with Sections 00704.03 Shop Drawings and 01300 Contractor Submittals:

- A. Catalog cuts and shop drawings to demonstrate that the valves and appurtenances conform to the Specifications.
- B. Manufacturer's installation and operation manuals, bulletins, and spare parts lists for the valves.

1.03 GUARANTEE

In addition to the regular guarantee requirements of Division 0 – General Conditions, the Contractor shall guarantee the valves for a period of 2 years beginning on the date of final acceptance.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Pressure Relief Valves: (for groundwater relief) shall have nominal 4-inch diameter cast-iron body with bronze cover and neoprene rubber gasket. Industry standard is Waterman Industries Pressure-Relief Valve, Model PRF 15. The bronze cover shall be replaced with a 316 stainless steel flat cover fabricated as shown on the Drawings. Break the edges, the new stainless steel cover shall not have sharp edges.
- B. Thrust Bond Breaker: 90-pound asphalt paper.

PART 3 - EXECUTION

3.01 VALVE INSTALLATION

- A. Valves in this contract shall not be buried.
- B. Before installation, clean and touch up all surfaces previously primed, make visual check of operating parts for proper and satisfactory operation, and clean and remove all foreign matter from the valve.

- C. Install valves according to the manufacturer's instructions. Unless otherwise shown on the Drawings, install with manual operators in the most accessible position. Install unions adjacent to all valves with threaded or socket ends.
- D. Label each valve with a phenolic plate describing the service.
- E. All bolts, nuts, and washers for flanged connections shall be hot-dip galvanized.
- F. Safety and relief valves shall be installed at all points required by codes, and where required for protection of equipment and piping. Set pressure shall be as indicated or directed. Pipe discharge to nearest floor drain where pressure cannot exceed 30 psig.

3.02 THRUST BLOCKS

- A. Buried piping shall have concrete thrust blocks as shown on Drawings and described in this Section.

TABLE 15100 - 3.02A				
THRUST BLOCK BEARING AREA Square Feet				
Pipe Size	Dead End	90° Bend *Note 1	45° Bend *Note 2	22 1/2° Bend *Note 3
4	0.3	0.4	0.2	0.1
6	0.6	0.9	0.5	0.2
8	1.1	1.5	0.8	0.4
10	1.8	2.5	1.4	0.7
12	2.6	3.6	2.0	1.0
14	3.3	5.0	2.7	1.3
16	4.7	6.7	3.6	1.8
18	6.0	8.5	4.6	2.3
24	10.5	15.0	8.0	4.0
30	16.5	23.5	12.5	6.3
36	24.5	35.0	18.5	9.3

*Note 1: Includes Bull Head Tee and Bull Head Cross.

*Note 2: Includes Elbow, Tee, and Cross.

*Note 3: Includes Elbow, Lateral, Vert. Bend, Offset.

- B. Anchor gate valves 12 inches and larger as shown on the Drawings or as indicated on the thrust block location sheet.
- C. No forms or reinforcing will be required. The concrete will bear directly against the undisturbed trench wall. Shape and compact the trench backfill to minimize the amount of concrete used. Pour and cure thrust blocks before the pipe is subjected to any hydrostatic pressure. Place thrust bond breaker wherever concrete thrust blocks contact the pipe.

3.03 HANGERS AND SUPPORTS

Provide all necessary supports, tie rods, bracing, brackets, or other types of supports necessary for proper suspension, bracing, or support of the pipe. Provide special supports under the pipe where fixtures, such as valves, are to be supported by the pipe. No attempt is made to show all of these supports or hangers on the Drawings. Include such supports and bracing and install them according to good trade practice.

END OF SECTION 15100