Prepared By:
Snohomish County
Conservation & Natural Resources

Tom Teigen
Director

CULVERT REPLACEMENT NEAR 10101 167TH AVE SE

Bid No.: PW-25-0585SB
Project No.: RR48684, WC8684, UPI 21-0024

Contract Provisions

DANIEL D HOWE
STATE OF WASHINGTON
53735
REGISTERED
PROFESSIONAL ENGINEER

10/2/2025

Reviewed and Approved for Construction

Douglas W. McCormick, P.E.
Snohomish County Engineer

10/6/2025
Date Approved

NOTICE OF CALL FOR BIDS

Notice is hereby given that sealed bids will be received by the Snohomish County Purchasing Division for the following:

Bid No.: PW-25-0585SB
CULVERT REPLACEMENT NEAR 10101 167TH AVE SE
RR48684, WC8684, UPI 21-0024
Estimate: $4,502,585.20

Training: N/A
Apprenticeship: 15%
Funding: NOAA Restoration Grant, County SWM Funds, County Road Funds

Sealed bids must be received no later than **11:00 A.M., November 18, 2025.** Sealed bids may be mailed to Snohomish County Purchasing Division, 3000 Rockefeller Ave., M/S 507 – 6AdmE, Robert J. Drewel Building, Everett, Washington 98201.

This Contract provides for the improvement of **Culvert Replacement near 10101 167th Ave SE** (Group 1), Utility Relocation for culvert replacement (Group 2), and other work, all in accordance with the attached Contract Plans, these Contract Provisions, and the Standard Specifications.

Please see Current Bid protocol for receipt and opening below.

All bids must be submitted in writing on forms downloaded from Builders Exchange of Washington.

Commercial carriers such as Federal Express and United Parcel Services as well as the United States Postal Service will continue to deliver items to County buildings.

Hard copy submittals may be delivered in person or sent via commercial carrier or post office. The delivery/physical address is: 3000 Rockefeller Ave, Drewel Building - Admin East, 6th Floor and must be received by the Purchasing Department not later than 11:00am on the given due date.

If submitting in person, the bid shall be sealed in an envelope and the Bid number and proposer's name noted on the outside of the envelope. Proposals will not be accepted at any other county location other than the Snohomish County Purchasing Division.

Bids will be opened by County staff. The opening may be viewed via Microsoft Teams. Bidders may attend bid openings on the 6th floor of the Robert J. Drewel Building. Bidders may also call in and listen to the bid opening at the number below.

The phone number is 1-425-262-2000 and the Phone Conference ID is 712 654 577#.
The Teams Meeting URL is: https://bit.ly/SnoCoBids

Plans, Specifications, Addenda, Bidders List, and Plan Holders List for this project are available through the Snohomish County Projects Online virtual plan room at Builders Exchange of Washington (BWXA). Free of charge access is provided to Bidders, Subcontractors, and Vendors by going to: www.bxwa.com and clicking on: "Posted Projects", "Public Works", "Snohomish County", and "Projects Bidding".

This is the official/primary means established by Snohomish County for the issuance and distribution of its project bid documents. The online virtual plan room provides Bidders with fully usable online documents with the ability to view, download, print to your own printer, and to order electronically and purchase full/partial plan sets from numerous reprographic sources.

Bidders are encouraged to “Register” online at the Snohomish County Projects Online virtual plan room at the BXWA website to receive automatic e-mail notification of addenda and to be placed on the “Bidders (Plan Holders) List”. Bidders shall obtain any and all addenda issued by Snohomish County for these projects from the Snohomish County Projects Online virtual plan room at the BXWA website. Bidders are ultimately responsible to investigate and acknowledge all issued project addenda.

Contact Builders Exchange of Washington at 425-258-1303 should you require any assistance in viewing, obtaining, or purchasing the project bid documents or any addenda.

Bidders may contact the Snohomish County Purchasing Division, at purchasing@snoco.org with questions regarding bid content, specifications, schedule and or process.

Questions shall be submitted in writing to purchasing@snoco.org and must be received by the County no later than seven (7) calendar days prior to the due date for sealed bids.

A five percent (5%) Bid Deposit is required with the sealed bid. The Bid Deposit shall be a certified check, postal money order, cash, cashier's check, or bid bond issued by a surety who meets the requirements of Chapter 48.28 RCW on the form provided or equivalent. Deposit of unsuccessful bidders will be returned after award. Successful bidder's deposit will be returned upon receipt and acceptance of Contract Documents.

Payment of **prevailing wages** is required (see RCW 39.12).

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

Within 20 calendar days after the Award date, the successful Bidder shall return the signed Contracting Agency-prepared Contract, an insurance certification as required by Section 1-07.18, and a satisfactory bond as required by law and Section 1-03.4. Before execution of the Contract by the Contracting Agency, the successful Bidder shall provide any pre-Award information the Contracting Agency may require under Section 1-02.15 in the Special Provisions.

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

The County reserves the right, in its sole discretion, to reject Bid Responses, waive informalities and irregularities in Bid Responses, or not award Bids.

Method of Bid Award
Bid Award will be made to the lowest responsible Bidder(s). Awards will be made of all items on a lot basis, item-by-item basis, and/or entire bid basis as is in the best interest of the County.

Responsible Bidder
The County will consider all the material submitted by the Bidder, and other evidence it may obtain otherwise, to determine whether the Bidder is in compliance with the terms and conditions set forth in the Bid and deemed responsive to the Bid.

In determining the responsiveness to the Bid and responsibility of the bidder, the County may consider the ability, capacity, and skill to perform or provide the service required (inspection of the bidder's facility may be required prior to award); the character, integrity, reputation, judgment and efficiency; financial resources to perform properly and within the times specified; the quality and timeliness of performance on previous contracts with the County and other agencies.

Protests
To be considered, a Protest shall be in writing, addressed to the Purchasing Manager of Snohomish County, and include:

1. The name, address, and phone number of the Bidder protesting, or the authorized representative of the Bidder;
2. The Invitation to Bid (ITB) Number and Title under which the Protest is submitted;
3. A detailed description of the specific grounds for protest and any supporting documentation; and
4. The specific ruling or relief requested.

Specification/Scope of Work Clarification/Protests
Clarification/Protests based on specifications/scope of work may be submitted by any prospective Bidder and must be received by the County no later than seven (7) calendar days prior to the due date for submittal of Bid Responses.

Process/Award Protests
All bid submittals will be posted on the Snohomish County Purchasing Portal at: https://snoco.procureware.com/Bids the day of bid opening. Protests following the opening and posting of the Bid Responses may be submitted by any Bidder and must be in writing and received by the County Purchasing Manager within two (2) business days of Bid opening and posting. In no event shall a Protest be considered if all submittals are rejected or after award of the Bid.

Upon receipt of a timely written Protest, the Purchasing Manager shall investigate the Protest, and shall respond in writing to the Protestor prior to the award of Contract. Purchasing Manager is unable to respond to the Protestor prior to the proposed award date, the award date shall be postponed until a Protest response has been completed.

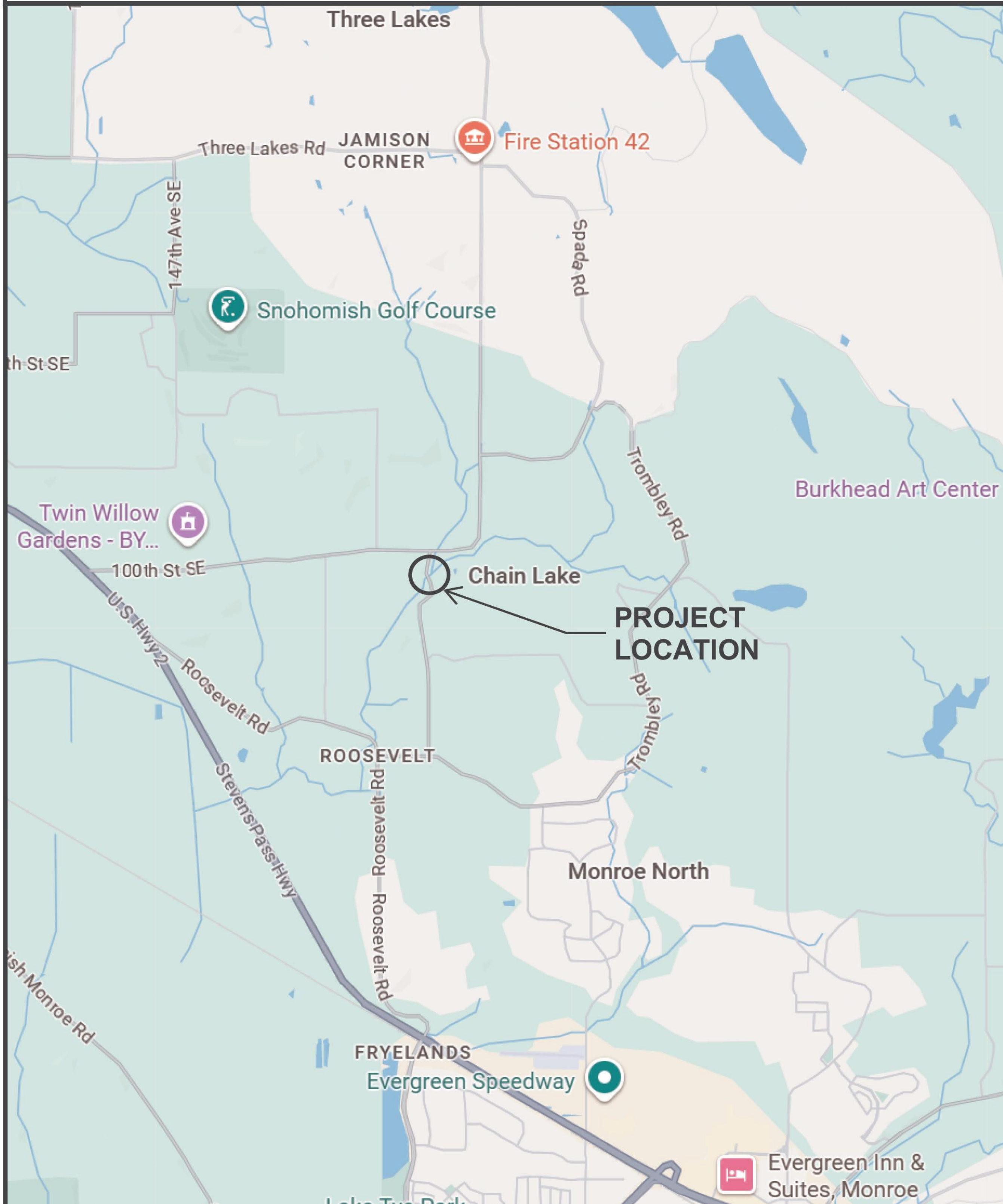
Clarifications and protests shall be sent to: Purchasing@snoco.org.

Bidders may contact the Purchasing Division to schedule a post-award review if they would like to discuss the process without submitting a Protest.

PUBLISH:
Herald: Wednesday, October 22, 2025, Thursday, October 23, 2025, and
Tuesday, October 28, 2025

Daily Journal: Wednesday, October 22, 2025, Thursday, October 23, 2025, and
Tuesday, October 28, 2025

VICINITY MAP



CULVERT REPLACEMENT NEAR 10101 167TH AVE SE
PROJECT NUMBER: RR48684, WC8684, UPI 21-0024

Snohomish County

Summary of Quantities

Project Name	RR48684, WC8684 167TH AVE SE CULVERT REPLACEMENT
Project Code	RR48684,WC8684
Estimate ID	RR48684,WC8684
Region	**10**
State	**WA**

Bid Item No.	Plan Quantity	Unit	Item Description	Std. Item No.	RR48684, GP 1, 167th Ave SE Culvert Replacement, Std Spec 1-07.2(1), Tax Location 4231	WR28684, GP 2, 167th Ave SE Water Line, Std Spec 1-07.2(1), Tax Location 4231
01. PREPARATION						
1	1.00	L.S.	MOBILIZATION	0001	1.00	
2	1.00	L.S.	CLEARING AND GRUBBING	0035	1.00	
3	1.00	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	0050	1.00	
4	139.00	S.Y.	REMOVING ASPHALT CONC. PAVEMENT	0120	139.00	
5	93.00	L.F.	REMOVING GUARDRAIL	0170	93.00	
6	10,000.00	EST.	ARCHAEOLOGICAL AND HISTORICAL SALVAGE	0038	10,000.00	
02. GRADING						
7	830.00	C.Y.	COMMON BORROW INCL. HAUL	0405	830.00	
04. DRAINAGE						
8	1,130.00	TON	STREAMBED COBBLES 8 IN.	0902	1,130.00	
9	5,421.00	EACH	STREAMBED BOULDER TYPE TWO	0907	5,421.00	
10	36.00	C.Y.	DITCH EXCAVATION INCL. HAUL	1030	36.00	
11	1,990.00	C.Y.	CHANNEL EXCAVATION INCL. HAUL	1040	1,990.00	
12	37.00	TON	LIGHT LOOSE RIPRAP	1073	37.00	
13	99.00	TON	QUARRY SPALLS	1086	99.00	
14	730.00	TON	STREAMBED SEDIMENT	1093	730.00	
15	1.00	L.S.	TEMPORARY STREAM DIVERSION	3075	1.00	
07. WATER LINES						
16	181.00	L.F.	DUCTILE IRON PIPE (RJ) FOR WATER MAIN, 8 IN. DIAM. CLASS 52	3867		181.00
17	178.00	L.F.	REMOVAL AND DISPOSAL OF EXISTING AC WATER MAIN	9999		178.00
18	2.00	EACH	CONNECTION TO EXISTING WATER MAIN, 8 IN. DIAM.	9999		2.00
08. STRUCTURE						
19	1.00	L.S.	SHORING OR EXTRA EXCAVATION CL. A	4013	1.00	
20	200.00	L.F.	BRIDGE RAILING TYPE CHAIN LINK PIPE RAIL	4410	200.00	
21	1.00	EACH	CONTRACTOR DESIGNED BURIED STRUCTURE NO. (54'W x 10'H x 64L)	9999	1.00	
09. SURFACING						
22	123.00	TON	CRUSHED SURFACING BASE COURSE	5100	123.00	
14. HOT MIX ASPHALT						
23	157.00	TON	HMA CL. 1/2 IN. PG 58H-22	5767	157.00	
24	-1.00	CALC	ASPHALT COST PRICE ADJUSTMENT	5837	-1.00	
25	-1.00	CALC	JOB MIX COMPLIANCE CREDIT	9999	-1.00	
26	-1.00	CALC	COMPACTION COMPLIANCE CREDIT	9999	-1.00	
27	-1.00	CALC	AGGREGATE COMPLIANCE CREDIT	9999	-1.00	
17. EROSION CONTROL AND ROADSIDE PLANTING						
28	3,173.00	S.Y.	TOPSOIL TYPE A	6391	3,173.00	

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PROFESSIONAL ENGINEER

Daniel D Howe

10/7/2025

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Douglas W. McCormick

Douglas W. McCormick, P.E.
Snohomish County Engineer

10/7/2025

Date Approved

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Snohomish County

Summary of Quantities

Project Name	RR48684, WC8684 167TH AVE SE CULVERT REPLACEMENT
Project Code	RR48684,WC8684
Estimate ID	RR48684,WC8684
Region	10
State	WA

Bid Item No.	Plan Quantity	Unit	Item Description	Std. Item No.	RR48684, GP 1, 167th Ave SE Culvert Replacement, Std Spec 1-07.2(1), Tax Location 4231	WR28684, GP 2, 167th Ave SE Water Line, Std Spec 1-07.2(1), Tax Location 4231
29	100.00	DAY	ESC LEAD	6403	100.00	
30	200.00	HR	STREET CLEANING	6470	200.00	
31	52.00	L.F.	GRAVEL FILTER BERM	6474	52.00	
32	91.00	L.F.	WATTLE	6479	91.00	
33	50,000.00	EST.	EROSION/WATER POLLUTION CONTROL	6490	50,000.00	
34	10,000.00	EST.	PLANTING AREA WEED CONTROL AND PREPARATION	6537	10,000.00	
35	950.00	L.F.	HIGH VISIBILITY FENCE	6630	950.00	
36	672.00	S.Y.	HYDROSEED	9999	672.00	
37	3,180.00	S.Y.	WOOD STRAND MULCH	9999	3,180.00	
38	1.00	L.S.	TEMPORARY ACCESS	9999	1.00	
18. TRAFFIC						
39	125.00	L.F.	BEAM GUARDRAIL TYPE 31 - 8 FT. LONG POST	6711	125.00	
40	19.00	L.F.	BEAM GUARDRAIL TYPE 31 - 11 FT. LONG POST	6713	19.00	
41	25.00	L.F.	BEAM GUARDRAIL TYPE 31 - 6 FT. LONG POST	6713	25.00	
42	1.00	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL	6719	1.00	
43	4.00	EACH	BEAM GUARDRAIL TYPE 31 TRANSITION SECTION TYPE 24	6760	4.00	
44	1.00	EACH	BEAM GUARDRAIL ANCHOR TYPE 11	6786	1.00	
45	50.00	L.F.	PRECAST CONC. BARRIER TYPE F ANCHORED	6789	50.00	
46	361.00	L.F.	PAINT LINE	6806	361.00	
47	1.00	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL	6971	1.00	
48	1.00	L.S.	TRAFFIC CONTROL SUPERVISOR	6974	1.00	
19. OTHER ITEMS						
49	79.00	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING	7530	79.00	
50	1.00	L.S.	SPCC PLAN	7736	1.00	
51	310.00	L.F.	DEFORMABLE GRADE CONTROL STRUCTURE	9999	310.00	
52	7.00	EACH	WOODY MATERIAL - LOG WITH ROOTWAD DBH 30 INCH	9999	7.00	
53	26.00	EACH	WOODY MATERIAL - LOG WITH ROOTWAD DBH 24 INCH	9999	26.00	
54	26.00	EACH	WOODY MATERIAL - LOG WITH ROOTWAD DBH 18 INCH	9999	26.00	
55	4.00	EACH	WOODY MATERIAL - LOG WITHOUT ROOTWAD DBH 30 INCH	9999	4.00	
56	350.00	C.Y.	SLASH	9999	350.00	
57	50,000.00	EST.	FORCE ACCOUNT	9999	50,000.00	
58	6.00	EACH	ADDITIONAL POTHOLING	9999	6.00	
59	1,000.00	L.S.	APPRENTICESHIP INCENTIVE	9999	1,000.00	
60	-1.00	CALC	APPRENTICESHIP PENALTY	9999	-1.00	
61	10,000.00	EST.	RESOLUTION OF UTILITY CONFLICTS	9999	10,000.00	
62	5,000.00	L.S.	TYPE B PROGRESS SCHEDULE	7003	5,000.00	

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10/7/2025

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CULVERT REPLACEMENT NEAR 10101 167TH AVE SE

BID NO.: PW-25-0585SB
PROJECT NO.: RR48684, WC8684, UPI 21-0024

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I
INTRODUCTION

II
SPECIAL PROVISIONS

INTRO.OptionB.APWA.FR1

INTRODUCTION TO THE SPECIAL PROVISIONS

(July 8, 2024 APWA GSP, Option B)

The work on this project shall be accomplished in accordance with the Standard Specifications for Road, Bridge and Municipal Construction, 2025 edition, as issued by the *Washington State Department of Transportation (WSDOT)* and the *American Public Works Association (APWA)*, *Washington State Chapter* (hereafter “Standard Specifications”). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

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

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

(March 8, 2013)	*WSDOT General Special Provision*
(April 1, 2013 APWA GSP)	*American Public Works Association Special Provision*
(May 1, 2013 SnoCo GSP)	*Snohomish County General Special Provision*

Project specific special provisions are labeled with a unique two-letter prefix:
Example: JV1-02.1.DT1

Also incorporated into the Contract Documents by reference are:

- *Manual on Uniform Traffic Control Devices for Streets and Highways*, currently adopted edition, with Washington State modifications, if any
- *Standard Plans for Road, Bridge and Municipal Construction,* WSDOT Manual M21 01, current edition
- *Snohomish County Engineering Design and Development Standards (EDDS)* September 17, 2021

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

DIVISION1.GR1

Division 1
General Requirements

DESWORK.GR1

DESCRIPTION OF WORK

KGDESWORK1.FR1
(March 13, 1995)
This Contract provides for the improvement of **Culvert Replacement near 10101 167th Ave SE** (Group 1), Utility Relocation for culvert replacement (Group 2) and other work, all in

accordance with the attached Contract Plans, these Contract Provisions, and the 2025 Standard Specifications.

1-01.GR1

Definition and Terms

1-01.3.APWA.GR1

(January 19, 2022 APWA GSP)

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

Dates

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

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

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

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

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

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

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

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

Supplement this Section with the following:

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

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

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

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

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

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

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

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

Contract Documents
See definition for “Contract”.

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

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

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

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

1-02.GR1
Bid Procedures and Conditions

1-02.INST1.GR1
Section 1-02 is supplemented with the following:

1-02.1.GR1

Prequalification of Bidders

1-02.1.DT1

This section including the title is deleted and replaced with the following:

Qualification of Bidders

(February 11, 2025 SnoCo GSP)

The Contracting Agency will verify that the Bidder meets the bidder responsibility criteria in RCW 39.04.350(1) and supplemental bidder criteria as established in the bid documents and allowed by RCW 39.04.350(3). In evaluating compliance with supplemental bidder criteria, the Contracting Agency will obtain references from previous projects regarding past project safety records, timeliness of contract completion, and adherence to contract requirements. To assess bidder responsibility, the Contracting Agency reserves the right to request documentation as needed from the Bidder and third parties concerning the Bidder's compliance with the bidder responsibility criteria.

As evidence that the bidder meets the criteria described above, bidders shall submit with their bid the form entitled "Statement of Bidder's Qualifications" located in the Bid Proposal package.

1-02.2.GR1

Plans and Specifications

1-02.2.DT1

Section 1-02.2 is deleted in its entirety and replaced with the following:

(May 20, 2020 SnoCo GSP)

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

After award of the Contract, the Contracting Agency will provide three sets of all Addenda, three reduced sets of Plans (11" x 17"), and three sets of Special Provisions including the Summary of Quantities. These copies will be available for pick up through the Engineer.

It is the responsibility of the Contractor to obtain any additional copies, at its own expense, of the Plans, Specifications, and Summary of Quantities needed in the field from Snohomish County Projects online virtual plan room of Builders Exchange of Washington (www.bxwa.com).

1-02.5.GR1

Proposal Forms

1-02.5.DT1

The first paragraph of Section 1-02.5 is deleted in its entirety and replaced with the following:

(August 11, 2022 SnoCo GSP)

It is the responsibility of the bidder to acquire the Proposal form from the Snohomish County Projects online virtual plan room at Builders Exchange of Washington (www.bxwa.com).

The first two sentences of the second paragraph of Section 1-02.5 are revised to read as follows:

(August 11, 2022 SnoCo GSP)
The proposal form will identify the project. It will also list estimated quantities, units of measurement, and the items of work.

1-02.6.GR1
Preparation of Proposal

1-02.6.OptionC.APWA.GR1
Subcontractor's List

(June 11, 2025 APWA GSP 1-02.6, Option C)
The fourth paragraph of Section 1-02.6 is revised to read:

The Bidder shall submit with the Bid the completed Subcontractor List included in the Contracting Agency Proposal Package. If a Subcontractor List Form is not included in the package, use DOT Form 271-015LP. The Form shall contain the following:

1. Subcontractors who will perform the work of structural steel installation, rebar installation, heating, ventilation, air conditioning, and plumbing as described in RCW 18.106 and electrical as described in RCW 19.28;

2. The Work those subcontractors will perform on the Contract and the proof of license when required as described in RCW 39.30.060; and

3. No more than one subcontractor for each category of work identified, except when subcontractors vary with Bid alternates, in which case the Bidder shall identify which subcontractor will be used for which alternate.

1-02.6(1).GR1
Recycled Materials

1-02.6(1).APWA.GR1
Add the following new section:

(January 4, 2016 APWA GSP)
Recycled Materials Proposal

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

1-02.10.GR1
Withdrawal or Revision of Proposal

1-02.10.APWA.GR1
(July 23, 2015 APWA GSP)
Delete this section, and replace it with the following:

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

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

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

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

1-02.13.GR1

Irregular Proposals

1-02.13.APWA.GR1
(September 3, 2024 APWA GSP)
Delete this section and replace it with the following:

1. A Proposal will be considered irregular and will be rejected if:
   a. The Bidder is not prequalified when so required;
   b. The Bidder adds provisions reserving the right to reject or accept the Award, or enter into the Contract;
   c. A price per unit cannot be determined from the Bid Proposal;
   d. The Proposal form is not properly executed;
   e. The Bidder fails to submit or properly complete a subcontractor list (WSDOT Form 271-015), if applicable, as required in Section 1-02.6;
   f. The Bidder fails to submit or properly complete a Disadvantaged Business Enterprise Certification (WSDOT Form 272-056), if applicable, as required in Section 1-02.6;
   g. The Bidder fails to submit Written Confirmations (WSDOT Form 422-031) from each DBE firm listed on the Bidder's completed DBE Utilization Certification that they are in agreement with the bidder's DBE participation commitment, if applicable, as required in Section 1-02.6, or if the written confirmation that is submitted fails to meet the requirements of the Special Provisions;
   h. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to demonstrate that a Good Faith Effort to meet the Condition of Award in accordance with Section 1-07.11;
   i. The Bidder fails to submit a DBE Bid Item Breakdown (WSDOT Form 272-054), if applicable, as required in Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions;

Addendum #1

j. The Bidder fails to submit the Bidder Questionnaire (DOT Form 272-022), if applicable as required by Section 1-02.6, or if the documentation that is submitted fails to meet the requirements of the Special Provisions; or

k. The Bid Proposal does not constitute a definite and unqualified offer to meet the material terms of the Bid invitation.

2. A Proposal may be considered irregular and may be rejected if:
   a. The Proposal does not include a unit price for every Bid item;
   b. Any of the unit prices are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
   c. The authorized Proposal Form furnished by the Contracting Agency is not used or is altered;
   d. The completed Proposal form contains unauthorized additions, deletions, alternate Bids, or conditions;
   e. Receipt of Addenda is not acknowledged;
   f. A member of a joint venture or partnership and the joint venture or partnership submit Proposals for the same project (in such an instance, both Bids may be rejected); or
   g. If Proposal form entries are not made in ink.

1-02.14.GR1

Disqualification of Bidders

1-02.14.OPT2.DT1
(April 13, 2022 SnoCo GSP)
(Section 1-02.14 is supplemented with the following:

The following new paragraphs are inserted after the last paragraph.

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

The Contracting Agency may determine the Bidder is not a responsible Bidder if The Bidder failed to meet the apprenticeship requirements on any County project during the two-year period immediately preceding the date of the bid solicitation.

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

1-03.GR1

Award and Execution of Contract

1-03.1.GR1

Consideration of Bids

1-03.1(1).GR1

Identical Bid Totals

1-03.1(1).APWA.GR1
(December 30, 2022 APWA GSP)
Revise this section to read:

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

1-03.1(1).GR1

Identical Bid Totals

1-03.3.GR1

Execution Of Contract

1-03.3.OPT1.DT1
Section 1-03.3 is revised to read as follows:

(August 13, 2024 SnoCo GSP)
Within 20 calendar days after the award date, the successful bidder shall return the signed Contracting Agency-prepared contract, an insurance certification as required by Section 1-07.18, a satisfactory bond as required by law and Section 1-03.4 and shall be registered as a Contractor in the State of Washington.

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

1-03.5.GR1

Failure to Execute Contract

1-03.5.OPT1.DT1

The first sentence of Section 1-03.5 is revised to read as follows:

(December 17, 2024 SnoCo GSP)

Failure to return the insurance certification and bond with the signed Contract as required in Section 1-03.3, or failure to provide Disadvantaged, Minority or Women's Business Enterprises information if required in the Contract, or failure or refusal to sign the Contract, or failure to register as a Contractor in the State of Washington shall result in forfeiture of the proposal bond or deposit of this Bidder.

1-04.GR1

Scope of the Work

1-04.4.GR1

Changes

1-04.4(1).GR1

Minor Changes

1-04.4(1).INST1.GR1

Section 1-04.4(1)) is supplemented with the following:

(December 22, 2020):

1-04.4(1).OPT1.DT1

(March 19, 2025 SnoCo GSP)

The "Minor Field Changes" item compensates the Contractor for added work resulting from field corrections or adjustments directed by the Engineer due to existing site conditions or minor design changes identified during construction and not covered by other bid items in the Proposal.

"Minor Field Changes" shall be paid in accordance with Section 1-09.6.

For the purpose of providing a common Proposal for all Bidders, the Contracting Agency has entered an amount in the Proposal to become part of the total Bid by the Contractor.

1-05.GR1

Control of Work

1-05.1.GR1

Authority of the Engineer

1-05.1(2).GR1

Requests for Information (RFI)

1-05.1(2).INST1.GR1

The fourth paragraph of Section 1-05.1(2) is revised to read:

1-05.1(2).OPT1.2026.GR1

(November 4, 2024)

The Contractor may submit a RFI for one of the following reasons:

1. The Contractor believes there is information missing from the Contract Documents (Missing Information).

2. The Contractor believes a clarification of one or more of the Contract requirements is necessary (Clarification).

3. The Contractor needs to substitute a material that provides an equal or better level of performance as the one specified in the Contract (RFC - Material Substitution). Requests shall indicate the location(s), quantity, and shall describe how the material provides an equal or better level of performance as the material originally specified.

4. The Contractor requests a change to the Contract requirements for a reason other than one listed in items 1-3 of this Section (RFC - Other). To be considered, the request must not meet the requirements of a Value Engineering Change Proposal. To be considered, the request shall qualify as a Minor Change in accordance with Section 1-04.4(1) and shall describe how the change is beneficial to the project.

1-06.GR1

Control of Material

1-06.1.GR1

Approval of Materials Prior to Use

1-06.1.INST1.GR1

Section 1-06.1 is supplemented with the following:

1-06.1(2).GR1

Request for Approval of Material (RAM)

1-06.1(2).DT1

The first paragraph of Section 1-06.1(2) is revised to read as follows:

(December 17, 2024)
All items, including QPL items, shall be subject to approval through the process of filing a Request for Approval of Material Source (RAMS). The RAMS shall be prepared by the Contractor in accordance with the instructions on the form provided by the Contracting Agency (also available on-line under "Helpful Forms & Links at: http://www.snohomishcountywa.gov/205/Engineering-Services) submitted to the Engineer and approved before the material is incorporated into the Work.

1-06.6.GR1

Recycled Materials

1-06.6.APWA.GR1

(January 4, 2016 APWA GSP)

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

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

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

1-07.GR1

Legal Relations and Responsibilities to the Public

1-07.5.GR1

Environmental Regulations

1-07.5.INST1.GR1

Section 1-07.5 is supplemented with the following:

1-07.5.OPT1.GR1

(September 20, 2010)

Environmental Commitments

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

KG1-07.5.OPT1(A).FR1

(June 26, 2025 SnoCo GSP)

The Contractor shall submit a written notification to the Engineer no later than 10 calendar days prior to beginning any ground disturbing activities including channel excavation to allow for archaeological monitoring. The Contractor shall not commence any such ground disturbing activities until the monitor is present.

1-07.5.OPT2.GR1

(August 3, 2009)

Payment

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

1-07.5(2).GR1

State Department of Fish And Wildlife

1-07.5(2).INST1.GR1

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

1-07.5(2).OPT1.GR1

(April 2, 2018)

The following Provisions summarize the requirements, in addition to those required elsewhere in the Contract, imposed upon the Contracting Agency by the Washington State Department of Fish and Wildlife. Throughout the work, the Contractor shall comply with the following requirements:

KG1-07.5(2).OPT1(A).FR1

(June 26, 2025 SnoCo GSP)

The Contractor may begin Work below the Ordinary High Water Line on **July 16** and must complete all the Work by **September 15**.

1-07.5(2).OPT2.GR1

(April 2, 2018)

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

1-07.5(3).GR1

State Department of Ecology

1-07.5(3).DT1

(October 5, 2018 SnoCo GSP)

In Section 1-07.5(3) item numbers 6, 7, 8 and 9 are deleted.

1-07.5(5).GR1

U.S. Army Corps of Engineers

1-07.5(5).INST1.GR1

Section 1-07.5(5) is supplemented with the following:

1-07.5(5).OPT1.GR1

(April 2, 2018)

The following Provisions summarize the requirements, in addition to those required elsewhere in the Contract, imposed upon the Contracting Agency by the U.S. Army Corps of Engineers. Throughout the work, the Contractor shall comply with the following requirements:

KG1-07.5(5).OPT1(B).FR1

(June 26, 2025 SnoCo GSP)

Temporary fills within wetlands must be removed by September 15th, 2026. Any temporary fills within wetlands beyond this date require approval by the Engineer. Requests to extend must be received a minimum of 45 days prior to the expiration of number of days listed above, since the extension is subject to concurrence by the U.S. Army Corps of Engineers.

1-07.5(5).OPT1(C).GR1

(February 25, 2013)

Temporary structures and dewatering of areas under the jurisdiction of the U.S. Army Corps of Engineers must maintain normal downstream flows and prevent upstream and downstream flooding to the maximum extent practicable.

1-07.5(5).OPT1(D).GR1

(August 3, 2009)

Heavy equipment working in wetlands or mudflats must be placed on mats or other measures taken to minimize soil disturbance as approved by the Engineer.

1-07.5(5).OPT2.GR1

(April 2, 2018)

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

1-07.6.GR1

Permits and Licenses

KG1-07.6.OPT1.DT1
(June 26, 2025 SnoCo GSP)
Section 1-07.6 is supplemented with the following:

All costs to obtain and comply with these and any additional permits shall be included in the applicable Bid items for the Work involved:

Hydraulic Project Approval (HPA)
The Contracting Agency has obtained a Hydraulic Project Approval (HPA) for this project. All contacts with the Washington Department of Fish and Wildlife concerning this approval shall be through the Engineer. A copy of the permit is included in Appendix "**B**". The Contractor shall, at no expense to the Contracting Agency, comply with all requirements of the State of Washington in the construction of this project and shall secure additional permits as are necessary.

Timing Limitations
All in-water work shall be conducted between **July 16** and **September 15**.

Corps of Engineers Permit
The Contracting Agency has obtained a Corps of Engineers permit for this project (Permit Number NWS-2025-349-WRD). All contacts with the Corps of Engineers concerning this permit shall be through the Engineer. A copy of the permit is located in Appendix "**B**". The Contractor shall, at no expense to the Contracting Agency, comply with all requirements of the Corps of Engineers in the construction of this project and shall secure additional permits as are necessary.

Snohomish County Drainage and Land Disturbing Activity (LDA) Compliance
The Contracting Agency has demonstrated compliance with Snohomish County Drainage and LDA codes for this project and has issued a Certificate of Compliance. All contacts with Snohomish County concerning the Drainage and LDA Certificate of Compliance shall be through the Engineer. A copy of the Certificate of Compliance is located in Appendix "**B**". The Contractor shall, at no expense to the Contracting Agency, comply with all requirements of Snohomish County in the construction of this project and shall secure additional permits as are necessary.

National Pollutant Discharge Elimination System (NPDES)
The Contracting Agency has obtained a National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit: No. **WAR314744**, effective date **August 22, 2025**.

Stormwater Pollution Prevention Plan (SWPPP)
Work on this project is governed by the requirements of SCC 30.63A. SWPPP requirements are documented in the narrative portion of the SWPPP. The full text of this document is provided in Appendix "**C**".

1-07.8.GR1

High-Visibility Apparel

1-07.8.INST1.GR1

The third and fourth paragraphs of Section 1-07.8 are revised to read

1-07.8.OPT1.2026.GR1

(November 4, 2024)

High-visibility garments shall always be the outermost garments worn in a manner to ensure 360 degrees of uninterrupted background and retroreflective material encircling the torso.

High-visibility garments shall be labeled as, and in a condition compliant with the ANSI/ISEA 107-2015 publication entitled "American National Standard for High-Visibility Safety Apparel and Accessories," or equivalent revisions.

1-07.8(1).GR1

Traffic Control Personnel

1-07.8(1).INST1.GR1

Section 1-07.8(1) is revised to read:

1-07.8(1).OPT1.2026.GR1

(November 4, 2024)

All personnel performing the Work described in Section 1-10 (including traffic control supervisors, flaggers, and others performing traffic control labor of any kind) shall comply with the following:

1. During daylight hours with clear visibility, workers shall wear a high-visibility ANSI/ISEA 107 Type R Class 2 or 3 garment with background material that are fluorescent yellow-green, fluorescent orange-red, or fluorescent red in color; and a high visibility hardhat that is white, yellow, yellow-green, orange, or red in color; and

2. During hours of darkness (½ hour before sunset to ½ hour after sunrise) or other low-visibility conditions (snow, fog, etc.), workers shall wear a high-visibility ANSI/ISEA 107 Type R Class 2 or 3 garment with background material that are fluorescent yellow-green, fluorescent orange-red, or fluorescent red in color; a high-visibility lower garment meeting ANSI/ISEA 107 Class E, and a high visibility hardhat marked with at least 12 square inches of retroreflective material applied to provide 360 degrees of visibility.

1-07.9.GR1

Wages

1-07.9(3).GR1

Apprentices

1-07.9(3).INST1.GR1

Section 1-07.9(3) is supplemented with the following:

1-07.9(3)A.DT1

(January 7, 2025 SnoCo GSP)
In accordance with chapter 3.05 SCC, the apprenticeship utilization participation for this project is fifteen percent (15%) of total project labor hours. With the submission of a signed bid, the Bidder acknowledges that they shall comply with the project's established Apprentice Utilization participation. Apprentice Utilization will be determined using the Department of Labor and Industries (L&I) online Prevailing Wage Intent & Affidavit (PWIA) system.

Definitions

For this specification, the following definitions apply:

1. Apprentice means a person who has signed a written apprenticeship agreement with, and enrolled in, an active registered apprenticeship program approved by the Washington State Apprenticeship and Training Council.

2. Apprentice Utilization means the total number of labor hours performed by prime and subcontractor apprentices divided by the total number of labor hours performed by all hourly labor (apprentice and journey) at the job site, expressed as a percentage. The denominator shall not include hours spent by contractor/subcontractor personnel not directly involved in the work at the job site and shall not include hours spent by personnel at the site that are not paid prevailing wages, such as owners and superintendents.

3. Apprenticeship Utilization Plan means a plan submitted by a prospective bidder specifically detailing verifiable efforts to meet the apprenticeship utilization Goal.

4. Apprentice Utilization Goal means the minimum percentage of labor hours required to be performed by apprentices on a county public works project.

5. Labor Hours refers to the total number of hours worked by workers receiving an hourly wage who are directly employed by the contractor and all subcontractors on a county public works project. As defined by RCW 39.04.310, "Labor Hours" does not include hours worked by foremen, superintendents, owners and workers who are not subject to prevailing wage requirements. Labor Hours are determined based on the scope of work performed by the individuals, rather than the title of their occupations in accordance with WAC 296-127.

6. Registered Apprenticeship Program means an apprenticeship program that is approved by the Washington State Apprenticeship and Training Council. Registered apprenticeship programs may include both union and non-union programs.

Administration

The Contractor shall submit an Apprentice Utilization Plan prior to contract execution that reflects its plan to meet the 15% labor hour goal. An electronic copy of the Apprentice Utilization Plan Form is available on the County's website at:
https://www.snohomishcountywa.gov/2361/Apprenticeship.

Contractors shall update their Apprentice Utilization Plan throughout the project if changes are needed to meet the labor hour goal. Failure to meet the Apprenticeship Utilization Goal may be deemed a breach of contract and may result in the Contractor being found non-responsive in future Snohomish County bids, in accordance with SCC 3.05.070.

Per RCW 49.04.130 the Contractor and all Subcontractors shall make every effort to enlist women and racial minority representation in their apprenticeship programs. However, this provision is not intended and shall not be used to discriminate against any applicant to an apprenticeship program, whether that person is a minority, woman, veteran, or otherwise.

Contacts

The Contractor may obtain information on Registered Apprenticeship Programs by using the Apprentice Registration and Tracking System (ARTS) https://secure.lni.wa.gov/arts-public/#/program-search or by contacting the Department of Labor and Industries directly at:

Specialty Compliance and Services Division, Apprenticeship Section, P.O. Box 44530, Olympia, WA 98504-4530 or by phone at (360) 902-5320.

Compliance

The Contractor is expected to make attempts to employ Apprentices and shall implement a plan to meet the Apprentice Utilization Goal. In the event that the Contractor is unable to meet apprenticeship requirements, the County will issue a penalty, as noted below under “Payment” and “Apprenticeship Penalty”. Additionally, per SCC 3.05.030: Bids for construction projects that are subject to apprentice requirements as described in this chapter shall include supplemental bidder responsibility criteria pertaining to apprentice requirements in the bid document that allow the purchasing manager to find a bidder non-responsive if the bidder fails to meet the apprenticeship requirements on any project during the two-year period immediately preceding the date of the bid solicitation.

If the Contractor achieves the Apprentice Utilization Goal an incentive will be added to the final payment.

Payment

Payment will be made for the following Bid Items:

“Apprenticeship Incentive”, Lump Sum
An incentive of 1,000.00 will be added to the final payment for Contractors who meet the Apprentice Utilization Goal, as defined in the original bid documents. To provide a common proposal for all bidders, the County has entered an amount in the proposal to become a part of the total bid by the Contractor.

“Apprenticeship Penalty”, by calculation.
A “penalty assessment” will be applied to every hour of shortfall of the minimum required apprentice hours, as shown in the Apprenticeship Utilization data reported through the MySecure L&I webpage, using the applicable published rate of a step-1 apprentice laborer. The penalty assessment will be applied against the final payment to the Contractors. If the final payment amount is less than the penalty assessment the County

will invoice the Contractor for the remaining penalty amount. The County will not request approval to release Retainage or Performance Bon from the Department of Revenue, Department of Labor and Industries, and Employment Security Department until the penalty has been satisfied in full. Under no circumstances will the total penalty assessment exceed five percent (5%) of the total contract sum.

For the purpose of providing a common proposal for all bidders, the County has entered an amount in the proposal to become a part of the total bid by the Contractor.

The Contractor shall include all related costs in the unit Bid prices of the Contract, including but not limited to implementing, developing, documenting, and administering an Apprenticeship Utilization program, recording and reporting hours, and all other costs to comply with this provision.

Reporting

The Contractor shall submit, on a monthly basis throughout the term of the contract, Apprenticeship Utilization data through the MySecure L&I webpage. The data reported shall include all labor and apprentice hours for the Contractor and all Subcontractors. The Contractor shall update the Apprentice Utilization data within the MySecure L&I system for the prior month within ten (10) business days following the first of the month. (For example, Contractor's Apprentice Utilization data for February is due 10 business days into March.)

Contractors shall include a revised apprentice utilization plan when changed conditions or circumstances affect the method or schedule of the contractor's previously submitted plan to meet the Apprentice Utilization Goal. Failure to meet targets of the applicable apprentice utilization plan may be deemed a breach of contract under SCC 3.05.070.

Failure to submit the required data as stated above may delay approval and processing of the progress payment or result in the withholding of payments. Regardless of the number of days allowed for completion of the project, the Contractor shall monitor the apprenticeship Labor Hours and shall monitor compliance with the project's established Apprenticeship Utilization Goal.

1-07.9(5).GR1

Required Documents

1-07.9(5)A.GR1

General

1-07.9(5)A.APWA.GR1
(July 8, 2024 APWA GSP)

This section is revised to read as follows:

All Statements of Intent to Pay Prevailing Wages, Affidavits of Wages Paid and Certified Payrolls, including a signed Statement of Compliance for Federal-aid projects, shall be submitted to the Engineer and to the State L&I online Prevailing Wage Intent & Affidavit (PWIA) system. When apprenticeship is a requirement of the contract, include in PWIA all apprentices.

1-07.11.GR1

Requirements for Nondiscrimination

1-07.11.DT1

Section 1-07.11 is supplemented with the following:

(March 26, 2012 SnoCo GSP)

As a condition of Contract Award, the Contractor selected under this competitive solicitation process shall be required to comply with the Snohomish County Human Rights Ordinance, Chapter 2.460 SCC. The Contract between the County and the Contractor will contain the following provision:

Non-discrimination. It is the policy of the County to reject discrimination which denies equal treatment to any individual because of his or her race, creed, color, national origin, families with children, sex, marital status, sexual orientation, age, honorably discharged veteran or military status, or the presence of any sensory, mental, or physical disability, or the use of a trained dog guide or service animal by a person with a disability, as provided in Washington's Law against Discrimination, Chapter 49.60 RCW, and the Snohomish County Human Rights Ordinance, Chapter 2.460 SCC. These laws protect against specific forms of discrimination in employment, credit transactions, public accommodation, housing, County facilities and services, and County contracts.

The Contractor shall comply with the substantive requirements of Chapter 2.460 SCC, which are incorporated herein by this reference. Execution of this Contract constitutes a certification by the Contractor of the Contractor's compliance with the requirements of Chapter 2.460 SCC. If the Contractor is found to have violated this provision, or to have furnished false or misleading information in an investigation or proceeding conducted pursuant to this Contract or Chapter 2.460 SCC, this Contract may be subject to a declaration of default and termination at the County's discretion. This provision shall not supersede the Contractor's obligations under other federal, state, or local laws against discrimination.

1-07.14.GR1

Responsibility for Damage

1-07.14.OPT1.DT1

Section 1-07.14, paragraph 9, the first sentence is revised to read as follows:

(February 14, 2020 SnoCo GSP)

"Within 60 calendar days following the date a claim is sent by the Contracting Agency to the Contractor, the Contractor shall notify the Claimant and Snohomish County Public Works Office, 3000 Rockefeller Ave, M/S 607, Everett, WA 98201.

1-07.16.GR1

Protection and Restoration of Property

1-07.16(2).GR1

Vegetation Protection and Restoration

1-07.16(2).INST1.GR1

Section 1-07.16(2) is supplemented with the following:

1-07.16(2).OPT1.GR1

(August 2, 2010)

Vegetation and soil protection zones for trees shall extend out from the trunk to a distance of 1 foot radius for each inch of trunk diameter at breast height.

Vegetation and soil protection zones for shrubs shall extend out from the stems at ground level to twice the radius of the shrub.

Vegetation and soil protection zones for herbaceous vegetation shall extend to encompass the diameter of the plant as measured from the outer edge of the plant.

1-07.16(4).GR1

Archaeological and Historical Objects

1-07.16(4).INST1.GR1

Section 1-07.16(4) is supplemented with the following:

1-07.16(4).OPT1.GR1

(December 6, 2004)

The project area potentially contains archaeological or historical objects that may have significance from a historical or scientific standpoint. To protect these objects from damage or destruction, the Contracting Agency, at its discretion and expense, may monitor the Contractor's operations, conduct various site testing and perform recovery and removal of such objects when necessary.

The Contractor may be required to conduct its operations in a manner that will accommodate such activities, including the reserving of portions of the work area for site testing, exploratory operations and recovery and removal of such objects as directed by the Engineer. If such activities are performed by consultants retained by the Contracting Agency, the Contractor shall provide them adequate access to the project site.

Added work necessary to uncover, fence, dewater, or otherwise protect or assist in such testing, exploratory operations and salvaging of the objects as ordered by the Engineer shall be paid by force account as provided in Section 1-09.6. If the discovery and salvaging activities require the Engineer to suspend the Contractor's work, any adjustment in time will be determined by the Engineer pursuant to Section 1-08.8.

To provide a common basis for all bidders, the Contracting Agency has entered an amount for the item "Archaeological and Historical Salvage" in the Proposal to become a part of the total bid by the Contractor.

KG1-07.16(4).OPT2.DT1

(June 26, 2025 SnoCo GSP)

An Inadvertent Discovery Plan is included in Appendix "**E**".

1-07.17.GR1

Utilities and Similar Facilities

1-07.17.SA1.DT1

Section 1-07.17 is supplemented with the following:

(October 30, 2018 SnoCo GSP)

Potholing

Description

The Contractor shall pothole utilities, as designated by the Engineer, to determine the horizontal and vertical location of existing utilities and identify conflicting Structures in advance of the Contractor's operations.

Construction Requirements

The Contractor shall pothole and measure the vertical and horizontal position of utilities and provide the Contracting Agency with copies of all measurements. Previous potholing in advance of Bidding shall not relieve the Contractor of its potholing obligations hereunder. The Contractor shall pothole a minimum of six (6) working days in advance of excavation Work to be performed in the area of the pothole, immediately notify the Engineer of any potential conflicts and provide the Contracting Agency with copies of all measurements. Potholing shall be accomplished using methods that will avoid damage to the buried utilities. Backfill shall be as designated by the Engineer.

This item of Work is intended for the sole use of the Engineer for managing adjustments to new underground facilities (for example: drainage, conduits, signal poles). This item shall not modify or apply to the responsibilities listed in Section 1-07.17 or relieve the Contractor of these responsibilities.

Resolution of Utility Conflicts

This shall cover extra Work required to complete the construction of new facilities resulting from changes required by the Engineer due to direct conflicts with existing utilities that are not shown in the Plans and discovered during construction.

The Contractor shall notify the Engineer when conflicts are encountered with the existing utilities that effect the installation of the Contract Work shown in the Plans. The Engineer will coordinate with the Contractor and the utility owner to resolve the conflicts in the field.

Measurement

Potholing will be measured per each.

Payment

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

> "Potholing", per each.
>
> The unit Contract price per each for "Potholing" shall be full compensation for all labor, materials, tools, and equipment required to complete each pothole including excavation, location, documentation, backfill, and restoration.
>
> Where two or more utilities are located within one trench as defined by a separation of 2 feet or less, the Contractor shall be paid for one pothole. Where multiple utilities are located in close proximity, the Contractor shall be paid for one pothole for every 4 feet of trench excavation.

"Resolution of Utility Conflicts" shall be paid by force account in accordance with Section 1-09.6.

KG1-07.17.OPT1.DT1
Section 1-07.17 is supplemented with the following:

(June 26, 2025 SnoCo GSP)
Locations and dimensions shown in the Plans for existing facilities are in accordance with available information obtained without uncovering, measuring, or other verification.

Public and private utilities, or their contractors, will furnish all work necessary to adjust, relocate, replace, or construct their facilities unless otherwise provided for in the Plans or these Special Provisions. Such adjustment, relocation, replacement, or construction will be done during the prosecution of the work for this project.

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

Roosevelt Water Association Janelle MacDicken, Manager 360.568.3450 janelle@rooseveltwater.com	Astound 4786 1st Ave S Suite 101 Seattle, WA 98134 Oscar Palucha oscar.palucha@astound.com
Snohomish County PUD No. 1 (Power) 1802 75th ST SW PO Box 1107, MS #02 Everett, WA 98206 Contact: Andy Tran O: 425-783-8262 C: 425-359-1123 axtran@snopud.com	Ziply Fiber 1800 41st ST Everett, WA 98206 Contact: Shane Newton 360-322-2329 shane.newton1@ziply.com

1-07.18.GR1
Public Liability and Property Damage Insurance

1-07.18(5).GR1
Required Insurance Policies

KG1-07.18.APWA.FR1
(January 4, 2024 APWA GSP)
Delete this section in its entirety, and replace it with the following:

Insurance

1-07.18(1) General Requirements
A. The Contractor shall procure and maintain the insurance described in all subsections of section 1-07.18 of these Special Provisions, from insurers with a current A. M. Best

rating of not less than A-: VII and licensed to do business in the State of Washington. The Contracting Agency reserves the right to approve or reject the insurance provided, based on the insurer's financial condition.

B. The Contractor shall keep this insurance in force without interruption from the commencement of the Contractor's Work through the term of the Contract and for thirty (30) days after the Physical Completion date, unless otherwise indicated below.

C. If any insurance policy is written on a claims-made form, its retroactive date, and that of all subsequent renewals, shall be no later than the effective date of this Contract. The policy shall state that coverage is claims made and state the retroactive date. Claims-made form coverage shall be maintained by the Contractor for a minimum of 36 months following the Completion Date or earlier termination of this Contract, and the Contractor shall annually provide the Contracting Agency with proof of renewal. If renewal of the claims made form of coverage becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended reporting period ("tail") or execute another form of guarantee acceptable to the Contracting Agency to assure financial responsibility for liability for services performed.

D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella Liability insurance policies shall be primary and non-contributory insurance as respects the Contracting Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance, self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be excess of the Contractor's insurance and shall not contribute with it.

E. The Contractor shall provide the Contracting Agency and all additional insureds with written notice of any policy cancellation, within two business days of their receipt of such notice.

F. The Contractor shall not begin work under the Contract until the required insurance has been obtained and approved by the Contracting Agency

G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a material breach of contract, upon which the Contracting Agency may, after giving five business days' notice to the Contractor to correct the breach, immediately terminate the Contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the Contracting Agency on demand, or at the sole discretion of the Contracting Agency, offset against funds due the Contractor from the Contracting Agency.

H. All costs for insurance shall be incidental to and included in the unit or lump sum prices of the Contract and no additional payment will be made.

I. Under no circumstances shall a wrap up policy be obtained, for either initiating or maintaining coverage, to satisfy insurance requirements for any policy required under this Section. A "wrap up policy" is defined as an insurance agreement or arrangement under which all the parties working on a specified or designated project are insured under one policy for liability arising out of that specified or designated project.

1-07.18(2) Additional Insured

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

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

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

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

1-07.18(3) Subcontractors

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

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

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

1-07.18(4) Verification of Coverage

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

Verification of coverage shall include:

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

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

1-07.18(5) Coverages and Limits

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

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

1-07.18(5)A Commercial General Liability

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

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

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

Such policy must provide the following minimum limits:

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

1-07.18(5)B Automobile Liability

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

Such policy must provide the following minimum limit:

$1,000,000	Combined single limit each accident

1-07.18(5)C Workers' Compensation

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

1-07.23.GR1
Public Convenience and Safety

1-08.GR1
Prosecution and Progress

1-08.3.GR1
Progress Schedule

1-08.3(2).GR1
General Requirements

KG1-08.3(2)B.APWA.FR1
Type B Progress Schedule
(January 4, 2024 APWA GSP)

Revise the first paragraph to read:

> The Contractor shall submit a preliminary Type B Progress Schedule at or prior to the preconstruction conference. The preliminary Type B Progress Schedule shall comply with all of these requirements and the requirements of Section 1-08.3(2), except that it may be limited to only those activities occurring within the first 60-working days of the project.

Revise the first sentence of the second paragraph to read:

> The Contractor shall submit **a digital copy** of a Type B Progress Schedule depicting the entire project no later than 21-calendar days after the preconstruction conference.

1-08.5.GR1
Time for Completion

1-08.5.DT1
(September 9, 2018 SnoCo GSP)
In Section 1-08.5 paragraph six, under Item number 2 letter f is deleted.

1-08.5.INST2.GR1
Section 1-08.5 is supplemented with the following:

KG1-08.5.OPT7.FR1
(September 16, 2025 SnoCo. GSP)
This project shall be physically completed within *** **120***** working days.

1-08.6.GR1
Suspension of Work

1-08.6.INST1.GR1
Section 1-08.6 is supplemented with the following:

KG1-08.6.OPT2.FR1

(June 26, 2025 SnoCo GSP)

Contract time may be suspended for procurement of critical materials (Procurement Suspension). In order to receive a Procurement Suspension, the Contractor shall within 21 calendar days after execution by the Contracting Agency, place purchase orders for all materials deemed critical by the Contracting Agency for physical completion of the contract. The Contractor shall provide copies of purchase orders for the critical materials. Such purchase orders shall disclose the purchase order date and estimated delivery dates for such critical material.

The Contractor shall show procurement of the materials listed below as activities in the Progress Schedule. If the approved Progress Schedule indicates that the materials procurement are critical activities, and if the Contractor has provided documentation that purchase orders are placed for the critical materials within the prescribed 21 calendar days, then contract time will be suspended upon physical completion of all critical work except that work dependent upon the below listed critical materials:

Contractor designed buried structure

Charging of contract time will resume upon delivery of the critical materials to the Contractor or *** **120** *** calendar days after execution by the Contracting Agency, whichever occurs first.

1-08.7.GR1

Maintenance During Suspension

1-08.7.DT1

The fifth paragraph of Section 1-08.7 is revised to read:

(February 7, 2025 SnoCo GSP)

The Contractor shall protect and maintain all other work in areas within the project limits not used by traffic. All costs associated with protecting and maintaining such work shall be the responsibility of the Contractor except those costs associated with implementing the TESC plan according to Section 8-01.

1-08.9.GR1

Liquidated Damages

KG1-08.9.OptionA.APWA.FR1

(March 3, 2021 APWA GSP, Option A)

Replace Section 1-08.9 with the following:

Time is of the essence of the Contract. Delays inconvenience the traveling public, obstruct traffic, interfere with and delay commerce, and increase risk to Highway users. Delays also cost tax payers undue sums of money, adding time needed for administration, engineering, inspection, and supervision.

Accordingly, the Contractor agrees:

1. To pay liquidated damages in the amount of *** **$2,950***** for each working day beyond the number of working days established for Physical Completion, and

2. To authorize the Engineer to deduct these liquidated damages from any money due or coming due to the Contractor.

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

Liquidated damages will not be assessed for any days for which an extension of time is granted. No deduction or payment of liquidated damages will, in any degree, release the Contractor from further obligations and liabilities to complete the entire Contract.

1-09.GR1

Measurement and Payment

1-09.6.GR1

Force Account

1-09.6.OPT1.DT1

(February 8, 2024 SnoCo GSP)

Section 1-09.6 is supplemented with the following:

Prior to performing force account work, the Contractor shall submit to the Engineer an equipment list containing pertinent information as to the type of equipment to be used, i.e., make, model, year, horse-power, serial numbers, optional attachments, capacity, etc.

No force account work shall commence without the prior approval of the Engineer and will only be performed at the direction of the Engineer.

1-09.6.APWA.GR1

(December 30, 2022 APWA GSP)

Supplement this section with the following:

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

1-10.GR1

Temporary Traffic Control

1-10.2.GR1

Traffic Control Management

1-10.2.INST1.GR1

Section 1-10.2 is supplemented with the following:

1-10.2.OPT1.GR1

(November 2, 2022)

Work Zone Safety Contingency

Enhancements to improve the effectiveness of the accepted traffic control plans to increase the safety of the work zones shall be discussed on a weekly basis between the Contractor and the Contracting Agency. Enhancements shall be mutually agreed upon by the Contractor and Engineer prior to performing any Work to implement the enhancement.

Enhancements do not include the use of Uniformed Police Officers or WSP, address changes to the allowed work hour restrictions, or changes to the staging plans in the Contract (if applicable). If allowed by the Engineer, these items will be addressed in accordance with Section 1-04.4.

The Contractor shall be solely responsible for submitting any traffic control plan revision to implement the enhancement in accordance with Section 1-10.2(2).

1-10.2(1).GR1

General

1-10.2(1).INST1.GR1

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

1-10.2(1).OPT1.GR1

(October 3, 2022)

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

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

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

The American Traffic Safety Services Association
15 Riverside Parkway, Suite 100
Fredericksburg, Virginia 22406-1022

Training Dept. Toll Free (877) 642-4637
Phone: (540) 368-1701
https://atssa.com/training

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

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

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

1-10.5(2).OPT7.GR1

(November 2, 2022)

"Work Zone Safety Contingency", by force account.

All costs as authorized by the Engineer will be paid for by force account as specified in Section 1-09.6.

For purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount for the item "Work Zone Safety Contingency" in the Proposal to become a part of the Contractor's total bid.

The Engineer may choose to use existing bid items for the implementation of the agreed upon enhancement.

DIVISION2.GR2

Division 2
Earthwork

2-01.GR2

Clearing, Grubbing, and Roadside Cleanup

2-01.1.GR2

Description

2-01.1.INST1.GR2

Section 2-01.1 is supplemented with the following:

KG2-01.1.OPT1.FR2

(June 26, 2025 SnoCo GSP)

Clearing and grubbing on this project shall be performed within the following limits:

As shown in the plans

2-02.GR2

Removal of Structures and Obstructions

2-02.1.GR2

Description

2-02.1.INST1.GR2

Section 2-02.1 is supplemented with the following:

KG2-02.1.DT2

(June 26, 2025 SnoCo GSP)

The following items shall be removed and disposed of in accordance with the requirements of Section 2-02 and in accordance with the section, "Disposal of Surplus Material" contained within these Special Provisions:

Group 1

STRUCTURES AND OBSTRUCTIONS	DESCRIPTION	LOCATION
CULVERT	40 LF 8' W X 6' H CONCRETE BOX CULVERT AND WING WALLS	167TH AVE SE STREAM CROSSING
FISHWAY	65 LF 15' WIDE CONCRETE FISHWAY AND WEIRS	FRENCH CREEK DOWNSTREAM OF 167TH AVE SE CULVERT

Group 2

STRUCTURES AND OBSTRUCSTIONS	DESCRIPTION	LOCATION

It is assumed that all waterline to be removed is asbestos containing material.

2-02.3.GR2

Construction Requirements

2-02.3.OPT4.GR2

(October 4, 2021)

Removal and Disposal of Asbestos Material

Prior to performance of any contract work, the Contractor shall obtain all permits from and provide notification to, the Washington State Department of Labor and Industries, the Washington State Department of Ecology, the local clean air agency, and other permitting and regulatory agencies with jurisdiction over the work involving asbestos as the laws, rules, and regulations require.

Prior to commencing asbestos related work, the Contractor shall submit as a Type 1 Working Drawing any and all written verification of approvals and notifications that have been given and/or obtained from the required jurisdictional agencies. The Contractor shall include a schedule of activities for all work involving asbestos removal as part of the Type

1 Working Drawing. Asbestos related work shall also be shown on the Contractor's project progress schedule.

The Contractor shall designate a Washington State Certified Asbestos Supervisor (CAS), certified in accordance with WAC 295-65-012, to supervise the asbestos removal and to ensure that the handling and removal of asbestos is accomplished by certified asbestos workers, pursuant to Washington State Department of Labor and Industries standards. The Contractor shall ensure that the removal and disposal of asbestos meets the requirements of EPA regulation 40 CFR Part 61, local health department regulations, and all other applicable regulations.

The Contractor shall ensure the safety of all workers, visitors to the site, and the public in accordance with all applicable laws, rules, and regulations.

2-02.3(3).GR2

Removal of Pavement, Sidewalks, Curbs, and Gutters

2-02.3(3).DT2

Section 2-02.3(3), Item 3, is supplemented with the following:

(May 11, 2022 SnoCo GSP)

All sawcutting performed in the Contract shall provide for and include the removal and disposal of slurry created from water cooling/lubrication. Waste material (slurry) shall not be allowed to enter drainage systems, ditches, or streams. Removal and disposal of slurry shall be included as part of the work, and no separate payment shall be made.

KG2-02.3(4).GR2

Removal and Disposal of Asbestos Cement (AC) Water Mains

(September 16, 2025 SnoCo GSP)

Construction of this project will require cutting, removal and disposal of asbestos cement pipe by the contractor. When working with asbestos cement pipe, the contractor is required to maintain worker's exposure to asbestos material at or below the exposure limit as prescribed in WAC 296-62-0775. The Contractor shall be responsible for filing a notice of Intent with the Puget Sound Clean Air Agency. All work shall be performed in compliance with the requirements of the WAC chapter 296-65, Puget Sound Clean Air Agency, Labor and Industries and all local, state and federal agencies having jurisdiction. The contractor shall provide all personal protective equipment, tools and materials. In addition, when requested, the Contractor shall provide their safety plan that demonstrates the processes and procedures the Contractor employs to ensure asbestos exposure limits are not exceeded.

2-02.4.GR2

Measurement

KG2-02.4.INST1.GR2

(September 16, 2025 SnoCo GSP)

Section 2-02.4 is supplemented with the following:

Removal and disposal of existing AC pipe will be measured per linear foot.

2-02.4.OPT3.DT2

(January 19, 2023 SnoCo GSP)

Removal of pavement outside excavation area will be measured by the square yard prior to removal. No measurement will be made if pavement is located within an excavation area.

2-02.5.GR2

Payment

KG2-02.5.INST1.GR2

(September 16, 2025 SnoCo. GSP)

Section 2-02.5 is revised by the following:

"Removal and disposal of existing AC water main", per linear foot.

2-03.GR2

Roadway Excavation and Embankment

2-03.3.GR2

Construction Requirements

2-03.3(7).GR2

Disposal Of Surplus Material

2-03.3(7)C.GR2

Contractor-Provided Disposal Site

2-03.3(7)C.DT2

(September 16, 2013 SnoCo GSP)

Section 2-03.3(7)C is supplemented with the following:

A waste site has not been provided by the Engineer for the disposal and/or storage of surplus materials and debris.

In addition to Section 2-03.3(7)C, the following items shall apply:

1. It shall be the responsibility of each bidder to thoroughly plan for material disposal at the time of project planning and bid preparation.

2. All solid waste generated in unincorporated areas and within the corporate limits of cities and towns of Snohomish County must be disposed of at a Snohomish County solid waste facility, required by SCC 7.35.125.

3. If there is a construction and demolition (C&D) recycling container on the project site, no more than 10% by volume of its contents can be solid waste. If more than 10% by volume of its contents is solid waste, the entire box must be disposed of at a Snohomish County facility and is considered garbage. Containers of solid waste must

be transported by the Washington Utilities and Transportation Commission (WUTC) certified hauler or the contracted city hauler for the area.

4. Any construction site provided service via a C&D recycling container must also provide a container of appropriate size for solid waste in accordance with WAC 173-345-040.

5. Businesses or contractors that provide hauling and disposing of garbage as an ancillary operation to their primary service are permitted to haul garbage, as long as it is disposed of at a Snohomish County owned and operated facility.

6. The Contractor shall provide the Engineer with copies of all permits for disposal and/or storage of surplus materials.

7. The Engineer will use the following criteria to evaluate disposal and/or storage sites(s) located within Snohomish County:

   a. WAC 173-304 Minimum Functional Standards for Solid Waste Handling, in accordance with applicable Sections 400 through 462.
   b. Applicable sections of the Snohomish Health District Sanitary Code Chapter 3.1 - Regulations Governing Solid Waste Handling.
   c. Snohomish County Code Title 30.63A, Drainage.
   d. Snohomish County Code Title 30.63B, Land Disturbing Activity.
   e. Snohomish County Code Title 30.61, Snohomish County Environmental Review SEPA.
   f. Applicable sections of the Snohomish County Comprehensive Plan Policies.
   g. Disposal of excess fill material within a wetland area will not be allowed without a Section 404 permit issued by the U.S. Corps of Engineers and approved by the local agency with jurisdiction over the wetlands.

8. A reconnaissance of each submitted facility will be conducted by the Snohomish County Public Works Geotechnical/Materials Section. During this visit, the operating procedures and general conditions of the site will be reviewed for compliance with the conditions of the disposal and/or storage site permit and with the applicable County codes and State WACs. If violations of the disposal and/or storage site permit, applicable codes and/or WACs are noted during this reconnaissance, the site will be rejected from further consideration.

   In addition, the status of each Snohomish County land disturbing activity permit will be checked through the Planning And Development Services. Flagged sites, invalid or expired permits will be rejected from further consideration.

   If disposal and/or storage site(s) are located outside of Snohomish County, applicable local policies and ordinances will apply.

9. Following is a typical listing of contract items that are impacted by this Specification:

   - clearing and grubbing
   - removal of structures and obstructions
   - roadway excavation including haul
   - structure excavation Class A and B including haul
   - unsuitable foundation excavation including haul

- removing asphalt/cement concrete pavement
- ditch excavation
- pond excavation
- removing sidewalks, curbs, and walkways

The items listed above are for informational purposes only and may not cover all surplus disposal items. Specifically, not covered under the codes, regulations and specifications given above is the disposal of treated timber and treated wood products.

This Specification applies to all treated wood products and treated timber.

Treated wood products shall be removed from the site and disposed of:

1. At a landfill that is permitted in accordance with WAC 173-304-460, minimum functional standards for solid waste handling, or Chapter 173-351 WAC, criteria for municipal solid waste landfills, or

2. May be sold for reuse for its originally intended purpose. Any sales for reuse must be sold on the condition that the material be used for its originally intended purpose and not remanufactured. Remanufacturing of treated timber or treated wood products is not allowed. If they are remanufactured, they are subject to characterization as and/or criteria testing for a hazardous waste material in accordance with WAC 173-303-090(8) and WAC 173-303-071(3)(g).

3. If a disposal and/or storage site is rejected, the Contractor is responsible for locating a new disposal and/or storage site that will meet the County's criteria. Any associated costs incurred in finding a new or different disposal and/or storage site will be the responsibility of the Contractor, and at no additional cost to the County.

4. Work shall not start on any contract item that requires disposal and/or removal of surplus items until the disposal and/or storage site(s) are allowed to be used by the County. Additionally, no payment will be made for any related contract item until the disposal and/or storage site(s) have been allowed for use.

5. If the Contractor determines during construction that he/she would like to dispose of or remove the surplus materials to a site other than those previously requested and allowed, the Contractor shall submit a request in writing to the County. The request shall include a listing of the proposed type of material to be removed from the site, the location of the disposal and/or storage site and the proposed method of disposal. A copy of the applicable permits shall be attached to this request. The County will then have 10 working days after receipt of this request to either allow the use of this site or to reject it.

6. The Contractor shall provide to the County a letter certifying the type of material disposed and/or stored at each site, the location of each disposal and/or storage site and the method of disposal and/or reuse of each type of material as a condition to receiving the final contract payment.

2-03.4.GR2

Measurement

2-03.4.OPT2.DT2

(January 13, 2016 SnoCo GSP)

Section 2-03.4 is supplemented with the following:

Only one determination of the original ground elevation will be made on this project. Measurement for roadway excavation and embankment will be based on the original ground elevations recorded previous to the award of this Contract, and the alignment, profile, grade, and roadway section, as shown in the Plans.

Measurement of the earthwork bid item quantities will be based on the original ground elevations as follows:

Earthwork quantities will be computed, either manually or by means of electronic data processing equipment, by use of the average end area method or by the finite element analysis method utilizing digital terrain modeling techniques.

If discrepancies are discovered in the ground elevations that materially affect the quantities of earthwork, the original computations of earthwork quantities will be adjusted accordingly for the final quantity determination of the earthwork bid item.

If the Engineer authorizes changes in the alignment, profile, grade, or roadway sections, the original computations will be adjusted accordingly for the final quantity determination of the earthwork bid item.

2-09.GR2

Structure Excavation

2-09.3.GR2

Construction Requirements

2-09.3(3).GR2

Construction Requirements, Structure Excavation, Class A

2-09.3(3)D.GR2

Shoring And Cofferdams

2-09.3(3)D.DT2

(October 7, 2013)

Section 2-09.3(3)D is supplemented with the following:

The Contractor shall protect the existing pavement from damage due to the Contractor's operations and shall shore all excavation adjacent to the existing pavement as specified in Section 2-09.3(3)D. Existing pavement damaged by the Contractor's operations shall be repaired by the Contractor at the Contractor's expense. The repair shall be performed where directed and with the approval of the Engineer.

DIVISION3.GR3

Division 3
Aggregate Production and Acceptance

3-04.GR3

Acceptance of Aggregate

3-04.1.GR3

Description

3-04.1.DT3
(January 8, 2018 SnoCo GSP)
Section 3-04.1 is revised to read as follows:

This work shall consist of acceptance of aggregate as provided for under statistical or nonstatistical evaluation. All aggregates shall meet the requirements in Section 9-03.

Acceptance of aggregate by statistical evaluation is administered under Section 1-06.2.

Nonstatistical evaluation will be used for acceptance of aggregate materials for this project.

3-04.3.GR3

Construction Requirements

3-04.3(4).GR3

Testing Results

3-04.3(4).DT3
(January 16, 2018 SnoCo GSP)
Section 3-04.3(4) is revised to read:

The results of all acceptance testing performed in the field shall be provided to the Contractor through the Engineer.

3-04.3(5).GR3

Nonstatistical Evaluation

3-04.3(5).DT3
(January 8, 2018 SnoCo GSP)

Section 3-04.3(5) is revised to read:

Each lot of aggregate materials produced under nonstatistical evaluation and having all constituents falling within the specification limits shall be accepted with no further evaluation. When one or more constituents fall outside the specification limits, the Engineer will take one of the following actions:

1. Require complete removal and replacement with specification material at no additional cost to the Contracting Agency

2. Statistically evaluate the material for determination of acceptance.

If the Engineer chooses to evaluate the material under statistical evaluation for acceptance, a minimum of two additional samples shall be taken from the material that is suspected of being defective. These additional two samples, combined with the original sample, shall be evaluated as an independent lot in accordance with Section 1-06.2 using the price adjustment factors from Table 2 to determine the appropriate CPF. If only two samples exist, the test results shall be averaged to create a third set of results to provide a total of three sets of results. The maximum CPF shall be 1.00. Aggregate that achieves a CPF of 1.00 shall be paid in accordance with the existing bid items. If the CPF is below 1.00 but is equal to or above 0.75, a price adjustment will be calculated in accordance with Section 3-04.3(8).

When the aggregate does not have established price adjustment factors, use the appropriate price adjustment factors from "Other Materials" as listed in Table 2.

3-04.5.GR3

Payment

3-04.5.DT3

(January 8, 2018 SnoCo GSP)

Section 3-04.5 is supplemented with the following:

"Aggregate Compliance Credit", by calculation.

"Aggregate Compliance Credit" shall be calculated for a credit as described under Section 3-04.3(8) Price Adjustments for Quality of Aggregate.

DIVISION4.GR4

Division 4
Bases

4-04.GR4

Ballast and Crushed Surfacing

4-04.SA.OPT1.DT4

Section 4-04.2 is supplemented with the following:

(December 10, 2024 SnoCo GSP)

Materials

2 ½" Minus Chips shall consist of a crushed material which meets the requirements of Section 4-04 and 9-03.9(1) with the following modifications:

Sieve Size	Percent Passing by Weight (%)
2 .5 inch	90 to 100
1 .5 inch	50 to 90
3/4 inch	5 to 50
1/2 inch	0 to 10
% Fracture	75 min.

Material meeting the grading and quality requirements for Permeable Ballast (9-03.9(2)) is acceptable for use as 2 ½" Minus Chips.

Section 4-04.3 is supplemented with the following:

Construction Requirements
Compaction shall be accomplished by making a minimum of three passes over the aggregate with a vibratory compactor of a type acceptable to the Engineer.

Section 4-04.4 is supplemented with the following:

Measurement
2 ½" Minus Chips Incl. Haul, per ton.

Section 4-04.5 is supplemented with the following:

Payment
"2 ½" Minus Chips Incl. Haul", per ton.
The unit contract price per ton for "2 ½" Minus Chips Incl. Haul" shall be full pay for furnishing all labor, materials, tools, and equipment necessary to complete the work as specified, including processing, hauling, placing, and compacting it.

DIVISION5.GR5

Division 5
Surface Treatments and Pavements

5-04.GR5

Hot Mix Asphalt

5-04.1.GR5

Description

5-04.1.DT5
(October 2, 2019 SnoCo GSP)
The second paragraph of Section 5-04.1 is revised to read:

HMA shall be composed of asphalt binder and mineral materials as required, and shall include at least 5% and not greater than 20% reclaimed asphalt pavement (RAP), mixed in the proportions specified to provide a homogeneous, stable, and workable mix. Reclaimed asphalt shingles (RAS), are not allowed in HMA.

5-04.2.GR5

Materials

5-04.2(1).GR5

How to Get an HMA Mix Design on the QPL

5-04.2(1).DT5
(March 9, 2017 SnoCo GSP)
In Section 5-04.2(1), and all subsections, all references to "Contracting Agency" shall be revised to read "Washington State Department of Transportation (WSDOT)".

5-04.2(2).GR5

Mix Design – Obtaining Project Approval

5-04.2(2).DT5

(April 12, 2017 SnoCo GSP)

The first sentence of Section 5-04.2(2) is deleted.

The rest of Section 5-04.2(2) is supplemented with the following:

Mix designs, including mix designs on the current QPL, shall be submitted to the Project Engineer on WSDOT Form 350-042.

At or prior to the preconstruction meeting, the Contractor shall provide one of the following mix design verification certifications for Contracting Agency review.

- The proposed mix design from the WSDOT QPL.
- The proposed HMA mix design submittal Form 350-042 with the seal and certification (stamp and signature) of a valid licensed Washington State Professional Engineer.
- The proposed mix design by an accredited City or County laboratory or a mix design report that is within one year of the approval date.

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

The number of ESAL's for the design and acceptance of the HMA shall be 0.3 to <3 million. HMA designed for a higher number of ESAL's may be accepted at the discretion of the Engineer.

The Contractor shall submit a mix design with Hamburg Wheel-Track Testing and Indirect Tensile Strength of Bituminous Materials test data as follows:

For a mix design that the Contractor provides Hamburg Wheel-Track Testing and Indirect Tensile Strength of Bituminous Materials test results the Contractor shall include the test data file generated by the wheel-tracking device with the mix design submittal.

At the discretion of the Engineer, agencies may accept mix designs verified beyond the one year verification period with a certification from the Contractor that the materials and sources are the same as those shown on the original mix design.

Evaluation of anti-strip additives shall be provided as part of the mix design acceptance criteria. Acceptable anti-strip evaluations include

1.) A WSDOT validated mix design showing the validated anti-strip additive and dosage,
2.) A historic anti-strip determination from WSDOT not greater than two calendar years old, or
3.) A passing TSR test at the anti-strip dosage proposed by the Contractor.

No paving shall begin prior to Contracting Agency approval of the Contractor provided mix design.

5-04.3.GR5

Construction Requirements

5-04.3(1).GR5

Weather Limitations

5-04.3(1).INST1.GR5

The first sentence of Section 5-04.3(1) is revised to read:

KG5-04.3(1).OPT1.FR5

(June 30, 2025 SnoCo GSP)

HMA for wearing course shall not be placed on any travelled way from **November 1st** and through March 31st of the following year without written approval from the Engineer.

5-04.3(3)D.GR5

Material Transfer Device or Material Transfer Vehicle

5-04.3(3)D.OPT1.GR5

(April 4, 2016)

Section 5-04.3(3)D is deleted in its entirety.

5-04.3(4).GR5

Preparation of Existing Paved Surfaces

5-04.3(4).DT5

(March 26, 2017 SnoCo GSP)

Section 5-04.3(4) is supplemented with the following:

Special Sweeping

The Contractor is required per Section 5-04.3(4) to routinely provide thorough cleaning of all types of existing pavement or bituminous surfaces by sweeping prior to paving.

Measurement and Payment

No specific measurement and payment will be made for routine sweeping, or sweeping and cleanup of asphalt tracked by Contractor's trucks and equipment, or other vehicles on roadways within the project vicinity.

5-04.3(7).GR5

Spreading and Finishing

5-04.3(7).DT5

(May 13, 2016 SnoCo GSP)

Section 5-04.3(7) is supplemented with the following:

HMA for wearing course shall not be placed until the leveling course is completed on the entire project unless otherwise allowed by the Engineer.

5-04.3(8).GR5

Aggregate Acceptance Prior to Incorporation in HMA

5-04.3(8).DT5

(July 9, 2018 SnoCo GSP)

The first sentence of the third paragraph of Section 5-04.3(8) is revised to read:

For aggregate that will be used in HMA mixture which will be accepted by either Statistical or Nonstatistical Evaluation, the Contracting Agency's acceptance of the aggregate will be based on:

5-04.3(9).GR5

HMA Mixture Acceptance

5-04.3(9).DT5

(March 9, 2017 SnoCo GSP)

Section 5-04.3(9) is revised to read:

The Contracting Agency will evaluate HMA mixture for acceptance by one of two methods as determined from the criteria in Table 7.

Table 7

Basis of Acceptance for HMA Mixture		
	Visual Evaluation	**Nonstatistical Evaluation**
Criteria for Selecting the Evaluation Method	• Commercial HMA placed at any location • Any HMA placed in: ○ sidewalks ○ driveways ○ ditches ○ slopes ○ paths ○ trails ○ gores ○ prelevel ○ temporary pavement[1] ○ pavement repair • Other nonstructural applications of HMA as approved by the Engineer	• All HMA mixture other than that accepted by Visual Evaluation

[1]Temporary pavement is HMA that will be removed before the Physical Completion of the Contract.

5-04.3(9)A.GR5

Mixture Acceptance – Test Section

5-04.3(9)A.DT5

(March 9, 2017 SnoCo GSP)

Section 5-04.3(9)A, and all subsections, are revised to read:

This Section applies to HMA mixture accepted by Statistical Evaluation and mixture accepted by Nonstatistical Evaluation. A test section is not allowed for HMA accepted by Visual Evaluation.

The purpose of a test section is to determine, at the beginning of paving, whether or not the Contractor's mix design and production processes will produce HMA meeting the Contract requirements related to mixture. Construct HMA mixture test sections at the beginning of paving, using at least 600 tons and a maximum of 1,000 tons or as specified by the Engineer. Each test section shall be constructed in one continuous operation.

5-04.3(9)A1 Test Section – When Required, When to Stop

Use Tables 8 and 9 to determine when a test section is required, optional, or not allowed, and to determine when performing test sections may end for an individual mix design. Each mix design will be evaluated independently for the test section requirements.

If more than one test section is required, each test section shall be evaluated separately by the criteria in table 8 and 9.

Table 8

Criteria for Conducting and Evaluating HMA Mixture Test Sections
(For HMA Mixture Accepted by Statistical or Nonstatistical Evaluation)

	High RAP/Any RAS	**Low RAP/No RAS**
Is Mixture Test Section Optional or Mandatory?	Mandatory[1]	At Contractor's Option[3]
Waiting period after paving the test section.	4 calendar days[2]	4 calendar days[2]
What Must Happen to Stop Performing Test Sections?	Meet "Results Required to Stop Performing Test Sections" in Table 9 for High RAP/Any RAS.	Provide samples and respond to WSDOT test results required by Table 9 for Low RAP/No RAS.

[1]If a mix design has produced an acceptable test section on a previous contract (paved in the same calendar year, from the same plant, using the same JMF) the test section may be waived if approved by the Engineer.

[2]This is to provide time needed by the Contracting Agency to complete testing and the Contractor to adjust the mixture in response to those test results. Paving may resume when this is done.

[3]For HMA with Low RAP/No RAS, which is accepted by Nonstatistical Evaluation, a test section is not allowed.

Table 9

Results Required to Stop Performing HMA Mixture Test Sections[1]
(For HMA Mixture Accepted by Statistical or Nonstatistical Evaluation)

Test Property	**Type of HMA**

	High RAP/Any RAS	Low RAP/No RAS
Gradation	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4[2]	None[4]
Asphalt Binder	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4[2]	None[4]
V_a	Minimum PF_i of 0.95 based on the criteria in Section 5-04.3(9)B4[2]	None[4]
Hamburg Wheel Track Indirect Tensile Strength	Meet requirements of Section 9-03.8(2).[3]	These tests will not be done as part of Test Section.
Aggregates Sand Equivalent Uncompacted Void Content Fracture	Nonstatistical Evaluation in accordance with the requirements of Section 3-04[3]	None[3]

[1]In addition to the requirements of this table, acceptance of the HMA mixture used in each test section is subject to the acceptance criteria and price adjustments for Statistical Evaluation or Nonstatistical Evaluation (see Table 7 and Table 9a).

[2]Divide the test section lot into three sublots, approximately equal in size. Take one sample from each sublot, and test each sample for the property in the first column.

[3]Take one sample for each test section lot. Test the sample for the properties in the first column.

[4]Divide the test section lot into three sublots, approximately equal in size. Take one sample from each sublot, and test each sample for the property in the first column. There are no criteria for discontinuing test sections for these mixes; however, the contractor must comply with Section 5-04.3(11)F before resuming paving.

5-04.3(9)A2 Test Section – Evaluating the HMA Mixture in a Test Section

The Engineer will evaluate the HMA mixture in each test section for rejection, acceptance, and price adjustments based on the criteria in Table 9a using the data generated from the testing required by Table 9. Each test section shall be considered a separate lot.

Table 9a

Acceptance Criteria for HMA Mixture Placed in a Test Section
(For HMA Mixture Accepted by Statistical or Nonstatistical Evaluation)

Test Property	**Type of HMA**	
	High RAP/Any RAS	**Low RAP/No RAS**
Gradation Asphalt Binder V_a	Statistical or Nonstatistical Evaluation - determined by the criteria in Table 7	Statistical or Nonstatistical Evaluation - determined by the criteria in Table 7

Hamburg Wheel Track Indirect Tensile Strength	Pass/Fail for the requirements of Section 9-03.8(2)[1]	N/A
HMA Aggregate Sand Equivalent Uncompacted Void Content	Nonstatistical Evaluation in accordance with the requirements of Section 3-04	Nonstatistical Evaluation in accordance with the requirements of Section 3-04

[1]Failure to meet the specifications for Hamburg and/or IDT will cause the mixture in the test section to be rejected. Refer to Section 5-04.3(11).

5-04.3(9)B.GR5

Mixture Acceptance – Statistical Evaluation

5-04.3(9)B1.GR5

Mixture Statistical Evaluation – Lots and Sublots

5-04.3(9)B1.DT5

(March 10, 2017 SnoCo GSP)

The third paragraph in Section 5-04.3(9)B1 is revised to read:

Each mixture sublot shall be approximately uniform in size with the maximum mixture sublot size as specified in Table 10. The quantity of material represented by the final mixture sublot of the project, for each mix design on the project, may be increased to a maximum of two times the mixture sublot quantity calculated. Should a lot accepted by statistical evaluation contain fewer than three sublots, the HMA will be accepted in accordance with Nonstatistical evaluation.

5-04.3(9)B3.GR5

Mixture Statistical Evaluation – Acceptance Testing

5-04.3(9)B3.DT5

(July 23, 2018 SnoCo GSP)

Section 5-04.3(9)B3 is supplemented with the following:

Testing of HMA for compliance of VMA and Va will be at the option of the Contracting Agency.

5-04.3(9)C.GR5

Vacant

5-04.3(9)C.DT5

(January 17, 2018 SnoCo GSP)

Section 5-04.3(9)C, including title, is revised to read:

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

For HMA in a structural application, sampling and testing for total project quantities less than 400 tons is at the discretion of the Engineer. For HMA used in a structural application and with a total project quantity less than 800 tons but more than 400 tons, a minimum of one acceptance test shall be performed.

If test results are found to be within specification requirements, additional testing will be at the Engineer's discretion.

If test results are found not to be within specification requirements, additional testing shall be performed as needed.

This section is supplemented with the following new subsections:

5-04.3(9)C1 Mixture Nonstatistical Evaluation – Lots, Sublots, Sampling, Test Section, Testing, Retests

For HMA mixture accepted by Nonstatistical Evaluation, comply with the requirements in Table 13:

Table 13

Nonstatistical Evaluation Lots, Sublots, Sampling, Test Section, Testing, Retests		
Comply with the Specifications Below		Comply with the Requirements of the Section for:
Lots and Sublots	Section 5-04.3(9)B1	Statistical Evaluation
Sampling	Section 5-04.3(9)B2	Statistical Evaluation
Acceptance Tests	Section 5-04.3(9)B3	Statistical Evaluation
Retests	Section 5-04.3(9)B7	Statistical Evaluation

5-04.3(9)C2 Mixture

Each mixture lot of HMA produced under Nonstatistical Evaluation, for which all sublot acceptance test results (required by Table 13) fall within the Job Mix Formula Tolerances for Nonstatistical Evaluation in Section 9-03.8(7), will be accepted at the unit Contract price with no further evaluation.

5-04.3(9)C3 Mixture Nonstatistical Evaluation – Out of Tolerance Procedures

Each mixture lot of HMA produced under Nonstatistical Evaluation, for which any sublot acceptance test result (required by Table 13) falls outside of the Job Mix Formula Tolerances for Nonstatistical Evaluation in Section 9-03.8(7), the Engineer will take one of the following actions:

1. Require complete removal and replacement with specification material at no additional cost to the Contracting Agency
2. Statistically evaluate the material for determination of acceptance in accordance with Section 1-06.2 and Table 14

Table 14

Nonstatistical Evaluation – Out of Tolerance Procedures	
Comply with the Following[1]	
Pay Factors[2]	Section 5-04.3(9)B4
Composite Pay Factors[3]	Section 5-04.3(9)B5

Price Adjustments	Section 5-04.3(9)B6

[1]When less than three mixture sublots exist, backup samples of the existing mixture sublots shall be tested to provide a minimum of three sets of results for evaluation. If enough backup samples are not available, the Contracting Agency will select core sample locations from the Roadway in accordance with WSDOT Test Method T 716, take cores from the roadway in accordance with WSDOT SOP 734, and test the cores in accordance with WSDOT SOP 737.
[2]The Nonstatistical Evaluation tolerance limits in Section 9-03.8(7) will be used in the calculation of the PFi.
[3]The maximum CPF shall be 1.00.

5-04.3(9)D.GR5

Mixture Acceptance – Visual Evaluation

5-04.3(9)D1.GR5

Mixture Visual Evaluation – Lots, Sampling, Testing, Price Adjustments

5-04.3(9)D1.DT5

(March 16, 2017 SnoCo GSP)

In Section 5-04.3(9) D1, the title of Table 13 and all references to "Table 13" are revised to read "Table 15".

5-04.3(9)E.GR5

Mixture Acceptance – Notification of Acceptance Test Results

5-04.3(9)E.DT5

(March 16, 2017 SnoCo GSP)

The first two paragraphs of 5-04.3(9) E are revised to read:

The results of all mixture acceptance testing of the lot after three sublots have been tested will be available to the Contractor through the Engineer.

The Contracting Agency will endeavor to provide written notification (via email to the Contractor's designee) of acceptance test results within 24 hours of the sample being made available to the Contracting Agency. However the Contractor agrees:

5-04.3(10).GR5

HMA Compaction Acceptance

5-04.3(10).DT5

(January 8, 2018 SnoCo GSP)

Section 5-04.3(10) is revised to read:

For all HMA, the Contractor shall comply with the General Compaction Requirements in Section 5-04.3(10)A. Acceptance of compaction for the Bid items "HMA for Pavement Repair Cl. ___ PG ___" and "HMA for Preleveling Class ___ PG ___" shall be in accordance with Section 5-04.3(10)D. Acceptance of compaction for all other HMA shall be as follows:

For HMA, where the specified compacted course thickness is greater than 0.10 foot, the acceptable level of compaction shall be a minimum of 92 percent of the maximum density as determined by WSDOT FOP for AASHTO T209. The level of compaction attained will be determined as the average of not less than 5 nuclear density gauge tests taken on the day the mix is placed (after completion of the finish rolling) at representative locations selected by the Engineer or Materials Lab Personnel within each lot. No test result may be lower than 90 percent of the maximum density. The quantity represented by each lot will be no greater than a single day's production or approximately 400 tons, whichever is less. If the daily production or the final lot is less than 360 tons, testing shall be at frequency of one test per 80 tons, with each test representing up to 90 tons. Compaction will be determined by using a “thin lift” density gauge or a Moisture Density gauge in “thin lift” mode.

Control lots not meeting the minimum density standard shall be removed and replaced with satisfactory material. At the option of the Engineer, noncomplying material may be accepted at a reduced price as computed below.

% of RICE	% of Pay
92.0 and above	100
91.0 – 91.9	95 (if accepted)
90.0 – 90.9	90 (if accepted)
89.0 – 89.9	75 (if accepted)
Below 89.0	50 (if accepted)

Cores may be used as an alternate to the nuclear density gauge tests. When cores are taken by the Engineer at the request of the Contractor, the request shall be made in writing by noon of the first working day following placement of the mix. The Engineer shall be reimbursed for the coring expenses at the rate of $250 per core when the core indicates the acceptable level of compaction within a lot has not been achieved.

In addition to the randomly selected locations for tests of the control lot, the Engineer reserves the right to test any area which appears defective and to require the further compaction of areas that fall below acceptable density readings. These additional tests shall not impact the compaction evaluation of the entire control lot. The Contracting Agency may, at its sole discretion, evaluate any HMA for compliance with the Cyclic Density requirements of Section 5-04.3(10)B.

5-04.3(10)C.GR5

HMA Compaction Acceptance – Statistical Evaluation

5-04.3(10)C1.GR5

HMA Compaction Statistical Evaluation – Lots and Sublots

5-04.3(10)C1.A.DT5

(March 16, 2017 SnoCo GSP)

In Section 5-04.3(10)C1, the title of Table 15 and all references to “Table 15” are revised to read “Table 16”.

5-04.3(10)C1.B.DT5

(March 16, 2017 SnoCo GSP)

5-04.3(10)C2 HMA Compaction Statistical Evaluation – Acceptance Testing

In Section 5-04.3(10)C2, the title of Table 16 and all references to "Table 16" are revised to read "Table 17".

5-04.3(12).GR5

Joints

5-04.3(12)A.GR5

HMA Joints

5-04.3(12)A1.GR5

Transverse Joints

5-04.3(12)A1.DT5

(October 1, 2018 SnoCo GSP)

Section 5-04.3(12) A1 is supplemented with the following:

All transverse joints shall be sealed with liquid asphalt PG 58H-22 within 72 hours of completion of each overlay.

There is no separate bid item for joint sealant. This work shall be included in the unit contract prices for the associated asphalt bid items, and no separate payment will be made.

5-04.3(14).GR5

Planing Bituminous Pavement

5-04.3(14).DT5

(March 13, 2017 SnoCo GSP)

Section 5-04.3(14) is supplemented with the following:

The Contractor shall perform the planing operations no more than five (5) working days ahead of the time the planed area is to be paved with HMA, unless otherwise allowed by the Engineer in writing.

5-04.5.GR5

Payment

5-04.5.INST2.GR5

Section 5-04.5 is supplemented with the following:

5-04.5.OPT1.DT5

(January 16, 2018 SnoCo GSP)

"Compaction Compliance Credit" will be calculated for a credit as described in Section 5-04.3(10).

5-04.5.OPT2.GR5

(January 13, 2021)

Asphalt Cost Price Adjustment

The Contracting Agency will make an Asphalt Cost Price Adjustment, either a credit or a payment, for qualifying changes in the reference cost of asphalt binder. The adjustment will be applied to partial payments made according to Section 1-09.9 for the following bid items when they are included in the proposal:

"HMA Cl. ___ PG ___"
"HMA for Approach Cl. ___ PG ___"
"HMA for Preleveling Cl. ___ PG ___"
"HMA for Pavement Repair Cl. ___ PG ___"
"Commercial HMA"

The adjustment is not a guarantee of full compensation for changes in the cost of asphalt binder. The Contracting Agency does not guarantee that asphalt binder will be available at the reference cost.

The Contracting Agency will establish asphalt binder reference costs twice each month and post the information on the Agency website at: https://wsdot.wa.gov/business-wsdot/contracts/about-public-works-contracts/payments-reporting/asphalt-binder-reference-cost. The reference cost will be determined using posted prices furnished by Poten & Partners, Inc. If the selected price source ceases to be available for any reason, then the Contracting Agency will select a substitute price source to establish the reference cost.

Price adjustments will be calculated one time per month. No price adjustment will be made if the Current Reference Cost is within +/-5% of the Base Cost. Reference costs for projects located in Eastern versus Western Washington shall be selected from the column in the WSDOT website table labeled "Eastern", or "Western", accordingly. The adjustment will be calculated as follows:

If the reference cost is greater than or equal to 105% of the base cost, then Asphalt Cost Price Adjustment = (Current Reference Cost – (1.05 x Base Cost)) x (Q x 0.056).

If the reference cost is less than or equal to 95% of the base cost, then Asphalt Cost Price Adjustment = (Current Reference Cost – (0.95 x Base Cost)) x (Q x 0.056).

Where: **Current Reference Cost** is selected from the website table based on the "Date Effective" that immediately precedes the current month's progress estimate end date. For work completed after all authorized working days are used, the adjustment will be based on the posted reference cost during which contract time was exhausted.

Base Cost is selected from the website table based on the "Date Effective" that immediately precedes the contract bid opening date, and shall be a constant for all monthly adjustments.

Q = total tons of all classes of HMA paid in the current month's progress payment.

"Asphalt Cost Price Adjustment", by calculation.

"Asphalt Cost Price Adjustment" will be calculated and paid for as described in this section. For the purpose of providing a common proposal for all bidders, the Contracting Agency has entered an amount in the proposal to become a part of the total bid by the Contractor.

DIVISION6.GR6

Division 6
Structures

6-01.GR6

General Requirements for Structures

6-01.2.GR6

Foundation Data

6-01.2.INST1.GR6

Section 6-01.2 is supplemented with the following:

6-01.2.DT6

(October 7, 2013)

The Exploration Logs included in Appendix "A" are reproductions of the original exploration logs for the test holes indicated on the project plan sheets.

The observed water levels and/or conditions indicated on the exploration logs are as recorded at the time of exploration. These water levels and/or conditions may vary considerably with time depending upon the prevailing climate, rainfall, or other factors, and are otherwise dependent upon the duration of and methods used in the exploration program.

Sound engineering judgment was exercised in preparing the subsurface information presented herein. This information was prepared and is intended for County design and estimating purposes. Its presentation in the Plans and Contract Documents is for the purpose of providing intended users with access to the same information available to the County. This subsurface information interpretation is presented in good faith, and is not intended as a substitute for personal investigation, independent interpretations, or judgment by the Contractor.

Copies of the complete subsurface investigation performed for this project are available for viewing at Snohomish County Projects Online virtual plan room at Builders Exchange of Washington (BXWA) www.bxwa.com.

6-02.3(2).GR6

Proportioning Materials

6-02.3(2)B.GR6

Commercial Concrete

6-02.3(2)B.DT6

(February 21, 2018)

The third sentence of the first paragraph of Section 6-02.3(2)B is revised to read as follows:

Commercial concrete requires an approved mix design.

6-02.3(5).GR6

Acceptance of Concrete

6-02.3(5)E.GR6

Point of Acceptance

6-02.3(5)E.DT6

(October 7, 2013)

The second sentence of Section 6-02.3(5)E is revised to read as follows:

Bridge decks, overlays, wing walls, walls, and barriers at the discharge of the placement system.

6-02.3(6).GR6

Placing Concrete

6-02.3(6).DT6

(October 7, 2013)

Section 6-02.3(6) is supplemented with the following:

Under no circumstances shall the Contractor delay the placement process enough to cause a cold joint.

6-02.3(20).GR6

Grout for Anchor Bolts and Bridge Bearings

KG6-02.3(20).OPT2.DT6

Nonshrink Grout

(June 30, 2025 SnoCo GSP)
Section 6-02.3(20) is supplemented with the following:

Description
The Contractor shall furnish and place the nonshrink grout specified herein at the locations shown in the Plans.

Materials
The grout shall be a prepackaged nonshrink grout, mixed, placed, and cured as recommended by the manufacturer.

The nonshrink grout shall meet the following requirements:

REQUIREMENT	TEST METHOD	VALUES

Early Volume Change	ASTM C 827	0% Shrinkage 2.5% Expansion
Hardened Volume Change	CRD C 621	0% Shrinkage 0.2% Expansion
Setting Time at	AASHTO T 131	30 minutes min.
Ambient Conditions	AASHTO T 154	45 minutes min.
Min. Compressive Strength	AASHTO T 106	6,000 psi @ 3 days

The grout shall be a workable mix with flowability suitable for the intended application.

The Contractor shall submit a request for approval of material sources for the prepackaged nonshrink grout to the Engineer for approval along with test data from an independent testing laboratory confirming that the proposed grout will meet the specified nonshrink requirements. A sample of the prepackaged grout of the production lot to be used shall be submitted to the Engineer for approval. The Contractor shall receive approval from the Engineer before using the grout.

Construction Requirements

Before placing grout, the concrete on which it is to be placed shall be thoroughly cleaned, roughened, and wetted with water to ensure proper bonding. The grout shall be kept continuously wet with water until a strength of 3,000 psi is attained.

Payment

All costs in connection with furnishing and placing the grout shall be included in the bid item for “**Contractor Designed Buried Structure NO.__”.**

6-20.GR6

Buried Structures

6-20.1.GR6

Description

KG6-20.1 Buried Structures.GR6
(June 30, 2025 SnoCo GSP)

Section 6-20.1 is supplemented with the following:

The following items and quantities are listed only for the convenience of the Contractor in determining the approximate types of materials needed and volume of work involved. Items and quantities are not guaranteed to be accurate and may vary depending on the Contractor's Work methods and order of work. The prospective bidders shall verify these quantities before submitting a bid.

Item	Unit	Quantities
Group 1 – Contractor Designed Buried Structure No. 54' W X 10' H X 64' L (Includes Wingwalls and Headwalls)		
Structure excavation Cl. A Incl. Haul	C.Y.	2,680
Gravel Borrow Incl. Haul	TON	2,280
Construction Dewatering	L.S.	1
Crushed Surfacing Base Course	TON	151
Reinforced Concrete Footing	L.F.	218
Gravel Backfill for Wingwalls	C.Y.	64

6-20.3(1).GR6

Design

KG6-20.3(1)Design.GR6
(July 1, 2025, 2025 SnoCo GSP)

Section 6-20.3(1) is revised as follows:

Delete sections 6-20.3(1)E

All other requirements of section 6-20.3 still apply as written in the standard specifications. All submittals requiring a Type 3E Working Drawing shall be prepared in accordance with standard specification 1-05.3.

6-20.3(1)A1 Contractor Supplied Design

Section 6-20.3(1)A1 is modified as follows:

The Contractor shall prepare the design in accordance with Sections 6-20.3(1)C, 6-20.3(1)D, 6-20.3(1)F, and 6-20.3(1)H.

All structures are considered Contractor Supplied Design. Contractor shall provide a structure that matches the size and dimensions specified in the Plans. Alternate structures are not allowed.

6-20.3(1)B Buried Structure Class

Section 6-20.3(1)B is supplemented with the following:

The buried structure for Group 1 is Class 2.

6-20.3(1)D Geotechnical Considerations

Section 6-20.3(1)D is modified as follows:

Delete the second paragraph.

6-20.3(2) Submittals

6-20.3(2)A Plans Specifications, and Calculations

Section 6-20.3(2)A is modified as follows:

Delete “hydraulic and scour design parameters” from Item 2 of the minimum calculation requirements.

Delete Item 6, “Demonstrate how the minimum services life of 75-years is to be achieved”, from the minimum calculation requirements.

6-20.5.GR6

Payment

KG6-20.5.INST1.GR6
(June 30, 2025 SnoCo GSP)

Section 6-20.5 for “Contractor Designed Buried Structure No. ____”, lump sum is supplemented with the following:

Streambed Sediment, Streambed Cobbles, Streambed Boulders, Slash and Shoring or Extra Excavation Cl. A will be paid separately.

All costs involved with Construction Dewatering shall be included in the lump sum contract price for “Contractor Designed Buried Structure No. ____”, and no further compensation will be made. Construction dewatering includes all material, labor, and equipment, complete and in place, for work necessary to keep excavations free from water and in a hydrostatically controlled condition during construction including but not limited to design, materials, equipment, installation, operation, maintenance, monitoring, reporting, removal of dewatering system(s), and decommissioning of well(s).

DIVISION7.GR7

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

7-01.GR7

Drains

7-01.1.GR7

Description

7-01.1.DT7

Included Work

(May 1, 2019 SnoCo GSP)

Sections 7-01 through 7-08 are supplemented with the following:

Description
Structure excavation Class B incl. haul, asphalt removal and disposal, gravel backfill for pipe zone bedding, backfilling, backfill compaction, hauling and disposing of native material, and cleaning and testing storm system as described herein shall be included in the various related drainage and storm sewer system bid items, as included in the Proposal.

7-01.3.GR7

Construction Requirements

7-01.3.DT7

(December 20, 2023 SnoCo GSP)
Sections 7-01.3, 7-02.3, 7-04.3, 7-05.3 and 7-08.3 are supplemented with the following:

For pipes, culverts and storm sewers the Contractor shall sawcut and remove one foot of pavement beyond each side of the structure excavation limits of the trench as specified in Section 2-09.4

For manhole, catch basin, grate inlet and drop inlet the contractor shall sawcut and remove one foot of pavement around the perimeter of the structure excavation limit specified in Section 2-09.4.

The Engineer reserves the right to vary pipe and drainage structure vertically up to one foot from the Plans. Excavation greater than 1.0 foot in depth from that shown in the Plans will be considered as additional excavation for drainage structures.

The Contractor shall clean and test all storm system components installed, modified, or connected to in this Contract. Cleaning and removal of sediment and debris shall be performed as needed or as designated by the Engineer to maintain full operation and capacity of the drainage system(s) during the project. Immediately prior to project completion the Contractor shall thoroughly clean these appurtenances by vactor and jetting methods to the satisfaction of the Engineer.

7-01.5.GR7

Payment

7-01.5.DT7

(December 20, 2023 SnoCo GSP)

Sections 7-01.5, 7-02.5, 7-04.5, 7-05.5 and, 7-08.5 are supplemented with the following:

Structure excavation class B including haul, backfilling, pipe zone bedding, sawcutting and if applicable, cleaning and testing storm system shall be included in the unit contract bid price for all pipes, drains, culverts, storm sewers, manholes, catch basins, and inlets that are included in the Proposal.

Backfilling the excavation with select material and surfacing shall be paid at the unit contract price for the bid items included in the Proposal.

7-09.GR7

Water Mains

7-09.3.GR7

Construction Requirements

KG7-09.3(21).GR7

(September 16, 2025 SnoCo GSP)

Concrete Thrust Blocking

This section is supplemented with the following:

Thrust blocking shall be of concrete of a mix not leaner than 1 part cement, 2-1/2 parts sand and 5 parts aggregate, having compressive strength of not less than 2000 psi in 24 hours when using high early strength cement, and 7 days when using standard cement. Blocking shall be placed between solid ground and the fitting to be anchored.

7-09.5 **Payment**

This section is supplemented with the following:

"Ductile Iron Pipe (RJ) for Water Main 8-In. Diam., Class 52", per linear foot.

The unit contract price per linear foot of "Ductile Iron Pipe for Water Main 8-In Diam, Class 52" shall be full pay for all Work to complete the installation of the water main, including but not limited to, trench excavation, bedding, laying and jointing pipe and fittings, ethafoam pad, insulation sleeve, backfilling, concrete thrust blocking, testing, disinfecting the pipeline, flushing, dechlorination of water used for flushing, and clean up.

"Connection to Existing Water Main, 8-In Diam., per each.

Payment for work under this item includes all labor, materials and equipment necessary to furnish and for the complete connection of the new ductile iron water main pipe to the existing water main/system as shown on the Contract Drawings including potholing of the existing water main to verify depth, pipe material, flange bolt pattern, and pipe size, removal of fittings as necessary, co-ordination with other utilities etc.

DIVISION8.GR8

Division 8
Miscellaneous Construction

8-01.GR8

Erosion Control and Water Pollution Control

8-01.3.GR8

Construction Requirements

8-01.3(1).GR8

General

8-01.3(1).DT8

(July 9, 2018 SnoCo GSP)

The last sentence of the first paragraph of Section 8-01.3(1) is revised to read:

The adaptive management shall use the means and methods identified in this section and means and methods identified in the Snohomish County Drainage Manual or the Washington State Department of Ecology's Stormwater Management Manual for Western Washington

The eleventh paragraph of Section 8-01.3(1) is revised to read:

When applicable, the Contractor shall be responsible for all work required for compliance with the CSWGP.

8-01.3(1)A.GR8

Submittals

8-01.3(1)A1.GR8

Temporary Erosion and Sediment Control Plan

8-01.3(1)A1.DT8

(July 9, 2018 SnoCo GSP)

The second paragraph of Section 8-01.3(1)A1 is revised to read:

The Contractor shall either adopt the TESC Plan in the Contract or develop a new TESC Plan. If the Contractor adopts the Contracting Agency TESC Plan, the Contractor shall modify the TESC Plan to meet the Contractor's schedule, and method of construction and it includes off-site areas that will be used to directly support construction activity such as equipment staging yards, material storage areas, or borrow areas. Contractor TESC Plans shall include all high visibility fence delineation shown in the Contracting Agency Contract Plans. All TESC Plans shall meet the requirements of the current edition of the Snohomish County Drainage Manual and be adaptively managed as needed throughout construction based on site inspections and required sampling to maintain compliance with the CWSGP. The Contractors shall develop a schedule for the implementation of the TESC work and incorporate it into the Contractor's progress schedule.

8-01.3(1)B.GR8

Erosion and Sediment Control (ESC) Lead

8-01.3(1)B.OPT2.DT8

Section 8-01.5 is supplemented with the following:

(May 14, 2025 SnoCo GSP)

The unit contract price for "High Visibility Silt Fence", "High Visibility Fence", "Check Dam", "Plastic Covering", "Stabilized Construction Entrance", "Wattle", and "Inlet Protection" shall be full pay for all costs to furnish, install, and remove these items as specified. Once removed, these items shall remain the property of the Contractor.

8-01.3(15).GR8

Maintenance

8-01.3(15).DT8

(July 9, 2018 SnoCo GSP)

The first paragraph of Section 8-01.3(15) is revised to read:

Erosion and sediment control BMPs shall be maintained or adaptively managed until the Engineer determines they are no longer needed. When deficiencies in functional performance are identified the deficiencies shall be rectified immediately.

8-01.3(16).GR8

Removal

8-01.3(16).DT8

(July 9, 2018 SnoCo GSP)

The last two paragraphs of Section 8-01.3(16) are deleted.

8-01.5.GR8

Payment

8-01.5.DT8

Section 8-01.5 is supplemented with the following:

(May 21, 2025 SnoCo GSP)

The unit contract price for “High Visibility Silt Fence”, “High Visibility Fence”, Check Dam”, “Plastic Covering”, “Stabilized Construction Entrance”, “Wattle”, and “Inlet Protection” shall be full pay for all costs to furnish, install, and remove these items as specified. Once removed, these items shall remain the property of the Contractor.

8-02.GR8

Roadside Restoration

KG8-02_Hydroseed.DT8

(August 21, 2024 SnoCo GSP)

Section 8-02 is supplemented with the following:

Hydroseed

Description

All hydroseeding and other revegetation shall be completed in accordance with Section 8-02, Roadside Restoration of the Standard Specifications, except as modified herein. Hydroseeding shall begin after grading and site work is completed.

Materials

Materials shall conform to Section 9-14, Erosion Control and Roadside Planting, of the Standard Specifications as modified herein.

Hydroseed shall be composed of the following seed mixture, mulch, and tackifier.

Roadside Restoration Seed Mix shall conform to the following:

Botanical Name	Common Name	Seed Ratio
Lolium perenne	Perennial rye blend	70%
Festuca rubra var. commutata *or* *Festuca rubra*	Chewings fescue or Red fescue blend	30%

	Total	100%

Wetland Restoration Seed Mix shall conform to the following:

Botanical Name	Common Name	Seed Ratio
Carex densa	Dense sedge	10%
Carex obnupta	Slough sedge	20%
Eleocharis palustris	Creeping Spikerush	20%
Juncus patens	Spreading Rush	20%
Scirpus microcarpus	Small fruited bulrush	30%
	Total	100%

Seed application rate: 90 lbs/acre

Mulch shall conform to Section 9-14.4(2)A, Long-Term Mulch, with an application rate of 2,000 lbs/acre.

Tackifier shall conform to Section 9-14.4(7)A, Organic Tackifier, with an application rate of 60 lbs/acre.

Construction Requirements

Apply all seed, mulch, and tackifier per application rates stated above onto soil. Seed, mulch, and tackifier shall be mixed and applied in unison and not stratified onto soil. Fertilizers shall not be used.

Hydroseeding shall not be applied until weather permits and installation has been authorized by the Engineer.

Seeding may be done from September 1 to October 15.

Measurement

Hydroseed shall be measured per square yard.

Payment

“Hydroseed”, per square yard.

The Contract price per square yard for “Hydroseed” shall be full pay for all materials, delivery, labor, and equipment to perform the final permanent hydroseeding work as specified including application of seed, mulch, and tackifier.

8-02.3.GR8

Construction Requirements

8-02.3(4).GR8

Topsoil

8-02.3(4)A.GR8

Topsoil Type A

8-02.3(4)A.OPT1.DT8

Section 8-02.3(4)A is supplemented with the following:
(February 25, 2021 SnoCo GSP)

Roadside Planting, Wall Face, and Buffer Blend

Topsoil Type A (RWB) shall consist of a blend of sandy loam (as defined by National Soil Survey Center, Natural Resources Conservation Service, U.S. Department of Agriculture) and fine compost as defined in Section 9-14.5(8).

The sandy loam shall be free of weeds, deleterious materials, rocks, and debris. Topsoil Type A shall have an organic matter content by volume between 10% to 15%. 100% of the imported topsoil shall pass through a 1-inch sieve, and less than 25% shall pass through a #200 sieve.

8-12.GR8

Chain Link Fence and Wire Fence

8-12.2.GR8

Materials

8-12.2.INST1.GR8

Section 8-12.2 is supplemented with the following:

KG8-12.2.OPT1.FR8

(June 30, 2025 SnoCo GSP)

Coated Chain Link Fence

Chain link fence fabric shall be hot-dip galvanized with a minimum of 0.8 ounce per square foot of surface area.

Fencing materials shall be coated with an ultraviolet-insensitive plastic or other inert material at least 2 mils in thickness. Any pretreatment or coating shall be applied in accordance with the manufacturer's written instructions. The Contractor shall provide the Engineer with the manufacturer's written specifications detailing the product and method of fabrication. The color shall match SAE AMS Standard 595 color number **17038**.

Samples of the coated fencing materials shall have received the Engineer’s acceptance prior to installation on the project.

The Contractor shall supply the Engineer with 10 aerosol spray cans containing a minimum of 14 ounces each of paint of the color specified above. The touch-up paint shall be compatible with the coating system used.

8-12.5.GR8

Payment

8-12.5.INST1.GR8
Section 8-12.5 is supplemented with the following:

8-12.5.OPT6.GR8
(April 6, 2015)
"Cable Fence", per linear foot.

KG8-26 Wood Strand Mulch.GR8
(June 30, 2025 SnoCo GSP)

8-26 Vacant
(October 9, 2024)

Section 8-26 including title is deleted and replaced with the following:

8-26 Wood Strand Mulch

Description
This Work consists of furnishing and placing Wood Strand Mulch and shall be performed in accordance with these Specifications and as shown in the Plans or as designated by the Engineer.

Materials
Materials shall meet the requirements of the following sections:

Wood Strand Mulch	Section 9-14.5(4)

Construction Requirements
The Contractor shall complete final grading and placement/incorporation of soil amendments within the planting area prior to placement of Wood Strand Mulch. Wood Strand Mulch shall not be placed below the anticipated water level of ditch slopes, pond bank slopes, and stream banks, or in areas of standing or flowing water. Areas receiving Wood Strand Mulch shall be bare soil or vegetation free before application, except where trees and other plants are specifically identified in the Plans or designated by the Engineer to be saved and protected. Wood Strand Mulch shall be placed to a uniform non-compacted depth of 3 inches over all areas unless otherwise specified. Wood Strand Mulch shall be feathered to the base of the plant and 1 inch below the top of junction and valve boxes, curbs, and pavement edges. Any contamination of the Wood Strand Mulch due to the Contractor's operations shall be corrected to its former condition at no additional cost to the Contracting Agency. Wood Strand Mulch placed to a thickness greater than specified shall be at no additional cost to the Contracting Agency.

Measurement
Wood Strand Mulch will be measured by the square yard ground slope surface area covered and accepted.

Payment
Payment will be made in accordance with Section 1-04.1, for each of the following bid items that are included in the proposal:

"Wood Strand Mulch", per S.Y.

The contract unit price per S.Y. for "Wood Strand Mulch", shall be full compensation for all labor, materials, and equipment necessary to complete the work as shown in the Plans and as specified, including stockpiling, and spreading the mulch.

KG8-27 Small Woody Material.GR8

(June 30, 2025 SnoCo GSP)

8-27 Vacant

(November 27, 2024)

Section 8-27 including title is deleted and replaced with the following:

8-27 Small Woody Material

Description

This Work consists of furnishing and placing Small Woody Material and shall be performed in accordance with these Specifications and as shown in the Plans or as designated by the Engineer.

Materials

Small Woody Material may be available from trees removed by excavation or clearing and grubbing limits as shown in the Plans. Components of the removed trees which meet the criteria for Small Woody Material may be used to supplement the imported material and will be accepted by a visual inspection by the Engineer.

Small Woody Material shall consist of a random assortment of branches and trees of the following native species: Western red cedar (Thuja plicata), douglas fir (Pseudotsuga mensezeii), western hemlock (Tsuga heterophylla) coniferous trees, or various hardwood trees. No more than 50% of hardwood species shall be used. Small branches less than 2 inches in diameter, leaves, and needles shall be removed. The maximum diameter of any piece of Small Woody Material shall be 5 inches. The minimum length of any piece of Small Woody Material shall be 4 feet; maximum length shall be 8 feet.

Construction Requirements

The Contractor shall place the Small Woody Material at locations shown in the Plans. Small Woody Material shall be placed in a 1-foot lift as the streambed is constructed within the culvert. Individual pieces of Small Woody Material shall have a somewhat random, horizontal orientation within the lift and placed at a 10 to 30-degree vertical angle with the streambank end of Small Woody Material set lower in elevation. One-half to two-thirds of the length of each piece of Small Woody Material shall be buried within the streambed to a minimum depth of 1 foot.

Small Woody Material shall extend one quarter to one half of the distance into the bankfull channel width. No portion of the wood shall be higher in elevation than the adjacent bank at the culvert wall.

Measurement

Small Woody Material will be measured by the linear foot placed as measured parallel to the thalweg.

Payment

Payment will be made in accordance with Section 1-04.1, for each of the following bid items that are included in the proposal:

"Small Woody Material", per linear foot.

The contract unit price per linear foot for "Small Woody Material", shall be full payment for all costs to complete the Work as specified here and shown in the Plans including for all labor, materials, transportation, and equipment needed for final placement.

KG8-28 Deformable Grade Control.GR8
(June 30, 2025 SnoCo GSP)
Division 8 is supplemented with the following:

8-28 Deformable Grade Control Structure

8-28.1 Description

This Work consists of furnishing and installing Deformable Grade Control Structures to the lines, dimensions, and grades designated in the Plans or established by the Engineer.

8-28.2 Materials

Materials shall meet the requirements of the following sections:

Slash	Section 8-SA5.GR8
Streambed Sediment	Section 9-03.11(1)
Streambed Fine Sediment	Section 9-03.11(2)
Streambed Cobbles 8 In	Section 9-03.11(4)
Streambed Boulders Type 2	Section 9-03.11(5)

Slash is preferably obtained from on-site clearing operations for the project.

8-28.3 Construction Requirements

Slash, streambed sediment, and streambed cobbles shall be mixed onsite in the ratio specified in the Plans. Place the mix so that the slash has a random orientation and is interlocking. Hand placement may be required to achieve the vertical portions of the slash. Vertical portions of the slash shall be visible across the entire area of the Deformable Grade Control Structure in a random appearing fashion.

The Deformable Grade Control Structure shall be roughly flush with the adjacent ground surfaces with the slash slightly exposed (less than 9-inches) above the finished grade. Slash shall vary in length and diameter up to the tolerances allowed per the materials section and make up approximately 50-percent of the trench volume.

Water-in fine sediment until voids are filled and water remains on the surface. Dewatering water may be used for this purpose if it does not leave the isolated channel. Do not allow fine sediments to accumulate on the surface of the Deformable Grade Control Structure.

The Deformable Grade Control Structure position may be adjusted by the Engineer to fit field conditions at no added cost.

8-28.4 Measurement

Deformable Grade Control Structure will be measured in place by the linear foot along the stream thalweg.

Channel excavation including haul will be measured separately.

Streambed fine sediment will not be measured.

8-28.5 Payment

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

"Deformable Grade Control Structure", per linear foot.

Streambed Fine Sediment, Streambed Sediments, Streambed Cobbles 8", Streambed Boulder Type 2 shall be incidental to the bid item "Deformable Grade Control Structure".

The unit contract prices shall be full payment for all material, labor, and equipment costs associated with furnishing, transporting, mixing, and installing the deformable grade control structure as specified.

8-31.GR8

Temporary Stream Diversion

8-31.3.GR8

Construction Requirements

8-31.3(1).GR8

General

8-31.3(1)A.GR8

General TSD Requirements

8-31.3(1)A.INST1.GR8

Section 8-31.3(1)A is supplemented with the following:

KG8-31.3(1)A.OPT1.FR8

(October 3, 2022)

Minimum Stream Flows

At all times of operation, the Contractor's temporary stream diversion shall be designed to convey the following minimum flow rate of water in cubic feet per second:

~~The temporary stream diversion shall have a contingency for the 25yr seasonal flow of 140 cfs.~~

The temporary stream diversion shall be designed for a minimum 2-year seasonal flow of 19.9 cfs. The temporary stream diversion shall have a contingency for the 25-year seasonal flow of 140 cfs.

Addendum #1

KG8-31.3(2)B Plan Requirements.GR8

(June 30, 2025 SnoCo GSP)

8-31.3(2)B Plan Requirements

This section is supplemented with the following:

A Contingency Plan is required that meets the criteria listed under 8-31.3(2)B item number 5.

8-31.3(3).GR8

Fish Block Net Installation and Fish and Aquatic Species Exclusion

8-31.3(3)B.GR8

Contracting Agency Provided Materials

8-31.3(3)B.INST1.GR8

Section 8-31.3(3)B is supplemented with the following:

KG8-31.3(3)B.OPT1.FR8

(June 30, 2025 SnoCo GSP)

The Contracting Agency will provide the following fish exclusion materials:

5 gallon buckets and nets

KG8-31.5.GR8

Payment

KG8-31.5.INST1.GR8

Section 8-31.5 is supplemented with the following:

(SnoCo October 2, 2025 GSP)

The cost associated with dewatering channel excavation is incidental to the lump sum bid item "Temporary Stream Diversion"

8-32.1SA.DT8

Section 8-32 is added with the following:

(January 12, 2016 SnoCo GSP)

Sanitary Facility

There will be no field office building for this project.

Description

At a location approved by the Engineer, and being the first order of work, the Contractor shall provide, at each site, a sanitary facility sufficient for the size of the work force which will be required for the project, including County staff.

Sanitary Facility

The Contractor shall provide and install the sanitary facility so that it is plumb and level, and shall properly maintain the facility based upon the number of workers on the site. The facility shall be kept locked during nonworking hours.

The Contractor shall also provide a dispenser and waterless hand sanitizer near or in the sanitary facility.

Upon physical completion of the Contract, or when designated by the Engineer, the Contractor shall remove the sanitary facility and hand-washing station from the site, and the facility shall remain the property of the Contractor.

Measurement and Payment
All costs involved with supplying the sanitary facility shall be included in the lump sum contract price for "Mobilization", and no further compensation will be made.

8-SA5.GR8
(October 3, 2022)
WOODY MATERIAL

Description
This Work consists of furnishing and installing Woody Materials and Slash where designated in the Plans or determined by the Engineer.

Definitions
Woody Material – Logs, rootwads, or stumps greater than 4 inches in diameter. The size and length of Woody Material will be as designated in the Plans.
Slash – Branches, small trees, brush, and treetops smaller than 4 inches in diameter.

Materials
Woody Material
Woody Material shall be a log with or without rootwad, of the diameter and length specified in the plans and shall meet the following requirements:

1. Woody Material – Log with rootwad - A trunk of a native coniferous tree species with the length as designated in the plans (measured from the cut end of the log to the start of the rootwad mass). Trunk diameter at breast height (DBH) as designated in the plans. DBH measured 4.5-feet from the start of the rootwad mass.

2. Woody Material – Log without rootwad - A trunk of a native coniferous tree species with the length as designated in the plans (from cut end to cut end). The cut end of the log shall be no more than 4-inches narrower than the specified DBH.

3. The rootwad diameter shall be a minimum of 2.5 times the DBH and maximum 4 times DBH with roots intact. Woody Material shall be free of soil and rocks, and rot and disease, and shall be structurally sound. Cleaning shall not strip logs of bark and roots.

4. The acceptable tolerance of DBH as specified in the plans is ±3 inches.

5. The acceptable tolerance of the length of Woody Materials is ±6 inches.

Woody Material may be available from trees removed by excavation or clearing and grubbing limits as shown in the Plans. Components of the removed trees which meet the criteria for the specific Woody Material may be used to supplement the Woody Material and will accepted by a visual inspection by the Engineer.

Slash

Slash shall consist of a random assortment of branches, trees, brush and treetops of the following native species: Western red cedar (Thuja plicata), douglas fir (Pseudotsuga mensezeii), western hemlock (Tsuga heterophylla) coniferous trees, or various hardwood trees. No more than 50% of hardwood species shall be used. The needles shall be left intact to the extent possible given the mechanics of handling Slash. The maximum diameter of any piece of slash shall be 4 inches. The maximum length of any piece of Slash shall be 6 feet. Slash shall not contain any material which causes turbidity.

Slash shall consist of a random assortment of branches, trees, brush and treetops of the following native species: Western red cedar (Thuja plicata), douglas fir (Pseudotsuga mensezeii), western hemlock (Tsuga heterophylla) coniferous trees, or various hardwood trees. No more than 50% of hardwood species shall be used. The needles shall be left intact to the extent possible given the mechanics of handling Slash. The maximum diameter of any piece of Slash shall be 4 inches. The maximum length of any piece of Slash shall be 6 feet. Slash shall not contain any material which causes turbidity.

Construction Requirements

The streambed and bank shall be temporarily excavated to allow placement of the Woody Material. Backfill shall be native material or designed streambed material. Backfill shall be placed in lifts no thicker than 12 inches and shall be compacted to be uniformly dense and unyielding as approved by the Engineer.

The Contractor shall install each Woody Material at the location and elevation shown in the Plans.

The Contractor shall exercise care when placing the Woody Material to ensure that the method of installation minimizes disturbance of waterways and prevents sediment or pollutant discharge into water.

The Contractor shall exercise care when installing and transporting the Woody Materials to avoid damage. Rootwads shall remain intact during delivery and installation.

Acceptance of Woody Material will be based upon inspection by the Engineer, prior to placement.

Measurement

Woody Material – Log without Rootwad and Woody Material – Log with Rootwad will be measured per each.

Slash will be measured by the cubic yard, in the hauling conveyance.

Payment

Payment will be made in accordance with Section 1-04.1, for each of the following bid items.

"Woody Material - Log without Rootwad DBH ______", per each.
"Woody Material - Log with Rootwad DBH ______", per each.
The unit contract price for each "Woody Material - Log without Rootwad DBH ______" and "Woody Material - Log with Rootwad DBH ______" shall be full payment for

construction of one log with or without rootwad as specified, including acquiring, storing, hauling to the site, unloading, assembling, bundling, installing, anchoring, excavation, backfill, compaction and grading needed for final placement.

"Slash", per cubic yard.
The unit Contract price per cubic yard for "Slash" shall be full payment for all costs to complete the Work as specified, including acquiring, storing, hauling to the site, unloading, assembling, bundling, installing, anchoring, excavation, backfill, compaction and grading needed for final placement.

DIVISION9.GR9

Division 9
Materials

9-02.GR9

Bituminous Materials

9-02.4.GR9

Anti-Stripping Additive

9-02.4.DT9
(March 9, 2017 SnoCo GSP)
Section 9-02.4 is revised to read:

Evaluation of anti-strip additives shall be provided as part of the mix design acceptance criteria. Acceptable anti-strip evaluations include;

1) a WSDOT validated mix design showing the validated anti-strip additive and dosage,
2) a historic anti-strip determination from WSDOT not greater than two calendar years old, or
3) a passing TSR test at the anti-strip dosage proposed by the Contractor.

9-03.GR9

Aggregates

9-03.8.GR9

Aggregate for Hot Mix Asphalt

9-03.8(2).GR9

HMA Test Requirements

9-03.8(2).DT9
(April 11, 2017 SnoCo GSP)
Section 9-03.8(2) is supplemented with the following:

In the table in, item number 3, the heading "Statistical" is revised to read "Statistical and Nonstatistical".

9-03.8(7).DT9

9-03.8(7) HMA Tolerances and Adjustments

(February 21, 2024 SnoCo GSP)
In Section 9-03.8(7), all table headings reading "Statistical Evaluation" are revised to read "Statistical and Nonstatistical Evaluation".

9-03.14.DT9
(April 17, 2006 SnoCo GSP)

Borrow

9-03.14(1).DT9
(October 10, 2013 SnoCo GSP)

Gravel Borrow

Section 9-03.14(1) is revised as follows:

Delete U.S. No. 200 7.0 max. from the table, and replace with U.S. No. 200 5.0 max.

9-16.GR9

Fence and Guardrail

9-16.3.GR9

Beam Guardrail

9-16.3(2).DT9
(July 22, 2016 SnoCo GSP)
Section 9-16.3(2) is deleted and replaced with the following:

Posts shall be galvanized steel. Blocks made from alternate materials that meet the NCHRP Report 350 or MASH criteria may be used in accordance with the manufacturer's recommendations.

Posts and blocks shall be of the size, length, and type shown in the Plans and shall meet the requirements below.

Galvanized steel posts, and base plates, where used, shall conform to either ASTM A36 or ASTM A992, and shall be galvanized in accordance with AASHTO M 111. Welding shall conform to Section 6-03.3(25). All fabrication shall be completed prior to galvanizing.

KGAPPENDIX2.FR9
(January 2, 2012)

APPENDICES

The following appendices are attached and made a part of this Contract:

APPENDIX A: GEOTECHNICAL ENGINEERING REPORT

APPENDIX B: PERMITS

APPENDIX C: STORMWATER POLLUTION PREVENTION PLAN

APPENDIX D: MONUMENT PRESERVATION

APPENDIX E: APPRENTICESHIP REQUIREMENTS

STDPLANS.GR9
(May 5, 2025)

Standard Plans

The Washington State Department of Transportation *Standard Plans* M21-01, published September 2024, is made a part of this Contract with the following revisions:

A-10.30
RISER RING detail (Including SECTION view and RISER RING DIMENSIONS table): The RISER RING detail is deleted from the plan.

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

A-40.20
Sheet 1, NOTES 1, 2, 3, and 4 are replaced with the following:

1. Use the ½ inch joint details for bridges with expansion length less than 100 feet and for bridges with L type abutments. Use the 1 inch joint details for other applications.

2. Use detail 5, 6, 7 on steel trusses and timber bridges with concrete bridge deck panels.

3. For details 1, 2, 3, and 4, the item “HMA Joint Seal at Bridge End” shall be used for payment. For details 5 and 6, the item “HMA Joint Seal at Bridge Deck Panel Joint” shall be used for payment. For detail 7, the item “Clean and Seal Bridge Deck Panel Joint” shall be used for payment.

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

A-50.40
Sheet 1, Plan View: The callout “BEAM GUARDRAIL TYPE 31 TRANSITION SECTION TYPE 21 OR TYPE 24 (SEE STANDARD PLAN C-25.20 OR C-25.30)” is revised to read “BEAM GUARDRAIL TYPE 31 TRANSITION SECTION TYPE 21, 24, OR 25 (SEE STANDARD PLAN C-25.20, C-25.30, OR C-25.32)”

A-60.40
Note 2 reference to “6-09.3(6)” is revised to read “6-21.3(7)”.

B-90.40
Valve Detail – DELETED

C-20.41

Note 4, First Sentence, “Box Culvert guardrail steel posts are not needed for fill depths greater than 40 inches.” is revised to read; “Box culvert guardrail steel posts are not needed for fill depths greater than 46 inches. Provide 6-inches or greater of separation between the bottom of the guardrail post and top of the culvert”

BOX CULVERT POST ASSEMBLY, ELEVATION VIEW, post assembly length dimension “41” MIN. 72” MAX.” is revised to read; “41” MIN. 78” MAX.”

SECTION A, base material depth dimension - “9” MIN. 40” MAX. (SEE NOTE 4)” is revised to read: “9” MIN. 46” MAX. (SEE NOTE 4)”

<u>C20-43</u>

Note 4, First Sentence: “Box culvert guardrail steel posts are not needed for fill depths greater than 40 inches.” is revised to read: “Box culvert guardrail steel posts are not needed for fill depths greater than 46 inches. Provide 6-inches or greater separation between the bottom of guardrail post and top of culvert.”

BOX CULVERT POST & BASE PLATE ASSEMBLY, ELEVATION VIEW, post assembly length dimension – “41” MIN. 72” MAX.” is revised to read: “41” MIN. 78” MAX.”

SECTION A, base material depth dimension - “9” MIN. 40” MAX. (SEE NOTE 4)” is revised to read: “9” MIN. 46” MAX. (SEE NOTE 4)”

<u>C-23.70</u>

Sheet 2, ANCHOR BRACKET ASSEMBLY DETAIL, dimension, “R. 5/16” is revised to read; R. 15/16”

ANCHOR PLATE DETAIL, weld callout (fillet), 1/4" is revised to read; 3/16”

<u>C-60.20</u>

Sheet 1, Plan view, callout – “1/2” (IN) DIAMETER X 6 1/2" (IN) LONG ANCHOR BOLT ~ PER STD. SPEC. SECT. 9-06.5(4) (TYPICAL) (SEE NOTE 7)” is revised to read: “5/8” DIAMETER x 6 1/2" (IN) LONG ANCHOR BOLT ~ PER STD. SPEC. SECT. 9-06.5(4) (TYPICAL) (SEE NOTE 7)”

<u>C-70.15</u>

BARRIER CONNECTION DETAIL, callout – “CENTER GRID IN CONNECTION BLOCKOUT AND FILL VOID WITH TYPE 3 GROUT (STD. SPECIFICATION SECTION 9-20.3(3) PLACED IN ACCORDANCE WITH STD. SPECIFICATION SECTION 6-20.3(20)” is revised to read “CENTER GRID IN CONNECTION BLOCKOUT AND FILL VOID WITH GROUT TYPE 3 (STD. SPECIFICATION SECTION 9-20.3(3) PLACED IN ACCORDANCE WITH STD. SPECIFICATION SECTION 6-02.3(20)”

<u>C81.10</u>

Sheet 1, TYPICAL SECTION – TRAFFIC BARRIER the R4 #6 bar on the traffic face may be placed 4” down from the top of the barrier to allow additional room to install BP railing or other attachments. The R4 bar shall be kept tight to the front R2 bar.

Sheet 4, the existing table “IMPACT SHEAR AND IMPACT MOMENT TABLE” is renamed to “IMPACT SHEAR AND MOMENT TABLE DECK OVERHANG AND CONNECTIONS” keynote 25 is still applicable.

Sheet 4, NOTES, the following Note is added: “3. Deck overhangs for this use constitute plain reinforced concrete typically around 8" in thickness, non-prestressed moment slabs or approach slabs, or plain reinforced and longitudinally prestressed box girders which employ a topping slab. Other Supporting Structure Systems inclusive of post-tensioned decks, walls, and or Structure segments tied together without a topping slab, with the ties in the barrier resistance load path, shall use the impact shear and moments for other supporting structures.”

Sheet 4, the following table is added with a keynote 25.

IMPACT SHEAR AND MOMENT TABLE OTHER SUPPORTING STRUCTURES										
	Interior Segment					End Segment				
Roadway and Fill Height at Curb Line (in)	0	6	12	18	24	0	6	12	18	24
End Segment Length (ft)	-	-	-	-	-	10.00	10.50	11.25	11.75	12.50
Impact Moment (kip*ft/ft)	19.86	24.12	28.55	33.16	37.97	20.80	25.17	29.65	34.27	39.04
Impact Shear (kip/ft)	7.89	8.04	8.23	8.44	8.68	8.27	8.39	8.54	8.72	8.92

<u>C-81.15</u>

Sheet 1, General Notes, Add Note 7, to read;"7. The concrete class for the moment slab shall be class 4000 typically and class 4000A when the top of the slab is used as the roadway, or sidewalk, surface. The concrete class for the barrier is defined in Standard Specification Section 6-10.3."

<u>C-85.11</u>

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

<u>D-3.09</u>

Sheet 1, GEOSYNTHETIC WALL WITH 2 FT TRAFFIC SURCHARGE detail, callout – "BARRIER ON WALL ~ SEE Standard Plan D-3.15 or D-3.16" is revised to read: "BARRIER ON WALL ~ SEE CONTRACT PLANS"

<u>D-3.10</u>

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

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

<u>D-3.11</u>

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

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

D-10.10

Note 7, “If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30” is revised to read “Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 1 and 1SW”.

D-10.15

Note 7, “If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30” is revised to read “Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 2 and 2SW”.

D-10.30

Wall Type 5 may be used in all cases.

D-10.35

Wall Type 6 may be used in all cases.

D-10.40

Note 5, “If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30” is revised to read “Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 7”.

D-10.45

Note 5, “If Traffic Barriers are required, See Standard Plans D-15.10, D-15.20 and D-15.30” is revised to read “Traffic Barriers shall not be structurally connected to the Reinforced Concrete Retaining Wall Type 8”.

F-10.18

Note 1; “Construct curb joints at concrete pavement transverse joint locations. If all adjacent pavement is HMA, see Standard Plam F-30.10 for Curb Expansion and Contraction Joint Spacing.” is revised to read – “See Standard Plan F-30.10 and Standard Specification Section 8-04.3 for Curb Expansion and Contraction Joint details and spacing.”

F-30.10

All five instances of the “2.0% MAX.” are replaced with “2.1% MAX.”

F-40.12

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”

Note 7 is replaced with the following:

7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement. When a ramp is constructed on a radius, the Curb Ramp length is measured on the inside radius along the back of the walkway.

Section B is amended as follows:

Delete: “15’ – 0” MAX. (TYP.)”

Section C is amended as follows:

Delete: “15’ – 0” MAX. (TYP.)”

F-40.14

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”

Note 7 is replaced with the following:

7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement. When a ramp is constructed on a radius, the Curb Ramp length is measured on the inside radius along the back of the walkway.

Section A is amended as follows:

Delete: “15’ – 0” MAX. (TYP.)”

Section C is amended as follows:

Delete: “15’ – 0” MAX. (TYP.)”

<u>F-40.15</u>

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”

Note 7 is replaced with the following:

7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement.

Section A is amended as follows:

Delete: “15’ – 0” MAX. (TYP.)”

<u>F-40.16</u>

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”

Note 8 is replaced with the following:

7. The running slope of curb ramps shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the landing. Do not include the abutting landing in the Curb Ramp length measurement.

Section A is amended as follows:

Delete: “15’ – 0” MAX. (TYP.)”

Section B is amended as follows:

Delete: “15’ – 0” MAX. (TYP.)”

<u>F-80.10</u>

The one instance of “2.0% MAX.” is replaced with “2.1% MAX.”

Note 6 is replaced with the following:

The running slope of the Pedestrian Ramp shall not exceed 8.3% maximum except as noted herein. If the 8.3% running slope creates a ramp that exceeds 15ft, see contract plans for details. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk.

Section A is amended as follows:

Delete: “15” Max.”

<u>J-10.10</u>

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

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

J-10.16

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

J-10.17

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

J-10.18

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

J-20.01

STANDARD DIMENSIONS AND REFERENCES table, TYPE FB, Standard Height column – "15'-0" "is revised to read; "14'-0" "

J-20.10

DELETED

J-20.11

DELETED

J-20.26

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

Add General Note 2, to read: "Signs shown are for locations with pedestrian signal displays (Accessible Pedestrian Signals/APS). Accessible information device (AID) pushbuttons signs not shown."

Revise View Titles (Both Sheets) to read: "ACCESSIBLE PEDESTRIAN PUSHBUTTON ASSEMBLY"

J-20.16

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

J-21.10

Sheet 1, Anchor Bolt Template, callout; "9" (IN) BOLT CIRCLE" is revised to read: "9" (IN) DIA.BOLT CIRCLE"

Base Plate Detail, callout; "3/4" (IN) STEEL PLATE WITH HOLE = POLE BASE + 1/6" (IN)" IS REVISED TO READ; "3/4" (IN) STEEL PLATE WITH HOLE = POLE BASE + 1/16" (IN)"

Flat Foundation Detail – Elevation, callout; "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY" is revised to read; "ANCHOR BOLTS ~ ¾" (IN) x 30" (IN) FULL THREAD ~ FOUR REQ'D. PER ASSEMBLY"

Flat Foundation Detail – Elevation, dimension; 4' – 0" is revised to read; "4' – 0" ROUND OR 3' – 0" SQUARE"

J-21.15

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

J-21.16

On both elevation views, the overall standard height dimension "15'-0" " is revised to read; "14'-0" "

J-28.30

General Note 13 – “See Standard Plans C-8b and C-85.14 for steel light standards on traffic barrier” is revised to read; “See Standard Plan C-85.15 for steel light standards on traffic barrier.”

J-40.10

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

J-40.36

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

J-40.37

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

J-50.15

Sheet 1, SECTION A, the call out “LOOP LEAD-IN WIRES, TWISTED PAIRS ~ MAX. 3 PAIRS” is revised to read “LOOP LEAD-IN WIRES, TWISTED PAIRS ~ MAX. 6 PAIRS”

J-75.20

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

J-75.55

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

L-5.10

Add new general Note 9 on sheet 1 – “9. The top of wall in Section A on Sheet 1 shall be located as follows: 1) flush with the finished grade when placed within the deflection distance of the long span guardrail system (Std. Plan C-20.40), 2) Two inches maximum above finished grade when placed behind a box culvert guardrail steel post system (Std. Plan C-20.41 or C-20.43), 3) Six inches minimum for all other applications. The bottom rail shall be located at mid height between the top rail and the top of structure.”

M-20.30

Wide Dotted Lane Line Detail, reference below title, (SEE NOTE 6) is revised to read: (SEE NOTE 5)

M-40.10

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

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

A-10.10-00......... 8/7/07	A-30.35-00......10/12/07	A-50.10-02 ....7/18/24
A-10.20-00........10/5/07	A-40.00-01..........7/6/22	A-50.40-01 ....8/17/21
A-10.30-00........10/5/07	A-40.10-04........7/31/19	A-60.10-03 ..... 12/23/14
A-20.10-00........8/31/07	A-40.15-00........ 8/11/09	A-60.20-03 ..... 12/23/14
A-30.10-00........ 11/8/07	A-40.20-04........1/18/17	A-60.30-01 ....6/28/18
A-30.30-01........6/16/11	A-40.50-03...... 9/12/23	A-60.40-00 ....8/31/07

B-5.20-03........... 9/9/20	B-30.50-03 ....2/27/18	B-75.20-03 .... 8/17/21
B-5.40-02..........1/26/17	B-30.60-00 ....9/9/20	B-75.50-02 .... 3/15/22
B-5.60-02..........1/26/17	B-30.40-03 ....2/27/18	B-70.60-01 .... 1/26/17
B-10.20-03........8/23/23	B-30.70-04 ....2/27/18	B-75.60-00 .... 6/8/06
B-10.40-02........8/17/21	B-30.80-01 ....2/27/18	B-80.20-00 .... 6/8/06
B-10.70-03........8/23/23	B-30.90-02 .... 1/26/17	B-80.40-00 .... 6/1/06
B-15.20-01......... 2/7/12	B-35.20-00 ....6/8/06	B-85.10-01 .... 6/10/08
B-15.40-01......... 2/7/12	B-35.40-01 ....8/23/23	B-85.20-00 .... 6/1/06
B-15.60-02........1/26/17	B-40.20-00 ....6/1/06	B-85.30-00 .... 6/1/06
B-20.20-02........3/16/12	B-40.40-02 .... 1/26/17	B-85.40-00 .... 6/8/06
B-20.40-04........2/27/18	B-45.20-01 .... 7/11/17	B-85.50-01 .... 6/10/08
B-20.60-03........3/15/12	B-45.40-01 ....7/21/17	B-90.10-00 .... 6/8/06
B-25.20-02........2/27/18	B-50.20-00 ....6/1/06	B-90.20-00 .... 6/8/06
B-25.60-03........8/23/23	B-55.20-03 ....8/17/21	B-90.30-00 .... 6/8/06
B-30.05-00......... 9/9/20	B-60.20-02 ....9/9/20	B-90.40-01 .... 1/26/17
B-30.10-03........2/27/18	B-60.40-01 ....2/27/18	B-90.50-00 .... 6/8/06
B-30.15-00........2/27/18	B-65.20-01 ....4/26/12	B-95.20-02 .... 8/17/21
B-30.20-04........2/27/18	B-65.40-00 ....6/1/06	B-95.40-01 .... 6/28/18
B-30.30-03........2/27/18	B-70.20-01 ....3/15/22	

C-1..................... 9/8/22	C-23.70-01 ..... 10/16/23	C-70.10-04 ..... 10/16/23
C-1b................10/12/23	C.24.10-05 ....7/21/24	C-70.15-01 .... 7/21/24
C-1d................10/31/03	C-24.15-00 ....3/15/22	C-75.10-02 .... 9/16/20
C-6a.................. 9/8/22	C-25.20-07 ....8/20/21	C-75.20-03 .... 8/20/21
C-7..................... 9/8/22	C-25.22-06 ....8/20/21	C-75.30-03 .... 8/20/21
C-7a.................. 9/8/22	C-25.26-05 ....8/20/21	C-80.10-03 ..... 10/16/23
C-20.10-09......10/12/23	C-25.30-01 ....8/20/21	C-80.20-01 .... 6/11/14
C-20.14-05......... 9/8/22	C-25.32-00 ....7/29/24	C-80.30-02 .... 8/20/21
C-20.15-03......10/12/23	C-25.80-05 ....8/12/19	C-80.40-01 .... 6/11/14
C-20.18-04......... 9/8/22	C-60.10-04 ....7/21/24	C-85.10-00 .... 4/8/12
C-20.40-10......10/12/23	C-60.15-01 ....7/21/24	C-85.11-01 .... 9/16/20
C-20.41-05........7/18/24	C-60.20-01 ....9/8/22	C-85.15-03 ..... 10/17/23
C-20.43-01........7/18/24	C-60.30-02 ....7/21/24	C-85-18-03......... 9/8/22
C-20.44-00........8/13/24	C-60.40-01 ....7/21/24	C-81.10-00 .... 9/12/23
C-20.45-03......... 9/8/22	C-60.45-01 ....7/21/24	C-81.15-00 .... 9/12/23
C-20.55-00........7/30/24	C-60.50-01 ....7/21/24	
C-22.16-08......10/17/23	C-60.60-01 ....7/21/24	
C-22.40-11........7/21/24	C-60.70-01 ....9/8/22	
C-22.45-07........7/21/24	C-60.80-02 ....7/21/24	

D-2.36-03..........6/11/14	D-3.11-03 .... 6/11/14	D-10.25-01 .... 8/7/19
D-2.46-02..........8/13/21	D-4 .... 12/11/98	D-10.30-00 .... 7/8/08

D-2.84-00........11/10/05
D-2.92-01..........4/26/22
D-3.09-00..........5/17/12
D-3.10-01..........5/29/13
D-6 ....6/19/98
D-10.10-01 .... 12/2/08
D-10.15-01 .... 12/2/08
D-10.20-01 .... 8/7/19
D-10.35-00 .... 7/8/08
D-10.40-01 .... 12/2/08
D-10.45-01 .... 12/2/08
D-20.10-00 .... 10/9/23

1

E-1....................2/21/07
E-2....................5/29/98
E-4 ....8/27/03
E-4a 8/27/03
E-20.10-00 ....9/12/23
E-20.20-00 .... 10/4/23

2

F-10.12-04 ....9/24/20
F-10.16-00 ......12/20/06
F-10.18-04 ....6/28/24
F-10.40-04 ....9/24/20
F-10.42-00 ....1/23/07
F-10.62-02........4/22/14
F-10.64-03........4/22/14
F-30.10-04........9/25/20
F-40.12-03........6/29/16
F-40.14-03........6/29/16
F-40.15-04 ....9/25/20
F-40.16-03 ....6/29/16
F-45.10-05 .... 6/4/24
F-80.10-04 ....7/15/16

3

G-10.10-00 ....9/20/07
G-20.10-03 ....8/20/21
G-22.10-04 ....6/28/18
G-24.10-00 .... 11/8/07
G-24.20-01 .... 2/7/12
G-24.30-02 ....6/28/18
G-24.40-07 ....6/28/18
G-24.50-05.........8/7/19
G-24.60-05.......6/28/18
G-25.10-05.......9/16/20
G-26.10-00.......7/31/19
G-30.10-04.......6/23/15
G-50.10-03.......6/28/18
G-90.10-03....... 7/11/17
G-90.20-05....... 7/11/17
G-90.30-04....... 7/11/17
G-95.10-02.......6/28/18
G-95.20-03.......6/28/18
G-95.30-03.......6/28/18

4

H-10.10-01......... 6/2/24
H-10.11-00......... 6/2/24
H-10.15-01......... 6/2/24
H-10.16-00......... 6/2/24
H-30.10-00 ..... 10/12/07
H-32.10-00 ....9/20/07
H-60.10-01 ....7/3/08
H-60.20-01 ....7/3/08
H-70.10-02 ....8/17/21
H-70.20-02 ....8/17/21

5

I-10.10-01 ....8/11/09
I-30.10-02 ....3/22/13
I-30.15-02 ....3/22/13
I-30.16-01 ....7/11/19
I-30.17-01 ....6/12/19
I-30.20-00.........9/20/07
I-30.30-02.........6/12/19
I-30.40-02.........6/12/19
I-30.60-02.........6/12/19
I-40.10-00.........9/20/07
I-40.20-00.........9/20/07
I-50.20-02...........7/6/22
I-60.10-01.........6/10/13
I-60.20-01.........6/10/13
I-80.10-02.........7/15/16

6

J-05.50-00 ....8/30/22
J-10 ....7/18/97
J-10.10-04 ....9/16/20
J-10.12-00 ....9/16/20
J-10.14-00 ....9/16/20
J-10.15-01 ....6/11/14
J-10.16-02 ....8/18/21
J-10.17-02 ....8/18/21
J-10.18-02 ....8/18/21
J-10.20-04 ....8/18/21
J-10.21-02 ....8/18/21
J-10.22-03 ....10/4/23
J-10.25-01 ....6/21/24
J-10.26-00 ....8/30/22
J-12.15-00 ....6/28/18
J-12.16-00 ....6/28/18
J-15.10-01 ....6/11/14
J-15.15-02 ....7/10/15
J-20.01-01 ....6/21/24
J-26.10-03........7/21/16
J-26.15-01........5/17/12
J-26.20-01........6/28/18
J-27.10-01........7/21/16
J-27.15-00........3/15/12
J-28.01-00........8/30/22
J-28.10-02..........8/7/19
J-28.22-00........8/07/07
J-28.24-02........9/16/20
J-28.26-01...... 12/02/08
J-28.30-04........6/18/24
J-28.40-02........ 6/11/14
J-28.42-01........ 6/11/14
J-28.43-01........6/28/18
J-28.45-03........7/21/16
J-28.50-03........7/21/16
J-28.60-03........8/27/21
J-28.70-04........8/30/22
J-29.10-02........8/26/22
J-50.05-00........7/21/17
J-50.10-01....... .7/31/19
J-50.11-02........7/31/19
J-50.12-02..........8/7/19
J-50.13-01........8/30/22
J-50.15-01........7/21/17
J-50.16-01........3/22/13
J-50.18-00..........8/7/19
J-50.19-00..........8/7/19
J-50.20-00.......... 6/3/11
J-50.25-00.......... 6/3/11
J-50.30-00.......... 6/3/11
J-60.05-01........7/21/16
J-60.11-00........5/20/13
J-60.12-00........5/20/13
J-60.13-00........6/16/10
J-60.14-01........7/31/19
J-75.10-02........7/10/15
J-75.20-01........7/10/15

J-20.05-00 ....6/21/24	J-29.15-01 .... 7/21/16	J-75.30-02........ 7/10/15
J-20.10-05 ....10/4/23	J-29.16-02 .... 7/21/16	J-75.50-00........ 8/30/22
J-20.11-03........7/31/19	J-30.10-01 .... 8/26/22	J-75.55-00........ 8/30/22
J-20.15-04 ....6/21/24	J-40.01-00 .... 8/30/22	J-80.05-00........ 8/30/22
J-20.16-02 ....6/30/14	J-40.05-00 .... 7/21/16	J-80.10-01........ 8/18/21
J-20.20-02 ....5/20/13	J-40.10-04 .... 4/28/16	J-80.12-00........ 8/18/21
J-20.26-01 ....7/12/12	J-40.20-03 .... 4/28/16	J-80.15-00........ 6/28/18
J-21.10-05 ....6/21/24	J-40.30-04 .... 4/28/16	J-81.10-02........ 8/18/21
J-21.15-01 ....6/10/13	J-40.35-01 .... 5/29/13	J-81.12-00.......... 9/3/21
J-21.16-02 ....6/21/24	J-40.36-02 .... 7/21/17	J-84.05-00........ 8/30/22
J-21.17-01 ....6/10/13	J-40.37-02 .... 7/21/17	J-86.10-00........ 6/28/18
J-21.20-01 ....6/10/13	J-40.38-01 .... 5/20/13	J-90.10-03........ 6/28/18
J-22.15-03 ....6/21/24	J-40.39-00 .... 5/20/13	J-90.20-03........ 6/28/18
J-22.16-03 ....7/10/15	J-40.40-02 .... 7/31/19	J-90.21-02........ 6/28/18
J-22.17-00 ....6/21/24	J-45.36-00 .... 7/21/17	J-90.50-00........ 6/28/18

K-70.20-01......... 6/1/16	K-80.32-00 .... 8/17/21	K-80.35-01 .... 9/16/20
K-80.10-02........9/25/20	K-80.34-00 .... 8/17/21	K-80.37-01 .... 9/16/20

L-5.10-02 .... 6/5/24	L-20.10-03........ 7/14/15	L-40.20-02........ 6/21/12
L-5.15-00 ....9/19/22	L-30.10-02........ 6/11/14	L-70.10-01........ 5/21/08
L-10.10-02 ....6/21/12	L-40.15-01........ 6/16/11	L-70.20-01........ 5/21/08

M-1.20-04 ....9/25/20	M-9.60-00......... 2/10/09	M-24.66-00....... 7/11/17
M-1.40-03 ....9/25/20	M-11.10-04 .... 8/2/22	M-40.10-04..... 10/17/23
M-1.60-03 ....9/25/20	M-12.10-04....... 6/28/24	M-40.20-00..... 10/12/07
M-1.80-03 ....6/3/11	M-15.10-02....... 7/17/23	M-40.30-01....... 7/11/17
M-2.20-03 ....7/10/15	M-17.10-02......... 7/3/08	M-40.40-00....... 9/20/07
M-2.21-00 ....7/10/15	M-20.10-04......... 8/2/22	M-40.50-00....... 9/20/07
M-3.10-04 ....9/25/20	M-20.20-02....... 4/20/15	M-40.60-00....... 9/20/07
M-3.20-04 .... 8/2/22	M-20.30-05....... 6/28/24	M-60.10-01......... 6/3/11
M-3.30-04 ....9/25/20	M-20.40-03....... 6/24/14	M-60.20-03....... 8/17/21
M-3.40-04 ....9/25/20	M-20.50-02......... 6/3/11	M-65.10-03....... 8/17/21
M-3.50-03 ....9/25/20	M-24.20-02....... 4/20/15	M-80.10-01......... 6/3/11
M-5.10-03 ....9/25/20	M-24.40-02....... 4/20/15	M-80.20-00....... 6/10/08
M-7.50-01 ....1/30/07	M-24.60-04....... 6/24/14	M-80.30-00....... 6/10/08
M-9.50-02 ....6/24/14	M-24.65-00....... 7/11/17	

PREVAILING WAGE INFORMATION

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Overtime Codes

Overtime calculations are based on the hourly rate actually paid to the worker. On public works projects, the hourly rate must be not less than the prevailing rate of wage minus the hourly rate of the cost of fringe benefits actually provided for the worker.

1. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

C. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

D. The first two (2) hours before or after a five-eight (8) hour workweek day or a four-ten (10) hour workweek day and the first eight (8) hours worked the next day after either workweek shall be paid at one and one-half times the hourly rate of wage. All additional hours worked and all worked on Sundays and holidays shall be paid at double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

G. The first ten (10) hours worked on Saturdays and the first ten (10) hours worked on a fifth calendar weekday in a four-ten hour schedule, shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

H. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions or equipment breakdown) shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. All hours worked on Sundays and holidays shall also be paid at double the hourly rate of wage.

J. The first two (2) hours after eight (8) regular hours Monday through Friday and the first ten (10) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage.

K. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

M. All hours worked on Saturdays (except makeup days if work is lost due to inclement weather conditions) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

1. N. All hours worked on Saturdays (except makeup days) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

O. The first ten (10) hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays, holidays and after twelve (12) hours, Monday through Friday and after ten (10) hours on Saturday shall be paid at double the hourly rate of wage.

P. All hours worked on Saturdays (except makeup days if circumstances warrant) and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

Q. The first two (2) hours after eight (8) regular hours Monday through Friday and up to ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of ten (10) hours per day Monday through Saturday and all hours worked on Sundays and holidays (except Christmas day) shall be paid at double the hourly rate of wage. All hours worked on Christmas day shall be paid at two and one-half times the hourly rate of wage.

R. All hours worked on Sundays and holidays shall be paid at two times the hourly rate of wage.

U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays (except Labor Day) shall be paid at two times the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage.

V. All hours worked on Sundays and holidays (except Thanksgiving Day and Christmas day) shall be paid at one and one-half times the hourly rate of wage. All hours worked on Thanksgiving Day and Christmas day shall be paid at double the hourly rate of wage.

W. All hours worked on Saturdays and Sundays (except make-up days due to conditions beyond the control of the employer)) shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at double the hourly rate of wage.

X. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked over twelve (12) hours Monday through Saturday, Sundays and holidays shall be paid at double the hourly rate of wage. When holiday falls on Saturday or Sunday, the day before Saturday, Friday, and the day after Sunday, Monday, shall be considered the holiday and all work performed shall be paid at double the hourly rate of wage.

Y. All hours worked outside the hours of 5:00 am and 5:00 pm (or such other hours as may be agreed upon by any employer and the employee) and all hours worked in excess of eight (8) hours per day (10 hours per day for a 4 x 10 workweek) and on Saturdays and holidays (except labor day) shall be paid at one and one-half times the hourly rate of wage. (except for employees who are absent from work without prior approval on a scheduled workday during the workweek shall be paid at the straight-time rate until they have worked 8 hours in a day (10 in a 4 x 10 workweek) or 40 hours during that workweek.) All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and Labor Day shall be paid at double the hourly rate of wage.

Z. All hours worked on Saturdays and Sundays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid the straight time rate of pay in addition to holiday pay.

Overtime Codes Continued

2. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   B. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

   F. The first eight (8) hours worked on holidays shall be paid at the straight hourly rate of wage in addition to the holiday pay. All hours worked in excess of eight (8) hours on holidays shall be paid at double the hourly rate of wage.

   M. This code appears to be missing. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage.

   R. All hours worked on Sundays and holidays and all hours worked over sixty (60) in one week shall be paid at double the hourly rate of wage.

   U. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked over 12 hours in a day or on Sundays and holidays shall be paid at double the hourly rate of wage.

3. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

   F. All hours worked on Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sunday shall be paid at two times the hourly rate of wage. All hours worked on paid holidays shall be paid at two and one-half times the hourly rate of wage including holiday pay.

   H. All work performed on Sundays between March 16th and October 14th and all Holidays shall be compensated for at two (2) times the regular rate of pay. Work performed on Sundays between October 15th and March 15th shall be compensated at one and one half (1-1/2) times the regular rate of pay.

   J. All hours worked between the hours of 10:00 pm and 5:00 am, Monday through Friday, and all hours worked on Saturdays shall be paid at a one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

   K. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

   After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the eight (8) hours rest period.

Overtime Codes Continued

4. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

A. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturdays, Sundays and holidays shall be paid at double the hourly rate of wage

C. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay. On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay. All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

D. All hours worked in excess of eight (8) hours per day or forty (40) hours per week shall be paid at double the hourly rate of wage. All hours worked on Saturday, Sundays and holidays shall be paid at double the hourly rate of pay. Rates include all members of the assigned crew.

EXCEPTION:
On all multipole structures and steel transmission lines, switching stations, regulating, capacitor stations, generating plants, industrial plants, associated installations and substations, except those substations whose primary function is to feed a distribution system, will be paid overtime under the following rates:

The first two (2) hours after eight (8) regular hours Monday through Friday of overtime on a regular workday, shall be paid at one and one-half times the hourly rate of wage. All hours in excess of ten (10) hours will be at two (2) times the hourly rate of wage. The first eight (8) hours worked on Saturday will be paid at one and one-half (1-1/2) times the hourly rate of wage. All hours worked in excess of eight (8) hours on Saturday, and all hours worked on Sundays and holidays will be at the double the hourly rate of wage.

All overtime eligible hours performed on the above described work that is energized, shall be paid at the double the hourly rate of wage.

E. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one and one half (1½) times the regular shift rate for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

G. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

I. The First eight (8) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) per day on Saturdays shall be paid at double the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. J. The first eight (8) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked in excess of eight (8) hours on a Saturday shall be paid at double the hourly rate of wage. All hours worked over twelve (12) in a day, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

K. All hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage, so long as Saturday is the sixth consecutive day worked. All hours worked over twelve (12) in a day Monday through Saturday, and all hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

L. The first twelve (12) hours worked on a Saturday shall be paid at one and one-half times the hourly rate of wage. All hours worked on a Saturday in excess of twelve (12) hours shall be paid at double the hourly rate of pay. All hours worked over twelve (12) in a day Monday through Friday, and all hours worked on Sundays shall be paid at double the hourly rate of wage. All hours worked on a holiday shall be paid at one and one-half times the hourly rate of wage, except that all hours worked on Labor Day shall be paid at double the hourly rate of pay.

S. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, work performed in excess of (10) hours shall be paid at one and one half (1-1/2) times the hourly rate of pay. On Monday through Friday, work performed outside the normal work hours of 6:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations).

All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. When an employee returns to work without at least eight (8) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Multiple Shift Operations: When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. Special Shifts: The Special Shift Premium is the basic hourly rate of pay plus $2.00 an hour. When due to conditions beyond the control of the employer or when an owner (not acting as the contractor), a government agency or the contract specifications require more than four (4) hours of a special shift can only be performed outside the normal 6am to 6pm shift then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid the special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday).

U. The first four (4) hours after eight (8) regular hours Monday through Friday and the first twelve (12) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. (Except on makeup days if work is lost due to inclement weather, then the first eight (8) hours on Saturday may be paid the regular rate.) All hours worked over twelve (12) hours Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

Overtime Codes Continued

4. X. All hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays and holidays shall be paid at double the hourly rate of wage. Work performed outside the normal shift of 6 am to 6pm shall be paid at one and one-half the straight time rate, (except for special shifts or three shift operations). All work performed on Sundays and holidays shall be paid at double the hourly rate of wage. Shifts may be established when considered necessary by the Employer.

The Employer may establish shifts consisting of eight (8) or ten (10) hours of work (subject to WAC 296-127-022), that shall constitute a normal forty (40) hour work week. The Employer can change from a 5-eight to a 4-ten hour schedule or back to the other. All hours of work on these shifts shall be paid for at the straight time hourly rate. Work performed in excess of eight hours (or ten hours per day (subject to WAC 296-127-022) shall be paid at one and one-half the straight time rate.

When due to conditions beyond the control of the Employer, or when contract specifications require that work can only be performed outside the regular day shift, then by mutual agreement a special shift may be worked at the straight time rate, eight (8) hours work for eight (8) hours pay. The starting time shall be arranged to fit such conditions of work.

When an employee returns to work without at a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Overtime Codes Continued

11. ALL HOURS WORKED IN EXCESS OF EIGHT (8) HOURS PER DAY OR FORTY (40) HOURS PER WEEK SHALL BE PAID AT ONE AND ONE-HALF TIMES THE HOURLY RATE OF WAGE.

B After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

C The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other overtime hours worked, except Labor Day, and all hours on Sunday shall be paid at double the hourly rate of wage. All hours worked on Labor Day shall be paid at three times the hourly rate of wage. All non-overtime and non-holiday hours worked between 4:00 pm and 5:00 am, Monday through Friday, shall be paid at a premium rate of 15% over the hourly rate of wage.

D. All hours worked on Saturdays and holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on Sundays shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

E. The first two (2) hours after eight (8) regular hours Monday through Friday, the first ten (10) hours on Saturday, and the first ten (10) hours worked on Holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked over ten (10) hours Monday through Saturday, and Sundays shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours, all additional hours worked shall be paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours or more.

Overtime Codes Continued

11. F. The first two (2) hours after eight (8) regular hours Monday through Friday and the first eight (8) hours on Saturday shall be paid at one and one-half times the hourly rate of wage. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

On a four-day, ten-hour weekly schedule, either Monday thru Thursday or Tuesday thru Friday schedule, all hours worked after ten shall be paid at double the hourly rate of wage. The Monday or Friday not utilized in the normal four-day, ten hour work week, and Saturday shall be paid at one-half times the hourly rate of wage for the first eight (8) hours. All other hours worked Monday through Saturday, and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

G. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.

All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of nine (9) hours or more. When an employee returns to work without at least nine (9) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the nine (9) hours rest period.

H. Work performed in excess of eight (8) hours of straight time per day, or ten (10) hours of straight time per day when four ten (10) hour shifts are established, or forty (40) hours of straight time per week, Monday through Friday, or outside the normal 5 am to 6pm shift, and all work on Saturdays shall be paid at one and one-half times the hourly rate of wage.

All work performed after 6:00 pm Saturday to 5:00 am Monday and Holidays, and all hours worked in excess of twelve (12) hours in a single shift shall be paid at double the hourly rate of wage.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of ten (10) hours or more. When an employee returns to work without at least ten (10) hours time off since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until he/she shall have the ten (10) hours rest period.

J. All hours worked on holidays shall be paid at double the hourly rate of wage.

K. On Monday through Friday hours worked outside 4:00 am and 5:00 pm, and the first two (2) hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked over 10 hours per day Monday through Friday, and all hours worked on Saturdays, Sundays, and Holidays worked shall be paid at double the hourly rate of wage.

L. An employee working outside 5:00 am and 5:00 pm shall receive an additional two dollar ($2.00) per hour for all hours worked that shift. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage. All hours worked on holidays shall be paid at one and one-half times the hourly rate of wage.

Overtime Codes Continued

11. M. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of a multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 am to 6:00 pm, then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shift shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten shifts.

On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay. All work performed after 6:00 pm Saturday to 5:00 am Monday, all work performed over twelve (12) hours, and all work performed on holidays shall be paid at double the straight time rate of pay.

Shift Pay Premium: In an addition to any overtime already required, all hours worked between the hours of 6:00 pm and 5:00 am shall receive an additional two dollars ($2.00) per hour.

N. All work performed over twelve hours in a shift and all work performed on Sundays and Holidays shall be paid at double the straight time rate.

Any time worked over eight (8) hours on Saturday shall be paid double the straight time rate, except employees assigned to work six 10-hour shifts per week shall be paid double the straight time rate for any time worked on Saturday over 10 hours.

O. All work performed on Saturdays, Sundays, and Holidays shall be paid at one and one half (1-1/2) times the straight time rate of pay.

Overtime Codes Continued

11. P. Work performed in excess of ten (10) hours of straight time per day when four ten (10) hour shifts are established and all work on Saturdays, except for make-up days shall be paid at time and one-half (1 ½) the straight time rate.

Work performed outside the normal work hours of 5:00 a.m. and 6:00 p.m. shall be paid at one and one-half (1-1/2) times the straight time rate, (except for special shifts or multiple shift operations). When the first shift of multiple shift (a two or three shift) operation is started at the basic straight time rate or at a specific overtime rate, all shifts of that day's operation shall be completed at that rate. When due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift of 5:00 a.m. to 6:00 p.m., then a special shift may be worked at the straight time rate, plus the shift pay premium when applicable. The starting time of work will be arranged to fit such conditions of work. Such shifts shall consist of eight (8) hours work for eight (8) hours pay or ten (10) hours work for ten (10) hours pay for four ten-hour shifts.

In the event the job is down due to weather conditions, then Saturday may, be worked as a voluntary make-up day at the straight time rate. However, Saturday shall not be utilized as a make-up day when a holiday falls on Friday. All work performed on Sundays and holidays and work in excess of twelve (12) hours per day shall be paid at double (2x) the straight time rate of pay.

After an employee has worked eight (8) hours at an applicable overtime rate, all additional hours shall be at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

Q. All hours worked between the hours of 6:00 pm and 6:00 am, Monday through Saturday, shall be paid at a premium rate of 35% over the hourly rate of wage. Work performed on Sundays shall be paid at double time. All hours worked on holidays shall be paid at double the hourly rate of wage.

R On Monday through Saturday hours worked outside 6:00 am and 7:00 pm, and all hours after eight (8) hours worked shall be paid at one and one-half times the hourly rate. All hours worked on Sundays and Holidays shall be paid at double the hourly rate of wage.

When a holiday falls on a Saturday, the Friday before shall be the observed holiday. When a holiday falls on a Sunday, the following Monday shall be the observed holiday.

S. The first ten (10) hours worked on Saturdays shall be paid at one and one-half times the hourly rate of wage. In the event the job is down due to weather conditions, or other conditions beyond the control of the Employer, then Saturday may be worked at the straight time rate, for the first eight (8) hours, or the first ten (10) hours when a four day ten hour workweek has been established.

All hours worked Monday through Saturday over twelve (12) hours and all hours worked on Sundays and holidays shall be paid at double the hourly rate of wage.

When an employee returns to work without a break of eight (8) hours since their previous shift, all such time shall be a continuation of shift and paid at the applicable overtime rate until such time as the employee has had a break of eight (8) hours.

11. T. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.

On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.

All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

U. On Monday through Friday, the first four (4) hours of overtime after eight (8) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay, unless a four (4) day ten (10) hour workweek has been established. On a four (4) day ten (10) hour workweek scheduled Monday through Thursday, or Tuesday through Friday, the first two (2) hours of overtime after ten (10) hours of straight time work shall be paid at one and one half (1-1/2) times the straight time rate of pay.

On Saturday, the first twelve (12) hours of work shall be paid at one and one half (1-1/2) times the straight time rate of pay, except that if the job is down on Monday through Friday due to weather conditions or other conditions outside the control of the employer, the first ten (10) hours on Saturday may be worked at the straight time rate of pay.

All hours worked over twelve (12) hours in a day and all hours worked on Sunday and Holidays shall be paid at two (2) times the straight time rate of pay.

If, due to conditions beyond the control of the Employer or when contract specifications require that work can only be performed outside the regular day shift, then a Special Shift may be worked, Monday through Friday, at the straight-time rate. The starting time of work for the Special Shift will be arranged to fit such conditions of work. Such Special Shift shall consist of eight (8) hours of work for eight (8) hours of pay or ten (10) hours of work for ten(10) hours of pay on a four-ten workday schedule.

Holiday Codes

5. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, and Christmas Day (7).

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, the day before Christmas, and Christmas Day (8).

C. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

D. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8).

H. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Day after Thanksgiving Day, And Christmas (6).

Holiday Codes Continued

5. I. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

K. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9).

L. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (8).

N. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, The Friday After Thanksgiving Day, And Christmas Day (9).

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday And Saturday After Thanksgiving Day, The Day Before Christmas, And Christmas Day (9). If A Holiday Falls On Sunday, The Following Monday Shall Be Considered As A Holiday.

Q. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6).

R. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving Day, One-Half Day Before Christmas Day, And Christmas Day. (7 1/2).

S. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, And Christmas Day (7).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8).

Holiday Codes Continued

6. G. Paid Holidays: New Year's Day, Martin Luther King Jr. Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and Christmas Eve Day (11).

H. Paid Holidays: New Year's Day, New Year's Eve Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday After Thanksgiving Day, Christmas Day, The Day After Christmas, And A Floating Holiday (10).

T. Paid Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Last Working Day Before Christmas Day, And Christmas Day (9).

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). If a holiday falls on Saturday, the preceding Friday shall be considered as the holiday. If a holiday falls on Sunday, the following Monday shall be considered as the holiday.

Holiday Codes Continued

7. A. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any Holiday Which Falls On A Sunday Shall Be Observed As A Holiday On The Following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

B. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

C. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

D. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (8). Unpaid Holidays: President's Day. Any paid holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any paid holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

E. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

F. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the last working day before Christmas day and Christmas day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. G. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day and Christmas Day (6). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

Holiday Codes Continued

7. K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Labor Day, Independence Day, Thanksgiving Day, the Last Work Day before Christmas Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. When Christmas falls on a Saturday, the preceding Friday shall be observed as a holiday.

P. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, And Christmas Day (7). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Q. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

S. Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Friday after Thanksgiving Day, Christmas Day, the Day after Christmas, and A Floating Holiday (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

V. Holidays: New Year's Day, President's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, the day before or after Christmas, and the day before or after New Year's Day. If any of the above listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

W. Holidays: New Year's Day, Day After New Year's, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day, Christmas Day, the day after Christmas, the day before New Year's Day, and a Floating Holiday.

X. Holidays: New Year's Day, Day before or after New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Day, and the day before or after Christmas day. If a holiday falls on a Saturday or on a Friday that is the normal day off, then the holiday will be taken on the last normal workday. If the holiday falls on a Monday that is the normal day off or on a Sunday, then the holiday will be taken on the next normal workday.

Y. Holidays: New Year's Day, Presidents' Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day. (8) If the holiday falls on a Sunday, then the day observed by the federal government shall be considered a holiday and compensated accordingly.

Z. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, Christmas Eve, and Christmas Day (9). Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday. Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Holiday Codes Continued

15. G. New Year's Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, the last scheduled workday before Christmas, and Christmas Day (9). If any of the listed holidays falls on a Sunday, the day observed by the Nation shall be considered a holiday and compensated accordingly.

H. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, the Last Working Day before Christmas Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

I. Holidays: New Year's Day, President's Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, The Friday After Thanksgiving Day, The Day Before Christmas Day And Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

J. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

K. Holidays: New Year's Day, Memorial Day, Independence Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, And Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. Any holiday which falls on a Saturday shall be observed as a holiday on the preceding Friday.

L. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

M. Holidays: New Year's Day, Martin Luther King Jr. Day, Independence Day, Memorial Day, Labor Day, Thanksgiving Day, the Friday after Thanksgiving Day, Christmas Eve Day and Christmas Day (9). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday. If any of the listed holidays falls on a Saturday, the preceding Friday shall be a regular work day.

N. Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day (8). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

O. Holidays: New Year's Day, Martin Luther King Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the Friday and Saturday after Thanksgiving Day, the day before Christmas day, and Christmas Day (10). Any holiday which falls on a Sunday shall be observed as a holiday on the following Monday.

Note Codes

8. D. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

M. Workers on hazmat projects receive additional hourly premiums as follows: Levels A & B: $1.00, Levels C & D: $0.50.

N. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

S. Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

T. Effective August 31, 2012 – A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. This classification is only effective on or after August 31, 2012.

U. Workers on hazmat projects receive additional hourly premiums as follows – Class A Suit: $2.00, Class B Suit: $1.50, And Class C Suit: $1.00. Workers performing underground work receive an additional $0.40 per hour for any and all work performed underground, including operating, servicing and repairing of equipment. The premium for underground work shall be paid for the entire shift worked. Workers who work suspended by a rope or cable receive an additional $0.50 per hour. The premium for work suspended shall be paid for the entire shift worked. Workers who do “pioneer” work (break open a cut, build road, etc.) more than one hundred fifty (150) feet above grade elevation receive an additional $0.50 per hour.

8. V. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

W. Meter Installers work on single phase 120/240V self-contained residential meters. The Lineman/Groundmen rates would apply to meters not fitting this description.

Note Codes Continued

X. Workers on hazmat projects receive additional hourly premiums as follows - Class A Suit: $2.00, Class B Suit: $1.50, Class C Suit: $1.00, and Class D Suit: $0.50. Special Shift Premium: Basic hourly rate plus $2.00 per hour.

When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications requires that work can only be performed outside the normal 5 am to 6pm shift, then the special shift premium will be applied to the basic hourly rate. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in OT or Double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Y. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging state or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

Z. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as a contractor), a government agency or the contract specifications require that more than (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they will be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Note Codes Continued

9. A. Workers working with supplied air on hazmat projects receive an additional $1.00 per hour.

Special Shift Premium: Basic hourly rate plus $2.00 per hour. When due to conditions beyond the control of the Employer or when an owner (not acting as the contractor), a government agency or the contract specifications require that more than four (4) hours of a special shift can only be performed outside the normal 6 am to 6pm shift, then the special shift premium will be applied to the basic straight time for the entire shift. When an employee works on a special shift, they shall be paid a special shift premium for each hour worked unless they are in overtime or double-time status. (For example, the special shift premium does not waive the overtime requirements for work performed on Saturday or Sunday.)

Certified Crane Operator Premium: Crane operators requiring certifications shall be paid $0.50 per hour above their classification rate.

Boom Pay Premium: All cranes including tower shall be paid as follows based on boom length:

(A) – 130’ to 199’ – $0.50 per hour over their classification rate.
(B) – 200’ to 299’ – $0.80 per hour over their classification rate.
(C) – 300’ and over – $1.00 per hour over their classification rate.

Note Codes Continued

9. B. The highest pressure registered on the gauge for an accumulated time of more than fifteen (15) minutes during the shift shall be used in determining the scale paid.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

C. Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay. Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

Effective August 31, 2012 – A Traffic Control Supervisor shall be present on the project whenever flagging or spotting or other traffic control labor is being utilized. A Traffic Control Laborer performs the setup, maintenance and removal of all temporary traffic control devices and construction signs necessary to control vehicular, bicycle, and pedestrian traffic during construction operations. Flaggers and Spotters shall be posted where shown on approved Traffic Control Plans or where directed by the Engineer. All flaggers and spotters shall possess a current flagging card issued by the State of Washington, Oregon, Montana, or Idaho. These classifications are only effective on or after August 31, 2012.

D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

E. Heavy Construction includes construction, repair, alteration or additions to the production, fabrication or manufacturing portions of industrial or manufacturing plants, hydroelectric or nuclear power plants and atomic reactor construction. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $1.00, Level B: $0.75, Level C: $0.50, And Level D: $0.25.

F. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous materials encapsulation is required.

H. One (1) person crew shall consist of a Party Chief. (Total Station or similar one (1) person survey system). Two (2) person survey party shall consist of a least a Party Chief and a Chain Person. Three (3) person survey party shall consist of at least a Party Chief, an Instrument Person, and a Chain Person.

9. I. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in calculating overtime pay.

Depth premiums apply to depths of fifty feet or more. Over 50' to 100' - $2.00 per foot for each foot over 50 feet. Over 101' to 150' - $3.00 per foot for each foot over 101 feet. Over 151' to 220' - $4.00 per foot for each foot over 220 feet. Over 221' - $5.00 per foot for each foot over 221 feet.

Enclosure premiums apply when divers enter enclosures (such as pipes or tunnels) where there is no vertical ascent and is measured by the distance travelled from the entrance. 25’ to 300’ - $1.00 per foot from entrance. 300’ to 600’ - $1.50 per foot beginning at 300’. Over 600’ - $2.00 per foot beginning at 600’.

Employees may be required to perform any combination of work within the Diving team/crew, (with the exception of dive Supervisor) provided they are paid at the highest rate at which he/she has worked for the shift.

L. Workers on hazmat projects receive additional hourly premiums as follows -Level A: $0.75, Level B: $0.50, And Level C: $0.25.

Tide Work: When employees are called out between the hours of 6:00 p.m. and 6:00 a.m. to work on tide work (work located in the tide plane) all time worked shall be at one and one-half times the hourly rate of pay.

Swinging Stage/Boatswains Chair: Employees working on a swinging stage or boatswains chair or under conditions that require them to be tied off to allow their hands to be free shall receive seventy-five cents ($0.75) per hour above the classification rate.

Washington State Department of Labor and Industries
Policy Statement
(Regarding the Production of "Standard" or "Non-standard" Items)

Below is the department's (State L&I's) list of criteria to be used in determining whether a prefabricated item is "standard" or "non-standard". For items not appearing on WSDOT's predetermined list, these criteria shall be used by the Contractor (and the Contractor's subcontractors, agents to subcontractors, suppliers, manufacturers, and fabricators) to determine coverage under RCW 39.12. The production, in the State of Washington, of non-standard items is covered by RCW 39.12, and the production of standard items is not. The production of any item outside the State of Washington is not covered by RCW 39.12.

1. Is the item fabricated for a public works project? If not, it is not subject to RCW 39.12. If it is, go to question 2.

2. Is the item fabricated on the public works jobsite? If it is, the work is covered under RCW 39.12. If not, go to question 3.

3. Is the item fabricated in an assembly/fabrication plant set up for, and dedicated primarily to, the public works project? If it is, the work is covered by RCW 39.12. If not, go to question 4.

4. Does the item require any assembly, cutting, modification or other fabrication by the supplier? If not, the work is not covered by RCW 39.12. If yes, go to question 5.

5. Is the prefabricated item intended for the public works project typically an inventory item which could reasonably be sold on the general market? If not, the work is covered by RCW 39.12. If yes, go to question 6.

6. Does the specific prefabricated item, generally defined as standard, have any unusual characteristics such as shape, type of material, strength requirements, finish, etc? If yes, the work is covered under RCW 39.12.

Any firm with questions regarding the policy, WSDOT's Predetermined List, or for determinations of covered and non-covered workers shall be directed to State L&I at (360) 902-5330.

WSDOT's
Predetermined List for
Suppliers - Manufactures - Fabricator

Below is a list of potentially prefabricated items, originally furnished by WSDOT to Washington State Department of Labor and Industries, that may be considered non-standard and therefore covered by the prevailing wage law, RCW 39.12. Items marked with an X in the "YES" column should be considered to be non-standard and therefore covered by RCW 39.12. Items marked with an X in the "NO" column should be considered to be standard and therefore not covered. Of course, exceptions to this general list may occur, and in that case shall be evaluated according to the criteria described in State and L&I's policy statement.

	ITEM DESCRIPTION	YES	NO
1.	Metal rectangular frames, solid metal covers, herringbone grates, and bi-directional vaned grates for Catch Basin Types 1, 1L, 1P, and 2 and Concrete Inlets. See Std. Plans		X
2.	Metal circular frames (rings) and covers, circular grates, and prefabricated ladders for Manhole Types 1, 2, and 3, Drywell Types 1, 2, and 3 and Catch Basin Type 2. See Std. Plans		X
3.	Prefabricated steel grate supports and welded grates, metal frames and dual vaned grates, and Type 1, 2, and 3 structural tubing grates for Drop Inlets. See Std. Plans.		X
4.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes smaller than 60 inch diameter.		X
5.	Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes larger than 60 inch diameter.		X
6.	Corrugated Steel Pipe - Steel lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, 1 thru 5.		X
7.	Corrugated Aluminum Pipe - Aluminum lock seam corrugated pipe for culverts and storm sewers, sizes 30 inch to 120 inches in diameter. May also be treated, #5.		X

	ITEM DESCRIPTION	YES	NO
8.	Anchor Bolts & Nuts - Anchor Bolts and Nuts, for mounting sign structures, luminaries and other items, shall be made from commercial bolt stock. See Contract Plans and Std. Plans for size and material type.		X
9.	Aluminum Pedestrian Handrail - Pedestrian handrail conforming to the type and material specifications set forth in the contract plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).	X	
10.	Major Structural Steel Fabrication - Fabrication of major steel items such as trusses, beams, girders, etc., for bridges.	X	
11.	Minor Structural Steel Fabrication - Fabrication of minor steel Items such as special hangers, brackets, access doors for structures, access ladders for irrigation boxes, bridge expansion joint systems, etc., involving welding, cutting, punching and/or boring of holes. See Contact Plans for item description and shop drawings.	X	
12.	Aluminum Bridge Railing Type BP - Metal bridge railing conforming to the type and material specifications set forth in the Contract Plans. Welding of aluminum shall be in accordance with Section 9-28.14(3).		X
13.	Concrete Piling--Precast-Prestressed concrete piling for use as 55 and 70 ton concrete piling. Concrete to conform to Section 9-19.1 of Std. Spec..	X	
14.	Precast Manhole Types 1, 2, and 3 with cones, adjustment sections and flat top slabs. See Std. Plans.		X
15.	Precast Drywell Types 1, 2, and with cones and adjustment Sections. See Std. Plans.		X
16.	Precast Catch Basin - Catch Basin type 1, 1L, 1P, and 2 With adjustment sections. See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
17.	Precast Concrete Inlet - with adjustment sections, See Std. Plans		X
18.	Precast Drop Inlet Type 1 and 2 with metal grate supports. See Std. Plans.		X
19.	Precast Grate Inlet Type 2 with extension and top units. See Std. Plans		X
20.	Metal frames, vaned grates, and hoods for Combination Inlets. See Std. Plans		X
21.	Precast Concrete Utility Vaults - Precast Concrete utility vaults of various sizes. Used for in ground storage of utility facilities and controls. See Contract Plans for size and construction requirements. Shop drawings are to be provided for approval prior to casting		X
22.	Vault Risers - For use with Valve Vaults and Utilities X Vaults.		X
23.	Valve Vault - For use with underground utilities. See Contract Plans for details.		X
24.	Precast Concrete Barrier - Precast Concrete Barrier for use as new barrier or may also be used as Temporary Concrete Barrier. Only new state approved barrier may be used as permanent barrier.		X
25.	Reinforced Earth Wall Panels – Reinforced Earth Wall Panels in size and shape as shown in the Plans. Fabrication plant has annual approval for methods and materials to be used. See Shop Drawing. Fabrication at other locations may be approved, after facilities inspection, contact HQ. Lab.	X	
26.	Precast Concrete Walls - Precast Concrete Walls - tilt-up wall panel in size and shape as shown in Plans. Fabrication plant has annual approval for methods and materials to be used	X	

	ITEM DESCRIPTION	YES	NO
27.	Precast Railroad Crossings - Concrete Crossing Structure Slabs.	X	
28.	12, 18 and 26 inch Standard Precast Prestressed Girder – Standard Precast Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
29.	Prestressed Concrete Girder Series 4-14 - Prestressed Concrete Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A .	X	
30.	Prestressed Tri-Beam Girder - Prestressed Tri-Beam Girders for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
31.	Prestressed Precast Hollow-Core Slab – Precast Prestressed Hollow-core slab for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A.	X	
32.	Prestressed-Bulb Tee Girder - Bulb Tee Prestressed Girder for use in structures. Fabricator plant has annual approval of methods and materials to be used. Shop Drawing to be provided for approval prior to casting girders. See Std. Spec. Section 6-02.3(25)A	X	
33.	Monument Case and Cover See Std. Plan.		X

	ITEM DESCRIPTION	YES	NO
34.	Cantilever Sign Structure - Cantilever Sign Structure fabricated from steel tubing meeting AASHTO-M-183. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
35.	Mono-tube Sign Structures - Mono-tube Sign Bridge fabricated to details shown in the Plans. Shop drawings for approval are required prior to fabrication.	X	
36.	Steel Sign Bridges - Steel Sign Bridges fabricated from steel tubing meeting AASHTO-M-138 for Aluminum Alloys. See Std. Plans, and Contract Plans for details. The steel structure shall be galvanized after fabrication in accordance with AASHTO-M-111.	X	
37.	Steel Sign Post - Fabricated Steel Sign Posts as detailed in Std Plans. Shop drawings for approval are to be provided prior to fabrication		X
38.	Light Standard-Prestressed - Spun, prestressed, hollow concrete poles.	X	
39.	Light Standards - Lighting Standards for use on highway illumination systems, poles to be fabricated to conform with methods and materials as specified on Std. Plans. See Specia Provisions for pre-approved drawings.	X	
40.	Traffic Signal Standards - Traffic Signal Standards for use on highway and/or street signal systems. Standards to be fabricated to conform with methods and material as specified on Std. Plans. See Special Provisions for pre-approved drawings	X	
41.	Precast Concrete Sloped Mountable Curb (Single and DualFaced) See Std. Plans.		X

	ITEM DESCRIPTION	YES	NO
42.	Traffic Signs - Prior to approval of a Fabricator of Traffic Signs, the sources of the following materials must be submitted and approved for reflective sheeting, legend material, and aluminum sheeting. **NOTE:** *** Fabrication inspection required. Only signs tagged "Fabrication Approved" by WSDOT Sign Fabrication Inspector to be installed	X	X
		Custom Message	Std Signing Message
43.	Cutting & bending reinforcing steel		X
44.	Guardrail components	X	X
		Custom End Sec	Standard Sec
45.	Aggregates/Concrete mixes	Covered by WAC 296-127-018	
46.	Asphalt	Covered by WAC 296-127-018	
47.	Fiber fabrics		X
48.	Electrical wiring/components		X
49.	treated or untreated timber pile		X
50.	Girder pads (elastomeric bearing)	X	
51.	Standard Dimension lumber		X
52.	Irrigation components		X

	ITEM DESCRIPTION	YES	NO
53.	Fencing materials		X
54.	Guide Posts		X
55.	Traffic Buttons		X
56.	Epoxy		X
57.	Cribbing		X
58.	Water distribution materials		X
59.	Steel "H" piles		X
60.	Steel pipe for concrete pile casings		X
61.	Steel pile tips, standard		X
62.	Steel pile tips, custom	X	

Prefabricated items specifically produced for public works projects that are prefabricated in a county other than the county wherein the public works project is to be completed, the wage for the offsite prefabrication shall be the applicable prevailing wage for the county in which the actual prefabrication takes place.

It is the manufacturer of the prefabricated product to verify that the correct county wage rates are applied to work they perform.

See RCW 39.12.010
(The definition of "locality" in RCW 39.12.010(2) contains the phrase "wherein the physical work is being performed." The department interprets this phrase to mean the actual work site.

WSDOT's List of State Occupations not applicable to Heavy and Highway Construction Projects

This project is subject to the state hourly minimum rates for wages and fringe benefits in the contract provisions, as provided by the state Department of Labor and Industries. The following list of occupations, is comprised of those occupations that are not normally used in the construction of heavy and highway projects.
When considering job classifications for use and / or payment when bidding on, or building heavy and highway construction projects for, or administered by WSDOT, these Occupations will be excepted from the included "Washington State Prevailing Wage Rates For Public Work Contracts" documents.

- Building Service Employees
- Electrical Fixture Maintenance Workers
- Electricians - Motor Shop
- Heating Equipment Mechanics
- Industrial Engine and Machine Mechanics
- Industrial Power Vacuum Cleaners
- Inspection, Cleaning, Sealing of Water Systems by Remote Control
- Laborers - Underground Sewer & Water
- Machinists (Hydroelectric Site Work)
- Modular Buildings
- Playground & Park Equipment Installers
- Power Equipment Operators - Underground Sewer & Water
- Residential *** ALL ASSOCIATED RATES ***
- Sign Makers and Installers (Non-Electrical)
- Sign Makers and Installers (Electrical)
- Stage Rigging Mechanics (Non Structural)

The following occupations may be used only as outlined in the preceding text concerning "WSDOT's list for Suppliers - Manufacturers - Fabricators"

- Fabricated Precast Concrete Products
- Metal Fabrication (In Shop)

Definitions for the Scope of Work for prevailing wages may be found at the Washington State Department of Labor and Industries web site and in WAC Chapter 296-127.

Washington State Department of Labor and Industries
Policy Statements
(Regarding Production and Delivery of Gravel, Concrete, Asphalt, etc.)

WAC 296-127-018 Agency filings affecting this section

Coverage and exemptions of workers involved in the production and delivery of gravel, concrete, asphalt, or similar materials.

(1) The materials covered under this section include but are not limited to: Sand, gravel, crushed rock, concrete, asphalt, or other similar materials.

(2) All workers, regardless of by whom employed, are subject to the provisions of chapter 39.12 RCW when they perform any or all of the following functions:

(a) They deliver or discharge any of the above-listed materials to a public works project site:

(i) At one or more point(s) directly upon the location where the material will be incorporated into the project; or

(ii) At multiple points at the project; or

(iii) Adjacent to the location and coordinated with the incorporation of those materials.

(b) They wait at or near a public works project site to perform any tasks subject to this section of the rule.

(c) They remove any materials from a public works construction site pursuant to contract requirements or specifications (e.g., excavated materials, materials from demolished structures, clean-up materials, etc.).

(d) They work in a materials production facility (e.g., batch plant, borrow pit, rock quarry, etc.,) which is established for a public works project for the specific, but not necessarily exclusive, purpose of supplying materials for the project.

(e) They deliver concrete to a public works site regardless of the method of incorporation.

(f) They assist or participate in the incorporation of any materials into the public works project.

(3) All travel time that relates to the work covered under subsection (2) of this section requires the payment of prevailing wages. Travel time includes time spent waiting to load, loading, transporting, waiting to unload, and delivering materials. Travel time would include all time spent in travel in support of a public works project whether the vehicle is empty or full. For example, travel time spent returning to a supply source to obtain another load of material for use on a public works site or returning to the public works site to obtain another load of excavated material is time spent in travel that is subject to prevailing wage. Travel to a supply source, including travel from a public works site, to obtain materials for use on a private project would not be travel subject to the prevailing wage.

(4) Workers are not subject to the provisions of chapter 39.12 RCW when they deliver materials to a stockpile.

(a) A "stockpile" is defined as materials delivered to a pile located away from the site of incorporation such that the stockpiled materials must be physically moved from the stockpile and transported to another location on the project site in order to be incorporated into the project.

(b) A stockpile does not include any of the functions described in subsection (2)(a) through (f) of this section; nor does a stockpile include materials delivered or distributed to multiple locations upon the project site; nor does a stockpile include materials dumped at the place of incorporation, or adjacent to the location and coordinated with the incorporation.

(5) The applicable prevailing wage rate shall be determined by the locality in which the work is performed. Workers subject to subsection (2)(d) of this section, who produce such materials at an off-site facility shall be paid the applicable prevailing wage rates for the county in which the off-site facility is located. Workers subject to subsection (2) of this section, who deliver such materials to a public works project site shall be paid the applicable prevailing wage rates for the county in which the public works project is located.

[Statutory Authority: Chapter 39.12 RCW, RCW 43.22.051 and 43.22.270. 08-24-101, § 296-127-018, filed 12/2/08, effective 1/2/09. Statutory Authority: Chapters 39.04 and 39.12 RCW and RCW 43.22.270. 92-01-104 and 92-08-101, § 296-127-018, filed 12/18/91 and 4/1/92, effective 8/31/92.]

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

Washington State Prevailing Wage

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

Journey Level Prevailing Wage Rates for the Effective Date: 10/3/2025

Snohomish County

Trade	Job Classification	Wage	Holiday	Overtime	Note
Asbestos Abatement Workers	Journey Level	$67.39	**5D**	**1H**	
Boilermakers	Journey Level	$80.89	**5N**	**1C**	
Brick Mason	Journey Level	$76.07	**7E**	**1N**	
Brick Mason	Pointer-Caulker-Cleaner	$76.07	**7E**	**1N**	
Building Service Employees	Janitor	$16.66		**1**	
Building Service Employees	Shampooer	$16.66		**1**	
Building Service Employees	Waxer	$16.66		**1**	

Building Service Employees	Window Cleaner	$16.66		**1**	
Cabinet Makers (In Shop)	Journey Level	$27.33	**5C**	**2M**	
Carpenters	Acoustical Worker	$83.21	**15J**	**11U**	
Carpenters	Bridge Dock and Wharf Carpenter	$84.81	**15J**	**11U**	**9L**
Carpenters	Floor Layer & Floor Finisher	$83.21	**15J**	**11U**	
Carpenters	General Carpenter	$83.21	**15J**	**11U**	
Carpenters	Scaffold Erector	$83.21	**15J**	**11U**	
Cement Masons	Application of all Composition Mastic	$81.87	**15J**	**4U**	
Cement Masons	Application of all Epoxy Material	$81.36	**15J**	**4U**	
Cement Masons	Application of all Plastic Material	$81.87	**15J**	**4U**	
Cement Masons	Application of Sealing Compound	$81.36	**15J**	**4U**	
Cement Masons	Application of Underlayment	$81.87	**15J**	**4U**	
Cement Masons	Building General	$81.36	**15J**	**4U**	
Cement Masons	Composition or Kalman Floors	$81.87	**15J**	**4U**	

Cement Masons	Concrete Paving	$81.36	**15J**	**4U**
Cement Masons	Curb & Gutter Machine	$81.87	**15J**	**4U**
Cement Masons	Curb & Gutter, Sidewalks	$81.36	**15J**	**4U**
Cement Masons	Curing Concrete	$81.36	**15J**	**4U**
Cement Masons	Finish Colored Concrete	$81.87	**15J**	**4U**
Cement Masons	Floor Grinding	$81.87	**15J**	**4U**
Cement Masons	Floor Grinding/Polisher	$81.36	**15J**	**4U**
Cement Masons	Green Concrete Saw, self-powered	$81.87	**15J**	**4U**
Cement Masons	Grouting of all Plates	$81.36	**15J**	**4U**
Cement Masons	Grouting of all Tilt-up Panels	$81.36	**15J**	**4U**
Cement Masons	Gunite Nozzleman	$81.87	**15J**	**4U**
Cement Masons	Hand Powered Grinder	$81.87	**15J**	**4U**
Cement Masons	Journey Level	$81.36	**15J**	**4U**
Cement Masons	Patching Concrete	$81.36	**15J**	**4U**
Cement Masons	Pneumatic Power Tools	$81.87	**15J**	**4U**
Cement Masons	Power Chipping & Brushing	$81.87	**15J**	**4U**

Cement Masons	Sand Blasting Architectural Finish	$81.87	**15J**	**4U**	
Cement Masons	Screed & Rodding Machine	$81.87	**15J**	**4U**	
Cement Masons	Spackling or Skim Coat Concrete	$81.36	**15J**	**4U**	
Cement Masons	Troweling Machine Operator	$81.87	**15J**	**4U**	
Cement Masons	Troweling Machine Operator on Colored Slabs	$81.87	**15J**	**4U**	
Cement Masons	Tunnel Workers	$81.87	**15J**	**4U**	
Divers & Tenders	Bell/Vehicle/Submersible Operator (not under pressure)	$144.72	**15J**	**11T**	**9I**
Divers & Tenders	Dive Supervisor	$146.22	**15J**	**11T**	**9I**
Divers & Tenders	Diver	$144.72	**15J**	**11T**	**9I**
Divers & Tenders	Diver Tender	$91.05	**15J**	**11T**	**9I**
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	$114.73	**15J**	**11U**	
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 30.01-44.00 PSI	$124.28	**15J**	**11U**	

Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	$133.82	**15J**	**11U**	
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	$143.37	**15J**	**11U**	
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	$152.91	**15J**	**11U**	
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	$162.46	**15J**	**11U**	
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	$172.00	**15J**	**11U**	
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	$181.55	**15J**	**11U**	
Divers & Tenders	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	$191.09	**15J**	**11U**	
Divers & Tenders	Lead Diver (Dive Master)	$105.51	**15J**	**11T**	**9I**
Divers & Tenders	Manifold Operator (Life Support Technician)	$96.05	**15J**	**11U**	**9I**
Divers & Tenders	Remote Operated Vehicle Operator/Technician	$91.05	**15J**	**11T**	**9I**

Divers & Tenders	Remote Operated Vehicle Operator/Technician	$91.05	**15J**	**11U**	**9I**
Divers & Tenders	Remote Operated Vehicle Tender	$84.75	**15J**	**11T**	**9I**
Divers & Tenders	Stand-by Diver	$100.51	**15J**	**11T**	**9I**
Dredge Workers	Assistant Engineer	$89.47	**5D**	**3F**	
Dredge Workers	Assistant Mate (Deckhand)	$88.78	**5D**	**3F**	
Dredge Workers	Boatmen	$89.47	**5D**	**3F**	
Dredge Workers	Engineer Welder	$91.20	**5D**	**3F**	
Dredge Workers	Leverman, Hydraulic	$93.03	**5D**	**3F**	
Dredge Workers	Mates	$89.47	**5D**	**3F**	
Dredge Workers	Oiler	$88.78	**5D**	**3F**	
Drywall Applicator	Journey Level	$81.71	**15O**	**11S**	
Drywall Tapers	Journey Level	$81.71	**15O**	**11S**	
Electrical Fixture Maintenance Workers	Journey Level	$16.66		**1**	
Electricians - Inside	Cable Splicer	$100.52	**7H**	**1E**	
Electricians - Inside	Construction Stock Person	$48.08	**7H**	**1D**	

Electricians - Inside	Journey Level	$94.06	**7H**	**1E**	
Electricians - Motor Shop	Craftsman	$16.66		**1**	
Electricians - Motor Shop	Journey Level	$16.66		**1**	
Electricians - Powerline Construction	Cable Splicer	$102.42	**5A**	**4D**	
Electricians - Powerline Construction	Certified Line Welder	$93.99	**5A**	**4D**	
Electricians - Powerline Construction	Groundperson	$59.30	**5A**	**4D**	
Electricians - Powerline Construction	Heavy Line Equipment Operator	$93.99	**5A**	**4D**	
Electricians - Powerline Construction	Journey Level Lineperson	$93.99	**5A**	**4D**	
Electricians - Powerline Construction	Line Equipment Operator	$80.96	**5A**	**4D**	
Electricians - Powerline Construction	Meter Installer	$59.30	**5A**	**4D**	**8W**
Electricians - Powerline Construction	Pole Sprayer	$93.99	**5A**	**4D**	
Electricians - Powerline Construction	Powderperson	$69.84	**5A**	**4D**	
Electronic Technicians	Electronic Technicians Journey Level	$62.05	**5B**	**1B**	

Elevator Constructors	Mechanic	$115.14	**7D**	**4A**	
Elevator Constructors	Mechanic In Charge	$124.53	**7D**	**4A**	
Fabricated Precast Concrete Products	Journey Level	$16.66		**1**	
Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	$16.66		**1**	
Fence Erectors	Fence Erector	$57.66	**15J**	**11P**	**8Y**
Fence Erectors	Fence Laborer	$57.66	**15J**	**11P**	**8Y**
Flaggers	Journey Level	$57.66	**15J**	**11P**	**8Y**
Glaziers	Journey Level	$85.16	**7L**	**1Y**	
Heat & Frost Insulators And Asbestos Workers	Journey Level	$96.42	**15H**	**11C**	
Heating Equipment Mechanics	Journey Level	$105.42	**7F**	**1E**	
Hod Carriers & Mason Tenders	Journey Level	$71.09	**15J**	**11P**	**8Y**
Industrial Power Vacuum Cleaner	Journey Level	$16.66		**1**	
Inland Boatmen	Boat Operator	$71.28	**5B**	**1K**	
Inland Boatmen	Cook	$69.70	**5B**	**1K**	
Inland Boatmen	Deckhand	$70.00	**5B**	**1K**	

Inland Boatmen	Deckhand Engineer	$69.55	**5B**	**1K**
Inland Boatmen	Launch Operator	$71.23	**5B**	**1K**
Inland Boatmen	Mate	$89.12	**5B**	**1K**
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator	$54.56	**15M**	**11O**
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Foamer Operator	$54.56	**15M**	**11O**
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	$54.56	**15M**	**11O**
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	$52.40	**15M**	**11O**
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	$45.97	**15M**	**11O**
Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	TV Truck Operator	$49.20	**15M**	**11O**
Insulation Applicators	Journey Level	$83.21	**15J**	**11U**
Ironworkers	Journeyman	$92.82	**15K**	**11N**

Laborers	Air, Gas Or Electric Vibrating Screed	$67.39	**15J**	**11P**	**8Y**
Laborers	Airtrac Drill Operator	$69.37	**15J**	**11P**	**8Y**
Laborers	Ballast Regular Machine	$67.39	**15J**	**11P**	**8Y**
Laborers	Batch Weighman	$57.66	**15J**	**11P**	**8Y**
Laborers	Brick Pavers	$67.39	**15J**	**11P**	**8Y**
Laborers	Brush Cutter	$67.39	**15J**	**11P**	**8Y**
Laborers	Brush Hog Feeder	$67.39	**15J**	**11P**	**8Y**
Laborers	Burner	$67.39	**15J**	**11P**	**8Y**
Laborers	Caisson Worker	$69.37	**15J**	**11P**	**8Y**
Laborers	Carpenter Tender	$67.39	**15J**	**11P**	**8Y**
Laborers	Cement Dumper-paving	$69.37	**15J**	**11P**	**8Y**
Laborers	Cement Finisher Tender	$67.39	**15J**	**11P**	**8Y**
Laborers	Change House Or Dry Shack	$67.39	**15J**	**11P**	**8Y**
Laborers	Chipping Gun (30 Lbs. And Over)	$68.56	**15J**	**11P**	**8Y**
Laborers	Chipping Gun (Under 30 Lbs.)	$67.39	**15J**	**11P**	**8Y**
Laborers	Choker Setter	$67.39	**15J**	**11P**	**8Y**

Laborers	Chuck Tender	$67.39	**15J**	**11P**	**8Y**
Laborers	Clary Power Spreader	$68.56	**15J**	**11P**	**8Y**
Laborers	Clean-up Laborer	$67.39	**15J**	**11P**	**8Y**
Laborers	Concrete Dumper/Chute Operator	$69.37	**15J**	**11P**	**8Y**
Laborers	Concrete Form Stripper	$67.39	**15J**	**11P**	**8Y**
Laborers	Concrete Placement Crew	$69.37	**15J**	**11P**	**8Y**
Laborers	Concrete Saw Operator/Core Driller	$68.56	**15J**	**11P**	**8Y**
Laborers	Crusher Feeder	$57.66	**15J**	**11P**	**8Y**
Laborers	Curing Laborer	$67.39	**15J**	**11P**	**8Y**
Laborers	Demolition: Wrecking & Moving (Incl. Charred Material)	$67.39	**15J**	**11P**	**8Y**
Laborers	Ditch Digger	$67.39	**15J**	**11P**	**8Y**
Laborers	Diver	$69.37	**15J**	**11P**	**8Y**
Laborers	Drill Operator (Hydraulic, Diamond)	$68.56	**15J**	**11P**	**8Y**
Laborers	Dry Stack Walls	$67.39	**15J**	**11P**	**8Y**
Laborers	Dump Person	$67.39	**15J**	**11P**	**8Y**

Laborers	Epoxy Technician	$67.39	**15J**	**11P**	**8Y**
Laborers	Erosion Control Worker	$67.39	**15J**	**11P**	**8Y**
Laborers	Faller & Bucker Chain Saw	$68.56	**15J**	**11P**	**8Y**
Laborers	Fine Graders	$67.39	**15J**	**11P**	**8Y**
Laborers	Firewatch	$57.66	**15J**	**11P**	**8Y**
Laborers	Form Setter	$69.37	**15J**	**11P**	**8Y**
Laborers	Form Setter	$68.56	**15J**	**11P**	**8Y**
Laborers	Gabian Basket Builders	$67.39	**15J**	**11P**	**8Y**
Laborers	General Laborer	$67.39	**15J**	**11P**	**8Y**
Laborers	Grade Checker & Transit Person	$71.09	**15J**	**11P**	**8Y**
Laborers	Grinders	$67.39	**15J**	**11P**	**8Y**
Laborers	Grout Machine Tender	$67.39	**15J**	**11P**	**8Y**
Laborers	Groutmen (Pressure) Including Post Tension Beams	$68.56	**15J**	**11P**	**8Y**
Laborers	Guardrail Erector	$67.39	**15J**	**11P**	**8Y**
Laborers	Hazardous Waste Worker (Level A)	$69.37	**15J**	**11P**	**8Y**

Laborers	Hazardous Waste Worker (Level B)	$68.56	**15J**	**11P**	**8Y**
Laborers	Hazardous Waste Worker (Level C)	$67.39	**15J**	**11P**	**8Y**
Laborers	High Scaler	$69.37	**15J**	**11P**	**8Y**
Laborers	Jackhammer	$68.56	**15J**	**11P**	**8Y**
Laborers	Laserbeam Operator	$68.56	**15J**	**11P**	**8Y**
Laborers	Maintenance Person	$67.39	**15J**	**11P**	**8Y**
Laborers	Manhole Builder-Mudman	$68.56	**15J**	**11P**	**8Y**
Laborers	Material Yard Person	$67.39	**15J**	**11P**	**8Y**
Laborers	Mold Abatement Worker	$67.39	**15J**	**11P**	**8Y**
Laborers	Motorman-Dinky Locomotive	$71.19	**15J**	**11P**	**8Y**
Laborers	nozzleman (concrete pump, green cutter when using combination of high pressure air & water on concrete & rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster)	$71.09	**15J**	**11P**	**8Y**
Laborers	Pavement Breaker	$68.56	**15J**	**11P**	**8Y**

Laborers	Pilot Car	$57.66	**15J**	**11P**	**8Y**
Laborers	Pipe Layer (Lead)	$71.09	**15J**	**11P**	**8Y**
Laborers	Pipe Layer/Tailor	$68.56	**15J**	**11P**	**8Y**
Laborers	Pipe Pot Tender	$68.56	**15J**	**11P**	**8Y**
Laborers	Pipe Reliner	$68.56	**15J**	**11P**	**8Y**
Laborers	Pipe Wrapper	$68.56	**15J**	**11P**	**8Y**
Laborers	Pot Tender	$67.39	**15J**	**11P**	**8Y**
Laborers	Powderman	$69.37	**15J**	**11P**	**8Y**
Laborers	Powderman's Helper	$67.39	**15J**	**11P**	**8Y**
Laborers	Power Jacks	$68.56	**15J**	**11P**	**8Y**
Laborers	Power Washer	$67.39	**15J**	**11P**	**8Y**
Laborers	Railroad Spike Puller - Power	$68.56	**15J**	**11P**	**8Y**
Laborers	Raker - Asphalt	$71.09	**15J**	**11P**	**8Y**
Laborers	Re-timberman	$69.37	**15J**	**11P**	**8Y**
Laborers	Remote Equipment Operator	$68.56	**15J**	**11P**	**8Y**
Laborers	Rigger/Signal Person	$68.56	**15J**	**11P**	**8Y**

Laborers	Rip Rap Person	$67.39	**15J**	**11P**	**8Y**
Laborers	Rivet Buster	$68.56	**15J**	**11P**	**8Y**
Laborers	Rodder	$69.37	**15J**	**11P**	**8Y**
Laborers	Scaffold Erector	$67.39	**15J**	**11P**	**8Y**
Laborers	Scale Person	$67.39	**15J**	**11P**	**8Y**
Laborers	Sloper (Over 20")	$68.56	**15J**	**11P**	**8Y**
Laborers	Sloper Sprayer	$67.39	**15J**	**11P**	**8Y**
Laborers	Spreader (Concrete)	$69.37	**15J**	**11P**	**8Y**
Laborers	Stake Hopper	$67.39	**15J**	**11P**	**8Y**
Laborers	Stock Piler	$67.39	**15J**	**11P**	**8Y**
Laborers	Swinging Stage/Boatswain Chair	$57.66	**15J**	**11P**	**8Y**
Laborers	Tamper & Similar Electric, Air & Gas Operated Tools	$68.56	**15J**	**11P**	**8Y**
Laborers	Tamper (Multiple & Self-propelled)	$68.56	**15J**	**11P**	**8Y**
Laborers	Timber Person - Sewer (Lagger, Shorer & Cribber)	$68.56	**15J**	**11P**	**8Y**
Laborers	Toolroom Person (at Jobsite)	$67.39	**15J**	**11P**	**8Y**

Laborers	Topper	$67.39	**15J**	**11P**	**8Y**
Laborers	Track Laborer	$67.39	**15J**	**11P**	**8Y**
Laborers	Track Liner (Power)	$68.56	**15J**	**11P**	**8Y**
Laborers	Traffic Control Laborer	$61.41	**15J**	**11P**	**9C**
Laborers	Traffic Control Supervisor	$64.86	**15J**	**11P**	**9C**
Laborers	Truck Spotter	$67.39	**15J**	**11P**	**8Y**
Laborers	Tugger Operator	$68.56	**15J**	**11P**	**8Y**
Laborers	Tunnel Work-Compressed Air Worker 0-30 psi	$225.32	**15J**	**11P**	**9B**
Laborers	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	$230.35	**15J**	**11P**	**9B**
Laborers	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	$234.03	**15J**	**11P**	**9B**
Laborers	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	$239.73	**15J**	**11P**	**9B**
Laborers	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	$241.85	**15J**	**11P**	**9B**
Laborers	Tunnel Work-Compressed Air Worker 64.01-68.00	$246.95	**15J**	**11P**	**9B**

	psi				
Laborers	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	$248.85	**15J**	**11P**	**9B**
Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	$250.85	**15J**	**11P**	**9B**
Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	$252.85	**15J**	**11P**	**9B**
Laborers	Tunnel Work-Guage and Lock Tender	$71.19	**15J**	**11P**	**8Y**
Laborers	Tunnel Work-Miner	$71.19	**15J**	**11P**	**8Y**
Laborers	Vibrator	$69.37	**15J**	**11P**	**8Y**
Laborers	Vinyl Seamer	$67.39	**15J**	**11P**	**8Y**
Laborers	Watchman	$52.73	**15J**	**11P**	**8Y**
Laborers	Welder	$68.56	**15J**	**11P**	**8Y**
Laborers	Well Point Laborer	$68.56	**15J**	**11P**	**8Y**
Laborers	Window Washer/Cleaner	$52.73	**15J**	**11P**	**8Y**
Laborers - Underground Sewer & Water	General Laborer & Topman	$67.39	**15J**	**11P**	**8Y**
Laborers - Underground Sewer & Water	Pipe Layer	$68.56	**15J**	**11P**	**8Y**

Landscape Construction	Landscape Construction/Landscaping Or Planting Laborers	$52.73	**15J**	**11P**	**8Y**
Landscape Construction	Landscape Operator	$90.81	**15J**	**11G**	**8X**
Landscape Maintenance	Groundskeeper	$16.66		**1**	
Lathers	Journey Level	$81.71	**15O**	**11S**	
Marble Setters	Journey Level	$76.07	**7E**	**1N**	
Metal Fabrication (In Shop)	Journey Level	$37.56	**0**	**11D**	
Millwright	Journey Level	$80.28	**15J**	**4C**	
Modular Buildings	Journey Level	$16.66		**1**	
Painters	Journey Level	$56.09	**6Z**	**11J**	
Pile Driver	Crew Tender	$80.50	**15J**	**11U**	**9L**
Pile Driver	Journey Level	$84.81	**15J**	**11U**	
Plasterers	Journey Level	$78.60	**7Q**	**1R**	
Plasterers	Nozzleman	$82.70	**7Q**	**1R**	
Playground & Park Equipment Installers	Journey Level	$16.66		**1**	
Plumbers & Pipefitters	Journey Level	$95.37	**5A**	**1G**	

Power Equipment Operators	Asphalt Plant Operators	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Assistant Engineer	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Barrier Machine (zipper)	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Batch Plant Operator: concrete	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Boat Operator	$91.73	**7A**	**11H**	**8X**
Power Equipment Operators	Bobcat	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Brokk - Remote Demolition Equipment	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Brooms	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Bump Cutter	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Cableways	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Chipper	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Compressor	$87.77	**15J**	**11G**	**8X**

Power Equipment Operators	Concrete Finish Machine - Laser Screed	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Conveyors	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Cranes Friction: 200 tons and over	$94.85	**7A**	**11H**	**8X**
Power Equipment Operators	Cranes, A-frame: 10 tons and under	$86.60	**7A**	**11H**	**8X**
Power Equipment Operators	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$92.98	**7A**	**11H**	**8X**
Power Equipment Operators	Cranes: 20 tons through 44 tons with attachments	$91.25	**7A**	**11H**	**8X**
Power Equipment Operators	Cranes: 200 tons- 299 tons, or 250' of boom	$93.95	**7A**	**11H**	**8X**

	including jib with attachments				
Power Equipment Operators	Cranes: 300 tons and over or 300' of boom including jib with attachments	$94.85	**7A**	**11H**	**8X**
Power Equipment Operators	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	$91.73	**7A**	**11H**	**8X**
Power Equipment Operators	Cranes: Friction cranes through 199 tons	$93.95	**7A**	**11H**	**8X**
Power Equipment Operators	Cranes: through 19 tons with attachments, a-frame over 10 tons	$90.55	**7A**	**11H**	**8X**
Power Equipment Operators	Crusher	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Deck Engineer/Deck Winches (power)	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Derricks, On Building Work	$91.73	**7A**	**11H**	**8X**
Power Equipment Operators	Dozers D-9 & Under	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Drilling Machine	$94.30	**15J**	**11G**	**8X**

Power Equipment Operators	Elevator and man-lift: permanent and shaft type	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Forklift: 3000 lbs and over with attachments	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Forklifts: under 3000 lbs. with attachments	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Gradechecker/Stakeman	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Guardrail Punch	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Horizontal/Directional Drill Locator	$90.81	**15J**	**11G**	**8X**

Power Equipment Operators	Horizontal/Directional Drill Operator	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Hydralifts/Boom Trucks Over 10 Tons	$90.55	**7A**	**11H**	**8X**
Power Equipment Operators	Hydralifts/boom trucks: 10 tons and under	$86.60	**7A**	**11H**	**8X**
Power Equipment Operators	Leverman	$95.28	**15J**	**11G**	**8X**
Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Loaders, Overhead Under 6 Yards	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Loaders, Plant Feed	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Loaders: Elevating Type Belt	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Locomotives, All	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Material Transfer Device	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Mechanics: All (Leadmen - $0.50 per hour over mechanic)	$94.30	**15J**	**11G**	**8X**
Power Equipment Operators	Motor Patrol Graders	$93.36	**15J**	**11G**	**8X**

Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Outside Hoists (Elevators and Manlifts), Air Tuggers, Strato	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Overhead, bridge type Crane: 20 tons through 44 tons	$91.25	**7A**	**11H**	**8X**
Power Equipment Operators	Overhead, bridge type: 100 tons and over	$92.98	**7A**	**11H**	**8X**
Power Equipment Operators	Overhead, bridge type: 45 tons through 99 tons	$91.73	**7A**	**11H**	**8X**
Power Equipment Operators	Pavement Breaker	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Pile Driver (other Than Crane Mount)	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Plant Oiler - Asphalt, Crusher	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Posthole Digger, Mechanical	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Power Plant	$87.77	**15J**	**11G**	**8X**

Power Equipment Operators	Pumps - Water	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Quad 9, Hd 41, D10 And Over	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Quick Tower: no cab, under 100 feet in height base to boom	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Rigger and Bellman	$86.60	**7A**	**11H**	**8X**
Power Equipment Operators	Rigger/Signal Person, Bellman(Certified)	$90.55	**7A**	**11H**	**8X**
Power Equipment Operators	Rollagon	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Roller, Other Than Plant Mix	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Roto-mill, Roto-grinder	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Saws - Concrete	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	$92.52	**15J**	**11G**	**8X**

Power Equipment Operators	Scrapers - Concrete & Carry All	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Service Engineers: Equipment	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Shotcrete/Gunite Equipment	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$94.30	**15J**	**11G**	**8X**
Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$95.28	**15J**	**11G**	**8X**
Power Equipment Operators	Slipform Pavers	$93.36	**15J**	**11G**	**8X**

Power Equipment Operators	Spreader, Topsider & Screedman	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Subgrader Trimmer	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Tower Bucket Elevators	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Tower Crane: over 175' through 250' in height, base to boom	$93.95	**7A**	**11H**	**8X**
Power Equipment Operators	Tower crane: up to 175' in height base to boom	$92.98	**7A**	**11H**	**8X**
Power Equipment Operators	Tower Cranes: over 250' in height from base to boom	$94.85	**7A**	**11H**	**8X**
Power Equipment Operators	Transporters, All Track Or Truck Type	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Trenching Machines	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators	Truck Crane Oiler/Driver: 100 tons and over	$91.25	**7A**	**11H**	**8X**
Power Equipment Operators	Truck crane oiler/driver: under 100 tons	$90.55	**7A**	**11H**	**8X**
Power Equipment Operators	Truck Mount Portable Conveyor	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators	Vac Truck (Vactor Guzzler, Hydro Excavator)	$92.52	**15J**	**11G**	**8X**

Power Equipment Operators	Welder	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators	Wheel Tractors, Farmall Type	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators	Yo Yo Pay Dozer	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Asphalt Plant Operators	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Assistant Engineer	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Barrier Machine (zipper)	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Batch Plant Operator, Concrete	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Boat Operator	$91.73	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Bobcat	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Brokk - Remote Demolition Equipment	$87.77	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Brooms	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Bump Cutter	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Cableways	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Chipper	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Compressor	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Concrete Finish Machine - Laser Screed	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	$93.36	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Conveyors	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Cranes Friction: 200 tons and over	$94.85	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Cranes, A-frame: 10 tons and under	$86.60	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	$92.98	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Cranes: 20 tons through 44 tons with attachments	$91.25	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	$93.95	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Cranes: 300 tons and over or 300' of boom including jib with attachments	$94.85	**7A**	**11H**	**8X**
Power Equipment Operators- Underground	Cranes: 45 tons through 99 tons, under 150' of	$91.73	**7A**	**11H**	**8X**

Sewer & Water	boom(including jib with attachments)				
Power Equipment Operators- Underground Sewer & Water	Cranes: Friction cranes through 199 tons	$93.95	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Cranes: through 19 tons with attachments, a-frame over 10 tons	$90.55	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Crusher	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Deck Engineer/Deck Winches (power)	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Derricks, On Building Work	$91.73	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Dozers D-9 & Under	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Drilling Machine	$94.30	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Elevator and man-lift: permanent and shaft type	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Forklift: 3000 lbs and over with attachments	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Forklifts: under 3000 lbs. with attachments	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Gradechecker/Stakeman	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Guardrail Punch	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	$93.36	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Horizontal/Directional Drill Locator	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Horizontal/Directional Drill Operator	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Hydralifts/boom trucks: 10 tons and under	$86.60	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Hydralifts/boom trucks: over 10 tons	$90.55	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Leverman	$95.28	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Loaders, Overhead Under 6 Yards	$92.52	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Loaders, Plant Feed	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Loaders: Elevating Type Belt	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Locomotives, All	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Material Transfer Device	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Mechanics: All (Leadmen - $0.50 per hour over mechanic)	$94.30	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Motor Patrol Graders	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Outside Hoists (Elevators and Manlifts), Air Tuggers, Strato	$90.81	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Overhead, bridge type Crane: 20 tons through 44 tons	$91.25	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Overhead, bridge type: 100 tons and over	$92.98	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Overhead, bridge type: 45 tons through 99 tons	$91.73	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Pavement Breaker	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Pile Driver (other Than Crane Mount)	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Posthole Digger, Mechanical	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Power Plant	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Pumps - Water	$87.77	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Quick Tower: no cab, under 100 feet in height base to boom	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Rigger and Bellman	$86.60	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Rigger/Signal Person, Bellman(Certified)	$90.55	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Rollagon	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Roller, Other Than Plant Mix	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Roto-mill, Roto-grinder	$92.52	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Saws - Concrete	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Scrapers - Concrete & Carry All	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Shotcrete/Gunite Equipment	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	$94.30	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	$95.28	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Slipform Pavers	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Spreader, Topsider & Screedman	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Subgrader Trimmer	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Tower Bucket Elevators	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Tower Crane: over 175' through 250' in height, base to boom	$93.95	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Tower crane: up to 175' in height base to boom	$92.98	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Tower Cranes: over 250' in height from base to boom	$94.85	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Transporters, All Track Or Truck Type	$93.36	**15J**	**11G**	**8X**

Power Equipment Operators- Underground Sewer & Water	Trenching Machines	$90.81	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/Driver: 100 tons and over	$91.25	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Truck crane oiler/driver: under 100 tons	$90.55	**7A**	**11H**	**8X**
Power Equipment Operators- Underground Sewer & Water	Truck Mount Portable Conveyor	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Vac Truck (Vactor Guzzler, Hydro Excavator)	$92.52	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Welder	$93.36	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Wheel Tractors, Farmall Type	$87.77	**15J**	**11G**	**8X**
Power Equipment Operators- Underground Sewer & Water	Yo Yo Pay Dozer	$92.52	**15J**	**11G**	**8X**
Power Line Clearance Tree Trimmers	Journey Level In Charge	$65.20	**5A**	**4A**	

Power Line Clearance Tree Trimmers	Spray Person	$61.74	**5A**	**4A**
Power Line Clearance Tree Trimmers	Tree Equipment Operator	$65.00	**5A**	**4A**
Power Line Clearance Tree Trimmers	Tree Trimmer	$58.29	**5A**	**4A**
Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	$43.05	**5A**	**4A**
Refrigeration & Air Conditioning Mechanics	Journey Level	$100.71	**5A**	**1G**
Residential Brick Mason	Journey Level	$22.73		**1**
Residential Carpenters	Journey Level	$37.17		**1**
Residential Cement Masons	Journey Level	$81.36	**15J**	**4U**
Residential Drywall Applicators	Journey Level	$51.52	**15J**	**4C**
Residential Drywall Tapers	Journey Level	$77.66	**5P**	**1E**
Residential Electricians	Journey Level	$48.80		**1**
Residential Glaziers	Journey Level	$33.75		**1**
Residential Insulation Applicators	Journey Level	$37.07		**1**
Residential Laborers	Journey Level	$28.78		**1**
Residential Marble Setters	Journey Level	$39.71		**1**

Residential Painters	Journey Level	$30.60		**1**
Residential Plumbers & Pipefitters	Journey Level	$51.38		**1**
Residential Refrigeration & Air Conditioning Mechanics	Journey Level	$105.42	**7F**	**1E**
Residential Sheet Metal Workers	Journey Level	$105.42	**7F**	**1E**
Residential Soft Floor Layers	Journey Level	$49.91	**15J**	**4C**
Residential Sprinkler Fitters (Fire Protection)	Journey Level	$61.85		**1**
Residential Stone Masons	Journey Level	$39.71		**1**
Residential Terrazzo Workers	Journey Level	$16.66		**1**
Residential Terrazzo/Tile Finishers	Journey Level	$27.90		**1**
Residential Tile Setters	Journey Level	$21.38		**1**
Roofers	Journey Level	$67.45	**5A**	**3H**
Roofers	Using Irritable Bituminous Materials	$70.45	**5A**	**3H**
Sheet Metal Workers	Journey Level (Field or Shop)	$105.42	**7F**	**1E**

Shipbuilding & Ship Repair	New Construction Boilermaker	$61.07	**7X**	**4J**
Shipbuilding & Ship Repair	New Construction Carpenter	$51.85	**7X**	**4J**
Shipbuilding & Ship Repair	New Construction Crane Operator	$44.29	**7V**	**1**
Shipbuilding & Ship Repair	New Construction Electrician	$61.12	**7X**	**4J**
Shipbuilding & Ship Repair	New Construction Heat & Frost Insulator	$96.42	**15H**	**11C**
Shipbuilding & Ship Repair	New Construction Laborer	$60.73	**7X**	**4J**
Shipbuilding & Ship Repair	New Construction Machinist	$60.93	**7X**	**4J**
Shipbuilding & Ship Repair	New Construction Operating Engineer	$44.29	**7V**	**1**
Shipbuilding & Ship Repair	New Construction Painter	$60.93	**7X**	**4J**
Shipbuilding & Ship Repair	New Construction Pipefitter	$61.21	**7X**	**4J**
Shipbuilding & Ship Repair	New Construction Rigger	$61.07	**7X**	**4J**
Shipbuilding & Ship Repair	New Construction Sheet Metal	$60.94	**7X**	**4J**
Shipbuilding & Ship Repair	New Construction Shipwright	$51.85	**7X**	**4J**

Shipbuilding & Ship Repair	New Construction Warehouse/Teamster	$44.29	**7V**	**1**
Shipbuilding & Ship Repair	New Construction Welder / Burner	$61.07	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Boilermaker	$61.07	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Carpenter	$51.85	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Crane Operator	$45.06	**7Y**	**4K**
Shipbuilding & Ship Repair	Ship Repair Electrician	$61.12	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Heat & Frost Insulator	$96.42	**15H**	**11C**
Shipbuilding & Ship Repair	Ship Repair Laborer	$60.73	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Machinist	$60.93	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Operating Engineer	$45.06	**7Y**	**4K**
Shipbuilding & Ship Repair	Ship Repair Painter	$60.93	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Pipefitter	$61.21	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Rigger	$61.07	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Sheet Metal	$60.94	**7X**	**4J**
Shipbuilding & Ship Repair	Ship Repair Shipwright	$51.85	**7X**	**4J**

Shipbuilding & Ship Repair	Ship Repair Warehouse / Teamster	$45.06	**7Y**	**4K**	
Sign Makers & Installers (Electrical)	Sign Installer	$26.56		**1**	
Sign Makers & Installers (Electrical)	Sign Maker	$20.50		**1**	
Sign Makers & Installers (Non-Electrical)	Sign Installer	$22.56		**1**	
Sign Makers & Installers (Non-Electrical)	Sign Maker	$20.50		**1**	
Soft Floor Layers	Journey Level	$63.29	**15J**	**4C**	
Solar Controls For Windows	Journey Level	$16.66		**1**	
Sprinkler Fitters (Fire Protection)	Journey Level	$103.19	**5C**	**1X**	
Stage Rigging Mechanics (Non Structural)	Journey Level	$16.66		**1**	
Stone Masons	Journey Level	$76.07	**7E**	**1N**	
Street And Parking Lot Sweeper Workers	Journey Level	$16.66		**1**	
Surveyors	Assistant Construction Site Surveyor	$90.55	**7A**	**11H**	**8X**
Surveyors	Chainman	$86.60	**7A**	**11H**	**8X**

Surveyors	Construction Site Surveyor	$91.73	**7A**	**11H**	**8X**
Surveyors	Drone Operator (when used in conjunction with survey work only)	$86.60	**7A**	**11H**	**8X**
Surveyors	Ground Penetrating Radar Operator	$86.60	**7A**	**11H**	**8X**
Telecommunication Technicians	Telecom Technician Journey Level	$62.05	**5B**	**1B**	
Telephone Line Construction - Outside	Cable Splicer	$42.62	**5A**	**2B**	
Telephone Line Construction - Outside	Hole Digger/Ground Person	$27.97	**5A**	**2B**	
Telephone Line Construction - Outside	Telephone Equipment Operator (Light)	$35.60	**5A**	**2B**	
Telephone Line Construction - Outside	Telephone Lineperson	$40.28	**5A**	**2B**	
Terrazzo Workers	Journey Level	$70.61	**7E**	**1N**	
Tile Setters	Journey Level	$68.61	**7E**	**1N**	
Tile, Marble & Terrazzo Finishers	Finisher	$59.44	**7E**	**1N**	
Traffic Control Stripers	All cleanup required in connection with traffic control stripers work (Group 1)	$95.41	**15L**	**1K**	

Traffic Control Stripers	Handling, painting and installing of all car stops, stop signs and any other type sign (Group 2)	$62.69	**15L**	**1K**
Traffic Control Stripers	Installation of guard rail and posts and similar protective devices (Group 2)	$62.69	**15L**	**1K**
Traffic Control Stripers	Installation of parking gates, ticket spitters and other mechanical and automatic control devices (Group 2)	$62.69	**15L**	**1K**
Traffic Control Stripers	Installation of plastic metal or composition button, or lines used instead of paint (Group 1)	$95.41	**15L**	**1K**
Traffic Control Stripers	Line removal; chemical sand and hydro-blast, paint and button (Group 1)	$95.41	**15L**	**1K**
Traffic Control Stripers	Manufacturing and installation of all car stops and control devices and similar traffic regulators (Group 2)	$62.69	**15L**	**1K**
Traffic Control Stripers	Manufacturing, painting, stenciling, servicing, repairing, placing and removal of traffic safety	$62.69	**15L**	**1K**

	and control devices/barricades (Group 2)				
Traffic Control Stripers	Painting and installing lines, arrows, bumpers, curbs, etc., on parking lots, air fields, highways, game courts (Group 1)	$95.41	**15L**	**1K**	
Traffic Control Stripers	Preparation and maintenance of all surfaces (Group 1)	$95.41	**15L**	**1K**	
Traffic Control Stripers	Seal coating, slurry coating and other surface protection (Group 2)	$62.69	**15L**	**1K**	
Truck Drivers	Asphalt Mix Over 16 Yards	$82.95	**15J**	**11M**	**8L**
Truck Drivers	Asphalt Mix To 16 Yards	$82.11	**15J**	**11M**	**8L**
Truck Drivers	Dump Truck	$82.11	**15J**	**11M**	**8L**
Truck Drivers	Dump Truck & Trailer	$82.95	**15J**	**11M**	**8L**
Truck Drivers	Other Trucks	$82.95	**15J**	**11M**	**8L**
Truck Drivers - Ready Mix	Transit Mix	$82.95	**15J**	**11M**	**8L**
Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	$17.05		**1**	
Well Drillers & Irrigation Pump Installers	Oiler	$16.66		**1**	

Well Drillers & Irrigation Pump Installers	Well Driller	$19.01	**1**

III
PROJECT PROPOSAL

Project Code	RR48684, WC8684	Project Name	CULVERT REPLACEMENT NEAR 10101 167TH AVE SE
Bid Number	PW-25-0585SB	Proposal Number	1

COMPANY: ______________________________
____

BID AMOUNT: ____________________

ADDRESS: ______________________________
____
____
____

TEL. NO: ______________________________

PROJECT PROPOSAL

Snohomish County is committed to fostering a diverse contractor program. Minority (MBE) and Women (WBE) Owned Businesses are encouraged to participate in the county competitive solicitation process. Please indicate if your company is a MWBE:

Women Business Enterprise (WBE)?	Yes ☐	Small Business Enterprise (SBE)?	Yes ☐
Minority Business Enterprise (MBE)?	Yes ☐	Veteran Owned Business (VOB)?	Yes ☐
Disadvantaged Business Enterprise (DBE)?	Yes ☐	Federal Small Business Enterprise(FSBE)	Yes ☐

Federal Suspension and Debarment Certification

Federal Executive Order 12549 prohibits federal, state and local public agencies receiving grant funding from contracting with individuals, organizations, or companies who have been excluded from participating in federal contracts or grants.

The purpose of this certification is for the contractor/vendor to advise Snohomish County, in writing, of any current Federal Suspension and Debarment.

Debarment Certification. By signing and submitting a response to this competitive solicitation, I certify that this firm and its principals are not currently suspended or debarred by any Federal Department or Agency from participating in Federal Funded Contracts.

BIDDER'S CHECKLIST

SNOHOMISH COUNTY PUBLIC WORKS

The bidder's attention is especially called to the following forms. All forms must be completed in full as required, and submitted collectively as the bid proposal package prior to the bid submittal deadline in order for bid to be considered.

1. ______ PROJECT PROPOSAL COVER SHEET

2. ______ PROPOSAL (FORM OF BID)
   The unit prices bid must be shown in the space provided. Show unit prices in figures. Bids must be submitted on the proposal form provided. Fill out proposal signature sheet.

3. ______ PROPOSAL BID BOND
   This attached bid bond form, or equivalent standard industry bid bond form, must be completed by the bidder and the surety company and submitted with the bid unless bid is accompanied by a certified check, postal money order, cash, or cashier's check.

   The amount of this bond shall be not less than five percent (5%) of the total bid amount, excluding sales tax, and may be shown in dollars on a percentage basis.

4. ______ NON-COLLUSION DECLARATION

5. ______ STATEMENT OF BIDDER'S QUALIFICATIONS

6. ______ PROPOSAL GUARANTY SELECTION AND PROPOSAL SIGNATURE SHEET

7. ______ BIDDER/SUBCONTRACTOR LIST

8. ______ PROPOSAL FOR INCORPORATING RECYCLED MATERIAL INTO THE PROJECT

9. ______ CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES

Snohomish County

PROPOSAL (FORM OF BID)

TO: The County Council
Snohomish County, Washington

This certifies that the undersigned has examined the location of the RR48684, WC8684 CULVERT REPLACEMENT NEAR 10101 167TH AVE SE and the Plans, Specifications, and Contract Documents governing the work embraced in this Public Works project improvement and the method by which payment will be made for said work is understood. The undersigned hereby proposes to undertake and complete the work embraced in this project, or as much thereof as can be completed with the money available in accordance with the said Plans, Specifications, and Contract Documents, and the following schedule of rates and prices.

- The Washington State Department of Revenue has issued special rules on the state sales tax. WSDOT Standard Specifications Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contracting Agency will not adjust its payment if the Contractor bases a Bid on a misunderstood tax liability.
- The Summary of Quantities in the Contract Provisions identifies those parts of the project that are subject to Use Tax under Section 1-07.2(1) and Retail Sales Tax under Section 1-07.2(2).

ITEM NO.	PLAN QUANTITY	UNIT	BID ITEM	PRICE PER UNIT	EXTENDED AMOUNT
			01. PREPARATION		
1	1.00	L.S.	MOBILIZATION		
2	1.00	L.S.	CLEARING AND GRUBBING		
3	1.00	L.S.	REMOVAL OF STRUCTURES AND OBSTRUCTIONS		
4	139.00	S.Y.	REMOVING ASPHALT CONC. PAVEMENT		
5	93.00	L.F.	REMOVING GUARDRAIL		
6	10,000.00	EST.	ARCHAEOLOGICAL AND HISTORICAL SALVAGE	1.00	10,000.00
			02. GRADING		
7	830.00	C.Y.	COMMON BORROW INCL. HAUL		
			04. DRAINAGE		
8	1,130.00	TON	STREAMBED COBBLES 8 IN.		
9	5,421.00	EACH	STREAMBED BOULDER TYPE TWO		
10	36.00	C.Y.	DITCH EXCAVATION INCL. HAUL		
11	1,990.00	C.Y.	CHANNEL EXCAVATION INCL. HAUL		
12	37.00	TON	LIGHT LOOSE RIPRAP		
13	99.00	TON	QUARRY SPALLS		
14	730.00	TON	STREAMBED SEDIMENT		
15	1.00	L.S.	TEMPORARY STREAM DIVERSION		
			07. WATER LINES		
16	181.00	L.F.	DUCTILE IRON PIPE (RJ) FOR WATER MAIN, 8 IN. DIAM. CLASS 52		

17	178.00	L.F.	REMOVAL AND DISPOSAL OF EXISTING AC WATER MAIN		
18	2.00	EACH	CONNECTION TO EXISTING WATER MAIN, 8 IN. DIAM.		
			08. STRUCTURE		
19	1.00	L.S.	SHORING OR EXTRA EXCAVATION CL. A		
20	200.00	L.F.	BRIDGE RAILING TYPE CHAIN LINK PIPE RAIL		
21	1.00	EACH	CONTRACTOR DESIGNED BURIED STRUCTURE NO. (54'W x 10'H x 64L)		
			09. SURFACING		
22	123.00	TON	CRUSHED SURFACING BASE COURSE		
			14. HOT MIX ASPHALT		
23	157.00	TON	HMA CL. 1/2 IN. PG 58H-22		
24	-1.00	CALC	ASPHALT COST PRICE ADJUSTMENT	1.00	-1.00
25	-1.00	CALC	JOB MIX COMPLIANCE CREDIT	1.00	-1.00
26	-1.00	CALC	COMPACTION COMPLIANCE CREDIT	1.00	-1.00
27	-1.00	CALC	AGGREGATE COMPLIANCE CREDIT	1.00	-1.00
			17. EROSION CONTROL AND ROADSIDE PLANTING		
28	3,173.00	S.Y.	TOPSOIL TYPE A		
29	100.00	DAY	ESC LEAD		
30	200.00	HR	STREET CLEANING		
31	52.00	L.F.	GRAVEL FILTER BERM		
32	91.00	L.F.	WATTLE		
33	50,000.00	EST.	EROSION/WATER POLLUTION CONTROL	1.00	50,000.00
34	10,000.00	EST.	PLANTING AREA WEED CONTROL AND PREPARATION	1.00	10,000.00
35	950.00	L.F.	HIGH VISIBILITY FENCE		
36	672.00	S.Y.	HYDROSEED		
37	3,180.00	S.Y.	WOOD STRAND MULCH		
38	1.00	L.S.	TEMPORARY ACCESS		
			18. TRAFFIC		
39	125.00	L.F.	BEAM GUARDRAIL TYPE 31 - 8 FT. LONG POST		
40	19.00	L.F.	BEAM GUARDRAIL TYPE 31 - 11 FT. LONG POST		
41	25.00	L.F.	BEAM GUARDRAIL TYPE 31 - 6 FT. LONG POST		
42	1.00	EACH	BEAM GUARDRAIL TYPE 31 NON-FLARED TERMINAL		
43	4.00	EACH	BEAM GUARDRAIL TYPE 31 TRANSITION SECTION TYPE 24		

44	1.00	EACH	BEAM GUARDRAIL ANCHOR TYPE 11		
45	50.00	L.F.	PRECAST CONC. BARRIER TYPE F ANCHORED		
46	361.00	L.F.	PAINT LINE		
47	1.00	L.S.	PROJECT TEMPORARY TRAFFIC CONTROL		
48	1.00	L.S.	TRAFFIC CONTROL SUPERVISOR		
			19. OTHER ITEMS		
49	79.00	S.Y.	CONSTRUCTION GEOTEXTILE FOR DITCH LINING		
50	1.00	L.S.	SPCC PLAN		
51	310.00	L.F.	DEFORMABLE GRADE CONTROL STRUCTURE		
52	7.00	EACH	WOODY MATERIAL - LOG WITH ROOTWAD DBH 30 INCH		
53	26.00	EACH	WOODY MATERIAL - LOG WITH ROOTWAD DBH 24 INCH		
54	26.00	EACH	WOODY MATERIAL - LOG WITH ROOTWAD DBH 18 INCH		
55	4.00	EACH	WOODY MATERIAL - LOG WITHOUT ROOTWAD DBH 30 INCH		
56	350.00	C.Y.	SLASH		
57	50,000.00	EST.	FORCE ACCOUNT	1.00	50,000.00
58	6.00	EACH	ADDITIONAL POTHOLING		
59	1,000.00	L.S.	APPRENTICESHIP INCENTIVE		
60	-1.00	CALC	APPRENTICESHIP PENALTY	1.00	-1.00
61	10,000.00	EST.	RESOLUTION OF UTILITY CONFLICTS	1.00	10,000.00
62	5,000.00	L.S.	TYPE B PROGRESS SCHEDULE		
				Total:	

PROPOSAL BID BOND

KNOW ALL BY THESE PRESENTS, THAT____a corporation duly organized under the laws of the State of___________________as principal, and ____, a corporation duly organized under the laws of the State of_________________and authorized to do business in the State of Washington, as surety, are held and firmly bound unto the County of Snohomish in the full and penal sum of five (5) percent of the total amount of the bid proposal of said principal for the work hereinafter described for the payment of which, well and truly to be made, we bind our heirs, executors, administrators and assigns, and successors and assigns, firmly by these presents.

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

____

____

____

said bid and proposal, by reference hereto, being made a part hereof:

NOW, THEREFORE, If the said proposal bid by said principal be accepted, and the contract be awarded to said principal, and if said principal shall duly make and enter into and execute said contract and shall furnish a performance, payment and warranty bond as required by the County of Snohomish within a period of **twenty (20)** days from and after said award, exclusive of the day of such award, then this obligation shall be null and void, otherwise it shall remain and be in full force and effect.

IN TESTIMONY WHEREOF, The principal and surety have caused these presents to be signed and sealed this________________day of_________, 20_.

PRINCIPAL:

(Name): ______________________________

(Address): ______________________________

____

____

By: (Signature of Authorized Representative)

____

(Typed Name of Authorized Representative)

Title: ______________________________

SURETY:

______________________________ (Name)

By:______________________________Attorney-in-Fact for Surety

______________________________ (Typed Name)

____

____

Name and Address
of Local Office or
Agent

*This bond must be accompanied by a fully executed Power of Attorney appointing the Attorney-in-Fact

NON-COLLUSION DECLARATION

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

1. That the undersigned person(s), firm, association or corporation has (have) not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the project for which this proposal is submitted.

2. **That by signing the signature page of this proposal, I am deemed to have signed and to have agreed to the provisions of this declaration.**

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

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

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

DOT Form 272-036I EF
Revised 7/2011

STATEMENT OF BIDDER'S QUALIFICATIONS

As part of this bid, each bidder shall complete and submit the following data:

1. Name of Bidder:____
2. Business Address:______________________________________
3. E-mail Address: ________________________
4. Telephone Number: __________________________
5. How many years has said bidder been engaged in the contracting business under the present firm name?

   ____

6. Contracts now in hand (gross amount): $______________________________
7. General character of work performed by said company: _______________________

   ____

8. Provide information for a minimum of three similar projects constructed by said company, to be used as reference by the Contracting Agency. List reference projects completed within the last 10 years, most recent first. Include all information outlined in the table(s) below. Attach additional sheets if necessary.

Agency/ Owner	Project Title:
Contact:	Telephone:
Date:	Cost:
Scope:	

Agency/ Owner	Project Title:
Contact:	Telephone:
Date:	Cost:
Scope:	

Agency/ Owner	Project Title:
Contact:	Telephone:
Date:	Cost:
Scope:	

9. List Snohomish County projects (if any) that have been constructed entirely or in part by your firm.

10. WA Contractor's License No.:____________________________ UBI No.:_____________________

Federal ID No.: _______________________________________
<u>If applicable:</u>

Workers Comp Acct No.: ____

Employment Sec Dept No.: ____

Excise Tax Registration No.: ____

____ By: ______________________________
Company Name

____ By: ______________________________
Date Printed Name and Title

PROPOSAL (FORM OF BID) - CONTINUED

PROPOSAL GUARANTY SELECTION AND PROPOSAL SIGNATURE SHEET

The bidder is hereby advised that by signature of this proposal he/she is deemed to have acknowledged all requirements and signed all certificates contained herein.

A proposal guaranty in an amount of five percent (5%) of the total bid, based upon the approximate estimate of quantities at the above prices and in the form as indicated below, is attached hereto:

CASH ☐ IN THE AMOUNT OF ____________________________

CASHIER'S CHECK ☐ ____________________________ DOLLARS

CERTIFIED CHECK ☐ ____________________________ DOLLARS

PROPOSAL BOND ☐ IN THE AMOUNT OF 5% OF THE BID

** Receipt is hereby acknowledged of addendum(s) No.(s) __________, __________, & __________.

SIGNATURE OF AUTHORIZED OFFICIAL(S)

____

____

____

PROPOSAL MUST BE SIGNED

FIRM NAME ______________________________________

(ADDRESS) ______________________________________

____

State of Washington Contractor's License No. ______________________________

Federal ID No. ______________________________

NOTE: (1) This proposal form is not transferable and any alteration of the firm's name entered hereon without prior permission from Snohomish County will be cause for considering the proposal irregular and subsequent rejection of the bid.

(2) Please refer to Section 1-02.6 of the Standard Specifications, re: "Preparation of Proposal".

BID NO.: PW-25-0585SB
LOCATION: 10101 167TH AVE SE, SNOHOMISH
PROJECT NO.: RR48684, WC8684, UPI 21-0024

BIDDER/SUBCONTRACTOR LIST

As required in RCW 39.30.060, all Bidders for projects estimated to cost $1,000,000 or more 1) shall identify Subcontractors that the Bidder, if awarded, will subcontract for the performance of the work of: rebar and structural steel installation, HVAC, plumbing as described in RCW 18.106 and electrical as described in RCW 19.28, or 2) indicate that the Bidder intends to self-perform the work. Per RCW 39.30.060 failure to list subcontractor(s) with whom the bidder will directly subcontract or to name itself to perform such work, will result in the bid being found non-responsive. If the box for "self-perform" is checked, the Bidder must be licensed and qualified to self-perform at the time of Bid submittal, or the Bid shall be found non-responsive. The Bidder may not list more than one Subcontractor for each category of work unless Subcontractors vary with Bid Alternates, Additives, or Deductives, in which case the Bidder must indicate on a separate Bidder/Subcontractor List which Subcontractor(s) will be used for which Alternate, Additive, or Deductive.

The Bidder/Subcontractor List must be submitted to the Purchasing Division within one hour of the time and date for Bid submittal for HVAC, Plumbing, and Electrical. The Bidder/Subcontractor List must be submitted to the Purchasing Division within 48 hours of the time and date for Bid submittal for Structural Steel Installation and Rebar Installation.

Trade	You must check one box for each trade. If subcontracting, you must name the subcontractor(s) you will use and category of work.
1. Heating, Ventilation & Air Conditioning (HVAC)	☐ Name of Sub: ____________ UBI# ____________ ☐ Bidder intends to self-perform ☐ N/A (this project does not include this work)
2. Plumbing	☐ Name of Sub: ____________ UBI# ____________ ☐ Bidder intends to self-perform ☐ N/A (this project does not include this work)
3. Electrical	☐ Name of Sub: ____________ UBI# ____________ ☐ Bidder intends to self-perform ☐ N/A (this project does not include this work)
4. Structural Steel Installation	☐ Name of Sub: ____________ UBI# ____________ ☐ Bidder intends to self-perform ☐ N/A (this project does not include this work)
5. Rebar Installation	☐ Name of Sub: ____________ UBI# ____________ ☐ Bidder intends to self-perform ☐ N/A (this project does not include this work)

______________________________ ______________________________
PW Bid # Bidder's Business Name

______________________________ ______________________________
Name of Bidder's Representative Signature of Bidder's Representative

____
Title of Bidder's Representative

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

VER. 07/12/2023

Proposal for Incorporating Recycled Materials into the Project

In compliance with RCW 70A.205.700, the Bidder shall propose below, the total percent of construction aggregate and concrete materials to be incorporated into the Project that are recycled materials. Calculated percentages must be within the amounts allowed in Section 9-03.21(1)E, Table on Maximum Allowable Percent (By Weight) of Recycled Material, of the Standard Specifications.

Proposed total percentage: ______________________________ percent.

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

Bidder: ____

Signature of Authorized Official: ____

Date: ____

Certification of Compliance with Wage Payment Statutes

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

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

____
Bidder

____
Signature of Authorized Official*

____
Printed Name

____
Title

______________________ ______________________ ________________
Date City State

Check One:

Individual ☐ Partnership ☐ Joint Venture ☐ Corporation ☐

State of Incorporation, or if not a corporation, State where business entity was formed:

____

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

____

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

INFORMATION ONLY

CONTRACT DOCUMENT FORMS

DOCUMENTS IN THE FOLLOWING FORM MUST BE EXECUTED AND SUBMITTED BY THE SUCCESSFUL BIDDER WITHIN TWENTY (20) DAYS FOLLOWING THE NOTICE OF AWARD

Snohomish County

CONTRACT #_______

THIS CONTRACT between, **SNOHOMISH COUNTY**, hereinafter called "OWNER" and ______________________________, hereinafter called "CONTRACTOR," to conduct business in the State of Washington as a ____________________.

WITNESSETH: That for and in consideration of payments and agreements hereinafter mentioned the parties agree as follows:

1. The CONTRACTOR will commence and complete the construction of the
   Project Name ____
   Project No. ______________________________, **Bid No.** ____________________
   in accordance with the Contract Documents. The work to be performed under this contract provides for ____
   ____
   and other work all in accordance with the Contract Plans, Contract Provisions, and the 2025 Standard Specifications.

2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the project described herein, in accordance with the Contract Documents.

3. The CONTRACTOR will commence the work required by the Contract Documents within twenty-one, (21) calendar days from the date of Contract Execution or as otherwise specified in the Contract Documents, and will achieve Physical Completion of the work within working days, unless the period for Physical Completion is extended otherwise in accordance with the Contract Documents.

4. The CONTRACTOR agrees to perform all of the WORK described in the Contract Documents for the sum of ______________________________ (____________________), unless otherwise adjusted as authorized and provided for by the Contract Documents.

5. The term "Contract Documents" means and includes the following, which are incorporated by reference as if fully set forth herein (not in order of precedence):

   A. Notice of Call for Bids
   B. Project Proposal
   C. ADDENDA: __________, __________, __________, __________, __________
   D. Contract
   E. Performance Bond pursuant to Chapter 39.08 RCW, as applicable, or otherwise required by OWNER.
   F. Payment Bond pursuant to Chapter 39.08 RCW, and as applicable, pursuant to Chapter 60.28 RCW.
   G. Contractors Declaration of Option for Management of Statutory Retained Percentage
   H. Assignment of Savings or Time Deposit Escrow Retained Percentage Holding Account
   I. Escrow Agreement
   J. Bond in Lieu of Retainage
   K. 2025 Standard Specifications for Road, Bridge and Municipal Construction, Washington State Department of Transportation ("Standard Specifications")

L. Plans and Drawings
M. Specifications and/or Technical Specifications
N. Change Orders

and all modifications or changes issued pursuant to the Contract Documents.

6. The OWNER will pay the CONTRACTOR in the manner, at such times, and in such amounts as set forth by the Contract Documents.

7. The CONTRACTOR must verify mandatory responsibility criteria for each first tier subcontractor, and its subcontractors of any tier that hire other subcontractors must verify mandatory responsibility criteria for each of its subcontractors. Verification shall include that each subcontractor, at the time of subcontract execution, meets the responsibility criteria listed in RCW 39.04.350(1) and SCC 3.04.13[illegible](2) and Subcontractors who will perform the work of structural steel installation, rebar installation, heating, ventilation, air conditioning and plumbing as described in RCW 18.106 and electrical as described in RCW 19.28, or an elevator contractor license, if required by Chapter 70.87 RCW.

   Non-discrimination. It is the policy of the County to reject discrimination which denies equal treatment to any individual because of his or her race, creed, color, national origin, families with children, sex, marital status, sexual orientation, age, honorably discharged veteran or military status, or the presence of any sensory, mental, or physical disability or the use of a trained dog guide or service animal by a person with a disability as provided in Washington's Law against Discrimination, Chapter 49.60 RCW, and the Snohomish County Human Rights Ordinance, Chapter 2.460 SCC. These laws protect against specific forms of discrimination in employment, credit transactions, public accommodation, housing, county facilities and services, and county contracts.

8. The Contractor shall comply with the substantive requirements of Chapter 2.460 SCC, which are incorporated herein by this reference. Execution of this Contract constitutes a certification by the Contractor of the Contractor's compliance with the requirements of Chapter 2.460 SCC. If the Contractor is found to have violated this provision, or to have furnished false or misleading information in an investigation or proceeding conducted pursuant to this Contract or Chapter 2.460 SCC, this Contract may be subject to a declaration of default and termination at the County's discretion. This provision shall not affect the Contractor's obligations under other federal, state, or local laws against discrimination.

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

IN WITNESS WHEREOF, the Parties hereto have executed this Contract as of the Party's date last signed below.

EXECUTED BY THE CONTRACTOR:	EXECUTED BY THE COUNTY:
______________________________	______________________________
Printed Name	Printed Name
______________________________	______________________________
Date	Date
______________________________	______________________________

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PERFORMANCE BOND

To Snohomish County, WA

Bond No. ____________

Snohomish County, Washington (County) has awarded to ______________________________ (Principal), a contract for the construction of the project designated as ______________________________, Project No.______________________________, in Snohomish County, Washington (Contract), and said Principal is required to furnish a bond for performance of all obligations under the Contract.

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

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

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

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

______________________________	______________________________
Principal Signature Date	Surety Signature Date
______________________________	______________________________
Printed Name	Printed Name
______________________________	______________________________
Title	Title

Name, address, email, and telephone of local office/agent of Surety Company is:

PAYMENT BOND

To Snohomish County, WA

Bond No. ____________

Snohomish County, Washington (County) has awarded to ____________________________ (Principal), a contract for the construction of the project designated as ________________________________, Project No. ____________________________ in Snohomish County, Washington (Contract), and said Principal is required under the terms of that Contract to furnish a payment bond in accord with Title 39.08 Revised Code of Washington (RCW) and (where applicable) 60.28 RCW.

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

This statutory payment bond shall become null and void, if and when the Principal, its heirs, executors, administrators, successors, or assigns shall pay all persons in accordance with RCW 39.08, 39.12, and 60.28 including all workers, laborers, mechanics, subcontractors, and materialmen, and all persons who shall supply such contractor or subcontractor with provisions and supplies for the carrying on of such work, and if such payment obligations have not been fulfilled, this bond shall remain in full force and effect.

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

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

PRINCIPAL

Principal Signature Date	Surety Signature Date
Printed Name	Printed Name
Title	Title

Name, address, email, and telephone of local office/agent of Surety Company is:

Date: ________________

Power of Attorney

Snohomish County
Department of Public Works - Administrative Operations
Admin W, 5th Floor
3000 Rockefeller Avenue, MS:607
Everett, Washington 98201

Attention: ______________________, Contract Administrator

RE: Project Name ____

Project No. ____

Bid Number ____________

Regarding Performance Bond No. ____________________________ and Payment Bond No. __________________________________, the surety acknowledges that the County will execute the above referenced contract after the date of execution of the Power of Attorney, and the surety further represents that the Power of Attorney will be valid on the date of contract execution. The surety company agrees to provide written notice, prior to execution of the Public Works contract, to the County in the event the Power of Attorney is revoked. The surety company agrees not to challenge the validity of the contract bonds based upon a revocation of the Power of Attorney, unless the County receives written notice of the revocation prior to execution of the Public Works contract secured by the contract bonds.

Surety Name: ____

Signature of Authorized Representative: ________________________________

Typed Name of Authorized Representative: ______________________________

Authorized Representative's Title: ____________________________________

(Area Code) Phone Number: ____________________________________

Rev.3/21/17

CONTRACTOR'S DECLARATION OF OPTION FOR MANAGEMENT OF STATUTORY RETAINED PERCENTAGE
(Reference - Chapters 60.28 & 39.12 RCW)

Project Name: ______________________________

Project No.: ______________________________

I hereby elect to have the retained percentage of this contract: (Choose One)

A: FUNDS TO BE HELD BY AGENCY:
Retained in a fund by the County until sixty (60) days following the completion date of the work and in accordance with Chapters 60.28 and 39.12 RCW.

Date:______________________ Signed: ______________________

B: FUNDS TO BE PLACED IN SAVINGS ACCOUNT:
Deposited by the County in an interest bearing account in a bank, mutual savings bank, or savings and loan association, not subject to withdrawal until sixty (60) days after the completion date of the work and in accordance with Chapters 60.28 and 39.12 RCW. Interest on such account shall be paid to the Contractor.

If this option is selected, complete the attached "Assignment of Savings or Time Deposit Escrow Retained Percentage Holding Account" form.

Date:______________________ Signed: ______________________

C: FUNDS TO BE PLACED IN AN ESCROW ACCOUNT CHOSEN BY CONTRACTOR:

Placed in escrow with______________________(*designate a bank or trust company)* by the County until sixty (60) days following the completion date of the work and in accordance with Chapters 60.28 and 39.12 RCW.

Submit signed escrow agreement from your bank and attach to this option form.

When the monies reserved are to be placed in escrow, the County shall issue a check representing the sum of the monies reserved payable to the bank or trust company and the Contractor jointly. This check shall be converted into bonds and securities chosen by the Contractor and approved by the County, and such bonds and securities shall be held in escrow. Interest on such bonds and securities shall be paid to the Contractor as the said interest accrues.

I further agree to be fully responsible for payment of all costs or fees incurred as a result of placing said retained percentage in escrow and investing it as authorized by statute. The County shall not be liable in any way for any costs or fees in connection therewith.

Date:______________________ Signed: ______________________

D: BOND IN LIEU OF RETAINAGE:

Effective until sixty (60) days following the completion date of the work and in accordance with Chapters 60.28 and 39.12 RCW.

Date:______________________ Signed: ______________________

Rev 02/02/2021

ASSIGNMENT OF SAVINGS OR TIME DEPOSIT ESCROW RETAINED PERCENTAGE HOLDING ACCOUNT

The undersigned ______________________________ hereby referenced to as "Contractor" has directed SNOHOMISH COUNTY herein referred to as "Agency" to deliver its warrants or checks payable to ____________________________, hereinafter the "Bank" and the Contractor jointly. Such warrants or checks shall be deposited to Account # ___________________________ as an Escrow Retained Percentage Holding Account.

All deposits to the account shall not be subject to withdrawal until the Bank is notified by the Agency in writing, authorizing the release of such funds. All interest earned on this account shall be paid to the Contractor. Any costs or fees incurred as a result of placing the said retained percentage funds in this account shall be paid by the Contractor.

Contractor: ______________________

Signature: ______________________

Name: ______________________

Title: ______________________

Address: ______________________

____

Date: ______________________

Agency: Snohomish County

Signature: ______________________

Name: ______________________

Title: ______________________

Address: 3000 Rockefeller Avenue
M/S 607 - Admin West, 5th Floor
Everett, WA 98201-4067

Date: ______________________

____
Bank

Signature: ______________________

Name: ______________________

Title: ______________________

Address: ______________________

____

Phone: ______________________

Date: ______________________

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Contract No.:__________ Public Body: Snohomish County

Project Name: ____

Completion Date:_______________ Escrow No.: ___________________

ESCROW AGREEMENT

TO:________________________________(ESCROW AGENT)
(ESCROW AGENCY AND BRANCH)

____

____
ESCROW AGENCY ADDRESS

This Escrow Agreement is for the investment of the retained percentages of the above contract in accordance with Chapter 38, Laws of 1970, amending RCW 60.28.011, 60.28.030 and 60.28.050.

The Undersigned,____, hereinafter referred to as the Contractor, has directed Snohomish County, hereinafter referred to as the Public Body, to deliver to you its warrants, checks or drafts which shall be payable to you and the Contractor jointly. Such warrants, checks or drafts are to be held and disposed of by you in accordance with the following instructions and upon the terms and conditions hereinafter set forth.

INSTRUCTIONS

1. Upon delivery to you, warrants, checks or drafts made payable to you and the Contractor jointly shall be endorsed by you and forwarded for collection. The moneys from all such warrants, checks or drafts received hereunder shall be used by you to purchase bonds or other securities selected by the Contractor and approved by the Public Body. For the purpose of each such purchase, you may follow the last written direction received by you from the Contractor, provided said direction otherwise conforms with the restrictions on investments recited herein. The Contractor, subject to express written approval of the Public Body, may select other bonds or securities, except stocks.

2. The investments selected by the Contractor, approved by the Public Body and purchased by you must mature on or before the date set for the completion of the contract, including extensions thereof. After the completion date of the contract, you shall not be required to invest the money held by you and derived from the sale or redemption of matured investments until authorized to do so by the Contractor and the Public Body, which authorization shall include the completion date of the extension.

3. When and as interest on the securities held by you pursuant to this agreement accrues and is paid, you shall collect such interest and forward it to the Contractor at its address designated below unless otherwise directed by the Contractor.

4. You are not authorized to deliver to the Contractor all or any part of the securities held by you pursuant to this agreement (or any moneys derived from the sale of such securities, or the negotiation of the Public Body's warrants) except in accordance with the written instructions from the Public Body. Compliance with such instructions shall relieve you of any further liability related thereto.

5. In the event the Public Body orders you to do so in writing, you shall, within thirty-five (35) days of receipt of such order, reconvert into money the securities held by you pursuant to this agreement and return such money together with any other moneys held by you, hereunder, to the Public Body.

6. The Contractor agrees to pay you for your services and hereunder compensation in accordance with your published schedule of Escrow Fees - Public Works Contracts. Payment of all fees shall be the sole responsibility of the Contractor and shall not be deducted from any property placed with you pursuant to this agreement until and unless the Public Body directs the release to the Contractor of the securities and moneys held hereunder whereupon you shall be granted a first lien upon such property released and shall be entitled to reimburse yourself from such property for the entire amount of your fees as with respect to the property held by you hereunder, or in the event that the conditions of this escrow are not promptly fulfilled or that you are required to render any service not provided for in these instructions, or that there is any assignment of the interests of this escrow or any modification hereof, you shall be entitled to reasonable compensation for such extraordinary services from the Contractor and reimbursement from the Contractor for all costs and expenses, including attorney fees occasioned by such default, delay, controversy or litigation.

7. This agreement shall not be binding until executed by the Contractor and the Public Body and accepted by you.

8. This instrument contains the entire agreement between you, the Contractor, and the Public Body with respect to this escrow and you are not a party to nor bound by any instrument or agreement other than this; you shall not be required to give notice or demand, nor required to take any action whatever except as herein expressly provided; you shall not be liable for any loss or damage not caused by your own negligence or willful misconduct.

9. The foregoing provisions shall be binding upon the assigns, successors, personal representatives and heirs of the parties hereto.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the Party's date last signed below.

______________________________ESCROW AGENT

By______________________________AUTHORIZED OFFICER

Contractor:

____

Signature:______________________________

Name:______________________________

Title:______________________________

Address:______________________________

____

____

Agency: Snohomish County

Signature:______________________________

Name:______________________________

Title:______________________________

Address: 3000 Rockefeller Avenue

M/S 607 – Admin West, 5th Floor

Everett, WA 98201-4067

Rev. 2/2/2021

BOND NO. ________________

SNOHOMISH COUNTY
RETAINAGE BOND
(Bond In Lieu of Retainage - RCW 60.28)

KNOW ALL PERSONS BY THESE PRESENTS, that_____________________________________, a corporation organized under the laws of the State of Washington and registered to do business in the State of Washington as a contractor, as Principal, and______________________________, a ________________ organized under the laws of the State of______________________________and registered to transact business in the State of Washington as a surety, as Surety, their heirs, executors, administrators, successors and assigns, are jointly and severally held and bound to the County of Snohomish, Washington, hereinafter called COUNTY, and are similarly held and bound unto the beneficiaries of the trust fund created by RCW 60.28, in the sum of five percent (5%) of all amounts earned by the Principal on the contract described below.

THE CONDITIONS OF THIS BOND OBLIGATION ARE THAT:

WHEREAS, on the________day of________________, 20 , the Principal executed a contract with the COUNTY for:

Project Name: ____

Contract Number:______________; and

WHEREAS, said contract and RCW 60.28 require the COUNTY to withhold from the Principal the sum of five percent (5%) from monies earned by the Principal on estimates during the progress of the construction, hereinafter referred to as earned retained funds;

AND WHEREAS, the Principal has requested that the County not retain any earned retained funds as allowed under RCW 60.28.

NOW, THEREFORE, the condition of this obligation is such that the Surety is held and bound to the COUNTY and to the beneficiaries of the trust fund created by RCW 60.28 in the sum of five percent (5%) of the final contract cost which shall include any increases due to change orders, increases in quantities of work, addition of new items of work, or otherwise, hereafter referred to as the final contract cost. If the Principal shall use the earned retained funds, which will not be retained, for the trust fund purposes of RCW 60.28, and all trust fund purposes of RCW 60.28 have been met, then this obligation shall be null and void; otherwise, it shall remain in full force and effect until released as authorized in writing by the COUNTY.

IT IS FURTHER EXPRESSLY AGREED THAT:

1. The liability of the Surety under this bond shall not exceed five percent (5%) of the final contract cost, if no monies are retained by the COUNTY on estimates during the progress of construction.

2. The COUNTY reserves the right to resume the actual withholding of earned retained funds according to the contractor's designated option for management of Retainage under RCW 60.28.010(2). In the event the COUNTY resumes withholding of earned retained funds, the liability of the Surety under this bond shall not exceed the actual

amount of the earned retained funds which have been released and are not currently held by the COUNTY.

3. The Surety hereby consents to and waives notice of any extension in the time for performance of the contract, assignment of obligations under the contract, or contract alteration, amendment, or change order.

4. Any suit under this bond must be instituted within the time period provided by applicable law. The bond shall be subject to all claims and liens and in the same manner and priority as set forth for retained percentages in RCW 60.28.

5. Until written release of this obligation by the COUNTY, this bond may not be terminated or canceled by the Principal or the Surety for any reason. Any extension of time for the Principal's performance on the contract, assignments of obligations under the contract, or any amendment to the contract of any kind shall not release the Surety from its obligation under this bond.

6. RCW 60.28 authorizes the COUNTY to substitute a retainage bond in lieu of ever actually retaining earned retained funds and the Surety hereby waives any defense that this bond is void or otherwise not authorized by law.

Any claim or suit against the COUNTY to foreclose the liens provided for by RCW 60.28 shall be effective against the Principal and Surety and any judgment under RCW 60.28 against the COUNTY shall be conclusive against the Principal and the Surety.

IN WITNESS WHEREOF, the Parties hereto have executed this Bond as of the Party's date last signed below.

SURETY:	**PRINCIPAL:**
(Name)	(Name)
Attorney-in-Fact for Surety	(Address)
(Typed Name)	(City, State, Zip code)
(Name of Local Office or Agent))	(Signature of Authorized Representative)
(Address of Local Office or Agent)	(Typed Name of Authorized Representative)
(City, State, Zip code)	(Title)
(Area Code and Phone Number)	(Area Code and Phone Number)

ACCEPTED: SNOHOMISH COUNTY
COUNTY ENGINEER

DATED

* This bond must be accompanied by a fully executed Power of Attorney appointing the Attorney-in-Fact.

Rev. 8/29/11

Snohomish County
Public Works
Administration

PROJECT NAME:
PROJECT NUMBER:

SURPLUS MATERIAL DISPOSAL AND/OR REMOVAL

TYPE OF MATERIAL TO BE REMOVED FROM SITE	LOCATION OF STORAGE AND/OR DISPOSAL SITE (Include name & phone # of owner & address of storage/disposal site.)	PROPOSED METHOD OF DISPOSAL AND/OR REUSE

****NOTE:** Please refer to the contract Special Provisions specification titled "Disposal and/or Removal of Surplus Material".

If a disposal site is rejected, the Contractor is responsible for locating a new disposal site that will meet the County's criteria. Any associated costs incurred in finding a new or different disposal and/or storage site will be the responsibility of the Contractor, and at no additional cost to the County.

Snohomish County Public Works

Apprentice Utilization Plan

☐ Original (due prior to contract execution) ☐ Revised

Contract Title		Contract Number		Today's Date	
Prime Contractor				**Apprentice Utilization Requirement %**	
*Include labor hours and count for all trades, including those performed by Subcontractors. Use continuation sheet if needed.					
				Estimated	
Start Date (mm/dd/yyyy)	**Contractor or Subcontractor**	**Trade/Craft Description**	**Quantity**	**Total Labor (Hours)**	**Apprentice (Hours)**
			Total Hours		
Completed By		Email			
Title		Phone			

Apprentice Utilization Plan Form Instructions

Contract Title	Contract Title as it appears in the Award Letter
Contract Number	Contract Number as it appears in the Agreement
Today's Date	The date that the plan is submitted
Prime Contractor	The name of the Prime Contractor (Firm)
Apprentice Utilization Requirement	The required percentage of Apprentice Utilization from the contract provisions
Start Date	The estimated date that these apprentices will start work on the project
Contractor	The firm name of the contractor or subcontractor proposing to utilize these apprentices
Trade/Craft	Provide description of trade/craft
Quantity	Number of apprentices employed in each Trade/Craft
Total Labor (Hours)	Total number of labor hours (for this trade/craft and for the Prime Contractor and all subcontractor) estimated to complete the project
Apprentice Hours	Total number of proposed apprentice hours for this trade/craft
Completed By	Name of person submitting the plan
Email	Email address of person submitting the plan
Title	Title of person submitting the plan
Phone	Phone number of person submitting the plan

APPENDIX A

GEOTECHNICAL ENGINEERING REPORT

GEOTECHNICAL ENGINEERING REPORT

Culvert Replacement near 10101 167th Ave SE
Snohomish County, Washington

Prepared for: Osborn Consulting, Inc

Project No. 210212-A • January 28, 2022 FINAL

earth + water

Aspect CONSULTING

GEOTECHNICAL ENGINEERING REPORT

Culvert Replacement near 10101 167th Ave SE Snohomish County, Washington

Prepared for: Osborn Consulting, Inc

Project No. 210212-A • January 28, 2022 FINAL

Aspect Consulting, LLC

1/28/2022

Rory P. Kilkenny, PE
Senior Geotechnical Engineer
rkilkenny@aspectconsulting.com

Jane Gregg, PE
Project Geotechnical Engineer
jgregg@aspectconsulting.com

Erik O. Andersen, PE
Principal Geotechnical Engineer
eandersen@aspectconsulting.com

\\seafps\Deliverables\210212 Snohomish County On-Call\Deliverables\Geotechnical Engineering Report\Final\Geotech Eng Report_Culvert Rep_167th Ave SE_2022.01.28.docx

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1 Introduction

Aspect Consulting, LLC (Aspect) prepared this geotechnical engineering report in support of the French Creek Culvert Replacement project (Project) located near 10101 167th Avenue SE (Site) in Snohomish County, Washington (County). The Project involves the proposed replacement of the existing concrete culvert at the French Creek culvert crossing on 167th Avenue SE (Figure 1) with a fish-passable pre-cast concrete structure (Osborn Consulting, Inc [Osborn], 2021). The culvert conveys French Creek, which continues southwest to discharge into the Snohomish River.

1.1 Project Description

At the French Creek culvert crossing, 167th Avenue SE is a paved, two-lane rural road oriented northwest to southeast. The existing culvert at the Site consists of a 6-foot-tall, 8-foot-wide, 40-foot-long concrete culvert oriented roughly perpendicular to the roadway under an approximately 12-foot-tall road embankment.

At the western end of the culvert there is a concrete headwall and three levels of weirs (lower weirs) that extend approximately 45 feet downstream. The lower weirs have washed away, and the concrete wing walls have been undermined and have fallen into the stream. These failed wing walls have fully obstructed fish passage. The existing culvert is most likely undersized, resulting in increased flow velocities exiting the structure. The eastern opening of the culvert has a concrete head wall and wingwalls. Upstream of the crossing, French Creek flows parallel to the roadway, causing embankment failure and requiring repairs by the County.

The 60 percent plans by Osborn (Osborn, 2022) show the replacement structure to be a pre-cast concrete structure with an inside span of 54 feet, a rise of about 14.75 feet, and a total length of 52 feet. We understand that 167th Ave SE will be fully closed during the replacement.

1.2 Scope of Work

Our scope of work includes conducting subsurface explorations, laboratory testing, and groundwater monitoring across the Site to characterize the geologic conditions and aquifer characteristics. This scope provides the baseline data for geotechnical recommendations for the Project and for estimating the horizontal hydraulic conductivity of the aquifer at the Site.

Our subsurface exploration program included three hand augers (AHA-01 to AHA-03), two machine-drilled soil borings (AB-01 and AMW-01), laboratory testing, and installation of one groundwater monitoring well (AMW-01). This report includes:

- Site and Project descriptions
- Distribution and characteristics of subsurface soils and groundwater

- Description of the field work completed
- Seismic design criteria in accordance with the American Association of State Highway and Transportation Officials (AASHTO)
- Pre-cast structure foundation design
- Lateral earth pressures for pre-cast structure and wingwall design
- Earthwork and grading, cut, and fill recommendations
- Permanent bank and channel slope stability design
- Construction dewatering considerations
- Pavement restoration recommendations

Copies of our subsurface investigation logs, laboratory testing, and slug test results are attached as Appendices A through C, respectively.

We assume that design and construction of the pre-cast structure and associated roadway improvements will be in accordance with AASHTO Bridge Design Specifications (BDS; AASHTO, 2017) and/or Washington State Department of Transportation (WSDOT) Bridge Design Manual (BDM; WSDOT, 2020) Load and Resistance Factor Design (LRFD) methodology. The Project will also meet Washington Department of Fish and Wildlife (WDFW) design criteria for fish passage and selected Washington State Department of Transportation (WSDOT, 2022) guidance and methodologies.

2 Site Conditions

This section presents the Site conditions, including geology and seismic setting, and Site area topography and subsurface conditions. This information provides context for the discussion of types and distribution of the geologic soil units, and a basis for anticipating the conditions that will be encountered during construction of the Project elements.

The general Site layout, select Site features, and the locations of our completed subsurface explorations are shown on Figure 2.

2.1 Topography

The pavement surface of 167th Avenue SE is Elevation[1] (El.) +136 feet at the culvert location and gradually slopes upward to the northwest at an inclination of about 4 percent. From both sides of the roadway, embankments descend to the culvert at approximately 2H:1V (horizontal:vertical). The creek banks generally slope down to the streambeds at a 6H:1V slope from El. +128 feet upstream of the culvert and El. +120 feet downstream of the culvert.

A Project-specific topographic survey map completed by 1-Alliance Geomatics in August 2021 is the source of topographic information we used for this Project.

2.2 Surface Conditions

Surface conditions at the Site generally consist of moderately vegetated slopes to the east and west of the roadway and on the side slopes of the creek. The road embankment consists of paved roadway above vegetated embankment slopes. The embankment slopes appeared to be reinforced with a mechanically stabilized earth (MSE) wall as the embankment approached the culvert. Trees are present on the roadway embankment as well as on the creek banks. The creek banks are heavily vegetated with trees, ferns, bushes, and other groundcovers.

Gravel and cobbles were present on the creek banks. Upstream of the culvert, the alignment of the creek makes a sharp turn from north-south to east-west immediately before crossing through the existing culvert and continuing south downstream through the weirs before turning into a southwest-northeast alignment. The creek surface upstream and downstream of the culvert and weirs consist of fluvially deposited silt, sand, gravel, and cobbles.

2.3 Geology

The Site is located at the central portion of the Puget Lowland. The Puget Lowland is a complex tectonic environment and an area of tectonic subsidence flanked by two mountain ranges—the Cascades to the east and the Olympics to the west. The sediments within the Puget Lowland result from repeated cycles of glacial and nonglacial deposition

[1] For the purposes of this report, the Project vertical datum is North American Vertical Datum of 1988 (NAVD88) and is the basis for all references to “Elevations” contained herein.

and erosion. During nonglacial cycles, the area was dominated by lowland forests and broad river valleys. During glacial cycles, ice sheets up to 3,000 feet thick occupied the Puget Lowland and surrounding areas, carved out the deep marine waterways and river valleys, and sculpted the uplands. Deposits from these glacial and nonglacial cycles are present in the subsurface of the project vicinity.

The available geologic mapping indicates the Site is underlain by Holocene-age alluvium and Vashon till (Minard, 1985). Based on our understanding of the construction of 167th Avenue SE, the Site was also graded with embankment fill to create the road alignment.

Geology of the Site consists of relatively simple sequences (generally from top down) of fill, alluvium, and Vashon glacial deposits. Soil units are described in more detail in Section 2.5.3.

2.4 Seismicity

The Site is in a seismically active area approximately 24 miles north of the Seattle Fault Zone and approximately 3.5 miles northeast of the Southern Whidbey Island Fault Zone, a shallow crustal fault zone. It is also within the zone of potentially very strong shaking from the Cascadia Subduction Zone.

2.5 Subsurface Conditions

Subsurface conditions at the Site were inferred from the completed field explorations, laboratory testing of soil samples collected during our subsurface investigation, review of applicable geologic literature, and experience with the local geology. Our observations were used to develop a generalized geologic cross section of the Site (Figure 3).

2.5.1 Soil Borings

Aspect conducted a 2-day subsurface investigation on August 2 and 3, 2021. The Site was explored with two borings (AB-01 and AMW-01) and three hand tool explorations (AHA-01 to AHA-03).

The soil borings were advanced by Holocene Drilling, Inc (Holocene), subcontracted to Aspect, using a truck-mounted drill rig with hollow-stem auger methods. AB-01 and AMW-01 were advanced to 35.8 feet below ground surface (bgs) and 50.3 feet bgs, respectively, through the road surface on either side of the culvert crossing. Disturbed soil samples were obtained from the hollow-stem auger borings at 2.5- to 5-foot intervals using the Standard Penetration Test (SPT) in general accordance with the ASTM International (ASTM) D1586, *Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils* (ASTM, 2018).

Hand tool explorations were advanced using a hand auger and spade shovel by an Aspect geologist. AHA-01 and AHA-02 were advanced near the culvert inlet and AHA-03 was performed just north of the lower weirs. The explorations were advanced to practical refusal on gravel and cobbles, between 1 foot bgs and 1.6 feet bgs. Disturbed soil samples were collected from each exploration.

The locations of our field explorations are presented on Figure 2. Our exploration logs and detailed descriptions of the drilling, sampling, and soil classification methods are presented in Appendix A.

2.5.2 Geotechnical Laboratory Testing

Geotechnical laboratory testing of selected soil samples was performed by Hayre McElroy & Associates under subcontract to Aspect. Tests included grain-size distribution and moisture content testing. A summary of lab results, further descriptions of the laboratory test methods, and detailed results are presented in Appendix B.

2.5.3 Soil Units

The primary geologic/soil units observed at the Site, presented in stratigraphic order from top to bottom, include fill, alluvium, and Vashon glacial till. The general location in the subsurface profile of each of these units is best conveyed by cross section shown on Figure 3. The units are described in more detail below.

Fill

Immediately below the paved surface of 167th Avenue SE, we observed gravel with silt and sand (GP-GM)[2], gravel with sand and cobbles (GP), and silty gravel with sand and cobbles (GM) that was generally medium dense to dense, slightly moist, and brown to red brown. The relative density of the material indicates it was likely placed with some compactive effort. In AMW-01, the fill had strong petroleum-like odors and trace 1-inch-diameter charcoal debris. Also in AMW-01, the fill had a roughly 2.5-foot-thick layer of very loose, moist, dark gray to black, silty sand (SM) at the bottom of the unit. We interpreted this unit to be the embankment fill for the road. We observed the fill extending to depths of approximately 12.5 feet bgs.

North of the lower weirs in hand exploration AHA-03, we observed silty gravel with cobbles (GM), which we interpreted as fill.

Alluvium (Qyal)

Below the embankment fill in both borings we observed a 3- to 5-foot-thick alluvial deposit that consisted of gravel with sand (GM), sand with gravel (SW), silty gravel with sand and cobbles (GM) and gravel with sand and cobbles (GP) with decomposing organics, rootlets, and woody debris that was generally medium dense, wet, dark gray and brown to red brown. Observations of the modern stream channel indicate that logs and larger wood debris may be present within the Alluvium.

In the active channel we observed alluvial deposits in hand explorations AHA-01 and AHA-02 consisting of very loose to loose, wet, dark gray to dark brown sand with silt (SP-SM) and sand (SP) as well as medium dense, wet, brown to red brown gravel with sand and cobbles (GW).

Vashon Glacial Till (Qvt)

Below the thin layer of alluvium, we encountered Vashon glacial till consisting of silty sand with and without gravel (SM) and sandy silt (ML) that were generally very dense, moist, blue gray to gray to dark gray. Both borings were terminated in this unit. The Vashon glacial till is not liquefiable and is an appropriate bearing stratum for foundations.

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[2] Soils classified in accordance with the Unified Soil Classification System (USCS), ASTM D2488.

2.6 Groundwater

Groundwater in AB-01 was measured to be at a depth of 12.12 feet bgs (approximately El. +137 feet) during drilling so the measured water level is approximate and is not representative of static water level. The static groundwater level in AMW-01 was measured to be at a depth of 10.88 feet below top of casing (btoc) (approximately El. +134.5 feet) on August 3, 2021, which correlates with French Creek. Groundwater levels will fluctuate seasonally with precipitation, as well as with the water level in the creek and any changes in Site and near-Site usage.

2.7 Aquifer Characterization

An Aspect geologist conducted field permeability (slug) testing on August 3, 2021, to estimate horizontal hydraulic conductivity (K) of the shallow aquifer within the proposed structure excavation area. The slug tests were completed in AMW-01, which has a screen zone between 9 and 19 feet bgs within the Alluvium and Vashon Glacial Till layers.

After reviewing the slug test data, the Bouwer & Rice (1976) method was used to estimate the K value of the material within the screening interval. Appendix C summarizes the testing methods, well parameters, and resulting K estimates, which were geometrically averaged for the well. The resulting K estimates for the well range from 4.2×10^{-3} centimeters/second (cm/sec) to 5.6×10^{-3} cm/sec. We conservatively recommend a K value of 6.0×10^{-3} cm/sec for dewatering estimates.

These estimates are consistent with the mixture of well graded sands, poorly graded gravel, and sandy silt described within the monitoring well screen intervals and with conditions observed in the field during testing.

3 Conclusions and Recommendations

3.1 Earthquake Engineering

3.1.1 Ground Response

The AASHTO seismic design is based on an event with a return period of 1,000 years. The U.S. Geological Survey (USGS, 2016) has an online tool for key design parameters for the AASTHO event using the probabilistic ground motion studies and maps for Washington. Seismic design should be completed with the specific ground motion parameters listed in Table 1 below (AASHTO, 2009).

Table 1. Seismic Design Parameters

Design Parameter	Recommended Value
Site Class	D
Peak Ground Acceleration (PGA)	0.351g(1)
Short Period Spectral Acceleration (S_s)	0.791g
1-Second Period Spectral Acceleration (S_1)	0.265g
Site Coefficient (F_{PGA})	1.149
Site Coefficient (F_a)	1.184
Site Coefficient (F_v)	1.870
Design Peak Ground Acceleration (A_s)	0.403 g
Design Short Period Spectral Acceleration (S_{DS})	0.936g
Design 1-Second Period Spectral Acceleration (S_{D1})	0.496g
Site Effective Shear Modulus (Gm)	16,000 psi(1)

Notes:

1. g = Gravitational force; pci = pounds per cubic inch
2. Based on the latitude and longitude of the Site: 47.9052°N, -122.0074°W World Geodetic System 1984 (WGS84)

3.1.2 Surficial Ground Rupture

The Site is located approximately 24 miles north of the Seattle Fault Zone and approximately 3.5 miles southeast of the Southern Whidbey Island Fault Zone. Based on the available fault mapping data, these two fault structures represent the closest surficial faults to the Site. The recurrence intervals of movement along these fault systems are still unknown, although they are hypothesized to be in excess of 1,000 years. Due to the suspected long recurrence interval and offset of the Site from the known rupture locations, the risk of surficial ground rupture is considered to be low during the expected life of the Project.

3.1.3 Liquefaction

Liquefaction occurs when loose, saturated, and relatively cohesionless soil deposits temporarily lose strength from seismic shaking. The primary factors controlling the onset of liquefaction include intensity and duration of strong ground motion, characteristics of subsurface soil, *in situ* stress conditions, and the depth to groundwater.

The Washington Department of Natural Resources (DNR) maps the Site as having low liquefaction susceptibility (DNR, 2004). Because the new pre-cast concrete structure will be supported on Vashon till, we do not consider soil liquefaction to be a design consideration for this Project.

3.2 Pre-Cast Concrete Structure

We understand that the existing culvert will be replaced with a pre-cast concrete structure that will be placed approximately within the same alignment as the existing culvert (Osborn, 2022). The proposed structure will have an inside span of 54 feet, a rise of 14.75 feet, and a total length of 52 feet.

The draft profile shows the structure invert at approximately El. +122.2 feet at the inlet end, and approximately El. +121.3 feet at the outlet end. The existing centerline of 167th Avenue SE is roughly El. +136 feet. The 60 percent design (Osborn, 2022) depicts the structure extending about ±10.25 feet above the stream thalweg, such that the structure is embedded ±4.5 feet below the base of the streambed. The top of the proposed structure is roughly 3 feet below the road surface.

The 60 percent design (Osborn, 2022), shows that the existing creek will be regraded approximately 250 feet upstream and 75 feet downstream to tie into the channel, realigning the upstream channel more centrally within the valley. The channel and structure bottom will be regraded to a 1.8 percent slope, transitioning to a typical slope of 4.3 percent upstream of the structure. The structure bottom will be filled with aggregate and streambed sediment.

We understand that the work will be completed with a full closure of 167th Avenue SE and the installation of a temporary one-lane bypass road. The contractor will have the option to shore the proposed excavation to reduce impacts of construction in the road.

3.2.1 Strip Footing Foundations

We understand that the proposed structure will bear on strip footings approximately 6 to 18 feet wide. We recommend that the footings bear on a crushed rock leveling/bearing pad overlying the Vashon till bearing surface. The base of the footings should be below expected scour depth. Recommended bearing capacities based on allowable settlement and the width of the footing are presented on Figure 4.

The 60 percent design drawings (Osborn, 2022) indicate that the footings will be up to 4 feet thick from top to bottom. The crushed rock leveling/bearing pad below the foundation should be at least 12 inches thick and it should extend at least 12 inches feet beyond the outside edges of the footing.

The recommended LRFD resistance factors required to calculate Strength and Extreme Limit State Bearing Resistances from the recommended Nominal Bearing Resistance are provided in Table 2.

Table 2. LRFD Resistance Factors for Shallow Foundations

Limit State	Bearing Resistance, ϕ_b	Shear Resistance to Sliding, ϕ_τ	Passive Pressure Resistance to Sliding, ϕ_{ep}
Service	1.0	-	-
Strength	0.45	0.8	0.5
Extreme	0.9	0.9	0.9

Other parameters for the design of the structure foundations are included in Table 3.

Table 3. Shallow Foundation Design Parameters

Parameter	Value
Poisson's Ratio, vm	0.35
Soil Subgrade Modulus, k_1	125 pci
Foundation Soil Saturated Unit Weight, γ_{sat}	63 pcf
Effective Shear Modulus Ratio, G/G_0	0.50

Notes:
pci = pounds per cubic inch
pcf = pounds per cubic foot

For strip footings that are designed as beam-on-elastic foundation, a modulus of subgrade reaction varies nonlinearly with soil strain level and the size and shape of the loaded area. For a 1-foot by 1-foot loaded area, we recommend a modulus of subgrade reaction of 125 pounds per cubic inch (pci). The value should be adjusted for square and rectangular area of loading as follows (NAVFAC, 1986):

$$K_s = K_1 * \left(\frac{B + 1foot}{2 * B}\right)^2$$

$$K_r = K_s * \left(\frac{m + 0.5}{1.5 * m}\right)$$

Where:
K_s = modulus of subgrade reaction for a square loaded area
K_1 = modulus for a 1-foot by 1-foot loaded area, from Table 3
B = side length of a square loaded area or the length of the short side of a rectangular loaded area
K_r = modulus of subgrade reaction for a rectangular loaded area
m = ratio of the length of a long side to the length of the short side of a rectangular loaded area

3.2.2 Sliding Resistance

Sliding resistance is developed from the friction occurring between the bottom of the concrete strip footing and the crushed rock pad and the passive resistance developed from the soil around the foundation. The frictional and passive resistance values presented assume the structure bears on Vashon till, and that the structure is backfilled with material meeting the minimum requirements for Gravel Borrow, WSDOT Standard Specification 9-03.14(1), and compacted per our recommendations in Section 4.3.3.

For passive resistance, we recommend a nominal passive resistance of 240 pounds per cubic foot (pcf). For frictional resistance along the interface between the cast-in-place strip footings and crushed rock fill pad, an unfactored coefficient of 0.70 may be used. LRFD Resistance Factors for determining limit state sliding and passive resistance are provided in Table 2 above.

3.2.3 Lateral Earth Pressures

The structure and any wingwalls or headwalls will be subject to lateral earth pressures from the backfill material. The earth pressures acting on the walls for active, at-rest, and seismic conditions are shown below in Table 4. The earth pressures in Table 4 assume that imported structural fill will be used for most of the backfill and compacted in accordance with our recommendations in Section 4.3.3 and that proper drainage as described in Section 4.3.2 will be installed behind the walls to prevent the build-up of hydrostatic pressures.

To invoke active earth pressure conditions, a wall must be capable of yielding laterally at least 0.001H to 0.002H, where H is the exposed height of the wall; otherwise, at-rest conditions should be assumed. Wingwalls or headwalls that are not structurally attached to the pre-cast concrete structure, might be considered yielding walls; this determination should be made by the structural engineer.

Table 4. Lateral Earth Pressure Parameters

Earth Pressure Condition	Backslope Inclination	Equivalent Fluid Pressure[3] (psf)[1]	Uniform Lateral Surcharge Pressure[4] (psf)[1]
Active[2]	Level	32H	0.26S
	2H:1V	45H	0.36S
At-Rest	Level	52H	0.41S
	2H:1V	75H	0.60S

Notes:

1. psf = pounds per square foot.
2. To invoke active earth pressure condition, the wall must be capable of yielding laterally at least 0.001H to 0.002H, where H is the exposed height of the wall.
3. The equivalent fluid densities provided above are distributed triangularly along the exposed height of the wall. The uniform lateral surcharge pressures are distributed uniformly (rectangularly) along the exposed height of the wall.
4. S is the vertical surcharge pressure at the ground surface immediately above/behind the wall. The vertical surcharge pressure causes a lateral earth pressure to act on the wall, which is calculated as the product of S and the appropriate lateral earth pressure coefficient. We recommend a traffic live load surcharge of 250 psf be used for structure design. The resultant uniform rectangular lateral pressure should be applied to the full height of the abutment wall.

An allowable equivalent fluid pressure of 240*D psf, where D is the embedment depth of the wall, can be applied to soils adjacent to below-grade elements for passive earth pressures. The upper 2 feet of passive resistance should be neglected in design. This allowable passive pressure is presented with an applied strength limit state resistance factor (ϕ_{ep}) of 0.50 and assumes a level surface in front of the wall.

Earthquake shaking will temporarily subject retaining walls and subsurface walls to additional earth pressure. We recommend accounting for earthquake earth pressures in the design of the pre-cast concrete structure and wingwalls or headwalls. Aspect should be provided with preliminary plans so we may evaluate these pressures on wingwalls and the effect of inclined backslopes on these pressures.

3.2.4 Drainage

Surface runoff from the paved roadway surface should be diverted or sloped away from the pre-cast concrete structure to the extent possible. Structural fill behind wingwalls or headwalls should consist of Gravel Backfill for Walls, WSDOT Standard Specifications 9.03.12(2) (WSDOT, 2022).

4 Construction Considerations

Key construction considerations for this Project include excavation, foundation subgrade preparation, backfill compaction, dewatering, and pavement subgrade preparation.

4.1 Earthwork

Based on the materials encountered in our explorations and our understanding of the Project, we anticipate Site earthwork can be completed with standard construction equipment such as tracked excavators, dozers, and mobile cranes. The equipment should be capable of excavating oversize material such as large cobbles and boulders or larger pieces of wood. The existing road embankment comprises fill and may also include oversize material such as boulders or debris such as wood, refuse, or chunks of concrete and asphalt.

Appropriate erosion and sedimentation control measures should be in accordance with the local best management practices (BMPs) and should be installed prior to beginning earthwork activities.

4.1.1 Wet-Weather Conditions

We recommend performing the construction during the late summer months of July through September, when the depth of water within the channel will be lowest. If earthwork is to be performed or fill is to be placed in wet weather or under wet conditions when soil moisture content is above optimum and difficult to control, the following recommendations apply:

- Earthwork should be performed in small areas to minimize exposure.
- Excavation or removal of unsuitable soils should be followed promptly by the placement and compaction of the specified structural fill.
- The size, type, and access of construction equipment used may have to be limited to prevent soil disturbance.
- The ground surface within the construction area should be graded to promote runoff of surface water away from the slopes and to prevent water ponding.
- The ground surface within the construction area should be properly covered and under no circumstances should be left uncompacted and/or exposed to moisture.
- Excavation and placement of fill should be observed by Aspect to verify that all unsuitable materials are removed prior to placement, compaction requirements are met, and Site drainage is appropriate.
- Erosion and sedimentation control are implemented in accordance with County best management practices (BMPs).

4.1.2 Temporary Excavation Slopes

Maintenance of safe working conditions, including temporary excavation stability, is the responsibility of the Contractor. Based on the 60 percent dimensions of the structure, the foundation excavations may extend as much as 25 feet below 167th Avenue SE. These excavations may be accomplished using large sloped open cuts, temporary shoring, or a combination of the two. The Contractor will be responsible for the design and installation of the temporary shoring in accordance with state and federal safety regulations.

All temporary cuts in excess of 4 feet in height that are not shored or otherwise protected, should be sloped in accordance with Part N of Washington Administrative Code (WAC) 296-155 for worker safety (WSL, 2016). The existing fill and alluvium classifies as Type C Soil per WAC and should be inclined no steeper than 1.5H:1V up to a maximum height of 20 feet. Flatter slopes are required where groundwater seepage exists, if traffic or construction surcharges are present, or where less stable soils are present. Selective removal of precariously lodged cobble and boulders in the excavation face should be completed by the Contractor to maintain safe working conditions. It will be the Contractor's responsibility to design and construct any temporary excavation and complete the work safely and in accordance with state safety regulations.

The stability of temporary unsupported cut slopes can be significantly reduced in the presence of seepage and/or precipitation. Therefore, all temporary slopes should be protected from erosion by installing a surface water diversion ditch or berm at the top of the slope if precipitation is expected. Surcharge loads such as construction equipment or material stockpiles should be maintained behind the cut slopes a minimum distance equal to the height of the cut.

In addition, the Contractor should monitor the stability of the temporary cut slopes and adjust the construction schedule and slope inclination accordingly. Vibrations created by traffic and construction equipment may cause caving and raveling of the temporary slopes. In such an event, lateral support for the temporary slopes should be provided by the Contractor.

4.1.3 Construction Dewatering

We understand that a bypass of French Creek will be installed during construction. Groundwater at the Project is influenced by creek flow and the time of year. A stream diversion will bring down the water level somewhat. However, construction dewatering will be necessary to complete this replacement project. Ideally, construction will be completed during the later summer or early fall months, when groundwater levels are typically at seasonally lowest levels.

We recommend the contractor utilize a hydraulic conductivity, or K-value, of 6.0×10^{-3} cm/sec in calculations to determine dewatering rates within the Alluvium and fill layers. Construction dewatering means, methods, and design, shall be the Contractor's responsibility.

4.2 Embankment and Pavement Construction

The road embankment should be reestablished using structural fill as detailed in the following section with side slopes matching the existing embankment. We expect embankment soil settlement will occur as structural fill is being placed with no appreciable long-term settlement expected.

Pavement subgrade will consist of structural fill to reconstruct the roadway embankments utilizing the materials and construction requirements detailed in the following section. We recommend proof rolling all pavement subgrade areas with heavy, pneumatic-tired construction equipment such as a loaded dump truck or front-end loader to identify apparent loose, soft, or pumping areas prior to placing pavement sections. Pavement sections should not be placed on frozen subgrade.

We recommend replacing the existing pavement in-kind with 8 inches of hot mixed asphalt (HMA; Appendix A) over at least 6 inches of Crushed Surfacing Base Course, over compacted structural fill. Class 1/2-inch HMA is the preferred road surfacing material (Snohomish County Public Works, 2021). Aspect can complete a quantitative flexible pavement design per WSDOT and/or AASHTO requirements, if current and projected future traffic data is provided.

4.3 Structural Fill and Material Reuse

4.3.1 Reuse of On-Site Material

The construction of the replacement structure will require excavation at the Site, which will encounter all three soil units discussed in Section 2.5.3 of this report. None of the existing on-Site materials are suitable for reuse as structural fill.

- The existing **Fill**, as previously mentioned, had strong petroleum-like odors and trace 1-inch-diameter charcoal debris.
- The **Alluvium** layer with wood has organics present and a high fines (silt and clay) content, which will make segregation and compaction difficult.
- The **Vashon till** has a high fines content and is extremely moisture sensitive and difficult to compact when moisture content cannot be controlled.

We recommend that all excavated soil be exported from the Site for disposal at an appropriate facility.

4.3.2 Structural Fill Placement

Appropriate imported material should meet the following specifications:

- The leveling/bearing pad under the pre-cast concrete structure footings should consist of Crushed Surfacing Base Course (CSBC), as specified in Section 9-03.9(3) of the WSDOT Standard Specifications (WSDOT, 2022). CSBC shall also be used as base course under the restored pavement section.
- Fill imported for backfill placed against the pre-cast concrete structure and any wingwalls should consist of Gravel Backfill for Walls, specified in Section 9-03.12(2) of the WSDOT Standard Specifications.

Streambed materials are not considered structural fill and will be selected by Osborn and Snohomish County.

4.3.3 Compaction Criteria

Soils placed beneath or around the strip footings, the embankment, and below paved areas should be considered as structural fill and placed and compacted in general accordance with the methods described in WSDOT Standard Specifications 2-03.3(14) C, Method C (WSDOT, 2022).

The procedure to achieve the specified minimum relative compaction depends on the size and type of compacting equipment, the number of passes, thickness of the layer being compacted, and certain soil properties. When the size of the excavation restricts the use of heavy equipment, smaller equipment can be used, but the soil must be placed in thin-enough lifts to achieve the required compaction.

5 Recommendations for Continuing Geotechnical Services

The engineering analyses completed for this study were done so with careful consideration of the existing and available Site data while making reasonable assumptions about Site conditions not fully detailed or addressed by the current design and existing data. Our recommendations may change as the Project develops further and new information becomes available.

5.1 Additional Construction Services

We are available to provide geotechnical engineering and monitoring services during construction. The integrity of the geotechnical elements depends on proper Site preparation and construction procedures. In addition, engineering decisions may have to be made in the field if variations in subsurface conditions become apparent.

During the construction phase of the Project, we recommend that Aspect be retained to perform the following tasks:

- Observe and evaluate excavations and any installation of temporary shoring.
- Observe and evaluate subgrade prior to placement of structural fill.
- Observe and evaluate subgrade for all walls, foundations, and pavements.
- Observe structural fill placement.
- Attend meetings by telephone or on-Site, as needed.
- Advise on other geotechnical engineering considerations that may arise during construction.

The purpose of our observations during construction is to verify compliance with design concepts and recommendations, and to allow design changes or evaluation of appropriate construction methods if subsurface conditions differ from those anticipated prior to the start of construction.

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Limitations

Work for this project was performed for Osborn Consulting, Inc (Osborn), and this report was prepared consistent with recognized standards of professionals in the same locality and involving similar conditions, at the time the work was performed. No other warranty, expressed or implied, is made by Aspect Consulting, LLC (Aspect).

Recommendations presented herein are based on our interpretation of site conditions, geotechnical engineering calculations, and judgment in accordance with our mutually agreed-upon scope of work. Our recommendations are unique and specific to the project, site, and Client. Application of this report for any purpose other than the project should be done only after consultation with Aspect.

Variations may exist between the soil and groundwater conditions reported and those actually underlying the site. The nature and extent of such soil variations may change over time and may not be evident before construction begins. If any soil conditions are encountered at the site that are different from those described in this report, Aspect should be notified immediately to review the applicability of our recommendations.

It is the Client's responsibility to see that all parties to this project, including the designer, contractor, subcontractors, and agents, are made aware of this report in its entirety. At the time of this report, design plans and construction methods have not been finalized, and the recommendations presented herein are based on preliminary project information. If project developments result in changes from the preliminary project information, Aspect should be contacted to determine if our recommendations contained in this report should be revised and/or expanded upon.

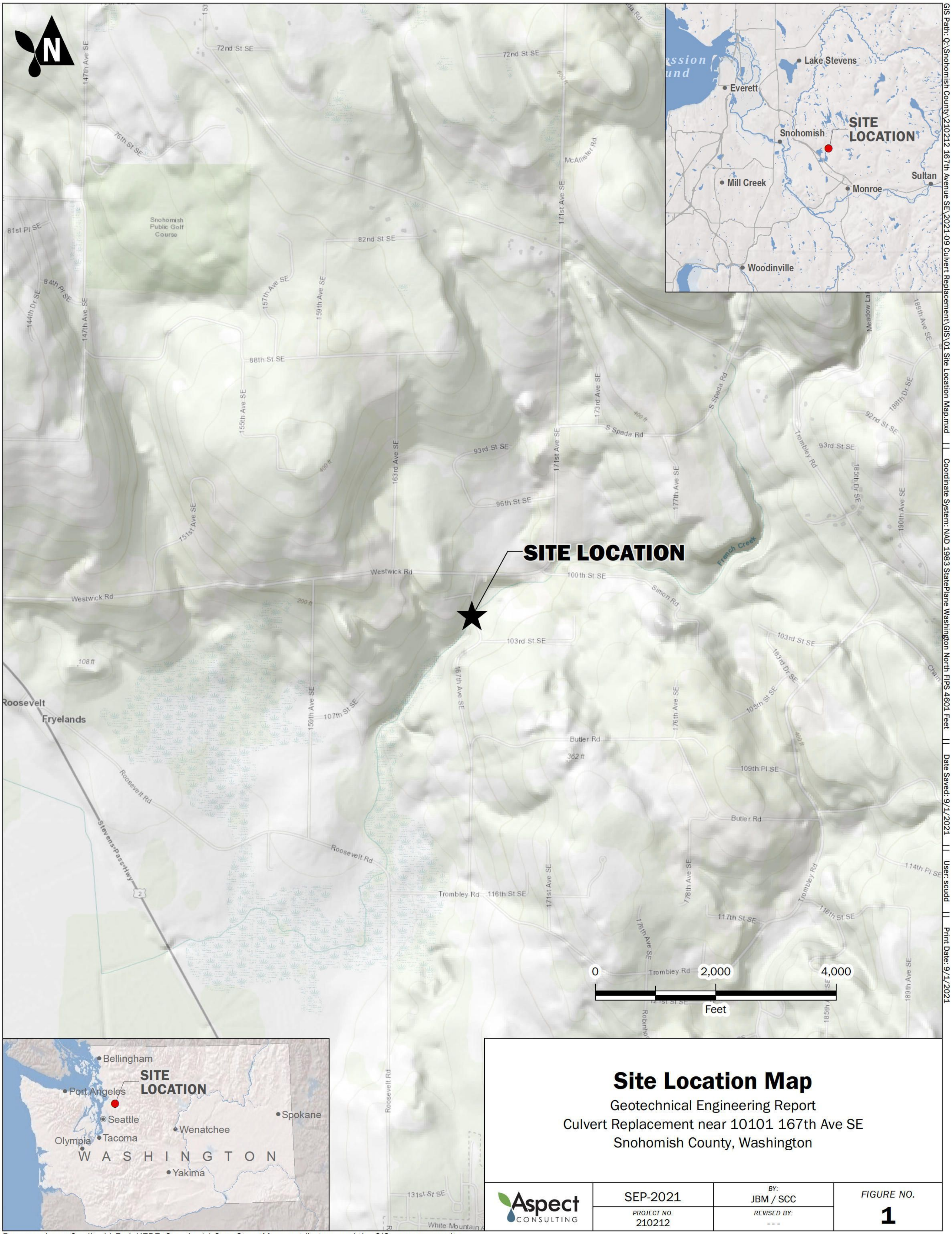
The scope of work does not include services related to construction safety precautions. Site safety is typically the responsibility of the contractor, and our recommendations are not intended to direct the contractor's site safety methods, techniques, sequences, or procedures. The scope of our work also does not include the assessment of environmental characteristics, particularly those involving potentially hazardous substances in soil or groundwater.

All reports prepared by Aspect for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect. Aspect's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

Please refer to Appendix D titled "Report Limitations and Guidelines for Use" for additional information governing the use of this report.

We appreciate the opportunity to perform these services. If you have any questions please call Rory Kilkenny, Senior Geotechnical Engineer, and 206-780-7727.

FIGURES



Site Location Map

Geotechnical Engineering Report
Culvert Replacement near 10101 167th Ave SE
Snohomish County, Washington

Aspect CONSULTING	SEP-2021	BY: JBM / SCC	FIGURE NO.
	PROJECT NO. 210212	REVISED BY: - - -	1

Basemap Layer Credits || Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
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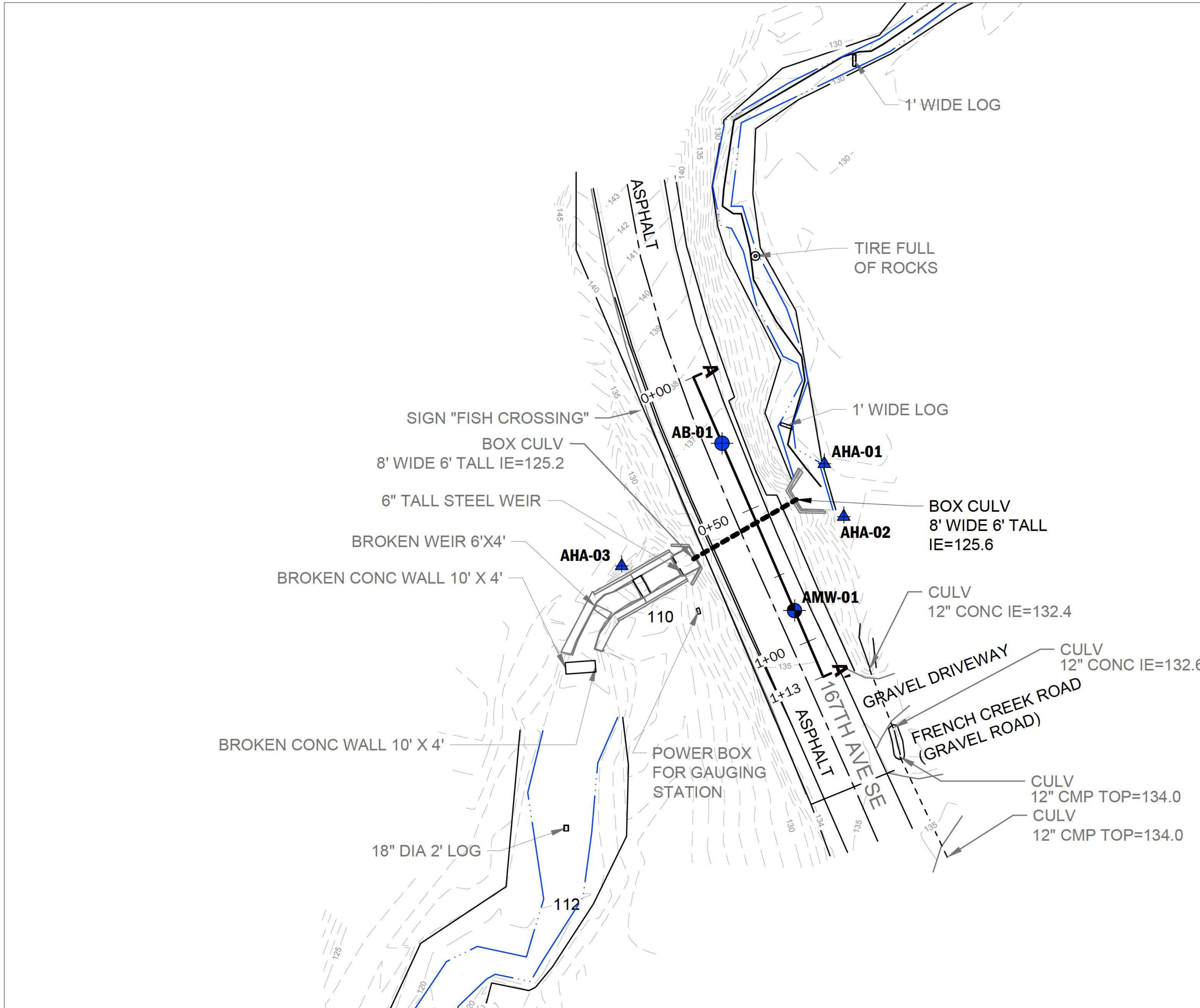


SURVEY NOTES:

1. BASE MAP PROVIDED BY SNOHOMISH COUNTY DEPARTMENT OF PUBLIC WORKS. TOPOGRAPHIC SURVEY PRELIMINARY SUBMITTAL.
2. HORIZONTAL DATUM: PROJECT SYSTEM DERIVED FROM THE WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (4601), NAD83(2011)EPOCH2010.0, US SURVEY FOOT.
3. VERTICAL DATUM: NAVD88
4. BASIS OF BEARINGS: WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (4601), NAD83/11, US SURVEY FOOT (GRID) N 79° 35' 22" W [SET MAG/TAG (1–ALLIANCE #102) TO SET MAG/TAG(1–ALLIANCE #101)]]
5. PROJECT BENCHMARK: (1–ALLIANCE #102) SET MAG/TAG ELEV = 171.40.
6. FIELD WORK FOR THIS SURVEY WAS PERFORMED IN JULY–AUGUST 2021. MONUMENTS AND CONTROL POINTS SHOWN HEREIN WERE VISITED AND/OR SET IN JULY–AUGUST 2021.
7. CONTOURS SHOWN ARE DERIVED FROM DIRECT FIELD OBSERVATIONS.

ATTENTION
IF ASSISTANCE IS NEEDED WITH NAVIGATING OR UTILIZING
THIS BASE MAP IN CIVIL 3D PLEASE CONTACT
1–ALLIANCE AT (425) 598–2200.

Legend

Boring Location	Road Center Line
Monitoring Well Location	Contour Lines
Hand Auger Location	Creek Bank
A A' Cross Section Location	

0 40 80 Feet

Site and Exploration Plan

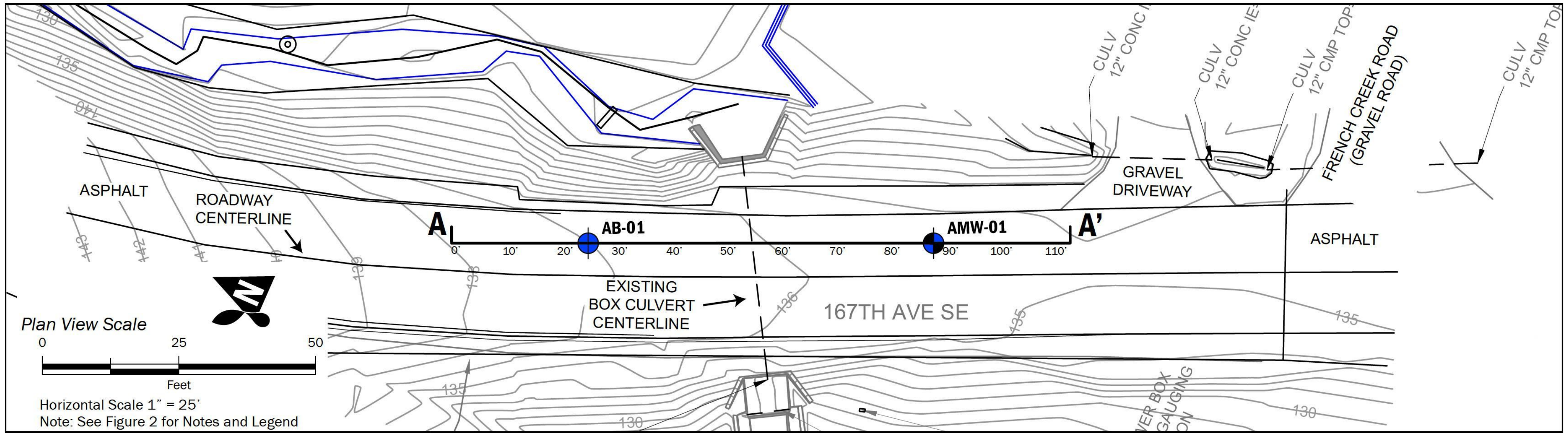
Geotechnical Engineering Report
Culvert Replacement near 10101 167th Ave SE
Snohomish County, Washington

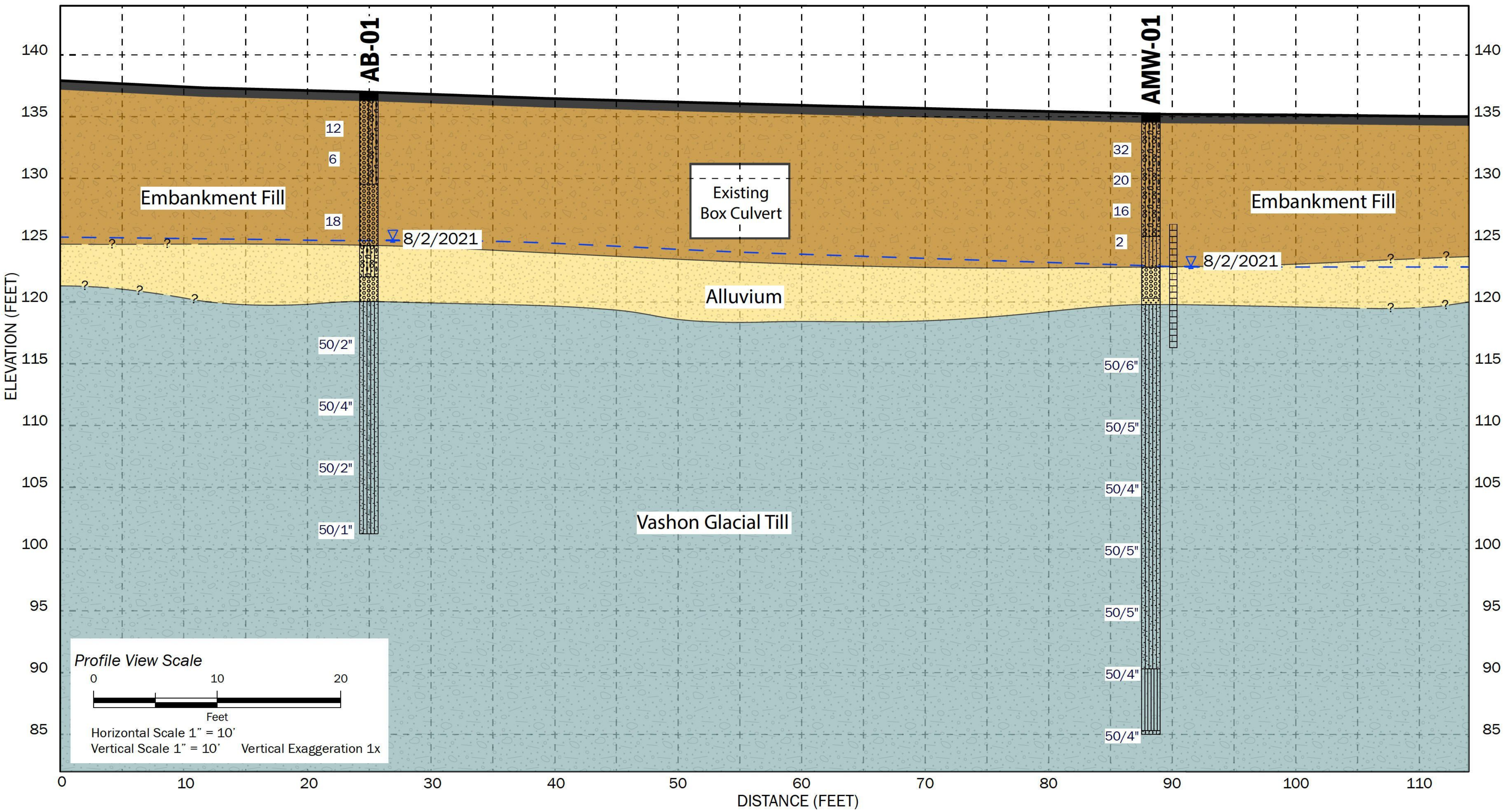
Aspect CONSULTING

Sep-2021	BY: JBM/SCC	FIGURE NO.
PROJECT NO. 210212	REVISED BY: CMV	2

CAD Path: Q:\Snohomish County\210212 167th Avenue SE\2021-09 Culvert Replacement\210212-02.dwg 02 Site and Exploration Plan || Date Saved: Sep 22, 2021 11:12am || User: jgregg

A A'





Legend

Lithology Graphics

- Embankment Fill
- Alluvium (Qal)
- Vashon Glacial Till (Qvt)

Contacts and Borings

- Contact - Known
- Contact - Inferred
- Contact - Queried
- Groundwater

Explorations

- Exploration ID
- Offset and direction
- AB-01 (Offset 5' W)
- SPT Blow Count N Value
- Blow Count
- Water Level in Exploration at time of drilling
- Water Level in Monitoring Well, Date
- Material Type (see Appendix A)
- Boring Location
- Monitoring Well Location

DISCLAIMER: The subsurface conditions presented in this geologic cross section are conceptual. Variations may exist between the soil and groundwater conditions depicted on this figure and those actually underlying the site. Refer to the contents of this report and boring logs for further context.

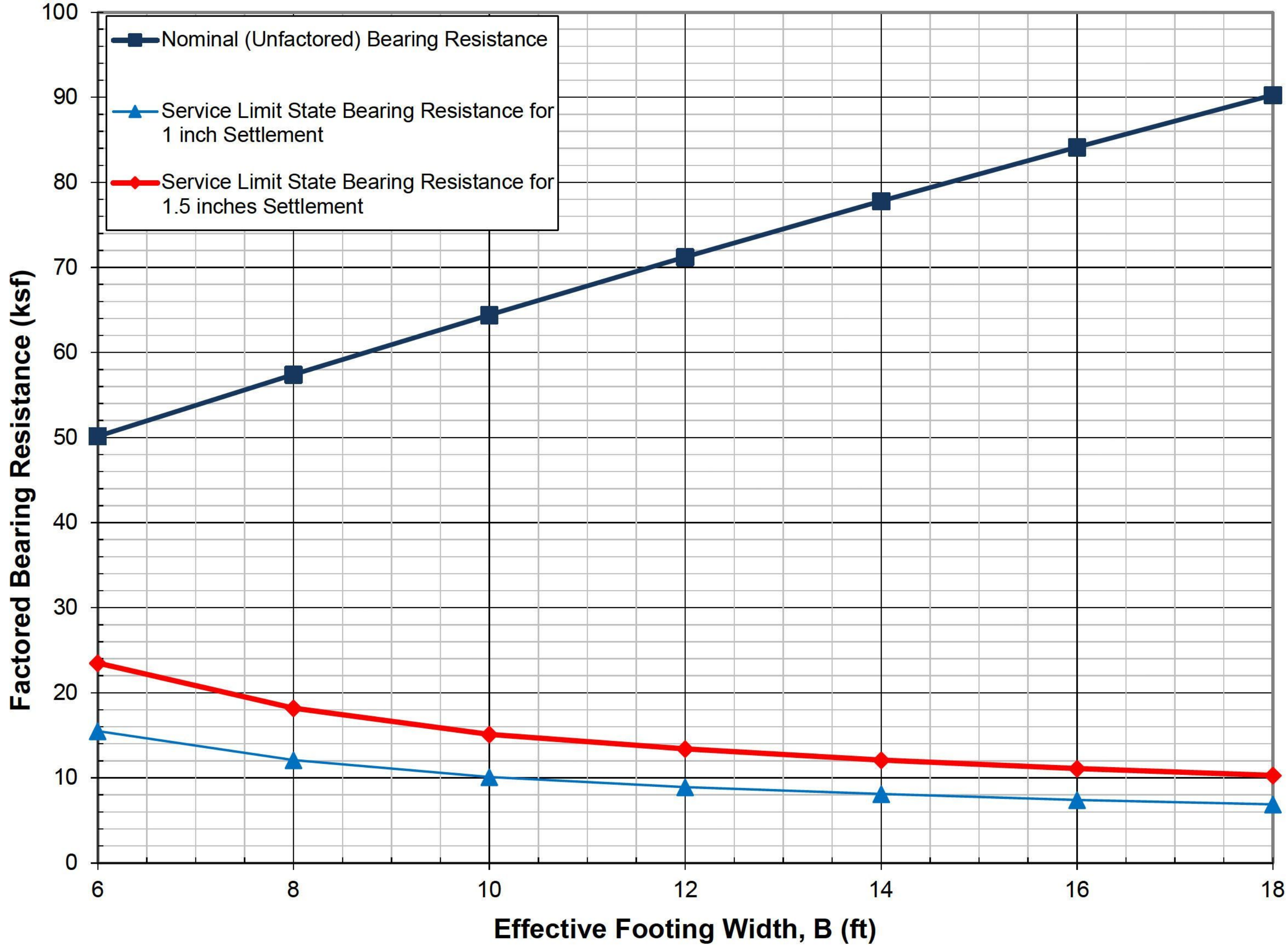
Notes:
- Cross section surface generated from CAD files provided by 1-Alliance Geomatics (Received August 2021).
- Site features are approximate.

Cross Section A-A'

Geotechnical Engineering Report
Culvert Replacement near 10101 167th Ave SE
Snohomish County, Washington

Aspect CONSULTING	SEPT-2021	BY: JBM/SCC	FIGURE NO.
	PROJECT NO. 210212	REVISED BY: RPK/JR	3

CAD Path: Q:\Snohomish County\210212 167th Avenue SE\2021-09 Culvert Replacement\210212-02.dwg 03 Cross Section for Handoff || Date Saved: Sep 02, 2021 5:34pm || User: scudd



Notes:

1. Assumes foundation embedment depth of at least 2 feet below design scour elevation.
2. Apply Resistance Factors to Nominal (Unfactored) Bearing Resistance to calculate Strength and Extreme Limit State Bearing Resistances.
   Bearing Resistance Factor Strength L.S. (Table 10.5.5.2.1-1) = 0.45; Extreme Event L.S. (WSDOT GD 8.10.2M) = 0.9

Foundation Bearing Resistance

Geotechnical Engineering Report
Culvert Replacement near 10101 167th Ave
Snohomish County, Washington

210212

Jan-22

Aspect CONSULTING

Figure 4

APPENDIX A

Subsurface Exploration Logs

A. Subsurface Explorations Methodology

A field exploration program was performed to determine the geotechnical and hydrogeological properties of materials at the Site. An Aspect geologist was present throughout the program to observe the drilling procedure, assist in sampling, and to prepare descriptive logs of the exploration. Soils were classified in general accordance with ASTM D2488, *Standard Practice for Description and Identification of Soils* (Visual-Manual Procedure.) The summary exploration logs represent our interpretation of the contents of the field logs. The stratigraphic contacts shown on the individual summary logs represent the approximate boundaries between soil types; actual transitions may be more gradual. The subsurface conditions depicted are only for the specific date and locations reported and are not necessarily representative of other locations and times.

The exploration logs are provided within this appendix and exploration locations are shown on Figure 2.

A.1 Hand Augers

On August 2 and 3, 2021, Aspect completed three shallow hand auger explorations, designated AHA-01 through AHA-03 at either side of the culvert crossing. Disturbed soil samples were collected from select borings and depths.

A.2 Hollow-Stem Auger Borings

Geotechnical borings AB-01 and AMW-01 were drilled using hollow-stem auger drilling techniques on August 2 and 3, 2021. The drilling was subcontracted to Holocene Drilling, Inc, an experienced and licensed local driller. Drilling was completed with a Diedrich D-120 truck-mounted drill rig advancing an 8-inch (4.25-inch inside diameter) hollow-stem auger. AB-01 and AMW-01 were advanced to depths of 35.8 feet bgs and 50.3 feet bgs, respectively. Disturbed samples were obtained at 2.5-foot intervals for the upper 15 feet and then at 5-foot intervals thereafter in accordance ASTM D1586, *Standard Test Method for Standard Penetration Test (SPT) and Split-Barrel Sampling of Soils*. This involves driving a 2-inch outside-diameter split-barrel sampler a distance of 18 inches into the soil with a 140-pound hammer free-falling from a height of 30 inches. The number of blows for each 6 inch interval is recorded and the number of blows required to drive the final 12 inches is known as the Standard Penetration Resistance ("N-value"). The N-value provides a measure of the relative density of granular soils or the relative consistency of cohesive soils.

Upon completion, AB-01 was backfilled with hydrated 3/8-inch bentonite chips in accordance with requirements of the Washington State Department of Ecology. AMW-01 was equipped with a groundwater monitoring well consisting of 2-inch-diameter threaded Schedule 40, polyvinyl chloride (PVC) solid-wall casing with screened intervals. A sand filter pack was installed around the screened intervals. A concrete surface seal with a metal, flush-mount monument was installed at the ground surface.

Major Division		Fines	Group Symbol	Group Name
Coarse-Grained Soils - More than 50%[1] Retained on No. 200 Sieve	Gravels - More than 50%[1] of Coarse Fraction Retained on No. 4 Sieve	≤5% Fines	GW	Well-graded GRAVEL Well-graded GRAVEL WITH SAND
			GP	Poorly-graded GRAVEL Poorly-graded GRAVEL WITH SAND
		≥15% Fines	GM	SILTY GRAVEL SILTY GRAVEL WITH SAND
			GC	CLAYEY GRAVEL CLAYEY GRAVEL WITH SAND
	Sands - 50%[1] or More of Coarse Fraction Passes No. 4 Sieve	≤5% Fines	SW	Well-graded SAND Well-graded SAND WITH GRAVEL
			SP	Poorly-graded SAND Poorly-graded SAND WITH GRAVEL
		≥15% Fines	SM	SILTY SAND SILTY SAND WITH GRAVEL
			SC	CLAYEY SAND CLAYEY SAND WITH GRAVEL
Fine-Grained Soils - 50%[1] or More Passes No. 200 Sieve	Silts and Clays Liquid Limit Less than 50%		ML	SILT SANDY or GRAVELLY SILT SILT WITH SAND SILT WITH GRAVEL
			CL	LEAN CLAY SANDY or GRAVELLY LEAN CLAY LEAN CLAY WITH SAND LEAN CLAY WITH GRAVEL
			OL	ORGANIC SILT SANDY or GRAVELLY ORGANIC SILT ORGANIC SILT WITH SAND ORGANIC SILT WITH GRAVEL
	Silts and Clays Liquid Limit 50% or More		MH	ELASTIC SILT SANDY or GRAVELLY ELASTIC SILT ELASTIC SILT WITH SAND ELASTIC SILT WITH GRAVEL
			CH	FAT CLAY SANDY or GRAVELLY FAT CLAY FAT CLAY WITH SAND FAT CLAY WITH GRAVEL
			OH	ORGANIC CLAY SANDY or GRAVELLY ORGANIC CLAY ORGANIC CLAY WITH SAND ORGANIC CLAY WITH GRAVEL
Highly Organic Soils			PT	PEAT and other mostly organic soils

"WITH SILT" or "WITH CLAY" means 5 to 15% silt and clay, denoted by a "-" in the group name; e.g., SP-SM • "SILTY" or "CLAYEY" means >15% silt and clay • "WITH SAND" or "WITH GRAVEL" means 15 to 30% sand and gravel. • "SANDY" or "GRAVELLY" means >30% sand and gravel. • "Well-graded" means approximately equal amounts of fine to coarse grain sizes • "Poorly graded" means unequal amounts of grain sizes • Group names separated by "/" means soil contains layers of the two soil types; e.g., SM/ML.

Soils were described and identified in the field in general accordance with the methods described in ASTM D2488. Where indicated in the log, soils were classified using ASTM D2487 or other laboratory tests as appropriate. Refer to the report accompanying these exploration logs for details.

1. Estimated or measured percentage by dry weight
2. (SPT) Standard Penetration Test (ASTM D1586)
3. Determined by SPT, DCPT (ASTM STP399) or other field methods. See report text for details.

GEOTECHNICAL LAB TESTS

MC	=	Natural Moisture Content
PS	=	Particle Size Distribution
FC	=	Fines Content (% < 0.075 mm)
GH	=	Hydrometer Test
AL	=	Atterberg Limits
C	=	Consolidation Test
Str	=	Strength Test
OC	=	Organic Content (% Loss by Ignition)
Comp	=	Proctor Test
K	=	Hydraulic Conductivity Test
SG	=	Specific Gravity Test

CHEMICAL LAB TESTS

Organic Chemicals

BTEX	=	Benzene, Toluene, Ethylbenzene, Xylenes
TPH-Dx	=	Diesel and Oil-Range Petroleum Hydrocarbons
TPH-G	=	Gasoline-Range Petroleum Hydrocarbons
VOCs	=	Volatile Organic Compounds
SVOCs	=	Semi-Volatile Organic Compounds
PAHs	=	Polycyclic Aromatic Hydrocarbon Compounds
PCBs	=	Polychlorinated Biphenyls

Metals

RCRA8	=	As, Ba, Cd, Cr, Pb, Hg, Se, Ag, (d = dissolved, t = total)
MTCA5	=	As, Cd, Cr, Hg, Pb (d = dissolved, t = total)
PP-13	=	Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, Zn (d=dissolved, t=total)

FIELD TESTS

PID	=	Photoionization Detector
Sheen	=	Oil Sheen Test
SPT[2]	=	Standard Penetration Test
NSPT	=	Non-Standard Penetration Test
DCPT	=	Dynamic Cone Penetration Test

COMPONENT DEFINITIONS

Descriptive Term		*Size Range and Sieve Number*
Boulders	=	Larger than 12 inches
Cobbles	=	3 inches to 12 inches
Coarse Gravel	=	3 inches to 3/4 inches
Fine Gravel	=	3/4 inches to No. 4 (4.75 mm)
Coarse Sand	=	No. 4 (4.75 mm) to No. 10 (2.00 mm)
Medium Sand	=	No. 10 (2.00 mm) to No. 40 (0.425 mm)
Fine Sand	=	No. 40 (0.425 mm) to No. 200 (0.075 mm)
Silt and Clay	=	Smaller than No. 200 (0.075 mm)

ESTIMATED[1] PERCENTAGE

% by Weight		*Modifier*	*% by Weight*		*Modifier*
<1	=	Subtrace	15 to 25	=	Little
1 to <5	=	Trace	30 to 45	=	Some
5 to 10	=	Few	>50	=	Mostly

MOISTURE CONTENT

Dry	=	Absence of moisture, dusty, dry to the touch
Slightly Moist	=	Perceptible moisture
Moist	=	Damp but no visible water
Very Moist	=	Water visible but not free draining
Wet	=	Visible free water, usually from below water table

RELATIVE DENSITY

Non-Cohesive or Coarse-Grained Soils

Density[3]		*SPT[2] Blows/Foot*	*Penetration with 1/2" Diameter Rod*
Very Loose	=	0 to 4	≥ 2'
Loose	=	5 to 10	1' to 2'
Medium Dense	=	11 to 30	3" to 1'
Dense	=	31 to 50	1" to 3"
Very Dense	=	> 50	< 1"

CONSISTENCY

Cohesive or Fine-Grained Soils

Consistency[3]		*SPT[2] Blows/Foot*	*Manual Test*
Very Soft	=	0 to 1	Penetrated >1" easily by thumb. Extrudes between thumb & fingers.
Soft	=	2 to 4	Penetrated 1/4" to 1" easily by thumb. Easily molded.
Medium Stiff	=	5 to 8	Penetrated >1/4" with effort by thumb. Molded with strong pressure.
Stiff	=	9 to 15	Indented ~1/4" with effort by thumb.
Very Stiff	=	16 to 30	Indented easily by thumbnail.
Hard	=	> 30	Indented with difficulty by thumbnail.

GEOLOGIC CONTACTS

Observed and Distinct | Observed and Gradual | Inferred

Aspect CONSULTING

Exploration Log Key

167th Ave SE Culvert Replacement - 210212

Geotechnical Exploration Log

Aspect CONSULTING

Project Address & Site Specific Location			Coordinates (Lat,Lon WGS84)	Exploration Number
167th Ave SE, Snohomish, WA, See Figure 2			47.9052, -122.0074	**AB-01**
Contractor	**Equipment**	**Sampling Method**	**Ground Surface Elev. (NAVD88)**	
Holocene	Diedrich D-120 Truck Rig	Autohammer; 140 lb hammer; 30" drop	137'	
Operator	**Exploration Method(s)**	**Work Start/Completion Dates**	**Top of Casing Elev. (NAVD88)**	**Depth to Water (Below GS)**
Roddy	8-in OD X 4.5 ID Hollow-stem Auger	8/2/2021	NA	12.12' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Blows/6"	Tests	Description
0	137	Capped with quick cure concrete.				ASPHALT; 8-inch-thick black hot mix asphalt.
						FILL GRAVEL WITH SILT AND SAND (GP-GM); medium dense, slightly moist, brown to red brown; fine to coarse sand; fine to coarse, subangular to subrounded gravel; trace, subrounded cobbles. Blow count overstated due to oversized material.
	135		S1	5, 6, 6		
5		Backfilled with 3/8-inch bentonite chips.	S2	4, 3, 3		Becomes loose.
	130					GRAVEL WITH SAND AND COBBLES (GP); medium dense, slightly moist, brown to red brown; fine to coarse sand; fine to coarse, subangular to subrounded gravel; subrounded cobbles; blow count overstated due to oversized material.
		Intense drill chatter.	S3		Blows (non-SPT) =5,7,9	
10			S4	5, 9, 9	FC=8.1%	Becomes slightly moist to moist.
	125	∇ 8/2/2021 Measured inside augers with water level indicator.				**ALLUVIUM (Qal)** GRAVEL WITH SILT AND SAND (GW-GM); medium dense, wet, brown to dark brown; fine to coarse sand; fine to coarse, subrounded to rounded gravel; subrounded cobbles; trace organics, sticks and rootlets; blow count overstated due to oversized material.
			S5	17, 50/6"		
15			S6	35, 43, 27	FC=7.2%	Becomes dark gray.
	120	Driller notes hard drilling conditions.				**VASHON TILL (Qvt)** SILTY SAND WITH GRAVEL (SM); very dense, moist, gray to dark gray; fine to medium sand; fine to coarse, subrounded gravel; trace, subrounded cobbles; socketing gravel.
20			S7	41, 50/2"		
	115					
25			S8	50/4"		
	110					

Blows/foot ▲ Water Content (%) ● — 0 10 20 30 40 50

Material Type

Legend

Sample Type: No Soil Sample Recovery; Split Barrel 2" X 1.375" (SPT); Split Barrel 3" X 2.375"

Plastic Limit ├──┤ Liquid Limit

Water Level: ∇ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: JBM
Approved by: RPK (8/17/2021)

Exploration Log AB-01

Sheet 1 of 2

167th Ave SE Culvert Replacement - 210212

Geotechnical Exploration Log

Aspect CONSULTING

Project Address & Site Specific Location	Coordinates (Lat,Lon WGS84)	Exploration Number
167th Ave SE, Snohomish, WA, See Figure 2	47.9052, -122.0074	AB-01

Contractor	Equipment	Sampling Method	Ground Surface Elev. (NAVD88)
Holocene	Diedrich D-120 Truck Rig	Autohammer; 140 lb hammer; 30" drop	137'

Operator	Exploration Method(s)	Work Start/Completion Dates	Top of Casing Elev. (NAVD88)	Depth to Water (Below GS)
Roddy	8-in OD X 4.5 ID Hollow-stem Auger	8/2/2021	NA	12.12' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Blows/6"	Tests	Description
	105	Backfilled with 3/8-inch bentonite chips.	S9	50/2"		**VASHON TILL (Qvt)** SILTY SAND WITH GRAVEL (SM); very dense, moist, gray to dark gray; fine to medium sand; fine to coarse, subrounded gravel; trace, subrounded cobbles; socketing gravel. (continued)
35			S10	41, 50/1"		
	100					Bottom of exploration at 35.8 ft. bgs. Note: Exploration terminated due to skewed boring angle.
40	95					
45	90					
50	85					
55	80					

Blows/foot ▲ Water Content (%) ● 0 10 20 30 40 50

Legend

Sample Type: No Soil Sample Recovery; Split Barrel 2" X 1.375" (SPT); Split Barrel 3" X 2.375"

Plastic Limit ├──┤ Liquid Limit

Water Level: Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: JBM
Approved by: RPK (8/17/2021)

Exploration Log AB-01

167th Ave SE Culvert Replacement - 210212

Geotechnical Exploration Log

Project Address & Site Specific Location	167th Ave SE, Snohomish, WA, See Figure 2
Coordinates (Lat,Lon WGS84)	47.9050, -122.0073
Exploration Number	AMW-01
Contractor	Holocene
Equipment	Diedrich D-120 Truck Rig
Sampling Method	Autohammer; 140 lb hammer; 30" drop
Ground Surface Elev. (NAVD88)	135.5'
Operator	Roddy
Exploration Method(s)	8-in OD X 4.5 ID Hollow-stem Auger
Work Start/Completion Dates	8/2/2021
Top of Casing Elev. (NAVD88)	NA
Depth to Water (Below GS)	12.41' (ATD)

Exploration Notes and Completion Details

- Flush mount monumnet set in concrete.
- 2-inch PVC pipe in 3/8-inch bentonite chips.
- 2-inch PVC pipe in sand.
- ∇ 8/2/2021 Measured inside augers with water level indicator. Intense drill chatter.
- 2-inch PVC slotted screen in sand.
- Backfilled with sand.
- Backfilled with 3/8-inch bentonite chips.

Samples

Sample Type/ID	Depth (feet)	Blows/6"	Tests
S1	~2.5	11, 14, 18	
S2	~5	7, 9, 11	
S3	~7.5	11, 8, 8	
S4	~10	1, 1, 1	FC=53.2%
S5	~12.5	19, 50/4"	
S6/S7	~15	17, 50/1"	
S8	~20	21, 50/6"	FC=39.5%
S9	~25	50/5"	

Description

ASPHALT; 8-inch-thick black hot mix asphalt.

FILL

SILTY GRAVEL WITH SAND AND COBBLES (GM); dense, slightly moist, brown; fine to coarse sand; fine to coarse, subangular gravel; subrounded cobbles. Blow count overstated due to oversized material.

Becomes medium dense and has strong petroleum-like odor. Blow count overstated due to oversized material.

Strong petroleum-like odor. Blow count overstated due to oversized material.

SANDY SILT (ML); very loose, moist, dark gray to black; fine to medium sand; trace up to 1-inch-diameter charcoal debris.

ALLUVIUM (Qal)

GRAVEL WITH SAND (GP); medium dense, wet, red brown; medium to coarse sand; fine to coarse, subrounded to rounded gravel; subrounded cobbles; blow count overstated due to oversized material.

SAND WITH GRAVEL (SW); medium dense, wet, dark brown; medium to coarse sand; fine to coarse, subrounded to rounded gravel.

VASHON TILL (Qvt)

SILTY SAND WITH GRAVEL (SM); very dense, moist, gray to blue gray; fine to medium sand; fine to coarse, subrounded gravel; trace, subrounded cobbles; socketing gravel.

Legend

Sample Type: ○ No Soil Sample Recovery; ◩ Split Barrel 2" X 1.375" (SPT)

Plastic Limit ├─┤ Liquid Limit

Water Level: ∇ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: JBM
Approved by: RPK (8/17/2021)

Exploration Log AMW-01

Sheet 1 of 2

167th Ave SE Culvert Replacement - 210212

Geotechnical Exploration Log

Project Address & Site Specific Location			Coordinates (Lat,Lon WGS84)	Exploration Number
167th Ave SE, Snohomish, WA, See Figure 2			47.9050, -122.0073	AMW-01
Contractor	**Equipment**	**Sampling Method**	**Ground Surface Elev. (NAVD88)**	
Holocene	Diedrich D-120 Truck Rig	Autohammer; 140 lb hammer; 30" drop	135.5'	
Operator	**Exploration Method(s)**	**Work Start/Completion Dates**	**Top of Casing Elev. (NAVD88)**	**Depth to Water (Below GS)**
Roddy	8-in OD X 4.5 ID Hollow-stem Auger	8/2/2021	NA	12.41' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Blows/foot ▲ Water Content (%) ●	Blows/6"	Tests	Description
	105		S10	▲ 50/4"	50/4"		**VASHON TILL (Qvt)** SILTY SAND WITH GRAVEL (SM); very dense, moist, gray to blue gray; fine to medium sand; fine to coarse, subrounded gravel; trace, subrounded cobbles; socketing gravel. (continued)
35	100	Backfilled with 3/8-inch bentonite chips.	S11	▲ 50/5"	50/5"		
40	95		S12	▲ 50/5"	21 50/5"		
45	90		S13	● ▲ 50/4"	50/4"	FC=79.3%	SANDY SILT (ML); very dense, moist, gray; fine to medium sand; 0.2-inch-thick laminations of silty sand and sandy silt.
50	85		S14	▲ 50/4"	50/4"		SILTY SAND (SM); very dense, moist, dark gray; fine to mdieum sand.
							Bottom of exploration at 50.3 ft. bgs.
55	80						

Legend

Sample Type: No Soil Sample Recovery; Split Barrel 2" X 1.375" (SPT)

Plastic Limit ├──┤ Liquid Limit

Water Level: ∇ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: JBM
Approved by: RPK (8/17/2021)

Exploration Log AMW-01

Aspect CONSULTING	167th Ave SE Culvert Replacement - 210212		Geotechnical Exploration Log	
	Project Address & Site Specific Location		*Coordinates (Lat,Lon WGS84)*	*Exploration Number*
	167th Ave SE, Snohomish, WA, See Figure 2		47.9052, -122.0072	**AHA-01**
Contractor	*Equipment*	*Sampling Method*	*Ground Surface Elev. (NAVD88)*	
Aspect	3-inch OD hand auger and shovel	Grab	126'	
Operator	*Exploration Method(s)*	*Work Start/Completion Dates*	*Top of Casing Elev. (NAVD88)*	*Depth to Water (Below GS)*
	Hand tools	8/2/2021	NA	No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Blows/foot ▲ Water Content (%) ● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
		Exploration backfilled with excavated soil.	Grab S1	●		DCPT =30/1" FC=0.9%		**ALLUVIUM (Qal)** GRAVEL WITH SAND AND COBBLES (GW); medium dense, moist, brown to red brown; medium to coarse sand; fine to coarse, subrounded to rounded gravel; subrounded to rounded cobbles.	
1	125							Bottom of exploration at 1 ft. bgs. Note: Exploration terminated due to practical refusal in gravel and cobbles.	1
2	124								2

Legend

Sample Type: Grab sample

Plastic Limit ⊢—⊣ Liquid Limit

Water Level: No Water Encountered

See Exploration Log Key for explanation of symbols

Logged by: JBM
Approved by: RPK (8/17/2021)

Exploration Log AHA-01

Sheet 1 of 1

167th Ave SE Culvert Replacement - 210212

Geotechnical Exploration Log

Aspect Consulting	*Project Address & Site Specific Location*: 167th Ave SE, Snohomish, WA, See Figure 2			*Coordinates (Lat,Lon WGS84)*: 47.9051, -122.0072	*Exploration Number*: **AHA-02**
Contractor: Aspect	*Equipment*: 3-inch OD hand auger and shovel	*Sampling Method*: Grab		*Ground Surface Elev. (NAVD88)*: 126'	
Operator:	*Exploration Method(s)*: Hand tools	*Work Start/Completion Dates*: 8/3/2021		*Top of Casing Elev. (NAVD88)*: NA	*Depth to Water (Below GS)*: 1' (ATD)

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Blows/foot ▲ Water Content (%)● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
		Exploration backfilled with excavated soil.	Grab S1			DCPT =1,1,3		**ALLUVIUM (Qal)** SAND WITH SILT (SP-SM); very loose, wet, dark gray to dark brown; fine to medium sand; few modern organics, sticks, grass, and rootlets.	
1	125	∇ 8/3/2021	Grab S2	●		DCPT =1,11,11 FC=11%		SAND WITH SILT (SP-SM); loose, wet, gray; fine to medium sand; trace modern organics, sticks and rootlets.	1
						DCPT =30/1"		GRAVEL WITH SAND AND COBBLES (GW); medium dense, moist, brown to red brown; medium to coarse sand; fine to coarse, subrounded to rounded gravel; subrounded to rounded cobbles.	
								Bottom of exploration at 1.6 ft. bgs. Note: Exploration terminated due to practical refusal in gravel and cobbles.	
2	124								2

Legend

Sample Type: Grab sample

Plastic Limit ├─┤ Liquid Limit

Water Level: ∇ Water Level ATD

See Exploration Log Key for explanation of symbols

Logged by: JBM
Approved by: RPK (8/17/2021)

Exploration Log AHA-02

Sheet 1 of 1

167th Ave SE Culvert Replacement - 210212		Geotechnical Exploration Log	
Project Address & Site Specific Location 167th Ave SE, Snohomish, WA, See Figure 2		*Coordinates (Lat,Lon WGS84)* 47.9051, -122.0075	*Exploration Number* **AHA-03**
Contractor Holocene	*Equipment* 3-inch OD hand auger and shovel	*Sampling Method* Grab	*Ground Surface Elev. (NAVD88)* 127'
Operator	*Exploration Method(s)* Hand tools	*Work Start/Completion Dates* 8/3/2021	*Top of Casing Elev. (NAVD88)* NA	*Depth to Water (Below GS)* No Water Encountered

Depth (feet)	Elev. (feet)	Exploration Notes and Completion Details	Sample Type/ID	Blows/foot ▲ Water Content (%) ● 0 10 20 30 40 50	Blows/6"	Tests	Material Type	Description	Depth (ft)
		Exploration backfilled with excavated soil.	S1	●		DCPT =3,7,13 FC=3.7%		**FILL** GRAVEL WITH SAND (GP); medium dense, moist, dark brown; fine to coarse sand; fine to coarse, angular to rounded gravel; angular cobbles; trace modern organics, roots, woody debris, and grass.	
1	126					DCPT =6,10,9			1
								Bottom of exploration at 1.3 ft. bgs. Note: Exploration terminated due to practical refusal in gravel and cobbles.	
2	125								2

Legend

Sample Type: Grab sample

Plastic Limit ├─┤ Liquid Limit

Water Level: No Water Encountered

See Exploration Log Key for explanation of symbols

Logged by: JBM
Approved by: RPK (8/17/2021)

Exploration Log AHA-03

Sheet 1 of 1

NEW STANDARD EXPLORATION LOG TEMPLATE \\BISERVER1.ASPECT.LOCAL\PROJECTS\GINTW\PROJECTS\210212 167TH AVE SE CULVERT.GPJ December 27, 2021

APPENDIX B

Geotechnical Laboratory Testing

B. Geotechnical Laboratory Testing

A geotechnical laboratory testing program was developed to determine index and engineering properties of materials at the Site. Soil samples used in the testing program were collected from the test pits and borings. The test results are summarized in the table below and complete results are included within this Appendix.

Table B-1. Laboratory Testing Results Summary

Boring	Sample ID	Sample Depth (ft bgs)	Moisture Content (%)	Gravel Content (%)	Sand Content (%)	Fines Content (%)	USCS Class
AB-01	S-6	15	11.3	55.0	37.8	7.2	GW-GM
AB-01	S-4	10	6.3	48.6	43.3	8.1	GW-GM
AHA-01	S-1	0.5	1.5	88.5	10.6	0.9	GW
AHA-02	S-2	1	43.0	0.0	89.0	11.0	SP-SM
AHA-03	S-1	0	6.7	75.3	21.0	3.7	GP
AMW-01	S-4	10	42.2	0.4	46.4	53.2	ML
AMW-01	S-8	20	9.6	20.6	39.9	39.5	SM
AMW-01	S-13	45	12.2	20.7		79.3	-

Notes:
% = percent; AB = Aspect soil boring; AHA = Aspect hand auger; AMW = Aspect monitoring well; ft bgs = feet below ground surface; ID = identification; GP = poorly sorted gravel; GM = silty gravel; GW = well graded gravel; ML = silt; SM = silty sand; SP = poorly sorted sand; USCS = Unified Soil Classification System.

The tests that were performed and the procedures followed are outlined below.

B.1 Soil Classification

Soil samples from the explorations were visually classified in the field and then taken to our office where the classifications were verified in a relatively controlled environment. Field and laboratory observations include density/consistency, moisture condition, and grain-size and plasticity estimates. The classifications of selected samples were checked by grain-size analysis and plasticity index testing. Classifications were made in general accordance with the Unified Soil Classification System (USCS) according to ASTM D2488, *Standard Practice for Description and Identification of Soils (Visual-Manual Procedures)*, and ASTM D2487, *Standard Practice for Classification of Soils for Engineering Purposes* (Unified Soil Classification System).

B.2 Moisture-Content Determination

Moisture contents were determined for samples recovered in the explorations in general accordance with ASTM D2216, *Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass*, as soon as possible following their arrival to the laboratory. Moisture contents are summarized in the report text and shown on the exploration logs and shown in this appendix.

B.3 Grain-Size Analysis

Grain-size analysis was performed on selected soil samples in general accordance with:

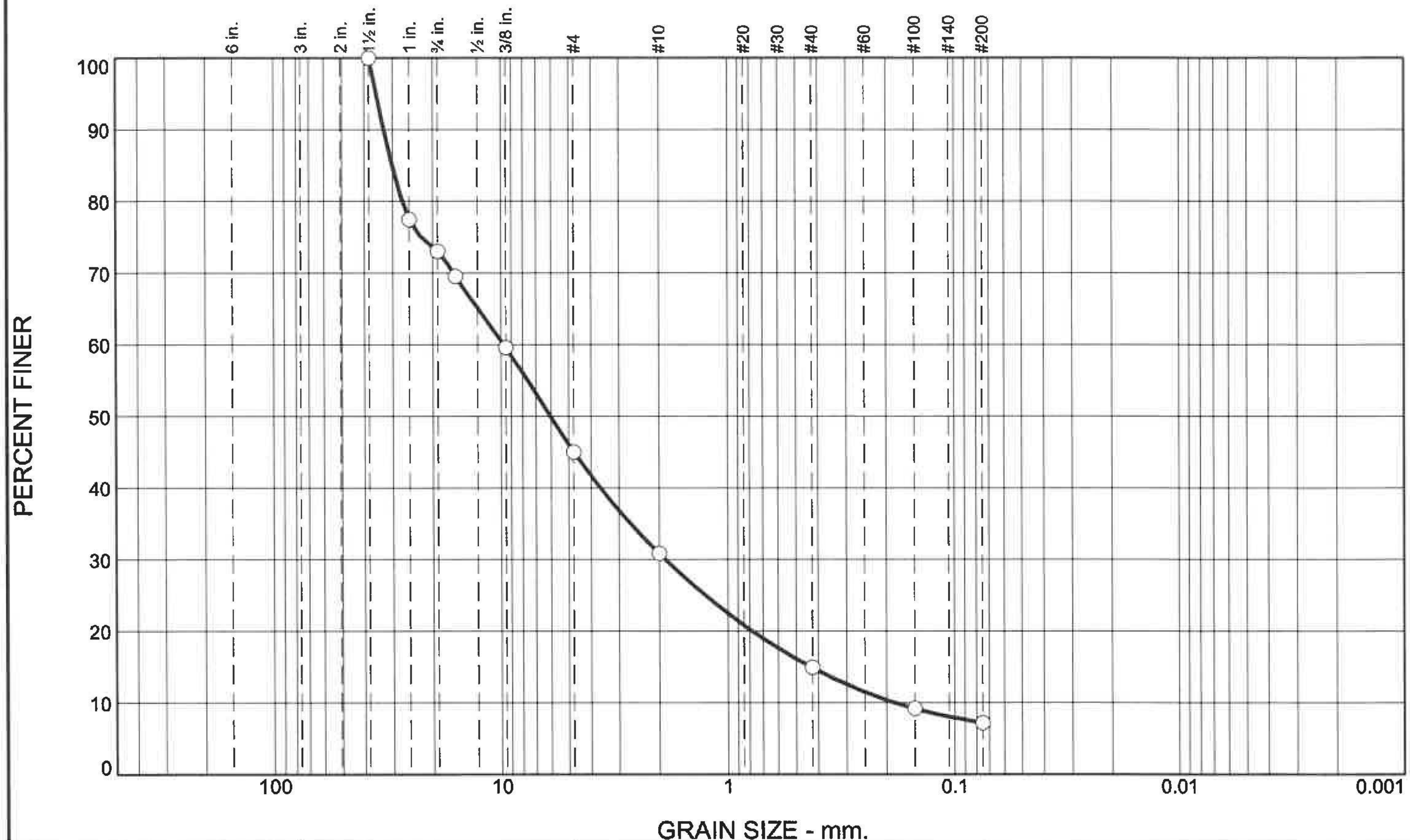
- ASTM D6913, Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
- ASTM C136, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
- ASTM D7928, Standard Test Method for Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis

The results of the tests are presented in this appendix showing percent finer by weight versus grain size.

B.4 Fines Content

Fines-content analyses were performed on selected soil samples in general accordance with ASTM C117, *Standard Test Method for Materials Finer than 75-µm (No. 200) Sieve in Mineral Aggregates by Washing*. The results of the tests are presented in this appendix showing percent passing the No. 200 sieve by weight.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	26.9	28.1	14.1	16.0	7.7	7.2	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1.5"	100.0		
1"	77.5		
3/4"	73.1		
5/8"	69.5		
3/8"	59.6		
#4	45.0		
#10	30.9		
#40	14.9		
#100	9.2		
#200	7.2		

* (no specification provided)

Soil Description

Well graded GRAVEL with silt and sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 32.8033 D_{85}= 30.1695 D_{60}= 9.7242
D_{50}= 6.0431 D_{30}= 1.8761 D_{15}= 0.4297
D_{10}= 0.1837 C_u= 52.92 C_c= 1.97

Classification

USCS= GW-GM AASHTO=

Remarks

Source of Sample: AB-01 / S-6 **Depth:** 15
Sample Number: 8457
Date: 9/15/21

Hayre McElroy & Associates, LLC

Redmond, WA

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project No: 08-175 / 210212 **Figure**

Tested By: AD **Checked By:** JAM

GRAIN SIZE DISTRIBUTION TEST DATA

9/16/2021

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project Number: 08-175 / 210212
Location: AB-01 / S-6
Depth: 15 **Sample Number:** 8457
Material Description: Well graded GRAVEL with silt and sand
Date: 9/15/21
USCS Classification: GW-GM
Tested by: AD **Checked by:** JAM

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 339.40
Tare Wt. = 12.50
Minus #200 from wash = 7.1%

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
364.40	12.50	0.00	1.5"	0.00	100.0
			1"	79.30	77.5
			3/4"	94.80	73.1
			5/8"	107.20	69.5
			3/8"	142.20	59.6
			#4	193.50	45.0
			#10	243.30	30.9
			#40	299.40	14.9
			#100	319.60	9.2
			#200	326.60	7.2

Fractional Components

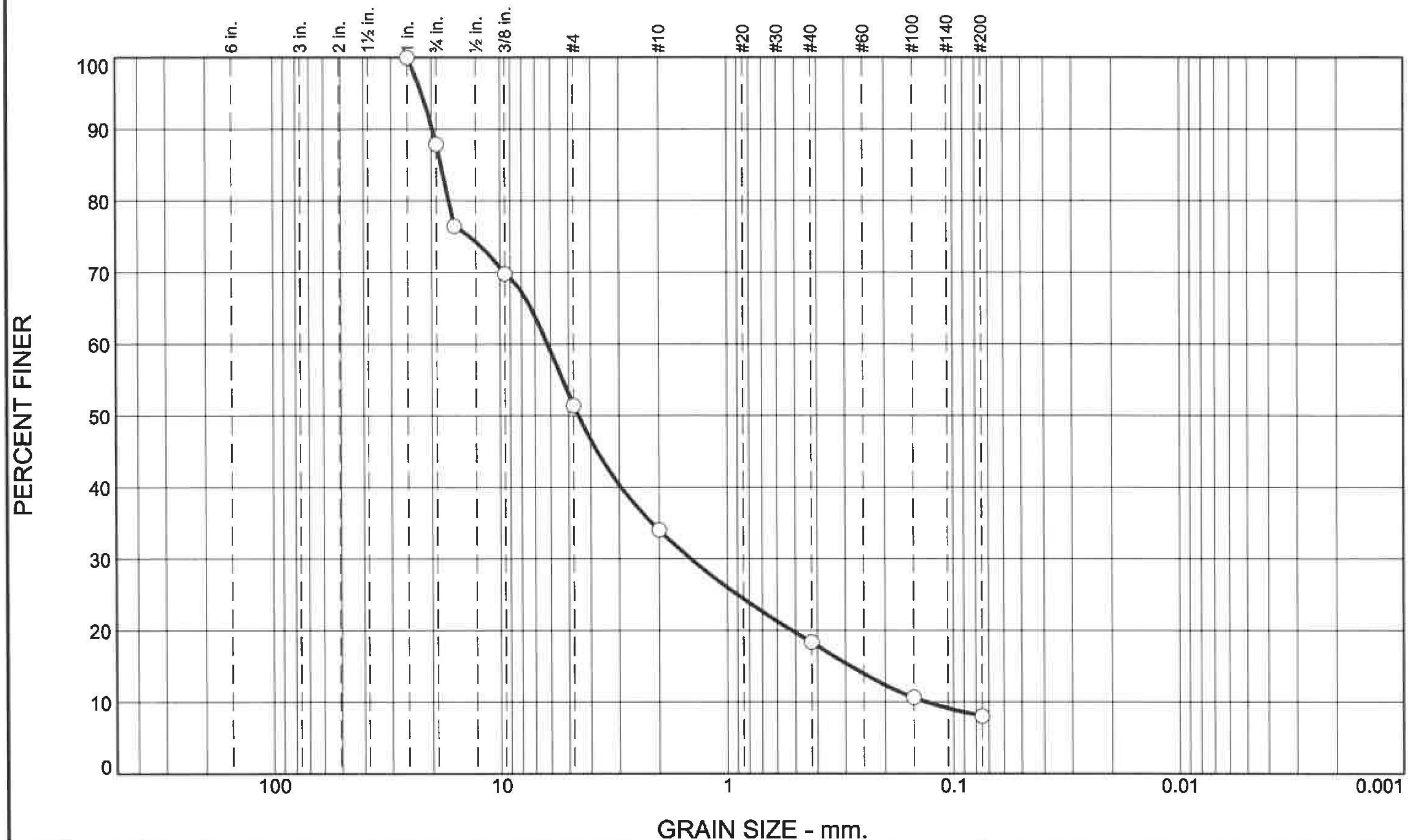
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	26.9	28.1	55.0	14.1	16.0	7.7	37.8			7.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.1837	0.4297	0.7784	1.8761	3.6273	6.0431	9.7242	27.2549	30.1695	32.8033	35.4049

Fineness Modulus	C_u	C_c
5.25	52.92	1.97

Hayre McElroy & Associates, LLC

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	12.1	36.5	17.4	15.7	10.2	8.1	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1"	100.0		
3/4"	87.9		
5/8"	76.5		
3/8"	69.8		
#4	51.4		
#10	34.0		
#40	18.3		
#100	10.6		
#200	8.1		

* (no specification provided)

Soil Description

Well graded GRAVEL with silt and sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 19.7722 D_{85}= 18.1949 D_{60}= 6.1782
D_{50}= 4.5285 D_{30}= 1.4498 D_{15}= 0.2844
D_{10}= 0.1314 C_u= 47.03 C_c= 2.59

Classification

USCS= GW-GM AASHTO=

Remarks

Source of Sample: AB-01 / S-4 **Depth:** 10
Sample Number: 8457
Date: 9/15/21

Hayre McElroy & Associates, LLC

Redmond, WA

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project No: 08-175 / 210212 **Figure**

Tested By: AD **Checked By:** JAM

GRAIN SIZE DISTRIBUTION TEST DATA

9/16/2021

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project Number: 08-175 / 210212
Location: AB-01 / S-4
Depth: 10 **Sample Number:** 8457
Material Description: Well graded GRAVEL with silt and sand
Date: 9/15/21
USCS Classification: GW-GM
Tested by: AD **Checked by:** JAM

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 225.70
Tare Wt. = 12.80
Minus #200 from wash = 8.3%

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
245.00	12.80	0.00	1"	0.00	100.0
			3/4"	28.10	87.9
			5/8"	54.60	76.5
			3/8"	70.10	69.8
			#4	112.80	51.4
			#10	153.20	34.0
			#40	189.60	18.3
			#100	207.50	10.6
			#200	213.50	8.1

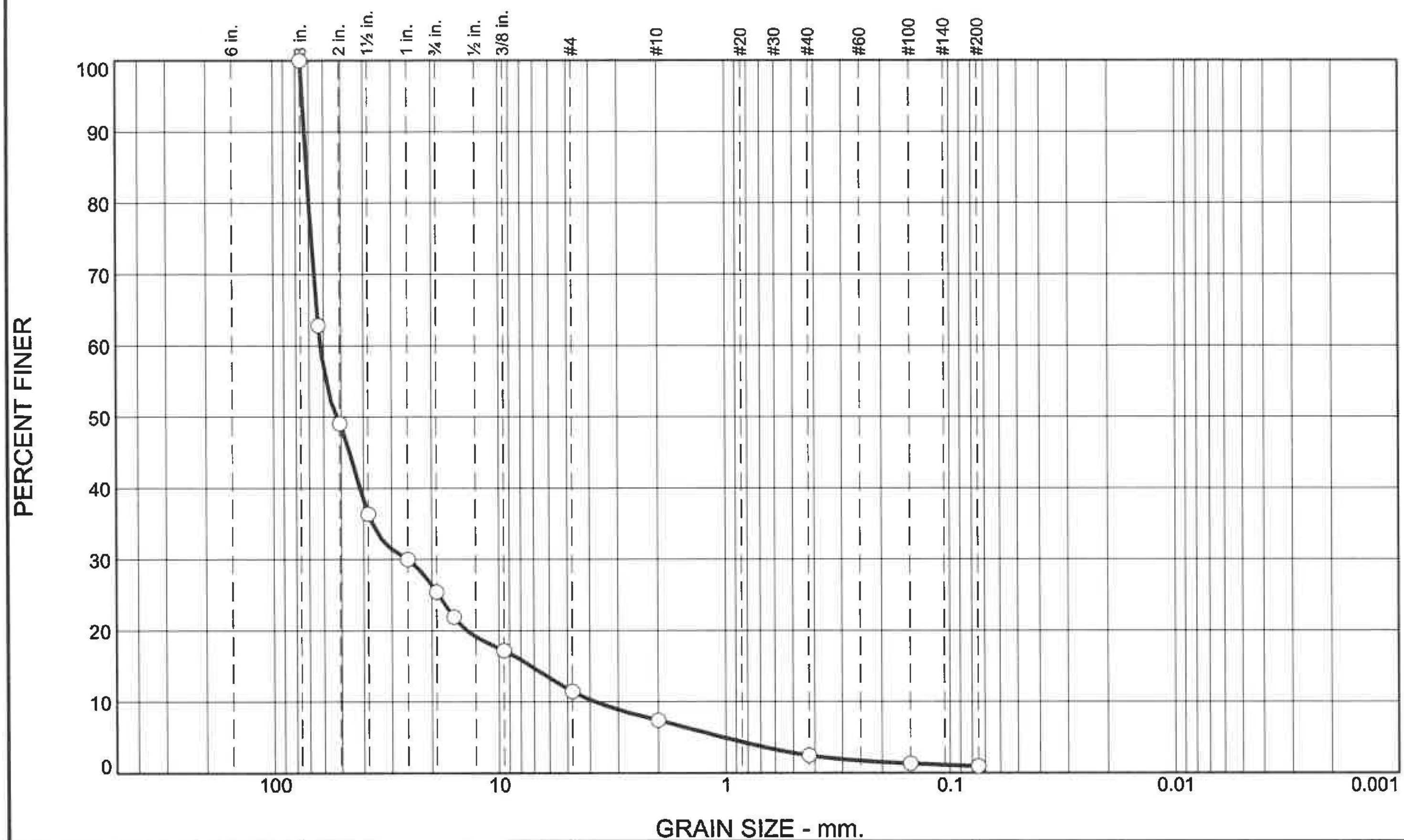
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	12.1	36.5	48.6	17.4	15.7	10.2	43.3			8.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.1314	0.2844	0.5163	1.4498	2.9409	4.5285	6.1782	16.8626	18.1949	19.7722	22.0504

Fineness Modulus	C_u	C_c
4.79	47.03	2.59

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	74.6	13.9	4.1	4.9	1.6	0.9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3"	100.0		
2.5"	62.8		
2"	49.1		
1.5"	36.4		
1"	30.0		
3/4"	25.4		
5/8"	21.9		
3/8"	17.2		
#4	11.5		
#10	7.4		
#40	2.5		
#100	1.3		
#200	0.9		

* (no specification provided)

Soil Description

Well graded GRAVEL

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 73.0314 D_{85}= 71.4508 D_{60}= 62.0655
D_{50}= 52.2548 D_{30}= 25.4103 D_{15}= 7.1927
D_{10}= 3.7600 C_u= 16.51 C_c= 2.77

Classification

USCS= GW AASHTO=

Remarks

Source of Sample: AHA-01 / S-1 **Depth:** 0.5
Sample Number: 8457 **Date:** 9/15/21

Hayre McElroy & Associates, LLC

Redmond, WA

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project No: 08-175 / 210212 **Figure**

Tested By: AD **Checked By:** JAM

GRAIN SIZE DISTRIBUTION TEST DATA

9/16/2021

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project Number: 08-175 / 210212
Location: AHA-01 / S-1
Depth: 0.5
Sample Number: 8457
Material Description: Well graded GRAVEL
Date: 9/15/21
USCS Classification: GW
Tested by: AD
Checked by: JAM

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 4621.20
Tare Wt. = 595.90
Minus #200 from wash = 0.9%

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
4655.80	595.90	0.00	3"	0.00	100.0
			2.5"	1508.30	62.8
			2"	2067.50	49.1
			1.5"	2582.90	36.4
			1"	2842.10	30.0
			3/4"	3026.70	25.4
			5/8"	3170.90	21.9
			3/8"	3360.60	17.2
			#4	3593.70	11.5
			#10	3758.60	7.4
			#40	3959.80	2.5
			#100	4006.50	1.3
			#200	4022.50	0.9

Fractional Components

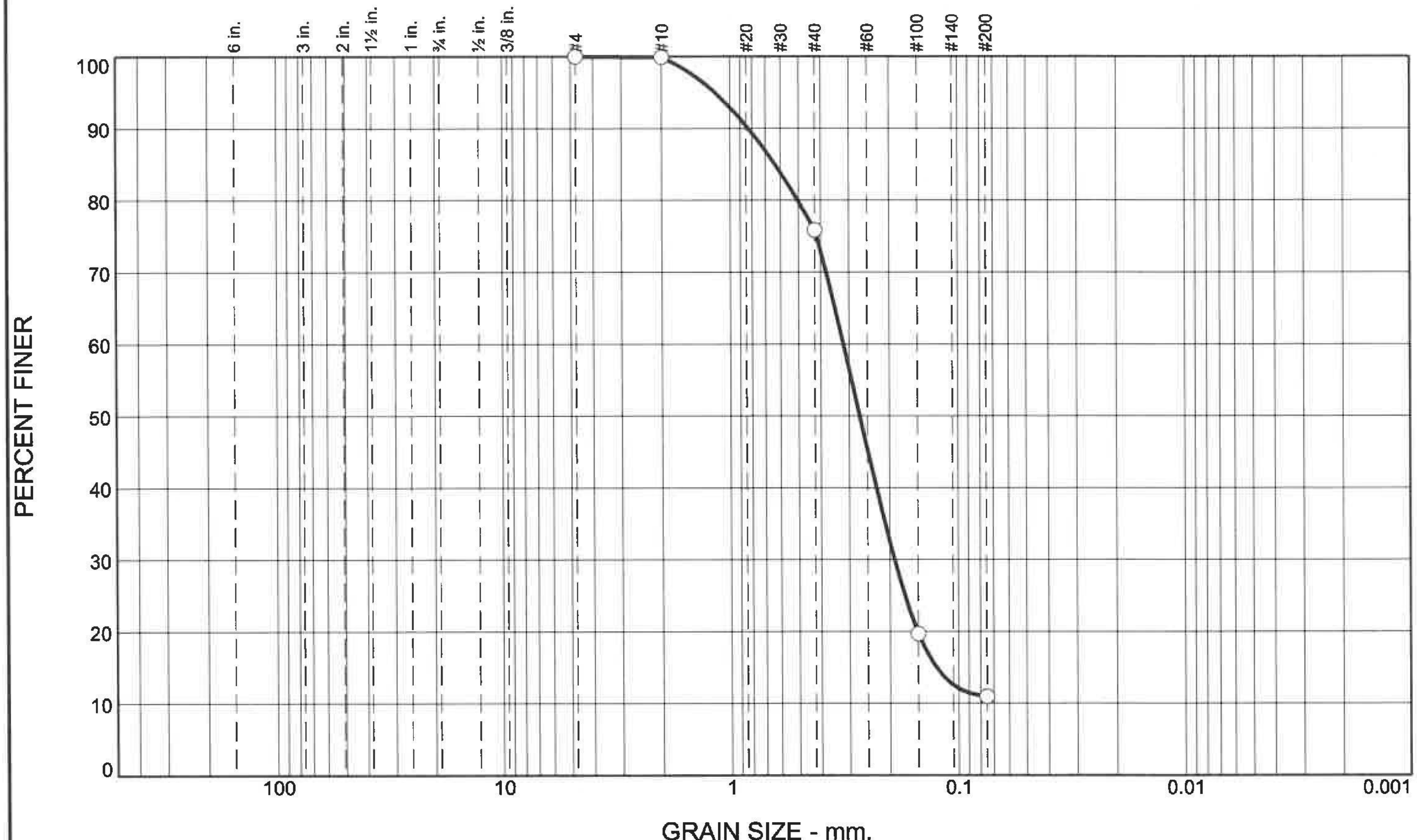
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	74.6	13.9	88.5	4.1	4.9	1.6	10.6			0.9

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
1.0182	3.7600	7.1927	13.8330	25.4103	41.5096	52.2548	62.0655	69.8438	71.4508	73.0314	74.6080

Fineness Modulus	C_u	C_c
7.89	16.51	2.77

Hayre McElroy & Associates, LLC

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.0	0.1	24.0	64.9	11.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.9		
#40	75.9		
#100	19.7		
#200	11.0		

* (no specification provided)

Soil Description

Poorly graded SAND with silt

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.8292 D_{85}= 0.6338 D_{60}= 0.3183
D_{50}= 0.2700 D_{30}= 0.1908 D_{15}= 0.1254
D_{10}= C_u= C_c=

Classification

USCS= SP-SM AASHTO=

Remarks

Source of Sample: AHA-02 / S-2 **Depth:** 1
Sample Number: 8457

Date: 9/15/21

Hayre McElroy & Associates, LLC

Redmond, WA

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project No: 08-175 / 210212 **Figure**

Tested By: AD **Checked By:** JAM

GRAIN SIZE DISTRIBUTION TEST DATA

9/16/2021

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project Number: 08-175 / 210212
Location: AHA-02 / S-2
Depth: 1
Sample Number: 8457
Material Description: Poorly graded SAND with silt
Date: 9/15/21
USCS Classification: SP-SM
Tested by: AD
Checked by: JAM

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 329.20
Tare Wt. = 12.70
Minus #200 from wash = 9.9%

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
363.90	12.70	0.00	#4	0.00	100.0
			#10	0.30	99.9
			#40	84.80	75.9
			#100	282.10	19.7
			#200	312.70	11.0

Fractional Components

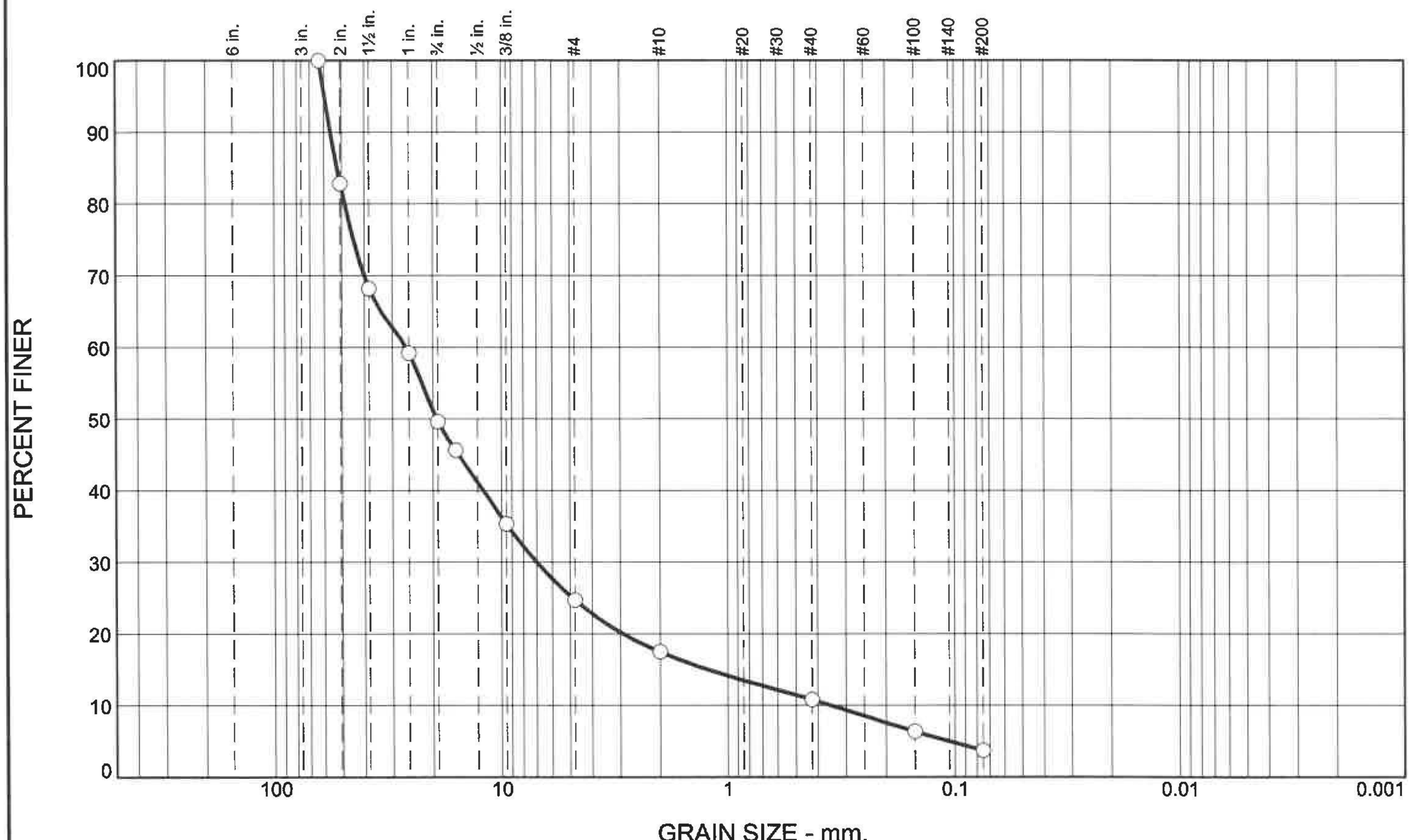
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.0	0.0	0.1	24.0	64.9	89.0			11.0

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
		0.1254	0.1514	0.1908	0.2287	0.2700	0.3183	0.5039	0.6338	0.8292	1.1646

Fineness Modulus
1.45

Hayre McElroy & Associates, LLC

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	50.4	24.9	7.2	6.7	7.1	3.7	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
2.5"	100.0		
2"	82.8		
1.5"	68.2		
1"	59.2		
3/4"	49.6		
5/8"	45.6		
3/8"	35.4		
#4	24.7		
#10	17.5		
#40	10.8		
#100	6.4		
#200	3.7		

* (no specification provided)

Soil Description

Poorly graded GRAVEL with sand

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 56.0218 D_{85}= 52.3868 D_{60}= 26.2250
D_{50}= 19.2922 D_{30}= 6.9994 D_{15}= 1.2180
D_{10}= 0.3477 C_u= 75.42 C_c= 5.37

Classification

USCS= GP AASHTO=

Remarks

Source of Sample: AHA-03 / S-1 **Depth:** 0
Sample Number: 8457

Date: 9/15/21

Hayre McElroy & Associates, LLC

Redmond, WA

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement

Project No: 08-175 / 210212 **Figure**

Tested By: AD **Checked By:** JAM

GRAIN SIZE DISTRIBUTION TEST DATA

9/16/2021

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project Number: 08-175 / 210212
Location: AHA-03 / S-1
Depth: 0
Sample Number: 8457
Material Description: Poorly graded GRAVEL with sand
Date: 9/15/21
USCS Classification: GP
Tested by: AD
Checked by: JAM

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 3966.80
Tare Wt. = 598.60
Minus #200 from wash = 3.2%

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
4077.50	598.60	0.00	2.5"	0.00	100.0
			2"	596.70	82.8
			1.5"	1106.10	68.2
			1"	1420.80	59.2
			3/4"	1752.10	49.6
			5/8"	1891.80	45.6
			3/8"	2249.10	35.4
			#4	2619.90	24.7
			#10	2869.70	17.5
			#40	3101.90	10.8
			#100	3257.50	6.4
			#200	3349.50	3.7

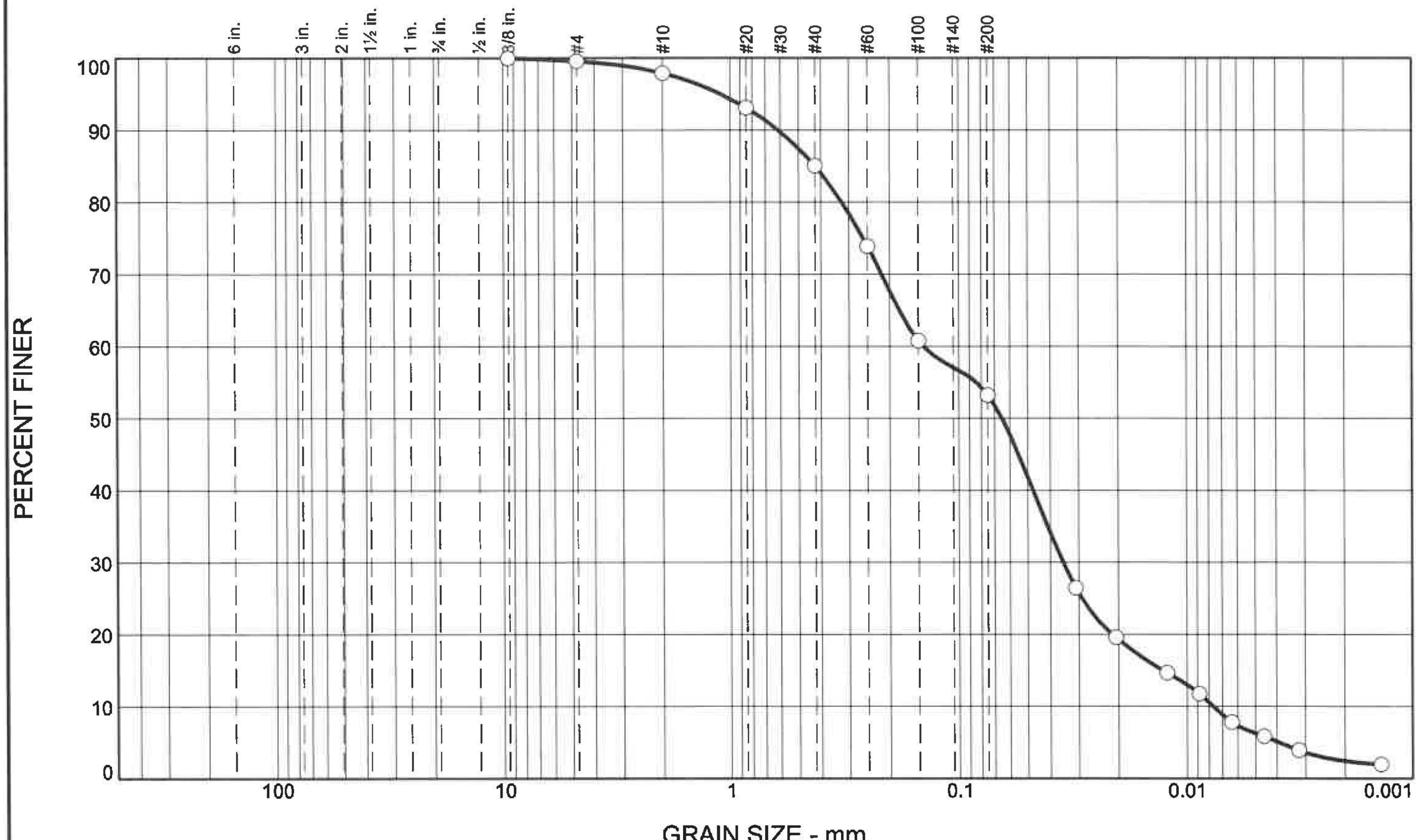
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	50.4	24.9	75.3	7.2	6.7	7.1	21.0			3.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.1059	0.3477	1.2180	2.9055	6.9994	12.0231	19.2922	26.2250	48.6464	52.3868	56.0218	59.6912

Fineness Modulus	C_u	C_c
6.61	75.42	5.37

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.4	1.7	12.8	31.9	46.9	6.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/8"	100.0		
#4	99.6		
#10	97.9		
#20	93.1		
#40	85.1		
#60	73.9		
#100	60.8		
#200	53.2		
0.0309 mm.	26.4		
0.0205 mm.	19.6		
0.0122 mm.	14.7		
0.0088 mm.	11.8		
0.0064 mm.	7.8		
0.0046 mm.	5.9		
0.0032 mm.	3.9		
0.0014 mm.	2.0		

* (no specification provided)

Soil Description

Sandy SILT

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 0.6128 D_{85}= 0.4228 D_{60}= 0.1429
D_{50}= 0.0651 D_{30}= 0.0352 D_{15}= 0.0127
D_{10}= 0.0077 C_u= 18.64 C_c= 1.13

Classification

USCS= ML AASHTO=

Remarks

Source of Sample: AMW-01 / S-4 **Depth:** 10
Sample Number: 8457
Date: 9/15/21

Hayre McElroy & Associates, LLC

Redmond, WA

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project No: 08-175 / 210212 **Figure**

Tested By: AD **Checked By:** JAM

GRAIN SIZE DISTRIBUTION TEST DATA

9/16/2021

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project Number: 08-175 / 210212
Location: AMW-01 / S-4
Depth: 10 **Sample Number:** 8457
Material Description: Sandy SILT
Date: 9/15/21
USCS Classification: ML
Tested by: AD **Checked by:** JAM

Sieve Test Data

Post #200 Wash Test Weights (grams): Dry Sample and Tare = 111.00
Tare Wt. = 12.60
Minus #200 from wash = 52.6%

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
220.40	12.60	0.00	3/8"	0.00	100.0
			#4	0.90	99.6
			#10	4.30	97.9
			#20	14.30	93.1
			#40	31.00	85.1
			#60	54.20	73.9
			#100	81.50	60.8
			#200	97.20	53.2

Hydrometer Test Data

Hydrometer test uses material passing #10
Percent passing #10 based upon complete sample = 97.9
Weight of hydrometer sample =99.20
Hygroscopic moisture correction:
Moist weight and tare = 30.52
Dry weight and tare = 30.39
Tare weight = 13.71
Hygroscopic moisture = 0.8%
Table of composite correction values:

Temp., deg. C:	17.8	18.2	19.4
Comp. corr.:	-4.5	-4.3	-4.0

Meniscus correction only = -1.0
Specific gravity of solids = 2.72
Hydrometer type = 152H
Hydrometer effective depth equation: L = 16.294964 - 0.164 x Rm

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
2.00	22.5	31.0	27.0	0.0130	30.0	11.4	0.0309	26.4
5.00	22.5	24.0	20.0	0.0130	23.0	12.5	0.0205	19.6
15.00	22.5	19.0	15.0	0.0130	18.0	13.3	0.0122	14.7
30.00	22.4	16.0	12.0	0.0130	15.0	13.8	0.0088	11.8
60.00	22.3	12.0	8.0	0.0130	11.0	14.5	0.0064	7.8
120.00	22.3	10.0	6.0	0.0130	9.0	14.8	0.0046	5.9
250.00	22.3	8.0	4.0	0.0130	7.0	15.1	0.0032	3.9
1440.00	20.3	6.0	2.0	0.0133	5.0	15.5	0.0014	2.0

Hayre McElroy & Associates, LLC

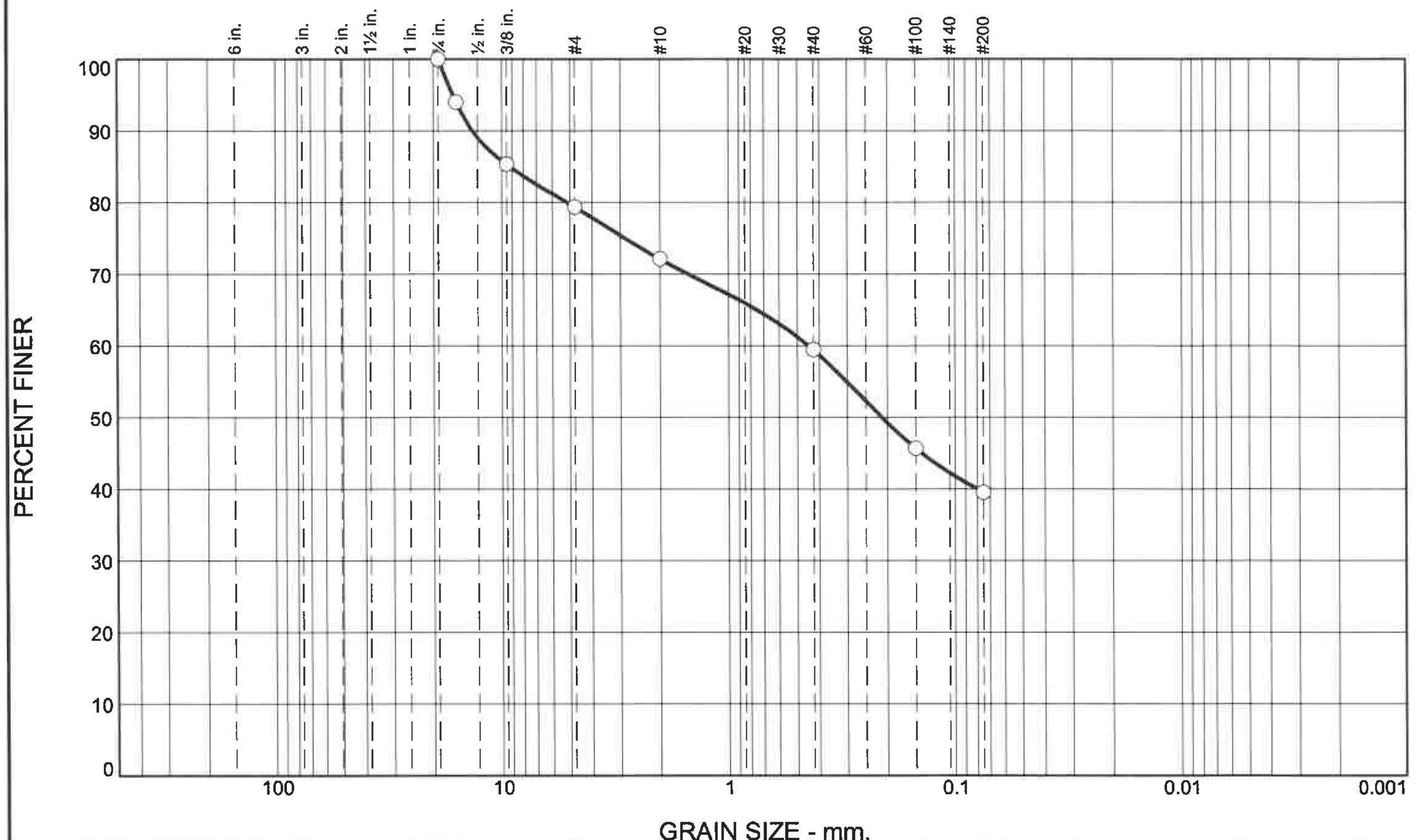
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.4	0.4	1.7	12.8	31.9	46.4	46.9	6.3	53.2

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0039	0.0077	0.0127	0.0212	0.0352	0.0475	0.0651	0.1429	0.3227	0.4228	0.6128	1.0977

Fineness Modulus	C_u	C_c
0.78	18.64	1.13

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	20.6	7.3	12.6	20.0	39.5	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4"	100.0		
5/8"	94.0		
3/8"	85.4		
#4	79.4		
#10	72.1		
#40	59.5		
#100	45.7		
#200	39.5		

* (no specification provided)

Soil Description

Silty SAND with gravel

Atterberg Limits

PL= LL= PI=

Coefficients

D_{90}= 13.4104 D_{85}= 9.1830 D_{60}= 0.4450
D_{50}= 0.2114 D_{30}= D_{15}=
D_{10}= C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Source of Sample: AMW-01 / S-8 **Depth:** 20
Sample Number: 8457 **Date:** 9/15/21

Hayre McElroy & Associates, LLC

Redmond, WA

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project No: 08-175 / 210212 **Figure**

Tested By: AD **Checked By:** JAM

GRAIN SIZE DISTRIBUTION TEST DATA

9/16/2021

Client: Aspect Consulting
Project: 167th Ave Culvert Replacement
Project Number: 08-175 / 210212
Location: AMW-01 / S-8
Depth: 20
Sample Number: 8457
Material Description: Silty SAND with gravel
Date: 9/15/21
USCS Classification: SM
Tested by: AD
Checked by: JAM

Sieve Test Data

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 259.60
Tare Wt. = 16.20
Minus #200 from wash = 38.3%

Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
410.40	16.20	0.00	3/4"	0.00	100.0
			5/8"	23.60	94.0
			3/8"	57.70	85.4
			#4	81.30	79.4
			#10	109.90	72.1
			#40	159.80	59.5
			#100	214.20	45.7
			#200	238.40	39.5

Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	20.6	20.6	7.3	12.6	20.0	39.9			39.5

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
					0.0798	0.2114	0.4450	5.1259	9.1830	13.4104	16.4087

Fineness Modulus
2.30

hayremcelroy & associates, llc

9644 153rd Ave NE
Redmond, WA 98052
425-869-6750

Minus No. 200 Wash

ASTM C117

Project Number: 08-175 / 210212
Project Name: 167th Ave Culvert Replacement
Lab Number: 8457

Technician: AD
Received: 9/1/2021
Start Date: 9/7/2021
Finish Date: 9/15/2021

HMA LAB NO	Boring No	Sample Number	Depth (ft)	Tare Weight (g)	Tare+Dry Weight Before Wash (g)	Tare+Dry Weight After Wash (g)	% Retained	% PASSING
8457	AMW-01	S-13	45	13.6	303.9	73.7	20.7	79.3

hayremcelroy & associates, llc

9644 153rd Ave NE
Redmond, WA 98052
425.869.6750

Moisture Content

ASTM D-2216

Project Number: 08-175 / 210212
Received Date: 9/3/2021
Project Name: 167th Ave Culvert Replacement
Start Date: 9/8/2021
Lab Number: 8457
Finish Date: 9/15/2021
Technician: AD

HMA Lab #	Boring	Sample	Depth (ft)	Weight of Moist Soil + Tare (g)	Weight of Dry Soil + Tare (g)	Tare Weight (g)	**Moisture Content (%)**
8457	AB-01	S-6	15	404.2	364.4	12.5	**11.3**
8457	AB-01	S-4	10	259.7	245.0	12.8	**6.3**
8457	AHA-01	S-1	0.5	4716.6	4655.8	595.9	**1.5**
8457	AHA-02	S-2	1	515.0	363.9	12.7	**43.0**
8457	AHA-03	S-1	0	4309.0	4077.5	598.6	**6.7**
8457	AMW-01	S-4	10	308.1	220.4	12.6	**42.2**
8457	AMW-01	S-8	20	448.4	410.4	16.2	**9.6**
8457	AMW-01	S-13	45	339.4	303.9	13.6	**12.2**

APPENDIX C

Hydrogeologic Testing

C. Hydrogeologic Testing

Aspect performed slug testing in AMW-01 to estimate the hydraulic conductivity of the soils within the screen zone of the monitoring well. A slug test induces a change in water level within a well and measures the rate of return to the static water level (SWL). This rate of water level change in the well is used to compute the hydraulic conductivity of the water-bearing zone.

A slug rod (a solid cylinder of known volume) was used to displace water in wells. The slug rod was rapidly submerged in the water, causing the water level to rise rapidly before falling back to the SWL over time, which is known as a falling head slug test. Upon completion of the falling head test, a rising head test was performed by rapidly removing the slug rod from the water, causing the water level to rapidly fall before rising back to the SWL over time.

The water levels in the wells during testing were measured using a vented pressure transducer (10 psi range) and collected electronically on a data logger set to a nearly continuous time interval (1 second or less). Manual water level measurements were also collected using a sounding tape to confirm depth to water measurements from the pressure transducers.

The results of our slug tests are summarized in this appendix.

Table C-1. Aquifer Hydraulic Conductivity Estimates from Slug Tests

Project 210212, Culvert Replacement near 10101 167th Ave SE, Snohomish County, Washington

Monitoring Well	AMW-01 2.55' Slug		AMW-01 3' Slug		
Well Depth in Feet	19.0		19.0		
Screen Length in Feet	3.0		3.0		
Depth to Screen in Feet	12.5		12.5		
Depth to Aquitard in Feet	45		45		
Depth to Water in Feet	10.88		10.88		
Depth to Sandpack in Feet	7.0		7.0		
Slug Displacement (Ho) in Feet	1.13	1.24	1.43	1.30	0.90
Porosity (n)	0.20		0.20		
Radius of Casing (rc) in Feet	0.08		0.08		
Radius of Borehole (rw) in Feet	0.35		0.35		
Saturated Aquifer Thickness (H) in Feet	**34.1**		**34.1**		
Saturated Well Thickness (Lw) in Feet	**4.6**		**4.6**		
Effective Radius (reff) in Feet	**0.175**		**0.175**		
Effective Screen Length (Le) in Feet	**3.0**		**3.0**		
Slug Size	*2.55'x1"*	*2.55'x1"*	*3' x 1"*	*3' x 1"*	*3' x 1"*
Rising/Falling Head Test	*Rising*	*Rising*	*Rising*	*Rising*	*Falling*
Fully Submerged Sandpack	*No*	*No*	*No*	*No*	*No*
Transiently Exposed Sandpack	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Transiently Exposed Screen	*No*	*No*	*No*	*No*	*No*
Partially Submerged Screen	*No*	*No*	*No*	*No*	*No*
Bouwer and Rice Analysis Parameters					
Normalized Head at t1 (y1) in Feet	**0.23**	**0.22**	**0.22**	**0.23**	**0.36**
Time - t1 in Seconds	**24**	**23**	**30**	**25**	**10**
Normalized Head at t2 (y2) in Feet	**0.15**	**0.14**	**0.12**	**0.15**	**0.22**
Time - t2 in Seconds	**40**	**40**	**60**	**45**	**25**
Le/rw	8.5		8.5		
Calculated K in cm/sec	**5.7E-03**	**5.5E-03**	**3.9E-03**	**4.5E-03**	**6.5E-03**
Calculated K in ft/day	**16.1**	**15.7**	**11.1**	**12.8**	**18.6**
Geometric Mean K in ft/day	**15.9**		**11.9**		
Screened Interval Soil Type	SM, GP, & SW		SM, GP, & SW		
Aquifer Geometric Mean K in ft/day	13.8				

Data analysis by method of Bouwer and Rice (1976; 1989) or Springer-Gelhar (1991).
Bold values are entered from field data and other values are calculated.
All depths are below ground surface
[a] The Bouwer and Rice A, B, and C coefficients are calculated using regression equations of Van Rooy (1988).
[b] R_e/r_w is the effective radial distance over which y is dissipated, divided by the radial distance of well development.

Aspect Consulting
09/22/2021
\\seafps\Projects\Snohomish County\Culvert Replacement - 10101 167th Ave SE\Data\Field Data\2021.08.03 - Slug Tests\167th Culvert Replacement_Overdamped Slug Test Worksheet_MML_JRG_revised

APPENDIX D

Report Limitations and Guidelines for Use

REPORT LIMITATIONS AND GUIDELINES FOR USE

Geoscience is Not Exact

The geoscience practices (geotechnical engineering, geology, and environmental science) are far less exact than other engineering and natural science disciplines. It is important to recognize this limitation in evaluating the content of the report. If you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or property, you should contact Aspect Consulting, LLC (Aspect).

This Report and Project-Specific Factors

Aspect's services are designed to meet the specific needs of our clients. Aspect has performed the services in general accordance with our agreement (the Agreement) with the Client (defined under the Limitations section of this project's work product). This report has been prepared for the exclusive use of the Client. This report should not be applied for any purpose or project except the purpose described in the Agreement.

Aspect considered many unique, project-specific factors when establishing the Scope of Work for this project and report. You should not rely on this report if it was:

- Not prepared for you;
- Not prepared for the specific purpose identified in the Agreement;
- Not prepared for the specific subject property assessed; or
- Completed before important changes occurred concerning the subject property, project, or governmental regulatory actions.

If changes are made to the project or subject property after the date of this report, Aspect should be retained to assess the impact of the changes with respect to the conclusions contained in the report.

Reliance Conditions for Third Parties

This report was prepared for the exclusive use of the Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against liability claims by third parties with whom there would otherwise be no contractual limitations. Within the limitations of scope, schedule, and budget, our services have been executed in accordance with our Agreement with the Client and recognized geoscience practices in the same locality and involving similar conditions at the time this report was prepared

Property Conditions Change Over Time

This report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by events such as a change in property use or occupancy, or by natural events, such as floods, earthquakes, slope instability, or groundwater fluctuations. If any of the described events may have occurred following the issuance of the report, you should contact Aspect so that we may evaluate whether changed conditions affect the continued reliability or applicability of our conclusions and recommendations.

Geotechnical, Geologic, and Environmental Reports Are Not Interchangeable

The equipment, techniques, and personnel used to perform a geotechnical or geologic study differ significantly from those used to perform an environmental study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually address any environmental findings, conclusions, or recommendations (e.g., about the likelihood of encountering underground storage tanks or regulated contaminants). Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding the subject property.

We appreciate the opportunity to perform these services. If you have any questions please contact the Aspect Project Manager for this project.

APPENDIX B

PERMITS

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, SEATTLE DISTRICT
4735 EAST MARGINAL WAY SOUTH, BLDG 1202
SEATTLE, WA 98134-2388

Regulatory Branch May 29, 2025

Mr. Daniel Howe
Snohomish County Department of Conservation and Natural Resources
3000 Rockefeller Avenue, M/S 303
Everett, Washington 98201

Reference: NWS-2025-349-WRD
French Creek Culvert
Replacement

Dear Mr. Howe:

We have reviewed your application to replace the existing culvert under 167th Avenue Southeast with a 10-foot-tall, 54-foot-wide, 64-foot-long pre-cast concrete structure, excavate and regrade the channel, and place large woody material to increase fish passage though French Creek at Snohomish, Snohomish County, Washington. Based on the information you provided to us, Nationwide Permit (NWP) 14 (Federal Register December 27, 2021 Vol. 86, No. 245) authorizes your proposal as depicted on the enclosed drawings dated May 27, 2025.

In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed *NWP 14, Terms and Conditions* and the following special conditions:

a. To protect the listed threatened and endangered species in the project area, you may conduct the authorized activities in the work window as agreed to and documented in writing through consultation by the National Marine Fisheries Service in any year this permit is valid. If changes to the originally authorized work window are proposed, you must re-coordinate these changes with the Services and receive written concurrence on the changes. Copies of the concurrences must be sent to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch, within 10 days of the date of the revised concurrence.

b. In order to meet the requirements of the Endangered Species Act (ESA) Programmatic Restoration Opinion for Joint Ecosystem Conservation by the Services (PROJECTS) (National Marine Fisheries Service (NMFS) Reference Number NWR-2013-10221, U.S. Fish and Wildlife Service (USFWS) Reference

Number 01EOFW00-2014-F-0222), you must implement and abide by the ESA requirements and agreements set forth in the Biological Opinions (BOs) dated December 3, 2013 and May 15, 2015, respectively, and the PROJECTS' Action Notification and Completion Forms dated March 20, 2024. Failure to comply with these requirements constitutes non-compliance with the ESA and your Corps permit. The NMFS/USFWS is the appropriate authority to determine compliance with the terms and conditions of their BO and with the ESA. If you cannot comply with the terms and conditions of this programmatic consultation, you must, prior to commencing construction, contact the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch for an individual consultation in accordance with the requirements of the ESA and the Magnuson-Stevens Fishery Conservation and Management Act.

c. You shall implement and abide by the restoration plan located in the project drawings, dated February 20, 2025. To ensure the project results in a net increase in aquatic resource functions and services, an as-built report and drawings shall be submitted within six months of project completion. This report should state if any adaptive management is required to ensure a net increase in aquatic resource functions. If this work would require additional impacts to waters of the U.S., you must wait for approval by the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch, before commencing that work. The as-built report must prominently display the reference number NWS-2025-349-WRD.

We have reviewed your project pursuant to the requirements of the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act and the National Historic Preservation Act. We have determined this project complies with the requirements of these laws provided you comply with all permit general and special conditions.

The National Oceanic and Atmospheric Administration–Restoration Center completed National Historic Preservation Act, Section 7 Endangered Species Act (ESA) consultation and Magnuson Stevens Act, Essential Fish Habitat (EFH) consultation for the proposed activity. For the purpose of this Department of the Army authorization, we have determined this project will comply with the requirements of these laws provided you comply with all of the permit conditions. We have determined the permit action is sufficiently addressed in their ESA and EFH consultation documents. By this letter we are advising you and the Services, in accordance with 50 CFR 402.07 and 50 CFR 600.920(b), that this agency has served as the lead Federal agency for the ESA and EFH consultation responsibilities for the activity described above.

The authorized work complies with the Washington State Department of Ecology's (Ecology) Water Quality Certification (WQC) requirements and Coastal Zone Management (CZM) consistency determination decision for this NWP. No further coordination with Ecology for WQC and CZM is required.

You have not requested a jurisdictional determination for this proposed project. If you believe the U.S. Army Corps of Engineers does not have jurisdiction over all or portions of your project you may request a preliminary or approved jurisdictional determination (JD). If one is requested, please be aware that we may require the submittal of additional information to complete the JD and work authorized in this letter may not occur until the JD has been completed.

Our verification of this NWP authorization is valid until March 14, 2026, unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work for the NWP authorization has not been completed by that date and you have commenced or are under contract to commence this activity before March 14, 2026, you will have until March 14, 2027, to complete the activity under the enclosed terms and conditions of this NWP. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. You must also obtain all local, State, and other Federal permits that apply to this project.

Upon completing the authorized work, you must fill out and return the enclosed *Certificate of Compliance with Department of the Army Permit*. All compliance reports should be submitted to the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch electronically at nws.compliance@usace.army.mil. Thank you for your cooperation during the permitting process.

We are interested in your experience with our Regulatory Program and encourage you to complete a customer service survey. Referenced documents and information about our program are available on our website at www.nws.usace.army.mil, select “Regulatory Permit Information”. A copy of this letter with enclosures will be furnished to Maggie Poyant. If you have any questions, please contact the project manager, Ryan Cochoit, at ryan.j.cochoit@usace.army.mil or (206) 601-2691.

Sincerely,

Jacalen Printz, Section Chief
Regulatory Branch

Enclosures

cc:
Ecology (ecyrefedpermits@ecy.wa.gov)
USFWS (wfwoctap@fws.gov)
NMFS (consultationupdates.wcr@noaa.gov)

HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish and Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Modification Date: 6/2/2025

Project End Date: 6/1/2030

Permit Type: HPA - Standard (Fish Habitat Enhancement Project (FHEP))
Permit Number: 2025-4-308+02
Application ID: 0044217

PERMITTEE	AUTHORIZED AGENT
Daniel Howe 3000 Rockefeller Avenue, M/S 303 Everett, WA 98201	ICF ATTENTION: Maggie Poyant 8540 N Mohawk Ave Portland, OR 97203

Project Name: French Creek Fish Passage Restoration Project (Culvert Replacement Near 10101 167th Ave SE)

Project Description: The proposed project would replace the existing 6-foot-tall, 8 foot wide, 40-foot-long concrete culvert with a 54-foot wide, 10-foot tall, 64-foot-long pre-cast concrete structure. This replacement culvert is designed to meet the WDFW fish passage requirements, as outlined in the 2013 WDFW Water Crossing Design
Guidelines (WCDG). The proposed project would regrade the existing creek approximately 275 feet upstream and 80 feet downstream to tie into the channel. The channel and structure bottom would be regraded to a 1.7 percent slope, transitioning to a slopes between 4.3 and 10 percent upstream of the structure. The realigned
upstream reach would tie into French Creek and be positioned more centrally within the naturally cut drainage on site. The surrounding banks would be graded to support drainage to the new stream alignment.

PROVISIONS

AUTHORIZED WORK TIMES:

1. For this FHEP Project, work below the ordinary high water line must only occur between July 16 and September 15 of a given year.

PROJECT APPROVALS:

2. Work must be accomplished per the plans and specifications submitted with the application and approved by the Washington Department of Fish and Wildlife, entitled ProjectPlanDrawings_20250321-PmtDrawings_French Creek, dated May 28, 2025, except as modified by this Hydraulic Project Approval. You must have a copy of these plans available on site during all phases of the project construction.

NOTIFICATION REQUIREMENTS:

3. FISH KILL/WATER QUALITY PROBLEM NOTIFICATION: If a fish kill occurs or fish are observed in distress at the job site, immediately stop all activities causing harm. Immediately notify the Washington Department of Fish and Wildlife of the problem. If the likely cause of the fish kill or fish distress is related to water quality, also notify the Washington Military Department Emergency Management Division at 1-800-258-5990. Activities related to the fish kill or fish distress must not resume until the Washington Department of Fish and Wildlife gives approval. The Washington Department of Fish and Wildlife may require additional measures to mitigate impacts.
4. You or your agent must contact the Washington Department of Fish and Wildlife by e-mail at HPAapplications@dfw.wa.gov; mail to Post Office Box 43234, Olympia, Washington 98504-3234; or fax to (360) 902-2946 at least three business days before starting work, [IF APPLICABLE ADD one day before removing the temporary bypass,] and again within seven days after completing the work. The notification must include the permittee's name, project location, starting date for work or date the work was completed, and the permit number. The Washington Department of Fish and Wildlife may conduct inspections during and after construction; however, the Washington Department of Fish and Wildlife will notify you or your agent before conducting the inspection.

REPORTING REQUIREMENTS:

5. PHOTOGRAPHS: You, your agent, or contractor must take photographs of the job site before the work begins and after the work is completed. You must upload the photographs to the post-permit requirement page in the Aquatic Protection Permitting System (APPS) or mail them to Washington Department of Fish and Wildlife at Post Office Box 43234, Olympia, Washington 98504-3234 within 30-days after the work is completed.
6. The structural integrity and performance of the Fish Passage Improvement project must be monitored for five years and the results presented to WDFW in a monitoring report. The monitoring report must follow the guidance in the "Culvert Monitoring Plan_French Creek" document received May 23, 2025.

INVASIVE SPECIES CONTROL:

7. Follow Method 1 for low-risk locations (i.e., clean/drain/rinse/dry). Thoroughly remove visible dirt and debris from all equipment and gear—including vessels, boots, waders, drive mechanisms, wheels, tires, tracks, buckets, and undercarriage—before arriving at and leaving the job site to prevent the transport and introduction of aquatic invasive species. For contaminated or high-risk sites, refer to the Method 2 Decontamination protocol. Clean, rinse, and dry all decontamination equipment used and properly dispose of any water and chemicals used for cleaning. For additional decontamination details, including specific protocols for freshwater, marine, and estuarine environments, refer to the Washington Department of Fish and Wildlife's Invasive Species Management Protocols, available online at https://wdfw.wa.gov/species-habitats/invasive/prevention.

STAGING, JOB SITE ACCESS, AND EQUIPMENT:

8. Check equipment daily for leaks and complete any required repairs in an upland location before using the equipment in or near the water.
9. Clearly mark boundaries to establish the limit of work associated with site access and construction.
10. Equipment used in or near water must use environmentally acceptable lubricants composed of biodegradable base oils. These are vegetable oils, synthetic esters, and polyalkylene glycols.
11. Establish staging areas (used for activities such as equipment storage, vehicle storage, fueling, servicing, and hazardous material storage) in a location and manner that will prevent contaminants such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.
12. When placing, repositioning, or removing large woody material, station equipment on the bank.

SEDIMENT, EROSION, AND POLLUTION CONTAINMENT:

13. Prevent project contaminants, such as petroleum products, hydraulic fluid, fresh concrete, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials, from entering or leaching into waters of the state.
14. Before starting work, install sediment and erosion control measures to prevent sediment from entering waters of the state. Inspect the sediment and erosion control measures regularly during construction and make all needed repairs if any damage occurs.
15. Return water flow slowly to the in-water work area to prevent the downstream release of sediment laden water. If necessary, install silt fencing above the bypass outlet to capture sediment during re-watering of the channel.
16. If flow conditions arise that will result in erosion or siltation of waters of the state, stop all hydraulic project activities except those needed to control erosion and siltation.
17. Store all construction and deconstruction material in a location and manner that will prevent contaminants such as petroleum products, hydraulic fluid, fresh cement, sediments, sediment-laden water, chemicals, or any other toxic or harmful materials from entering waters of the state.

PROJECT LOCATION:

18. Establish the culvert invert elevation with reference point(s) or benchmark(s) created before to starting work on this project. Clearly mark and preserve the reference point(s) for post-project compliance. Before backfilling, confirm the invert elevation, as stated on the plans, relative to the reference points with at least a construction-grade leveling device (such as an optical auto-level or laser level).

FISH LIFE REMOVAL:

19. All persons participating in capture and removal must have training, knowledge, and skills in the safe handling of fish life.
20. Capture and safely move fish life from the work area to the nearest suitable free-flowing water.
21. If electrofishing is conducted, a person with electrofishing training must be on-site to conduct or direct all electrofishing activities.

22. Place block nets upstream and downstream of the in-water work area before capturing and removing fish life.

IN-WATER WORK AREA ISOLATION:

23. After the first block net is secured at the upstream end, use a second block net to herd fish downstream and out of the project area.
24. Check block nets at least three times a day for entangled fish and accumulated debris.
25. Do not install block nets at sites with heavy vegetation, large cobble or boulders, undercut banks, or deep pools unless you can secure and maintain them.
26. Install a downstream block net if fish may reenter the work area from downstream.
27. Install block nets at an angle to the direction of flow (not perpendicular to the flow) to avoid entrapping fish in the nets.
28. Install block nets at sites with reduced flow volume or velocity, uniform depth, and good accessibility.
29. Isolate fish from the work area by using block nets.
30. Secure block nets along both banks and the channel bottom to prevent failure from debris accumulation, high flows, and/or flanking.
31. To anchor block nets, place bags filled with clean round gravel along the bottom of the nets.
32. To keep fish out of the job site, leave block nets in place until the work is complete and conditions are suitable for fish.
33. Install the cofferdam, dike, or similar structure and remove fish prior to the start of other work in the wetted perimeter.
34. Maintain water quality when installing and removing the cofferdam, dike or similar structure.
35. Use a cofferdam, dike, or similar structure to exclude water from the work area.
36. Sequence the work to minimize the duration of dewatering.
37. Design the temporary bypass to minimize the length of the dewatered stream channel.
38. During all phases of bypass installation and decommissioning, maintain flows downstream of the project site to ensure survival of all downstream fish.
39. Install a cofferdam or similar device at the upstream and downstream end of the bypass to prevent backwater from entering the work area.
40. Isolate fish from the work area by using either a total or partial bypass to reroute the stream through a temporary channel or pipe.
41. Isolate pump hose intakes with block nets so that fish cannot get near the intake.
42. Provide fish passage during times of the year when fish are expected to migrate.
43. Use the least-impacting feasible method to temporarily bypass water from the work area. Consider the physical characteristics of the site and the anticipated volume of water flowing through the work area.
44. If the bypass is a pumped diversion, once started it must run continuously until it is no longer necessary to bypass flows. This requires back-up pumps on-site and twenty-four-hour monitoring for overnight operation.

45. If the diversion inlet is a gravity diversion that provides fish passage, place the diversion outlet where it facilitates gradual and safe reentry of fish into the stream channel.
46. If the diversion inlet is a pump diversion in a fish-bearing stream, the pump intake structure must have a fish screen installed, operated, and maintained in accordance with RCW 77.57.010 and 77.57.070. Screen the pump intake with one of the following:
    a) Perforated plate: 0.094 inch (maximum opening diameter);
    b) Profile bar: 0.069 inch (maximum width opening); or
    c) Woven wire: 0.087 inch (maximum opening in the narrow direction).

    The minimum open area for all types of fish screens is twenty-seven percent. The screened intake facility must have enough surface area to ensure that the velocity through the screen is less than 0.4 feet per second. Maintain fish screens to prevent injury or entrapment of fish.
47. Return diverted water to the channel immediately downstream of the work area. Dissipate flow energy from the diversion to prevent scour or erosion of the channel and bank.
48. The fish screen must remain in place whenever water is withdrawn from the stream through the pump intake.

HABITAT FEATURES:

49. Limit the removal of native bankline vegetation to the minimum amount needed to construct the project.
50. Retain all natural habitat features on the bed or banks including large woody material and boulders. You may move these natural habitat features during construction but you must place them near the pre-project location before leaving the job site.

PROJECT DESIGN:

51. Embed the top of footings of bottomless culverts sufficiently below potential scour depth to prevent exposure of the footing surface and undermining.
52. Partially bury, and if necessary, anchor rootwads and other large woody material to limit movement during high tides or wave action.

PROJECT IMPLEMENTATION:

53. Install the culvert in the dry or in isolation from the stream flow by using a bypass channel or culvert, or by pumping the stream flow around the work area. The Washington Department of Fish and Wildlife may grant exception if installing the culvert in the flowing stream reduces siltation or turbidity.

MAINTENANCE AND OPERATION:

54. The owner(s) must maintain the culvert to ensure it provides continued, unimpeded fish passage. If the culvert becomes a hindrance to fish passage, the owner must obtain an HPA and provide prompt repair.

DEMOBILIZATION AND CLEANUP:

55. Remove temporary erosion and sediment control methods after job site is stabilized or within three months of project completion, whichever is sooner.
56. Deposit all trash from the project at an appropriate upland disposal location.

57. Do not relocate removed or replaced structures within waters of the state. Remove and dispose of these structures in an upland area above the limits of anticipated floodwater.
58. Prevent the existing structure and associated construction materials from entering the stream when removing them.
59. Remove all the components of a bridge or culvert crossing (approach material, sills, stringers, deck, riprap, guardrails, etc.).
60. Remove all trash and unauthorized fill in the project area, including concrete blocks or pieces, bricks, asphalt, metal, treated wood, glass, floating debris, and paper, that is waterward of the ordinary high water line and deposit upland.

PLANTING:

61. Complete replanting of riparian vegetation during the first dormant season (late fall through late winter) after project completion per the approved plan. Maintain plantings for at least three years to ensure at least eighty percent of the plantings survive. Failure to achieve the eighty percent survival in year three will require you to submit a plan with follow-up measures to achieve requirements or reasons to modify requirements.
62. Replace native riparian zone and aquatic vegetation, and wetland vascular plants (except noxious weeds) damaged or destroyed by construction using a proven methodology.
63. Replant the job site with the plant species composition and planting densities approved by the Washington Department of Fish and Wildlife.

PROJECT LOCATION(S)

#1

Location		
French Creek Culvert Near 10101 167th Ave SE , WA		
Latitude	**Longitude**	**County**
47.905297000000000	-122.007411000000000	Snohomish
WRIA	**Waterbody**	**Tributary to**
7	French Creek	French Creek

HYDRAULIC PROJECT APPROVAL

Washington Department of
Fish and Wildlife
PO Box 43234
Olympia, WA 98504-3234
(360) 902-2200

Modification Date: 6/2/2025

Project End Date: 6/1/2030

Permit Type: HPA - Standard (Fish Habitat Enhancement Project (FHEP))
Permit Number: 2025-4-308+02
Application ID: 0044217

APPLIES TO ALL HYDRAULIC PROJECT APPROVALS

This Hydraulic Project Approval (HPA) pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW. Additional authorization from other public agencies may be necessary for this project. The person(s) to whom this HPA is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state, and/or federal) that may be necessary for this project.

This Hydraulic Project Approval (HPA) shall be available on the job site at all times and all its provisions followed by the person(s) to whom this HPA is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval (HPA) is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this HPA.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil action against you, including, but not limited to, a stop work order or notice to comply, and/or a gross misdemeanor criminal charge, possibly punishable by a fine and/or imprisonment.

All Hydraulic Project Approvals (HPA) issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Washington Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this HPA is issued has the right to appeal those decisions. Procedures for filing appeals are listed below.

MINOR MODIFICATIONS TO THIS HYDRAULIC PROJECT APPROVAL (HPA): You may request approval of minor modifications to the required work timing or the plans and specifications approved in this HPA unless this is a General HPA. If this is a General HPA you must use the Major Modification process described below. Any approved minor modification will require the issuance of a letter documenting the approval. A minor modification to the required work timing means any change to the work start or end dates of the current work season to enable project or work phase completion. Minor modifications will be approved only if spawning or incubating fish are not present within the vicinity of the project. You may request subsequent minor modifications to the required work timing. A minor modification of the plans and specifications means any changes in the materials, characteristics, or construction of your project that do not alter the project's impact to fish life or habitat and do not require a change in the provisions of the HPA to mitigate the impacts of the modification. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a minor modification through APPS. A link to APPS is at https://hpa.wdfw.wa.gov/s. If you did not use APPS you must submit a written request for a minor modification to an existing HPA. Written requests must include the name of the permittee, the name of the authorized agent if applicable, the APP ID or HPA number, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by email to HPAapplications@dfw.wa.gov, or by mail to Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You should allow up to 45 days for the Department to process your request.

MAJOR MODIFICATIONS TO THIS HYDRUALIC PROJECT APPROVAL (HPA): You may request approval of major modifications to any aspect of your HPA. Any approved change other than a minor modification to your HPA will require the issuance of a new HPA. If you originally applied for your HPA through the online Aquatic Protection Permitting System (APPS), you may request a major modification through APPS. A link to APPS is at https://hpa.wdfw.wa.gov/s. If you did not use APPS you must submit a written request for a major modification to an existing HPA. Written requests must include the name of the permittee, the name of the authorized agent if applicable, the APP ID or HPA number, the date issued, the permitting biologist, the requested changes to the HPA, the reason for the requested change, the date of the request, and the requestor's signature. Send your written request by email to HPAapplications@dfw.wa.gov or by mail to Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. You should allow up to 45 days for the Department to process your request.

APPEALS INFORMATION

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), the Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the WDFW employee who issued, denied, or conditioned the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by WDFW management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process.

A. INFORMAL APPEALS: WAC 220-660-460 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule:

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the WDFW Habitat Program, Natural Resources Building, 1111 Washington St SE, Olympia, Washington 98501. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee may conduct an informal hearing or review and recommend a decision to the Habitat Program Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-660-470 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule:

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the HPA Appeals Coordinator, Department of Fish and Wildlife, Habitat Program, PO Box 43234, Olympia, Washington 98504-3234; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Habitat Program, Natural Resources Building, 1111 Washington St SE, Olympia, Washington 98501. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Habitat Program Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.

Ryan Shaw
Regional Habitat Biologist
(425) 606-0652
ryan.shaw@dfw.wa.gov

Ryan Shaw

For Director
DFW

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

August 22, 2025

Tom Teigen
Snohomish County Conservation and Natural Resource
3000 Rockefeller Ave M/S 303
Everett, WA 98201
Sent by email only: tom.teigen@snoco.org

RE: Coverage under the Construction Stormwater General Permit

Permit number:	**WAR314744**
Site Name:	**Culvert Replacement near 10101 167th Ave SE**
Location:	**10101 167th Ave SE**
	Snohomish County: Snohomish
Disturbed Acres:	**1.15**

Dear Tom Teigen:

The Washington State Department of Ecology (Ecology) received your Notice of Intent for coverage under Ecology's Construction Stormwater General Permit (CSWGP). This is your permit coverage letter. Your permit coverage is effective August 22, 2025.

Retain this letter as an official record of permit coverage for your site. You may keep your records in electronic format if you can easily access them from your construction site. You can get the CSWGP, permit forms, and other information at Ecology's CSWGP eCoverage Packet webpage[1]. Contact your Permit Administrator, listed below, if you want a copy of the CSWGP mailed to you. Please read the permit and contact Ecology if you have any questions.

Electronic Discharge Monitoring Reports (WQWebDMR)

This permit requires you to submit monthly discharge monitoring reports (DMRs) for the full duration of permit coverage (from the first full month of coverage to termination). Your first sampling and reporting period will be for the month of **September 2025** and your first DMR must be submitted by **October 15, 2025**.

You must submit your DMRs electronically using Ecology's secure online system, WQWebDMR. To sign up for WQWebDMR go to Ecology's WQWebPortal guidance webpage[2]. If you have

[1] http://www.ecology.wa.gov/eCoverage-packet
[2] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance

questions, contact the portal staff at (360) 407-7097 (Olympia area), or (800) 633-6193/Option 3, or email WQWebPortal@ecy.wa.gov.

Appeal Process

You have a right to appeal coverage under the general permit to the Pollution Control Hearing Board (PCHB). Appeals must be filed within 30 days of the date of receipt of this letter. Any appeal is limited to the general permit's applicability or non-applicability to a specific discharger. The appeal process is governed by chapter 43.21B RCW and chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2). For more information regarding your right to appeal, please reference Ecology's Focus Sheet: *Appeal of General Permit Coverage*[3].

Annual Permit Fees

RCW 90.48.465 requires Ecology to recover the costs of managing the permit program. Permit fees are invoiced annually until the permit is terminated. Termination conditions are described in the permit. For permit fee related questions, please contact the Water Quality Fee Unit at wqfeeunit@ecy.wa.gov or (800) 633-6193/Option 2. You can also visit Water Quality Permit Fees Webpage[4] for more information.

Ecology Field Inspector Assistance

If you have questions regarding stormwater management at your construction site, please contact your Regional Inspector, Luis Buen Abad of Ecology's Northwest Regional Office in Shoreline at luis.buenabad@ecy.wa.gov, or (425) 256-0891.

Questions or Additional Information

Ecology is here to help. Please review our Construction Stormwater General Permit webpage[5] for more information. If you have questions about the Construction Stormwater General Permit, please contact your Permit Administrator, Collin Smith at collin.smith@ecy.wa.gov or (564) 669-9319.

Sincerely,

Jeff Killelea

Jeff Killelea, Manager
Permit and Technical Services Section
Water Quality Program

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[3] https://apps.ecology.wa.gov/publications/summarypages/1710007.html
[4] https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-quality-permits/Fees
[5] www.ecology.wa.gov/constructionstormwaterpermit

APPENDIX C

STORMWATER POLLUTION PREVENTION PLAN

Construction Stormwater General Permit (CSWGP)

Stormwater Pollution Prevention Plan (SWPPP)

For

Culvert Replacement near 10101 167th Ave SE

Prepared for:

Department of Ecology

Northwest Regional Office - Bellevue

Permittee / Owner	Developer	Operator / Contractor
Snohomish County	Snohomish County	TBD

11200 67th Ave NE, Arlington, WA 98223

Certified Erosion and Sediment Control Lead (CESCL)

Name	Organization	Contact Phone Number
TBD	TBD	TBD

SWPPP Prepared By

Name	Organization	Contact Phone Number
Daniel Howe	Snohomish County DCNR – Surface Water Management	425-359-7431

SWPPP Preparation Date

July 7, 2025

Project Construction Dates

Activity / Phase	Start Date	End Date
Project Construction	July 1, 2026	October 1, 2026

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List of Acronyms and Abbreviations

Acronym / Abbreviation	Explanation
303(d)	Section of the Clean Water Act pertaining to Impaired Waterbodies
BFO	Bellingham Field Office of the Department of Ecology
BMP(s)	Best Management Practice(s)
CESCL	Certified Erosion and Sediment Control Lead
CO_2	Carbon Dioxide
CRO	Central Regional Office of the Department of Ecology
CSWGP	Construction Stormwater General Permit
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved Oxygen
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
ERO	Eastern Regional Office of the Department of Ecology
ERTS	Environmental Report Tracking System
ESC	Erosion and Sediment Control
GULD	General Use Level Designation
NPDES	National Pollutant Discharge Elimination System
NTU	Nephelometric Turbidity Units
NWRO	Northwest Regional Office of the Department of Ecology
pH	Power of Hydrogen
RCW	Revised Code of Washington
SPCC	Spill Prevention, Control, and Countermeasure
su	Standard Units
SWMMEW	Stormwater Management Manual for Eastern Washington
SWMMWW	Stormwater Management Manual for Western Washington
SWPPP	Stormwater Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
SWRO	Southwest Regional Office of the Department of Ecology
TMDL	Total Maximum Daily Load
VFO	Vancouver Field Office of the Department of Ecology
WAC	Washington Administrative Code
WSDOT	Washington Department of Transportation
WWHM	Western Washington Hydrology Model

Project Information (1.0)

Project/Site Name: Culvert Replacement near 10101 167th Ave SE
Street/Location: 10101 167th Ave SE, Snohomish, WA 98290
Receiving waterbody: French Creek

Existing Conditions (1.1)

The project site consists of an existing 6’x8’ cast in place concrete box culvert under 167th Ave SE, and failed fishway attached to the downstream end of the culvert that convey French Creek under 167th Ave SE. Upstream of the culvert French Creek runs parallel to 167th Ave SE before making a 90 degree bend to enter the culvert.

Total acreage: 1.15
Disturbed acreage: 1.15
Existing structures: 0

Landscape topography: Upland riparian stream corridor with moderate slopes.

Drainage patterns: Stream flows in a northeast to southwest direction

Existing Vegetation: riparian, and upland vegetation.

Critical Areas: French Creek

List of known impairments for 303(d) listed or Total Maximum Daily Load (TMDL) for the receiving waterbody: French Creek

Per the Washington State Water Quality Assessment List there is a category 5 assessment for temperature, dissolved oxygen, and pH in French Creek. These parameters will not be affected with site construction.

Proposed Construction Activities (1.2)

The project consists of replacing the existing concrete box culvert and failed fishway with a single bottomless concrete structure designed to meet fish passage standards. Upstream of the culvert, French Creek will be re-aligned to the middle of the stream valley, with the existing channel left in place to act as off-channel habitat. Large woody debris will be placed in the existing channel to discourage the main flow from returning to that channel, but still allowing it to become wet and provide habitat value. Construction will include the installation of a temporary stream by-pass system, removal of the existing features, along with removal and replacement of the roadway including guardrail. All disturbed areas will be stabilized through revegetation. There are no contaminated soils known to be on-site. The temporary stream by-pass will be used to isolate the stream from the work area so the stream doesn’t come in contact with removal of the existing concrete or the installation of the new concrete structure. The proposed structure will have streambed aggregate with a formed channel that will keep the creek centered in the structure and isolated from the concrete structure.

Construction Stormwater Best Management Practices (BMPs) (2.0)

The SWPPP is a living document reflecting current conditions and changes throughout the life of the project. These changes may be informal (i.e. hand-written notes and deletions). Update the SWPPP when the CESCL has noted a deficiency in BMPs or deviation from original design.

The 13 Elements (2.1)

Element 1: Preserve Vegetation / Mark Clearing Limits (2.1.1)
Project construction will be done within County Road right of way and acquired easements. Clearing and grubbing limits shall be marked prior starting construction. Vegetation beyond the established clearing limits will be retained and undisturbed.

- BMPs Used: Preserving Natural Vegetation (C101), High Visibility Fencing (C103)
- Installation Schedules: Clearing limits to be marked before any clearing, grubbing or demolition to begin.
- Inspection and Maintenance plan: Inspect flagged and/or fenced areas regularly to make sure it has not been removed or damaged. If damaged or visibility reduce, it shall be repaired or replaced immediately, and visibility restored.
- Responsible Staff: SWPPP Site Inspector

Element 2: Establish Construction Access (2.1.2)
This element is not applicable to the project. Construction will occur from the existing paved roadway surface.

- BMPs Used: N/A
- Installation Schedules: N/A
- Inspection and Maintenance plan: N/A
- Responsible Staff: N/A

Element 3: Control Flow Rates (2.1.3)
The project does not include any development or increase in impervious area that would measurably change runoff flow rates or channel velocities. Stormwater discharges from the site will be controlled using temporary drainage system bypass, and sediment trap devices to be used with the dewatering pumps. The bypass system and any dewatering measures required will remain operating properly for the duration of the project and must be in operating conditions prior to site excavation.

Will you construct stormwater retention and/or detention facilities?
Yes <u>No</u>

Will you use permanent infiltration ponds or other low impact development (example: rain gardens, bio-retention, porous pavement) to control flow during construction?
Yes <u>No</u>

- BMPs Used: Sediment Trap (C240), Temporary Stream Diversion
- Installation Schedules: Temporary Stream Diversion, dewatering system, and sediment trap to be installed prior to the installation of proposed culvert and to remain operating for the duration of the project as outlined above.
- Inspection and Maintenance plan: Sediment shall be removed from the trap when it reaches 1-foot in depth. Any damage to the trap embankments or slopes shall be repaired. Rock shall be added as needed to maintain the intended function.
- Responsible Staff: SWPPP Site Inspector

Element 4: Install Sediment Controls (2.1.4)
Sediment control shall be managed using the installation of silt fence and wattles.

- BMPs Used: Silt Fence (C233), Wattles (C235)
- Installation Schedules: Silt fence shall be installed prior to land disturbing activities. Clearing of vegetation may take place to allow for installation of silt fence. Wattles to be installed as shown on plans.
- Inspection and Maintenance plan: Silt fence shall be inspected daily to ensure that there is not damage or excess sediment accumulation. Damaged silt fence shall be repaired immediately. Sediment deposits shall be removed when the deposit reaches approximately one-third the height of the silt fence. Wattles shall be inspected to ensure they are in contact with soil and thoroughly entrenched, especially after significant rainfall on steep sandy soils.
- Responsible Staff: SWPPP Site Inspector

Element 5: Stabilize Soils (2.1.5)
Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast. No soils shall remain exposed and unworked for more than the durations listed in Table 2. Plastic covering, mulching, or nets and blankets may be used to temporarily protect soils. Permanent stabilization shall be achieved through the placement of topsoil and seed, rock armoring, and paving.

Table 1 - Soil Stabilization Timeline

Season	Dates	Number of Days Soils Can be Left Exposed
During the Dry Season	May 1 – September 30	7 days
During the Wet Season	October 1 – April 30	2 days

Soils must be stabilized at the end of the shift before a holiday or weekend if needed based on the weather forecast.

Anticipated project dates: Start date: July 1, 2026 End date: October 1, 2026

Will you construct during the wet season?

Yes No

- BMPs Used: Temporary and Permanent Seeding (C120), Nets and Blankets (C122), Plastic Covering (C123), Topsoiling/Composting (C125)
- Installation Schedules: Soil stabilizing measures shall be installed as described above.
- Inspection and Maintenance plan: Maintain design thickness of mulch products. Areas that experience erosion shall be re-mulched and/or protected with a net or blanket. Erosion control nets/blankets must maintain good contact with the ground. Any areas of the net/blanket that are damaged or not in close contact with the ground shall be repaired and stapled. Plastic sheeting used for temporary protection shall be repaired or replaced if torn.
- Responsible Staff: SWPPP Site Inspector

Element 6: Protect Slopes (2.1.6)
Off-site stormwater (run-on) will be diverted away from the excavation and disturbed areas. A temporary bypass system will be used to divert flow around the project site. Seeding, mulch and erosion control blankets will be used on the project.

Will steep slopes be present at the site during construction?
Yes No

- BMPs Used: Temporary and Permanent Seeding (C120), Nets and Blankets (C122), Topsoiling/Composting (C125), Wattles (C235), Temporary Stream Diversion
- Installation Schedules: Soil stabilizing measures shall be installed as described above.
- Inspection and Maintenance plan: Maintain design thickness of mulch products. Areas that experience erosion shall be re-mulched and/or protected with a net or blanket. Erosion control nets/blankets must maintain good contact with the ground. Any areas of the net/blanket that are damaged or not in close contact with the ground shall be repaired and stapled. Wattles shall be inspected to ensure they are in contact with soil and thoroughly entrenched, especially after significant rainfall on steep sandy soils.
- Responsible Staff: SWPPP Site Inspector

Element 7: Protect Drain Inlets (2.1.7)
Drain inlets are not present on project sites. Off-site stormwater and sediment shall be controlled from entering drainage systems through flow rate and sediment control outlined under Element 3 and Element 4.

- BMPs Used: N/A
- Installation Schedules: N/A
- Inspection and Maintenance plan: N/A
- Responsible Staff: N/A

Element 8: Stabilize Channels and Outlets (2.1.8)
Contractor may us a channel lining to stabilize as needed.

- BMPs Used: Channel Lining (C202)
- Installation Schedules: Channel lining should be installed after the completion of grading, before returning to service or a rain event.
- Inspection and Maintenance plan: Channel lining should be expected daily, especially after significant rainfall or when water is flowing within the channels. Repairs to be completed as needed.

Element 9: Control Pollutants (2.1.9)
All pollutants, including waste materials and demolition debris, that occur onsite shall be handled and disposed of in a manner that does not cause contamination of stormwater. Good housekeeping and preventative measures will be taken to ensure that the site will be kept clean, well-organized, and free of debris. If required, BMPs to be implemented to control specific sources of pollutants are discussed below.

- List and describe BMPs: Material Delivery, Storage, and Containment (C153), Saw cutting and Surfacing Pollution Prevention (C152), Concrete Handling (C151)
- Installation Schedules: Any chemicals stored in the construction areas will conform to the appropriate source control BMPs listed in Volume IV of the Ecology stormwater manual. In Western WA, all chemicals shall have cover, containment, and protection provided on site, per BMP C153 for Material Delivery, Storage and Containment. Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Manufacturers' recommendations for application procedures and rates shall be followed. Process water and slurry resulting from saw cutting shall be prevented from entering the water of the State. Street sweeping or vacuuming shall be employed, with material being collected and hauled to an appropriate disposal site.
- Inspection and Maintenance plan: As per the Federal regulations of the Clean Water Act (CWA) and according to Final Rule 40 CFR Part 112, as stated in the National Register, a Spill Prevention, Control, and Countermeasure (SPCC) Plan is required for construction activities. A SPCC Plan will be prepared by the Contractor to address an approach to prevent, respond to, and report spills or releases to the environment that could result from construction activities. This Plan must:
  - Be well thought out in accordance with good engineering.
  - Achieve three objectives - prevent spills, contain a spill that occurs, and clean up the spill.
  - Identify the name, location, owner, and type of facility.
  - Include the date of initial operation and oil spill history.
  - Name the designated person responsible.
  - Show evidence of approval and certification by the person in authority; and
  - Contain a facility analysis.
- Responsible Staff: SWPPP Site Inspector

Will maintenance, fueling, and/or repair of heavy equipment and vehicles occur on-site?
Yes <u>No</u>

Onsite vehicles and heavy equipment shall be completed offsite.

Will wheel wash or tire bath system BMPs be used during construction?
Yes <u>No</u>

Will pH-modifying sources be present on-site?
Yes <u>No</u>

Table 2 - pH-Modifying Sources

	None
	Bulk cement
	Cement kiln dust
	Fly ash
	Other cementitious materials
	New concrete washing or curing waters
X	Waste streams generated from concrete grinding and sawing
	Exposed aggregate processes
	Dewatering concrete vaults
	Concrete pumping and mixer washout waters
	Recycled concrete
	Other (i.e. calcium lignosulfate) [please describe]

- BMP's Used: Concrete Handling (C151), Sawcutting and Surfacing Pollution Prevention (C152)
- Installation Schedule: BMP's will be implemented anytime work is being performed on pH modifying sources.
- Inspection and Maintenance plan: Processes will be inspected continuously and adjusted as necessary to meet standards.

Element 10: Control Dewatering (2.1.10)

Clean, non-turbid dewatering water will be discharged to systems tributary to the receiving waters of the State in a manner that does not cause erosion, flooding, or a violation of State water quality standards in the receiving water. Highly turbid dewatering water from soils known or suspected to be contaminated, or from use of construction equipment, will require additional monitoring and treatment as required for the specific pollutants based on the receiving waters into which the discharge is occurring. Such monitoring and compliance with State Water Quality standards and discharge requirements is the responsibility of the contractor. The dewatering water may require filtering through mechanical means prior to reentering the drainage system, removed from the site and hauled to an approved disposal facility, or discharge to the sanitary sewer system with approval of the local sewer district. A bid item for Dewatering has been included in the contract documents.

Table 3 - Dewatering BMPs

	Infiltration
	Transport off-site in a vehicle (vacuum truck for legal disposal)
	Ecology-approved on-site chemical treatment or other suitable treatment technologies
	Sanitary or combined sewer discharge with local sewer district approval (last resort)
X	Use of sedimentation bag with discharge to ditch or swale (small volumes of localized dewatering)

- BMPs Used: Sediment Trap (C240)
- Installation Schedules: To be installed on an as-needed basis
- Inspection and Maintenance plan: Inspect sedimentation bag during operation to ensure no tears or other damage would degrade the performance of the BMP. Replace sediment bag as needed.
- Responsible Staff: SWPPP Site Inspector / Road Maintenance Lead

Element 11: Maintain BMPs (2.1.11)

All temporary and permanent Erosion and Sediment Control (ESC) BMPs shall be maintained and repaired as needed to ensure continued performance of their intended function.

Maintenance and repair shall be conducted in accordance with each particular BMP specification (see *Volume II of the SWMMWW or Chapter 7 of the SWMMEW*).

Visual monitoring of all BMPs installed at the site will be conducted at least once every calendar week and within 24 hours of any stormwater or non-stormwater discharge from the site. If the site becomes inactive and is temporarily stabilized, the inspection frequency may be reduced to once every calendar month.

All temporary ESC BMPs shall be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed.

Trapped sediment shall be stabilized on-site or removed. Disturbed soil resulting from removal of either BMPs or vegetation shall be permanently stabilized.

Additionally, protection must be provided for all BMPs installed for the permanent control of stormwater from sediment and compaction. BMPs that are to remain in place following completion of construction shall be examined and restored to full operating condition. If sediment enters these BMPs during construction, the sediment shall be removed and the facility shall be returned to conditions specified in the construction documents.

Element 12: Manage the Project (2.1.12)

The project will be managed based on the following principles:

- Projects will be phased to the maximum extent practicable and seasonal work limitations will be taken into account.
- Inspection and monitoring:

- Inspection, maintenance, and repair of all BMPs will occur as needed to ensure performance of their intended function.
- Site inspections and monitoring will be conducted in accordance with Special Condition S4 of the CSWGP. Sampling locations are indicated on the Site Map. Sampling station(s) are located in accordance with applicable requirements of the CSWGP.

- Maintain an updated SWPPP.
  - The SWPPP will be updated, maintained, and implemented in accordance with Special Conditions S3, S4, and S9 of the CSWGP.

As site work progresses the SWPPP will be modified routinely to reflect changing site conditions. The SWPPP will be reviewed monthly to ensure the content is current.

Table 4 - Management

X	Design the project to fit the existing topography, soils, and drainage patterns
X	Emphasize erosion control rather than sediment control
X	Minimize the extent and duration of the area exposed
X	Keep runoff velocities low
X	Retain sediment on-site
X	Thoroughly monitor site and maintain all ESC measures
X	Schedule major earthwork during the dry season
	Other (please describe)

The BMP implementation schedule will be driven by the construction schedule. The following provides a sequential list of the estimated construction schedule milestones and the corresponding BMP implementation schedule. The contractor will be responsible for the final schedule and BMP implementation schedule.

1. Install Erosion/Sediment Control BMP's per TESC plan.
2. Clear and grub construction area.
3. Sawcut and remove road pavement. Plate road to provide access, where applicable.
4. Install temporary bypass, or stream diversion, per TESC plan.
5. Install dewatering system as needed.
6. Remove existing structures and obstructions per demolition plans
7. Perform grading and construct infrastructure
8. Move temporary bypass system as needed.
9. Restore road surface, road shoulder, driveway, and other disturbed areas.
10. Remove BMP's/Clean-up.

Element 13: Protect Low Impact Development (LID) BMPs (2.1.13)

There are no on-site stormwater management (Low Impact Development) BMPs on the project sites.

Site Specific BMPs (2.2)

Site specific BMPs are shown in the TESC, Erosion Control, SWPP Plan, or TESC sheets and notes within the contract plans.

Pollution Prevention Team (3.0)

The pollution prevention team consists of personnel responsible for implementation of the SWPPP, including the following:

1. Certified Erosion and Sediment Control Lead (CESCL) – primary contractor contact, responsible for site inspections (BMPs, visual monitoring, sampling, etc.); to be called upon in case of failure of any ESC measures.
2. Resident Engineer – For projects with engineered structures only (sediment ponds/traps, sand filters, etc.): site representative for the owner that is the project's supervising engineer responsible for inspections and issuing instructions and drawings to the contractor's site supervisor or representative
3. Emergency Ecology Contact – individual to be contacted at Ecology in case of emergency.
4. Emergency Owner Contact – individual that is the site owner or representative of the site owner to be contacted in the case of an emergency.
5. Non-Emergency Owner Contact – individual that is the site owner or representative of the site owner than can be contacted if required.
6. Monitoring Personnel – personnel responsible for conducting water quality monitoring; for most sites this person is also the Certified Erosion and Sediment Control Lead.

Table 5 - Team Information

Title	Name(s)	Phone Number
Certified Erosion and Sediment Control Lead (CESCL)	TBD (contractor to provide)	
Resident Engineer	Snohomish County ES - Construction	
Emergency Ecology Contact	DOE, Emergency Management Division	1-800-258-5990
Emergency Permittee/ Owner Contact	TBD	
Non-Emergency Owner Contact	TBD	
Monitoring Personnel	Snohomish County ES - Construction	
Ecology Regional Office	NW Regional Office	360-255-4400

Monitoring and Sampling Requirements (4.0)

Monitoring includes visual inspection, sampling for water quality parameters of concern, and documentation of the inspection and sampling findings in a site logbook. A site logbook will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Stormwater sampling data

The site logbook must be maintained on-site within reasonable access to the site and be made available upon request to Ecology or the local jurisdiction.

The receiving waterbody, French Creek, is impaired for: Dissolved Oxygen (DO), Temperature, and pH. All stormwater and dewatering discharges from the site are subject to an **effluent limit** of 8.5 su for pH and/or 25 NTU for turbidity.

Site Inspection (4.1)

Site inspections will be conducted at least once every calendar week and within 24 hours following any discharge from the site. For sites that are temporarily stabilized and inactive, the required frequency is reduced to once per calendar month.

All BMPs will be inspected, maintained, and repaired as needed to assure continued performance of their intended function. The site inspector will record each site inspection using the site log inspection forms provided in Appendix D. The inspector will be a Certified Erosion and Sediment Control Lead (CESCL) per BMP C160. The name and contact information for the CESCL is provided in pollution prevention team member table within this SWPPP.

The discharge point(s) are indicated on the Site Map (see Appendix A) and in accordance with the applicable requirements of the CSWGP.

Stormwater Quality Sampling (4.2)

As the construction area for this project is larger than one acre in size, it is subject to turbidity or transparency sampling in accordance with CSWG Special Condition S4.C.4.a or b. The project does not involve significant concrete work or the use of engineered soils and therefore is not subject to pH sampling requirements.

Turbidity Sampling (4.2.1)

Requirements include calibrated turbidity meter or transparency tube to sample site discharges for compliance with the CSWGP. Sampling will be conducted at all discharge points at least once per calendar week.

Table 6 - Turbidity Sampling

	Turbidity Meter/Turbidimeter (required for disturbances 5 acres or greater in size)
X	Transparency Tube (option for disturbances less than 1 acre and up to 5 acres in size)

The benchmark for turbidity value is 25 nephelometric turbidity units (NTU) and a transparency less than 33 centimeters.

If the discharge's turbidity is 26 to 249 NTU **or** the transparency is less than 33 cm but equal to or greater than 6 cm, the following steps will be conducted:

1. Review the SWPPP for compliance with Special Condition S9. Make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period.
3. Document BMP implementation and maintenance in the site logbook.

If the turbidity exceeds 250 NTU **or** the transparency is 6 cm or less at any time, the following steps will be conducted:

1. Telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) within 24 hours. https://www.ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue
   - Northwest Region (King, Kitsap, Island, San Juan, Skagit, Snohomish, Whatcom): (425) 649-7000
2. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible. Address the problems within 10 days of the date the discharge exceeded the benchmark. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when the Permittee requests an extension within the initial 10-day response period
3. Document BMP implementation and maintenance in the site logbook.
4. Continue to sample discharges daily until one of the following is true:
   - Turbidity is 25 NTU (or lower).
   - Transparency is 33 cm (or greater).
   - Compliance with the water quality limit for turbidity is achieved.
     - 1 - 5 NTU over background turbidity, if background is less than 50 NTU
     - 1% - 10% over background turbidity, if background is 50 NTU or greater
   - The discharge stops or is eliminated.

Discharges to 303(d) or Total Maximum Daily Load (TMDL) Waterbodies (5.0)

303(d) Listed Waterbodies (5.1)

Is the receiving water 303(d) (Category 5) listed for turbidity, fine sediment, phosphorus, or pH?

Yes No

The receiving waterbody, French Creek, is impaired for dissolved oxygen (DO), Temperature, and pH. No mitigation is required as these parameters will not be affected with site construction.

All stormwater and dewatering discharges from the site are subject to an **effluent limit** of 8.5 su for pH and /or 25 NTU for turbidity.

TMDL Waterbodies (5.2)

Waste Load Allocation for CWSGP discharges:

No pollutant or stormwater discharge points are present within the project site.

Discharges to TMDL receiving waterbodies will meet in-stream water quality criteria at the point of discharge.

Reporting and Record Keeping (6.0)

Record Keeping (6.1)

Site Logbook (6.1.1)

A site logbook will be maintained for all on-site construction activities and will include:

- A record of the implementation of the SWPPP and other permit requirements
- Site inspections
- Sample logs

Records Retention (6.1.2)

Records will be retained during the life of the project and for a minimum of three (3) years following the termination of permit coverage in accordance with Special Condition S5.C of the CSWGP.

Permit documentation to be retained on-site:

- CSWGP
- Permit Coverage Letter
- SWPPP
- Site Logbook

Permit documentation will be provided within 14 days of receipt of a written request from Ecology. A copy of the SWPPP or access to the SWPPP will be provided to the public when requested in writing in accordance with Special Condition S5.G.2.b of the CSWGP.

Updating the SWPPP (6.1.3)

The SWPPP will be modified if:

- Found ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site.
- There is a change in design, construction, operation, or maintenance at the construction site that has, or could have, a significant effect on the discharge of pollutants to waters of the State.

The SWPPP will be modified within seven (7) days if inspection(s) or investigation(s) determine additional or modified BMPs are necessary for compliance. An updated timeline for BMP implementation will be prepared.

Reporting (6.2)

Discharge Monitoring Reports (6.2.1)

Cumulative soil disturbance is one (1) acre or larger; therefore, Discharge Monitoring Reports (DMRs) will be submitted to Ecology monthly. If there was no discharge during a given monitoring period the DMR will be submitted as required, reporting "No Discharge". The DMR due date is fifteen (15) days following the end of each calendar month.

DMRs will be reported online through Ecology's WQWebDMR System.

To sign up for WQWebDMR go to:
https://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance

Notification of Noncompliance (6.2.2)

If any of the terms and conditions of the permit is not met, and the resulting noncompliance may cause a threat to human health or the environment, the following actions will be taken:

1. Ecology will be notified within 24-hours of the failure to comply by calling the applicable regional office ERTS phone number (Regional office numbers listed below).
2. Immediate action will be taken to prevent the discharge/pollution or otherwise stop or correct the noncompliance. If applicable, sampling and analysis of any noncompliance will be repeated immediately, and the results submitted to Ecology within five (5) days of becoming aware of the violation.
3. A detailed written report describing the noncompliance will be submitted to Ecology within five (5) days, unless requested earlier by Ecology.

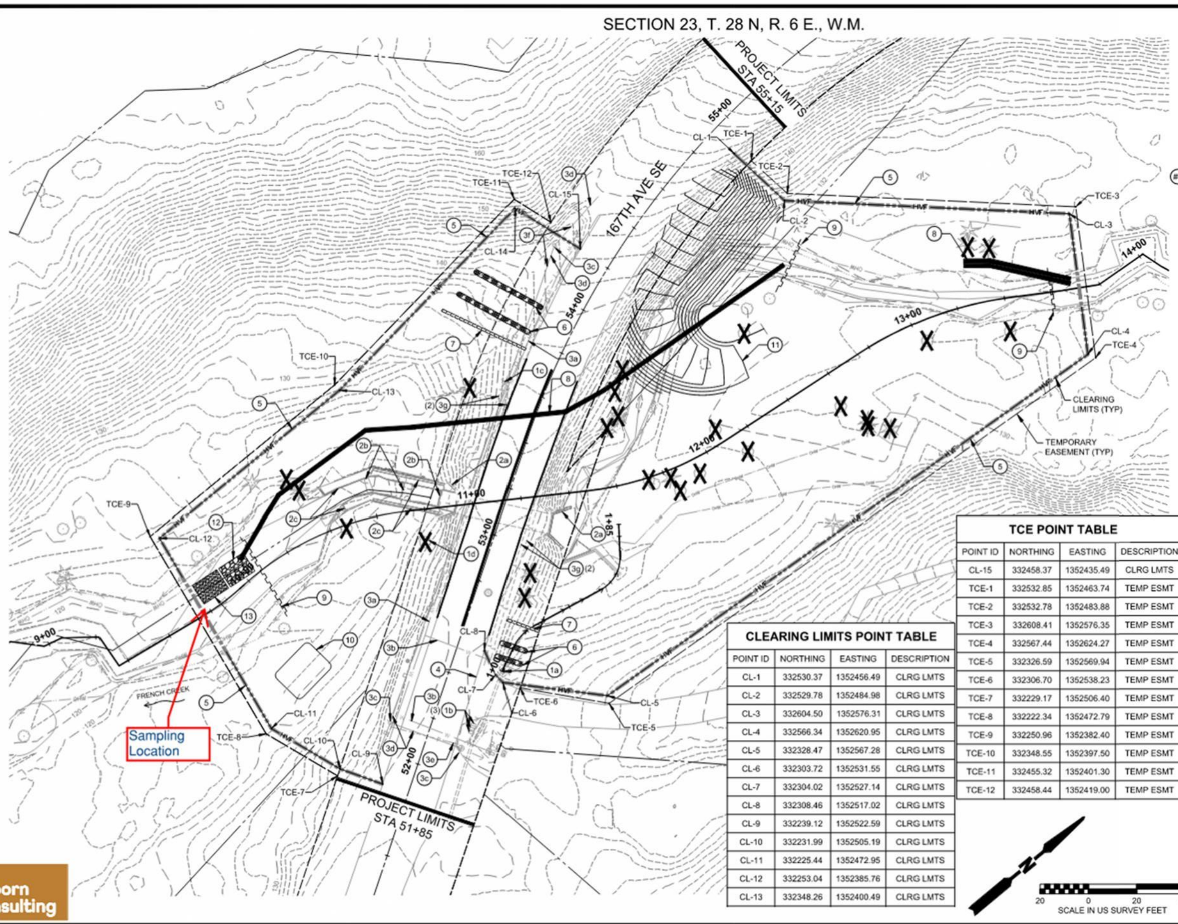
Anytime turbidity sampling indicates turbidity is 250 NTUs or greater, or water transparency is 6 cm or less, the Ecology Regional office will be notified by phone within 24 hours of analysis as required by Special Condition S5.A of the CSWGP.

- Northwest Region at (425) 649-7000 for Island, King, Kitsap, San Juan, Skagit, Snohomish, or Whatcom County

Include the following information:

1. Your name and / Phone number
2. Permit number
3. City / County of project
4. Sample results
5. Date / Time of call
6. Date / Time of sample
7. Project name

In accordance with Special Condition S4.D.5.b of the CSWGP, the Ecology Regional office will be notified if chemical treatment other than CO_2 sparging is planned for adjustment of high pH water.



CLEARING LIMITS POINT TABLE

POINT ID	NORTHING	EASTING	DESCRIPTION
CL-1	332530.37	1352456.49	CLRG LMTS
CL-2	332529.78	1352484.98	CLRG LMTS
CL-3	332604.50	1352576.31	CLRG LMTS
CL-4	332566.34	1352620.95	CLRG LMTS
CL-5	332328.47	1352567.28	CLRG LMTS
CL-6	332303.72	1352531.55	CLRG LMTS
CL-7	332304.02	1352527.14	CLRG LMTS
CL-8	332308.46	1352517.02	CLRG LMTS
CL-9	332239.12	1352522.59	CLRG LMTS
CL-10	332231.99	1352505.19	CLRG LMTS
CL-11	332225.44	1352472.95	CLRG LMTS
CL-12	332253.04	1352385.76	CLRG LMTS
CL-13	332348.26	1352400.49	CLRG LMTS

TCE POINT TABLE

POINT ID	NORTHING	EASTING	DESCRIPTION
CL-15	332458.37	1352435.49	CLRG LMTS
TCE-1	332532.85	1352463.74	TEMP ESMT
TCE-2	332532.78	1352483.88	TEMP ESMT
TCE-3	332608.41	1352576.35	TEMP ESMT
TCE-4	332567.44	1352624.27	TEMP ESMT
TCE-5	332326.59	1352569.94	TEMP ESMT
TCE-6	332306.70	1352538.23	TEMP ESMT
TCE-7	332229.17	1352506.40	TEMP ESMT
TCE-8	332222.34	1352472.79	TEMP ESMT
TCE-9	332250.96	1352382.40	TEMP ESMT
TCE-10	332348.55	1352397.50	TEMP ESMT
TCE-11	332455.32	1352401.30	TEMP ESMT
TCE-12	332458.44	1352419.00	TEMP ESMT

LEGEND

- CLEARING LIMITS
- HVF — HIGH VISIBILITY FENCE
- GRAVEL BERM BAG
- STRAW WATTLE
- COFFER DAM
- X REMOVE TREE
- 36-IN PIPE FOR THE TEMPORARY STREAM DIVERSION
- FILTER BAG
- TEMPORARY QUARRY SPALLS
- SEDIMENT MAT

SITE PREPARATION, TEMPORARY STREAM DIVERSION, AND TESC NOTES

1. PROTECT EXISTING
   a. CULVERT
   b. MAILBOX
   c. SIGN
   d. POWER BOX
2. REMOVE EXISTING
   a. CULVERT, WINGWALLS, AND FOUNDATION
   b. CONCRETE WEIR
   c. CONCRETE WALL
3. COORDINATE RELOCATION AND PROTECTION OF UTILITIES WITH UTILITY PROVIDERS:
   a. WATER MAIN
   b. WATER SERVICE
   c. POWER POLE
   d. ABOVEGROUND POWER LINE
   e. UNDERGROUND POWER LINE
   f. ABOVEGROUND COMMUNICATION LINE
   g. UNDERGROUND COMMUNICATION LINE
4. MAINTAIN RESIDENTIAL ACCESS.
5. INSTALL HIGH VISIBILITY FENCE PER WSDOT STANDARD PLAN I-10.10-01.
6. INSTALL STRAW WATTLE PER WSDOT SD PLAN I-30.30.02.
7. INSTALL GRAVEL BAG BERM. COLLECT RUNOFF AND ROUTE AROUND CONSTRUCTION AREA.
8. TEMPORARY STREAM DIVERSION SHOWN IS CONCEPTUAL. THE TEMPORARY STREAM DIVERSION MAY BE PHASED IN ORDER TO UTILIZE THE EXISTING STREAM CHANNEL TO THE EXTENT FEASIBLE DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A TEMPORARY STREAM DIVERSION PLAN FOR APPROVAL PRIOR TO THE BEGINNING OF WORK. SEE SPECIAL PROVISION "TEMPORARY STREAM DIVERSION".
9. CONSTRUCT TEMPORARY COFFER DAM. COFFER DAM OPTIONS PER DETAIL 4 SHEET 14.
10. INSTALL FILTER BAG PER DETAIL 3 SHEET 14 FOR SEDIMENT REMOVAL FROM ANY DEWATERING ACTIVITIES THAT MAY BE NECESSARY DURING CONSTRUCTION.
11. CONSTRUCT TEMPORARY ACCESS. TEMPORARY ACCESS SHOWN IS A PROPOSED CONCEPT.
12. INSTALL TEMPORARY QUARRY SPALLS MAT TO PREVENT EROSION AT TEMPORARY STREAM DIVERSION OUTFALL. ALL QUARRY SPALLS SHALL BE REMOVED WHEN CONSTRUCTION IS COMPLETE.
13. INSTALL SEDIMENT MAT. SEE DETAIL 6 SHEET 14.

GENERAL NOTES:

1. DISTURBANCE SHALL BE MINIMIZED TO THE AREA NECESSARY FOR INSTALLATION OF TEMPORARY AND PERMANENT ITEMS. TEMPORARY CONSTRUCTION EASEMENTS SHALL BE DELINEATED WITH HIGH VISIBILITY FENCE AS SHOWN. WORK OUTSIDE OF THE RIGHT-OF-WAY SHALL ONLY OCCUR WITHIN THE LIMITS OF THE TEMPORARY CONSTRUCTION EASEMENTS (SEE TABLE THIS SHEET). IN PAVEMENT AREAS, USE WHITE MARKING PAINT TO DENOTE THE WORK LIMITS.
2. UTILITY LOCATIONS AND TYPES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDERS TO PROVIDE TEMPORARY LOCATION AND APPROPRIATE PROTECTION DURING CONSTRUCTION.
3. CONTRACTOR SHALL COORDINATE WITH COUNTY STAFF WHO WILL INSTALL FISH SCREENS AND REMOVE FISH FROM WORK AREA PRIOR TO COMMENCING CONSTRUCTION. APPLICABLE STATE AND FEDERAL REGULATIONS SHALL BE FOLLOWED. SEE CONTRACT PROVISIONS.
4. PROTECT ALL TREES WITHIN THE CONSTRUCTION LIMITS AND WITHIN 5 FEET FROM THE WORK LIMITS, UNLESS NOTED FOR REMOVAL IN THIS SHEET, PER DETAIL 1 ON SHEET 14 AS FEASIBLE TO PERFORM WORK. SEE NOTE 2, SHEET 12.
5. ONLY REMOVE THE MINIMUM VEGETATION NEEDED FOR CONSTRUCTION. CLEARING LIMITS SHOULD BE OFFSET 3-FT FROM THE TEMPORARY EASEMENT LIMITS UNLESS OTHERWISE NOTED IN THE TABLE THIS SHEET.
6. TESC AND TEMPORARY STREAM DIVERSION SHOWN ARE PROPOSED CONCEPTS. CONTRACTOR TO SUBMIT TESC AND TEMPORARY STREAM DIVERSION PLANS FOR APPROVAL PRIOR TO BEGINNING OF WORK.

Osborn Consulting

August 30, 2024 - 8:52 AM - PETERW - C:\PW_OSBORN_WORKING\DMS33674\21-0024-EC.DWG - Layout Name: 5 SITE PREPARATION TEMPORARY STREAM DIVERSION AND TESC

DATE	NO.	REVISION	BY

811 Know what's below. Call 811 before you dig.

UPI NO.: 21-0024
FED. AID PROJ. NO.:
SURVEY NO.:
FIELD BOOK(S):
HORZ. DATUM: NAD 83
VERT. DATUM: NAVD 88
DESIGNED BY: PWF/MP
DRAWN BY: JAR

PRELIMINARY

90% SUBMITTAL

REVIEWED AND APPROVED FOR CONSTRUCTION
DOUGLAS W. McCORMICK, P.E.
SNOHOMISH COUNTY ENGINEER
X/X/2021
DATE APPROVED:

SNOHOMISH COUNTY DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
FUNDING NO. WC8684

CULVERT REPLACEMENT
NEAR 10101 167TH AVE SE
SITE PREPARATION, TEMPORARY STREAM DIVERSION, AND TESC

REFERENCE SHEET NO. EC01
SHEET 5 OF 16 SHEETS

Appendix B – BMP Details

Construction BMPs listed in the SWPPP are contained in Volume II – Construction Stormwater Pollution Prevention BMPs of the 2021 Snohomish County Drainage Manual and available at https://snohomishcountywa.gov/1130/Drainage-Manual

Appendix C – Correspondence

Ecology
EPA
Local Government

Appendix D – Site Inspection Form

The results of each inspection shall be summarized in an inspection report or checklist that is entered into or attached to the site logbook. It is suggested that the inspection report or checklist be included in this appendix to keep monitoring and inspection information in one document, but this is optional. However, it is mandatory that this SWPPP and the site inspection forms be kept onsite at all times during construction, and that inspections be performed and documented as outlined below.

At a minimum, each inspection report or checklist shall include:

a. Inspection date/times
b. Weather information: general conditions during inspection, approximate amount of precipitation since the last inspection, and approximate amount of precipitation within the last 24 hours.
c. A summary or list of all BMPs that have been implemented, including observations of all erosion/sediment control structures or practices.
d. The following shall be described:
    i. locations of BMPs inspected,
    ii. locations of BMPs that need maintenance, and why
    iii. locations of BMPs that failed to operate as designed or intended, and
    iv. locations where additional or different BMPs are needed, and the reason(s) why
e. A description of stormwater discharged from the site. The presence of suspended sediment, turbid water, discoloration, and/or oil sheen shall be noted, as applicable.
f. A description of any water quality monitoring performed during inspection, and the results of that monitoring.
g. General comments and notes, including a brief description of any BMP repairs, maintenance or installations made as a result of the inspection.
h. A statement that, in the judgment of the person conducting the site inspection, the site is either in compliance or out of compliance with the terms and conditions of the SWPPP and the NPDES permit. If the site inspection indicates that the site is out of compliance, the inspection report shall include a summary of the remedial actions required to bring the site back into compliance, as well as a schedule of implementation.
i. Name, title, and signature of person conducting the site inspection; and the following statement: “I certify under penalty of law that this report is true, accurate, and complete, to the best of my knowledge and belief”.

When the site inspection indicates that the site is not in compliance with any terms and conditions of the NPDES permit, the Permittee shall take immediate action(s) to: stop, contain, and clean up the unauthorized discharges, or otherwise stop the noncompliance; correct the problem(s); implement appropriate Best Management Practices (BMPs), and/or conduct maintenance of existing BMPs; and achieve compliance with all applicable standards and permit conditions. In addition, if the noncompliance causes a threat to human health or the environment, the Permittee shall comply with the Noncompliance Notification requirements in Special Condition S5.F of the permit.

Construction Stormwater Site Inspection Form

Project Name ________________ Permit # __________ Inspection Date _________ Time _______

Name of Certified Erosion Sediment Control Lead (CESCL) or qualified inspector if *less than one acre*

Print Name: ______________________________

Approximate rainfall amount since the last inspection (in inches): ______________________

Approximate rainfall amount in the last 24 hours (in inches): ______________________

Current Weather Clear ☐ Cloudy ☐ Mist ☐ Rain ☐ Wind ☐ Fog ☐

A. Type of inspection: Weekly ☐ Post Storm Event ☐ Other ☐

B. Phase of Active Construction (*check all that apply*):

Pre Construction/installation of erosion/sediment controls	☐	Clearing/Demo/Grading	☐	Infrastructure/storm/roads	☐
Concrete pours	☐	Vertical Construction/buildings	☐	Utilities	☐
Offsite improvements	☐	Site temporary stabilized	☐	Final stabilization	☐

C. Questions:

1. Were all areas of construction and discharge points inspected? Yes ___ No ___
2. Did you observe the presence of suspended sediment, turbidity, discoloration, or oil sheen Yes ___ No ___
3. Was a water quality sample taken during inspection? (*refer to permit conditions S4 & S5*) Yes ___ No ___
4. Was there a turbid discharge 250 NTU or greater, or Transparency 6 cm or less?* Yes ___ No ___
5. If yes to #4 was it reported to Ecology? Yes ___ No ___
6. Is pH sampling required? pH range required is 6.5 to 8.5. Yes ___ No ___

If answering yes to a discharge, describe the event. Include when, where, and why it happened; what action was taken, and when.

____

____

____

____

*If answering yes to # 4 record NTU/Transparency with continual sampling daily until turbidity is 25 NTU or less/ transparency is 33 cm or greater.

Sampling Results: Date: ______________

Parameter	Method (circle one)	Result			Other/Note
		NTU	cm	pH	
Turbidity	tube, meter, laboratory				
pH	Paper, kit, meter				

D. Check the observed status of all items. Provide "Action Required "details and dates.

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
1 Clearing Limits	Before beginning land disturbing activities are all clearing limits, natural resource areas (streams, wetlands, buffers, trees) protected with barriers or similar BMPs? (high visibility recommended)						
2 Construction Access	Construction access is stabilized with quarry spalls or equivalent BMP to prevent sediment from being tracked onto roads?						
	Sediment tracked onto the road way was cleaned thoroughly at the end of the day or more frequent as necessary.						
3 Control Flow Rates	Are flow control measures installed to control stormwater volumes and velocity during construction and do they protect downstream properties and waterways from erosion?						
	If permanent infiltration ponds are used for flow control during construction, are they protected from siltation?						
4 Sediment Controls	All perimeter sediment controls (e.g. silt fence, wattles, compost socks, berms, etc.) installed, and maintained in accordance with the Stormwater Pollution Prevention Plan (SWPPP).						
	Sediment control BMPs (sediment ponds, traps, filters etc.) have been constructed and functional as the first step of grading.						
	Stormwater runoff from disturbed areas is directed to sediment removal BMP.						
5 Stabilize Soils	Have exposed un-worked soils been stabilized with effective BMP to prevent erosion and sediment deposition?						

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
5 Stabilize Soils Cont.	Are stockpiles stabilized from erosion, protected with sediment trapping measures and located away from drain inlet, waterways, and drainage channels?						
	Have soils been stabilized at the end of the shift, before a holiday or weekend if needed based on the weather forecast?						
6 Protect Slopes	Has stormwater and ground water been diverted away from slopes and disturbed areas with interceptor dikes, pipes and or swales?						
	Is off-site storm water managed separately from stormwater generated on the site?						
	Is excavated material placed on uphill side of trenches consistent with safety and space considerations?						
	Have check dams been placed at regular intervals within constructed channels that are cut down a slope?						
7 Drain Inlets	Storm drain inlets made operable during construction are protected.						
	Are existing storm drains within the influence of the project protected?						
8 Stabilize Channel and Outlets	Have all on-site conveyance channels been designed, constructed and stabilized to prevent erosion from expected peak flows?						
	Is stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes and downstream conveyance systems?						
9 Control Pollutants	Are waste materials and demolition debris handled and disposed of to prevent contamination of stormwater?						
	Has cover been provided for all chemicals, liquid products, petroleum products, and other material?						
	Has secondary containment been provided capable of containing 110% of the volume?						
	Were contaminated surfaces cleaned immediately after a spill incident?						
	Were BMPs used to prevent contamination of stormwater by a pH modifying sources?						

Element #	Inspection	BMPs Inspected			BMP needs maintenance	BMP failed	Action required (describe in section F)
		yes	no	n/a			
9 Cont.	Wheel wash wastewater is handled and disposed of properly.						
10 Control Dewatering	Concrete washout in designated areas. No washout or excess concrete on the ground.						
	Dewatering has been done to an approved source and in compliance with the SWPPP.						
	Were there any clean non turbid dewatering discharges?						
11 Maintain BMP	Are all temporary and permanent erosion and sediment control BMPs maintained to perform as intended?						
12 Manage the Project	Has the project been phased to the maximum degree practicable?						
	Has regular inspection, monitoring and maintenance been performed as required by the permit?						
	Has the SWPPP been updated, implemented and records maintained?						
13 Protect LID	Is all Bioretention and Rain Garden Facilities protected from sedimentation with appropriate BMPs?						
	Is the Bioretention and Rain Garden protected against over compaction of construction equipment and foot traffic to retain its infiltration capabilities?						
	Permeable pavements are clean and free of sediment and sediment laden-water runoff. Muddy construction equipment has not been on the base material or pavement.						
	Have soiled permeable pavements been cleaned of sediments and pass infiltration test as required by stormwater manual methodology?						
	Heavy equipment has been kept off existing soils under LID facilities to retain infiltration rate.						

E. Check all areas that have been inspected. ✔

All in place BMPs ☐ All disturbed soils ☐ All concrete wash out area ☐ All material storage areas ☐
All discharge locations ☐ All equipment storage areas ☐ All construction entrances/exits ☐

F. Elements checked "Action Required" (section D) describe corrective action to be taken. List the element number; be specific on location and work needed. Document, initial, and date when the corrective action has been completed and inspected.

Element #	Description and Location	Action Required	Completion Date	Initials

Attach additional page if needed

<u>Sign the following certification:</u>

"I certify that this report is true, accurate, and complete, to the best of my knowledge and belief"

Inspected by: (print) ____________________ (Signature) __________________________ Date: _______________

Title/Qualification of Inspector: ____

Appendix E – Construction Stormwater General Permit (CSWGP)

Download CSWGP: https://www.ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit

APPENDIX D

MONUMENT PRESERVATION

Monument Preservation Documentation

I, ______________________ representing ________________________ pursuant to
(Licensed Surveyor) (Contractor)

WAC Chapter 332-120 Survey Monuments-Removal or Destruction, certify that I have reviewed the construction plans for ________________________ and complied with the following:
(Project)

1. Defined the areas where the proposed construction may disturb or destroy survey monuments.
2. Made a diligent search of survey records in Snohomish County to determine possible locations and type of existing monuments.
3. Made a diligent field search within the defined construction limits at locations determined from the survey records research.
4. Made an additional diligent field search for unrecorded monuments at locations not defined from survey records but in locations where survey monuments typically exist.
5. Supplied Snohomish County with a map outlining the project boundary search area with the individual search areas being further defined indicating the type of monument found or that the monument was searched for and not found. (Map attached)
6. Each found monument has been referenced to at least 3 nearby points not likely to be destroyed with this construction. (Copies of references attached)
7. Permits have been obtained from the Department of Natural Resources according to WAC Chapter 332-120. (Copies of permits attached)

This certification is for the expressed purpose of preserving the existing location and type of survey monuments within the construction area. It is not for the purpose of verifying that these monuments mark the location of previously surveyed positions.

Signed and Sealed,

APPENDIX E

APPRENTICESHIP REQUIREMENTS

Snohomish County
Monthly Apprentice Utilization Report

Completion Instructions

1. This report is designed to track the use of registered apprentices on this project. Please update and email to the Contract Administrator no later than the 10th of each month following the reporting period.

2. Include for yourself and all subcontractors the names of any registered apprentices working on this project. This report is designed to be accumulative, so do not clear data from previous months. Simply add rows as needed for new apprentices and track all hours worked in the appropriate monthly column. Using the "Sort By Last Name" button as needed for convenience.

3. Reporting of the information highlighted in yellow is to be completed to the extent that apprentices have, upon the contractor's request, voluntarily reported such data to the contractor.

4. **The "Total Labor Hours Used on Project By Month" must be filled in manually each month and should include apprentice hours**. The "Total Apprentice Hours By Month" row (shaded in grey) will populate automatically, based on the number of hours entered into each monthly column.

5. Do not delete, add to, or reformat the structure of this form in any way, as we must copy the info into other forms for county use.

Monthly Apprentice Utilization Report

Snohomish County

County Department: ______________________

Project Name: ______________________

County Project #: ______________________

Percent Complete: ______________________

Prime Contractor: ______________________

Completed By: ______________________

	# of Apprentices	Total Hours Worked
Women Apprentices on Project to Date:		
Minority Apprentices on Project to Date:		
Veteran Apprentices on Project to Date:		

First Chargable Working Day: ______________________

Anticipated Completion Date: ______________________

Overall Percentage to Date:	#DIV/0!
Total Labor Hours to Date:	0.0
Total Apprentice Hours to Date:	0.0

Date: ____________ Phone Number: ______________________

Apprentice Percentage By Month:	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!
→ → Enter Total Labor Hours Used on Project By Month:												
Total Apprentice Hours By Month:												

Last Name	First Name	Middle Initial	Apprentice Registration Number	Employer (Prime Contractor and all Subcontractors)	Trade or Craft	Year Registered as a Result of This Project	Year Graduated to Journey Level	Apprentice Hours Worked by Month and Year: Nov-20	Dec-20	Dec-20	Jan-21	Mar-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21