

**CONTRACT DOCUMENTS  
FOR  
CITY OF FERNDALE, WASHINGTON  
Ferndale Terrace Project  
City Project Number SW2016-01**

Consisting of:

Bid Documents  
Contract Forms  
Specifications & Conditions  
Drawings

Funded in part by the Washington State Department of Ecology and Transportation  
Improvement Board (TIB)



**Approved By:**

A stylized, handwritten signature in black ink, appearing to be "Kevin Renz", written over a horizontal line.

City of Ferndale  
**Kevin Renz, Public Works Director**  
2095 Main Street  
Ferndale, WA 98248  
Phone: (360) 384-4006



**Engineer:**

Reichhardt & Ebe Engineering, Inc.  
**423 Front Street**  
**Lynden, WA 98264**  
**Phone: (360) 354-3687**

**FERNDALE TERRACE PROJECT, CITY PROJECT SW2016-01  
FERNDALE, WASHINGTON**

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**BID PROCEDURES AND CONDITIONS**  
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**INVITATION TO BID  
FOR  
FERNDAL TERRACE PROJECT, CITY PROJECT SW2016-01**

**NOTICE IS HEREBY GIVEN by CITY OF FERNDAL** that sealed bid proposals will be received by the City of Ferndale at Ferndale City Hall, 2095 Main Street, Ferndale, Washington, 98248, (360) 384-4006, until **February 5, 2025, at 2:00 PM**, and will then and there be opened and publicly read for the **Ferndale Terrace Project**.

**PROJECT DESCRIPTION:** This contract provides for improvements of approximately 2,600 linear feet of Ferndale Terrace, from the intersection of Ferndale Terrace and Hendrickson Avenue, then easterly to Vista Drive, in Ferndale Washington. Work will include clearing, grubbing, grading, roadway excavation, storm sewer drainage improvements, water main installation, sanitary sewer installation, placing gravel base, hot mix asphalt paving, curb and gutters, sidewalks, ADA ramps, and other work, in accordance with the Contract Plans, Special Provisions, the Standard Specifications, and Standard Plans.

**Bid Guaranty:** All bid proposals shall be accompanied by a bid proposal deposit in cash, certified check, cashier's check, or surety bond in an amount equal to five percent (5%) of the amount of such bid proposal. Should the successful bidder fail to enter into such contract and furnish satisfactory performance bond and payment bond both in an amount of 100 percent (100%) of the contract price within the time stated in the specifications, the bid proposal deposit shall be forfeited to the City of Ferndale. All bidders and subcontractors shall have a contractor's license to work in the State of Washington and a City of Ferndale Business License before starting work. All work performed on this project will be subject to prevailing state wage rates.

**Project Documents:** Electronic versions of the project plans and specifications are available for view and download on the City of Ferndale website at [www.cityofferndale.org/ferndaleterrace](http://www.cityofferndale.org/ferndaleterrace). Bidders must request to be added to the planholders list. Please email the City of Ferndale at [public-works@cityofferndale.org](mailto:public-works@cityofferndale.org) to be included. Only those on the planholders list will be notified when bid-related information, such as addenda, etc., is issued. Informational copies of maps, plans and specifications are on file for inspection in the Public Works Department at Ferndale City Hall, 2095 Main Street, Ferndale, Washington 98248.

**Pre-Bid Conference:** Bidders, prior to submitting a bid, may attend a non-mandatory pre-bid conference with the Project Engineer. The meeting will start on **January 22, 2025, at 2:00 PM** in the main conference room at the Ferndale City Hall, located at 2095 Main Street, Ferndale, Washington 98248. For those who are not available to attend in person, the pre-bid conference will also be broadcast using Microsoft Teams. Please see our project page for information to join the online meeting. A jobsite visit may follow upon request.

This project will be funded in part by the Transportation Improvement Board and the Washington State Department of Ecology. Neither the State of Washington nor any of its departments or employees are, or shall be, a party to any contract or any subcontract resulting from this solicitation for bids.

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

The City of Ferndale is an Equal Opportunity and Affirmative Action Employer. Minority and Women-Owned firms are encouraged to submit bids.

The CALL FOR BIDS for this project was advertised in the Ferndale Record Journal on December 18 and 25, 2024.

**BID PROPOSAL FORMS**  
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**BID PROPOSAL**  
**FOR**  
**FERNDALE TERRACE PROJECT**  
**FERNDALE, WASHINGTON**

Date: \_\_\_\_\_

TO: City of Ferndale

Gentlepersons:

This certifies that the Undersigned: has examined the location of the project site and the conditions of work; and has carefully read and thoroughly understands the contract documents entitled: **"FERNDALE TERRACE PROJECT"**, in Ferndale, including the "Bid Procedures and Conditions", "Specifications and Conditions", "Contract Forms", and "Plans" governing the work embraced in this project and the method by which payment will be made for said work. The Undersigned hereby proposes to undertake and complete the work embraced in this project in accordance with said contract documents, and agrees to accept as payment for said work, the schedule of lump sum and unit prices as set forth in the "Bid" below.

The Undersigned acknowledges that payment will be based on the actual work performed and material used as measured or provided for in accordance with the said contract documents, and that no additional compensation will be allowed for any taxes not included in each lump sum or unit price, and that the basis for payment will be the actual work performed and measured or provided for in accordance with the said contract documents.

**CITY OF FERNDALE**  
**FERNDALE TERRACE PROJECT, VISTA DRIVE TO HENDRICKSON AVENUE**

( ) SECTION REFERENCE

December 17, 2024

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
1	1 LUMP SUM	MOBILIZATION (1-09.7)		
			\$	\$
			per LS	
2	1 LUMP SUM	ROADWAY SURVEYING (1-05)		
			\$	\$
			per LS	
3	1 LUMP SUM	ADA FEATURE SURVEYING (1-05)		
			\$	\$
			per LS	
4	1 LUMP SUM	SPCC PLAN (1-07)		
			\$	\$
			per LS	
5	1 LUMP SUM	PROJECT TEMPORARY TRAFFIC CONTROL (1-10)		
			\$	\$
			per LS	
6	1 LUMP SUM	CLEARING AND GRUBBING (2-01)		
			\$	\$
			per LS	
7	1 LUMP SUM	REMOVAL OF STRUCTURES AND OBSTRUCTIONS (2-02)		
			\$	\$
			per LS	
8	5,050 LINEAR FOOT-INCH	SAWCUT ACP (2-02)		
			\$	\$
			per LF-IN	
9	2,250 LINEAR FOOT-INCH	SAWCUT PCC (2-02)		
			\$	\$
			per LF-IN	
10	36 EACH	REMOVING DRAINAGE STRUCTURES AND MANHOLES (2-02)		
			\$	\$
			per EA	
11	1 FORCE ACCOUNT	ABANDONMENT OF ASBESTOS CEMENT WATER MAIN (2-02)		
			\$	\$
			20,000.00	20,000.00
			FA	

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ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
12	8,550 CUBIC YARD	ROADWAY EXCAVATION INCL. HAUL (2-03)		
			\$	\$
			per CY	
13	200 CUBIC YARD	EMBANKMENT COMPACTION (2-03)		
			\$	\$
			per CY	
14	200 CUBIC YARD	UNSUITABLE FOUNDATION EXCAVATION INCL. HAUL (2-03)		
			\$	\$
			per CY	
15	200 M GAL.	WATER (2-07)		
			\$	\$
			per M GAL.	
16	25,750 SQUARE FOOT	SHORING OR EXTRA EXCAVATION CLASS B (2-09)		
			\$	\$
			per SF	
17	50 CUBIC YARD	CONTROLLED DENSITY FILL (2-09)		
			\$	\$
			per CY	
18	9,900 SQUARE YARD	CONSTRUCTION GEOTEXTILE FOR SEPARATION (2-12)		
			\$	\$
			per SY	
19	22,200 TON	GRAVEL BASE (4-02)		
			\$	\$
			per TON	
20	1,350 TON	CRUSHED SURFACING TOP COURSE (4-04)		
			\$	\$
			per TON	
21	225 SQUARE YARD	PLANING BITUMINOUS PAVEMENT (5-04)		
			\$	\$
			per SY	
22	85 SQUARE YARD	SELF-ADHERING RUBBERIZED ASPHALT MEMBRANE (5-04)		
			\$	\$
			per SY	

**CITY OF FERNDALE**  
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ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
23	2,075 TON	HMA CL. 1/2" PG 58H-22 (5-04)		
			\$	\$
			per TON	
24	100 TON	COMMERCIAL HMA (5-04)		
			\$	\$
			per TON	
25	0 CALC	JOB MIX COMPLIANCE PRICE ADJUSTMENT (5-04)		
			\$	0
			CALC	0
26	0 CALC	COMPACTION PRICE ADJUSTMENT (5-04)		
			\$	0
			CALC	0
27	1 CALC	ASPHALT COST PRICE ADJUSTMENT (5-04)		
			\$	20,000.00
			CALC	20,000.00
28	2 EACH	SPEED TABLE (5-05)		
			\$	\$
			per EA	
29	25 SQUARE YARD	TEXTURED CEMENT CONCRETE PAVEMENT (5-05)		
			\$	\$
			per SY	
30	935 LINEAR FOOT	INFILTRATION TRENCH (7-01)		
			\$	\$
			per LF	
31	20 LINEAR FOOT	SOLID WALL PVC STORM SEWER PIPE 2 IN. DIAM. (7-04)		
			\$	\$
			per LF	
32	80 LINEAR FOOT	SOLID WALL PVC STORM SEWER PIPE 4 IN. DIAM. (7-04)		
			\$	\$
			per LF	
33	160 LINEAR FOOT	DUCTILE IRON STORM SEWER PIPE 8 IN. DIAM. (7-04)		
			\$	\$
			per LF	

**CITY OF FERNDALE**  
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ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
34	340.0 LINEAR FOOT	CORRUGATED POLYETHYLENE STORM SEWER PIPE 8 IN. DIAM. (7-04)		
			\$	\$
			per LF	
35	540.0 LINEAR FOOT	DUCTILE IRON STORM SEWER PIPE 12 IN. DIAM. (7-04)		
			\$	\$
			per LF	
36	2,660 LINEAR FOOT	CORRUGATED POLYETHYLENE STORM SEWER PIPE 12 IN. DIAM. (7-04)		
			\$	\$
			per LF	
37	420 LINEAR FOOT	CORRUGATED POLYETHYLENE STORM SEWER PIPE 18 IN. DIAM. (7-04)		
			\$	\$
			per LF	
38	240 LINEAR FOOT	CORRUGATED POLYETHYLENE STORM SEWER PIPE 24 IN. DIAM. (7-04)		
			\$	\$
			per LF	
39	100 LINEAR FOOT	CORRUGATED POLYETHYLENE STORM SEWER PIPE 30 IN. DIAM. (7-04)		
			\$	\$
			per LF	
40	4,460 LINEAR FOOT	TESTING STORM SEWER PIPE (7-04)		
			\$	\$
			per LF	
41	15 EACH	MANHOLE 48 IN. DIAM. TYPE 1 (7-05)		
			\$	\$
			per EA	
42	1 EACH	MANHOLE 54 IN. DIAM. TYPE 1 (7-05)		
			\$	\$
			per EA	
43	5 LINEAR FOOT	MANHOLE ADDITIONAL HEIGHT 48 IN. DIAM. TYPE 1 (7-05)		
			\$	\$
			per LF	
44	1 EACH	DROP MANHOLE CONNECTION (7-05)		
			\$	\$
			per EA	



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ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
45	2 EACH	CONCRETE INLET (7-05)		
			\$	\$
			per EA	
46	68 EACH	CATCH BASIN TYPE 1 (7-05)		
			\$	\$
			per EA	
47	15 EACH	CATCH BASIN TYPE 2, 48 IN. DIAM. (7-05)		
			\$	\$
			per EA	
48	1 EACH	CATCH BASIN TYPE 2, 54 IN. DIAM. (7-05)		
			\$	\$
			per EA	
49	2 EACH	STORMWATER FILTRATION SYSTEM (7-05)		
			\$	\$
			per EA	
50	1 LUMP SUM	ADJUSTMENTS TO FINISHED GRADE (7-05)		
			\$	\$
			per LS	
51	332 CUBIC YARD	REMOVAL OF UNSUITABLE MATERIAL INCL. HAUL (7-08)		
			\$	\$
			per CY	
52	20 LINEAR FOOT	DUCTILE IRON PIPE FOR WATER MAIN 4 IN. DIAM. (7-09)		
			\$	\$
			per LF	
53	3,100 LINEAR FOOT	DUCTILE IRON PIPE FOR WATER MAIN 8 IN. DIAM. (7-09)		
			\$	\$
			per LF	
54	4 EACH	CONNECT TO EXISTING AC WATER MAIN 4 IN. DIAM. (7-09)		
			\$	\$
			per EA	
55	1 EACH	CONNECT TO EXISTING AC WATER MAIN 8 IN. DIAM. (7-09)		
			\$	\$
			per EA	

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ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
56	1 EACH	CONNECT TO EXISTING WATER MAIN 6 IN. DIAM. (7-09)		
			\$	\$
			per EA	
57	2 EACH	CONNECT TO EXISTING WATER MAIN 8 IN. DIAM. (7-09)		
			\$	\$
			per EA	
58	2 EACH	STOVEPIPE WATERMAIN, 8 IN. DIAM. (7-09)		
			\$	\$
			per EA	
59	80 LINEAR FOOT	FURNISHING AND INSTALLING PVC CASING PIPE 1.25 IN. DIAM. (7-09)		
			\$	\$
			per LF	
60	1 EACH	BLOWOFF ASSEMBLY (7-09)		
			\$	\$
			per EA	
61	21 EACH	GATE VALVE 8 IN. (7-12)		
			\$	\$
			per EA	
62	5 EACH	HYDRANT ASSEMBLY (7-14)		
			\$	\$
			per EA	
63	45 EACH	SERVICE CONNECTION 3/4 IN. DIAM. (7-15)		
			\$	\$
			per EA	
64	5 EACH	DOUBLE SERVICE CONNECTION 1 IN. DIAM. (7-15)		
			\$	\$
			per EA	
65	55 EACH	PRESSURE REDUCING VALVE 3/4 IN. (7-15)		
			\$	\$
			per EA	
66	1,300 LINEAR FOOT	PVC SANITARY SEWER PIPE 6 IN. DIAM. (7-17)		
			\$	\$
			per LF	

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ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
67	2,880 LINEAR FOOT	PVC SANITARY SEWER PIPE 8 IN. DIAM. (7-17)		
			\$	\$
			per LF	
68	70 LINEAR FOOT	PVC SANITARY SEWER PIPE 10 IN. DIAM. (7-17)		
			\$	\$
			per LF	
69	4,250 LINEAR FOOT	TESTING SEWER PIPE (7-17)		
			\$	\$
			per LF	
70	1 LUMP SUM	ESC LEAD (8-01)		
			\$	\$
			per LS	
71	1 LUMP SUM	SWPP PLAN PREPARATION (8-01)		
			\$	\$
			per LS	
72	1 EST	EROSION/WATER POLLUTION CONTROL (8-01)		
			\$	\$
			10,000.00	10,000.00
			EST	
73	31 EACH	INLET PROTECTION (8-01)		
			\$	\$
			per EA	
74	175 SQUARE YARD	BARK OR WOOD CHIP MULCH (8-02)		
			\$	\$
			per SY	
75	2,400 SQUARE YARD	SEEDED LAWN INSTALLATION (8-02)		
			\$	\$
			per SY	
76	1 EST	LANDSCAPE RESTORATION (8-02)		
			\$	\$
			20,000.00	20,000.00
			EST	
77	5,460 LINEAR FOOT	CEMENT CONC. TRAFFIC CURB AND GUTTER (8-04)		
			\$	\$
			per LF	

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ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
78	540 LINEAR FOOT	CEMENT CONC. PEDESTRIAN CURB (8-04)		
			\$	\$
			per LF	
79	2,100 SQUARE YARD	CEMENT CONC. DRIVEWAY ENTRANCE TYPE 1 (8-06)		
			\$	\$
			per SY	
80	35 SQUARE YARD	EXPOSED AGGREGATE DRIVEWAY (8-06)		
			\$	\$
			per SY	
81	20 HUNDRED	RAISED PAVEMENT MARKER TYPE 1 (8-09)		
			\$	\$
			per HUN	
82	4 HUNDRED	RAISED PAVEMENT MARKER TYPE 2 (8-09)		
			\$	\$
			per HUN	
83	55 LINEAR FOOT	TEMPORARY FENCING (8-12)		
			\$	\$
			per LF	
84	1,800 SQUARE YARD	CEMENT CONC. SIDEWALK (8-14)		
			\$	\$
			per SY	
85	40 SQUARE YARD	12 IN. RAISED EDGE MONOLITHIC CEMENT CONCRETE CURB AND SIDEWALK (8-14)		
			\$	\$
			per SY	
86	91 SQUARE YARD	21 IN. RAISED EDGE MONOLITHIC CEMENT CONCRETE CURB AND SIDEWALK (8-14)		
			\$	\$
			per SY	
87	80 SQUARE YARD	24 IN. RAISED EDGE MONOLITHIC CEMENT CONCRETE CURB AND SIDEWALK (8-14)		
			\$	\$
			per SY	
88	11 EACH	CEMENT CONC. CURB RAMP TYPE PARALLEL A (8-14)		
			\$	\$
			per EA	

**CITY OF FERNDALE**  
**FERNDALE TERRACE PROJECT, VISTA DRIVE TO HENDRICKSON AVENUE**

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December 17, 2024

ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
89	2 EACH	CEMENT CONC. CURB RAMP TYPE PARALLEL B (8-14)		
			\$	\$
			per EA	
90	1 EACH	CEMENT CONC. CURB RAMP TYPE SINGLE DIRECTION A (8-14)		
			\$	\$
			per EA	
91	2 EACH	CEMENT CONC. CURB RAMP TYPE PERPENDICULAR B (8-14)		
			\$	\$
			per EA	
92	657 TON	QUARRY SPALLS (8-15)		
			\$	\$
			per TON	
93	2 EACH	MAILBOX SUPPORT, TYPE 1 (8-18)		
			\$	\$
			per EA	
94	11 EACH	MAILBOX SUPPORT, TYPE 2 (8-18)		
			\$	\$
			per EA	
95	1 LUMP SUM	RRFB SYSTEMS (8-20)		
			\$	\$
			per LS	
96	1 LUMP SUM	PERMANENT SIGNING (8-21)		
			\$	\$
			per LS	
97	8 EACH	PLASTIC SPEED BUMP SYMBOL (8-22)		
			\$	\$
			per EA	
98	3,600 LINEAR FOOT	PAINT LINE (8-22)		
			\$	\$
			per LF	
99	116 LINEAR FOOT	PLASTIC STOP LINE (8-22)		
			\$	\$
			per LF	

**CITY OF FERNDALE**  
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ITEM NO.	QUANTITY	DESCRIPTION	UNIT PRICE	TOTAL
100	1,300 SQUARE FOOT	PLASTIC CROSSWALK LINE (8-22)		
			\$	\$
			per SF	
101	30 SQUARE YARD	GRAVITY BLOCK WALL (8-24)		
			\$	\$
			per SY	
102	140 EACH	POTHOLE EXISTING UNDERGROUND UTILITY (8-32)		
			\$	\$
			per EA	
103	1 EST	REPAIR EXISTING PUBLIC AND PRIVATE FACILITIES (8-33)		
			\$	\$
			75,000.00	75,000.00
			EST	

**Sub-Total** \$

**Sales Tax @ 9% (Bid Items 11,16,17,41-44, 51-69,92)** \$

**Total** \$

## **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 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.

## BIDDER IDENTIFICATION

The name of the Bidder submitting this proposal, the address and phone number to which all communications concerned with this proposal shall be made and the number which has been assigned indicating the Bidder is licensed to do business in the State of Washington are as follows:

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

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

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

Contractor's Number: \_\_\_\_\_

The Firm submitting this proposal is a \_\_\_\_\_Sole Proprietorship  
\_\_\_\_\_Partnership  
\_\_\_\_\_Corporation

The names and titles of the principal officers of the corporation submitting this proposal, or of the partnership, or of all persons interested in this proposal as principals are as follows:

_____	_____
_____	_____
_____	_____
_____	_____

-----

NOTE: Signatures of this proposal must be identified above. Failure to identify the Signatories will be cause for considering the proposal irregular and for subsequent rejection of the bid.



## BID PROPOSAL SIGNATURE AND ADDENDUM ACKNOWLEDGMENT

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 approximation estimate of quantities at the above prices and in the form as indicated below, is attached hereto:

<input type="checkbox"/>	CASH	IN THE AMOUNT OF _____
<input type="checkbox"/>	CASHIER'S CHECK	_____ DOLLARS
<input type="checkbox"/>	CERTIFIED CHECK	(\$_____) PAYABLE TO THE CITY OF FERNDAL
<input type="checkbox"/>	PROPOSAL BOND	IN THE AMOUNT OF 5% OF THE BID.

Receipt is hereby acknowledged by addendum(s) No.(s) \_\_\_\_\_, \_\_\_\_\_, & \_\_\_\_\_

**SIGNATURE OF AUTHORIZED OFFICIAL(S)**

(PROPOSAL MUST BE SIGNED)

SIGNATURE

FIRM NAME

STATE OF WASHINGTON )  
 ) ss.  
COUNTY OF WHATCOM )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared \_\_\_\_\_ to me personally known to be the person described in and who executed the above instrument and who acknowledged to me the act of signing thereof.

NOTARY PUBLIC, in and for the  
State of Washington, residing at:

---

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

**This proposal form is not transferable and any alteration of the firm's name entered hereon without prior permission from the City of Ferndale will be cause for considering the proposal irregular and for subsequent rejection of the bid.**

## BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we of \_\_\_\_\_, as principal, and the \_\_\_\_\_ a corporation duly organized under the laws of the State of \_\_\_\_\_ and having its principal place of business at \_\_\_\_\_, in the State of Washington, as Surety, are held and firmly bound unto the City of Ferndale, a Municipal Corporation in the State of Washington, in the full and penal sum of five percent (5%) of the total bid amount appearing on 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, jointly and severally, firmly by these presents.

The condition of this bond is such that, whereas, the principal herein is herewith submitting his or its bid proposal for, **FERNDALE TERRACE PROJECT**, said bid proposal, by reference thereto, being hereby made a part hereof.

NOW, THEREFORE, if the said bid proposal submitted by the 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 the performance bond as required by the bidding and contract documents within a period of twenty (20) days from and after said award, exclusive of the day of such award, then its obligation to pay the above-mentioned penal sum as liquidated damages shall be null and void, otherwise it shall remain and be in full force and effect.

SIGNED AND SEALED this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Principal

By \_\_\_\_\_ (Seal)

Surety

By \_\_\_\_\_  
Attorney-In-Fact

The Attorney-in-fact who executes this bond on behalf of the surety company, must attach a copy of his power-of-attorney as evidence of his authority.

Local Agency Name
Local Agency Address

## Local Agency Subcontractor List

*Prepared in compliance with RCW 39.30.060 as amended*

### To Be Submitted with the Bid Proposal

Project Name \_\_\_\_\_

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

Subcontractor(s) with whom the bidder will directly subcontract that are proposed to perform the work of structural steel installation, rebar installation, heating, ventilation and air conditioning, plumbing, as described in Chapter 18.106 RCW, and electrical as described in Chapter 19.28 RCW must be listed below. The work to be performed is to be listed below the subcontractor(s) name.

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

Subcontractor Name \_\_\_\_\_

Work to be performed \_\_\_\_\_

Subcontractor Name \_\_\_\_\_

Work to be performed \_\_\_\_\_

Subcontractor Name \_\_\_\_\_

Work to be performed \_\_\_\_\_

Subcontractor Name \_\_\_\_\_

Work to be performed \_\_\_\_\_

Subcontractor Name \_\_\_\_\_

Work to be performed \_\_\_\_\_

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



This form must be submitted with the Bid Proposal or as a Supplement to the Bid no later than 24 hours after the time for delivery of the Bid Proposal, as provided for in Section 1-02.9 of the Contract Provisions.

### **CERTIFICATION OF COMPLIANCE WITH WAGE PAYMENT STATUTES**

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date (December 18, 2024), the bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

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

\_\_\_\_\_  
Bidder's Business Name

\_\_\_\_\_  
Signature of Authorized Official\*

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

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
City

\_\_\_\_\_  
State

*Check One:*

Sole Proprietorship ☐ 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.*

**SPECIFICATIONS AND CONDITIONS**  
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## 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*, 2024 edition, as issued by the Washington State Department of Transportation (WSDOT) and the American Public Works Association (APWA), Washington State Chapter (hereafter “Standard Specifications”). The Standard Specifications, as modified or supplemented by these Special Provisions, all of which are made a part of the Contract Documents, shall govern all of the Work.

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

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

*(March 8, 2013 APWA GSP)*

*(April 1, 2013 WSDOT GSP)*

*(May 1, 2013 R&E GSP)*

*(NWR February 5, 2013)*

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

*(\*\*\*\*\*)*

Also incorporated into the Contract Documents by reference are:

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

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

1 **DIVISION 1**  
2 **GENERAL REQUIREMENTS**

3  
4 **DESCRIPTION OF WORK**  
5 *(March 13, 1995 WSDOT GSP)*

6  
7 This contract provides for improvements of approximately 2,600 linear feet of Ferndale Terrace,  
8 from the intersection of Ferndale Terrace and Hendrickson Avenue, then easterly to Vista Drive,  
9 in Ferndale, Washington. Work will include clearing, grubbing, grading, roadway excavation,  
10 storm sewer drainage improvements, water main installation, sanitary sewer installation, placing  
11 gravel base, hot mix asphalt paving, curb and gutters, sidewalks, ADA ramps, and other work, in  
12 accordance with the Contract Plans, Special Provisions, the Standard Specifications, and Standard  
13 Plans.

14  
15 (\*\*\*\*\*)

16 It is anticipated that this project will be funded in part by the Washington State Department of  
17 Ecology. Neither the State of Washington nor any of its departments or employees are, or shall  
18 be, a party to this contract or any subcontract.

19  
20 (\*\*\*\*\*)

21 **Third-Party Beneficiary:** All parties agree that the State of Washington shall be, and is hereby,  
22 named as an express third-party beneficiary of this contract, with full rights as such.

23  
24 **1-01 DEFINITIONS AND TERMS**

25  
26 **1-01.3 Definitions**

27 *(January 19, 2022 APWA GSP)*

28  
29 Delete the heading **Completion Dates** and the three paragraphs that follow it, and replace them  
30 with the following:

31  
32 **Dates**

33 ***Bid Opening Date***

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

35 ***Award Date***

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

38 ***Contract Execution Date***

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

40 ***Notice to Proceed Date***

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

42 ***Substantial Completion Date***

43 The day the Engineer determines the Contracting Agency has full and unrestricted use and  
44 benefit of the facilities, both from the operational and safety standpoint, any remaining  
45 traffic disruptions will be rare and brief, and only minor incidental work, replacement of  
46 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



1 form(s) are required by the Contract Documents, which may be a combination of a Payment  
2 Bond and a Performance Bond.

3  
4 **Contract Documents**

5 See definition for "Contract".  
6

7 **Contract Time**

8 The period of time established by the terms and conditions of the Contract within which the  
9 Work must be physically completed.  
10

11 **Notice of Award**

12 The written notice from the Contracting Agency to the successful Bidder signifying the  
13 Contracting Agency's acceptance of the Bid Proposal.  
14

15 **Notice to Proceed**

16 The written notice from the Contracting Agency or Engineer to the Contractor authorizing and  
17 directing the Contractor to proceed with the Work and establishing the date on which the  
18 Contract time begins.  
19

20 **Traffic**

21 Both vehicular and non-vehicular traffic, such as pedestrians, bicyclists, wheelchairs, and  
22 equestrian traffic.  
23

24 **1-02 BID PROCEDURES AND CONDITIONS**  
25

26 **1-02.1 Prequalification of Bidders**  
27

28 Delete this Section and replace it with the following:  
29

30 **1-02.1 Qualifications of Bidder**

31 *(January 24, 2011 APWA GSP)*  
32

33 Before award of a public works contract, a bidder must meet at least the minimum  
34 qualifications of RCW 39.04.350(1) to be considered a responsible bidder and qualified to be  
35 awarded a public works project.  
36

37 **1-02.2 Plans and Specifications**

38 *(June 27, 2011 APWA GSP)*  
39

40 Delete this section and replace it with the following:  
41

42 Information as to where Bid Documents can be obtained or reviewed can be found in the Call  
43 for Bids (Advertisement for Bids) for the work.  
44

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

To Prime Contractor	No. of Sets	Basis of Distribution
Reduced plans (11" x 17")	5	Furnished automatically upon award.
Contract Provisions	5	Furnished automatically upon award.
Large plans (e.g., 22" x 34")	3	Furnished only upon request.

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

#### **1-02.4 EXAMINATION OF PLANS, SPECIFICATIONS AND SITE OF WORK**

##### **1-02.4(1) General**

*(December 30, 2022 APWA GSP Option B)*

The first sentence of the ninth paragraph, beginning with "Prospective Bidder desiring...", is revised to read:

Prospective Bidders desiring an explanation or interpretation of the Bid Documents, shall request the explanation or interpretation in writing by close of business 5 business days preceding the bid opening to allow a written reply to reach all prospective Bidders before the submission of their Bids.

##### **Pre-Bid Conference**

Due to the nature of the project, the Contracting Agency will hold one pre-bid conference for all proposal holders for this project. Subcontractors or other plan holders are encouraged to attend.

Those prospective bidders wanting to take part in the Pre-Bid Conference shall meet at the Ferndale City Hall, 2095 Main Street, Ferndale, Washington 98248. The meeting will start on **January 22, 2025, at 2:00 PM**. A jobsite visit may follow upon request. Attendance at this Pre-Bid Conference is not mandatory.

##### **1-02.5 Proposal Forms**

*(November 25, 2024 APWA GSP)*

Delete this section and replace it with the following:

The Proposal Form will identify the project and its location and describe the work. It will also list estimated quantities, units of measurement, the items of work, and the materials to be

furnished at the unit bid prices. The bidder shall complete spaces on the proposal form that call for, but are not limited to, unit prices; extensions; summations; the total bid amount; signatures; date; and, where applicable, retail sales taxes and acknowledgment of addenda; the bidder's name, address, telephone number, and signature; the bidder's DBE commitment, if applicable; a State of Washington Contractor's Registration Number; and a Business License Number, if applicable. Bids shall be in legible figures (not words) written in ink or typed and expressed in U.S. dollars. The required certifications are included as part of the Proposal Form.

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

#### **1-02.6 Preparation of Proposal**

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

Supplement the second paragraph with the following:

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

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

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

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

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

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

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

#### **Subcontractor's List**

*(November 25, 2024 APWA GSP 1-02.6, Option C)*

The fourth paragraph of Section 1-02.6 is revised to read:

1 The Bidder shall submit with the Bid the completed Subcontractor List included in the  
2 Contracting Agency Proposal Package. If a Subcontractor List Form is not included in the  
3 package, use DOT Form 271-015LP. The Form shall contain the following:  
4

- 5 1. Subcontractors who will perform the work of structural steel installation, rebar  
6 installation, heating, ventilation, air conditioning, and plumbing as described in  
7 RCW 18.106 and electrical as described in RCW 19.28,
- 8 2. The Work those subcontractors will perform on the Contract as described in RCW  
9 39.30.060; and
- 10 3. No more than one subcontractor for each category of work identified, except, when  
11 subcontractors vary with Bid alternates, in which case the Bidder shall identify  
12 which subcontractor will be used for which alternate.  
13

#### 14 **1-02.7 Bid Deposit**

15 *(March 8, 2013 APWA GSP)*  
16

17 Supplement this section with the following:  
18

19 Bid bonds shall contain the following:

- 20 1. Contracting Agency-assigned number for the project;
- 21 2. Name of the project;
- 22 3. The Contracting Agency named as obligee;
- 23 4. The amount of the bid bond stated either as a dollar figure or as a percentage which  
24 represents five percent of the maximum bid amount that could be awarded;
- 25 5. Signature of the bidder's officer empowered to sign official statements. The signature of  
26 the person authorized to submit the bid should agree with the signature on the bond, and  
27 the title of the person must accompany the said signature;
- 28 6. The signature of the surety's officer empowered to sign the bond and the power of attorney.  
29

30 If so stated in the Contract Provisions, bidder must use the bond form included in the Contract  
31 Provisions.  
32

33 If so stated in the Contract Provisions, cash will not be accepted for a bid deposit.  
34

35 *(February 1, 2008, R&E GSP)*

36 Section 1-02.7 is supplemented with the following:  
37

38 All bid bonds shall be made payable to the City of Ferndale.  
39

#### 40 **1-02.9 Delivery of Proposal**

41 *(September 20, 2021 R&E GSP)*  
42

43 Delete this section and replace it with the following:  
44

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

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

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

#### **1-02.10 Withdrawing, Revising, or Supplementing Proposal** (July 23, 2015 APWA GSP)

Delete this section in its entirety, 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 **1-02.13 Irregular Proposals**  
2 *(September 3, 2024 APWA GSP)*

3  
4 Delete this section and replace it with the following:

- 5  
6 1. A Proposal will be considered irregular and will be rejected if:
- 7 a. The Bidder is not prequalified when so required;
  - 8 b. The Bidder adds provisions reserving the right to reject or accept the Award, or
  - 9 enter into the Contract;
  - 10 c. A price per unit cannot be determined from the Bid Proposal;
  - 11 d. The Proposal form is not properly executed;
  - 12 e. The Bidder fails to submit or properly complete a subcontractor list (WSDOT Form
  - 13 271-015), if applicable, as required in Section 1-02.6;
  - 14 f. The Bidder fails to submit or properly complete a Disadvantaged Business
  - 15 Enterprise Certification (WSDOT Form 272-056), if applicable, as required in
  - 16 Section 1-02.6;
  - 17 g. The Bidder fails to submit Written Confirmations (WSDOT Form 422-031) from
  - 18 each DBE firm listed on the Bidder's completed DBE Utilization Certification that
  - 19 they are in agreement with the bidder's DBE participation commitment, if
  - 20 applicable, as required in Section 1-02.6, or if the written confirmation that is
  - 21 submitted fails to meet the requirements of the Special Provisions;
  - 22 h. The Bidder fails to submit DBE Good Faith Effort documentation, if applicable, as
  - 23 required in Section 1-02.6, or if the documentation that is submitted fails to
  - 24 demonstrate that a Good Faith Effort to meet the Condition of Award in accordance
  - 25 with Section 1-07.11;
  - 26 i. The Bidder fails to submit a DBE Bid Item Breakdown (WSDOT Form 272-054),
  - 27 if applicable, as required in Section 1-02.6, or if the documentation that is submitted
  - 28 fails to meet the requirements of the Special Provisions;
  - 29 j. The Bidder fails to submit the Bidder Questionnaire (DOT Form 272-022), if
  - 30 applicable as required by Section 1-02.6, or if the documentation that is submitted
  - 31 fails to meet the requirements of the Special Provisions; or
  - 32 k. The Bid Proposal does not constitute a definite and unqualified offer to meet the
  - 33 material terms of the Bid invitation.
- 34  
35 2. A Proposal may be considered irregular and may be rejected if:
- 36 a. The Proposal does not include a unit price for every Bid item;
  - 37 b. Any of the unit prices are excessively unbalanced (either above or below the
  - 38 amount of a reasonable Bid) to the potential detriment of the Contracting Agency;
  - 39 c. The authorized Proposal Form furnished by the Contracting Agency is not used or
  - 40 is altered;
  - 41 d. The completed Proposal form contains unauthorized additions, deletions, alternate
  - 42 Bids, or conditions;
  - 43 e. Receipt of Addenda is not acknowledged;
  - 44 f. A member of a joint venture or partnership and the joint venture or partnership
  - 45 submit Proposals for the same project (in such an instance, both Bids may be
  - 46 rejected); or

g. If Proposal form entries are not made in ink.

*(December 29, 2008 R&E GSP)*

Item 1a is supplemented with the following:

“Bidders do not have to be pre-qualified.”

#### **1-02.14 Disqualification of Bidders**

*(May 17, 2018 APWA GSP, Option A)*

Delete this section and replace it with the following:

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

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

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

#### **1-02.15 Pre Award Information**

*(December 30, 2022 APWA GSP)*

Revise this section to read:

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

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

1 the work is located.

- 2 7. Any other information or action taken that is deemed necessary to ensure that the bidder is  
3 the lowest responsible bidder.  
4

5 *(December 29, 2008 R&E GSP)*

6 Section 1-02.15 is supplemented with the following:  
7

- 8 9. Evidence of financial resources and experience,  
9 10. Organization and equipment the Bidder has available for the performance of the contract  
10 by the Bidder and each proposed subcontractor.  
11

## 12 **1-03 AWARD AND EXECUTION OF CONTRACT**

13

### 14 **1-03.1 Consideration of Bids**

15 *(December 30, 2022 APWA GSP)*  
16

17 Revise the first paragraph to read:  
18

19 After opening and reading proposals, the Contracting Agency will check them for correctness  
20 of extensions of the prices per unit and the total price. If a discrepancy exists between the price  
21 per unit and the extended amount of any bid item, the price per unit will control. If a minimum  
22 bid amount has been established for any item and the bidder's unit or lump sum price is less  
23 than the minimum specified amount, the Contracting Agency will unilaterally revise the unit  
24 or lump sum price, to the minimum specified amount and recalculate the extension. The total  
25 of extensions, corrected where necessary, including sales taxes where applicable and such  
26 additives and/or alternates as selected by the Contracting Agency, will be used by the  
27 Contracting Agency for award purposes and to fix the Awarded Contract Price amount and the  
28 amount of the contract bond.  
29

### 30 **1-03.3 Execution of Contract**

31 *(July 8, 2024 APWA GSP Option A)*  
32

33 Revise this section to read:  
34

35 Within 3 calendar days of Award date (not including Saturdays, Sundays and Holidays), the  
36 successful Bidder shall provide the information necessary to execute the Contract to the  
37 Contracting Agency. The Bidder shall send the contact information, including the full name,  
38 email address, and phone number, for the authorized signer and bonding agent to the  
39 Contracting Agency.  
40

41 Copies of the Contract Provisions, including the unsigned Form of Contract, will be available  
42 for signature by the successful bidder on the first business day following award. The number  
43 of copies to be executed by the Contractor will be determined by the Contracting Agency.  
44

45 Within 20 calendar days after the award date, the successful bidder shall return the signed  
46 Contracting Agency-prepared contract, an insurance certification as required by Section 1-



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

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

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

#### **1-03.4 Contract Bond**

*(July 23, 2015 APWA GSP)*

Delete the first paragraph and replace it with the following:

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

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

6. Be signed by an officer of the Contractor empowered to sign official statements (sole proprietor or partner). If the Contractor is a corporation, the bond(s) must be signed by the president or vice president, unless accompanied by written proof of the authority of the individual signing the bond(s) to bind the corporation (i.e., corporate resolution, power of attorney, or a letter to such effect signed by the president or vice president).

#### **1-03.7 Judicial Review**

*(December 30, 2022 APWA GSP)*

Revise this section to read:

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

### **1-04 SCOPE OF THE WORK**

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

*(December 30, 2022 APWA GSP)*

Revise the second paragraph to read:

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

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

#### **1-04.4 Changes**

*(January 19, 2022 APWA GSP)*

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

#### **1-04.6 Variation in Estimated Quantities**

*(May 25, 2006 APWA GSP)*

Supplement this Section with the following:

The quantities for:

1 Gravel Base

2  
3 have been entered into the Proposal only to provide a common proposal for bidders. Actual  
4 quantities will be determined in the field as the work progresses, and will be paid at the original  
5 bid price, regardless of final quantity. These bid items shall not be subject to the provisions of  
6 1-04.6 of the Standard Specifications.

7  
8 **1-05 CONTROL OF WORK**

9  
10 **1-05.4 Conformity with and Deviations from Plans and Stakes**

11  
12 Section 1-05.4 is supplemented with the following:

13  
14 *(January 13, 2021)*

15 ***Contractor Surveying - Roadway***

16 The Contracting Agency has provided primary survey control in the Plans.

17  
18 The Contractor shall be responsible for setting, maintaining, and resetting all alignment  
19 stakes, slope stakes, and grades necessary for the construction of the roadbed, drainage,  
20 surfacing, paving, channelization and pavement marking, illumination and signals, guardrails  
21 and barriers, and signing. Except for the survey control data to be furnished by the  
22 Contracting Agency, calculations, surveying, and measuring required for setting and  
23 maintaining the necessary lines and grades shall be the Contractor's responsibility.

24  
25 The Contractor shall inform the Engineer when monuments are discovered that were not  
26 identified in the Plans and construction activity may disturb or damage the monuments. All  
27 monuments noted on the plans "DO NOT DISTURB" shall be protected throughout the length  
28 of the project or be replaced at the Contractors expense.

29  
30 Detailed survey records shall be maintained, including a description of the work performed  
31 on each shift, the methods utilized, and the control points used. The record shall be adequate  
32 to allow the survey to be reproduced. A copy of each day's record shall be provided to the  
33 Engineer within three working days after the end of the shift.

34  
35 The meaning of words and terms used in this provision shall be as listed in "Definitions of  
36 Surveying and Associated Terms" current edition, published by the American Congress on  
37 Surveying and Mapping and the American Society of Civil Engineers.

38  
39 The survey work shall include but not be limited to the following:

- 40  
41 1. Verify the primary horizontal and vertical control furnished by the Contracting  
42 Agency, and expand into secondary control by adding stakes and hubs as well as  
43 additional survey control needed for the project. Provide descriptions of secondary  
44 control to the Contracting Agency. The description shall include coordinates and  
45 elevations of all secondary control points.

2. Establish, the centerlines of all alignments, by placing hubs, stakes, or marks on centerline or on offsets to centerline at all curve points (PCs, PTs, and PIs) and at points on the alignments spaced no further than 50 feet.
3. Establish clearing limits, placing stakes at all angle points and at intermediate points not more than 50 feet apart. The clearing and grubbing limits shall be 5 feet beyond the toe of a fill and 10 feet beyond the top of a cut unless otherwise shown in the Plans.
4. Establish grading limits, placing slope stakes at centerline increments not more than 50 feet apart. Establish offset reference to all slope stakes. If Global Positioning Satellite (GPS) Machine Controls are used to provide grade control, then slope stakes may be omitted at the discretion of the Contractor
5. Establish the horizontal and vertical location of all drainage features, placing offset stakes to all drainage structures and to pipes at a horizontal interval not greater than 25 feet.
6. Establish roadbed and surfacing elevations by placing stakes at the top of subgrade and at the top of each course of surfacing. Subgrade and surfacing stakes shall be set at horizontal intervals not greater than 50 feet in tangent sections, 25 feet in curve sections with a radius less than 300 feet, and at 10-foot intervals in intersection radii with a radius less than 10 feet. Transversely, stakes shall be placed at all locations where the roadway slope changes and at additional points such that the transverse spacing of stakes is not more than 12 feet. If GPS Machine Controls are used to provide grade control, then roadbed and surfacing stakes may be omitted at the discretion of the Contractor.
7. Establish intermediate elevation benchmarks as needed to check work throughout the project.
8. Provide references for paving pins at 25-foot intervals or provide simultaneous surveying to establish location and elevation of paving pins as they are being placed.
9. For all other types of construction included in this provision, (including but not limited to channelization and pavement marking, illumination and signals, guardrails and barriers, and signing) provide staking and layout as necessary to adequately locate, construct, and check the specific construction activity.
10. Contractor shall determine if changes are needed to the profiles or roadway sections shown in the Contract Plans in order to achieve proper smoothness and drainage where matching into existing features, such as a smooth transition from new pavement to existing pavement. The Contractor shall submit these changes to the Engineer for review and approval 10 days prior to the beginning of work.

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

3  
4 The Contractor shall ensure a surveying accuracy within the following tolerances:

	<u>Vertical</u>	<u>Horizontal</u>
Slope stakes	±0.10 feet	±0.10 feet
Subgrade grade stakes set 0.04 feet below grade	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Stationing on roadway	N/A	±0.1 feet
Alignment on roadway	N/A	±0.04 feet
Surfacing grade stakes	±0.01 feet	±0.5 feet (parallel to alignment) ±0.1 feet (normal to alignment)
Roadway paving pins for surfacing or paving	±0.01 feet	±0.2 feet (parallel to alignment) ±0.1 feet (normal to alignment)

20  
21  
22  
23  
24  
25  
26  
27 The Contracting Agency may spot-check the Contractor's surveying. These spot-checks will  
28 not change the requirements for normal checking by the Contractor.

29  
30 When staking roadway alignment and stationing, the Contractor shall perform independent  
31 checks from different secondary control to ensure that the points staked are within the  
32 specified survey accuracy tolerances.

33  
34 The Contractor shall calculate coordinates for the alignment. The Contracting Agency will  
35 verify these coordinates prior to issuing approval to the Contractor for commencing with the  
36 work. The Contracting Agency will require up to seven calendar days from the date the data  
37 is received.

38  
39 Contract work to be performed using contractor-provided stakes shall not begin until the  
40 stakes are approved by the Contracting Agency. Such approval shall not relieve the Contractor  
41 of responsibility for the accuracy of the stakes.

42  
43 Stakes shall be marked in accordance with Standard Plan A10.10. When stakes are needed  
44 that are not described in the Plans, then those stakes shall be marked, at no additional cost to  
45 the Contracting Agency as ordered by the Engineer.

1 (November 25, 2024 APWA GSP Option D)

2 **Contractor Surveying – ADA Features**

3 **ADA Feature Staking Requirements**

4 The Contractor shall be responsible for setting, maintaining, and resetting all alignment stakes,  
5 and grades necessary for the construction of the ADA features. Calculations, surveying, and  
6 measuring required for setting and maintaining the necessary lines and grades shall be the  
7 Contractor's responsibility. The Contractor shall build the ADA features within the  
8 specifications in the Standard Plans and contract documents.  
9

10 **ADA Feature Contract Compliance**

11 The Contractor shall be responsible for completing measurements to verify all ADA features  
12 comply with the Contract in the presence of the Engineer.  
13

14 **ADA Feature As-Built Measurements**

15 The Contractor shall be responsible for providing the latitude and longitude of each ADA  
16 feature as indicated on the ADA Post Inspection Form(s) (WSDOT Form 224-020LP).  
17

18 The completed ADA Post Inspection Form(s) (WSDOT Form 224-020LP) shall be submitted  
19 as a Type 3 Working Drawing and transmitted to the Engineer within 30 calendar days of  
20 completing the ADA feature. After acceptance, the Contracting Agency will retain the final  
21 form(s) for their records.  
22

23 **Payment**

24 Payment will be made for the following bid item when included in the proposal:  
25

26 "Roadway Surveying", lump sum.  
27

28 The lump sum contract price for "Roadway Surveying" shall be full pay for all labor,  
29 equipment, materials, and supervision utilized to perform the Work specified, including any  
30 resurveying, checking, correction of errors, replacement of missing or damaged stakes, and  
31 coordination efforts.  
32

33 "ADA Feature Surveying", lump sum.  
34

35 The lump sum Contract price for "ADA Feature Surveying" shall be full pay for all the Work  
36 as specified.  
37

38 In the instance where an ADA feature does not meet accessibility requirements, all work to  
39 replace non-compliant work and then to measure, record the as-built measurements, and  
40 transmit the electronic forms to the Engineer shall be completed at no additional cost to the  
41 Contracting Agency.  
42

1 **1-05.7 Removal of Defective and Unauthorized Work**

2 *(October 1, 2005 APWA GSP)*

3  
4 Supplement this section with the following:

5  
6 If the Contractor fails to remedy defective or unauthorized work within the time specified in a  
7 written notice from the Engineer, or fails to perform any part of the work required by the  
8 Contract Documents, the Engineer may correct and remedy such work as may be identified in  
9 the written notice, with Contracting Agency forces or by such other means as the Contracting  
10 Agency may deem necessary.

11  
12 If the Contractor fails to comply with a written order to remedy what the Engineer determines  
13 to be an emergency situation, the Engineer may have the defective and unauthorized work  
14 corrected immediately, have the rejected work removed and replaced, or have work the  
15 Contractor refuses to perform completed by using Contracting Agency or other forces. An  
16 emergency situation is any situation when, in the opinion of the Engineer, a delay in its remedy  
17 could be potentially unsafe, or might cause serious risk of loss or damage to the public.

18  
19 Direct or indirect costs incurred by the Contracting Agency attributable to correcting and  
20 remedying defective or unauthorized work, or work the Contractor failed or refused to perform,  
21 shall be paid by the Contractor. Payment will be deducted by the Engineer from monies due,  
22 or to become due, the Contractor. Such direct and indirect costs shall include in particular, but  
23 without limitation, compensation for additional professional services required, and costs for  
24 repair and replacement of work of others destroyed or damaged by correction, removal, or  
25 replacement of the Contractor's unauthorized work.

26  
27 No adjustment in contract time or compensation will be allowed because of the delay in the  
28 performance of the work attributable to the exercise of the Contracting Agency's rights  
29 provided by this Section.

30  
31 The rights exercised under the provisions of this section shall not diminish the Contracting  
32 Agency's right to pursue any other avenue for additional remedy or damages with respect to  
33 the Contractor's failure to perform the work as required.

34  
35 **1-05.11 Final Inspection**

36  
37 Delete this section and replace it with the following:

38  
39 **1-05.11 Final Inspections and Operational Testing**

40 *(October 1, 2005 APWA GSP)*

41  
42 **1-05.11(1) Substantial Completion Date**

43  
44 When the Contractor considers the work to be substantially complete, the Contractor shall so  
45 notify the Engineer and request the Engineer establish the Substantial Completion Date. The  
46 Contractor's request shall list the specific items of work that remain to be completed in order

1 to reach physical completion. The Engineer will schedule an inspection of the work with the  
2 Contractor to determine the status of completion. The Engineer may also establish the  
3 Substantial Completion Date unilaterally.

4  
5 If, after this inspection, the Engineer concurs with the Contractor that the work is substantially  
6 complete and ready for its intended use, the Engineer, by written notice to the Contractor, will  
7 set the Substantial Completion Date. If, after this inspection the Engineer does not consider the  
8 work substantially complete and ready for its intended use, the Engineer will, by written notice,  
9 so notify the Contractor giving the reasons therefor.

10  
11 Upon receipt of written notice concurring in or denying substantial completion, whichever is  
12 applicable, the Contractor shall pursue vigorously, diligently and without unauthorized  
13 interruption, the work necessary to reach Substantial and Physical Completion. The Contractor  
14 shall provide the Engineer with a revised schedule indicating when the Contractor expects to  
15 reach substantial and physical completion of the work.

16  
17 The above process shall be repeated until the Engineer establishes the Substantial Completion  
18 Date and the Contractor considers the work physically complete and ready for final inspection.

#### 19 20 **1-05.11(2) Final Inspection and Physical Completion Date**

21  
22 When the Contractor considers the work physically complete and ready for final inspection,  
23 the Contractor by written notice, shall request the Engineer to schedule a final inspection. The  
24 Engineer will set a date for final inspection. The Engineer and the Contractor will then make a  
25 final inspection and the Engineer will notify the Contractor in writing of all particulars in which  
26 the final inspection reveals the work incomplete or unacceptable. The Contractor shall  
27 immediately take such corrective measures as are necessary to remedy the listed deficiencies.  
28 Corrective work shall be pursued vigorously, diligently, and without interruption until physical  
29 completion of the listed deficiencies. This process will continue until the Engineer is satisfied  
30 the listed deficiencies have been corrected.

31  
32 If action to correct the listed deficiencies is not initiated within 7 days after receipt of the  
33 written notice listing the deficiencies, the Engineer may, upon written notice to the Contractor,  
34 take whatever steps are necessary to correct those deficiencies pursuant to Section 1-05.7.

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

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

#### 42 43 **1-05.11(3) Operational Testing**

44  
45 It is the intent of the Contracting Agency to have at the Physical Completion Date a complete  
46 and operable system. Therefore when the work involves the installation of machinery or other



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

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

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

#### **1-05.13 Superintendents, Labor and Equipment of Contractor**

*(August 14, 2013 APWA GSP)*

Delete the sixth and seventh paragraphs of this section.

#### **1-05.14 Cooperation With Other Contractors**

Section 1-05.14 is supplemented with the following:

##### ***Other Contracts Or Other Work***

*(March 13, 1995 WSDOT GSP)*

It is anticipated that the following work adjacent to or within the limits of this project will be performed by others during this project and will require coordination of the work:

Relocation of existing utilities on Ferndale Terrace by franchise utilities.

#### **1-05.15 Method of Serving Notices**

*(January 4, 2024 APWA GSP)*

Revise the second paragraph to read:

All correspondence from the Contractor shall be served and directed to the Engineer. All correspondence from the Contractor constituting any notification, notice of protest, notice of dispute, or other correspondence constituting notification required to be furnished under the Contract, must be written in paper format, hand delivered or sent via certified mail

1 delivery service with return receipt requested to the Engineer's office. Electronic copies  
2 such as e-mails or electronically delivered copies of correspondence will not constitute  
3 such notice and will not comply with the requirements of the Contract.  
4

5 Add the following new section:  
6

7 **1-05.16 Water and Power**

8 *(October 1, 2005 APWA GSP)*  
9

10 The Contractor shall make necessary arrangements, and shall bear the costs for power and  
11 water necessary for the performance of the work, unless the contract includes power and water  
12 as a pay item.  
13

14 **1-06 CONTROL OF MATERIALS**  
15

16 **1-06.4 Handling and Storing Materials**

17 *(February 1, 2008 R&E GSP)*  
18

19 Section 1-06.4 is supplemented with the following:  
20

21 The Contractor shall make arrangements for storage of equipment and materials.  
22

23 No staging area is provided by the Contracting Agency.  
24

25 **1-06.6 Recycled Materials**

26 *(January 4, 2016 APWA GSP)*  
27

28 Delete this section, including its subsections, and replace it with the following:  
29

30 The Contractor shall make their best effort to utilize recycled materials in the construction of  
31 the project. Approval of such material use shall be as detailed elsewhere in the Standard  
32 Specifications.  
33

34 Prior to Physical Completion the Contractor shall report the quantity of recycled materials  
35 that were utilized in the construction of the project for each of the items listed in Section 9-  
36 03.21. The report shall include hot mix asphalt, recycled concrete aggregate, recycled glass,  
37 steel furnace slag and other recycled materials (e.g. utilization of on-site material and  
38 aggregates from concrete returned to the supplier). The Contractor's report shall be provided  
39 on DOT form 350-075 Recycled Materials Reporting.  
40

41 **1-07 LEGAL RELATIONS AND RESPONSIBILITIES TO THE PUBLIC**  
42

43 **1-07.1 Laws to Be Observed**

1 (October 1, 2005 APWA GSP)

2  
3 Supplement this section with the following:

4  
5 In cases of conflict between different safety regulations, the more stringent regulation shall  
6 apply.

7  
8 The Washington State Department of Labor and Industries shall be the sole and paramount  
9 administrative agency responsible for the administration of the provisions of the Washington  
10 Industrial Safety and Health Act of 1973 (WISHA).

11  
12 The Contractor shall maintain at the project site office, or other well-known place at the project  
13 site, all articles necessary for providing first aid to the injured. The Contractor shall establish,  
14 publish, and make known to all employees, procedures for ensuring immediate removal to a  
15 hospital, or doctor's care, persons, including employees, who may have been injured on the  
16 project site. Employees should not be permitted to work on the project site before the  
17 Contractor has established and made known procedures for removal of injured persons to a  
18 hospital or a doctor's care.

19  
20 The Contractor shall have sole responsibility for the safety, efficiency, and adequacy of the  
21 Contractor's plant, appliances, and methods, and for any damage or injury resulting from their  
22 failure, or improper maintenance, use, or operation. The Contractor shall be solely and  
23 completely responsible for the conditions of the project site, including safety for all persons  
24 and property in the performance of the work. This requirement shall apply continuously, and  
25 not be limited to normal working hours. The required or implied duty of the Engineer to  
26 conduct construction review of the Contractor's performance does not, and shall not, be  
27 intended to include review and adequacy of the Contractor's safety measures in, on, or near  
28 the project site.

29  
30 *(April 3, 2006)*

31 ***Confined Space***

32 Confined spaces are known to exist at the following locations:

33  
34 \*\*\* Stormwater and Sanitary Structures\*\*\*

35  
36 The Contractor shall be fully responsible for the safety and health of all on-site workers and  
37 compliant with Washington Administrative Code (WAC 296-809).

38  
39 The Contractor shall prepare and implement a confined space program for each of the  
40 confined spaces identified above. The Contractors Confined Space program shall be sent to  
41 the Contracting Agency at least 30 days prior to the Contractor beginning work in or adjacent  
42 to the confined space. No work shall be performed in or adjacent to the confined space until  
43 the plan is submitted to the Engineer as required. The Contractor shall communicate with the  
44 Engineer to ensure a coordinated effort for providing and maintaining a safe worksite for both  
45 the Contracting Agency's and Contractor's workers when working in or near a confined space.  
46

1 All costs to prepare and implement the confined space program shall be included in the bid  
2 prices for the various items associated with the confined space work.

### 3 4 **1-07.2 State Taxes**

5  
6 Delete this section, including its sub-sections, in its entirety and replace it with the following:

#### 7 8 **1-07.2 State Sales Tax**

9 *(June 27, 2011 APWA GSP)*

10  
11 The Washington State Department of Revenue has issued special rules on the State sales tax.  
12 Sections 1-07.2(1) through 1-07.2(3) are meant to clarify those rules. The Contractor should  
13 contact the Washington State Department of Revenue for answers to questions in this area.  
14 The Contracting Agency will not adjust its payment if the Contractor bases a bid on a  
15 misunderstood tax liability.

16  
17 The Contractor shall include all Contractor-paid taxes in the unit bid prices or other contract  
18 amounts. In some cases, however, state retail sales tax will not be included. Section 1-07.2(2)  
19 describes this exception.

20  
21 The Contracting Agency will pay the retained percentage (or release the Contract Bond if a  
22 FHWA-funded Project) only if the Contractor has obtained from the Washington State  
23 Department of Revenue a certificate showing that all contract-related taxes have been paid  
24 (RCW 60.28.051). The Contracting Agency may deduct from its payments to the Contractor  
25 any amount the Contractor may owe the Washington State Department of Revenue, whether  
26 the amount owed relates to this contract or not. Any amount so deducted will be paid into the  
27 proper State fund.

#### 28 29 **1-07.2(1) State Sales Tax — Rule 171**

30  
31 WAC 458-20-171, and its related rules, apply to building, repairing, or improving streets,  
32 roads, etc., which are owned by a municipal corporation, or political subdivision of the state,  
33 or by the United States, and which are used primarily for foot or vehicular traffic. This includes  
34 storm or combined sewer systems within and included as a part of the street or road drainage  
35 system and power lines when such are part of the roadway lighting system. For work  
36 performed in such cases, the Contractor shall include Washington State Retail Sales Taxes in  
37 the various unit bid item prices, or other contract amounts, including those that the Contractor  
38 pays on the purchase of the materials, equipment, or supplies used or consumed in doing the  
39 work.

#### 40 41 **1-07.2(2) State Sales Tax — Rule 170**

42  
43 WAC 458-20-170, and its related rules, apply to the constructing and repairing of new or  
44 existing buildings, or other structures, upon real property. This includes, but is not limited to,  
45 the construction of streets, roads, highways, etc., owned by the state of Washington; water  
46 mains and their appurtenances; sanitary sewers and sewage disposal systems unless such

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

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

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

### **1-07.2(3) Services**

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

## **1-07.5 Environmental Regulations**

Section 1-07.5 is supplemented with the following:

### **Environmental Commitments**

*(September 20, 2010 WSDOT GSP)*

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:

Work, reports, documentation, etc., as required per the NPDES Construction Stormwater General Permit.

*(August 3, 2009 WSDOT GSP)*

### **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(1) General**

### **1-07.5(1) General**

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

(\*\*\*\*\*)

No construction related activity shall contribute to the degradation of the environment, allow material to enter surface or ground waters, or allow particulate emissions to the atmosphere, which exceed state or federal standards. Any actions that potentially allow a discharge to state waters must have prior approval of the Washington State Department of Ecology.

#### **1-07.6 Permits and Licenses**

*(January 2, 2018 WSDOT GSP)*

The Contracting Agency has obtained the below-listed permit(s) for this project. A copy of the permit(s) is attached as an appendix for informational purposes. Copies of these permits, including a copy of the Transfer of Coverage form, when applicable, are required to be onsite at all times.

Contact with the permitting agencies, concerning the below-listed permit(s), shall be made through the Engineer with the exception of when the Construction Stormwater General Permit coverage is transferred to the Contractor, direct communication with the Department of Ecology is allowed. The Contractor shall be responsible for obtaining Ecology's approval for any Work requiring additional approvals (e.g. Request for Chemical Treatment Form). The Contractor shall obtain additional permits as necessary. All costs to obtain and comply with additional permits shall be included in the applicable Bid items for the Work involved.

NAME OF DOCUMENT	PERMITTING AGENCY	PERMIT REFERENCE NO.
NPDES Construction Stormwater General Permit	Department of Ecology	WAR314078

#### **1-07.7 Load Limits**

*(March 13, 1995 WSDOT GSP)*

Section 1-07.7 is supplemented with the following:

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

#### **1-07.11(2) Contractual Requirements**

*(November 25, 2024 APWA GSP)*

Delete item 11 of the first paragraph of Section 1-07.11(2).

#### **1-07.15 Temporary Water Pollution Prevention**

*(February 1, 2008 R&E GSP)*

Section 1-07.15 is supplemented with the following:

Erosion Control shall include but not be limited to preventing storm water which has come in

1 contact with disturbed or excavated areas from entering the storm drainage system. The  
2 contractor will not allow flow from existing ditches or ground water to come in contact with  
3 disturbed or excavated areas. The contractor shall be required to take any means necessary to  
4 prevent, control and stop water pollution or erosion within the project as shown on the Plans.  
5

#### 6 **1-07.17 Utilities and Similar Facilities**

7 *(April 2, 2007 WSDOT GSP)*  
8

9 Section 1-07.17 is supplemented with the following:  
10

11 Locations and dimensions shown in the Plans for existing facilities are in accordance with  
12 available information obtained without uncovering, measuring, or other verification.  
13

14 The following addresses and telephone numbers of utility companies known or suspected of  
15 having facilities within the project limits are supplied for the Contractor's convenience:  
16

##### 17 **Puget Sound Energy**

18 Jane Major, PSE Project Manager/Public Improvement  
19 (360) 791-2748  
20 jane.major@pse.com  
21

##### 22 **Zipty Communications**

23 Barb Robinson  
24 (360) 770-6594  
25 [barbara.robinson@zipty.com](mailto:barbara.robinson@zipty.com)  
26

##### 27 **Comcast Cable**

28 Alvin Kuntz  
29 (425) 293-1009  
30 alvin\_kuntz@cable.comcast.com  
31

##### 32 **Wave**

33 Jeremiah Strand  
34 (360) 500-9011  
35 jstrand@wavebroadband.com  
36

##### 37 **Cascade Natural Gas**

38 Cameron Krier  
39 (360) 812-5243  
40 Cameron.krier@cngc.com  
41

##### 42 **City of Ferndale Public Works**

43 Bo Westford  
44 (360) 384-4006  
45 BoWestford@cityofferndale.org  
46

1 **1-07.18 Public Liability and Property Damage Insurance**

2  
3 Delete this section in its entirety, and replace it with the following:

4  
5 **1-07.18 Insurance**

6 *(January 4, 2024 APWA GSP)*

7  
8 **1-07.18(1) General Requirements**

- 9 A. The Contractor shall procure and maintain the insurance described in all subsections of section  
10 1-07.18 of these Special Provisions, from insurers with a current A. M. Best rating of not less  
11 than A-: VII and licensed to do business in the State of Washington. The Contracting Agency  
12 reserves the right to approve or reject the insurance provided, based on the insurer's financial  
13 condition.
- 14  
15 B. The Contractor shall keep this insurance in force without interruption from the commencement  
16 of the Contractor's Work through the term of the Contract and for thirty (30) days after the  
17 Physical Completion date, unless otherwise indicated below.
- 18  
19 C. If any insurance policy is written on a claims-made form, its retroactive date, and that of all  
20 subsequent renewals, shall be no later than the effective date of this Contract. The policy shall  
21 state that coverage is claims made and state the retroactive date. Claims-made form coverage  
22 shall be maintained by the Contractor for a minimum of 36 months following the Completion  
23 Date or earlier termination of this Contract, and the Contractor shall annually provide the  
24 Contracting Agency with proof of renewal. If renewal of the claims made form of coverage  
25 becomes unavailable, or economically prohibitive, the Contractor shall purchase an extended  
26 reporting period ("tail") or execute another form of guarantee acceptable to the Contracting  
27 Agency to assure financial responsibility for liability for services performed.
- 28  
29 D. The Contractor's Automobile Liability, Commercial General Liability and Excess or Umbrella  
30 Liability insurance policies shall be primary and non-contributory insurance as respects the  
31 Contracting Agency's insurance, self-insurance, or self-insured pool coverage. Any insurance,  
32 self-insurance, or self-insured pool coverage maintained by the Contracting Agency shall be  
33 excess of the Contractor's insurance and shall not contribute with it.
- 34  
35 E. The Contractor shall provide the Contracting Agency and all additional insureds with written  
36 notice of any policy cancellation, within two business days of their receipt of such notice.
- 37  
38 F. The Contractor shall not begin work under the Contract until the required insurance has been  
39 obtained and approved by the Contracting Agency
- 40  
41 G. Failure on the part of the Contractor to maintain the insurance as required shall constitute a  
42 material breach of contract, upon which the Contracting Agency may, after giving five  
43 business days' notice to the Contractor to correct the breach, immediately terminate the  
44 Contract or, at its discretion, procure or renew such insurance and pay any and all premiums  
45 in connection therewith, with any sums so expended to be repaid to the Contracting Agency  
46 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
- Reichhardt & Ebe Engineering, Inc.

The above-listed entities shall be additional insured(s) for the full available limits of liability maintained by the Contractor, irrespective of whether such limits maintained by the Contractor are greater than those required by 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 **1-07.18(4) Verification of Coverage**

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

8  
9 Verification of coverage shall include:

- 10 1. An ACORD certificate or a form determined by the Contracting Agency to be equivalent.  
11 2. Copies of all endorsements naming Contracting Agency and all other entities listed in  
12 1-07.18(2) as additional insured(s), showing the policy number. The Contractor may submit a  
13 copy of any blanket additional insured clause from its policies instead of a separate  
14 endorsement.  
15 3. Any other amendatory endorsements to show the coverage required herein.  
16 4. A notation of coverage enhancements on the Certificate of Insurance shall not satisfy these  
17 requirements – actual endorsements must be submitted.

18  
19 Upon request by the Contracting Agency, the Contractor shall forward to the Contracting  
20 Agency a full and certified copy of the insurance policy(s). If Builders Risk insurance is  
21 required on this Project, a full and certified copy of that policy is required when the Contractor  
22 delivers the signed Contract for the work.

23  
24 **1-07.18(5) Coverages and Limits**

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

29  
30 All deductibles and self-insured retentions must be disclosed and are subject to approval by the  
31 Contracting Agency. The cost of any claim payments falling within the deductible or self-  
32 insured retention shall be the responsibility of the Contractor. In the event an additional insured  
33 incurs a liability subject to any policy's deductibles or self-insured retention, said deductibles or  
34 self-insured retention shall be the responsibility of the Contractor.

35  
36 **1-07.18(5)A Commercial General Liability**

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

42  
43 The Commercial General Liability insurance shall be endorsed to provide a per project general  
44 aggregate limit, using ISO form CG 25 03 05 09 or an equivalent endorsement.

45  
46 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 Public Convenience and Safety**

##### **1-07.23(1) Construction under Traffic**

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

(January 5, 2015 WSDOT GSP)

Lane closures are subject to the following restrictions:

\*\*\* Unless noted on the Detour Plans, a one lane closure will be allowed during working hours.\*\*\*

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

Lane closures are not allowed on any of the following:

1. A holiday,
2. A holiday weekend; holidays that occur on Friday, Saturday, Sunday or Monday are considered a holiday weekend. A holiday weekend includes Saturday, Sunday, and the holiday.
3. After 5 p.m. on the day prior to a holiday or holiday weekend, and

1  
2 4. Before 7 a.m. on the day after the holiday or holiday weekend.  
3

4 (*July 22, 2024 R&E GSP*)  
5

6 **General Restrictions**

7 Construction vehicles using a closed traffic lane shall travel only in the normal direction of  
8 traffic flow unless expressly allowed in an accepted traffic control plan. Construction vehicles  
9 shall be equipped with flashing or rotating amber lights.  
10

11 Work over an open lane of traffic will not be allowed, unless a plan for the protection of the  
12 traveling public from objects falling onto the traveled way is approved by the Engineer. This  
13 protection shall remain in place during construction and meet minimum vertical clearance for  
14 the highway.  
15

16 **Controlled Access**

17 No special access or egress shall be allowed by the Contractor other than normal legal  
18 movements or as shown in the Plans.  
19

20 **Pedestrian Access**

21 The Contractor shall keep all pedestrian routes and access point (including sidewalks and  
22 crosswalks when located within the project limits) open and clear at all times unless permitted  
23 otherwise by the Engineer in an approved traffic control plan.  
24

25 **Signs and Traffic Control Devices**

26 All signs and traffic control devices for the permitted closures shall only be installed during  
27 the hours specified on the plans. Construction signs, if placed earlier than the specified hours  
28 of closure, shall be turned or covered so as not to be visible to motorists.  
29

30 **Hours of Darkness**

31 The Contractor shall, at no additional cost to the Contracting Agency, make all arrangements  
32 for operations during hours of darkness. A portable illumination system, which will adequately  
33 illuminate the entire work area shall be provided. Flagger stations and advance warning signs  
34 shall be illuminated by floodlights that do not create glare that poses a hazard for drivers and  
35 to the satisfaction of the Engineer. Flares are for emergency use and are not considered a  
36 proper method of illumination.  
37

38 **Advance Notification**

39 The Contractor shall be responsible for notifying private property owners, or tenants, five (5)  
40 working days in advance of scheduled interruptions of access to private roads or driveways.  
41 The Contractor shall notify the Engineer three (3) working days in advance of scheduled  
42 interruptions of access to private road or driveways. The Contractor shall only interrupt access  
43 to one half of any private road or driveway. The Contractor shall notify private property  
44 owners, or tenants, by having a representative of the Contractor personally contact the private  
45 property owner or tenant. If the property owner or tenant is not available, the Contractor shall  
46 leave a door hanger notice indicating the commencement date of work, duration of work, the

1 type of work being done, and the Contractor's and Engineer's phone number and address for  
2 questions and concerns. The Engineer shall be provided adequate time to review, comment,  
3 and approve the door hanger notice prior to the Contractor placing any notices. The Contractor  
4 shall provide a copy of the final door hanger for the CONTRACTING AGENCY's records.  
5 Access shall be restored as soon as possible, but not later than the end of each working day.  
6 Any exception will only be allowed with the approval of the private property owner, tenant,  
7 and the Engineer. All costs involved with public notification shall be incidental to the various  
8 bid items.

#### 9 10 **Advance Notification – General Public**

11 The Contractor shall notify the Engineer in writing of any traffic impacts related to lane  
12 closure, shoulder closure, sidewalk closure, or any combination for the week by 12:00 p.m.  
13 (noon) Wednesday the week prior to the stated impacts.

14  
15 The Contractor shall notify the Engineer in writing ten working days in advance of any traffic  
16 impacts related to full roadway closure, ramp closure, or both.

17  
18 The Contractor shall notify the Engineer in writing of any changes to the stated traffic impacts  
19 a minimum of 48 hours prior to the traffic impacts.

#### 20 21 **Public Notification**

22 The Contractor shall notify the local fire, police, emergency service, and city engineering  
23 departments; transit companies; and the affected school district(s) in writing a minimum of 5  
24 working days prior to each closure. The Contractor shall furnish copies of these notifications  
25 to the Engineer.

#### 26 27 **1-07.24 Rights of Way**

28 *(July 23, 2015 APWA GSP)*

29  
30 Delete this section and replace it with the following:

31  
32 Street Right of Way lines, limits of easements, and limits of construction permits are indicated  
33 in the Plans. The Contractor's construction activities shall be confined within these limits,  
34 unless arrangements for use of private property are made.

35  
36 Generally, the Contracting Agency will have obtained, prior to bid opening, all rights of way  
37 and easements, both permanent and temporary, necessary for carrying out the work.  
38 Exceptions to this are noted in the Bid Documents or will be brought to the Contractor's  
39 attention by a duly issued Addendum.

40  
41 Whenever any of the work is accomplished on or through property other than public Right of  
42 Way, the Contractor shall meet and fulfill all covenants and stipulations of any easement  
43 agreement obtained by the Contracting Agency from the owner of the private property. Copies  
44 of the easement agreements may be included in the Contract Provisions or made available to  
45 the Contractor as soon as practical after they have been obtained by the Engineer.

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

9  
10 Each property owner shall be given 48 hours notice prior to entry by the Contractor. This  
11 includes entry onto easements and private property where private improvements must be  
12 adjusted.

13  
14 The Contractor shall be responsible for providing, without expense or liability to the  
15 Contracting Agency, any additional land and access thereto that the Contractor may desire for  
16 temporary construction facilities, storage of materials, or other Contractor needs. However,  
17 before using any private property, whether adjoining the work or not, the Contractor shall file  
18 with the Engineer a written permission of the private property owner, and, upon vacating the  
19 premises, a written release from the property owner of each property disturbed or otherwise  
20 interfered with by reasons of construction pursued under this contract. The statement shall be  
21 signed by the private property owner, or proper authority acting for the owner of the private  
22 property affected, stating that permission has been granted to use the property and all necessary  
23 permits have been obtained or, in the case of a release, that the restoration of the property has  
24 been satisfactorily accomplished. The statement shall include the parcel number, address, and  
25 date of signature. Written releases must be filed with the Engineer before the Completion Date  
26 will be established.

27  
28 **1-07.26 Personal Liability of Public Officers**  
29 *(February 1, 2008 R&E GSP)*

30  
31 Section 1-07.26 is revised to read:

32  
33 Neither the Mayor, the Ferndale City Council, employees of the City, or the Engineer shall be  
34 personally liable for any acts or failure to act in connection with the Contract, it being  
35 understood that in such matters, they are acting solely as agents of the City of Ferndale.

36  
37 **1-08 PROSECUTION AND PROGRESS**

38  
39 Add the following new section:

40  
41 **1-08.0 Preliminary Matters**  
42 *(May 25, 2006 APWA GSP)*

43  
44 Add the following new section:  
45

1 **1-08.0(1) Preconstruction Conference**

2 *(July 8, 2024APWA GSP)*

3  
4 Prior to the Contractor beginning the work, a preconstruction conference will be held  
5 between the Contractor, the Engineer and such other interested parties as may be invited.

6 The purpose of the preconstruction conference will be:

- 7 1. To review the initial progress schedule;
- 8 2. To establish a working understanding among the various parties associated or affected by
- 9 the work;
- 10 3. To establish and review procedures for progress payment, notifications, approvals,
- 11 submittals, etc.;
- 12 4. To review DBE Requirements, Training Plans, and Apprenticeship Plans, when applicable.
- 13 5. To establish normal working hours for the work;
- 14 6. To review safety standards and traffic control; and
- 15 7. To discuss such other related items as may be pertinent to the work.
- 16

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

- 18 1. A breakdown of all lump sum items;
- 19 2. A preliminary schedule of working drawing submittals; and
- 20 3. A list of material sources for approval if applicable.
- 21

22 **1-08.0(2) Hours of Work**

23 *(December 8, 2014 APWA GSP)*

24  
25 Except in the case of emergency or unless otherwise approved by the Engineer, the normal  
26 working hours for the Contract shall be any consecutive 8-hour period between 7:00 a.m. and  
27 6:00 p.m. Monday through Friday, exclusive of a lunch break. If the Contractor desires  
28 different than the normal working hours stated above, the request must be submitted in writing  
29 prior to the preconstruction conference, subject to the provisions below. The working hours  
30 for the Contract shall be established at or prior to the preconstruction conference.

31  
32 All working hours and days are also subject to local permit and ordinance conditions (such as  
33 noise ordinances).

34  
35 If the Contractor wishes to deviate from the established working hours, the Contractor shall  
36 submit a written request to the Engineer for consideration. This request shall state what hours  
37 are being requested, and why. Requests shall be submitted for review no later than noon on  
38 the working day prior to the day(s) the Contractor is requesting to change the hours.

39  
40 If the Contracting Agency approves such a deviation, such approval may be subject to certain  
41 other conditions, which will be detailed in writing. For example:

- 42  
43 1. On non-Federal aid projects, requiring the Contractor to reimburse the Contracting
- 44 Agency for the costs in excess of straight-time costs for Contracting Agency
- 45 representatives who worked during such times. (The Engineer may require designated

representatives to be present during the work. Representatives who may be deemed necessary by the Engineer include, but are not limited to: survey crews; personnel from the Contracting Agency's material testing lab; inspectors; and other Contracting Agency employees or third party consultants when, in the opinion of the Engineer, such work necessitates their presence.)

2. Considering the work performed on Saturdays, Sundays, and holidays as working days with regard to the contract time.
3. Considering multiple work shifts as multiple working days with respect to contract time even though the multiple shifts occur in a single 24-hour period.
4. If a 4-10 work schedule is requested and approved the non working day for the week will be charged as a working day.
5. If Davis Bacon wage rates apply to this Contract, all requirements must be met and recorded properly on certified payroll

### **1-08.1 Subcontracting**

Section 1-08.1 is supplemented with the following:

*(February 1, 2008 R&E GSP)*

Prior to any subcontractor or lower tier subcontractor beginning work, the Contractor shall submit to the Engineer a certification that a written agreement between the Contractor and the subcontractor or between the subcontractor and any lower tier subcontractor has been executed.

A subcontractor or lower tier subcontractor will not be permitted to perform any work under the contract until the following documents have been completed and submitted to the Engineer:

1. Request to Sublet Work (Form 421-012), and
2. City of Ferndale Contractor and Subcontractor or Lower Tier Subcontractor Certification.

The Contractor's records pertaining to the requirements of this Special Provision shall be open to inspection or audit by representatives of the Contracting Agency during the life of the contract and for a period of not less than three years after the date of acceptance of the contract. The Contractor shall retain these records for that period. The Contractor shall also guarantee that these records of all subcontractors and lower tier subcontractors shall be available and open to similar inspection or audit for the same time period.

### **1-08.1(7)A Payment Reporting**

*(November 25, 2024 APWA GSP)*

Delete this section and replace it with the following:

### **1-08.1(7)A VACANT**

### **1-08.1(8)B Clauses Required in Subcontracts of All Tiers**

*(November 25, 2024 APWA GSP)*

Delete item 8 of the second paragraph of Section 1-08.1(8)B.



1  
2 **1-08.3(2)A Type A Progress Schedule**  
3 *(March 13, 2012 APWA GSP)*

4  
5 Revise this section to read:

6  
7 The Contractor shall submit **3** copies of a Type A Progress Schedule no later than at the  
8 preconstruction conference, or some other mutually agreed upon submittal time. The schedule  
9 may be a critical path method (CPM) schedule, bar chart, or other standard schedule format.  
10 Regardless of which format used, the schedule shall identify the critical path. The Engineer  
11 will evaluate the Type A Progress Schedule and approve or return the schedule for corrections  
12 within 15 calendar days of receiving the submittal.

13  
14 **1-08.4 Prosecution of Work**

15  
16 Delete this section and replace it with the following:

17  
18 **1-08.4 Notice to Proceed and Prosecution of Work**  
19 *(July 23, 2015 APWA GSP)*

20  
21 Notice to Proceed will be given after the contract has been executed and the contract bond and  
22 evidence of insurance have been approved and filed by the Contracting Agency. The  
23 Contractor shall not commence with the work until the Notice to Proceed has been given by  
24 the Engineer. The Contractor shall commence construction activities on the project site within  
25 ten days of the Notice to Proceed Date, unless otherwise approved in writing. The Contractor  
26 shall diligently pursue the work to the physical completion date within the time specified in  
27 the contract. Voluntary shutdown or slowing of operations by the Contractor shall not relieve  
28 the Contractor of the responsibility to complete the work within the time(s) specified in the  
29 contract.

30  
31 When shown in the Plans, the first order of work shall be the installation of high visibility  
32 fencing to delineate all areas for protection or restoration, as described in the Contract.  
33 Installation of high visibility fencing adjacent to the roadway shall occur after the placement  
34 of all necessary signs and traffic control devices in accordance with 1-10.1(2). Upon  
35 construction of the fencing, the Contractor shall request the Engineer to inspect the fence. No  
36 other work shall be performed on the site until the Contracting Agency has accepted the  
37 installation of high visibility fencing, as described in the Contract.

38  
39 *(August 7, 2006)*

40 The Contractor shall begin work no earlier than **March 31, 2025**.

41  
42 *(February 1, 2008 R&E GSP)*

43 Section 1-08.4 is supplemented with the following:

44  
45 **Project Meetings**

46 The Engineer shall be responsible for preparation of agenda, preparation of minutes and  
47 distribution of documentation. One set of the documentation will be sent to each participant.

1 All meetings will be held at on-site, unless otherwise agreed upon.

### 2 3 **Progress Meetings**

4 Regular Progress Meetings shall be schedule by the Engineer. Progress Meetings shall be held  
5 weekly or as otherwise schedule by the Engineer.  
6

7 The Progress Meeting agenda shall include, but not be limited to:

- 8 1. Review minutes of previous meeting, amend minutes if necessary, and accept minutes.
- 9 2. Review unresolved questions and issues from previous Progress Meetings and further  
10 consider those questions and issues.
- 11 3. Review new questions and issues regarding delays, coordination with other agencies,  
12 changed conditions or work scope, interferences, utilities, and requests for information  
13 (RFI's).
- 14 4. Review corrective measures to regain projected schedule
- 15 5. Review status of submittals, RFI's, change issues, as-built documentation, and other  
16 correspondence.
- 17 6. Review effects of proposed changes on progress schedule and coordination
- 18 7. Contractor to present updated look-ahead / as-built schedule describing activities to  
19 occur in the upcoming three weeks, and to document the as-built schedule for work  
20 accomplished since the prior meeting. Contractor to present the updated schedule at  
21 each regular weekly progress meeting.  
22

### 23 **Coordination Meetings**

24 Coordination Meetings will commence after the NTP has been issued. The purpose of the  
25 Coordination Meetings is to coordinate the Contractor's Work with the work being done  
26 concurrently at the Site by others. Coordination meetings will be scheduled in conjunction  
27 with progress meetings when appropriate.  
28

### 29 **Additional Meetings**

30 Additional meetings will be scheduled as necessary for the completion of various portions of  
31 the Work. Meetings will include pre-installation, pre-testing or other purpose as required by  
32 the specifications, conditions on the jobsite, or as requested by the Engineer or the project  
33 team.  
34

### 35 **Public Open House**

36 The Contractor's Project Manager and the Contractor's Superintendent shall attend one Public  
37 Open House Meeting. The meeting will:  
38

- 39 • Occur after 5:00 p.m.
- 40 • Last approximately 3 hours
- 41 • Take place within the City of Ferndale
- 42 • Take place prior to beginning any on-site work  
43

44 All costs involved with the various meetings shall be incidental to the various bid items.  
45

September 15, 2008 R&E GSP)

## Order of Work

### Water Main Work

The Contractor shall substantially complete the following work as shown on the Plans prior to beginning any other utility work between STA 10+00 to STA 36+00:

- Installing the 8 inch water main from approximately STA 10+48 to STA 34+67
- Installing water main along the side streets

Other work on this Section includes, but is not limited to:

- Installing traffic control and traffic control devices
- Installing erosion control measure
- Removal of structures and obstructions

### 1-08.5 Time for Completion

(March 13, 1995 WSDOT GSP)

Section 1-08.5 is supplemented with the following:

This project shall be physically completed within **90** working days.

### 1-08.5 Time for Completion

(December 30, 2022 APWA GSP, Option A)

Revise the third and fourth paragraphs to read:

Contract time shall begin on the first working day following the Notice to Proceed Date.

Each working day shall be charged to the contract as it occurs, until the contract work is physically complete. If substantial completion has been granted and all the authorized working days have been used, charging of working days will cease. Each week the Engineer will provide the Contractor a statement that shows the number of working days: (1) charged to the contract the week before; (2) specified for the physical completion of the contract; and (3) remaining for the physical completion of the contract. The statement will also show the nonworking days and all partial or whole days the Engineer declares as unworkable. The statement will be identified as a Written Determination by the Engineer. If the Contractor does not agree with the Written Determination of working days, the Contractor shall pursue the protest procedures in accordance with Section 1-04.5. By failing to follow the procedures of Section 1-04.5, the Contractor shall be deemed as having accepted the statement as correct. If the Contractor is approved to work 10 hours a day and 4 days a week (a 4-10 schedule) and the fifth day of the week in which a 4-10 shift is worked would ordinarily be charged as a working day then the fifth day of that week will be charged as a working day whether or not the Contractor works on that day.

Revise the sixth paragraph to read:

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

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

#### **1-08.9 Liquidated Damages**

*(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 **\*\*\*\$1,350.00\*\*\*** 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 MEASUREMENT AND PAYMENT**

### **1-09.2 Weighing Equipment**

#### **1-09.2(1) General Requirements for Weighing Equipment**

*(November 25, 2024 APWA GSP, Option B)*

Revise item 4 of the fifth paragraph to read:

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

#### **1-09.2(5) Measurement**

*(December 30, 2022 APWA GSP)*

Revise the first paragraph to read:

**Scale Verification Checks** – At the Engineer's discretion, the Engineer may perform verification checks on the accuracy of each batch, hopper, or platform scale used in weighing contract items of Work.

### **1-09.6 Force Account**

*(December 30, 2022 APWA GSP)*

Supplement this section with the following:

The Contracting Agency has estimated and included in the Proposal, dollar amounts for all items to be paid per force account, only to provide a common proposal for Bidders. All such

dollar amounts are to become a part of Contractor's total bid. However, the Contracting Agency does not warrant expressly or by implication, that the actual amount of work will correspond with those estimates. Payment will be made on the basis of the amount of work actually authorized by the Engineer.

*(February 1, 2008 R&E GSP)*

Section 1-09.6 is supplemented with the following:

No claim for force account shall be allowed except upon written order by the Engineer prior to the performance of the work. The Contractor shall submit the required force account documentation to the Engineer on a daily basis unless agreed otherwise. The Contractor and the Engineer shall review all work or material to be paid for under force account on a daily basis unless agreed otherwise. The Contractor may propose corrections to the force account quantities and shall supply supporting documentation to the Engineer within 2 working days, unless agreed otherwise, of having reviewed the force account quantities with the Engineer.

#### **1-09.8 Payment for Material on Hand**

*(August 3, 2009 WSDOT GSP)*

The last paragraph of Section 1-09.8 is revised to read:

The Contracting Agency will not pay for material on hand when the invoice cost is less than \$2,000. As materials are used in the work, credits equaling the partial payments for them will be taken on future estimates. Each month, no later than the estimate due date, the Contractor shall submit a letter to the Project Engineer that clearly states: 1) the amount originally paid on the invoice (or other record of production cost) for the items on hand, 2) the dollar amount of the material incorporated into each of the various work items for the month, and 3) the amount that should be retained in material on hand items. If work is performed on the items and the Contractor does not submit a letter, all of the previous material on hand payment will be deducted on the estimate. Partial payment for materials on hand shall not constitute acceptance. Any material will be rejected if found to be faulty even if partial payment for it has been made.

#### **1-09.9 Payments**

*(July 8, 2024 APWA GSP, Option A)*

Supplement this section with the following:

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

*(July 8, 2024, APWA GSP, Option B)*

Delete the fourth paragraph and replace it with the following:

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

preconstruction conference.

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

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

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

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

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

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

### **1-09.11(3) Time Limitation and Jurisdiction**

*(December 30, 2022 APWA GSP)*

Revise this section to read:

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

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

### 3 4 **1-09.13 Claims Resolution**

#### 5 6 **1-09.13(3)A Arbitration General** 7 *(January 19, 2022 APWA GSP)*

8  
9 Revise the third paragraph to read:

10  
11 The Contracting Agency and the Contractor mutually agree to be bound by the decision of the  
12 arbitrator, and judgment upon the award rendered by the arbitrator may be entered in the  
13 Superior Court of the county in which the Contracting Agency's headquarters is located,  
14 provided that where claims subject to arbitration are asserted against a county, RCW 36.01.050  
15 shall control venue and jurisdiction of the Superior Court. The decision of the arbitrator and  
16 the specific basis for the decision shall be in writing. The arbitrator shall use the Contract as a  
17 basis for decisions.

#### 18 19 **1-09.13(4) Venue for Litigation** 20 *(December 30, 2022 APWA GSP)*

21  
22 Revise this section to read:

23  
24 Litigation shall be brought in the Superior Court of the county in which the Contracting  
25 Agency's headquarters is located, provided that where claims are asserted against a county,  
26 RCW 36.01.050 shall control venue and jurisdiction of the Superior Court. It is mutually  
27 agreed by the parties that when litigation occurs, the Contractor shall permit the Contracting  
28 Agency to have timely access to all records deemed necessary by the Contracting Agency to  
29 assist in evaluating the claims or action.

### 30 31 **1-10 TEMPORARY TRAFFIC CONTROL**

#### 32 33 **1-10.1 General** 34 *(March 17, 2010 R&E GSP)*

35 Section 1-10.1 is supplemented with the following:

36  
37 During grading operations, the elevation difference between the portion of the traveled way  
38 open to traffic and the adjoining portion of roadway shall be tapered at 10:1 or greater to allow  
39 cross traffic.

40  
41 In addition, for any modifications to the access provisions, the Contractor shall furnish  
42 satisfactory documentation that the affected property owners concur with the proposed change.  
43 The Contractor shall be responsible to coordinate with and make the necessary arrangements  
44 to accommodate the access requirements of the affected property owners and the public  
45 services.



1 If a modification to traffic control is deemed necessary by the Engineer, the contractor shall  
2 immediately implement any requested modification(s). The need for flashing warning lights  
3 shall be as determined by the Engineer. The cost of modifications to the traffic control plans  
4 as directed by the Engineer shall be considered incidental to the Contract.

5  
6 The Contractor shall determine and place signs in accordance with the Manual on Uniform  
7 Traffic Control Devices (MUTCD) and the Plans. A traffic control plan shall be submitted to  
8 the Engineer for review and approval prior to the beginning of construction.

9  
10 **1-10.2(1) General**

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

12  
13 (October 3, 2022)

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

15  
16 The Northwest Laborers-Employers Training Trust  
17 27055 Ohio Ave.  
18 Kingston, WA 98346  
19 (360) 297-3035  
20 <https://www.nwlett.edu>

21  
22 Evergreen Safety Council  
23 12545 135<sup>th</sup> Ave. NE  
24 Kirkland, WA 98034-8709  
25 1-800-521-0778  
26 <https://www.esc.org>

27  
28 The American Traffic Safety Services Association  
29 15 Riverside Parkway, Suite 100  
30 Fredericksburg, Virginia 22406-1022  
31 Training Dept. Toll Free (877) 642-4637  
32 Phone: (540) 368-1701  
33 <https://atssa.com/training>

34  
35 Integrity Safety  
36 13912 NE 20th Ave.  
37 Vancouver, WA 98686  
38 (360) 574-6071  
39 <https://www.integritysafety.com>

40  
41 US Safety Alliance  
42 (904) 705-5660  
43 <https://www.ussafetyalliance.com>

44  
45 K&D Services Inc.  
46 2719 Rockefeller Ave.

1                   Everett, WA 98201  
2                   (800) 343-4049  
3                   <https://www.kndservices.net>  
4

5   **1-10.2(2) Traffic Control Plans**  
6   *(December 1, 2016 R&E GSP)*  
7

8   Section 1-10.2(2) is supplemented with the following:  
9

10       Any modifications to existing plans or new traffic plans shall be submitted to the Engineer for  
11       review and approval a minimum of five (5) working days prior to institution of the plan.  
12

13   **1-10.3 Traffic Control Labor, Procedures, and Devices**  
14

15       **1-10.3(1)A Flaggers**  
16       *(November 8, 2024 R&E GSP)*  
17

18       Section 1-10.3(1)A Flaggers is supplemented with the following:  
19

20       The Contractor shall provide Flaggers throughout the project duration to escort pedestrians and  
21       bicyclists through the project limits. Flaggers shall always be available to escort pedestrians  
22       and bicyclists through the project limits.  
23

**DIVISION 2**  
**EARTHWORK**

**2-01 CLEARING, GRUBBING, AND ROADSIDE CLEANUP**

**2-01.1 Description**

*(February 4, 2008 R&E GSP)*

Section 2-01.1 is supplemented with the following:

This item also includes any clearing and grubbing necessary for the construction of driveways, storm drain system, and the reconstruction of intersecting roads shown on the plans.

Clearing and Grubbing work includes removal and disposal of topsoil to a depth of 6-inches, shrubs, and trees as shown on the plans. In addition to natural materials, clearing and grubbing shall also include removing and disposing of all refuse and any remaining structures, obstructions, trees and/or tree stumps within the right-of-way excluding contiguous pavement or structures identified under "Removal of Structures and Obstructions", as directed by the Engineer.

**2-01.2 Disposal of Useable Material and Debris**

*(February 4, 2008 R&E GSP)*

Section 2-01.2 is supplemented with the following:

Unless otherwise provided in the specifications, all material removed under this item shall become the property of the Contractor.

**2-01.2(1) Disposal Method No. 1 - Open Burning**

*(February 4, 2008 R&E GSP)*

Section 2-01.2(1) is supplemented with the following:

Disposal method No. 1 shall not be permitted within the project limits.

**2-01.2(3) Disposal Method No. 3 - Chipping**

*(March 17, 2010 R&E GSP)*

Section 2-01.2(3) is supplemented with the following:

Revise the fourth sentence to read:

"All chips shall become the property of the Contractor and shall be removed".

## **2-01.3 Construction Requirements**

### **2-01.3(1) Clearing**

*(February 4, 2008 R&E GSP)*

Section 2-01.3(1) is supplemented with the following:

8. The Contractor shall clear all areas staked and flagged by the Engineer prior to the placement of cut/fill stakes, offset stakes or grade hubs.
9. Tree trimming shall be sequenced so that overhanging limbs are removed prior to commencing construction activities. Construction activities include equipment staging, materials storage, and worker-vehicle parking.
10. When tree roots are encountered during construction activities, the Contractor shall carefully expose all roots greater than 1 inch diameter, either by hand or gently with the machine bucket, and then cut cleanly with lopper or saw. Pulling and wrenching of the roots shall not be allowed.
11. Cut the removed tree located at approximately STA 34+20, 30' RT into 18" logs and coordinate with the Engineer and the property owner to determine where the logs shall be relocated and stacked.

### **2-01.3(2) Grubbing**

Section 2-01.3(2) is supplemented with the following:

- f. Stumps shall be removed except where doing so would damage water, sewer lines or other utilities. Voids left by stump removal shall be backfilled with a granular material and compacted in accordance with Section 2-03.3(14)C. Unless otherwise noted, all materials removed shall become the property of the Contractor and shall be disposed of outside the project limits.
- g. If the stump removal would damage water, sewer lines or other utilities, the stump shall be ground out within five working days (5). Stumps and buttress roots must be removed to a minimum of 6 inches (6") below ground level and two (2) times the diameter at breast height in surface area ground. Unless otherwise noted, all materials removed shall become the property of the Contractor and shall be disposed of outside the project limits. All surface roots and adjacent subsurface roots shall be removed to eliminate "humps" or "mounds" to provide a level surface to match the existing grade.
- h. If equipment outriggers are placed between the proposed sidewalk and the trees, the Contractor shall place plywood or large wood chips to spread out the weight of the outriggers.

## **2-01.5 Payment**

*(February 4, 2008 R&E GSP)*

Section 2-01.5 is supplemented with the following:

"Clearing and Grubbing," lump sum. No additional payment shall be made for haul. Any

1 other clearing and grubbing not specifically identified as being paid for elsewhere will be  
2 considered incidental to this bid item and no other payment shall be made.

## 3 4 **2-02 REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

### 5 6 **2-02.1 Description**

7 *(September 15, 2008 R&E GSP)*  
8

9 Section 2-02.1 is supplemented with the following:  
10

11 Also included will be existing asphalt concrete pavement, chip seal, cement concrete curbs,  
12 gutter, sidewalk, driveways, retaining walls, culverts, ecology blocks, guardrail and posts,  
13 plugging drainage pipes, landscaping structures, fire hydrants, fences, and other structures  
14 necessary to complete the work indicated on the plans or as directed by the Engineer. The  
15 work described in this section includes abandonment of Asbestos Cement (AC) water main in  
16 accordance with applicable regulations. The AC water main is located as shown on the Plans.  
17 It is anticipated that the Contractor may encounter this water main during excavation.  
18 Equipment, labor, and materials necessary to perform the work as specified shall be considered  
19 a portion of this work. Equipment, labor, and materials necessary to perform the work as  
20 specified shall be considered a portion of this work. All material shall be hauled offsite to a  
21 permitted, Contractor provided disposal site in accordance with Section 2-03.3(7)C. No  
22 payment will be made for haul.  
23

### 24 **2-02.3 Construction Requirements**

25 *(February 4, 2008 R&E GSP)*  
26

27 Section 2-02.3 is supplemented with the following:  
28

#### 29 **Utility Removal**

30 Cavities left by removal of features by other parties, i.e., utility poles or other obstructions,  
31 shall be backfilled and compacted by the Contractor in accordance with Section 2-03.3(14)C.  
32

#### 33 **Use of Explosives**

34 Explosives shall not be used in the demolition.  
35

### 36 **2-02.3(2) Removal of Bridges, Box Culverts, and other Drainage Structures**

37 *(August 4, 2009 R&E GSP)*  
38

39 Section 2-02.3(2) is supplemented with the following:  
40

#### 41 **Removal of Existing Water Mains**

42 Where shown in the Plans or at other locations as determined by the Engineer, the Contractor  
43 shall abandon asbestos cement (AC) water mains that conflict with the proposed  
44 improvements. This item will require the Contractor to bury sections of this main, if  
45 necessary, a minimum of 2 feet below subgrade.

46 Voids left by the water main abandonment shall be backfilled with a granular material and  
47 compacted in accordance with Section 2-03.3(14)C.

All materials removed shall become the property of the Contractor and shall be disposed of outside the project limits.

### **Removal of Drainage Structures**

Where shown in the Plans, or at other locations as determined by the Engineer, the Contractor shall remove catch basins and manholes regardless of the size or type. Each catch basin and manhole shall be removed in its entirety. Prior to backfilling the resultant void, the Contractor shall plug and abandon the existing pipe(s) with commercial concrete in accordance with Section 7-08.3(4).

Voids left by catch basin removal shall be backfilled and compacted in accordance with Section 2-03.3(14)C.

All materials removed shall become the property of the Contractor and shall be disposed of outside the project limits.

### **2-02.3(3) Removal of Pavement, Sidewalks, Curbs and Gutters**

*(March 9, 2008 R&E GSP)*

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

Delete Item 1. No on-site burial of pavement, sidewalks, curbs and gutters, is allowed.

Item 3 is supplemented with the following: "At locations where the existing concrete is to remain, the horizontal sawcut line shall not vary more than 1/8 inch along the edge of a 10-foot straightedge placed on the surface parallel to the horizontal sawcut line."

### **Removal of Asphalt Concrete Pavement and Portland Cement Concrete Pavement**

The approximate thicknesses of the pavement are:

Please refer to the "Geotechnical Engineering Reports" contained in the appendix.

### **Removal of Cement Concrete Curb, Gutter and Sidewalk**

The Contractor shall use a sawcut to delineate the curb, gutter and sidewalk to be removed from curb, gutter and sidewalk to remain. The Contractor shall take care to avoid damaging adjacent curb, gutter and sidewalk to remain. Any damage caused to the curb, gutter and sidewalk to remain, as a result of the Contractor's operations, shall be repaired to the satisfaction of the Engineer at no additional cost to the Contracting Agency.

### **Removing and Relocating Blocks**

Where shown in the Plans, approximate STA 21+30, 25' RT, the Contractor shall remove all the concrete blocks and relocate and stack the blocks as part of the lump sum item "Removal of Structures and Obstructions". The Contractor shall coordinate with the CONTRACTING AGENCY and the property owner to determine where the blocks shall be relocated.

12" (L) x 8" (W) x 8" (D) concrete blocks      50 Each

1  
2 The quantities are listed only for the convenience of the Contractor in determining the volume  
3 of work involved and are not guaranteed to be accurate. The prospective bidders shall verify  
4 these quantities before submitting a bid. No adjustments other than for approved changes will  
5 be made in the lump sum contract price for "Removal of Structures and Obstructions" even  
6 though the actual quantities required may deviate from those listed.  
7

8 New Sub-Section Added:

9 **2-02.3(4) Removing/Abandoning/Decommissioning Monitor Wells**

10 *(August 1, 2023 R&E GSP)*  
11

12 This work shall consist of removing, abandoning, and decommissioning the existing monitor  
13 wells (MW1, approximate STA 25+10, 20' RT; MW2, approximate STA 32+00, 19' RT  
14 Monitor wells must be abandoned/decommissioned in accordance with State and Local laws  
15 and requirements, including, but not limited to WAC 173-160-381 and RCW 18.104.  
16

17 **2-02.4 Measurement**

18 *(February 4, 2008 R&E GSP)*  
19

20 Section 2-02.4 is supplemented with the following:  
21

22 Work performed under the item "Abandonment of Asbestos Cement Water Main" shall be  
23 measured in accordance with Section 1-09.6 Force Account.  
24

25 Removal of drainage structures and manholes will be measured per each for each structure  
26 removed.  
27

28 Sawcut ACP will be measured by the linear foot-inch along the line and slope of the cut prior  
29 to sawcutting and as staked by the Engineer. Saw-cut, if used for the pavement repair, shall not  
30 be measured.  
31

32 Sawcut PCC will be measured by the linear foot-inch along the line and slope of the cut prior  
33 to sawcutting and as staked by the Engineer.  
34

35 **2-02.5 Payment**

36 *(February 4, 2008 R&E GSP)*  
37

38 Section 2-02.5 is supplemented with the following:  
39

40 The lump sum contract price for "Removal of Structures and Obstructions" shall be full  
41 compensation for all tools, equipment, materials, and labor to perform the work as specified,  
42 including removing and disposing of the above materials, removing and relocating blocks,  
43 abandoning/decommissioning the existing monitor wells, and including Haul and disposal  
44 fees, and removing, transporting, and unloading the salvaged materials. Removal of any  
45 structures and obstructions readily apparent by visual inspection and not identified elsewhere  
46 will be considered incidental to this bid item.

1  
2 Payment for "Abandonment of Asbestos Cement Water Main" shall be on a force account basis  
3 as per Section 1-09.6. For the purpose of providing a common proposal for all bidders, the  
4 Contracting Agency has established the amount of force account for this item and has entered  
5 the amount in the bid proposal to become a part of the Contractor's total bid.  
6

7 "Removing Drainage Structures and Manholes", per each.

8 The unit contract price per each for "Removing Drainage Structures and Manholes" shall be  
9 full pay to perform the work as specified, including sawcutting and disposal  
10

11 The unit contract price per linear foot-inch for "Saw-cut ACP" and "Saw-cut PCC" as indicated  
12 on the Bid Proposal shall be full compensation for all labor, including hand removal if required,  
13 material, tools and equipment required to complete the Bid Items in accordance with Section  
14 1-04.1.  
15

## 16 **2-03 ROADWAY EXCAVATION AND EMBANKMENT**

### 17 **2-03.1 Description**

18 (\*\*\*\*\*)

19 Section 2-03.1 is supplemented with the following:  
20  
21

22 The work described in this section, regardless of the nature or type of the materials encountered  
23 includes excavating and grading the roadway and areas for curb, gutter and sidewalk,  
24 driveways, excavating in borrow pits, excavating below grade, excavating channels, removing  
25 slide materials and disposing of all excavated material. This work also includes stockpiling,  
26 placing and compacting Engineer approved materials generated during roadway excavation at  
27 locations shown on the Plans or as directed by the Engineer. Any excavation or embankment  
28 required to maintain positive drainage to or from drainage ditches or swales will be considered  
29 incidental to this bid item. This item also includes any excavation required to construct new  
30 driveway accesses.  
31

32 Groundwater may be encountered within the project boundary. Refer to the geotechnical  
33 report in the appendix for further information.  
34

35 The elevations shown on the plans are to finished grade. The Contractor shall excavate to  
36 depths sufficient to allow for the appropriate depth of compacted topsoil installation as  
37 specified for the project.  
38

39 Excess material shall become the property of the contractor for disposal. This work may  
40 include temporary stockpiling of material as dictated by the contractors operations. No specific  
41 stockpile sites are provided within the project limits, however on-site stockpiling may be  
42 permitted as approved by the Engineer. The costs for stockpiling shall be included in the bid  
43 items in this section.  
44

### 45 **2-03.3(7)C Contractor-Provided Disposal Site**

46 (March 17, 2010 R&E GSP)

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



Before completing any filling outside of the project limits, the Contractor, or property owner desiring to receive the fill, shall acquire all permits and approvals required for the use of the disposal site. A copy of each permit shall be provided to the City prior to utilization of the dumpsite.

### **2-03.3(10) Selected Material**

*(March 17, 2010 R&E GSP)*

Section 2-03.3(10) is supplemented with the following:

As indicated in the contract, existing suitable excavation materials, shall be used as embankment, unless otherwise directed by the Engineer.

### **2-03.3 (14)E Unsuitable Foundation Excavation**

*(February 4, 2008 R&E GSP)*

Section 2-03.3(14)E is supplemented with the following:

Prior to any backfilling, the Contractor shall proof roll the subgrade with a loaded dump truck, large self-propelled vibrating roller, or equivalent piece of equipment, to verify stability of the subgrade. The associated cost to proof roll the roadway will be considered incidental to the unit contract prices of this Contract.

### **2-03.4 Measurement**

*(February 4, 2008 R&E GSP)*

Section 2-03.4 is supplemented with the following

“Roadway Excavation Incl. Haul” will be measured to a maximum depth of 2 feet below the plan roadway excavation lower limit.

“Unsuitable Foundation Excavation Incl. Haul” shall be measured beginning 2 feet below the plan roadway excavation lower limits to the depth of excavation as directed by the Engineer. There is no limit to the depth of excavation to be paid under this item.

Groundwater may be encountered within the project boundary. No payment will be made for dewatering or material replacement. When the Engineer requires excavated material to be removed, stockpiled, and moved again, the material will be measured to the neat line of that removed from the stockpile. No separate measurement or payment will be made for stockpiled materials.

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 with the volume of planing bituminous pavement, and asphalt concrete pavement deducted.

1 If discrepancies are discovered in the ground elevations which will materially affect the  
2 quantities of earthwork, the original computations of earthwork quantities will be adjusted  
3 accordingly.

4  
5 Earthwork quantities will be computed, either manually or by means of electronic data  
6 processing equipment, by use of the average end area method or by the finite element analysis  
7 method utilizing digital terrain modeling techniques.

8  
9 Copies of the ground cross-section notes will be available for the bidder's inspection, before  
10 the opening of bids, at the Engineer's office.

11  
12 Upon award of the contract, copies of the original ground cross-sections will be furnished to  
13 the successful bidder on request to the Engineer.

14  
15 Removal of asphalt concrete will not be measured under this bid item. Pavement removal shall  
16 be paid under the bid item "Removal of Structures and Obstructions" in accordance with  
17 Section 2-02.

#### 18 19 **2-03.5 Payment**

20 *(March 2, 2010 R&E GSP)*

21 Section 2-03.5 is supplemented with the following:

22  
23 The unit contract price per cubic yard for "Roadway Excavation Incl. Haul" shall be  
24 compensation for all labor, materials, tools and equipment necessary to excavate, shape, load,  
25 stockpile for later embankment or otherwise dispose of surplus or unsuitable material off-site  
26 as specified herein. This item shall include the cost of compacting and proof rolling the  
27 subgrade.

28  
29 "Embankment Compaction" includes loading, hauling, stockpiling, placing, grading, and  
30 compacting suitable excavated material generated under any excavation within the Project  
31 limits.

#### 32 33 **2-04 HAUL**

##### 34 35 **2-04.4 Measurement**

36 *(February 5, 2008 R&E GSP)*

37  
38 Section 2-04.4 is revised to read:

39  
40 No specific unit of measurement shall apply. All costs involved for haul shall be incidental  
41 to and included in the various bid items.

##### 42 43 **2-04.5 Payment**

44 *(February 5, 2008 R&E GSP)*

45  
46 Section 2-04.5 is deleted in its entirety.

1 **2-07 WATERING**

2  
3 **2-07.4 Measurement**

4 *(September 15, 2008 R&E GSP)*

5  
6 Section 2-07.4 is supplemented with the following:

7  
8 The Contractor shall provide water distribution records including truck tickets and operator  
9 time records if requested by the Engineer. The contractor will not be allowed to use City  
10 water from fire hydrant without first renting a backflow preventer and meter from the City.  
11 Use of City water must be pre-approved by the Public Works Department. If Contracting  
12 Agency water is used, water meter records will be recorded and used as the basis for payment.

13  
14 **2-09 STRUCTURE EXCAVATION**

15  
16 **2-09.3(1)E Backfilling**

17 *(\*\*\*\*\*)*

18 Section 2-09.3(1)E is supplemented with the following:

19  
20 CDF shall be placed at locations shown on the plans.

21  
22 **2-09.3(4) Construction Requirements, Structure Excavation, Class B**

23 *(\*\*\*\*\*)*

24 Section 2-09.3(4) is supplemented with the following:

25  
26 All trenches shall be backfilled and completed by the end of the day. No payment shall be  
27 made for backfill of native materials. Gravel base shall be used for backfill unless the Engineer  
28 approves the use of native material.

1 **DIVISION 4**

2 **BASES**

3  
4 **4-02 GRAVEL BASE**

5  
6 **4-02.2 Materials**

7 (February 5, 2008 R&E GSP)

8 Section 4-02.2 is supplemented with the following:

9  
10 Material shall meet the requirements of Section 9-03.10 Gravel Base as modified. Refer to  
11 revised Section 9-03.10 Aggregate for Gravel Base.

12  
13 **4-02.4 Measurement**

14 (January 31, 2011 R&E GSP)

15 The first paragraph of Section 4-02.4 is revised to read:

16  
17 “Gravel Base” shall be measured by the ton and shall include haul.

18  
19 **4-02.5 Payment**

20 (February 5, 2008 R&E GSP)

21 Section 4-02.5, delete the second paragraph and replace with the following:

22  
23 “Gravel Base,” per ton.

24  
25 Proof rolling of material at the direction of the Engineer will be considered incidental to this  
26 bid item.

27  
28 **4-04 BALLAST AND CRUSHED SURFACING**

29  
30 **4-04.4 Measurement**

31 (February 5, 2008 R&E GSP)

32 Section 4-04.4, the second paragraph is revised to read:

33  
34 “Crushed Surfacing Top Course,” shall be measured by the ton and shall include haul.

35  
36 **4-04.5 Payment**

37 (February 5, 2008 R&E GSP)

38 Section 4-04.5, the second paragraph is revised to read:

39  
40 “Crushed Surfacing Top Course,” per ton.

**DIVISION 5**  
**SURFACE TREATMENTS AND PAVEMENTS**

**5-04 HOT MIX ASPHALT**  
*(January 31, 2023 APWA GSP)*

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

**5-04.1 Description**

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

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

**5-04.2 Materials**

Materials shall meet the requirements of the following sections:

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

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

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

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

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

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

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

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

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

(\*\*\*\*\*)

*May 22, 2017 R&E GSP)*

Section 5-04.2 is supplemented with the following:

“Self-Adhering Rubberized Asphalt Membrane” shall meet the following:

1. Polypropylene, staple fiber, needle punched nonwoven fabric
2. Coated with rubberized asphalt adhesive on the bottom
3. Top-coated with an asphalt tack coat
4. A release sheet, which is removed just prior to placement, shall cover the adhesive
5. Resistant to ultraviolet degradation
6. Minimum Average Roll Values:

Property	Test Method	Units	Property Requirement
Strip Tensile <sup>1</sup>	ASTM D 882	lb/in	50
Puncture Resistance	ASTM E 154	lb	200
Permeance	ASTM E 96 Method B	Perms	0.05 (max)
Pliability <sup>2</sup>	ASTM D 146	N/A	No cracks in fabric or rubberized asphalt

Note:

Using 12 in/min test speed and 1” distance initial distance between grips.

Using 180° bend on ¼” mandrel at -25° F.

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

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

#### **5-04.2(1)A Vacant**

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

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

**Nonstatistical** evaluation will be used for all HMA not designated as Commercial HMA in the

1 Contract documents.

2  
3 **Commercial** evaluation will be used for Commercial HMA and for other classes of HMA in  
4 the following applications: sidewalks, road approaches, ditches, slopes, paths, trails, gores,  
5 prelevel, temporary pavement, and pavement repair. Other nonstructural applications of HMA  
6 accepted by commercial evaluation shall be as approved by the Project Engineer. Sampling  
7 and testing of HMA accepted by commercial evaluation will be at the option of the Project  
8 Engineer. The Proposal quantity of HMA that is accepted by commercial evaluation will be  
9 excluded from the quantities used in the determination of nonstatistical evaluation.

10  
11 **Nonstatistical Mix Design.** Fifteen days prior to the first day of paving the Contractor shall  
12 provide one of the following mix design verification certifications for Contracting Agency  
13 review;

- 14  
15
  - The WSDOT Mix Design Evaluation Report from the current WSDOT QPL, or one of
  - 16 the mix design verification certifications listed below.
  - 17 • The proposed HMA mix design on WSDOT Form 350-042 with the seal and
  - 18 certification (stamp & signature) of a valid licensed Washington State Professional
  - 19 Engineer.
  - 20 • The Mix Design Report for the proposed HMA mix design developed by a qualified
  - 21 City or County laboratory that is within one year of the approval date.

22

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

28  
29 Mix designs for HMA accepted by Nonstatistical evaluation shall:

- 30  
31
  - Be designed for \*\*\*4.4\*\*\* million equivalent single axle loads (ESALs).
  - 32 • Have the aggregate structure and asphalt binder content determined in accordance with
  - 33 WSDOT Standard Operating Procedure 732 and meet the requirements of Sections 9-
  - 34 03.8(2), except that Hamburg testing for ruts and stripping are at the discretion of the
  - 35 Engineer, and 9-03.8(6).
  - 36 • Have anti-strip requirements, if any, for the proposed mix design determined in
  - 37 accordance with AASHTO T 283 or T 324 or based on historic anti-strip and aggregate
  - 38 source compatibility from previous WSDOT lab testing.

39

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

43  
44 **Commercial Evaluation Mix Design.** Approval of a mix design for "Commercial Evaluation"  
45 will be based on a review of the Contractor's submittal of WSDOT Form 350-042 (for  
46 commercial mixes, AASHTO T 324 evaluation is not required) or a Mix Design from the

current WSDOT QPL or from one of the processes allowed by this section. Testing of the HMA by the Contracting Agency for mix design approval is not required.

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

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

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

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

### **5-04.3 Construction Requirements**

#### **5-04.3(1) Weather Limitations**

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

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

**Minimum Surface Temperature for Paving**

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

#### **5-04.3(2) Paving Under Traffic**

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

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

Before closing an intersection, advance warning signs shall be placed, and signs shall also be



1 placed marking the detour or alternate route.

2  
3 During paving operations, temporary pavement markings shall be maintained throughout the  
4 project. Temporary pavement markings shall be installed on the Roadway prior to opening to  
5 traffic. Temporary pavement markings shall be in accordance with Section 8-23.

6  
7 All costs in connection with performing the Work in accordance with these requirements,  
8 except the cost of temporary pavement markings, shall be included in the unit Contract prices  
9 for the various Bid items involved in the Contract.

### 10 11 **5-04.3(3) Equipment**

#### 12 13 **5-04.3(3)A Mixing Plant**

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

- 15  
16 **1. Equipment for Preparation of Asphalt Binder** – Tanks for the storage of asphalt  
17 binder shall be equipped to heat and hold the material at the required temperatures.  
18 The heating shall be accomplished by steam coils, electricity, or other approved  
19 means so that no flame shall be in contact with the storage tank. The circulating  
20 system for the asphalt binder shall be designed to ensure proper and continuous  
21 circulation during the operating period. A valve for the purpose of sampling the  
22 asphalt binder shall be placed in either the storage tank or in the supply line to the  
23 mixer.
- 24  
25 **2. Thermometric Equipment** – An armored thermometer, capable of detecting  
26 temperature ranges expected in the HMA mix, shall be fixed in the asphalt binder feed  
27 line at a location near the charging valve at the mixer unit. The thermometer location  
28 shall be convenient and safe for access by Inspectors. The plant shall also be equipped  
29 with an approved dial-scale thermometer, a mercury actuated thermometer, an electric  
30 pyrometer, or another approved thermometric instrument placed at the discharge chute  
31 of the drier to automatically register or indicate the temperature of the heated  
32 aggregates. This device shall be in full view of the plant operator.
- 33  
34 **3. Heating of Asphalt Binder** – The temperature of the asphalt binder shall not exceed  
35 the maximum recommended by the asphalt binder manufacturer nor shall it be below  
36 the minimum temperature required to maintain the asphalt binder in a homogeneous  
37 state. The asphalt binder shall be heated in a manner that will avoid local variations in  
38 heating. The heating method shall provide a continuous supply of asphalt binder to the  
39 mixer at a uniform average temperature with no individual variations exceeding 25°F.  
40 Also, when a WMA additive is included in the asphalt binder, the temperature of the  
41 asphalt binder shall not exceed the maximum recommended by the manufacturer of the  
42 WMA additive.
- 43  
44 **4. Sampling and Testing of Mineral Materials** – The HMA plant shall be equipped with  
45 a mechanical sampler for the sampling of the mineral materials. The mechanical  
46 sampler shall meet the requirements of Section 1-05.6 for the crushing and screening

operation. The Contractor shall provide for the setup and operation of the field-testing facilities of the Contracting Agency as provided for in Section 3-01.2(2).

**5. Sampling HMA** – The HMA plant shall provide for sampling HMA by one of the following methods:

G. A mechanical sampling device attached to the HMA plant.

b. Platforms or devices to enable sampling from the hauling vehicle without entering the hauling vehicle.

**5-04.3(3)B Hauling Equipment**

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

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

**5-04.3(3)C Pavers**

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

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

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

When specified in the Contract, reference lines for vertical control will be required. Lines shall be placed on both outer edges of the Traveled Way of each Roadway. Horizontal control utilizing the reference line will be permitted. The grade and slope for intermediate lanes shall be controlled automatically from reference lines or by means of a mat referencing device and

1 a slope control device. When the finish of the grade prepared for paving is superior to the  
2 established tolerances and when, in the opinion of the Engineer, further improvement to the  
3 line, grade, cross-section, and smoothness can best be achieved without the use of the reference  
4 line, a mat referencing device may be substituted for the reference line. Substitution of the  
5 device will be subject to the continued approval of the Engineer. A joint matcher may be used  
6 subject to the approval of the Engineer. The reference line may be removed after the  
7 completion of the first course of HMA when approved by the Engineer. Whenever the Engineer  
8 determines that any of these methods are failing to provide the necessary vertical control, the  
9 reference lines will be reinstalled by the Contractor.

10  
11 The Contractor shall furnish and install all pins, brackets, tensioning devices, wire, and  
12 accessories necessary for satisfactory operation of the automatic control equipment.

13  
14 If the paving machine in use is not providing the required finish, the Engineer may suspend  
15 Work as allowed by Section 1-08.6. Any cleaning or solvent type liquids spilled on the  
16 pavement shall be thoroughly removed before paving proceeds.

17  
18 **5-04.3(3)D Material Transfer Device or Material Transfer Vehicle**

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

21  
22 Where an MTD/V is required by the Contract, the Engineer may approve paving without an  
23 MTD/V, at the request of the Contractor. The Engineer will determine if an equitable  
24 adjustment in cost or time is due.

25  
26 When used, the MTD/V shall mix the HMA after delivery by the hauling equipment and prior  
27 to laydown by the paving machine. Mixing of the HMA shall be sufficient to obtain a uniform  
28 temperature throughout the mixture. If a windrow elevator is used, the length of the windrow  
29 may be limited in urban areas or through intersections, at the discretion of the Engineer.

30  
31 To be approved for use, an MTV:

- 32
- 33 1. Shall be self-propelled vehicle, separate from the hauling vehicle or paver.
  - 34
  - 35 2. Shall not be connected to the hauling vehicle or paver.
  - 36
  - 37 3. May accept HMA directly from the haul vehicle or pick up HMA from a windrow.
  - 38
  - 39 4. Shall mix the HMA after delivery by the hauling equipment and prior to placement
  - 40 into the paving machine.
  - 41
  - 42 5. Shall mix the HMA sufficiently to obtain a uniform temperature throughout the
  - 43 mixture.
  - 44

45 To be approved for use, an MTD:

46

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

#### **5-04.3(3)E Rollers**

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

#### **5-04.3(4) Preparation of Existing Paved Surfaces**

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

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

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

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

A tack coat of asphalt shall be applied to all paved surfaces on which any course of HMA is to be placed or abutted; except that tack coat may be omitted from clean, newly paved surfaces at the discretion of the Engineer. Tack coat shall be uniformly applied to cover the existing pavement with a thin film of residual asphalt free of streaks and bare spots at a rate between

0.02 and 0.10 gallons per square yard of retained asphalt. The rate of application shall be approved by the Engineer. A heavy application of tack coat shall be applied to all joints. For Roadways open to traffic, the application of tack coat shall be limited to surfaces that will be paved during the same working shift. The spreading equipment shall be equipped with a thermometer to indicate the temperature of the tack coat material.

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

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

#### **5-04.3(4)A Crack Sealing**

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

#### **5-04.3(4)B Vacant**

#### **5-04.3(4)C Pavement Repair**

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

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

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

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

1 or a roller.

2  
3 **5-04.3(5) Producing/Stockpiling Aggregates and RAP**

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

9  
10 **5-04.3(5)A Vacant**

11  
12 **5-04.3(6) Mixing**

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

17  
18 When discharged, the temperature of the HMA shall not exceed the optimum mixing  
19 temperature by more than 25°F as shown on the reference mix design report or as approved by  
20 the Engineer. Also, when a WMA additive is included in the manufacture of HMA, the  
21 discharge temperature of the HMA shall not exceed the maximum recommended by the  
22 manufacturer of the WMA additive. A maximum water content of 2 percent in the mix, at  
23 discharge, will be allowed providing the water causes no problems with handling, stripping, or  
24 flushing. If the water in the HMA causes any of these problems, the moisture content shall be  
25 reduced as directed by the Engineer.

26  
27 Storing or holding of the HMA in approved storage facilities will be permitted with approval  
28 of the Engineer, but in no event shall the HMA be held for more than 24 hours. HMA held for  
29 more than 24 hours after mixing shall be rejected. Rejected HMA shall be disposed of by the  
30 Contractor at no expense to the Contracting Agency. The storage facility shall have an  
31 accessible device located at the top of the cone or about the third point. The device shall  
32 indicate the amount of material in storage. No HMA shall be accepted from the storage facility  
33 when the HMA in storage is below the top of the cone of the storage facility, except as the  
34 storage facility is being emptied at the end of the working shift.

35  
36 Recycled asphalt pavement (RAP) utilized in the production of HMA shall be sized prior to  
37 entering the mixer so that a uniform and thoroughly mixed HMA is produced. If there is  
38 evidence of the recycled asphalt pavement not breaking down during the heating and mixing  
39 of the HMA, the Contractor shall immediately suspend the use of the RAP until changes have  
40 been approved by the Engineer. After the required amount of mineral materials, RAP, new  
41 asphalt binder and asphalt rejuvenator have been introduced into the mixer the HMA shall be  
42 mixed until complete and uniform coating of the particles and thorough distribution of the  
43 asphalt binder throughout the mineral materials, and RAP is ensured.

44  
45 **5-04.3(7) Spreading and Finishing**

46 The mixture shall be laid upon an approved surface, spread, and struck off to the grade and

elevation established. HMA pavers complying with Section 5-04.3(3) shall be used to distribute the mixture. Unless otherwise directed by the Engineer, the nominal compacted depth of any layer of any course shall not exceed the following:

HMA Class 1"	0.35 feet
HMA Class ¾" and HMA Class ½"	
wearing course	0.30 feet
other courses	0.35 feet
HMA Class ⅜"	0.15 feet

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

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

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

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

#### **5-04.3(9) HMA Mixture Acceptance**

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

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

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

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

#### **HMA Tolerances and Adjustments**

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

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

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

For Aggregates in the mixture:

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

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

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

2. Job Mix Formula Adjustments – An adjustment to the aggregate gradation or asphalt binder content of the JMF requires approval of the Engineer. Adjustments to the JMF will only be considered if the change produces material of equal or better quality and may require the development of a new mix design if the adjustment exceeds the amounts listed below.

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

**5-04.3(9)A Vacant**

**5-04.3(9)B Vacant**



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

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

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

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

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

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

#### **5-04.3(9)C2 Mixture Nonstatistical Evaluation Sampling**

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

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

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

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

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

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

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

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

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

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

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

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

#### **5-04.3(9)C5 Vacant**

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

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

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

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

The Contractor may request a subplot be retested. To request a retest, the Contractor shall submit a written request within 7 calendar days after the specific test results have been received. A split of the original acceptance sample will be retested. The split of the sample will not be tested with the same tester that ran the original acceptance test. The sample will be tested for a complete gradation analysis, asphalt binder content, and, at the option of the agency, V<sub>a</sub>. The

1 results of the retest will be used for the acceptance of the HMA in place of the original subplot  
2 sample test results. The cost of testing will be deducted from any monies due or that may come  
3 due the Contractor under the Contract at the rate of \$500 per sample.  
4

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

6 If sampled and tested, HMA produced under Commercial Evaluation and having all  
7 constituents falling within the tolerance limits of the job mix formula shall be accepted at the  
8 unit Contract price with no further evaluation. When one or more constituents fall outside the  
9 commercial tolerance limits in the Job Mix Formula shown in 5-04.3(9), the lot shall be  
10 evaluated in accordance with Section 1-06.2 to determine the appropriate CPF. The  
11 commercial tolerance limits will be used in the calculation of the CPF and the maximum CPF  
12 shall be 1.00. When less than three sublots exist, backup samples of the existing sublots or  
13 samples from the street shall be tested to provide a minimum of three sets of results for  
14 evaluation.  
15

16 For each lot of HMA mix produced and tested under Commercial Evaluation when the  
17 calculated CPF is less than 1.00, a Nonconforming Mix Factor (NCMF) will be determined.  
18 The NCMF equals the algebraic difference of CPF minus 1.00 multiplied by 60 percent. The  
19 Job Mix Compliance Price Adjustment will be calculated as the product of the NCMF, the  
20 quantity of HMA in the lot in tons, and the unit Contract price per ton of mix.  
21

22 If a constituent is not measured in accordance with these Specifications, its individual pay  
23 factor will be considered 1.00 in calculating the CPF.  
24

#### 25 **5-04.3(10) HMA Compaction Acceptance**

26 HMA mixture accepted by nonstatistical evaluation that is used in traffic lanes, including lanes  
27 for intersections, ramps, truck climbing, weaving, and speed change, and having a specified  
28 compacted course thickness greater than 0.10-foot, shall be compacted to a specified level of  
29 relative density. The specified level of relative density shall be a CPF of not less than 0.75  
30 when evaluated in accordance with Section 1-06.2, using a LSL of 92.0 (minimum of 92  
31 percent of the maximum density). The maximum density shall be determined by WSDOT FOP  
32 for AASHTO T 729. The specified level of density attained will be determined by the  
33 evaluation of the density of the pavement. The density of the pavement shall be determined in  
34 accordance with WSDOT FOP for WAQTC TM 8, except that gauge correlation will be at the  
35 discretion of the Engineer, when using the nuclear density gauge and WSDOT SOP 736 when  
36 using cores to determine density.  
37

38 Tests for the determination of the pavement density will be taken in accordance with the  
39 required procedures for measurement by a nuclear density gauge or Roadway cores after  
40 completion of the finish rolling.  
41

42 If the Contracting Agency uses a nuclear density gauge to determine density the test procedures  
43 FOP for WAQTC TM 8 and WSDOT SOP T 729 will be used on the day the mix is placed  
44 and prior to opening to traffic.  
45

46 Roadway cores for density may be obtained by either the Contracting Agency or the Contractor

1 in accordance with WSDOT SOP 734. The core diameter shall be 4-inches minimum, unless  
2 otherwise approved by the Engineer. Roadway cores will be tested by the Contracting Agency  
3 in accordance with WSDOT FOP for AASHTO T 166.  
4

5 If the Contract includes the Bid item "Roadway Core", the cores shall be obtained by the  
6 Contractor in the presence of the Engineer on the same day the mix is placed and at locations  
7 designated by the Engineer. If the Contract does not include the Bid item "Roadway Core",  
8 the Contracting Agency will obtain the cores.  
9

10 For a lot in progress with a CPF less than 0.75, a new lot will begin at the Contractor's request  
11 after the Engineer is satisfied that material conforming to the Specifications can be produced.  
12

13 HMA mixture accepted by commercial evaluation and HMA constructed under conditions  
14 other than those listed above shall be compacted on the basis of a test point evaluation of the  
15 compaction train. The test point evaluation shall be performed in accordance with instructions  
16 from the Engineer. The number of passes with an approved compaction train, required to attain  
17 the maximum test point density, shall be used on all subsequent paving.  
18

19 HMA for preleveling shall be thoroughly compacted. HMA that is used for preleveling wheel  
20 rutting shall be compacted with a pneumatic tire roller unless otherwise approved by the  
21 Engineer.  
22

### 23 **Test Results**

24 For a subplot that has been tested with a nuclear density gauge that did not meet the minimum  
25 of 92 percent of the reference maximum density in a compaction lot with a CPF below 1.00  
26 and thus subject to a price reduction or rejection, the Contractor may request that a core be  
27 used for determination of the relative density of the subplot. The relative density of the core will  
28 replace the relative density determined by the nuclear density gauge for the subplot and will be  
29 used for calculation of the CPF and acceptance of HMA compaction lot.  
30

31 When cores are taken by the Contracting Agency at the request of the Contractor, they shall be  
32 requested by noon of the next workday after the test results for the subplot have been provided  
33 or made available to the Contractor. Core locations shall be outside of wheel paths and as  
34 determined by the Engineer. Traffic control shall be provided by the Contractor as requested  
35 by the Engineer. Failure by the Contractor to provide the requested traffic control will result  
36 in forfeiture of the request for cores. When the CPF for the lot based on the results of the HMA  
37 cores is less than 1.00, the cost for the coring will be deducted from any monies due or that  
38 may become due the Contractor under the Contract at the rate of \$200 per core and the  
39 Contractor shall pay for the cost of the traffic control.  
40

### 41 **5-04.3(10)A HMA Compaction – General Compaction Requirements**

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

the surrounding area.

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

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

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

#### **5-04.3(10)C Vacant**

#### **5-04.3(10)D HMA Nonstatistical Compaction**

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

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

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

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

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

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

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

The location of the HMA compaction acceptance tests will be randomly selected by the

1 Engineer from within each subplot, with one test per subplot.

### 2 3 **5-04.3(10)D3 HMA Nonstatistical Compaction – Price Adjustments**

4 For each compaction lot with one or two sublots, having all sublots attain a relative density  
5 that is 92 percent of the reference maximum density the HMA shall be accepted at the unit  
6 Contract price with no further evaluation. When a subplot does not attain a relative density that  
7 is 92 percent of the reference maximum density, the lot shall be evaluated in accordance with  
8 Section 1-06.2 to determine the appropriate CPF. The maximum CPF shall be 1.00, however,  
9 lots with a calculated CPF in excess of 1.00 will be used to offset lots with CPF values below  
10 1.00 but greater than 0.90. Lots with CPF lower than 0.90 will be evaluated for compliance per  
11 5-04.3(11). Additional testing by either a nuclear moisture-density gauge or cores will be  
12 completed as required to provide a minimum of three tests for evaluation.

13  
14 For compaction below the required 92%, a Non-Conforming Compaction Factor (NCCF) will  
15 be determined. The NCCF equals the algebraic difference of CPF minus 1.00 multiplied by 40  
16 percent. The Compaction Price Adjustment will be calculated as the product of CPF, the  
17 quantity of HMA in the compaction control lot in tons, and the unit Contract price per ton of  
18 mix.

### 19 20 **5-04.3(11) Reject Work**

#### 21 22 **5-04.3(11)A Reject Work General**

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

#### 29 30 **5-04.3(11)B Rejection by Contractor**

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

#### 34 35 **5-04.3(11)C Rejection Without Testing (Mixture or Compaction)**

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

39  
40 No payment will be made for the rejected materials or the removal of the materials unless the  
41 Contractor requests that the rejected material be tested. If the Contractor elects to have the  
42 rejected material tested, a minimum of three representative samples will be obtained and tested.  
43 Acceptance of rejected material will be based on conformance with the nonstatistical  
44 acceptance Specification. If the CPF for the rejected material is less than 0.75, no payment will  
45 be made for the rejected material; in addition, the cost of sampling and testing shall be borne  
46 by the Contractor. If the CPF is greater than or equal to 0.75, the cost of sampling and testing

will be borne by the Contracting Agency. If the material is rejected before placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at a CPF of 0.75. If rejection occurs after placement and the CPF is greater than or equal to 0.75, compensation for the rejected material will be at the calculated CPF with an addition of 25 percent of the unit Contract price added for the cost of removal and disposal.

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

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

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

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

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

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

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

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

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

### **5-04.3(12) Joints**

#### **5-04.3(12)A HMA Joints**

##### **5-04.3(12)A1 Transverse Joints**

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

1 of the course.

2  
3 A temporary wedge of HMA constructed on a 20H:1V shall be constructed where a transverse  
4 joint as a result of paving or planing is open to traffic. The HMA in the temporary wedge shall  
5 be separated from the permanent HMA by strips of heavy wrapping paper or other methods  
6 approved by the Engineer. The wrapping paper shall be removed and the joint trimmed to a  
7 slightly beveled edge for the full thickness of the course prior to resumption of paving.

8  
9 The material that is cut away shall be wasted and new mix shall be laid against the cut. Rollers  
10 or tamping irons shall be used to seal the joint.

11  
12 (\*\*\*\*\*)

13 (February 25, 2008 R&E GSP)

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

15  
16 All joints of new hot mix asphalt to an existing pavement shall be sealed with an appropriate  
17 asphalt joint sealer.

18  
19 **5-04.3(12)A2 Longitudinal Joints**

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

28  
29 **5-04.3(12)B Bridge Paving Joint Seals**

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

31  
32 **5-04.3(13) Surface Smoothness**

33 The completed surface of all courses shall be of uniform texture, smooth, uniform as to crown  
34 and grade, and free from defects of all kinds. The completed surface of the wearing course  
35 shall not vary more than ⅛ inch from the lower edge of a 10-foot straightedge placed on the  
36 surface parallel to the centerline. The transverse slope of the completed surface of the wearing  
37 course shall vary not more than ¼ inch in 10 feet from the rate of transverse slope shown in  
38 the Plans.

39  
40 When deviations in excess of the above tolerances are found that result from a high place in  
41 the HMA, the pavement surface shall be corrected by one of the following methods:

- 42  
43 1. Removal of material from high places by grinding with an approved grinding machine,  
44 or  
45  
46 2. Removal and replacement of the wearing course of HMA, or



1  
2 3. By other method approved by the Engineer.  
3

4 Correction of defects shall be carried out until there are no deviations anywhere greater than  
5 the allowable tolerances.  
6

7 Deviations in excess of the above tolerances that result from a low place in the HMA and  
8 deviations resulting from a high place where corrective action, in the opinion of the Engineer,  
9 will not produce satisfactory results will be accepted with a price adjustment. The Engineer  
10 shall deduct from monies due or that may become due to the Contractor the sum of \$500.00  
11 for each and every section of single traffic lane 100 feet in length in which any excessive  
12 deviations described above are found.  
13

14 When utility appurtenances such as manhole covers and valve boxes are located in the traveled  
15 way, the utility appurtenances shall be adjusted to the finished grade prior to paving. This  
16 requirement may be waived when requested by the Contractor, at the discretion of the Engineer  
17 or when the adjustment details provided in the project plan or specifications call for utility  
18 appurtenance adjustments after the completion of paving.  
19

20 Utility appurtenance adjustment discussions will be included in the Pre-Paving and Pre-Planing  
21 Briefing (5-04.3(14)B3). Submit a written request to waive this requirement to the Engineer  
22 prior to the start of paving.  
23

#### 24 **5-04.3(14) Planing Bituminous Pavement**

25 The planing plan must be approved by the Engineer and a pre-planing meeting must be held  
26 prior to the start of any planing. See Section 5-04.3(14)B2 for information on planing  
27 submittals.  
28

29 Where planing an existing pavement is specified in the Contract, the Contractor must remove  
30 existing surfacing material and to reshape the surface to remove irregularities. The finished  
31 product must be a prepared surface acceptable for receiving an HMA overlay.  
32

33 Use the cold milling method for planing unless otherwise specified in the Contract. Do not use  
34 the planer on the final wearing course of new HMA.  
35

36 Conduct planing operations in a manner that does not tear, break, burn, or otherwise damage  
37 the surface which is to remain. The finished planed surface must be slightly grooved or  
38 roughened and must be free from gouges, deep grooves, ridges, or other imperfections. The  
39 Contractor must repair any damage to the surface by the Contractor's planing equipment, using  
40 an Engineer approved method.  
41

42 Repair or replace any metal castings and other surface improvements damaged by planing, as  
43 determined by the Engineer.  
44

45 A tapered wedge cut must be planed longitudinally along curb lines sufficient to provide a  
46 minimum of 4 inches of curb reveal after placement and compaction of the final wearing

1 course. The dimensions of the wedge must be as shown on the Drawings or as specified by the  
2 Engineer.

3  
4 A tapered wedge cut must also be made at transitions to adjoining pavement surfaces (meet  
5 lines) where butt joints are shown on the Drawings. Cut butt joints in a straight line with  
6 vertical faces 2 inches or more in height, producing a smooth transition to the existing adjoining  
7 pavement.

8  
9 After planing is complete, planed surfaces must be swept, cleaned, and if required by the  
10 Contract, patched and preleveled.

11  
12 The Engineer may direct additional depth planing. Before performing this additional depth  
13 planing, the Contractor must conduct a hidden metal in pavement detection survey as specified  
14 in Section 5-04.3(14)A.

#### 15 16 **5-04.3(14)A Pre-Planing Metal Detection Check**

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

20  
21 Should such metal be identified, promptly notify the Engineer.

22  
23 See Section 1-07.16(1) regarding the protection of survey monumentation that may be hidden  
24 in pavement.

25  
26 The Contractor is solely responsible for any damage to equipment resulting from the  
27 Contractor's failure to conduct a pre-planing metal detection survey, or from the Contractor's  
28 failure to notify the Engineer of any hidden metal that is detected.

#### 29 30 **5-04.3(14)B Paving and Planing Under Traffic**

##### 31 32 **5-04.3(14)B1 General**

33 In addition, the requirements of Section 1-07.23 and the traffic controls required in Section 1-  
34 10, and unless the Contract specifies otherwise or the Engineer approves, the Contractor must  
35 comply with the following:

##### 36 37 1. Intersections:

- 38  
39 a. Keep intersections open to traffic at all times, except when paving or planing  
40 operations through an intersection requires closure. Such closure must be kept to the  
41 minimum time required to place and compact the HMA mixture, or plane as  
42 appropriate. For paving, schedule such closure to individual lanes or portions thereof  
43 that allows the traffic volumes and schedule of traffic volumes required in the approved  
44 traffic control plan. Schedule work so that adjacent intersections are not impacted at the  
45 same time and comply with the traffic control restrictions required by the Traffic  
46 Engineer. Each individual intersection closure or partial closure must be addressed in

the traffic control plan, which must be submitted to and accepted by the Engineer, see Section 1-10.2(2).

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

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

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

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

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

3. Permanent pavement marking must comply with Section 8-22.

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

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

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

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

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

- 1
- 2 1. A copy of the accepted traffic control plan, see Section 1-10.2(2), detailing each day's
- 3 traffic control as it relates to the specific requirements of that day's planing and
- 4 paving. Briefly describe the sequencing of traffic control consistent with the proposed
- 5 planing and paving sequence, and scheduling of placement of temporary pavement
- 6 markings and channelizing devices after each day's planing, and paving.
- 7
- 8 2. A copy of each intersection's traffic control plan.
- 9
- 10 3. Haul routes from supplier facilities, and locations of temporary parking and staging
- 11 areas, including return routes. Describe the complete round trip as it relates to the
- 12 sequencing of paving operations.
- 13
- 14 4. Names and locations of HMA supplier facilities to be used.
- 15
- 16 5. List of all equipment to be used for paving.
- 17
- 18 6. List of personnel and associated job classification assigned to each piece of paving
- 19 equipment.
- 20
- 21 7. Description (geometric or narrative) of the scheduled sequence of planing and of
- 22 paving and intended area of planing and of paving for each day's work, must include
- 23 the directions of proposed planing and of proposed paving, sequence of adjacent lane
- 24 paving, sequence of skipped lane paving, intersection planing and paving scheduling
- 25 and sequencing, and proposed notifications and coordinations to be timely made. The
- 26 plan must show HMA joints relative to the final pavement marking lane lines.
- 27
- 28 8. Names, job titles, and contact information for field, office, and plant supervisory
- 29 personnel.
- 30
- 31 9. A copy of the approved Mix Designs.
- 32
- 33 10. Tonnage of HMA to be placed each day.
- 34
- 35 11. Approximate times and days for starting and ending daily operations.
- 36

#### 37 **5-04.3(14)B3 Pre-Paving and Pre-Planing Briefing**

38 At least 2 Working Days before the first paving operation and the first planing operation, or as  
39 scheduled by the Engineer for future paving and planing operations to ensure the Contractor  
40 has adequately prepared for notifying and coordinating as required in the Contract, the  
41 Contractor must be prepared to discuss that day's operations as they relate to other entities and  
42 to public safety and convenience, including driveway and business access, garbage truck  
43 operations, transit operations and working around energized overhead wires, school and  
44 nursing home and hospital and other accesses, other Contractors who may be operating in the  
45 area, pedestrian and bicycle traffic, and emergency services. The Contractor, and  
46 Subcontractors that may be part of that day's operations, must meet with the Engineer and

1 discuss the proposed operation as it relates to the submitted planing plan and paving plan,  
2 approved traffic control plan, and public convenience and safety. Such discussion includes, but  
3 is not limited to:

4  
5 1. General for both the Paving and Planing:

- 6  
7 a. The actual times of starting and ending daily operations.  
8  
9 b. In intersections, how to break up the intersection, and address traffic control and  
10 signalization for that operation, including use of peace officers.  
11  
12 c. The sequencing and scheduling of paving operations and of planing operations, as  
13 applicable, as it relates to traffic control, public convenience and safety, and other  
14 Contractors who may operate in the Project limits.  
15  
16 d. Notifications required of Contractor activities and coordinating with other entities  
17 and the public as necessary.  
18  
19 e. Description of the sequencing of installation and types of temporary pavement  
20 markings as it relates to planning and paving.  
21  
22 f. Description of the sequencing of installation of, and the removal of, temporary  
23 pavement patch material around exposed castings and as may be needed.  
24  
25 g. Description of procedures and equipment to identify hidden metal in the pavement,  
26 such as survey monumentation, monitoring wells, streetcar rail, and castings, before  
27 planing as per Section 5-04.3(14)B2.  
28  
29 h. Description of how flaggers will be coordinated with the planing, paving, and  
30 related operations.  
31  
32 i. Description of sequencing of traffic controls for the process of rigid pavement base  
33 repairs.  
34  
35 j. Other items the Engineer deems necessary to address.

36  
37 2. Paving – additional topics:

- 38  
39 a. When to start applying tack and coordinating with paving.  
40  
41 b. Types of equipment and numbers of each type of equipment to be used. If more  
42 pieces of equipment than personnel are proposed, describe the sequencing of the  
43 personnel operating the types of equipment. Discuss the continuance of operator  
44 personnel for each type of equipment as it relates to meeting Specification  
45 requirements.  
46

- 1 c. Number of JMFs to be placed, and if more than one JMF is used, how the Contractor  
2 will ensure different JMFs are distinguished, how pavers and how MTVs are  
3 distinguished, and how pavers and MTVs are cleaned so that one JMF does not  
4 adversely influence the other JMF.  
5  
6 d. Description of contingency plans for that day's operations such as equipment  
7 breakdown, rain out, and supplier shutdown of operations.  
8  
9 e. Number of sublots to be placed, sequencing of density testing, and other sampling  
10 and testing.  
11

#### 12 **5-04.3(15) Sealing Pavement Surfaces**

13 Apply a fog seal where shown in the plans. Construct the fog seal in accordance with Section  
14 5-02.3. Unless otherwise approved by the Engineer, apply the fog seal prior to opening to  
15 traffic.  
16

#### 17 **5-04.3(16) HMA Road Approaches**

18 Construct HMA approaches at the locations shown in the Plans or where staked by the  
19 Engineer, in accordance with Section 5-04.  
20

#### 21 **5-04.4 Measurement**

22 HMA Cl. \_\_\_\_ PG \_\_\_\_, HMA for \_\_\_\_ Cl. \_\_\_\_ PG \_\_\_\_, and Commercial HMA will be measured  
23 by the ton in accordance with Section 1-09.2, with no deduction being made for the weight of  
24 asphalt binder, mineral filler, or any other component of the mixture. If the Contractor elects  
25 to remove and replace mix as allowed by Section 5-04.3(11), the material removed will not be  
26 measured.  
27

28 Roadway cores will be measured per each for the number of cores taken.  
29

30 Pavement repair excavation will be measured by the square yard of surface marked prior to  
31 excavation.  
32

33 Planing bituminous pavement will be measured by the square yard.  
34

35 (\*\*\*\*\*)

36 (*May 22, 2017 R&E GSP*)

37 Section 5-04.4 is supplemented with the following:  
38

39 "Self-Adhering Rubberized Asphalt Membrane" shall be measured by the square yard of  
40 completed fabric installed. Overlap at joints shall not be measured twice.  
41

#### 42 **5-04.5 Payment**

43 Payment will be made for each of the following Bid items that are included in the Proposal:  
44

45 "HMA Cl. \_\_\_\_ PG \_\_\_\_", per ton.  
46

1 “HMA for Approach Cl. \_\_\_\_ PG \_\_\_\_”, per ton.

2  
3 “HMA for Preleveling Cl. \_\_\_\_ PG \_\_\_\_”, per ton.

4  
5 “HMA for Pavement Repair Cl. \_\_\_\_ PG \_\_\_\_”, per ton.

6  
7 “Commercial HMA”, per ton.

8  
9 The unit Contract price per ton for “HMA Cl. \_\_\_\_ PG \_\_\_\_”, “HMA for Approach Cl. \_\_\_\_  
10 PG \_\_\_\_”, “HMA for Preleveling Cl. \_\_\_\_ PG \_\_\_\_”, “HMA for Pavement Repair Cl. \_\_\_\_ PG  
11 \_\_\_\_”, and “Commercial HMA” shall be full compensation for all costs, including anti-  
12 stripping additive, incurred to carry out the requirements of Section 5-04 except for those  
13 costs included in other items which are included in this Subsection and which are included  
14 in the Proposal.

15  
16 “Pavement Repair Excavation Incl. Haul”, per square yard.

17  
18 The unit Contract price per square yard for “Pavement Repair Excavation Incl. Haul” shall  
19 be full payment for all costs incurred to perform the Work described in Section 5-04.3(4)  
20 with the exception, however, that all costs involved in the placement of HMA shall be  
21 included in the unit Contract price per ton for “HMA for Pavement Repair Cl. \_\_\_\_ PG  
22 \_\_\_\_”, per ton.

23  
24 “Asphalt for Prime Coat”, per ton.

25  
26 The unit Contract price per ton for “Asphalt for Prime Coat” shall be full payment for all  
27 costs incurred to obtain, provide and install the material in accordance with Section 5-  
28 04.3(4).

29  
30 “Prime Coat Agg.”, per cubic yard, or per ton.

31  
32 The unit Contract price per cubic yard or per ton for “Prime Coat Agg.” shall be full pay  
33 for furnishing, loading, and hauling aggregate to the place of deposit and spreading the  
34 aggregate in the quantities required by the Engineer.

35  
36 “Planing Bituminous Pavement”, per square yard.

37  
38 The unit Contract price per square yard for “Planing Bituminous Pavement” shall be full  
39 payment for all costs incurred to perform the Work described in Section 5-04.3(14).

40  
41 “Job Mix Compliance Price Adjustment”, by calculation.

42  
43 “Job Mix Compliance Price Adjustment” will be calculated and paid for as described in  
44 Section 5-04.3(9)C6.

45  
46 “Compaction Price Adjustment”, by calculation.

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

“Roadway Core”, per each.

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

“Cyclic Density Price Adjustment”, by calculation.

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

(\*\*\*\*\*)

(May 22, 2017 R&E GSP)

Section 5-04.5 is supplemented with the following:

The unit contract price per square yard “Self-Adhering Rubberized Asphalt Membrane” shall be full compensation for furnishing all labor, materials, equipment to complete this item as specified.

*(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.

## **5-05 CEMENT CONCRETE PAVEMENT**

*(October 31, 2024 R&E GSP)*

### **5-05.3 Construction Requirements**

Section 5-05.3 is supplemented with the following:

**(\*\*\*\*\*)**

#### **Textured Cement Concrete**

The Contractor shall stamp the areas indicated on the Plans. The stamped concrete shall be Terra-Cotta Integral Color. The stamp pattern shall be Running Brick Bond pattern shown on the Plans.

1 Work shall be performed by workers experienced with concrete stamping and concrete  
2 coloring. The Contractor shall provide certification that they have completed a minimum of  
3 three concrete stamping projects for roadway related projects.

4  
5 The Contractor shall provide a job-site sample to be approved by the Engineer prior to placing  
6 textured cement concrete. The sample shall be a minimum of six feet by six feet, completed  
7 panel, including stamp pattern, colored concrete, and sealer.

8  
9 Concrete shall be a minimum of 8 inches thick and shall be constructed using Class 4,000  
10 concrete as specified in Section 6-02.3(1) of the Standard Specifications. The slump of the  
11 concrete shall not exceed 3 ½ inches. Concrete shall be 3-Day Mix, with Terra-Cotta (4 lbs  
12 per sack add mix). The concrete shall be air entrained concrete in accordance with the  
13 requirements of Section 5-05.3(4)A and shall be cured for 4 days in accordance with  
14 Section 5-05.3(13)B.

15  
16 Transverse construction joints and transverse contraction joints shall be placed perpendicular  
17 or radial to the back of curb. Joint spacing shall be a maximum of 15 feet apart and equally  
18 spaced along the length of the textured cement concrete. Joints shall be constructed as shown  
19 in the Plans.

20  
21 When the textured concrete is dry, the Contractor shall apply a sealer to the concrete. Sealer  
22 shall be as recommended by the color hardener manufacturer's recommendation and as  
23 approved by the Engineer.

24  
25 Concrete finishing for transitions to existing cement concrete shall match the existing surface  
26 as closely as possible.

#### 27 28 **5-05.4 Measurement**

29 Section 5-05.4 is supplemented with the following:

30  
31 **(\*\*\*\*\*)**

32 "Textured Cement Concrete Pavement" will be measured by the square yard of finished  
33 surface.

34  
35 **(\*\*\*\*\*)**

36 Speed Table will be measured per each.

#### 37 38 **5-05.5 Payment**

39 Section 5-05.5 is supplemented with the following:

40  
41 **(\*\*\*\*\*)**

42 "Textured Cement Concrete Pavement," per cubic yard.

43 The unit contract price per cubic yard for "Textured Cement Concrete Pavement" shall include  
44 for the full pay for the Terra-Cotta and the 3-day add mix and stamping, per Section 5-05.3 of  
45 these Special Provisions.

1       (\*\*\*)  
2       “Speed Table”, per each. The unit Contract price per each for “Speed Table” shall be full pay  
3       for providing, placing, pavement marking, sawcutting, furnishing and placing Class 4000  
4       concrete, cement concrete traffic curb, and furnishing and installing dowels, tie bars,  
5       expansion joint, and reinforcing steel and other items necessary for the speed table.

6 **DIVISION 7**

7 **DRAINAGE STRUCTURES, STORM SEWERS, SANITARY SEWERS, WATER MAINS,**  
8 **AND CONDUITS**

10 **7-01 Drains**

12 **7-01.1 Description**

13 *(July 6, 2009 R&E GSP)*

14 Section 7-01.1 is supplemented with the following:

16 This work consists of constructing infiltration trenches and water quality infiltration trenches  
17 in accordance with the Plans, and these Specifications at the locations staked.

19 **7-01.3 Construction Requirements**

20 *(December 6, 2024 R&E GSP)*

21 Section 7-01.3 is supplemented with the following:

23 The Contractor shall take every precaution to protect the infiltration trenches from damage,  
24 including the introduction of foreign materials to the surface, traffic, water run-on, standing  
25 water, over compaction, or other damage, throughout the course of the work. Infiltration  
26 trenches that are damaged or have been adversely impacted by the introduction of foreign  
27 materials shall be remediated to the satisfaction of the Engineer or rejected and replaced to the  
28 satisfaction of the Engineer.

30 **7-01.4 Measurement**

31 *(July 6, 2009 R&E GSP)*

32 Section 7-01.4 is supplemented with the following:

34 “Infiltration Trench” shall be measured per linear foot along the centerline of the trench  
35 actually installed.

37 **7-01.5 Payment**

38 *(July 6, 2009 R&E GSP)*

39 Section 7-01.5 is supplemented with the following:

41 “Infiltration Trench”, per linear foot.

42 Excavation, backfill, underdrain pipe, washed rock, filtration media, and filter fabric required  
43 for the installation of “Infiltration Trench” shall be considered incidental to the linear foot bid  
44 price for both items. Other work and materials not specifically identified as being paid  
45 elsewhere will be considered incidental to these bid items.

47 **7-04 STORM SEWERS**

49 **7-04.1 Description**

50 *(February 5, 2008 R&E GSP)*

51 Section 7-04.1 is supplemented with the following:

Suitable native materials shall be used for trench backfill with approval from or at the direction of the Engineer. Unsuitable native material shall become the property of the contractor for disposal. Excess suitable native material shall be embanked according to the plans and specifications.

#### **7-04.2 Materials**

*(February 5, 2008 R&E GSP)*

Section 7-04.2 is supplemented with the following:

“Ductile Iron Storm Sewer Pipe \_ In. Diam. 9-05.13”

#### **7-04.3(1) Cleaning and Testing**

##### **7-04.3(1)A General**

*(February 5, 2008 R&E GSP)*

Section 7-04.3(1)A is supplemented with the following:

Storm Drain Pipe shall be tested visually for alignment with full circle visibility required between drainage structures. Storm drain structures shall be cleaned of sediment and debris prior to final acceptance.

#### **7-04.4 Measurement**

*(February 5, 2008 R&E GSP)*

Section 7-04.4 is supplemented with the following:

Measurement for the various bid items for Storm Sewer pipe as indicated in the bid proposal form, shall be per linear foot. The following items shall be incidental and included in the unit price per linear foot:

1. Dewatering if required.
2. Structure Excavation Class B Including Haul
3. Pipe bedding as shown on the Plans
4. Compaction
5. Installation of storm sewer pipe
6. Coupling bands, fittings, and associated gaskets.
7. Cleaning
8. Connection to existing storm drains, culverts, and structures
9. Other work and materials, not specifically identified as being paid elsewhere
10. Bevel of pipe ends if applicable.

“Ductile Iron Storm Sewer Pipe \_ In. Diam.” shall be measured by linear feet.

#### **7-04.5 Payment**

*(February 5, 2008 R&E GSP)*

Section 7-04.5 is supplemented with the following:

“Ductile Iron Storm Sewer Pipe \_\_\_\_ In. Diam.,” per linear foot.

1 The unit contract price per linear foot for the various bid items for Storm Sewer pipe as  
2 indicated in the bid proposal form, shall be full compensation for all labor, material, tools and  
3 equipment required to complete the Bid Items in accordance with Section 1-04.1.

4  
5 “Testing Storm Sewer Pipe”, per linear foot.

6 The unit Contract price per linear foot for the testing storm sewer pipe shall be full pay for all  
7 Work to complete the Testing Storm Sewer Pipe.

## 8 9 **7-05 MANHOLES, INLETS, CATCH BASINS, AND DRYWELLS**

### 10 11 **7-05.1 Description**

12 (\*\*\*\*\*)

13 Section 7-05.1 is supplemented with the following:

14  
15 Work in the section also includes the fabrication and installation of StormFilter appurtenances  
16 as indicated in the Plans.

17  
18 This item also includes frames and grates in designated areas. Thru-curb inlet frame and grate  
19 shall be used at locations with 6 inch high cement concrete traffic curb and gutter as noted on  
20 the Plans. The adjusting of any new storm drain catch basin frame, manhole ring and cover,  
21 for the purpose of matching new finish grades shall be incidental to the cost of installation.  
22 Existing manholes, inlets, and catch basins within the Project boundary which are nearest to  
23 the point of connection into the storm drain system and other manholes, inlets, and catch basins  
24 which are impacted by construction activities will be cleaned by the Contractor. This work is  
25 incidental to the various bid items in this Section.

26  
27 All existing sanitary sewer manhole frame and covers that are adjusted to finished grade shall  
28 be replaced with locking frame and cover.

29  
30 This Work also includes the installation of trench drains, area drains and storm drain cleanouts  
31 as shown on the plans.

### 32 33 **7-05.2 Materials**

34 Section 7-05.3 is supplemented with the following:

35 *(June 10, 2009 R&E GSP)*

#### 36 37 **StormFilter**

38 All materials incorporated into the StormFilter shall be as shown on the plans and shall meet  
39 the requirements of the various applicable sections of the Specifications.

#### 40 41 **Sewer Manhole Covers**

42 “Never-Seez Anti-Seize & Lubricating Compound” shall be applied to all lock down bolts  
43 prior to installation. “Never-Seez Anti-Seize & Lubricating Compound” application shall be  
44 in accordance with manufacturer’s recommendations. This work is incidental to the various  
45 bid items.

1 Sanitary Sewer Manholes shall conform to the specified Standard Plan and shall be fitted with  
2 a booted or approved gasketed connection for sewer pipes. All sanitary sewer manholes shall  
3 have locking ring and covers.  
4

5 *(July 27, 2015 R&E GSP)*  
6

7 Manholes shall be pre-channeled.  
8

### 9 **7-05.3 Construction Requirements**

10 *(March 9, 2010 R&E GSP)*  
11

12 Section 7-05.3 is supplemented with the following:  
13

#### 14 **Sanitary Sewer Manholes**

15 Where necessary to complete the removal of existing sanitary sewer pipe for the installation of  
16 new sanitary sewer manhole, the Contractor shall pump existing sanitary sewer flows around  
17 the area of work and/or pump directly into tanker trucks. The required time of pumping shall  
18 be sufficient to allow the work to be completed for each manhole.  
19

20 Pumps used for the temporary diversion of sanitary sewer flows shall be capable of passing  
21 solids and other materials typically found in wastewater flows.  
22

23 The Contractor shall give a minimum of one week notice to the Contracting Agency prior to  
24 the planned installation of sanitary sewer manhole. At the time of notice, the Contractor shall  
25 provide a Sanitary Sewer Pump Around Plan for review and approval by the Contracting  
26 Agency.  
27

28 The Sanitary Sewer Pump Around Plan shall show method of removing the existing sanitary  
29 sewer pipe, proposed materials for the sanitary sewer pipe removal, and the sequence of  
30 demolition and removal. The plan shall detail the containment, collection, and disposal of all  
31 debris. The Contractor shall not begin removal operations until receiving the Engineer's  
32 approval of the Sanitary Sewer Pump Around Plan.  
33

34 The Contractor may at their option choose to make the connection at night. If night work is  
35 elected, the Contractor shall be responsible for all necessary lighting, extra equipment and  
36 personnel needed to complete the work. The Contractor shall be responsible for all overtime  
37 pay for employees as a result of night work. The Contractor is cautioned that City of Ferndale  
38 employees are not on duty for night work. Should City of Ferndale employees be needed to  
39 aid in the night work, the Contractor will be billed overtime rates by the Contracting Agency  
40 per hour for City employees.  
41

42 According to available information, the highest expected flow for the sanitary sewer line along  
43 **Ferndale Terrace is approximately 0.75 cubic feet per second (340 gpm).** Typical flow  
44 rates will vary. At each location where pumping is required, at least two pumps shall be  
45 supplied, both individually capable of pumping the necessary flows the required distances and  
46 against the required elevation head. One shall be designated as the primary pump, and the  
47 second shall be a back-up pump.

1  
2 Tanker trucks shall empty their loads back into the City of Ferndale's wastewater collection  
3 system at a location acceptable to the City. The Contractor shall propose a location at the time  
4 of submittal of the Pump Around Plan.

5  
6 Should the Contractor elect to pump from an existing sanitary sewer manhole to a sanitary  
7 sewer manhole downstream, the elevation differences and distances between the sanitary sewer  
8 manholes shall be addressed in the Sanitary Sewer Pump Around Plan. The Contractor shall  
9 confirm this distance and elevation difference in the field and size the pumps accordingly.

10  
11 The Contractor shall designate a person to oversee the pumps during their operation. This  
12 person shall be on site at all times while the pump around is occurring and shall continually  
13 monitor the pump operation. The individual shall be familiar with the operation of the pumps  
14 and shall be capable switching between pumps if necessary, refueling the pumps, etc.

15  
16 The Contractor shall take all necessary precautions to prevent an uncontrolled spill of untreated  
17 wastewater.

18  
19 Roadway must remain open to the passage of traffic during all pumping operations.

#### 20 21 **7-05.3(1) Adjusting Manholes and Catch Basins to Grade**

22 *(February 5, 2008 R&E GSP)*

23  
24 Section 7-05.3(1), paragraph 1 is revised to read:

25  
26 Where shown in the Plans or where directed by the Engineer, the existing manholes, catch  
27 basins, inlets, water valve boxes, irrigation boxes, or water meter boxes shall be adjusted to  
28 the grade as staked or otherwise designated by the Engineer.

29  
30 *(February 8, 2018 R&E GSP)*

31  
32 Leveling devices used to adjust structures to final grade shall be pre-cast rectangular or  
33 circular adjustment sections (risers).

#### 34 35 **7-05.4 Measurement**

36 *(July 12, 2010 R&E GSP)*

37 Section 7-05.4 is supplemented with the following:

38  
39 Measurement for the various inlets, manholes, vaults, StormFilter, area drains, concrete inlets,  
40 and catch basins as indicated in the Bid Proposal, shall be per each. The following items shall  
41 be incidental and included in the unit price per each:

- 42  
43 1. Dewatering if required  
44 2. Structure Excavation Class B Including Haul  
45 3. Gaskets, fittings, inlets, weirs, frames and grates or metal castings  
46 4. Bedding



5. Compaction
6. Connection to existing pipes, structures and drain lines
7. Curb modifications required per the Standard Plans
8. Other work and materials not specifically identified as being paid elsewhere
9. StormFilter as shown on the plans
10. Inside drop connection
11. Temporary pumping and transportation of sewer flows, including pumps and trucks.

No Specific unit of measurement shall apply for the item “Adjustment to Finished Grade”

Measurement for HMA required for Adjustments to Finished Grades shall be per ton in accordance with Section 5-04.

#### **7-05.5 Payment**

*(April 10, 2008 R&E GSP)*

Section 7-05.5 is supplemented with the following:

“Adjustments to Finished Grade”, lump sum.

The lump sum price for “Adjustments to Finished Grade” shall be full compensation for all labor, tools, equipment, and materials necessary to adjust existing structures to finished grades within the project limits.

### **7-08 GENERAL PIPE INSTALLATION REQUIREMENTS**

#### **7-08.2 Materials**

Section 7-08.2 is supplemented with the following:

All trenches within or beneath the roadbed prism shall be backfilled with suitable native material as approved by the Engineer. If suitable native material is unavailable, trenches shall be backfilled with Gravel Base in accordance with Section 4-02.

Detectable marking tape shall be specifically manufactured for marking and locating underground utilities. Tape shall be solid aluminum foil, visible on the up-printed side, encased in protective high visibility, inert polyethylene plastic jacket, six inches minimum width. Aluminum foil thickness shall be 0.35 mils minimum or thicker if necessary, to enable detection from the ground surface by a metal detector when the tape is buried at a depth of 3 feet. Laminate thickness shall be 5 mils minimum. Tape shall have permanent black lettering minimum 1 inch high printed contiguously the entire length of the tape identifying the facility (SEWER, for example). Color shall be in accordance with APWA Uniform Color Code for Temporary Marking of Underground Facilities and in ANSI Z535.1, Safety Color Code. Clips for joining sections of tape shall be tin or nickel-coated and furnished by the tape manufacturer. Tape shall be Terra Tape, Sentry Line Detectable as manufactured by Reef Industries, Detectable tape as manufactured by Mutual Industries, or Detectable Tape as manufactured by Presco.

#### **7-08.3 Construction Requirements**

Section 7-08.3 is supplemented by the following:

Roadway must remain open to the passage of traffic during the pipe installation.

#### **7-08.3(2)G Jointing of Dissimilar Pipe**

Section 7-08.3(2)G is supplemented with the following:

Existing storm drains shall be jointed to proposed pipe by use of factory-fabricated adapter couplings or a pipe collar or as shown in the Plans. The Contractor shall cut existing storm drains. The Contractor shall remove the portions of the storm drain to provide for the installation of the required fitting at the point of connection. All damage caused by the Contractor's operation to existing storm drains to remain in place shall be repaired by the Contractor at no expense to the Contracting Agency. The Contractor shall determine the exact length of the existing storm drains that must be removed.

#### **7-08.5 Payment**

The fifth paragraph of this section is revised to read:

Plugging pipes shall be incidental to "Removal of Structures and Obstructions."

*(July 12, 2010 R&E GSP)*

Section 7-08.5 is supplemented with the following:

"Removal of Unsuitable Material Including Haul", per cubic yard.

The unit contract price per cubic yard for "Removal of Unsuitable Material Including Haul" shall be full pay for all work to remove unsuitable material, haul and disposal of unsuitable material, as specified in Section 7-08.3(1)A.

Payment for "Quarry Spalls" required for trenches as shown on the Plans shall be per ton.

### **7-09 WATER MAINS**

#### **7-09.1 Description**

Section 7-09.1 is supplemented with the following:

Suitable native materials shall be used for trench backfill with approval from or at the direction of the Engineer. Unsuitable native material shall become the property of the contractor for disposal. Excess suitable native material shall be embanked according to the plans and specifications.

All thrust blocks shall be installed per details shown on the plans and inspected by the Engineer prior to backfilling. All bends shall include a thrust block per the details or as indicated on the Plans. Thrust blocks may be substituted with restrained joints at the discretion of the Contractor. The Contractor shall submit detailed sketches and plans of the proposed restrained joints to the Engineer not less than one week prior to the expected construction. The costs for thrust blocks or restrained joints shall be incidental to other items of work. No additional payment shall be made should the Contractor choose to substitute restrained joints for thrust

1 blocks

2  
3 Also included in the work is the construction of stovepipe watermain at locations directed by  
4 the Engineer where the watermain conflicts with unexpected existing utilities, or for other  
5 reasons.  
6

## 7 **7-09.2 Materials**

8 Section 7-09.2 is supplemented with the following:  
9

10 Pea Gravel shall not be used for pipe bedding on water mains.  
11

## 12 **7-09.3 Construction Requirements**

### 13 **7-09.3(5) Grade and Alignment**

14 Section 7-09.3(5) is supplemented with the following:  
15

16  
17 Finished grade is the proposed ground elevation unless otherwise staked by the Engineer or  
18 Surveyor. Pipes installed, which do not meet minimum cover requirements, shall be replaced  
19 at the Contractor's expense. Minimum cover over waterlines shall be 3-feet, except for where  
20 specifically noted on the plans.  
21

### 22 **7-09.3(7)A Dewatering of Trench**

23 Section 7-09.3(7)A is supplemented with the following:  
24

25 If the Contractor fails to adequately dewater the trench and prevent water or other materials  
26 from entering the pipe, the Contractor shall at their expense thoroughly clean the line per  
27 section 7-09.3(24)A, prior to disinfecting the main. Dewatering trenches is incidental to the  
28 cost of pipe installation.  
29

### 30 **7-09.3(8) Removal and Replacement of Unsuitable Materials**

31 Section 7-09.3(8) is supplemented with the following:  
32

33 Unsuitable material consists of excavated silt, clay, and organic material and in-situ materials  
34 which provide less than 1500 psf bearing capacity (as determined by a penetrometer test by  
35 the Engineer) shall be excavated and replaced with select backfill or ballast at the direction of  
36 the Engineer. All unsuitable material shall be removed from the site and hauled to a permitted,  
37 Contractor provided disposal site in accordance with Section 2-03.3(7)C.  
38

### 39 **7-09.3(9) Bedding The Pipe**

40 Section 7-09.3(9) is supplemented with the following:  
41

42 The contractor shall bed the pipe with Engineer approved native material, or provide imported  
43 bedding material meeting the requirements for Gravel Backfill 9-03.12(3). Bedding material  
44 or suitable native material used for pipe bedding will be considered incidental to the pipe bid  
45 item.  
46

1 **7-09.3(10) Backfilling Trenches**

2 Section 7-09.3(10) is supplemented with the following:

3  
4 Native backfill containing organics, un-compactable or deleterious materials are considered  
5 unsuitable. Driveways must be filled and compacted as required for driveway and pavement  
6 repair in accordance with the Plans. Where the Engineer determines that the native material is  
7 not suitable for backfill, the Contractor shall provide imported trench backfill material in  
8 accordance with Section 9-03.10 as modified. No additional payment shall be made for  
9 placement or compaction in the trench. Excess native materials after trench backfill shall be  
10 embanked in accordance with the plans and specs. Payment of imported backfill is per ton per  
11 Section 4-02. When water mains are installed within the roadway prism, trench backfill shall  
12 include the minimum structural section for the roadway. Detectable marking tape shall be  
13 installed over the water main.

14  
15 **7-09.3(11) Compaction of Backfill**

16 Section 7-09.3(11) is supplemented with the following:

17  
18 Trenches which are located outside the roadway may be backfilled with native material upon  
19 approval of the Engineer, and compacted to 85% of maximum density as specified in Section  
20 2-03.3(14)D. All other trenches shall be compacted to 95% of the maximum dry density.  
21 Compaction of native or imported backfill shall be incidental to other items of work.

22  
23 **7-09.3(19)A Connections to Existing Mains**

24 Section 7-09.3(19)A is supplemented with the following:

25  
26 Connection to existing mains is the full responsibility of the Contractor. Temporary routing  
27 of existing pipelines or services, shoring, temporary thrust blocks, extra fittings required to  
28 route the pipe over or under existing or new pipe or other utilities and all other work and  
29 materials required for making complete, permanent and workable connections are incidental  
30 to other items of work.

31  
32 The Contractor shall be responsible for determining which residents will be affected by  
33 shutoffs, and will notify them 24 hours in advance. The Contractor shall notify private property  
34 owners, or tenants, by having a representative of the Contractor personally contact the private  
35 property owner or tenant. If the property owner or tenant is not available, the Contractor shall  
36 leave a door hanger notice indicating the commencement date of work, duration of work, the  
37 type of work being done, and the Contractor's and Engineer's phone number and address for  
38 questions and concerns. The Engineer shall be provided adequate time to review, comment,  
39 and approve the door hanger notice prior to the Contractor placing any notices.

40  
41 The Contractor shall locate and verify the type of pipe, size, and depth prior to making the  
42 connection. Detailed sketches and plans of the connection proposed by the Contractor shall be  
43 given to the Engineer not less than one week prior to the expected construction. The City of  
44 Ferndale shall be notified not less than two (2) working days prior to connection to existing  
45 mains.

1 **7-09.3(22) Blowoff Assemblies**

2 Section 7-09.3(22) is revised to read:

3  
4 Blowoff Assemblies shall be constructed at the locations shown on the Plans and in accordance  
5 with the Plans.

6  
7 **7-09.3(24) Disinfection of Water Mains**

8 Section 7-09.3(24) is supplemented with the following:

9  
10 The liquid chlorine injection method described below or approved alternate method shall be  
11 used. Hypochlorite granules (65%) shall be mixed with water and injected into the main to  
12 acquire a minimum of 50 mg/l of chlorine in the main. A typical method is as follows: The  
13 chlorine solution is mixed in a container (new, clean garbage can) and fed into the new water  
14 main using a pressurizing pump. The injection is made at a corporation stop or similar fitting  
15 at the fill point of water from the existing City of Ferndale main. Filling and injection rates  
16 shall be reviewed by the Engineer prior to disinfection. Chlorine content at the beginning and  
17 end of each required 24-hour disinfection period, and prior to bacteriological testing shall be  
18 sampled by the Engineer. The cost for the first sequence of sampling and lab testing shall be  
19 paid for by the City of Ferndale. Subsequent testing and inspection shall be paid by the  
20 Contractor. The Engineer shall be notified 24 hours prior to conducting disinfecting and  
21 flushing operations.

22  
23 **7-09.3(24)A Flushing**

24 Section 7-09.3(24)A is supplemented with the following:

25  
26 Water for flushing mains may be taken from a direct connection to existing mains providing  
27 an approved backflow device is utilized. Velocity for testing must equal or exceed 2.5 fps.  
28 The connection must be capable of passing at least 400 gallons per minute (gpm) for flushing  
29 8-inch diameter mains.

30  
31 The Contractor shall be responsible for disposal of treated water flushed from mains and shall  
32 neutralize the waste water before disposal. An adequate amount of reducing agent shall be  
33 applied to water being disposed of in order to thoroughly neutralize the chlorine residual  
34 remaining in the water per AWWA Standard Section C651.

35  
36 **7-09.3(24)N Final Flushing and Testing**

37 *(July 12, 2010 R&E GSP)*

38 Section 7-09.3(24)N is supplemented with the following:

39  
40 Upon completion of final flushing, the main shall be filled with water and allowed to remain  
41 filled for 24 hours. The Engineer shall obtain a sample at the end of this 24-hour period. A  
42 satisfactory report shall be received before placing the lines into service.

43  
44 **7-09.3(24)O Repetition of Flushing and Testing**

45 Section 7-09.3(24)O is supplemented with the following:

1 The City shall furnish water for the initial flushing and testing process. In the event additional  
2 water is needed for flushing or testing, the Contractor shall connect a meter and pay the City  
3 for actual water used, at the commercial rate. The Contractor will pay for additional  
4 bacteriological testing required because of failed samples. The Contractor will be responsible  
5 for all cost associated with re-testing, including laboratory fees, and inspection.  
6

#### 7 **7-09.4 Measurement**

8 Section 7-09.4 is supplemented with the following:  
9

10 Measurement for connect to existing watermain shall be measured per each connection  
11 completed.  
12

13 Measurement for payment of stovepipe watermain shall be measured per each installed.  
14

15 No measurement shall be made for marking tape. Marking tape shall be considered incidental  
16 to the work of constructing the water main.  
17

18 No measurement shall be made for clearing and grubbing, removal of existing street  
19 improvements, removal of the abandoned watermain, removal of existing valve boxes,  
20 protection of existing utilities and service, trench excavation and pipe zone backfill, pipe zone  
21 bedding, thrust blocks, and compaction of backfill.  
22

#### 23 **7-09.5 Payment**

24  
25 Section 7-09.5 is supplemented with the following:  
26

27 "Connect to Existing \_\_\_\_ In. Diam. Watermain", per each.

28 The unit contract price bid per each "Connect to Existing \_\_\_\_ In. Diam. Watermain" shall be  
29 full compensation for all work to connect to the existing mains, including but not limited to  
30 excavating, removing existing fittings and thrust blocks, backfilling, laying and jointing pipe,  
31 pipe and fittings, and cover and cleanup.  
32

33 "Stovepipe Watermain, \_\_\_\_ In. Diam.", per each

34 The unit contract price bid per each for "Stovepipe Watermain, \_\_\_\_ In. Diam" shall be full pay  
35 for all work to install the stovepipe watermain, including but not limited to excavating, extra  
36 trench excavation, backfilling, laying and jointing pipe, tapping the main, corporation stops,  
37 pipe and fittings, thrust blocks, and cover and cleanup.  
38

### 39 **7-12 VALVES FOR WATER MAINS**

#### 40 **7-12.1 Description**

41 Section 7-12.1 is supplemented with the following:  
42

43  
44 All valves shall be thrust blocked per the detail shown on the plans. All valve boxes shall be  
45 new and a uniform type.  
46

1 **7-12.2 Materials**

2 Section 7-12.2 is supplemented with the following:

3  
4 Valve stem extensions will be required on operating nuts located 4 feet below grade per section  
5 9-30.3(6). Extensions shall be incidental to gate valves.  
6

7 **7-12.3 Construction Requirements**

8 *(September 15, 2021 R&E GSP)*  
9

10 Valves boxes outside of the pavement section shall be encased in concrete and furnished with  
11 a concrete valve marker conforming to Section 9-30.3(5).  
12

13 **7-14 HYDRANTS**

14  
15 **7-14.1 Description**

16 Section 7-14.1 is supplemented with the following:

17  
18 This work includes the installation of Blue Raised Pavement Markers on the roadway centerline  
19 adjacent to all hydrants.  
20

21 **7-14.2 Materials**

22 Section 7-14.2 is supplemented with the following:

23  
24 The City of Ferndale Standard Fire Hydrants is "M&H model 129S". The pumper port shall be  
25 oriented to face the main road.  
26

27 Fire hydrants shall be painted City colors with two coats of Urethane paint, applied per the paint  
28 manufacturer's specifications.  
29

30 A blue reflector, installed 1 foot off the road centerline towards the hydrant shall be included in  
31 the bid item "Hydrant Assembly".  
32

33 All labor, equipment, and materials necessary to connect fire hydrants shall be incidental to the  
34 unit bid prices. Materials include, but are not limited to: gate valves, fittings, spool fittings,  
35 restraints, restrained 6" ductile iron pipe, and thrust blocks.  
36

37 **7-14.5 Payment**

38 Section 7-14.5 is supplemented with the following:

39  
40 The unit contract price per each for "Hydrant Assembly" shall be full compensation for all costs  
41 for labor, material, and equipment to install spool fittings, restraints, thrust blocks, auxiliary gate  
42 valve, shackles, tie rods, concrete blocks, painting required for the complete installation of the  
43 hydrant assembly as specified, lateral tee and 6" ductile iron watermain to hydrant, hydrant, and  
44 blue raised pavement marker.  
45  
46  
47  
48

## **7-15 SERVICE CONNECTIONS**

### **7-15.1 Description**

Section 7-15.1 is supplemented with the following:

This work consists of installing new service connections, replacing existing services, and abandoning existing water service connections as shown on the Plans or at the direction of the Engineer.

All work is to be in conformance with City standards for water services.

### **7-15.2 Materials**

Section 7-15.2 is supplemented with the following:

All fittings shall be brass. Saddles shall be as shown on the Plans with I.P. standard tapping. Corporation stops shall be Ford F700, or approved equal with inlet I.P. standard thread and outlet thread compatible with Type K copper connection piping, with no special adapters, minimum 150 psi.

Within the right-of-way, service piping shall be copper tubing and shall conform to the requirements of ASTM B88, Type K annealed. All underground fittings shall be flared within the right-of-way.

Pea Gravel shall not be used for pipe bedding on service connections.

### **7-15.3 Construction Requirements**

Section 7-15.3 is supplemented with the following:

#### **General**

New type K copper tubing shall be installed between the watermain and the meter setter location. The Contractor shall provide and install a new meter setter, and meter box for all service connections, in accordance with the City of Ferndale Standards. All existing water meters, setters, and boxes shall be salvaged by the Contractor and delivered to the City of Ferndale Maintenance Shop.

Service connections shall include connection to the existing service line on the customer side of the meter. The proposed meter and meter setter shall be installed at the correct elevation below subgrade as shown in the plans. If the proposed meter setter is above or below the existing service line on the customer side of the meter, this work shall include all pipe, fittings, materials, tools, and labor to connect the customers' service line to the new setter.

Existing water services shall be abandoned at the existing water main by closing the corporation stop, disjointing the water service pipe from the corporation stop, and removing the existing water service line a minimum of 2 feet from the watermain.

Various items of work in this contract may require disruption of water service to customers on



1 adjacent properties. The Contractor shall keep the service disruptions to an absolute minimum.  
2 When more than one item of work requires disruption of the same utility service to the same  
3 customer, the Contractor shall schedule the work so that the customer's service is disrupted  
4 only once. The Contractor shall be responsible for determining which residents will be affected  
5 by shutoffs, and will notify them a minimum of 24 hours in advance. The Contractor shall  
6 locate and verify the type of pipe, size, and depth prior to making the connection. Detailed  
7 sketches and plans of the connection proposed by the Contractor shall be given to the Engineer  
8 not less than one week prior to the expected construction. The City of Ferndale shall be notified  
9 not less than two (2) working days prior to connection to existing mains and existing service  
10 line.

11  
12 Any disrupted services shall be restored before the end of each working day. Overnight  
13 disruptions will not be permitted. If, in the opinion of the Engineer, service has not been  
14 restored in a satisfactory manner, the Engineer may take whatever action is necessary to restore  
15 service. The cost of such action will be deducted from any payments due or coming due the  
16 Contractor.

#### 17 18 **Coordination of Work**

19 The Contractor shall notify the City of Ferndale Public Works Department at 384-4006, 48  
20 hours prior to disconnection of the existing meter. The Contractor shall tag the existing meters  
21 to be removed with the corresponding address which is served by that meter and meter reading  
22 at time of removal. Once removed these meters shall be delivered to the City of Ferndale  
23 Maintenance Shop located at 5735 Legoe Ave.

24  
25 The Contractor shall coordinate with the City of Ferndale for the collection of the existing  
26 meter. The existing water meter shall not be removed and service shall not be interrupted until  
27 the new water meter is on hand. The City will determine if a new meter is required and supply  
28 said meter.

#### 29 30 **Meter and PRV Removal**

31 All meters, PRVs, and meter boxes removed shall be salvaged without damage and delivered  
32 to the City of Ferndale shop yard located at 5735 Legoe Avenue. The contractor shall take  
33 care to salvage all meters, PRVs, and fittings.

34  
35 Delivery shall occur during the hours of 7:00 a.m. to 3:30 p.m. Monday thru Friday. Five days  
36 written advance notice shall be delivered to the Engineer prior to delivery. Material will not  
37 be accepted without the required advance notice.

38  
39 Equipment damaged during removal or delivery shall be repaired or replaced to the Engineer's  
40 satisfaction at no cost to the Contracting Agency.

41  
42 The Contractor shall be responsible for unloading the equipment where directed by the  
43 Engineer at the delivery site.

#### 44 45 **7-15.3(1) Flushing and Disinfection**

46  
47 Section 7-15.3(1) is supplemented with the following:

Service testing shall be done in conjunction with water main testing. An acceptance inspection will be made by the Engineer upon completion of all project work. During the inspection, every service shall be turned on to its full capacity to check flow and guarantee that each service line has been flushed. In no case shall the acceptance inspection be made until all project work is complete. Damage incurred during other construction work on the project shall be corrected by the Contractor prior to acceptance by the Engineer.

The following new Section is added:

#### **7-15.3(2) Adjustments to Finished Grade**

Existing water meter and irrigation boxes, which are to remain shall be adjusted to finished grade. This work shall be included in the bid item "Adjustments to Finished Grade."

#### **7-15.4 Measurement**

Section 7-15.4 is supplemented with the following:

Measurement for "Service Connection \_\_\_ In. Diam.", "Double Service Connection \_\_\_ In. Diam.", shall be measured per each. The following items shall be incidental and included in the unit price per each:

1. Dewatering if required.
2. Structure Excavation Class B Including Haul.
3. Pipe bedding as shown on the plans.
4. Backfill and Compaction.
5. All couplers, fittings, associated gaskets and appurtenances.
6. Connection to existing service pipe.
7. Cleaning.
8. Other work and materials, not specifically identified as being paid elsewhere.

Measurement of pressure reducing valves shall be per each for each type and size actually installed.

#### **7-15.5 Payment**

Section 7-15.5 is supplemented with the following:

The unit contract price per each for "Service Connection, \_\_\_ In. Diam." and "Double Service Connection \_\_\_ In. Diam." shall be full pay for all work to remove and deliver existing meters and PRVs, install the meter boxes, meter setter, gate valve, service connection, including but not limited to, excavating, tapping the main, laying and jointing the pipe and fittings and appurtenances, connecting to existing service line, backfilling, testing, flushing and disinfection of the service connection, and other appurtenances to the location shown on the plans.

"Pressure Reducing Valve \_\_\_\_ In.", per each.

1 The unit Contract price per each for the valve specified shall be full pay for all Work to  
2 furnish and install the valve complete in place on the water service, including trenching,  
3 jointing, blocking of valve, disinfecting, hydrostatic testing, and PVC valve box.  
4

## 5 **7-17 SANITARY SEWERS**

### 6 **7-17.3 Construction Requirements**

#### 7 **7-17.3(1) Protection of Existing Sewerage Facilities**

8  
9  
10 *(June 10, 2009 R&E GSP)*  
11

12 Section 7-17.3(1) is supplemented with the following:  
13

14 If the connection to the existing system involves sewer service disruption, the Contractor shall  
15 be responsible for notifying the residents and utility owner affected by the shutoff. The  
16 Engineer will advise which parties are to be notified.  
17

18 The Contractor may be required to perform the connection during times other than normal  
19 working hours. The types of connections for the sewer main are varied. For the installation  
20 of these connections, the surfaced portion of the roadway shall not be penetrated unless the  
21 connection point is directly under it.  
22

#### 23 **Maintaining Service**

24 Where existing services are to be transferred from old to new sewer mains, the Contractor shall  
25 plan and coordinate its work with that of the Utility so that service will be resumed with the  
26 least possible inconvenience to customers.  
27

### 28 **7-17.4 Measurement**

29 Section 7-17.4 is supplemented with the following:  
30

31 Measurement for Sanitary Sewer Pipe, as indicated on the Bid Proposal, shall be per linear  
32 foot. The following items shall be incidental and included in the unit price per linear foot:  
33

- 34 1. Structure Excavation Class B
- 35 2. Dewatering if required
- 36 3. Detectable marking tape
- 37 4. Pipe bedding as shown on the Plans
- 38 5. Compaction
- 39 6. Installation of sanitary sewer pipe
- 40 7. Coupling bands, fittings, and associated gaskets
- 41 8. Removing/adding concrete to manhole channels
- 42 9. Connection to existing structures
- 43 10. Connection to existing side sewers
- 44 11. Other work and materials, not specifically identified as being paid elsewhere  
45

### 46 **7-17.5 Payment**

47 Section 7-17.5 is supplemented with the following:

1  
2 The unit Contract price per linear foot for sewer pipe of the kind and size specified shall be  
3 full pay for connections to existing mains and manholes.  
4

## 5 **7-18 SIDE SEWERS**

### 6 **7-18.1 Description**

7  
8 *(March 15, 2010 R&E GSP)*  
9

10 Section 7-18.1 is supplemented with the following:  
11

12 Realignment and repair of the existing sanitary sewer services may be necessary to connect to  
13 new sanitary sewer main.  
14

### 15 **7-18.3(1) General**

16  
17 Connections to the existing sewer main shall not be made without first making the necessary  
18 scheduling arrangements with the Engineer in advance. Work shall not be started until all the  
19 materials, equipment, and labor necessary to properly complete the work are assembled on the  
20 site.  
21

22 Existing side sewers shall be cut by the Contractor, unless otherwise specified in the Special  
23 Conditions. The Contractor shall remove the portions of pipe to provide for the installation of  
24 the required fittings at the points of connection. Damage caused by the Contractor's operations  
25 to existing joints in piping to remain in-service shall be repaired by the Contractor at no  
26 additional expense to the Contracting Agency.  
27

28 Once work is started on a side sewer, it shall proceed continuously without interruption and as  
29 rapidly as possible until completed. No shutoff will be permitted overnight, over weekends,  
30 or on holidays.  
31

32 If the connection to the existing side sewer system involves turning off the side sewer, the  
33 Contractor shall be responsible for notifying the residents affected by the shutoff. The  
34 Engineer will advise which property owners are to be notified.  
35

36 The Contractor may be required to perform the connection during times other than normal  
37 working hours.  
38

39 The types of connections for the side sewers are varied. For the installation of these side  
40 sewers, the surfaced portion of the roadway shall not be penetrated unless the connection point  
41 is directly under it.  
42

### 43 **7-18.5 Payment**

44  
45 Section 7-18.5 is supplemented with the following:  
46

- 1 Potholing required to determine the connection point at the right of way shall be paid under
- 2 the bid item "Pothole Existing Underground Utility."

1 **DIVISION 8**

2 **MISCELLANEOUS CONSTRUCTION**

3  
4 **8-01 EROSION CONTROL AND WATER POLLUTION CONROL**

5  
6 **8-01.3 Construction Requirements**

7  
8 **8-01.3(1) General**

9 Section 8-01.3(1) is supplemented with the following:

10  
11 The Contractor shall prepare a Stormwater Pollution Prevention (SWPP) Plan in compliance  
12 with the most current edition of the Department of Ecology's Stormwater Management Manual  
13 for Western Washington, Volume II – Construction Stormwater Pollution Prevention and the  
14 NPDES Permit. The Contractor's ESC Lead shall coordinate with the Contracting Agency in  
15 preparing the SWPP Plan. The SWPP Plan is to remain onsite throughout the duration of  
16 construction.

17  
18 **8-01.4 Measurement**

19 *(March 18, 2010, 2008 R&E GSP)*

20 Section 8-01.4 is supplemented with the following:

21  
22 No specific unit of measure shall apply to the lump sum item "ESC Lead."

23  
24 No specific unit of measurement will apply for the lump sum bid item "SWPP Plan  
25 Preparation".

26  
27 **8-01.5 Payment**

28 *(March 18, 2010 R&E GSP)*

29 Section 8-01.5 is supplemented with the following:

30  
31 The first item, "ESC Lead", of Section 8-01.5 is revised to read:

32  
33 "ESC Lead", lump sum.

34  
35 The item, "Inlet Protection" of Section 8-01.5 is revised to read:

36 The unit Contract price per each for "Inlet Protection" shall include all costs for removal and  
37 disposal of accumulated debris, inlet protection maintenance, and inlet protection removal and  
38 disposal.

39  
40 "SWPP Plan Preparation", Lump Sum

41 The lump sum price for SWPP Plan Preparation shall be full compensation for all labor,  
42 materials, tools and equipment to satisfactorily complete the work as necessary and defined in  
43 the Standard Specifications, these Special Provisions, and the Plans.

44  
45 **8-02 ROADSIDE RESTORATION**

1  
2 **8-02.1 Description**

3 *(March 15, 2010 R&E GSP)*

4 Section 8-02.1 is supplemented with the following:

5  
6 Furnish all labor, materials and equipment necessary for installation of planting and installation  
7 of topsoil and soil amendments, including but not limited to the preparation of the ground  
8 surface, installation of soil amendments, application of fertilizer, installation of seed, and  
9 chemicals as necessary in areas shown on the plans or as directed by the Engineer in accordance  
10 with these specifications.

11  
12 The extent and location of seeding work includes all areas in this project , except new plant  
13 beds and paved areas, which are disturbed by construction, grading, pavement removal, utility  
14 installation and any other of the Contractor's operations or as directed by the Engineer in  
15 accordance with these specifications.

16  
17 The Contractor shall provide 48 hours notice to the Engineer when an inspection is desired.

18  
19 **8-02.3 Construction Requirements**

20  
21 **8-02.3(4) Topsoil**

22 *(March 18, 2010 R&E GSP)*

23  
24 Section 8-02.3, revise the 1<sup>st</sup> sentence of this Section to read:

25  
26 Topsoil shall be evenly spread over the specified areas to a depth of four (4) inches or as  
27 otherwise directed by the Engineer. The soil shall be cultivated to a depth of 6 inches. After  
28 the topsoil has been spread, all large clods, hard lumps, and rocks 3 inches in diameter and  
29 larger, and litter shall be raked up, removed, and disposed of by the Contractor. The area shall  
30 then be rolled with a landscape roller in at least 1 direction at a velocity not to exceed 2 feet  
31 per second. Spread topsoil after subgrade preparation is complete. Topsoil shall not be placed  
32 when the ground or topsoil is frozen, inundated with water, or in a condition detrimental to the  
33 Work.

34  
35 **8-02.3(11) Bark or Wood Chip Mulch**

36 *(April 22, 2010 R&E GSP)*

37 Section 8-02.3(11) is supplemented with the following:

38  
39 Wood Cellulose mulch shall be applied at a rate of 2,000 pounds per acre. To improve  
40 germination of seeds, this rate may be increased with approval by the Engineer.

41  
42 **8-02.3(16) Lawn Installation**

43 *(January 31, 2011 R&E GSP)*

44 Section 8-02.3(16) is supplemented with the following:

45  
46 The Contractor shall perform lawn installation in accordance with the following: Immediately  
47 prior to seeded lawn installation, a nominal four (4) inch depth of "Topsoil Type A" shall be

placed in the areas requiring seeded lawn installation or as directed by the Engineer. Peat moss mulch shall be applied to a depth of 1/4 inch over newly seeded lawn area. The area shall then be rolled with a landscape roller in at least 1 direction at a velocity not to exceed 2 feet per second. Alternatively, a seed of fabric mulch mat shall be installed as approved by the Engineer.

“Seeded Lawn Installation” will be paid where construction, filling excavation, and grading have disturbed unimproved areas. This will generally consist of areas behind the sidewalk where no established lawns or landscaping currently exist. “Seeded Lawn Installation” shall be placed on all exposed soil disturbed by construction or any area directed by Engineer. “Seeded Lawn Installation” shall also be placed on all fill and cut areas outside roadway surface width, within the project limits.

The intent of seeding is to produce viable roadside vegetation toward the end of preventing erosion. If seeding has not germinated satisfactorily at the time of final acceptance, this work will be considered defective according to Section 1-05.7 of the Standard Specifications. The Engineer may require the Contractor to post security equal to 200% of the amount bid for seeding in order to secure performance of this germination specification. This security shall be in a form acceptable to the City and may be required prior to release of retainage of this project. Said security shall not be released until satisfactory germination has occurred. Any erosion, which in the opinion of the Engineer, occurs directly as a result of insufficient seed germination shall be repaired by the Contractor at no additional expense to the City. Any such repairs shall be completed prior to project acceptance or release of security as identified herein. Satisfactory germination is defined as a minimum of 300 stems per square foot. Any area in which two consecutive one square foot plots sampled fall below this standard will be considered defective and shall be corrected by the Contractor."

The dates for seeding outlined in Section 8-02.3(16)A of the Standard Specifications will be considered guidelines rather than requirements for this item. The Contractor shall use professional judgment and consider factors such as weather and soil moisture to obtain satisfactory germination."

Immediately after hydroseeding, the Contractor shall remove hydroseed overspray from all features other than the intended seeding area."

### **Binding Agents**

Tacking agents and soil binders shall be provided in accordance with Section 8-01.3(2)E.

### **8-02.4 Measurement**

*(April 22, 2010 R&E GSP)*

Section 8-02.4, is supplemented with the following:

No separate measurement will be made for topsoil, fertilizer, mulch, soil amendments, binding agents, or water where applied for “Seeded Lawn Installation.”



1 All Work performed under "Landscape Restoration" shall be measured and paid in accordance  
2 with Section 1-09.6 Force Account.

#### 3 4 **8-02.5 Payment**

5 *(January 31, 2011 R&E GSP)*

6  
7 Section 8-02.5 is supplemented with the following:

8  
9 The unit contract price per square yard for "Seeded Lawn Installation" shall be full  
10 compensation for all labor, materials (topsoil, fertilizer, mulch, soil amendments, binding  
11 agents, and water), tools and equipment necessary to perform the work as specified herein. All  
12 other items in this Section, not specified on the Bid Proposal form shall be included in the cost  
13 of "Seeded Lawn Installation". The unit price shall be full compensation for multiple applications  
14 in areas required by the Engineer as the work progresses.

15  
16 Payment for "Landscape Restoration" shall be on a force account basis as per Section 1-09.  
17 For the purpose of providing a common proposal for all bidders, and for that purpose only, the  
18 Contracting Agency has established the amount of force account for this item and has entered  
19 the amount in the bid proposal to become a part of the total bid by the Contractor.

### 20 21 **8-04 CURBS, GUTTERS, AND SPILLWAYS**

#### 22 23 **8-04.3 Construction Requirements**

##### 24 25 **8-04.3(1) Cement Concrete Curbs, Gutters, and Spillways**

26 *(February 7, 2008 R&E GSP)*

27 Section 8-04.3(1) is supplemented with the following:

28  
29 Depressed curb driveways and wheel chair ramp openings shall be provided at such locations  
30 as directed by the Engineer or shown on the Plans. All curved sections with a radius less than  
31 500 feet shall be formed in arc sections to match the radii detailed in the Plans. The Contractor  
32 shall provide temporary ramps over new concrete curbing at driveway locations.

33  
34 Concrete placement shall be accomplished with line and grade control such that a 10-foot long  
35 straight edge placed on the concrete surface in the gutter or against the face of the curb shows  
36 no variance greater than 1/8 inch in grade or 1/4 inch on line, except at a designed angle point.  
37 Under no circumstances shall variances be allowed that cause drainage away from the catch  
38 basin or other drainage structures.

39  
40 Curb drains shall be constructed of 2-inch PVC pipe or other material subject to approval of  
41 the Engineer, cut to length to pass from the back of curb through the curb to the face of the  
42 curb at the gutter line. Spacing will be a maximum of 50 feet, center to center, and/or each  
43 side of the driveways and at such locations as designated by the Engineer or as shown on the  
44 Plans.

#### 45 46 **8-04.5 Payment**

47 *(February 7, 2008 R&E GSP)*

Section 8-04.5 is supplemented with the following:

All costs associated with the supply and installation of curb drains shall be included in the various bid items contained in this section.

## **8-06 CEMENT CONCRETE DRIVEWAY ENTRANCES**

### **8-06.1 Description**

*(November 1, 2024 R&E GSP)*

Section 8-06.1 is supplemented with the following:

Where shown on the plans or designated by the Engineer the Contractor shall install exposed aggregate driveways. The exposed aggregate mix shall be designed to match existing exposed surfaces to the maximum extent possible.

### **8-06.3 Construction Requirements**

*(February 8, 2008 R&E GSP)*

Section 8-06.3 is supplemented with the following:

Concrete placement shall be accomplished with line and grade control such that a 10-foot long straight edge placed on the concrete surface shows no variance greater than 1/8 inch in grade or 1/4 inch on line, except at a designed angle point.

Where possible the Contractor shall construct the driveway entrance in two or more segments to permit access to an existing driveway.

Driveways shall meet the following minimum requirements.

1. 3/8-inch premolded joint filler shall be placed at 20 foot centers, maximum and shall be matched to curb and gutter joints.
2. 'V' grooves shall be scored 3/4-inch deep at five-foot intervals.
3. Driveway sections shall be brush finished longitudinally with a fiber brush.
4. For driveways wider than 20 feet, place 3/4-inch deep 'V' groove at the mid-point. For driveways greater than 30 feet wide, place 3/4-inch deep 'V' groove at one-third points.
5. All joints shall be cleaned and edged.
6. Driveways shall have a uniform thickness of 6-inches.
7. Six (6) inches of compacted gravel base shall be placed beneath driveways.

*(November 1, 2024 R&E GSP)*

Exposed aggregate driveways shall be constructed in accordance with Section 6-02.3(14)E.

### **8-06.4 Measurement**

*(November 1, 2024 R&E GSP)*

Section 8-06.4 is supplemented with the following:

Exposed Aggregate Driveway entrances will be measured by the square yard of finished surface.

1 **8-06.5 Payment**

2 *(November 1, 2024 R&E GSP)*

3  
4 Section 8-06.5 is supplemented with the following:

5  
6 “Exposed Aggregate Driveway” per square yard.

7 All costs in constructing the driveway entrance in segments and installing and removing the  
8 temporary approach shall be included.  
9

10 **8-12 CHAIN LINK FENCE AND WIRE FENCE**

11  
12 **8-12.1 Description**

13 *(October 14, 2024 R&E GSP)*

14 Section 8-12.1 is supplemented with the following:

15  
16 This work also consists of furnishing all materials, labor, tools, equipment, services and incidentals  
17 necessary to erect, maintain, dismantle, and remove temporary fencing as shown on the Plans.  
18

19 **8-12.2 Materials**

20 *(October 14, 2024 R&E GSP)*

21 Section 8-12.2 is supplemented with the following:

22  
23 Temporary chain link fencing shall be new materials or previously used salvaged chain link fencing  
24 in good condition. Post shall be galvanized steel pipe of diameter to provide rigidity. Post shall be  
25 suitable for setting in concrete footings, anchoring with base plates, or inserting in precast concrete  
26 blocks. Fence fabric shall be woven galvanized steel wire mesh. Fence shall be provided in  
27 continuous lengths to be wire tied to fence posts or prefabricated into modular pipe-framed fence  
28 panels. Gates shall be of the same material as used for fencing.  
29

30 Temporary chain link fencing shall be 6 feet high.  
31

32 **8-12.3 Construction Requirements**

33 *(October 14, 2024 R&E GSP)*

34 Section 8-12.3 is supplemented with the following:

35  
36 5 days prior to the installation of temporary fencing, the Contractor shall provide a drawing  
37 indicating layout of temporary fencing, location and size of gates, existing pavement and roads,  
38 access to fire hydrants and hose connections, and other site specific conditions. The Contractor  
39 shall prepare the drawing after site observation and verification of existing conditions.

40 Chain link posts shall be spaced at maximum 10 feet on center. Posts over pavement and gravel  
41 shall use steel post plates or precast concrete blocks. Gate posts shall use bracing or concrete  
42 footings to provide rigidity for accommodating size of gate. Fence fabric shall be securely  
43 attached to posts. Gates shall be installed with the required hardware.

44 Contractor shall maintain fencing in good condition. If fencing is damaged, Contractor shall  
45 immediately repair. The Contractor shall remove temporary fencing upon completion of Work  
46 or when no longer required for security or control. The Contractor shall repair damage caused

by installation of temporary fencing.

#### **8-12.4 Measurement**

*(October 14, 2024 R&E GSP)*

Section 8-12.4 is supplemented with the following:

No specific unit of measurement shall apply to gates, posts, post plates, precast concrete blocks, hardware, and other items required for temporary fencing.

#### **8-12.5 Payment**

*(October 14, 2024 R&E GSP)*

Section 8-12.5 is supplemented with the following:

“Temporary Fencing”, per linear foot.

Payment for “Temporary Fencing”, per linear foot, shall include but is not limited to all labor, materials including gates, posts, post plates, precast concrete blocks, hardware, maintenance, repair, and removal required for temporary fencing at the location shown on the Plans or as directed by the Engineer.

### **8-14 CEMENT CONCRETE SIDEWALKS**

#### **8-14.1 Description**

*(March 16, 2010 R&E GSP)*

Section 8-14.1 is supplemented with the following:

This work shall consist of constructing cement concrete sidewalks and sidewalk ramps, in accordance with details shown in the Plans and these Specifications and in conformity to lines and grades shown in the Plans or as established by the Engineer. Replacement or matching to existing driveways shall be completed with a similar material and finish as that which exists or as directed by the Engineer.

#### **8-14.3 Construction Requirements**

*(February 11, 2008 R&E GSP)*

Section 8-14.3 is supplemented with the following:

Concrete placement shall be accomplished with line and grade control such that a 10-foot long straight edge placed on the concrete surface shows no variance greater than 1/8 inch in grade or 1/4 inch on line, except at a designed angle point.

*(March 2, 2010 R&E GSP)*

Section 8-14.3 is supplemented with the following:

Sidewalks shall meet the following minimum requirements:

1. Sidewalks shall have a uniform thickness of 4-inches.
2. 3/8-inch through joints shall be placed 20 feet center to center and shall be matched to curb and gutter joints.
3. ‘V’ grooves shall be scored 3/4-inch deep at five foot intervals.
4. All joints shall be cleaned and edged.

- 1           5. Two inches of washed rock shall be placed beneath sidewalks. Washed rock shall be  
2 commercially available 1" to ¾" washed rock. The contractor shall submit  
3 preliminary samples to the Engineer for approval prior to use.  
4           6. Thickened Edge sidewalk shall have a tooled joint located at the standard width  
5 shown on the plans.  
6

7 **8-14.3(4) Curing**

8 *(March 16, 2010 R&E GSP)*

9 Section 8-14.3(4) is supplemented with the following:  
10

11 It shall be the Contractor's responsibility to protect curing concrete until it is set to prevent  
12 vandalism. Any repairs needed to correct vandalism during the initial set period, including full  
13 replacement of the damaged panel, shall be at the expense of the Contractor and subject to  
14 approval of the Engineer.  
15

16 **8-14.4 Measurement**

17 *(March 16, 2010 R&E GSP)*

18 Section 8-14.4 is supplemented with the following:  
19

20 "\_\_\_ In. Raised Edge Monolithic Cement Concrete Curb and Sidewalk" will be measured by  
21 the square yard of finished sidewalk surface and will not include the surface of the monolithic  
22 curb.  
23

24 **8-14.5 Payment**

25 *(February 11, 2008 R&E GSP)*

26 Section 8-14.5 is supplemented with the following:  
27

28 Payment for "Cement Concrete Sidewalk", shall be at the unit price bid per square yard of  
29 cement concrete in place and shall be full compensation for all labor, equipment, and material  
30 necessary to construct this item in place, including driveway sections and repair sections, as  
31 specified including leveling and grading subgrade. Washed rock, and cement concrete  
32 pedestrian curb, shall be considered incidental to this bid item  
33

34 "Cement Conc. Curb Ramp Type \_\_\_", per each

35 The unit Contract price per each for "Cement Concrete Curb Ramp Type\_\_\_", shall be full  
36 pay for installing the curb ramp as specified, including the "Detectable Warning Surface" and  
37 leveling and grading subgrade. Washed rock, and cement concrete pedestrian curb, shall be  
38 considered incidental to this bid item.  
39

40 Payment for "\_\_\_ In. Raised Edge Monolithic Cement Concrete Curb and Sidewalk" shall be  
41 at the unit price bid per square yard of cement concrete in place and shall be full compensation  
42 for all labor, equipment, and material necessary to construct this item in place, including  
43 monolithic curb, sidewalk, closure pour, as specified including leveling and grading subgrade.  
44 Washed rock shall be considered incidental to this bid item.  
45  
46  
47  
48

## **8-18 MAILBOX SUPPORT**

### **8-18.3 Construction Requirements**

Section 8-18.3 is supplemented with the following:

The contractor shall salvage existing mailboxes for use on the new mailbox supports. All relocated mailboxes shall have new mailbox supports, Type 1 or Type 2 in accordance with the Standard Plans unless otherwise noted.

The contractor shall maintain temporary mailboxes and mailbox supports as necessary during construction to ensure that mail delivery is uninterrupted during the duration of the project. Coordination with the United States Postal Service and the property owner or tenant will be the responsibility of the Contractor.

### **8-18.5 Payment**

Section 8-18.5 is supplemented with the following:

All costs for temporary mailboxes, temporary mailbox supports and salvage and relocation of existing mailboxes shall be included in and incidental to the unit bid items for mailbox supports as indicated on the bid proposal form.

## **8-20 ILLUMINATION, TRAFFIC SIGNAL SYSTEMS, INTELLIGENT TRANSPORTATION SYSTEMS, AND ELECTRICAL**

### **Description**

Section 8-20.1 first paragraph shall be revised to read:

1. Construct new "Rectangular Rapid Flash Beacon System" at the location shown in the Plans. This work consists of all the following:
  - a. The Contractor shall furnish, construct, and install:
    - RRFB standard foundations, all with anchor bolts and necessary hardware;
    - RRFB standards, including pole collars, top caps and bases;
    - Pedestrian push button assemblies, control units, standard voice message, push button frame adapters, pedestrian push button signs, and mounting hardware;
    - RRFB solar panels;
    - RRFB flasher units;
    - Grounding material;
    - Wire and cabled conductors;
    - Cable ties;
    - Labeling of wire and cabled conductor;
    - Field wiring of the RRFB network controller cabinet;
  - b. The Contractor shall coordinate with the Engineer and City of Ferndale for a RRFB turn on date and a RRFB "pre-punch" inspection, prior to RRFB turn on;
  - c. The Contractor shall provide labor, equipment, and materials to:

- Install RRFB system-mounted signs and sign mounting hardware;
  - Properly cover pedestrian push buttons during construction;
- d. The Contractor shall provide any other materials, equipment, and labor necessary to have properly functioning “Rectangular Rapid Flash Beacon System”, as indicated in the Contract Documents.

## **Materials**

Section 8-20.2 is supplemented with the following:

### ***Light And Signal Standards***

Section 9-29.6(1) is supplemented with the following:

#### **RRFB Standards**

The Contractor shall provide and install RRFB standards where shown on the Plans. The RRFB standards to be provided shall have a square 15-inch high aluminum Pelco-style base with aluminum door and grounding lug (grounding lug may be field-installed), with a pole threaded into the base. The pole shall be steel, 4.50-inch outside diameter x 0.237-inch wall thickness, Schedule 40, with 10 pounds per foot, galvanized in accordance with ASTM A123. The bolt circle for the base shall be adjustable from a minimum of 12 inches to a maximum of 14.5 inches. See PC.J1.8. Anchor bolts shall be in accordance with Section 9-29.6(5). See PC.J4.6 and Plans for equipment mounting details.

#### **Foundation Hardware**

Section 9-29.6(5) is supplemented as follows:

For RRFB standards: Anchor bolts for RRFB standard shall meet ASTM F1554 Grade 36 specifications with thread ¾-inch 8NC for a minimum of 6 inches and be hot-dip galvanized. Each anchor bolt shall be a minimum of 30 inches long and include a 4-inch right hook at the unthreaded end. Two hot-dip galvanized hex nuts, meeting the requirements of ASTM A563 Grade A and two hot-dipped galvanized, square, flat washers, meeting the requirements of ASTM F436, shall be supplied with each anchor bolt.

### ***Control Cabinet Assemblies***

#### ***Flashing Beacon Control***

Section 9-29.15 is supplemented with the following:

The Contractor shall furnish and install one complete RRFB control system where specified in the Plans. The RRFB control system to be provided shall be Carmanah model R920-MX with solar-powered controls for operation of four flashing beacon light bars at each pedestrian crossing. The solar panel shall be MX-200 30 watt integrated solar power module. RRFB units shall be black. Push button assemblies shall be yellow.

1  
2 **(January 7, 2019)**

3 **Rapid Flashing Beacons**

4 Rapid Flashing Beacon (RFB) indications shall comply with the dimensional,  
5 operational, and flash pattern requirements of Federal Highway Administration (FHWA)  
6 Interim Approval 21 (IA-21, Conditions 4, 5, and 6, excluding Condition 5f;  
7 [https://mutcd.fhwa.dot.gov/resources/interim\\_approval/ia21/index.htm](https://mutcd.fhwa.dot.gov/resources/interim_approval/ia21/index.htm)). RFB systems  
8 shall be capable of providing, at a minimum, the following two-channel flashing patterns:  
9

10 1. NEMA Standard 50-50:

- 11
- 12 • Channel one is ON and channel two is OFF for 0.5 seconds.
  - 13
  - 14 • Channel one is OFF and channel two is ON for 0.5 seconds.
  - 15

16 (Cycle repeats; the total flashing pattern cycle length is 1.00 second.)  
17

18 2. RFB “WW+S” Pattern (IA-21 Condition 5b):

- 19
- 20 • Channel one is ON and channel two is OFF for 0.05 seconds.
  - 21
  - 22 • Both channels are OFF for 0.05 seconds.
  - 23
  - 24 • Channel one is OFF and channel two is ON for 0.05 seconds.
  - 25
  - 26 • Both channels are OFF for 0.05 seconds.
  - 27
  - 28 • Channel one is ON and channel two is OFF for 0.05 seconds.
  - 29
  - 30 • Both channels are OFF for 0.05 seconds.
  - 31
  - 32 • Channel one is OFF and channel two is ON for 0.05 seconds.
  - 33
  - 34 • Both channels are OFF for 0.05 seconds.
  - 35
  - 36 • Both channels are ON for 0.05 seconds.
  - 37
  - 38 • Both channels are OFF for 0.05 seconds.
  - 39
  - 40 • Both channels are ON for 0.05 seconds.
  - 41
  - 42 • Both channels are OFF for 0.25 seconds.
  - 43

44 (Cycle repeats; the total flashing pattern cycle length is 0.80 seconds.)  
45

46 The flashing pattern shall be user-selectable in the field.



RFB system pushbuttons shall include a locator tone, but shall not include tactile arrows, speech messages, or vibrotactile indications. RFB system pushbuttons may include speech message and vibrotactile functionality, provided these features can be deactivated. RFB system pushbuttons shall use a 9" x 12" R10-25 sign. The R10-25 sign may include integral yellow warning lights.

### ***Pedestrian Push Buttons***

Section 9-29.19 is supplemented with the following:

Pedestrian push button systems for the RRFB system shall be in accordance with the Plans, shall be provided and installed by the Contractor, and shall include:

- Polara iNavigator Bluetooth Dongle, part number IN-DGL;
- Polara, iNX Midblock Crossing Push Button Stations with yellow lid and body color, including standard English message, yellow push button station frame adapters for 9-inch x 12-inch signs, and 9-inch x 12-inch R10-25 signs with reflective sheeting, in accordance with Section 9-28.12, part number iNX9WN0Y;
- Pedestrian push button signs with reflective sheeting, in accordance with Section 9-28.12;
- Mounting hardware, which shall be galvanized or stainless steel, except as listed above.

Each push button shall include both an audible and LED indication upon momentary actuation and the switch shall be rated for greater than 20 million operations.

Pedestrian push buttons shall be field installed by the Contractor at 42 inches above the finished grade, measured from the pedestrian access route grade adjacent to the pole base to the center of the pedestrian push button.

### **Measurement**

Section 8-20.4 is supplemented with the following:

RRFB System will be measured per each complete installation.

### **Payment**

The first two paragraphs of Section 8-20.5 are supplemented with the following:

"RRFB System", lump sum.

Section 8-20.5 is supplemented with the following:

(\*\*\*\*\*)

The construction signs used during the first 30 days after the RRFB systems are turned on will be paid as part of "Permanent Signing".

1 **8-21 PERMANENT SIGNING**

2  
3 **8-21.2.1 Materials**

4 *(July 6, 2009 R&E GSP)*

5  
6 Section 8-21.2 is supplemented with the following:

7  
8 Permanent signs shall be mounted on Type ST-2 Sign Supports.

9  
10 **8-22 PAVEMENT MARKING**

11  
12 **8-22.1 Description**

13 Section 8-22.1 is supplemented with the following:

14  
15 Also included in this item is the complete removal of temporary pavement markings that will  
16 conflict with the new channelization. This work shall be incidental to the various bid items  
17 of the Contract, and no additional compensation will be made.

18  
19 The Contractor shall replace all pavement markings as currently delineated throughout the  
20 project. It shall be the responsibility of the Contractor to off-set and/or keep track of the  
21 existing pavement markings for replacement.

22  
23 **8-22.2 Materials**

24 Section 8-22.2 is supplemented with the following:

25  
26 The plastic material used to form pavement markings shall be Type A – liquid hot applied  
27 thermoplastic.

28  
29 **8-22.3 Construction Requirements**

30 *(February 11, 2008 R&E GSP)*

31  
32 Section 8-22.3 is supplemented with the following:

33  
34 Pavement markings shall be applied with appropriate templates to avoid non-uniform edges  
35 and unwanted drippings. Any such non-conforming pavement markings will be removed and  
36 replaced at the Contractors expense.

37  
38 **8-22.3(1) Preliminary Spotting**

39 Section 8-22.3(1) is supplemented with the following:

40  
41 The Contractor shall notify the Engineer three (3) working days in advance of scheduled  
42 preliminary spotting.

## **8-23 TEMPORARY PAVEMENT MARKINGS**

### **8-23.1 Description**

Section 8-23.1 is supplemented with the following:

The temporary centerline striping shall be 1-foot of stripe for every 25-feet of roadway. Temporary marking will be incidental to the bid proposal item for HMA in accordance with Section 5-04.

## **8-24 ROCK AND GRAVITY BLOCK WALL AND GABION CRIBBING**

### **Measurement**

Section 8-24.4 is supplemented with the following:

Gravity block wall will be measured by the square yard of completed wall in place. The vertical limits for measurement are from the bottom of the bottom layer of blocks to the top of the top layer of blocks. The horizontal limits for measurement are from the end of wall to the end of wall.

### **Payment**

Section 8-24.5 is supplemented with the following:

“Gravity Block Wall”, per square yard.

The following new Section is created:

## **8-32 POTHOLE EXISTING UNDERGROUND UTILITY**

### **8-32.1 Description**

When directed by the Engineer or shown on the Plans, this work shall consist of potholing existing underground utilities. The Contractor shall perform utility investigations or coordinate with utility companies as required. At the direction of the Engineer, the Contractor shall perform exploratory excavations or provide hand potholing as required to collect as-built utility information. The Contractor shall verify the depth and location of existing underground utilities. The Contractor shall immediately notify the Engineer if field conditions differ from that shown on the Plans. The Contractor shall give the owner advance notice of four (4) working days, prior to conducting such investigations.

### **8-32.4 Measurement**

Measurement for potholing existing underground utilities will be by the unit for each pothole.

### **8-32.5 Payment**

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

“Pothole Existing Underground Utility”, per each.

1 The unit contract price per each for “Pothole Existing Underground Utility” shall be full  
2 compensation for all equipment, labor, and materials to locate the existing utility, verify the  
3 utilities’ vertical and horizontal location, and restoring the disturbed area.  
4

5 The following new Section is created:

6 **8-33 REPAIR EXISTING PUBLIC AND PRIVATE FACILITIES**  
7

8 **8-33.1 Description**  
9

10 This work shall consist of the repair of existing public and private facilities, and the correction,  
11 repair, removal, or construction of items as directed by the Engineer. This shall not exempt  
12 the contractor from protecting known existing facilities, or from the responsibility for repair of  
13 such known existing facilities.  
14

15 **8-33.3 Construction Requirements**  
16

17 The contractor shall obtain written or verbal approval from the Engineer, prior to proceeding  
18 with any repair of existing or private facilities. Work performed without approval from the  
19 Engineer will not be compensated.  
20

21 The Contractor and the Contracting Agencies’ representative or Engineer shall reconcile the  
22 hours of work for labor and equipment on a daily basis for the purpose of tracking all work  
23 under this item. The Contractor shall supply the Engineer with material invoices for all  
24 materials incorporated into this work in a timely manner. Invoices shall be original or copies  
25 of original invoices from the material supplier.  
26

27 **8-33.4 Measurement**  
28

29 Work performed under the item “Repair Existing Public and Private Facilities” shall be  
30 measured in accordance with Section 1-09.6 Force Account.  
31

32 **8-33.5 Payment**  
33

34 Payment for the item “Repair Existing Public and Private Facilities” shall be full compensation  
35 for all labor, tools, equipment, materials and subcontractor work needed to complete individual  
36 items of work as directed by the engineer. This item shall be paid in accordance with Section  
37 1-09.6 Force Account.  
38

**DIVISION 9**  
**MATERIALS**

**9-03 AGGREGATES**

**9-03.10 Aggregate for Gravel Base**  
(December 28, 2009 R&E GSP)

Section 9-03.10 is revised to read:

Gravel base shall consist of granular material, either naturally occurring or processed. It shall be essentially free from various types of wood waste or other extraneous or objectionable materials. It shall have such characteristics of size and shape that it will compact readily and the maximum particle size shall not exceed ½ of the depth of the layer being placed.

Gravel base shall meet the following requirements for grading and quality when placed in hauling vehicles for delivery to the roadway or during manufacture and placement into a temporary stockpile. The exact point of acceptance will be determined by the Engineer.

<u>Sieve Size</u>	<u>Percent Passing</u>
4" square	100
1-1/2" square	70-100
1/2" square	35-80
U.S. No. 4	15-50
U.S. No. 40	20 max
U.S. No. 200	5.0 max

Sand Equivalent shall be 40 min.

All percentages are by weight.

Gravel base material retained on a No. 4 sieve shall contain not more than 0.20 percent by weight of wood waste.

**9-03.12(3) Gravel Backfill for Pipe Zone Bedding**

(February 11, 2008 R&E GSP)

Add the following section:

**9-03.12(3)A Pea Gravel for Pipe Bedding**

Pea gravel for pipe bedding shall consist of naturally occurring material. It shall be free from various types of wood waste or other extraneous or objectionable materials. It shall have characteristics of size and shape that it will compact and shall meet the following specifications for grading:

<u>Sieve Size</u>	<u>Percent Passing</u>
1/2"	100
3/8 "	95-100
U.S. No. 8	0-10

All percentages are by weight.

## 9-14 EROSION CONTROL AND ROADSIDE PLANTING

### 9-14.1 Soil

#### 9-14.1(1) Topsoil Type A

General: Topsoil shall be free draining, fertile, friable sandy loam, and shall supply the following composition requirements: weed and seed free; pH between 5.5 and 7.5; maximum particle size to 1/2 inch, with 97% to 100% passing the 3/8 inch screen; soluble salts shall not exceed 4.0 mmho/cm; free of clay lumps, litter and toxic matter harmful to plant growth. Components shall conform to the requirements indicated. Percentages below are by volume. Mixing of the soil components shall not occur on site.

Sand    Compost    Sandy Loam

Topsoil for turf, rough grass and plant bed areas

34%    33%    33%

Top Sand: Conform to the following analysis using Tyler Standard Screens - Equivalent U.S. Series Number:

Sieve Size	Percent Passing by Weight
#4	100%
#10	95-100%
#16	85-100%
#30	75-90%
#60	15-30%
#100	0-5%
#200 (wet sieve)	0-1.5%

Composted Mulch: Material shall be derived from aerobic decomposition of recycled plant waste fully composted; material shall be composted on a paved surface and shall have a moisture content of between 20% and 40%; no visible free water or dust shall be produced when handling the material; fresh sawdust or fresh wood by products shall not have been added after the composting process has begun. No recycled sanican waste shall be used. Yard waste shall be from permitted composting facility. Pure organic matter content shall be between 30% and 50% by weight. 100% of composted yard waste shall pass the 7/16 inch screen and a minimum 50% shall pass the 1/4" screen. Material shall be maintained at a 15% oxygen level throughout the composting process.

Sandy Loam: Shall be derived from the "A" horizon of naturally occurring, free draining, friable soils. Soils with a high clay content will be rejected. Submit separate sample for approval prior to mixing.

### 9-14.2 Seed

Section 9-14.2 is supplemented with the following:

Grass seed for Seeded Lawn Installation shall be a blended seed mixture of non-leafy grasses of a commercial grade for home lawn use. The composition, proportion, and quality shall be subject to the advance approval of the Engineer. Grass seed mixtures for playgrounds, pastures, roadside seeding, or other non-residential use shall not be allowed. The approved grass seed mixture shall be applied to the rate of five pounds per 1,000 square feet.

### 9-14.3 Fertilizer

Section 9-14.3 is supplemented with the following:

The Contractor shall supply a commercially available starter fertilizer designed by the manufacturer for use in new lawn installation applications. The fertilizer formula and application rate shall provide the following types and amounts of nutrients at a minimum:

Total Nitrogen as N - One pound per thousand square feet

Available Phosphoric Acid as  $P_2O_5$  - One pound per thousand square feet

Soluble Potash as  $K_2O$  - One pound per thousand square feet.

50-60 percent of the total nitrogen shall be derived from ureaform or ureformaldehyde. The remainder may be derived from any source.

## 9-33 CONSTRUCTION GEOSYNTHETIC

The following new section is created:

### 9-33.2(4) Geotextile Paving Fabric

(\*\*\*\*\*)

Geotextile Paving Fabric shall be non-woven polypropylene geotextile and shall meet the following Minimum Average Roll Values (MARV) when tested in accordance with the methods listed below

**Minimum Properties Required for Geotextile Paving Fabric**

Geotextile Property	ASTM Test Method	Units	Required Values
Tensile Strength (Grab)	ASTM D 4632	lbs	120
Elongation	ASTM D 4632	%	50
Asphalt Retention	ASTM D-6140	gal/yd <sup>2</sup>	0.24
Melting Point	ASTM D 276	°F	320
UV Resistance %Retained at 500 hours	ASTM D-4355	%	70

All geotextile properties above MARV (i.e., the test results for any sampled roll in a lot shall meet or exceed the values shown in the table).

The test procedures used are essentially in conformance with the most recently approved ASTM geotextile test procedures, except for geotextile sampling and specimen conditioning, which are in accordance with WSDOT T 914, Practice for Sampling of Geotextiles for Testing, and T 915, Practice for Conditioning of Geotextiles for Testing, respectively. Copies of these

1 test methods are available at the State Materials Laboratory, PO Box 47365, Olympia, WA  
2 98504-7365.



**(November 4, 2024)**  
**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-23.70

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”

C-60.20

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)”

C-81.15

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."

#### C-85.11

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

#### D-3.09

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 Standard Plan C-81.10 and/or C-81.15"

#### D-3.10

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

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

#### D-3.11

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

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

#### D-10.10

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

General Note 1; “Construct curb joints at concrete pavement transverse joint locations. If all adjacent pavement is HMA, see Standard Plan 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.)”

#### F-40.15

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.)"

#### F-40.16

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.)"

#### F-80.10

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."

#### J-10.10

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

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

#### J-10.16

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

#### J-10.17

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

#### J-10.18

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

#### J-20.10

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 ~ 3/4" (IN) x 30" (IN) FULL THREAD ~ THREE REQ'D. PER ASSEMBLY" is revised to read; "ANCHOR BOLTS ~ 3/4" (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 1/2" DIAM., is revised to read; CHASE NIPPLE ~ 1 1/2" (IN) DIAM.

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 1/2" S.S. PENTA HEAD BOLT AND 12" S. S. FLAT WASHER" is revised to read; "12 – 13 x 1 1/2" S.S. PENTA HEAD BOLT AND 1/2" (IN) S. S. FLAT WASHER"

J-40.36

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

J-40.37

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

J-75.20

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

J-75.55

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

L-5.10

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-6 ..... 6/19/98	D-10.35-00 ..... 7/8/08
D-2.92-01 ..... 4/26/22	D-10.10-01 ..... 12/2/08	D-10.40-01 ..... 12/2/08
D-3.09-00 ..... 5/17/12	D-10.15-01 ..... 12/2/08	D-10.45-01 ..... 12/2/08
D-3.10-01 ..... 5/29/13	D-10.20-01 ..... 8/7/19	D-20.10-00 ..... 10/9/23
E-1 ..... 2/21/07	E-4 ..... 8/27/03	E-20.10-00 ..... 9/12/23
E-2 ..... 5/29/98	E-4a ..... 8/27/03	E-20.20-00 ..... 10/4/23
F-10.12-04 ..... 9/24/20	F-10.62-02 ..... 4/22/14	F-40.15-04 ..... 9/25/20
F-10.16-00 ..... 12/20/06	F-10.64-03 ..... 4/22/14	F-40.16-03 ..... 6/29/16
F-10.18-04 ..... 6/28/24	F-30.10-04 ..... 9/25/20	F-45.10-05 ..... 6/4/24
F-10.40-04 ..... 9/24/20	F-40.12-03 ..... 6/29/16	F-80.10-04 ..... 7/15/16
F-10.42-00 ..... 1/23/07	F-40.14-03 ..... 6/29/16	
G-10.10-00 ..... 9/20/07	G-24.50-05 ..... 8/7/19	G-90.10-03 ..... 7/11/17
G-20.10-03 ..... 8/20/21	G-24.60-05 ..... 6/28/18	G-90.20-05 ..... 7/11/17
G-22.10-04 ..... 6/28/18	G-25.10-05 ..... 9/16/20	G-90.30-04 ..... 7/11/17
G-24.10-00 ..... 11/8/07	G-26.10-00 ..... 7/31/19	G-95.10-02 ..... 6/28/18
G-24.20-01 ..... 2/7/12	G-30.10-04 ..... 6/23/15	G-95.20-03 ..... 6/28/18
G-24.30-02 ..... 6/28/18	G-50.10-03 ..... 6/28/18	G-95.30-03 ..... 6/28/18
G-24.40-07 ..... 6/28/18		
H-10.10-01 ..... 6/2/24	H-30.10-00 ..... 10/12/07	H-70.10-02 ..... 8/17/21
H-10.11-00 ..... 6/2/24	H-32.10-00 ..... 9/20/07	H-70.20-02 ..... 8/17/21
H-10.15-01 ..... 6/2/24	H-60.10-01 ..... 7/3/08	
H-10.16-00 ..... 6/2/24	H-60.20-01 ..... 7/3/08	
I-10.10-01 ..... 8/11/09	I-30.20-00 ..... 9/20/07	I-40.20-00 ..... 9/20/07
I-30.10-02 ..... 3/22/13	I-30.30-02 ..... 6/12/19	I-50.20-02 ..... 7/6/22
I-30.15-02 ..... 3/22/13	I-30.40-02 ..... 6/12/19	I-60.10-01 ..... 6/10/13
I-30.16-01 ..... 7/11/19	I-30.60-02 ..... 6/12/19	I-60.20-01 ..... 6/10/13
I-30.17-01 ..... 6/12/19	I-40.10-00 ..... 9/20/07	I-80.10-02 ..... 7/15/16
J-05.50-00 ..... 8/30/22	J-26.10-03 ..... 7/21/16	J-50.05-00 ..... 7/21/17
J-10 ..... 7/18/97	J-26.15-01 ..... 5/17/12	J-50.10-01 ..... 7/31/19

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

**CONTRACT FORMS**  
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INFORMATIONAL

**CONTRACT**  
**FOR:**  
**FERNDALE TERRACE PROJECT**  
**FERNDALE, WASHINGTON**

This Contract, made and entered into this \_\_\_\_ day of \_\_\_\_, 20\_\_ by and between the City of Ferndale, hereinafter called the "Owner" and \_\_\_\_\_, hereinafter called the "Contractor".

WITNESSETH:

That in consideration of the terms and conditions contained herein and attached and made a part of this Contract, the parties hereto covenant and agree as follows:

1. The Contractor shall do all of the work and furnish all of the labor, materials, tools and equipment for the construction of the improvements and shall perform any changes in the work, all in full compliance with the contract documents entitled "FERNDALE TERRACE PROJECT, Ferndale, Washington".

The "Bid Proposal", "Specifications and Conditions", "Contract Forms", and the "Plans" sections contained in said contract documents are hereby referred to and by reference made a part hereof.

2. The Owner hereby promises and agrees with the Contractor to employ, and does employ the Contractor to furnish the labor, materials, tools and equipment, and to and cause to be done the above-described work, and to complete and finish the same in accordance with the said contract documents and the terms and conditions herein contained, and hereby contracts to pay for the same, according to the said contract documents, including the schedule of estimated quantities, and unit and lump sum prices in the Bid Proposal, the approximate sum of \_\_\_\_\_, the total amount of bid, subject to the actual quantity of work performed, at the time and in the manner and upon the conditions provided for in this contract.
3. The Contractor for himself, and for his agents, successors, assigns, subcontractors and/or employees, does hereby agree to the full performance of all the covenants herein contained upon the part of the Contractor.
4. The Owner hereby appoints and the Contractor hereby accepts Reichhardt & Ebe Engineering, Inc., hereinafter referred to as the Engineer, as the City's representative for the purpose of administering the provisions of this Contract, including the Owner's right to receive and act on all reports and documents related to this Contract, to request and receive additional information from the Contractor, to assess the general performance of the Contractor under this Contract, to determine if the contracted services are being performed in accordance with Federal, State or local laws, and to administer any other right granted to the Owner under this Contract. The Owner expressly reserves the right to terminate this

Contract as provided in the contract documents, and also expressly the reserves the right to commence civil action for the enforcement of this contract.

5. This Contract contains terms and conditions agreed upon by the parties. The parties agree that there are no other understandings, oral or otherwise, regarding the subject matter of this Contract.
6. The Contractor agrees to comply with all applicable Federal, State, City or municipal standards for the licensing, certification, operation of facilities and programs, and accreditation and licensing of individuals.
7. The Contractor shall not assign or subcontract any portion of the work provided for under the terms of this Contract without obtaining prior written approval of the Engineer. All terms and conditions of this Contract shall apply to any approved subcontract or assignment related to this Contract.
8. The parties intend that an independent Contractor-Owner relationship will be created by this Contract. The Owner is interested only in the results to be achieved, the implementation of the work will lie solely with the Contractor. The Contractor will be solely and entirely responsible for its acts and for the acts of its agents, employees, servants, subcontractors, or otherwise during the performance of this Contract. In the performance of the work herein contemplated, the Contractor is an independent Contractor with regard to the performance of the details of the work; however, the components of and the results of the work contemplated herein must meet the approval of the Engineer and shall be subject to the Engineer's general rights of inspection and review to secure the satisfactory completion thereof.
9. The Contractor agrees and covenants to indemnify, defend, and save harmless, the Owner and the City of Ferndale and those persons who were, now are, or shall be duly elected or appointed officials or members of employees thereof, hereinafter referred to as the "Owner" or "City" against and from any loss, damage, costs, charge, expense, liability, claims, demands or judgments, of whatsoever kind or nature, whether to persons or to property, arising wholly or partially out of any act, action, neglect, omission, or default on the part of the Contractor, his agents, successors, assignees, subcontractors and/or employees, except only such injury or damage as shall have been caused by or resulted from the sole negligence of the City. In case any suit or cause of action shall be brought against the Owner or the City on account of any act, action, neglect, omission, or default on the part of the Contractor, his agents, successors, assignees, subcontractors and/or employees the Contractor hereby agrees and covenants to assume the defense thereof and to pay any and all costs, charges, attorney's fees and other expenses and any and all judgments that may be incurred or obtained against the City.

In the event the Owner is required to institute legal action and/or participate in the legal action to enforce this Indemnification and Hold Harmless Clause, the Contractor agrees to pay the Owner or City's legal fees, costs and disbursements incurred in establishing the right to indemnification. If the claim, suit, or action for injuries, death, or damages as provided for in the preceding paragraphs of this specification is caused by or results from the concurrent

negligence of (a) the indemnitee or the indemnitee's agents or employees and (b) the indemnitor or the indemnitor's agents for employees the indemnity provisions provided for in the preceding paragraphs of this specification shall be valid and enforceable only to the extent of the indemnitor's negligence.

Contractor hereby specifically and expressly waives any immunity under Industrial Insurance, Title 51 RCW and acknowledges that this waiver was mutually negotiated by the parties herein. In the event of litigation between the parties to enforce the rights under this paragraph, reasonable attorney's fees shall be allowed to the prevailing party.

10. This Contract has been and shall be construed as having been made and delivered within the State of Washington and it is mutually understood and agreed by each party hereto that this Contract shall be governed by the laws of the State of Washington, both as to interpretation and performance. Any action in law, suit and equity or judicial proceedings for the enforcement of this contract, or any provisions thereof, shall be instituted and maintained in the courts of competent jurisdiction located in City of Ferndale, Washington.
11. The failure of the Owner to insist upon strict performance of any of the covenants and agreements of this Contract or to exercise any option herein conferred in any one or more instances shall not be construed to be a waiver or relinquishment of any such, or any other covenants or agreements, but the same shall be and remain in full force and effect.
12. It is understood and agreed by the parties hereto that if any part of this agreement is determined to be illegal, the validity of the remaining portions shall be construed as if the agreement did not contain the particular illegal part.
13. No change or addition to this Contract shall be valid or binding upon either party unless such change or addition shall be in writing, executed by both parties.
14. In the event that funding from State, Federal, or other sources is withdrawn, reduced, or limited in any way after the effective date of this Agreement, and prior to its normal completion, the Owner may summarily terminate this Agreement as to the funds withdrawn, reduced, or limited notwithstanding any other termination provisions of this Agreement. If the level of funding withdrawn, reduced or limited is so great that the Owner deems that the continuation of the programs covered by this Agreement is no longer in the best interest of the City, the Owner may summarily terminate this Agreement in whole notwithstanding any other termination of this Agreement. Termination under this section shall be effective upon receipt of written notice as specified herein.

IN WITNESS WHEREOF, the Contractor has executed this instrument, on the day and year first below written and the Owner has caused this instrument to be executed by and in the name of the said County, the day and year first above written.

Executed by the Contractor this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**CITY OF FERNDALE:**

By: \_\_\_\_\_  
City Administrator / Mayor

STATE OF WASHINGTON )  
 ) ss.  
COUNTY OF WHATCOM )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared \_\_\_\_\_ to me personally known to be the person described in and who executed the above instrument and who acknowledged to me the act of signing thereof.

NOTARY PUBLIC, in and for the  
State of Washington, residing at:

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

**CONTRACTOR:**

By: \_\_\_\_\_

Title: \_\_\_\_\_

STATE OF WASHINGTON )  
 ) ss.  
COUNTY OF WHATCOM )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally appeared \_\_\_\_\_ to me personally known to be the person described in and who executed the above instrument and who acknowledged to me the act of signing thereof.

NOTARY PUBLIC, in and for the  
State of Washington, residing at:

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

**PERFORMANCE BOND**  
**to the**  
**City of Ferndale**

**KNOW ALL MEN BY THESE PRESENTS**, That we \_\_\_\_\_  
\_\_\_\_\_ the Contractor named in the Contract  
hereinafter referred to as PRINCIPAL, and \_\_\_\_\_ as  
SURETY, are jointly and severally held and firmly bound to the City of Ferndale, hereinafter  
referred to as OWNER named in said Contract FERNDAL TERRACE PROJECT, Ferndale,  
Washington, for the penal sum of, \_\_\_\_\_ DOLLARS  
(\$ \_\_\_\_\_), lawful money of the United States, for the payment of which  
sum well and truly to be made, we bind ourselves, our heirs, assigns, administrators and successors  
jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH**, that Whereas, the Principal entered  
into a contract with the Owner, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, for such construction  
work with the City of Ferndale, Washington.

**NOW, THEREFORE**, if the Principal shall well, truly and faithfully perform all of the provisions  
and fulfill all of the undertakings, covenants, terms, conditions and agreements of said contract  
during the period of the original contract and any extensions thereof that may be granted by the  
Owner, with or without notices to the surety; and during the life of any guaranty required under  
the contract; and shall also well and truly perform and fulfill all of the undertakings, covenants,  
terms, conditions and agreements of any and all duly authorized modifications of said contract that  
may hereafter be made; notice of which modifications to the surety being hereby waived, shall  
indemnify and save harmless owner from all cost and damage by reason of the principal's default  
of failure to do so, and shall pay the State of Washington sales and use taxes, and amounts due  
said state pursuant to Titles 50 and 51 of the Revised Code of Washington then this obligation to  
be void, otherwise to remain in full force and effect.

**IN WITNESS WHEREOF**, the above bonded parties have executed this instrument under their  
separate seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, the name and corporate seal of each corporate  
party hereto affixed, and these presents duly signed by its undersigned representatives pursuant to  
authority of its governing body.

Corporate Seal:

\_\_\_\_\_  
PRINCIPAL

ATTEST: (If Corporation)

By: \_\_\_\_\_

Title: \_\_\_\_\_

Corporate Seal:

\_\_\_\_\_  
SURETY

By:\_\_\_\_\_

Title:\_\_\_\_\_

INFORMATIONAL



**PAYMENT BOND**  
**to the**  
**City of Ferndale**

**KNOW ALL MENT BY THESE PRESENTS: that**

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

a \_\_\_\_\_, hereinafter called Principal,  
(Corporation, Partnership or Individual)

and \_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
(Address of surety)

hereinafter called **SURETY**, are held and firmly bound unto \_\_\_\_\_

\_\_\_\_\_  
(Name of Owner)

\_\_\_\_\_  
(Address of Owner)

hereinafter called **OWNER**, in the penal sum of \_\_\_\_\_ Dollars, \$(\_\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION** is such that whereas, the Principal entered into a certain contract with the **OWNER**, dated the \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, a copy of which is hereto attached and made a part hereof for the construction of:

**NOW, THEREFORE**, if the Principal shall promptly make payment to all persons, firms, **SUBCONTRACTORS**, and corporations furnishing materials for or performing labor in the prosecution of the **WORK** provided for in such contract, and any authorized extension or modification thereof including all amounts due for materials, lubricants, oil, gasoline, coal, and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such **WORK**, and all Insurance premiums on said **WORK**, and for all labor, performed in such **WORK** whether by **SUBCONTRACTOR** or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

**PROVIDED, FURTHER**, that the said **SURETY** for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the **WORK** to be performed thereunder or the **SPECIFICATIONS** accompanying the same shall in any wise affect its obligation on this **BOND**, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the

**WORK** or to the **SPECIFICATIONS**.

**PROVIDED, FURTHER**, that no final settlement between the **OWNER** and the **CONTRACTOR** shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

**IN WITNESS WHEREOF**, this instrument is executed in \_\_\_\_\_ counterparts, each on of which  
(number)  
shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_

**ATTEST:**

\_\_\_\_\_  
Principal  
\_\_\_\_\_  
(Principal) Secretary

(SEAL) By \_\_\_\_\_ (s)

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

\_\_\_\_\_  
Witness as to Principal  
\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Surety)  
**ATTEST:** By \_\_\_\_\_  
(Attorney –in-Fact)

\_\_\_\_\_  
Witness as to Surety  
\_\_\_\_\_  
(Address)

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

**NOTE:** Date of **BOND** must not be prior to date of Contract.  
If **CONTRACTOR** is Partnership, all partners should execute **BOND**.

**IMPORTANT:** Surety companies executing **BONDS** must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the **PROJECT** is located.

**CITY OF FERNDALE  
RETAINAGE INVESTMENT OPTION**

CONTRACTOR: \_\_\_\_\_

PROJECT NAME: \_\_\_\_\_

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

Pursuant to Chapter 60.28 RCW, you may choose how your retainage under this contract will be held and invested. Please complete and sign this form indicating your preference. If you fail to do so, the City of Ferndale (City) will hold your retain age as described in "Current Expense", option 1 below.

- \_\_\_\_\_ 1. Current Expense: The City will retain your money in its Current Expense Fund Account until thirty days following final acceptance of the improvement or work as completed. You will not receive interest earned on this money.
- \_\_\_\_\_ 2. Interest Bearing Account: The City will deposit retainage checks in an interest-bearing account in a bank, mutual savings bank, or savings and loan association, not subject to withdrawal until after the final acceptance of the improvement or work as completed or until agreed to by both parties. Interest on the account will be paid to you.

**BONDS AND SECURITIES ACCEPTABLE BY THE CITY OF FERNDALE:**

1. Bills, certificates, notes or bonds of the United States.
2. Other obligations of the United States or its agencies.
3. Indebtedness of the Federal national Mortgage Association.
4. Time Deposits in commercial banks.

Designate below the type of investment selected:

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

- \_\_\_\_\_ 3. Bond-in-Lieu: With the consent of the City, the contractor may submit a bond for all or any portion of the amount of funds retained by the City in a form acceptable to the City and from a bonding company meeting standards established by the City, if any. Unless otherwise indicated, the contractor elects to submit a bond for the entire 5% retainage amount. Such bond and any proceeds there from shall be made subject to all claims and liens and in the same manner and priority as set forth for retained percentages in Chapter 60.28 RCW. Whenever the City accepts a bond-in-lieu of retained funds from a contractor, the contractor shall accept like bonds from any subcontractors or suppliers from which the contractor has retained funds. The contractor shall then release the funds retained from the subcontractor or supplier, to the subcontractor or supplier, within thirty days of the contractor's receipt of the retained funds from the City.

Retainage is normally released 30 - 45 days after final acceptance of work by the City, or following receipt Employment Security / Department of Revenue clearance, whichever takes longer.

\_\_\_\_\_  
(Contractor's Signature)

\_\_\_\_\_  
Date

Title: \_\_\_\_\_

INFORMATIONAL

**APPENDICES**  
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## **APPENDIX A – STATE PREVAILING WAGE RATES**

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

Washington State Prevailing Wage

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

Journey Level Prevailing Wage Rates for the Effective Date: 12/18/2024

## Whatcom County

Trade^	Job Classification	Wage	Holiday	Overtime	Note
<u>Asbestos Abatement Workers</u>	Journey Level	\$63.87	<b>5D</b>	<b>1H</b>	
<u>Boilermakers</u>	Journey Level	\$77.89	<b>5N</b>	<b>1C</b>	
<u>Brick Mason</u>	Journey Level	\$71.82	<b>7E</b>	<b>1N</b>	
<u>Brick Mason</u>	Pointer-Caulker-Cleaner	\$71.82	<b>7E</b>	<b>1N</b>	
<u>Building Service Employees</u>	Janitor	\$16.28		<b>1</b>	
<u>Building Service Employees</u>	Shampooer	\$16.28		<b>1</b>	
<u>Building Service Employees</u>	Waxer	\$16.28		<b>1</b>	

<u>Building Service Employees</u>	Window Cleaner	\$16.28		<b>1</b>	
<u>Cabinet Makers (In Shop)</u>	Journey Level	\$24.89		<b>1</b>	
<u>Carpenters</u>	Acoustical Worker	\$78.96	<b>15J</b>	<b>11U</b>	
<u>Carpenters</u>	Bridge Dock and Wharf Carpenter	\$80.50	<b>15J</b>	<b>11U</b>	<b>9L</b>
<u>Carpenters</u>	Floor Layer & Floor Finisher	\$78.96	<b>15J</b>	<b>11U</b>	
<u>Carpenters</u>	General Carpenter	\$78.96	<b>15J</b>	<b>11U</b>	
<u>Carpenters</u>	Scaffold Erector	\$78.96	<b>15J</b>	<b>11U</b>	
<u>Cement Masons</u>	Application of all Composition Mastic	\$77.30	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Application of all Epoxy Material	\$76.78	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Application of all Plastic Material	\$77.30	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Application of Sealing Compound	\$76.78	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Application of Underlayment	\$77.30	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Building General	\$76.78	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Composition or Kalman Floors	\$77.30	<b>15J</b>	<b>4U</b>	



<u>Cement Masons</u>	Concrete Paving	\$76.78	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Curb & Gutter Machine	\$77.30	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Curb & Gutter, Sidewalks	\$76.78	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Curing Concrete	\$76.78	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Finish Colored Concrete	\$77.30	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Floor Grinding	\$77.30	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Floor Grinding/Polisher	\$76.78	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Green Concrete Saw, self-powered	\$77.30	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Grouting of all Plates	\$76.78	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Grouting of all Tilt-up Panels	\$76.78	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Guniting Nozzleman	\$77.30	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Hand Powered Grinder	\$77.30	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Journey Level	\$76.78	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Patching Concrete	\$76.78	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Pneumatic Power Tools	\$77.30	<b>15J</b>	<b>4U</b>
<u>Cement Masons</u>	Power Chipping & Brushing	\$77.30	<b>15J</b>	<b>4U</b>

<u>Cement Masons</u>	Sand Blasting Architectural Finish	\$77.30	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Screed & Rodding Machine	\$77.30	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Spackling or Skim Coat Concrete	\$76.78	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Troweling Machine Operator	\$77.30	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Troweling Machine Operator on Colored Slabs	\$77.30	<b>15J</b>	<b>4U</b>	
<u>Cement Masons</u>	Tunnel Workers	\$77.30	<b>15J</b>	<b>4U</b>	
<u>Divers &amp; Tenders</u>	Bell/Vehicle/Submersible Operator (not under pressure)	\$156.25	<b>15J</b>	<b>11T</b>	<b>9I</b>
<u>Divers &amp; Tenders</u>	Dive Supervisor	\$157.75	<b>15J</b>	<b>11T</b>	<b>9I</b>
<u>Divers &amp; Tenders</u>	Diver	\$156.25	<b>15J</b>	<b>11T</b>	<b>9I</b>
<u>Divers &amp; Tenders</u>	Diver Tender	\$86.86	<b>15J</b>	<b>11T</b>	<b>9I</b>
<u>Divers &amp; Tenders</u>	Hyperbaric Worker - Compressed Air Worker 0-30.00 PSI	\$109.76	<b>15J</b>	<b>11U</b>	
<u>Divers &amp; Tenders</u>	Hyperbaric Worker - Compressed Air Worker 31.01-44.00 PSI	\$118.99	<b>15J</b>	<b>11U</b>	

<u>Divers &amp; Tenders</u>	Hyperbaric Worker - Compressed Air Worker 44.01 - 54.00 PSI	\$128.22	<b>15J</b>	<b>11U</b>	
<u>Divers &amp; Tenders</u>	Hyperbaric Worker - Compressed Air Worker 54.01 - 60.00 PSI	\$137.45	<b>15J</b>	<b>11U</b>	
<u>Divers &amp; Tenders</u>	Hyperbaric Worker - Compressed Air Worker 60.01 - 64.00 PSI	\$146.67	<b>15J</b>	<b>11U</b>	
<u>Divers &amp; Tenders</u>	Hyperbaric Worker - Compressed Air Worker 64.01 - 68.00 PSI	\$155.90	<b>15J</b>	<b>11U</b>	
<u>Divers &amp; Tenders</u>	Hyperbaric Worker - Compressed Air Worker 68.01 - 70.00 PSI	\$165.13	<b>15J</b>	<b>11U</b>	
<u>Divers &amp; Tenders</u>	Hyperbaric Worker - Compressed Air Worker 70.01 - 72.00 PSI	\$174.36	<b>15J</b>	<b>11U</b>	
<u>Divers &amp; Tenders</u>	Hyperbaric Worker - Compressed Air Worker 72.01 - 74.00 PSI	\$183.59	<b>15J</b>	<b>11U</b>	
<u>Divers &amp; Tenders</u>	Lead Diver (Dive Master)	\$101.32	<b>15J</b>	<b>11T</b>	<b>9I</b>
<u>Divers &amp; Tenders</u>	Manifold Operator (Life Support Technician)	\$86.86	<b>15J</b>	<b>11T</b>	<b>9I</b>
<u>Divers &amp; Tenders</u>	Remote Operated Vehicle Operator/Technician	\$86.86	<b>15J</b>	<b>11T</b>	<b>9I</b>

<u>Divers &amp; Tenders</u>	Remote Operated Vehicle Operator/Technician	\$86.86	<b>15J</b>	<b>11T</b>	<b>9I</b>
<u>Divers &amp; Tenders</u>	Remote Operated Vehicle Tender	\$80.55	<b>15J</b>	<b>11T</b>	<b>9I</b>
<u>Divers &amp; Tenders</u>	Stand-by Diver	\$96.32	<b>15J</b>	<b>11T</b>	<b>9I</b>
Dredge Workers	Assistant Engineer	\$83.92	<b>5D</b>	<b>3F</b>	
Dredge Workers	Assistant Mate (Deckhand)	\$83.28	<b>5D</b>	<b>3F</b>	
Dredge Workers	Boatmen	\$83.92	<b>5D</b>	<b>3F</b>	
Dredge Workers	Engineer Welder	\$85.53	<b>5D</b>	<b>3F</b>	
Dredge Workers	Leverman, Hydraulic	\$87.24	<b>5D</b>	<b>3F</b>	
Dredge Workers	Mates	\$83.92	<b>5D</b>	<b>3F</b>	
Dredge Workers	Oiler	\$83.28	<b>5D</b>	<b>3F</b>	
<u>Drywall Applicator</u>	Journey Level	\$78.76	<b>150</b>	<b>11S</b>	
<u>Drywall Tapers</u>	Journey Level	\$78.76	<b>150</b>	<b>11S</b>	
<u>Electrical Fixture Maintenance Workers</u>	Journey Level	\$16.28		<b>1</b>	
<u>Electricians - Inside</u>	Cable Splicer	\$95.85	<b>7H</b>	<b>1E</b>	
<u>Electricians - Inside</u>	Construction Stock Person	\$46.03	<b>7H</b>	<b>1D</b>	

<u>Electricians - Inside</u>	Journey Level	\$89.75	<b>7H</b>	<b>1E</b>	
<u>Electricians - Motor Shop</u>	Craftsman	\$16.28		<b>1</b>	
<u>Electricians - Motor Shop</u>	Journey Level	\$16.28		<b>1</b>	
<u>Electricians - Powerline Construction</u>	Cable Splicer	\$97.76	<b>5A</b>	<b>4D</b>	
<u>Electricians - Powerline Construction</u>	Certified Line Welder	\$89.71	<b>5A</b>	<b>4D</b>	
<u>Electricians - Powerline Construction</u>	Groundperson	\$56.79	<b>5A</b>	<b>4D</b>	
<u>Electricians - Powerline Construction</u>	Heavy Line Equipment Operator	\$89.71	<b>5A</b>	<b>4D</b>	
<u>Electricians - Powerline Construction</u>	Journey Level Lineperson	\$89.71	<b>5A</b>	<b>4D</b>	
<u>Electricians - Powerline Construction</u>	Line Equipment Operator	\$77.13	<b>5A</b>	<b>4D</b>	
<u>Electricians - Powerline Construction</u>	Meter Installer	\$56.79	<b>5A</b>	<b>4D</b>	<b>8W</b>
<u>Electricians - Powerline Construction</u>	Pole Sprayer	\$89.71	<b>5A</b>	<b>4D</b>	
<u>Electricians - Powerline Construction</u>	Powderperson	\$66.84	<b>5A</b>	<b>4D</b>	
<u>Electronic Technicians</u>	Electronic Technicians Journey Level	\$58.51	<b>5B</b>	<b>1B</b>	

<u>Elevator Constructors</u>	Mechanic	\$111.26	<b>7D</b>	<b>4A</b>	
<u>Elevator Constructors</u>	Mechanic In Charge	\$120.27	<b>7D</b>	<b>4A</b>	
Fabricated Precast Concrete Products	Journey Level	\$16.28		<b>1</b>	
Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$16.28		<b>1</b>	
<u>Fence Erectors</u>	Fence Erector	\$54.65	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Fence Erectors</u>	Fence Laborer	\$54.65	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Flaggers</u>	Journey Level	\$54.65	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Glaziers</u>	Journey Level	\$82.16	<b>7L</b>	<b>1Y</b>	
<u>Heat &amp; Frost Insulators And Asbestos Workers</u>	Journey Level	\$91.81	<b>15H</b>	<b>11C</b>	
<u>Heating Equipment Mechanics</u>	Mechanic	\$96.46	<b>7F</b>	<b>1E</b>	
<u>Hod Carriers &amp; Mason Tenders</u>	Journey Level	\$67.38	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Industrial Power Vacuum Cleaner</u>	Journey Level	\$16.28		<b>1</b>	
<u>Inland Boatmen</u>	Boat Operator	\$61.41	<b>5B</b>	<b>1K</b>	
<u>Inland Boatmen</u>	Cook	\$56.48	<b>5B</b>	<b>1K</b>	
<u>Inland Boatmen</u>	Deckhand	\$57.48	<b>5B</b>	<b>1K</b>	

<u>Inland Boatmen</u>	Deckhand Engineer	\$58.81	<b>5B</b>	<b>1K</b>
<u>Inland Boatmen</u>	Launch Operator	\$58.89	<b>5B</b>	<b>1K</b>
<u>Inland Boatmen</u>	Mate	\$57.31	<b>5B</b>	<b>1K</b>
<u>Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</u>	Cleaner Operator	\$51.27	<b>15M</b>	<b>110</b>
<u>Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</u>	Foamer Operator	\$51.27	<b>15M</b>	<b>110</b>
<u>Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</u>	Grout Truck Operator	\$51.27	<b>15M</b>	<b>110</b>
<u>Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</u>	Head Operator	\$49.20	<b>15M</b>	<b>110</b>
<u>Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</u>	Technician	\$42.99	<b>15M</b>	<b>110</b>
<u>Inspection/Cleaning/Sealing Of Sewer &amp; Water Systems By Remote Control</u>	TV Truck Operator	\$46.10	<b>15M</b>	<b>110</b>
<u>Insulation Applicators</u>	Journey Level	\$78.96	<b>15J</b>	<b>11U</b>
<u>Ironworkers</u>	Journeyman	\$90.82	<b>15K</b>	<b>11N</b>

<u>Laborers</u>	Air, Gas Or Electric Vibrating Screed	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Airtrac Drill Operator	\$65.75	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Ballast Regular Machine	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Batch Weighman	\$54.65	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Brick Pavers	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Brush Cutter	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Brush Hog Feeder	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Burner	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Caisson Worker	\$65.75	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Carpenter Tender	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Cement Dumper-paving	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Cement Finisher Tender	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Change House Or Dry Shack	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Chipping Gun (30 Lbs. And Over)	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Chipping Gun (Under 30 Lbs.)	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Choker Setter	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>



<u>Laborers</u>	Chuck Tender	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Clary Power Spreader	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Clean-up Laborer	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Concrete Dumper/Chute Operator	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Concrete Form Stripper	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Concrete Placement Crew	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Concrete Saw Operator/Core Driller	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Crusher Feeder	\$54.65	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Curing Laborer	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Demolition: Wrecking & Moving (Incl. Charred Material)	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Ditch Digger	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Diver	\$65.75	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Drill Operator (Hydraulic, Diamond)	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Dry Stack Walls	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Dump Person	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>

<u>Laborers</u>	Epoxy Technician	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Erosion Control Worker	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Faller & Bucker Chain Saw	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Fine Graders	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Firewatch	\$54.65	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Form Setter	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Gabian Basket Builders	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	General Laborer	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Grade Checker & Transit Person	\$67.38	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Grinders	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Grout Machine Tender	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Groutmen (Pressure) Including Post Tension Beams	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Guardrail Erector	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Hazardous Waste Worker (Level A)	\$65.75	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Hazardous Waste Worker (Level B)	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>

<u>Laborers</u>	Hazardous Waste Worker (Level C)	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	High Scaler	\$65.75	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Jackhammer	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Laserbeam Operator	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Maintenance Person	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Manhole Builder-Mudman	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Material Yard Person	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Mold Abatement Worker	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Motorman-Dinky Locomotive	\$67.48	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	nozzleman (concrete pump, green cutter when using combination of high pressure air & water on concrete & rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster)	\$67.38	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Pavement Breaker	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Pilot Car	\$54.65	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Pipe Layer (Lead)	\$67.38	<b>15J</b>	<b>11P</b>	<b>8Y</b>

<u>Laborers</u>	Pipe Layer/Tailor	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Pipe Pot Tender	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Pipe Reliner	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Pipe Wrapper	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Pot Tender	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Powderman	\$65.75	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Powderman's Helper	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Power Jacks	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Railroad Spike Puller - Power	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Raker - Asphalt	\$67.38	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Re-timberman	\$65.75	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Remote Equipment Operator	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Rigger/Signal Person	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Rip Rap Person	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Rivet Buster	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Rodder	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>

<u>Laborers</u>	Scaffold Erector	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Scale Person	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Sloper (Over 20")	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Sloper Sprayer	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Spreader (Concrete)	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Stake Hopper	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Stock Piler	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Swinging Stage/Boatswain Chair	\$54.65	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Tamper & Similar Electric, Air & Gas Operated Tools	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Tamper (Multiple & Self- propelled)	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Timber Person - Sewer (Lagger, Shorer & Cribber)	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Toolroom Person (at Jobsite)	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Topper	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Track Laborer	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Track Liner (Power)	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>

<u>Laborers</u>	Traffic Control Laborer	\$58.20	<b>15J</b>	<b>11P</b>	<b>9C</b>
<u>Laborers</u>	Traffic Control Supervisor	\$61.47	<b>15J</b>	<b>11P</b>	<b>9C</b>
<u>Laborers</u>	Truck Spotter	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Tugger Operator	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 0-30 psi	\$200.40	<b>15J</b>	<b>11P</b>	<b>9B</b>
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$205.43	<b>15J</b>	<b>11P</b>	<b>9B</b>
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$209.11	<b>15J</b>	<b>11P</b>	<b>9B</b>
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$214.81	<b>15J</b>	<b>11P</b>	<b>9B</b>
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$216.93	<b>15J</b>	<b>11P</b>	<b>9B</b>
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$222.03	<b>15J</b>	<b>11P</b>	<b>9B</b>
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$223.93	<b>15J</b>	<b>11P</b>	<b>9B</b>

<u>Laborers</u>	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$225.93	<b>15J</b>	<b>11P</b>	<b>9B</b>
<u>Laborers</u>	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$227.93	<b>15J</b>	<b>11P</b>	<b>9B</b>
<u>Laborers</u>	Tunnel Work-Guage and Lock Tender	\$67.48	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Tunnel Work-Miner	\$67.48	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Vibrator	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Vinyl Seamer	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Watchman	\$49.97	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Welder	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Well Point Laborer	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers</u>	Window Washer/Cleaner	\$49.97	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers - Underground Sewer &amp; Water</u>	General Laborer & Topman	\$63.87	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Laborers - Underground Sewer &amp; Water</u>	Pipe Layer	\$64.98	<b>15J</b>	<b>11P</b>	<b>8Y</b>
<u>Landscape Construction</u>	Landscape Construction/Landscaping Or Planting Laborers	\$49.97	<b>15J</b>	<b>11P</b>	<b>8Y</b>

<u>Landscape Construction</u>	Landscape Operator	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Landscape Maintenance</u>	Groundskeeper	\$16.28		<b>1</b>	
<u>Lathers</u>	Journey Level	\$78.76	<b>150</b>	<b>11S</b>	
<u>Marble Setters</u>	Journey Level	\$71.82	<b>7E</b>	<b>1N</b>	
<u>Metal Fabrication (In Shop)</u>	Journey Level	\$33.09	<b>15G</b>	<b>11B</b>	
<u>Millwright</u>	Journey Level	\$80.28	<b>15J</b>	<b>4C</b>	
Modular Buildings	Journey Level	\$16.28		<b>1</b>	
<u>Painters</u>	Journey Level	\$54.71	<b>6Z</b>	<b>11J</b>	
<u>Pile Driver</u>	Crew Tender	\$86.81	<b>15J</b>	<b>11U</b>	<b>9L</b>
<u>Pile Driver</u>	Journey Level	\$80.50	<b>15J</b>	<b>11U</b>	<b>9L</b>
<u>Plasterers</u>	Journey Level	\$73.54	<b>7Q</b>	<b>1R</b>	
<u>Plasterers</u>	Nozzleman	\$77.54	<b>7Q</b>	<b>1R</b>	
<u>Playground &amp; Park Equipment Installers</u>	Journey Level	\$16.28		<b>1</b>	
<u>Plumbers &amp; Pipefitters</u>	Journey Level	\$90.87	<b>5A</b>	<b>1G</b>	
<u>Power Equipment Operators</u>	Asphalt Plant Operators	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Assistant Engineer	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>



<u>Power Equipment Operators</u>	Barrier Machine (zipper)	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Batch Plant Operator: concrete	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Boat Operator	\$87.82	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Bobcat	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Brokk - Remote Demolition Equipment	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Brooms	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Bump Cutter	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Cableways	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Chipper	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Compressor	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Concrete Finish Machine - Laser Screed	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>

<u>Power Equipment Operators</u>	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Conveyors	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Cranes Friction: 200 tons and over	\$90.46	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Cranes, A-frame: 10 tons and under	\$82.59	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$88.67	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Cranes: 20 tons through 44 tons with attachments	\$87.03	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$89.60	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$90.46	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Cranes: 45 tons through 99 tons, under 150' of	\$87.82	<b>7A</b>	<b>11H</b>	<b>8X</b>

boom(including jib with  
attachments)

<u>Power Equipment Operators</u>	Cranes: Friction cranes through 199 tons	\$89.60	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Cranes: through 19 tons with attachments, a-frame over 10 tons	\$86.36	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Crusher	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Deck Engineer/Deck Winches (power)	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Derricks, On Building Work	\$87.82	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Dozers D-9 & Under	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Drill Oilers: Auger Type, Truck Or Crane Mount	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Drilling Machine	\$86.10	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Elevator and man-lift: permanent and shaft type	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Forklift: 3000 lbs and over with attachments	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>

<u>Power Equipment Operators</u>	Forklifts: under 3000 lbs. with attachments	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Gradechecker/Stakeman	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Guardrail Punch	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Horizontal/Directional Drill Locator	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Horizontal/Directional Drill Operator	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Hydralifts/Boom Trucks Over 10 Tons	\$86.36	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Hydralifts/boom trucks: 10 tons and under	\$82.59	<b>7A</b>	<b>11H</b>	<b>8X</b>

<u>Power Equipment Operators</u>	Leverman	\$86.96	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Loaders, Overhead Under 6 Yards	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Loaders, Plant Feed	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Loaders: Elevating Type Belt	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Locomotives, All	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Material Transfer Device	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Mechanics: All (Leadmen - \$0.50 per hour over mechanic)	\$86.10	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Motor Patrol Graders	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>

<u>Power Equipment Operators</u>	Outside Hoists (Elevators and Manlifts), Air Tuggers, Strato	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Overhead, bridge type Crane: 20 tons through 44 tons	\$87.03	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Overhead, bridge type: 100 tons and over	\$88.67	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Overhead, bridge type: 45 tons through 99 tons	\$87.82	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Pavement Breaker	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Pile Driver (other Than Crane Mount)	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Plant Oiler - Asphalt, Crusher	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Posthole Digger, Mechanical	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Power Plant	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Pumps - Water	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Quad 9, Hd 41, D10 And Over	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Quick Tower: no cab, under 100 feet in height	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>

base to boom

<u>Power Equipment Operators</u>	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Rigger and Bellman	\$82.59	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Rigger/Signal Person, Bellman(Certified)	\$86.36	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Rollagon	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Roller, Other Than Plant Mix	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Roller, Plant Mix Or Multi- lift Materials	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Roto-mill, Roto-grinder	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Saws - Concrete	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Scraper, Self Propelled Under 45 Yards	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Scrapers - Concrete & Carry All	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Scrapers, Self-propelled: 45 Yards And Over	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Service Engineers: Equipment	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>

<u>Power Equipment Operators</u>	Shotcrete/Gunite Equipment	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Shovel, Excavator, Backhoe, Tractors Under 15 Metric Tons	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$86.10	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$86.96	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Slipform Pavers	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Spreader, Topsider & Screedman	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Subgrader Trimmer	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Tower Bucket Elevators	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>



<u>Power Equipment Operators</u>	Tower Crane: over 175' through 250' in height, base to boom	\$89.60	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Tower crane: up to 175' in height base to boom	\$88.67	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Tower Cranes: over 250' in height from base to boom	\$90.46	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Transporters, All Track Or Truck Type	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Trenching Machines	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Truck Crane Oiler/Driver: 100 tons and over	\$87.03	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Truck crane oiler/driver: under 100 tons	\$86.36	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Truck Mount Portable Conveyor	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Vac Truck (Vactor Guzzler, Hydro Excavator)	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Welder	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Wheel Tractors, Farmall Type	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment Operators</u>	Yo Yo Pay Dozer	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>

<u>Power Equipment</u>					
<u>Operators- Underground</u>	Asphalt Plant Operators	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Assistant Engineer	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Barrier Machine (zipper)	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Batch Plant Operator, Concrete	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Boat Operator	\$87.82	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Bobcat	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Brokk - Remote Demolition Equipment	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Brooms	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Bump Cutter	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					

<u>Power Equipment</u>					
<u>Operators- Underground</u>	Cableways	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Chipper	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Compressor	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Concrete Finish Machine - Laser Screed	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Concrete Pump: Truck Mount With Boom	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Concrete Pump: Truck Mount With Boom	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Conveyors	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					

<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Cranes Friction: 200 tons and over	\$90.46	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Cranes, A-frame: 10 tons and under	\$82.59	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Cranes: 100 tons through 199 tons, or 150' of boom (including jib with attachments)	\$88.67	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Cranes: 20 tons through 44 tons with attachments	\$87.03	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Cranes: 200 tons- 299 tons, or 250' of boom including jib with attachments	\$89.60	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Cranes: 300 tons and over or 300' of boom including jib with attachments	\$90.46	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Cranes: 45 tons through 99 tons, under 150' of boom(including jib with attachments)	\$87.82	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Cranes: Friction cranes through 199 tons	\$89.60	<b>7A</b>	<b>11H</b>	<b>8X</b>

<u>Power Equipment</u>	Cranes: through 19 tons				
<u>Operators- Underground</u>	with attachments, a-frame	\$86.36	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	over 10 tons				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Crusher	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Deck Engineer/Deck	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Winches (power)				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Derricks, On Building	\$87.82	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Work				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Dozers D-9 & Under	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Drill Oilers: Auger Type,	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Truck Or Crane Mount				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Drilling Machine	\$86.10	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Elevator and man-lift:	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	permanent and shaft type				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Finishing Machine, Bidwell	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	And Gamaco & Similar Equipment				

<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Forklift: 3000 lbs and over with attachments	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Forklifts: under 3000 lbs. with attachments	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Gradechecker/Stakeman	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Guardrail Punch	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Horizontal/Directional Drill Locator	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>

<u>Power Equipment</u>	Horizontal/Directional Drill				
<u>Operators- Underground</u>	Operator	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Hydralifts/boom trucks: 10				
<u>Operators- Underground</u>	tons and under	\$82.59	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Hydralifts/boom trucks:				
<u>Operators- Underground</u>	over 10 tons	\$86.36	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Leverman				
<u>Operators- Underground</u>		\$86.96	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Loader, Overhead, 6 Yards.				
<u>Operators- Underground</u>	But Not Including 8 Yards	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Loaders, Overhead Under				
<u>Operators- Underground</u>	6 Yards	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Loaders, Plant Feed				
<u>Operators- Underground</u>		\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Loaders: Elevating Type				
<u>Operators- Underground</u>	Belt	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Locomotives, All				
<u>Operators- Underground</u>		\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					

<u>Power Equipment</u>					
<u>Operators- Underground</u>	Material Transfer Device	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Mechanics: All (Leadmen -				
<u>Operators- Underground</u>	\$0.50 per hour over	\$86.10	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	mechanic)				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Motor Patrol Graders	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Mucking Machine, Mole,				
<u>Operators- Underground</u>	Tunnel Drill, Boring, Road	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Header And/or Shield				
<u>Power Equipment</u>	Oil Distributors, Blower				
<u>Operators- Underground</u>	Distribution & Mulch	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Seeding Operator				
<u>Power Equipment</u>	Outside Hoists (Elevators				
<u>Operators- Underground</u>	and Manlifts), Air Tuggers,	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Strato				
<u>Power Equipment</u>	Overhead, bridge type				
<u>Operators- Underground</u>	Crane: 20 tons through 44	\$87.03	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	tons				
<u>Power Equipment</u>	Overhead, bridge type:				
<u>Operators- Underground</u>	100 tons and over	\$88.67	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Overhead, bridge type: 45				
<u>Operators- Underground</u>	tons through 99 tons	\$87.82	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					



<u>Power Equipment</u>					
<u>Operators- Underground</u>	Pavement Breaker	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Pile Driver (other Than Crane Mount)	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Plant Oiler - Asphalt, Crusher	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Posthole Digger, Mechanical	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Power Plant	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Pumps - Water	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Quad 9, Hd 41, D10 And Over	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Quick Tower: no cab, under 100 feet in height	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	base to boom				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Remote Control Operator On Rubber Tired Earth	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Moving Equipment				

<u>Power Equipment</u>					
<u>Operators- Underground</u>	Rigger and Bellman	\$82.59	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Rigger/Signal Person,	\$86.36	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Bellman(Certified)				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Rollagon	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Roller, Other Than Plant	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Mix				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Roller, Plant Mix Or Multi-	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	lift Materials				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Roto-mill, Roto-grinder	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Saws - Concrete	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Scraper, Self Propelled	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Under 45 Yards				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Scrapers - Concrete &	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Carry All				

<u>Power Equipment</u>	Scrapers, Self-propelled:				
<u>Operators- Underground</u>	45 Yards And Over	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Shotcrete/Gunite				
<u>Operators- Underground</u>	Equipment	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Shovel, Excavator,				
<u>Operators- Underground</u>	Backhoe, Tractors Under	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	15 Metric Tons				
<u>Power Equipment</u>	Shovel, Excavator,				
<u>Operators- Underground</u>	Backhoe: Over 30 Metric	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Tons To 50 Metric Tons				
<u>Power Equipment</u>	Shovel, Excavator,				
<u>Operators- Underground</u>	Backhoes, Tractors: 15 To	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	30 Metric Tons				
<u>Power Equipment</u>	Shovel, Excavator,				
<u>Operators- Underground</u>	Backhoes: Over 50 Metric	\$86.10	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Tons To 90 Metric Tons				
<u>Power Equipment</u>	Shovel, Excavator,				
<u>Operators- Underground</u>	Backhoes: Over 90 Metric	\$86.96	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Tons				
<u>Power Equipment</u>	Slipform Pavers				
<u>Operators- Underground</u>		\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Spreader, Topsider &				
<u>Operators- Underground</u>	Screedman	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					

<u>Power Equipment</u>					
<u>Operators- Underground</u>	Subgrader Trimmer	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Tower Bucket Elevators	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>	Tower Crane: over 175'				
<u>Operators- Underground</u>	through 250' in height,	\$89.60	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	base to boom				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Tower crane: up to 175' in	\$88.67	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	height base to boom				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Tower Cranes: over 250' in	\$90.46	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	height from base to boom				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Transporters, All Track Or	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	Truck Type				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Trenching Machines	\$83.83	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Sewer &amp; Water</u>					
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Truck Crane Oiler/Driver:	\$87.03	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	100 tons and over				
<u>Power Equipment</u>					
<u>Operators- Underground</u>	Truck crane oiler/driver:	\$86.36	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Sewer &amp; Water</u>	under 100 tons				

<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Truck Mount Portable Conveyor	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Vac Truck (Vactor Guzzler, Hydro Excavator)	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Welder	\$85.22	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Wheel Tractors, Farmall Type	\$80.17	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Equipment</u> <u>Operators- Underground</u> <u>Sewer &amp; Water</u>	Yo Yo Pay Dozer	\$84.48	<b>15J</b>	<b>11G</b>	<b>8X</b>
<u>Power Line Clearance Tree</u> <u>Trimmers</u>	Journey Level In Charge	\$61.73	<b>5A</b>	<b>4A</b>	
<u>Power Line Clearance Tree</u> <u>Trimmers</u>	Spray Person	\$58.44	<b>5A</b>	<b>4A</b>	
<u>Power Line Clearance Tree</u> <u>Trimmers</u>	Tree Equipment Operator	\$61.73	<b>5A</b>	<b>4A</b>	
<u>Power Line Clearance Tree</u> <u>Trimmers</u>	Tree Trimmer	\$55.14	<b>5A</b>	<b>4A</b>	
<u>Power Line Clearance Tree</u> <u>Trimmers</u>	Tree Trimmer Groundperson	\$41.68	<b>5A</b>	<b>4A</b>	

<u>Refrigeration &amp; Air Conditioning Mechanics</u>	Journey Level	\$98.07	<b>6Z</b>	<b>1G</b>
Residential Brick Mason	Journey Level	\$71.82	<b>7E</b>	<b>1N</b>
Residential Carpenters	Journey Level	\$31.89		<b>1</b>
Residential Cement Masons	Journey Level	\$35.24		<b>1</b>
Residential Drywall Applicators	Journey Level	\$26.00		<b>1</b>
Residential Drywall Tapers	Journey Level	\$27.18		<b>1</b>
Residential Electricians	Journey Level	\$47.21	<b>7F</b>	<b>1D</b>
Residential Glaziers	Journey Level	\$16.28		<b>1</b>
Residential Insulation Applicators	Journey Level	\$18.03		<b>1</b>
Residential Laborers	Journey Level	\$28.59		<b>1</b>
Residential Marble Setters	Journey Level	\$71.82	<b>7E</b>	<b>1N</b>
Residential Painters	Journey Level	\$30.34		<b>1</b>
Residential Plumbers & Pipefitters	Journey Level	\$40.83		<b>1</b>
Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$52.76	<b>5A</b>	<b>1G</b>
Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$56.70	<b>7J</b>	<b>1I</b>

Residential Soft Floor Layers	Journey Level	\$30.31		<b>1</b>
Residential Sprinkler Fitters (Fire Protection)	Journey Level	\$19.32		<b>1</b>
Residential Stone Masons	Journey Level	\$71.82	<b>7E</b>	<b>1N</b>
Residential Terrazzo Workers	Journey Level	\$16.28		<b>1</b>
Residential Terrazzo/Tile Finishers	Journey Level	\$18.09		<b>1</b>
Residential Tile Setters	Journey Level	\$16.28		<b>1</b>
<u>Roofers</u>	Journey Level	\$64.45	<b>5A</b>	<b>3H</b>
<u>Roofers</u>	Using Irritable Bituminous Materials	\$67.39	<b>5A</b>	<b>3H</b>
<u>Sheet Metal Workers</u>	Journey Level (Field or Shop)	\$96.46	<b>7F</b>	<b>1E</b>
Shipbuilding & Ship Repair	New Construction Boilermaker	\$58.93	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	New Construction Carpenter	\$51.85	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	New Construction Crane Operator	\$43.00	<b>7V</b>	<b>1</b>
Shipbuilding & Ship Repair	New Construction Electrician	\$58.98	<b>7X</b>	<b>4J</b>

Shipbuilding & Ship Repair	New Construction Heat & Frost Insulator	\$91.81	<b>15H</b>	<b>11C</b>
Shipbuilding & Ship Repair	New Construction Laborer	\$58.60	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	New Construction Machinist	\$58.79	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	New Construction Operating Engineer	\$43.00	<b>7V</b>	<b>1</b>
Shipbuilding & Ship Repair	New Construction Painter	\$58.72	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	New Construction Pipefitter	\$59.07	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	New Construction Rigger	\$58.93	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	New Construction Sheet Metal	\$58.68	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	New Construction Shipwright	\$51.85	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	New Construction Warehouse/Teamster	\$43.00	<b>7V</b>	<b>1</b>
Shipbuilding & Ship Repair	New Construction Welder / Burner	\$58.93	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Boilermaker	\$58.93	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Carpenter	\$51.85	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Crane Operator	\$45.06	<b>7Y</b>	<b>4K</b>



Shipbuilding & Ship Repair	Ship Repair Electrician	\$58.98	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Heat & Frost Insulator	\$91.81	<b>15H</b>	<b>11C</b>
Shipbuilding & Ship Repair	Ship Repair Laborer	\$58.60	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Machinist	\$58.79	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Operating Engineer	\$45.06	<b>7Y</b>	<b>4K</b>
Shipbuilding & Ship Repair	Ship Repair Painter	\$58.72	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Pipefitter	\$59.07	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Rigger	\$58.93	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Sheet Metal	\$58.68	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Shipwright	\$51.85	<b>7X</b>	<b>4J</b>
Shipbuilding & Ship Repair	Ship Repair Warehouse / Teamster	\$45.06	<b>7Y</b>	<b>4K</b>
<u>Sign Makers &amp; Installers</u> (Electrical)	Journey Level	\$16.28		<b>1</b>
<u>Sign Makers &amp; Installers</u> (Non-Electrical)	Journey Level	\$16.28		<b>1</b>
<u>Soft Floor Layers</u>	Journey Level	\$63.29	<b>15J</b>	<b>4C</b>
<u>Solar Controls For Windows</u>	Journey Level	\$16.28		<b>1</b>

<u>Sprinkler Fitters (Fire Protection)</u>	Journey Level	\$75.30	<b>7J</b>	<b>1R</b>	
<u>Stage Rigging Mechanics (Non Structural)</u>	Journey Level	\$16.28		<b>1</b>	
<u>Stone Masons</u>	Journey Level	\$71.82	<b>7E</b>	<b>1N</b>	
<u>Street And Parking Lot Sweeper Workers</u>	Journey Level	\$16.28		<b>1</b>	
<u>Surveyors</u>	Assistant Construction Site Surveyor	\$86.36	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Surveyors</u>	Chainman	\$82.59	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Surveyors</u>	Construction Site Surveyor	\$87.82	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Surveyors</u>	Drone Operator (when used in conjunction with survey work only)	\$82.59	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Surveyors</u>	Ground Penetrating Radar Operator	\$82.59	<b>7A</b>	<b>11H</b>	<b>8X</b>
<u>Telecommunication Technicians</u>	Telecom Technician Journey Level	\$58.51	<b>5B</b>	<b>1B</b>	
<u>Telephone Line Construction - Outside</u>	Cable Splicer	\$41.35	<b>5A</b>	<b>2B</b>	
<u>Telephone Line Construction - Outside</u>	Hole Digger/Ground Person	\$27.31	<b>5A</b>	<b>2B</b>	
<u>Telephone Line Construction - Outside</u>	Telephone Equipment Operator (Light)	\$34.53	<b>5A</b>	<b>2B</b>	

<u>Telephone Line</u>	Telephone Lineperson	\$39.07	<b>5A</b>	<b>2B</b>	
<u>Construction - Outside</u>					
<u>Terrazzo Workers</u>	Journey Level	\$67.51	<b>7E</b>	<b>1N</b>	
<u>Tile Setters</u>	Journey Level	\$65.51	<b>7E</b>	<b>1N</b>	
<u>Tile, Marble &amp; Terrazzo</u> <u>Finishers</u>	Finisher	\$56.34	<b>7E</b>	<b>1N</b>	
<u>Traffic Control Stripers</u>	Journey Level	\$92.44	<b>15L</b>	<b>1K</b>	
<u>Truck Drivers</u>	Asphalt Mix Over 16 Yards	\$78.65	<b>15J</b>	<b>11M</b>	<b>8L</b>
<u>Truck Drivers</u>	Asphalt Mix To 16 Yards	\$77.81	<b>15J</b>	<b>11M</b>	<b>8L</b>
<u>Truck Drivers</u>	Dump Truck	\$77.81	<b>15J</b>	<b>11M</b>	<b>8L</b>
<u>Truck Drivers</u>	Dump Truck & Trailer	\$78.65	<b>15J</b>	<b>11M</b>	<b>8L</b>
<u>Truck Drivers</u>	Other Trucks	\$78.65	<b>15J</b>	<b>11M</b>	<b>8L</b>
<u>Truck Drivers - Ready Mix</u>	Transit Mix	\$78.65	<b>15J</b>	<b>11M</b>	<b>8L</b>
<u>Well Drillers &amp; Irrigation</u> <u>Pump Installers</u>	Irrigation Pump Installer	\$16.28		<b>1</b>	
<u>Well Drillers &amp; Irrigation</u> <u>Pump Installers</u>	Oiler	\$16.28		<b>1</b>	
<u>Well Drillers &amp; Irrigation</u> <u>Pump Installers</u>	Well Driller	\$18.02		<b>1</b>	

**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		<b>X</b>
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		<b>X</b>
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.		<b>X</b>
4. Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes smaller than 60 inch diameter.		<b>X</b>
5. Concrete Pipe - Plain Concrete pipe and reinforced concrete pipe Class 2 to 5 sizes larger than 60 inch diameter.		<b>X</b>
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.		<b>X</b>
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.		<b>X</b>

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.		<b>X</b>
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).	<b>X</b>	
10. Major Structural Steel Fabrication - Fabrication of major steel items such as trusses, beams, girders, etc., for bridges.	<b>X</b>	
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 Contract Plans for item description and shop drawings.	<b>X</b>	
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).		<b>X</b>
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..	<b>X</b>	
14. Precast Manhole Types 1, 2, and 3 with cones, adjustment sections and flat top slabs. See Std. Plans.		<b>X</b>
15. Precast Drywell Types 1, 2, and with cones and adjustment Sections. See Std. Plans.		<b>X</b>
16. Precast Catch Basin - Catch Basin type 1, 1L, 1P, and 2 With adjustment sections. See Std. Plans.		<b>X</b>

ITEM DESCRIPTION	YES	NO
17. Precast Concrete Inlet - with adjustment sections, See Std. Plans		<b>X</b>
18. Precast Drop Inlet Type 1 and 2 with metal grate supports. See Std. Plans.		<b>X</b>
19. Precast Grate Inlet Type 2 with extension and top units. See Std. Plans		<b>X</b>
20. Metal frames, vaned grates, and hoods for Combination Inlets. See Std. Plans		<b>X</b>
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		<b>X</b>
22. Vault Risers - For use with Valve Vaults and Utilities  X Vaults.		<b>X</b>
23. Valve Vault - For use with underground utilities. See Contract Plans for details.		<b>X</b>
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.		<b>X</b>
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.	<b>X</b>	
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	<b>X</b>	

ITEM DESCRIPTION	YES	NO
27. Precast Railroad Crossings - Concrete Crossing Structure Slabs.	<b>X</b>	
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	<b>X</b>	
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	<b>X</b>	
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	<b>X</b>	
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.	<b>X</b>	
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	<b>X</b>	
33. Monument Case and Cover See Std. Plan.		<b>X</b>



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.	<b>X</b>	
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.	<b>X</b>	
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.	<b>X</b>	
37. Steel Sign Post - Fabricated Steel Sign Posts as detailed in Std Plans. Shop drawings for approval are to be provided prior to fabrication		<b>X</b>
38. Light Standard-Prestressed - Spun, prestressed, hollow concrete poles.	<b>X</b>	
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 Special Provisions for pre-approved drawings.	<b>X</b>	
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	<b>X</b>	
41. Precast Concrete Sloped Mountable Curb (Single and DualFaced) See Std. Plans.		<b>X</b>

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. <b>NOTE:</b> *** Fabrication inspection required. Only signs tagged "Fabrication Approved" by WSDOT Sign Fabrication Inspector to be installed	<b>X</b>	<b>X</b>
	Custom Message	Std Signing Message
43. Cutting & bending reinforcing steel		<b>X</b>
44. Guardrail components	<b>X</b>	<b>X</b>
	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		<b>X</b>
48. Electrical wiring/components		<b>X</b>
49. treated or untreated timber pile		<b>X</b>
50. Girder pads (elastomeric bearing)	<b>X</b>	
51. Standard Dimension lumber		<b>X</b>
52. Irrigation components		<b>X</b>

ITEM DESCRIPTION	YES	NO
53. Fencing materials		<b>X</b>
54. Guide Posts		<b>X</b>
55. Traffic Buttons		<b>X</b>
56. Epoxy		<b>X</b>
57. Cribbing		<b>X</b>
58. Water distribution materials		<b>X</b>
59. Steel "H" piles		<b>X</b>
60. Steel pipe for concrete pile casings		<b>X</b>
61. Steel pile tips, standard		<b>X</b>
62. Steel pile tips, custom	<b>X</b>	

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.]

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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.

## Benefit Code Key – Effective 8/31/2024 thru 3/4/2025

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.

Benefit Code Key – Effective 8/31/2024 thru 3/4/2025

**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.

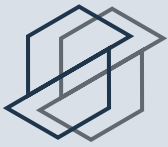
- D. Industrial Painter wages are required for painting within industrial facilities such as treatment plants, pipelines, towers, dams, bridges, power generation facilities and manufacturing facilities such as chemical plants, etc., or anywhere abrasive blasting is necessary to prepare surfaces, or hazardous 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.

Benefit Code Key – Effective 8/31/2024 thru 3/4/2025

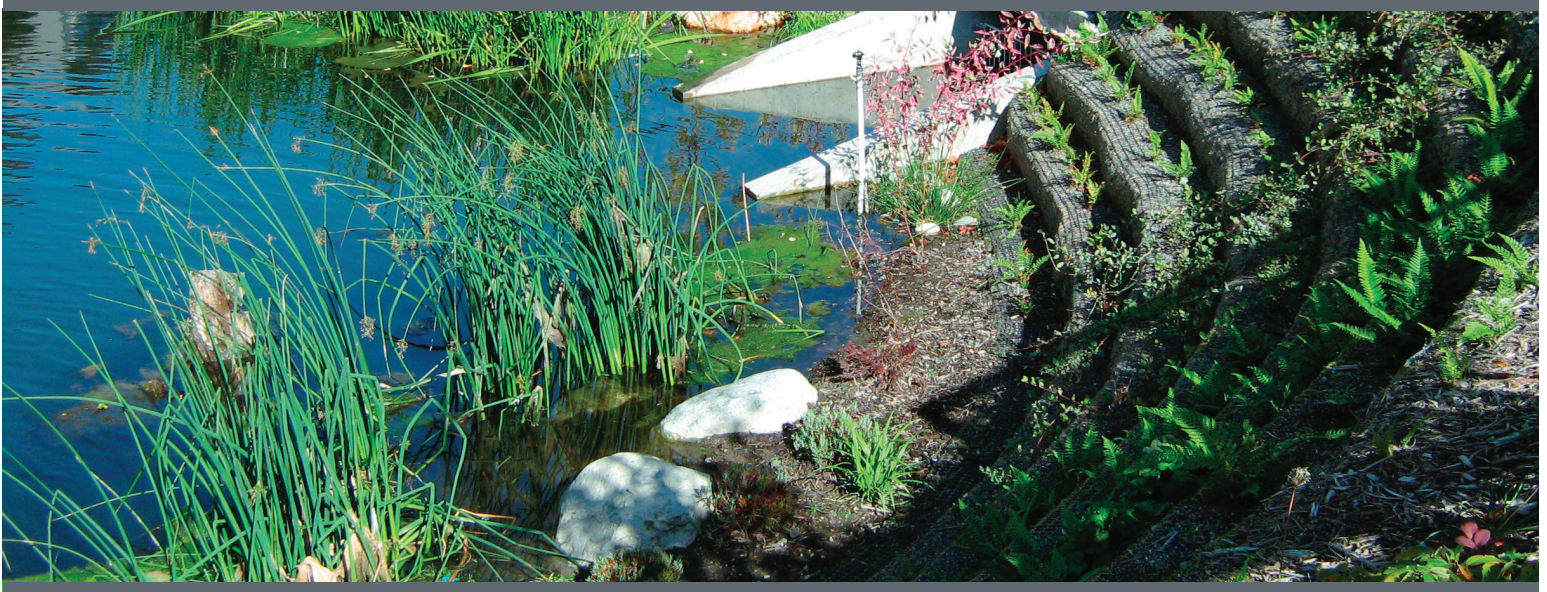
9. I. In addition to the hourly wage and fringe benefits, the following depth and enclosure premiums shall be paid. The premiums are to be calculated for the maximum depth and distance into an enclosure that a diver reaches in a day. The premiums are to be paid one time for the day and are not used in 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.



## **APPENDIX B – GEOTECHNICAL DATA REPORT**



a s s o c i a t e d  
e a r t h   s c i e n c e s  
i n c o r p o r a t e d



*Subsurface Exploration, Infiltration Feasibility,  
and Preliminary Geotechnical Engineering Report*

**FERNDALE TERRACE**

Ferndale, Washington

Prepared For

**REICHHARDT & EBE ENGINEERING, INC.**

Project No. 20180513E001

May 24, 2021



Associated Earth Sciences, Inc.  
911 5th Avenue  
Kirkland, WA 98033  
P (425) 827 7701



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e a r t h s c i e n c e s  
i n c o r p o r a t e d

May 24, 2021  
Project No. 20180513E001

Reichhardt & Ebe Engineering, Inc.  
423 Front Street  
P.O. Box 978  
Lynden, Washington 98264

Attention: Mr. Luis Ponce

Subject: Subsurface Exploration, Infiltration Feasibility,  
and Preliminary Geotechnical Engineering Report  
Ferndale Terrace - Hendrickson to Vista Drive  
Ferndale, Washington

Dear Mr. Ponce:

We are pleased to present the enclosed copy of our geotechnical report. This report summarizes the results of our subsurface exploration and geotechnical engineering studies and offers preliminary geotechnical recommendations for the design and development of the proposed project.

We have enjoyed working with you on this study and are confident that the preliminary recommendations presented in this report will aid in the successful completion of your project. Please contact me if you have any questions or if we can be of additional help to you.

Sincerely,  
**ASSOCIATED EARTH SCIENCES, INC.**  
**Kirkland, Washington**

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Matthew A. Miller, P.E.  
Principal Engineer

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**SUBSURFACE EXPLORATION, INFILTRATION FEASIBILITY, AND  
PRELIMINARY GEOTECHNICAL ENGINEERING REPORT**

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## I. PROJECT AND SITE CONDITIONS

### 1.0 INTRODUCTION

This report presents the results of Associated Earth Sciences, Inc.'s (AESI's) subsurface exploration and geotechnical engineering study for the above-referenced project located in Ferndale, Washington. The location of the site relative to surrounding geographic features is presented on Figure 1, "Vicinity Map." The site extends along the alignment of Ferndale Terrace, from its intersection with Hendrickson Avenue eastward to its intersection with Vista Drive. We understand that the project will include widening and improvements to the existing roadway, construction of sidewalks, improvements to utilities including a new sanitary sewer system and water main, and construction of stormwater treatment and conveyance system which may include stormwater infiltration facilities. Our recommendations are preliminary in that project plans and construction details were under development at the time this report was prepared. The preliminary recommendations contained in this report are based on our review of the "Ferndale Terrace Project, Vista Drive to Hendrickson Avenue, 60% Plans" prepared by Reichhardt & Ebe Engineering, Inc. (July 3, 2020). The approximate locations of the subsurface explorations referenced in this study are presented on Figure 2. Copies of the exploration logs are included in Appendix A. In the event that any changes in the nature, design, or layout of the project are planned, the conclusions and recommendations contained in this report should be reviewed and modified, or verified, as necessary.

#### 1.1 Purpose and Scope

The purpose of this study was to provide subsurface soil and groundwater data to be utilized in the design of the above-referenced project. Our study included reviewing available geologic literature, drilling ten hollow-stem auger exploration borings, and performing a geologic study to assess the type, thickness, distribution, and physical properties of the subsurface sediments and shallow groundwater conditions. This report summarizes our current fieldwork and offers preliminary recommendations based on our present understanding of the project.

#### 1.2 Authorization

We were authorized to proceed by means of a signature on our proposal "Subsurface Exploration and Geotechnical Engineering Services, Ferndale Terrace - Hendrickson to Vista Drive," dated October 15, 2018. This report has been prepared for the exclusive use of Reichhardt & Ebe Engineering, Inc. and their agents for specific application to this project. Within the limitations of scope, schedule, and budget, our services have been performed in accordance with generally accepted geotechnical engineering and engineering geology practices in effect in this area at the time our report was prepared. No other warranty, express or implied, is made.

## 2.0 PROJECT AND SITE DESCRIPTION

The subject site consists of Ferndale Terrace, from Hendrickson Drive to Vista Avenue. The project will consist of reconstructing and widening Ferndale Terrace. The length of the project is approximately 2,500 feet. The roadway will be widened to two 11-foot-wide lanes and paved with asphalt, and a 5-foot-wide shoulder and 5-foot-wide sidewalk will be constructed on both sides of the road. The project will also include utility improvements including a new sanitary sewer system, a new water main system, and a new stormwater treatment and conveyance system. The stormwater treatment and conveyance system may include stormwater infiltration. AESI understands that the City of Ferndale has adopted the Washington State Department of Ecology (Ecology) 2019 *Stormwater Management Manual for Western Washington* (2019 Ecology Manual) for stormwater design.

Existing site development includes single-family residential properties on both sides of the existing Ferndale Terrace roadway, which is paved with asphalt (Figure 2). Public utilities are present along the road and right-of-way. An existing sidewalk is present on the south side of Ferndale Terrace in the western portion of the project area, and on the north side of the road in the eastern side of the project area. Site topography slopes gently down to the south and east, with elevations ranging from approximately 105 feet at the west end to approximately 64 feet at the east end, with general slope inclinations less than 5 percent.

## 3.0 SUBSURFACE EXPLORATION AND TESTING

Our field study included drilling ten hollow-stem auger exploration borings in the southern lane of the existing Ferndale Terrace roadway on February 4, 2021. The locations of our explorations are shown on Figure 2. The various types of sediments, as well as the depths where the characteristics of the sediments changed, are indicated on the exploration logs presented in Appendix A. The depths indicated on the logs where conditions changed may represent gradational variations between sediment types. If changes occurred between sample intervals in our exploration borings, they were interpreted.

The conclusions and recommendations presented in this report are based, in part, on the exploration borings completed for this study. The number, locations, and depths of the explorations were completed within site and budgetary constraints. Because of the nature of exploratory work below ground, extrapolation of subsurface conditions between field explorations is necessary. It should be noted that differing subsurface conditions may sometimes be present due to the random nature of deposition and the alteration of topography by past grading and/or filling. The nature and extent of variations between the field explorations may not become fully evident until construction. If variations are observed at that time, it may be necessary to re-evaluate specific recommendations in this report and make appropriate changes.

### 3.1 Hollow-Stem Auger Exploration Borings

The exploration borings for this study were completed by advancing a 6-inch outside-diameter, hollow-stem auger using a trailer-mounted drill rig, owned and operated by Borettec, Inc. under subcontract to AESI. During the drilling process, samples were obtained from immediately beneath the asphalt and underlying subgrade material, and below that at generally 2½-foot-depth intervals. The borings were continuously observed and logged by a geologist from AESI. The exploration logs presented in Appendix A are based on the field logs, drilling action, and observation of the samples collected.

Disturbed, but representative samples were obtained by using the Standard Penetration Test (SPT) procedure in accordance with *ASTM International* (ASTM) D-1586. This test and sampling method consists of driving a standard 2-inch, outside-diameter, split-barrel sampler a distance of 18 inches into the soil with a 140-pound hammer free-falling a distance of 30 inches. The number of blows for each 6-inch interval is recorded, and the number of blows required to drive the sampler the final 12 inches is known as the Standard Penetration Resistance (“N”) or blow count. If a total of 50 is recorded within one 6-inch interval, the blow count is recorded as the number of blows for the corresponding number of inches of penetration. The resistance, or N-value, provides a measure of the relative density of granular soils or the relative consistency of cohesive soils; these values are plotted on the attached exploration boring logs (Appendix A).

The samples obtained from the split-barrel sampler were classified in the field and representative portions placed in watertight containers. The samples were then transported to our laboratory for further visual classification and laboratory testing, as necessary.

### 3.2 Laboratory Testing

Laboratory grain-size analyses were performed on selected samples collected from the exploration borings completed during our subsurface exploration for this project. The grain-size distribution test results are included in Appendix B, and are summarized in Table 1, below. The grain-size analyses test results indicate that tested Sumas glacial outwash sediments correlate primarily to poorly-graded fine- to medium-grained sand with variable silt content ranging from 4.9 to 8.1 percent based on the ASTM D-2487 Unified Soil Classification System (USCS). The tested glacial till sediments correlate to a very sandy silt with some gravel based on the ASTM USCS, with a silt content of 55.2 percent.

The grain-size distribution data were also transformed to describe the U.S. Department of Agriculture (USDA) soil texture. The grain-size distributions were normalized to the No. 10 sieve—i.e., the coarse sand and gravel fraction of the sample is discounted and the remainder is taken as 100 percent of the sample. The fines were assessed relative to the No. 270 sieve. The USDA soil texture for the tested Sumas glacial outwash sediments correlate with a “sand” ranging to a “loamy sand” with a fines content between 3.1 and 14 percent. The USDA soil texture for the

tested glacial till sediments correlate with a “sandy clay” ranging to a “silt loam” with a fines content of 59 percent.

**Table 1**  
**Summary of Grain-Size Distribution Testing**

Exploration	Sample Depth (feet)	Geologic Unit	USCS Description	Silt Content by Weight (Measured on #200 Sieve)	USDA Soil Texture
EB-2	1	Glacial Till	Very sandy silt, some gravel (ML)	55.2	Sandy clay to silt loam
EB-6	5	Sumas Glacial Outwash	Gravelly sand, some silt (SP-SM)	8.0	Sand to loamy sand
EB-8	1	Sumas Glacial Outwash	Sand, trace silt, trace gravel (SP)	4.9	Sand
EB-10	1	Sumas Glacial Outwash	Sand, some silt, trace gravel (SP-SM)	8.1	Sand

USCS = Unified Soil Classification System

USDA = U.S. Department of Agriculture

#### 4.0 SITE AND SUBSURFACE CONDITIONS

Subsurface conditions at the project site were inferred from the field explorations conducted for this study, visual reconnaissance of the site, and a review of selected geologic literature. Detailed descriptions of the sediments encountered in each of the explorations are provided on the exploration logs in Appendix A. The shallow subgrade along much of the road alignment is composed of pre-Fraser sediment which are overlain by glacial till, glacial outwash, Holocene alluvium, and fill sediments.

##### 4.1 Regional and Local Topography

The site and surrounding vicinity are generally located in a glacial upland which in the vicinity of the site generally slopes south and east toward the Nooksack River valley. The ground surface is gently sloping, with elevation ranging from approximately 64 to 105 feet (Figure 2). Northeast of the project site, the upland rises gradually to elevations of approximately 400 feet. The Nooksack River is approximately ½ mile southeast of the site, and discharges generally to the south into the Puget Sound.



## 4.2 Regional Geologic and Soils Mapping

Review of the regional geologic map indicates that the project site is mapped as Bellingham Drift, with Sumas-Stade outwash sand and gravel mapped near the eastern end of the project area (D.J. Easterbrook, 1976). A recent geomorphic map for the project area indicates that the project site is mapped as a glaciated surface towards the western end of the project area, marine-modified surface near the center of the project area, and Sumas-age outburst flood surface near the eastern end of the project area (D.J. Kovanen, 2020). Our interpretation of sediments encountered in our explorations is in general agreement with the regional geologic and geomorphic maps.

Review of regional soils mapping (*Web Soil Survey*, USDA, Natural Resources Conservation Service [NRCS]) indicates that the subject site is underlain on the western end by Whatcom and Labounty soils, formed from glaciomarine drift, and in the eastern portion by Lynden soils, formed from glacial outwash. Our interpretation of the shallower soils is in general agreement with the regional soils mapping.

## 4.3 Site Stratigraphy

### *Existing Road Surface and Base Coarse*

Ferndale Terrace is currently paved with asphalt, which is cracked and patched in many areas. The thickness of the asphalt ranged from 2 to 4 inches in our explorations. The asphalt was underlain by gravel base coarse which was 4 to 9 inches thick where observed in our explorations.

### *Relic Topsoil*

A surficial layer of organic topsoil was encountered immediately underlying the existing asphalt surface and gravel subgrade in exploration boring EB-3, EB-4, and EB-5. This organic layer reached a depth of up to approximately 2 feet in EB-3, 1.5 feet in EB-4, and was observed to at least 2.5 feet in EB-5. This layer was compacted to a medium stiff to stiff condition and is not suitable as a stormwater infiltration receptor horizon.

### *Fill Sediments*

Fill soils (those not naturally placed) were encountered in EB-7. The fill encountered consisted of medium stiff sandy silt with trace gravel. Fill sediments are not suitable as a stormwater infiltration receptor horizon. Additional fill sediments are expected to be present in the vicinity of existing buried utilities.

### *Holocene Alluvium*

In exploration boring EB-3 to EB-7 we observed sediments interpreted as Holocene alluvium. These sediments were present to greater than the maximum depth explored of 6.5 feet in EB-3, and were observed to a maximum depth of 9.5 feet in EB-7. We interpreted these deposits to be Holocene-age sediments deposited subsequent to the most recent glaciation of the area. The alluvium generally consists of medium stiff to stiff silt with varying sand content and occasionally trace gravel, occasionally ranging to a sand with trace silt. The upper portion of these sediments, where encountered in EB-6, ranged to soft. Due to their generally fine-grained nature, these sediments are not suitable for stormwater infiltration.

### *Sumas Glacial Outwash*

Exploration borings EB-4 through EB-10 encountered sediments interpreted as Sumas glacial outwash. These sediments generally consisted of brown sand with some silt and variable gravel content. The sediments were stratified, with sand ranging from fine to coarse and silt ranging from trace to silty, with occasional layers of silt present. Exploration borings EB-4 through EB-7 encountered these sediments underlying Holocene alluvium, with the top of the Sumas glacial outwash at depths of 3.5 feet to 9.5 feet below ground surface. Exploration borings EB-8, EB-9, and EB-10 encountered these sediments immediately underlying the road and base coarse near the eastern end of the project area. The maximum depth of the Sumas glacial outwash ranged from approximately 5 feet in EB-10 to 14.5 feet in EB-7, and greater than the total depth explored of 6.5 feet in EB-4 and EB-5. These sediments were deposited by meltwater flowing from the glacier during the Sumas Stade of the Fraser Glaciation. These sediments were in a loose to medium dense condition, with blow counts in several samples overstated due to the presence of gravels. The generally loose to medium dense condition of these sediments is indicative of a lack of glacial consolidation. Due to their generally sandy composition, where unsaturated, these sediments can be a suitable receptor horizon for stormwater infiltration.

### *Glaciomarine Drift*

Sediments encountered in the bottom of EB-6 through EB-10 generally consisted of medium stiff to stiff silt to clay, ranging to sandy. We interpret these sediments to be representative of glaciomarine drift. Glaciomarine drift sediments in this area were deposited when glacial ice began to retreat and was floated by marine waters. Glacial sediments were then introduced to the marine waters by the floating ice, and settled out. These sediments typically consist of primarily fine-grained glacial silt and clay, with occasional gravel dropstones which were carried to sea within floating ice. These sediments were present to greater than the total depth explored where encountered. Glaciomarine drift has a very low permeability due to a high fines content and is not a suitable receptor horizon for stormwater infiltration.

### *Sumas Glacial Till*

In EB-1 and EB-2 we interpreted sediments encountered to a depth of 8.5 feet in EB-1 and 10.5 feet in EB-2 as glacial till. Where observed in our explorations, these sediments consisted of brown to grayish brown sandy silt to very silty sand, with variable gravel content. The glacial till was deposited directly from basal, debris-laden, glacial ice during the Sumas Stade of the Fraser Glaciation. The high relative density characteristic of the glacial till is due to its consolidation by the massive weight of the glacial ice from which it was deposited. Where encountered, these sediments were medium stiff to very stiff. Due to their fine-grained nature, these sediments are not suitable for stormwater infiltration.

### *Pre-Fraser Sediments*

In exploration boring EB-1 and EB-2 we observed sediments interpreted as representative of pre-Fraser sediments. These sediments include nonglacial sediments as well as older glacial sediments. These sediments consisted of slightly moist gray silt and ranged to fine to medium sand with trace silt. We observed that these sediments contained reddish volcanic sand-sized particles in EB-2. These sediments were generally compacted to a very stiff to hard or very dense condition due to their consolidation by the massive weight of the glacial ice which overrode them subsequent to deposition. Because these sediments were either fine grained or saturated where observed, these sediments are not suitable for stormwater infiltration.

## 4.4 Groundwater Conditions

Shallow groundwater was encountered in several borings. Groundwater observations are summarized in Table 2, below. Details are included on the exploration logs in Appendix A.

Shallow perched groundwater was encountered within the Holocene alluvium and Sumas outwash at depths ranging from 5 to 7.5 feet below ground surface at the time of drilling. Groundwater within the Holocene alluvium and Sumas outwash is considered to be perched on the fine-grained glaciomarine drift. Groundwater flow directions are assumed to generally follow topography; however, groundwater flow direction is also strongly influenced by the subsurface topography of the perching layer, and may differ from surface topography.

Groundwater was also present beneath glacial till within pre-Fraser-age sediments in EB-1 and EB-2 at about 12.5 and 10.5 feet, respectively, and rose to 8 feet at the time of drilling before the boring was abandoned. Groundwater in the pre-Fraser sediments is considered confined and groundwater flow direction is unknown. Regional flow direction is toward the Nooksack River valley.

Groundwater conditions should be expected to vary seasonally, and in response to changes in precipitation, on- and off-site land usage, and the tide. Our explorations were conducted in early

February after higher than average rainfall in January, and are expected to be near seasonal high levels. However, groundwater depths at the time of drilling do not represent static groundwater level conditions. Actual groundwater levels at these locations may be higher than the at time of drilling values on the exploration logs and in Table 2.

**Table 2**  
**Summary of Groundwater**

Exploration Boring	Depth to Groundwater (feet)	Water-Bearing Unit
EB-1	8 (confined)	Pre-Fraser Sediments
EB-2	8 (confined)	Pre-Fraser Sediments
EB-3	>6.5 (bottom of exploration)	Dry but no outwash encountered
EB-4	5	Sumas Outwash
EB-5	>6.5 (bottom of exploration)	Dry, Sumas outwash present ~4 to 6.5+ feet
EB-6	5	Sumas Outwash
EB-7	7.5	Holocene Alluvium and Sumas Outwash
EB-8	7.5	Sumas Outwash
EB-9	>6.5 (bottom of exploration)	Dry, Sumas Outwash present ~1 to 6 feet
EB-10	5	Sumas Outwash

Groundwater depths at the time of drilling do not represent static groundwater conditions. Actual static groundwater levels at these locations may be higher than the values presented in this table.

## II. PRELIMINARY DESIGN RECOMMENDATIONS

### 5.0 INFILTRATION CONCLUSIONS AND RECOMMENDATIONS

The current stormwater plan has not yet been developed. We understand that infiltration facilities are being considered, and that locations of potential infiltration facilities have yet to be determined but that they may consist of underground gravel-filled trenches. Based on our subsurface exploration, testing, and geologic interpretations, it is our opinion that opportunity for shallow infiltration best management practices (BMPs) are limited to areas of permeable and unsaturated Sumas outwash. Unsaturated Sumas glacial outwash was observed in the vicinity of EB-5, EB-6, and in EB-8 to EB-10.

It is our understanding that the project will be developed under the 2019 Ecology Manual. The Ecology Manual lists eight Site Suitability Criteria (SSC) that must be considered when siting infiltration systems. The eight SSC include:

- SSC-1: Setback Criteria
- SSC-2: Ground Water Protection Areas
- SSC-3: High Vehicle Traffic Areas
- SSC-4: Soil Infiltration Rate/Drawdown Time
- SSC-5: Depth to Bedrock, Water Table, or Impermeable Layer
- SSC-6: Soil Physical and Chemical Suitability for Treatment
- SSC-7: Seepage Analysis and Control
- SSC-8: Cold Climate and Impact of Roadway Deicers

This preliminary infiltration assessment includes considerations for SSC-4, SSC-5, and SSC-6 which are discussed in more detail in the following sections.

#### 5.1 Preliminary Design Infiltration Rate Considerations and Soil Infiltration Rate/Drawdown Time (SSC-4)

Based on the results of the laboratory sieve analyses completed for this study, and our visual assessment of the sediments encountered in our explorations, it is our opinion that the Sumas outwash sediments underlying the site are suitable receptor soils for stormwater infiltration, provided that sufficient vertical separation can be achieved between the bases of the infiltration facilities and the seasonal high groundwater level.

The preliminary estimated design infiltration rates were based, in part, on the "Soil Grain-Size Analysis Method" from the 2019 Ecology Manual (also referred to as the Massmann method) and our experience working in similar settings. The estimated initial short-term infiltration rate for the Sumas outwash using the Massmann method ranged from about 30 to 45 inches per hour.

These rates assume depth to groundwater is moderate and the soil layer being characterized has not been compacted. For this site, groundwater will be shallow.

In our experience, the soil grain-size analysis method can overestimate the initial short-term (uncorrected) infiltration rate for unconsolidated sediments in shallow groundwater settings. We applied in-house, empirical correlations between grain-size data and pilot infiltration tests (PITs) to correlate the grain-size distribution with AESI's library of paired PITs and grain-size distribution samples to estimate initial short-term infiltration rates. The estimated short-term (uncorrected) infiltration rate using empirical methods ranged from 2 to 20 inches per hour.

Short-term infiltration rates are non-conservative and must have correction factors applied. The 2019 Ecology Manual requires that a series of partial correction factors for site variability ( $CF_v$ ), testing ( $CF_t$ ), and maintenance ( $CF_m$ ), be applied to these short-term values per the following formulas:

$$\text{Total Correction Factor} = CF_T = CF_v \times CF_t \times CF_m$$

and

$$K_{\text{sat design}} = K_{\text{sat initial}} \times CF_T$$

Where  $K_{\text{sat design}}$  and  $K_{\text{sat initial}}$  are the design and measured infiltration rates, respectively.

We provide a discussion of the safety factors in order to provide planning level long-term infiltration rates, as follows: The assigned factor for site variability is 0.5 and assumes that the facility will be located in Sumas outwash, but the facility type, location, and depth have not been determined. The assigned factor for type of test is 0.4 for the grain-size test method. The assigned factor for maintenance is 0.9 and should be reviewed by the owner and civil engineer once the infiltration BMP and water quality treatment method are selected. Per direction in the 2019 Ecology Manual, the value of 0.9 assumes that maintenance will occur when the performance is degraded 10 percent.

For preliminary planning purposes, we anticipate that long-term design infiltration rates may be on the order of 0.5 to 4 inches per hour.

Based on the texture, composition, and density of the site soils, along with our experience with similar sites, it is our opinion that higher design infiltration rates may be indicated through in-situ infiltration testing. To provide infiltration rates for site- and project-specific design, we recommend that PITs be completed in locations in which stormwater infiltration facilities are likely to be proposed, consistent with the 2019 Ecology Manual section V-5.4, to determine design infiltration rates. The infiltration tests should take place at the bottom elevation of the proposed infiltration systems.

For treatment purposes, the 2019 Ecology Manual states that the measured (initial) soil infiltration rate should be 9 inches per hour, or less, for most infiltration facilities. The coarser-grained on-site Sumas outwash deposits are considered to have short-term infiltration rates of more than 9 inches per hour.

## 5.2 Depth to Bedrock, Water Table, or Impermeable Layer (SSC-5)

The suitability of the site for infiltration of stormwater may be limited by the presence of a shallow water table. For most types of infiltration facilities, the 2019 Ecology Manual requires that there be at least 5 feet of vertical separation between the base of the facility and a low-permeability stratum or the seasonal high groundwater level. A reduced separation as small as 3 feet may be allowed if it can be demonstrated through a mounding analysis that the reduced separation will not adversely impact the performance of the infiltration system.

Shallow groundwater was observed at the time of drilling. Depth to groundwater and available thickness of unsaturated Sumas glacial outwash is summarized below, in Table 3. The area in the vicinity of EB-8 and EB-9 is best suited for infiltration BMPs due to the shallowest depth to Sumas outwash and greatest depth to groundwater.

We recommend the installation of shallow monitoring well points, one near each of the proposed infiltration facility locations. We recommend that an electronic data logger be installed in each well casing to continually monitor water levels, and that periodic manual water level measurements be made.

**Table 3**  
**Summary of Unsaturated Interval of Sumas Glacial Outwash**

<b>Exploration Boring</b>	<b>Depth to Top of Sumas Glacial Outwash (feet)</b>	<b>Depth to Water or Low-Permeability Layer (feet, water levels at time of drilling)</b>	<b>Unsaturated Interval of Sumas Glacial Outwash (feet)<sup>1</sup></b>
EB-1	Not encountered	Perching layer at ~1 foot	No unsaturated outwash present
EB-2	Not encountered	Perching layer at ~1 foot	No unsaturated outwash present
EB-3	Not encountered	Perching layer at ~1 foot	No unsaturated outwash present
EB-4	5	5	No unsaturated outwash present
EB-5	4	>6.5 (bottom of exploration)	>1.5
EB-6	~3.5	5	~1.5

Exploration Boring	Depth to Top of Sumas Glacial Outwash (feet)	Depth to Water or Low-Permeability Layer (feet, water levels at time of drilling)	Unsaturated Interval of Sumas Glacial Outwash (feet) <sup>1</sup>
EB-7	9.5	7.5	No unsaturated outwash present
EB-8	1	7.5	6.5
EB-9	1	6	5
EB-10	1	5	4

<sup>1</sup> Unsaturated interval of Sumas glacial outwash is specified only in explorations that encountered Sumas glacial outwash.

### 5.3 Soil Physical and Chemical Suitability for Treatment (SSC-6)

Grain-size analyses were completed on select samples as discussed previously under “Laboratory Testing.” Cation Exchange Capacity (CEC) and Organic Matter (OM) content laboratory tests were not completed as part of this scope of work; however, based on the grain size and geologic setting of the Sumas outwash, it is unlikely that the CEC and OM content in the coarser-grained Sumas outwash will be sufficient to meet the treatment requirements.

### 5.4 Infiltration Facility Geotechnical Recommendations

Design-specific infiltration facility geotechnical recommendations should be made once a design is available and will include design infiltration rate, considerations for stripping, overflow path, imported fill, protection of the facility subgrade, and considerations prior to converting the facility to on-line status.

## 6.0 PROJECT DESIGN AND CONSTRUCTION MONITORING

Once infiltration designs are available, we recommend that we review the locations and quantity of proposed stormwater infiltration relative to the project proposal and surrounding properties. Final design of an infiltration system may warrant groundwater level monitoring, additional on-site infiltration testing depending on the location(s) and design of infiltration facilities, groundwater mounding, or additional studies.

We recommend that AESI perform a geotechnical review of the plans prior to final design completion. In this way, our recommendations may be properly interpreted and implemented in the design. This plan review is not included in the current scope of work and budget.




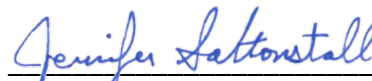
Because project plans were not available at the time of our study, this report should be considered preliminary. We recommend that we be allowed to review project plans when they are completed and to revise the recommendations presented in this report, if appropriate.

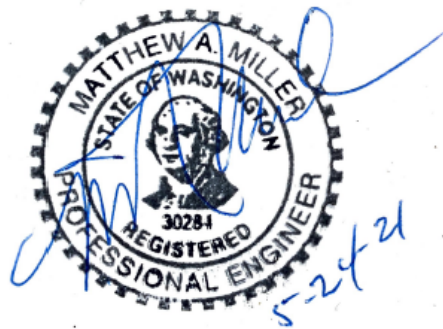
We are also available to provide geotechnical engineering and monitoring services during construction. The integrity of the earthwork and foundations depends on proper site preparation and construction procedures. In addition, engineering decisions may have to be made in the field in the event that variations in subsurface conditions become apparent. Construction monitoring services are not part of this current scope of work.

We have enjoyed working with you on this study and are confident these recommendations will aid in the successful completion of your project. If you should have any questions or require further assistance, please do not hesitate to call.

Sincerely,  
**ASSOCIATED EARTH SCIENCES, INC.**  
Kirkland, Washington

  
Anton D. Ypma, L.G.  
Senior Staff Geologist

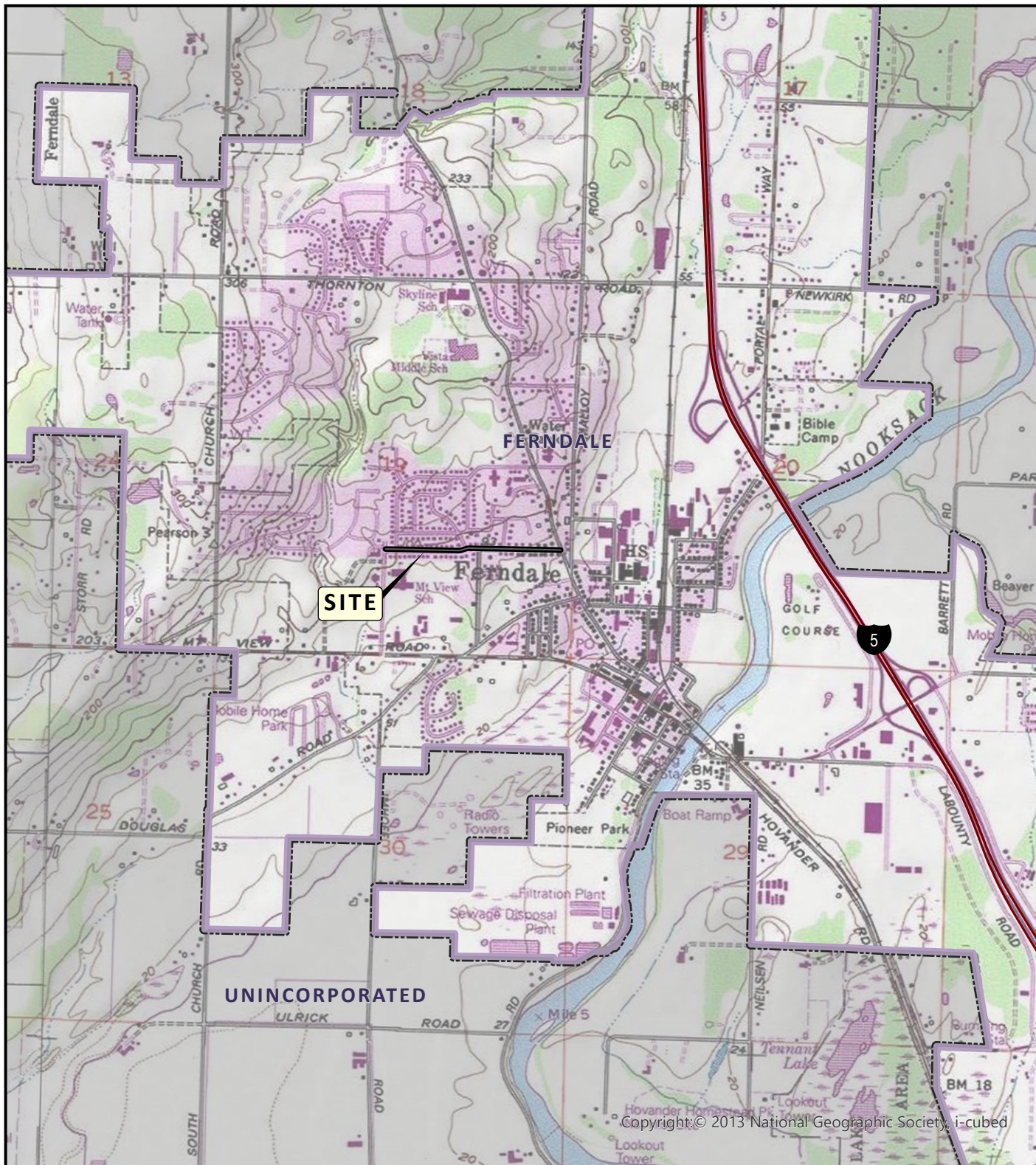
  
Jennifer H. Saltonstall, L.G., L.Hg.  
Principal Geologist/Hydrogeologist



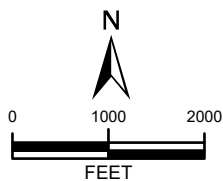
Matthew A. Miller, P.E.  
Principal Engineer

Attachments:     Figure 1:       Vicinity Map  
                       Figure 2:       Existing Site and Exploration Plan  
                       Appendix A:    Exploration Logs  
                       Appendix B:    Laboratory Test Results

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DATA SOURCES / REFERENCES:  
USGS: 7.5' SERIES TOPOGRAPHIC MAPS, ESRI/I-CUBED/NATIONAL  
GEOGRAPHIC SOCIETY 2013  
WHATCOM CO: STREETS 03/17, CITY LIMITS, PARCELS, 07/20  
LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE



NOTE: BLACK AND WHITE  
REPRODUCTION OF THIS COLOR  
ORIGINAL MAY REDUCE ITS  
EFFECTIVENESS AND LEAD TO  
INCORRECT INTERPRETATION



associated  
earth sciences  
incorporated

## VICINITY MAP

FERNDAL TERRACE  
FERNDAL, WASHINGTON

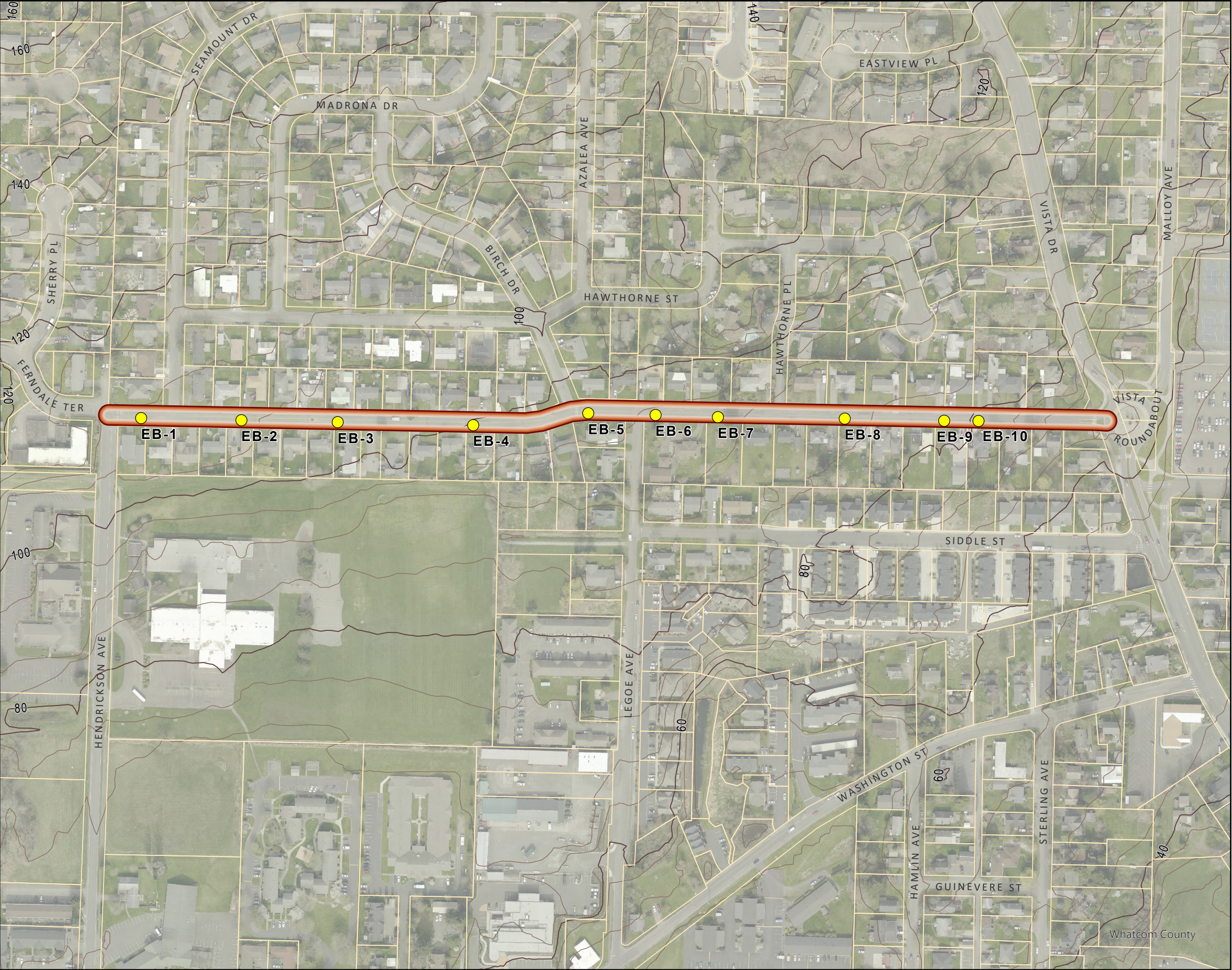
PROJ NO.  
20180513E001

DATE:  
2/21

FIGURE:  
1



G:\GIS\_Projects\aa\20180513 Ferndale Terrace\aprx\20180513E001 F2 ES\_Ferndale.aprx | 20180513E001 F2 ES\_Ferndale | 2/18/2021 4:21 PM



**LEGEND**

- SITE
- EXPLORATION BORING
- PARCEL
- CONTOUR 20 FT
- CONTOUR 5 FT

DATA SOURCES / REFERENCES:  
WA STATE LIDAR PORTAL: NORTH PUGET SOUND 2016  
ACQUIRED MARCH - SEPT 2016, GRID CELL SIZE IS 3'  
PSLC: NOOKSACK RIVER 2013  
FLOWN JAN/APRIL/JUNE 2013, GRID CELL SIZE IS 3'.  
WA STATE PLANE NORTH, NAD83(HARN)  
NAVD88, US SURVEY FEET.  
WHATCOM CO: PARCELS 7/20, CITY OF BELLINGHAM: ROADS 7/19  
AERIAL: PICTOMETRY 2016

LOCATIONS AND DISTANCES SHOWN ARE APPROXIMATE

BLACK AND WHITE REPRODUCTION OF THIS COLOR ORIGINAL MAY REDUCE ITS EFFECTIVENESS AND LEAD TO INCORRECT INTERPRETATION

**EXISTING SITE AND EXPLORATION PLAN**

**FERNDALE TERRACE**  
**FERNDALE, WASHINGTON**

PROJ NO. 20180513E001	DATE: 2/21	FIGURE: 2
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# **APPENDIX A**

## **Exploration Logs**

Classifications of soils in this report are based on visual field and/or laboratory observations, which include density/consistency, moisture condition, grain size, and plasticity estimates and should not be construed to imply field or laboratory testing unless presented herein. Visual-manual and/or laboratory classification methods of ASTM D-2487 and D-2488 were used as an identification guide for the Unified Soil Classification System.



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## Exploration Boring

Project Number  
20180513E001

Exploration Number  
EB-1

Sheet  
1 of 1

Project Name **Ferndale Terrace**

Location **Ferndale, WA**

Driller/Equipment **Boretec / HSA**

Hammer Weight/Drop **140# / 30**

Ground Surface Elevation (ft) **103**

Datum **NAVD 88**

Date Start/Finish **2/4/21, 2/4/21**

Hole Diameter (in) **6**

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				<b>Asphalt - 2 inches</b>								
				<b>Gravel - 9 inches</b>								
				<b>Sumas Glacial Till</b>								
		S-1		Moist, brown with mottling, sandy, SILT to very silty, SAND (ML-SM).			4 3 3	▲6				
5		S-2		Moist, brown, sandy, SILT, trace gravel; unsorted (ML).			7 9 11		▲20			
		S-3		Moist, brown, sandy, SILT, some gravel grading to gray, SILT with depth; unsorted (ML).		▼	7 14 20			▲34		
				<b>Pre-Fraser Sediments</b>								
10		S-4		Slightly moist, dark gray, SILT; massive (MH).			7 50/6"					▲50/6"
		S-5		Wet, brown, fine to medium SAND, some silt; massive (SP-SM).			12 22 45					▲67
15		S-6		Wet, brown, fine to medium SAND, some silt; stratified thin laminated layers (<1 inch thick) ranging to silt; oxidation observed on layer near center of sampler; several gravels present (SP-SM).			21 34 43					▲77
				Bottom of exploration boring at 16.5 feet Groundwater encountered at 8 feet.								

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▼ Water Level ( )



Grab Sample



Shelby Tube Sample

▼ Water Level at time of drilling (ATD)

Logged by: ADY

Approved by: JHS

AESIBOR 20180513E001.GPJ March 15, 2021



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## Exploration Boring

Project Number  
20180513E001

Exploration Number  
EB-2

Sheet  
1 of 1

Project Name Ferndale Terrace  
Location Ferndale, WA  
Driller/Equipment Boretec / HSA  
Hammer Weight/Drop 140# / 30

Ground Surface Elevation (ft) 101  
Datum NAVD 88  
Date Start/Finish 2/4/21, 2/4/21  
Hole Diameter (in) 6

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
5		S-1		Asphalt - 4 inches			7 8 9		▲17			
				Gravel - 9 inches								
				Sumas Glacial Till								
				Slightly moist, grayish brown, fine sandy, SILT, trace gravel; unsorted (ML).								
				Moist, grayish brown, fine sandy, SILT, trace gravel; unsorted (ML).								
10		S-2		Upper 6 inches: wet, brown, SILT, some sand, trace gravel (ML).			7 10 11		▲21			
				Pre-Fraser Sediments								
				Lower 12 inches: wet, brown, fine to medium SAND, some silt, trace gravel; oxidized layer (2 inches thick) 6 inches from bottom; color grades to brownish gray below oxidized layer; volcanics present (SP-SM).								
				Wet, gray, fine to medium SAND, trace silt; silt ranges to silty in layer (2 inches thick) near top of sampler; volcanics present; stratified (SP/SM).								
				Wet, gray, very silty, fine SAND (SM).								
15		S-3		Upper 6 inches: wet, brown, SILT, some sand, trace gravel (ML).			18 23 50/6"				▲50/6"	
				Pre-Fraser Sediments								
				Lower 12 inches: wet, brown, fine to medium SAND, some silt, trace gravel; oxidized layer (2 inches thick) 6 inches from bottom; color grades to brownish gray below oxidized layer; volcanics present (SP-SM).								
15		S-4		Wet, gray, fine to medium SAND, trace silt; silt ranges to silty in layer (2 inches thick) near top of sampler; volcanics present; stratified (SP/SM).			19 50/6"				▲50/6"	
15		S-5		Wet, gray, very silty, fine SAND (SM).			27 50/6"				▲50/6"	
				Bottom of exploration boring at 16 feet Groundwater encountered at 8 feet.								

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



3" OD Split Spoon Sampler (D & M)



Grab Sample



No Recovery



Ring Sample



Shelby Tube Sample

M - Moisture



Water Level ( )



Water Level at time of drilling (ATD)

Logged by: ADY

Approved by: JHS



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## Exploration Boring

Project Number  
20180513E001

Exploration Number  
EB-3

Sheet  
1 of 1

Project Name Ferndale Terrace

Location Ferndale, WA

Driller/Equipment Borettec / HSA

Hammer Weight/Drop 140# / 30

Ground Surface Elevation (ft) 99

Datum NAVD 88

Date Start/Finish 2/4/21, 2/4/21

Hole Diameter (in) 6

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/ft	Blows/Foot				Other Tests
								10	20	30	40	
5		S-1		Asphalt - 4 inches								
				Gravel - 4 inches								
				Relic Topsoil								
				Moist, dark brown, sandy, SILT, trace gravel; organic fragments (primarily fine roots) (ML).		4	▲7					
5		S-2		Holocene Alluvium		3						
				Lower 4 inches: grading to oxidized reddish brown, SILT, some sand, trace organics (ML).		4						
				Moist, light grayish brown with faint irregular mottling, SILT; poor recovery (ML).		5	▲8					
						4						
10				Bottom of exploration boring at 6.5 feet No groundwater encountered.								
15												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



3" OD Split Spoon Sampler (D & M)



Grab Sample



No Recovery



Ring Sample



Shelby Tube Sample

M - Moisture



Water Level ( )



Water Level at time of drilling (ATD)

Logged by: ADY

Approved by: JHS







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## Exploration Boring

Project Number  
20180513E001

Exploration Number  
EB-5

Sheet  
1 of 1

Project Name Ferndale Terrace

Location Ferndale, WA

Driller/Equipment Borettec / HSA

Hammer Weight/Drop 140# / 30

Ground Surface Elevation (ft) 94

Datum NAVD 88

Date Start/Finish 2/4/21, 2/4/21

Hole Diameter (in) 6

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/ft	Blows/Foot				Other Tests
								10	20	30	40	
				<b>Asphalt - 3 inches</b>								
				<b>Sandy Gravel - 8 inches</b>								
		S-1		<b>Relic Topsoil / Holocene Alluvium</b> Moist, dark brown, SILT; organic rich, many fine roots (ML).		5 4 4	▲8					
5		S-2		<b>Sumas Glacial Outwash</b>  Moist, brown, medium to coarse SAND, some silt, some gravel; massive (SP-SM).		12 7 12	▲19					
10				Bottom of exploration boring at 6.5 feet No groundwater encountered.								
15												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ( )



Grab Sample



Shelby Tube Sample



Water Level at time of drilling (ATD)

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Approved by: JHS



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## Exploration Boring

Project Number  
20180513E001

Exploration Number  
EB-6

Sheet  
1 of 1

Project Name **Ferndale Terrace**

Location **Ferndale, WA**

Driller/Equipment **Boretec / HSA**

Hammer Weight/Drop **140# / 30**

Ground Surface Elevation (ft) **91**

Datum **NAVD 88**

Date Start/Finish **2/4/21, 2/4/21**

Hole Diameter (in) **6**

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				<b>Asphalt - 4 inches</b>								
				<b>Gravel - 9 inches</b>								
		S-1		<b>Holocene Alluvium</b> Layer (1 inch thick) of moist, dark brown, SILT, some sand overlying moist, oxidized, light reddish brown, SILT, some sand, trace gravel (ML).			2 1 2	▲3				
5		S-2		<b>Sumas Glacial Outwash</b>  Wet, brown, gravelly, fine to coarse SAND, silty in top of sample to trace in tip (SP/SM).  Moisture on drill rod below 6.5 feet, not enough water in borehole to measure.  Wet, brown, medium to coarse silty, SAND; faintly stratified (SM).		▼	14 14 18			▲32		
		S-3		Gravelly drill action at ~9 feet.			10 11 12			▲23		
10		S-4		As above.			8 13 11			▲24		
		S-5		<b>Glaciomarine Drift</b> Wet, gray, SILT to CLAY, some fine sand to sandy (ML-CL).			2 2 3	▲5				
15		S-6		As above.			3 7 9			▲16		
				Bottom of exploration boring at 16.5 feet Groundwater encountered at 5 feet.								

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



3" OD Split Spoon Sampler (D & M)



Grab Sample



No Recovery



Ring Sample



Shelby Tube Sample

M - Moisture



Water Level ( )



Water Level at time of drilling (ATD)

Logged by: ADY

Approved by: JHS

AESIBOR 20180513E001.GPJ March 15, 2021



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# Exploration Boring

Project Number  
20180513E001

Exploration Number  
EB-7

Sheet  
1 of 1

Project Name **Ferndale Terrace**

Location **Ferndale, WA**

Driller/Equipment **Boretec / HSA**

Hammer Weight/Drop **140# / 30**

Ground Surface Elevation (ft) **88**

Datum **NAVD 88**

Date Start/Finish **2/4/21, 2/4/21**

Hole Diameter (in) **6**

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
				<b>Asphalt - 3.5 inches</b>								
				<b>Gravel - 6.5 inches</b>								
				<b>Fill</b>								
		S-1		Moist, brown to tan, sandy, SILT, trace gravel; unsorted (ML).			2 4 3	▲7				
				<b>Holocene Alluvium</b>								
5		S-2		No recovery, resampled with Cal-Mod sampler. Moist, grayish brown with irregular mottling, sandy, SILT, trace gravel (MH).			3 3 2	▲5				
		S-3		Upper ~6 inches: wet, brown, fine to medium SAND, some silt (SP-SM). Lower ~6 inches: wet, gray to brown with irregular mottling, SILT (ML).		▼	13 6 7	▲13				
10		S-4		<b>Sumas Glacial Outwash</b> Wet, brown, fine SAND, some silt; layer (2 inches thick) of silt to clay in top of sampler; layer (1 inch thick) in tip of sampler ranges to fine sandy silt; stratified (SP-SM/ML).			7 7 15	▲22				
		S-5		Wet, brown, fine SAND, some silt to silty (SP-SM/SM).			11 12 16	▲28				
15		S-6		Upper 6 inches: as above. <b>Glaciomarine Drift</b> Lower 6 inches: wet, gray, SILT; massive (ML).			4 3 3	▲6				
				Bottom of exploration boring at 16.5 feet Groundwater encountered at 7.5 feet.								

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▼ Water Level ( )



Grab Sample



Shelby Tube Sample

▼ Water Level at time of drilling (ATD)

Logged by: ADY

Approved by: JHS



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## Exploration Boring

Project Number  
20180513E001

Exploration Number  
EB-8

Sheet  
1 of 1

Project Name **Ferndale Terrace**  
Location **Ferndale, WA**  
Driller/Equipment **Borettec / HSA**  
Hammer Weight/Drop **140# / 30**

Ground Surface Elevation (ft) **85**  
Datum **NAVD 88**  
Date Start/Finish **2/4/21, 2/4/21**  
Hole Diameter (in) **6**

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/ft	Blows/Foot				Other Tests
								10	20	30	40	
				<b>Asphalt - 3.5 inches</b> <b>Gravel - 8 inches</b>								
		S-1		<b>Sumas Outwash</b> Upper 3 inches: moist, brown, silty, fine SAND, trace gravel (SM). Lower 9 inches: moist, light brown, fine SAND, trace to some silt (SP/SP-SM).		3 4 5	▲9					
5		S-2		Moist, brown with irregular patches of mottling, silty, fine SAND (SP-SM).		5 5 6	▲11					
		S-3		Upper ~3 inches: wet, brown, silty, fine SAND (SM). Lower ~9 inches: wet, grayish brown with irregular mottling, sandy, SILT (ML).	▼	3 3 6	▲9					
10		S-4		Upper ~6 inches: wet, grayish brown with irregular mottling, sandy, SILT (ML). Lower ~12 inches: wet, brown, fine to coarse SAND, trace to some silt; stratified (SP-SM/SP).		4 8 13	▲21					
		S-5		<b>Glaciomarine Drift</b> Wet, gray, SILT to CLAY; massive (ML-CL).		5 5 8	▲13					
15		S-6		No recovery.		3 2 3	▲5					
				Bottom of exploration boring at 16.5 feet Groundwater encountered at 7.5 feet.								

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

▼ Water Level ( )



Grab Sample



Shelby Tube Sample



Water Level at time of drilling (ATD)

Logged by: ADY

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## Exploration Boring

Project Number  
20180513E001

Exploration Number  
EB-9

Sheet  
1 of 1

Project Name Ferndale Terrace

Location Ferndale, WA

Driller/Equipment Boretec / HSA

Hammer Weight/Drop 140# / 30

Ground Surface Elevation (ft) 79

Datum NAVD 88

Date Start/Finish 2/4/21, 2/4/21

Hole Diameter (in) 6

Depth (ft)	S T	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6" Blows/ft	Blows/Foot				Other Tests
								10	20	30	40	
				<b>Asphalt - 4 inches</b>								
				<b>Gravel - 7 inches</b>								
				<b>Sumas Outwash</b>								
		S-1		Moist, tan, fine SAND, some silt, trace gravel (SP-SM).		5 5 5	▲ 10					
5				Moist, brown, fine to medium SAND, trace to some silt (SP-SM).		4 4 3	▲ 7					
		S-2		<b>Glaciomarine Drift ?</b> - Layer (2 inches thick) of grayish brown, silt (ML) in sampler tip.								
				Bottom of exploration boring at 6.5 feet No groundwater encountered.								
10												
15												

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ( )



Grab Sample



Shelby Tube Sample



Water Level at time of drilling (ATD)

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Approved by: JHS



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## Exploration Boring

Project Number  
20180513E001

Exploration Number  
EB-10

Sheet  
1 of 1

Project Name **Ferndale Terrace**

Location **Ferndale, WA**

Driller/Equipment **Borettec / HSA**

Hammer Weight/Drop **140# / 30**

Ground Surface Elevation (ft) **76**

Datum **NAVD 88**

Date Start/Finish **2/4/21, 2/4/21**

Hole Diameter (in) **6**

Depth (ft)	S	Samples	Graphic Symbol	DESCRIPTION	Well Completion	Water Level	Blows/6"	Blows/Foot				Other Tests
								10	20	30	40	
5		S-1		Asphalt - 4 inches			7 8 6	▲14				
				Gravel - 7 inches								
				Sumas Outwash								
				Moist, tan, fine SAND, some silt, trace gravel; massive (SP-SM).								
				Upper 2 inches: wet, brown, fine SAND some silt (SP-SM).								
		S-2		Glaciomarine Drift			4 5 6	▲11				
				Lower ~16 inches: wet, mottled grayish brown, fine sandy, SILT (ML).								
				Bottom of exploration boring at 6.5 feet Groundwater encountered at 5 feet.								

Sampler Type (ST):



2" OD Split Spoon Sampler (SPT)



No Recovery

M - Moisture



3" OD Split Spoon Sampler (D & M)



Ring Sample

Water Level ( )



Grab Sample



Shelby Tube Sample



Water Level at time of drilling (ATD)

Logged by: ADY

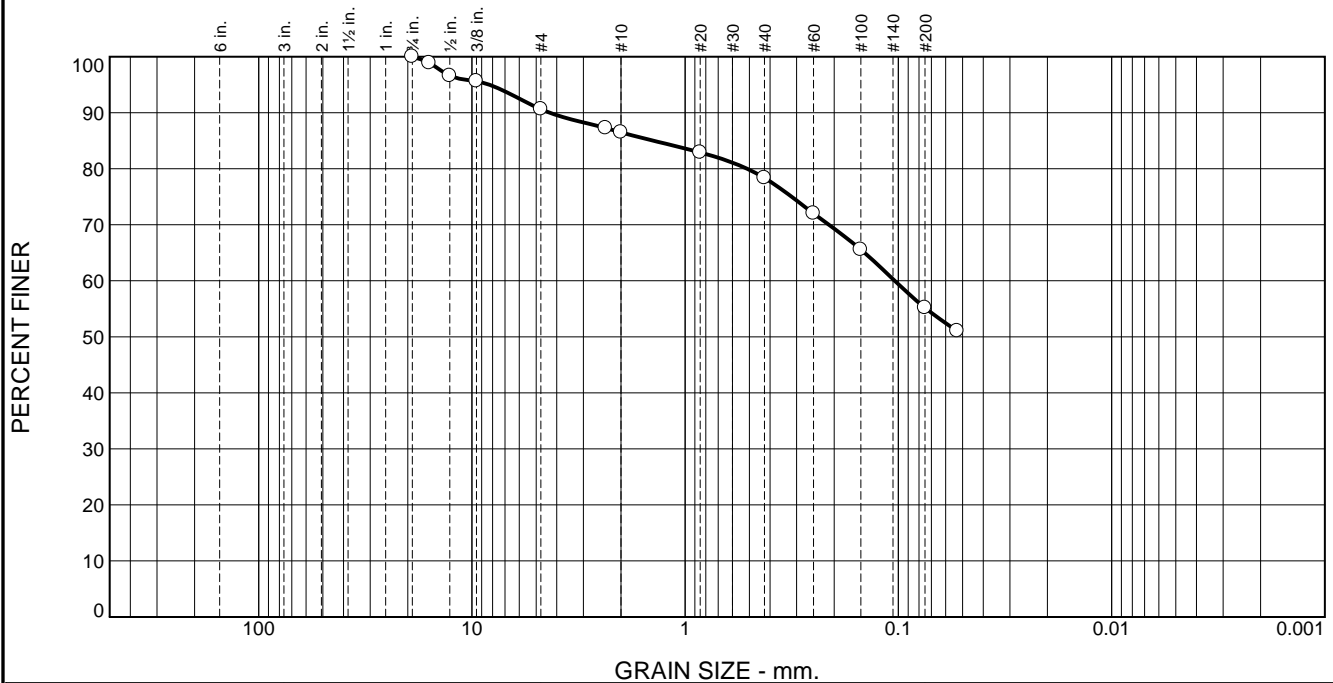
Approved by: JHS

## **APPENDIX B**

### **Laboratory Test Results**



# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	9.4	4.1	8.1	23.2	55.2	

TEST RESULTS			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3/4"	100.0		
5/8"	98.9		
1/2"	96.6		
3/8"	95.6		
#4	90.6		
#8	87.3		
#10	86.5		
#20	82.9		
#40	78.4		
#60	72.0		
#100	65.6		
#200	55.2		
#270	51.0		

\* (no specification provided)

**Material Description**  
very sandy SILT, some gravel

**Atterberg Limits (ASTM D 4318)**  
PL= NP LL= NV PI=

**Classification**  
USCS (D 2487)= ML AASHTO (M 145)= A-4(0)

**Coefficients**  
D<sub>90</sub>= 4.3218 D<sub>85</sub>= 1.4108 D<sub>60</sub>= 0.1040  
D<sub>50</sub>= D<sub>30</sub>= D<sub>15</sub>=  
D<sub>10</sub>= C<sub>u</sub>= C<sub>c</sub>=

Remarks

Date Received: 02/05/2021 Date Tested: 02/16/2021  
Tested By: NAS  
Checked By: \_\_\_\_\_  
Title: \_\_\_\_\_

Location: Onsite

Sample Number: EB-2

Depth: 1'

Date Sampled: 02/04/2021



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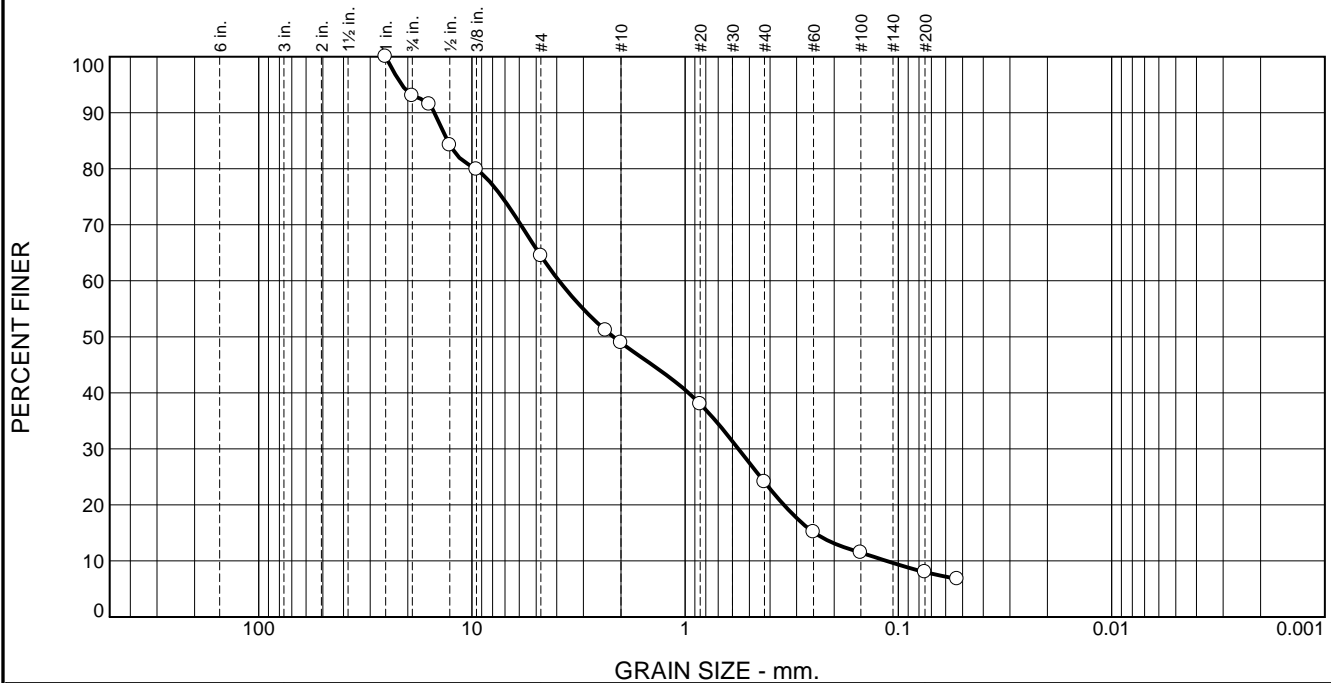
Client: Reichhardt & Ebe Engineering, Inc.

Project: Ferndale Terrace

Project No: 20180513 E001

Figure

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	7.0	28.5	15.5	24.9	16.1	8.0	

TEST RESULTS			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1"	100.0		
3/4"	93.0		
5/8"	91.5		
1/2"	84.2		
3/8"	79.9		
#4	64.5		
#8	51.2		
#10	49.0		
#20	38.0		
#40	24.1		
#60	15.1		
#100	11.5		
#200	8.0		
#270	6.8		

\* (no specification provided)

## Material Description

gravelly SAND, some silt

## Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI=

## Classification

USCS (D 2487)= SP-SM AASHTO (M 145)= A-1-a

## Coefficients

D<sub>90</sub>= 14.9932 D<sub>85</sub>= 13.0311 D<sub>60</sub>= 3.9054  
D<sub>50</sub>= 2.1695 D<sub>30</sub>= 0.5627 D<sub>15</sub>= 0.2471  
D<sub>10</sub>= 0.1136 C<sub>u</sub>= 34.38 C<sub>c</sub>= 0.71

Remarks

Date Received: 02/05/2021 Date Tested: 02/16/2021

Tested By: NAS

Checked By: ADY/MM

Title:

Location: Onsite

Sample Number: EB-6

Depth: 5'

Date Sampled: 02/04/2021



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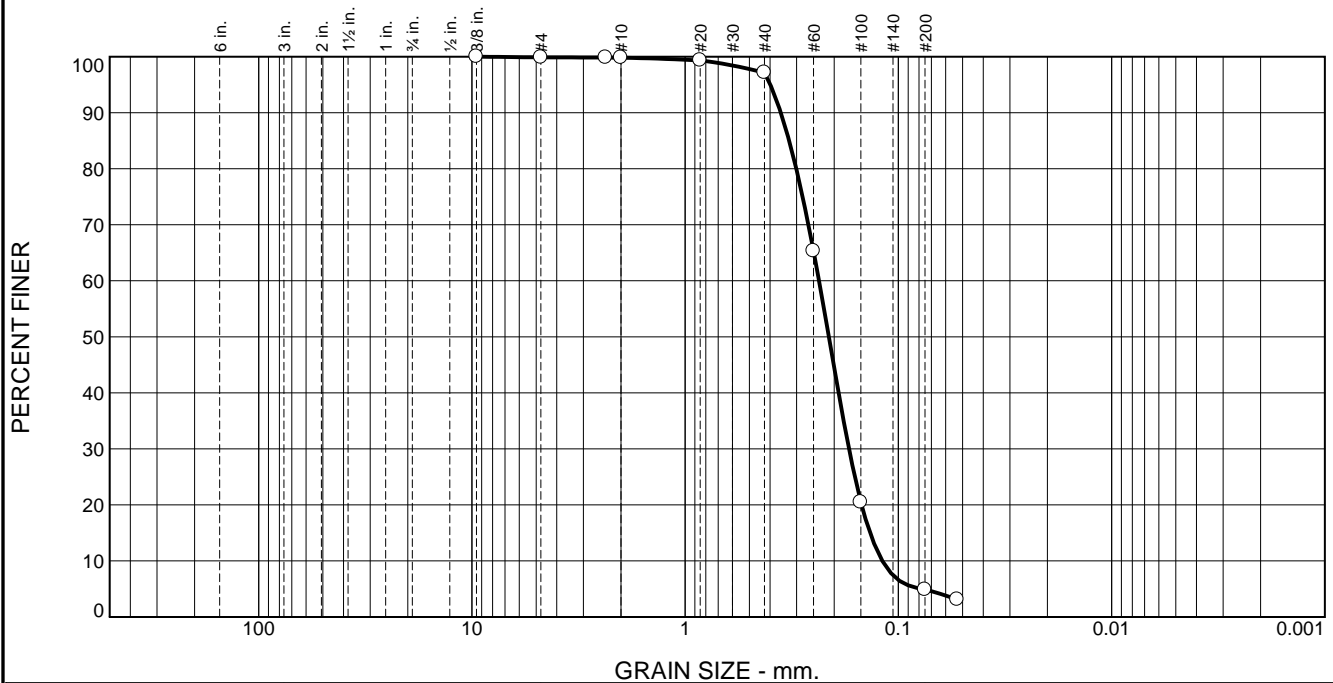
Client: Reichardt & Ebe Engineering, Inc.

Project: Ferndale Terrace

Project No: 20180513 E001

Figure

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.1	0.1	2.7	92.2	4.9	

TEST RESULTS			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3/8"	100.0		
#4	99.9		
#8	99.8		
#10	99.8		
#20	99.3		
#40	97.1		
#60	65.3		
#100	20.5		
#200	4.9		
#270	3.1		

\* (no specification provided)

## Material Description

SAND, trace silt, trace gravel

## Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI=

## Classification

USCS (D 2487)= SP AASHTO (M 145)= A-3

## Coefficients

D<sub>90</sub>= 0.3559 D<sub>85</sub>= 0.3254 D<sub>60</sub>= 0.2356  
D<sub>50</sub>= 0.2120 D<sub>30</sub>= 0.1704 D<sub>15</sub>= 0.1359  
D<sub>10</sub>= 0.1189 C<sub>u</sub>= 1.98 C<sub>c</sub>= 1.04

Remarks

Date Received: 02/05/2021 Date Tested: 02/16/2021

Tested By: NAS

Checked By: ADY/MM

Title:

Location: Onsite  
Sample Number: EB-8

Depth: 1'

Date Sampled: 02/04/2021



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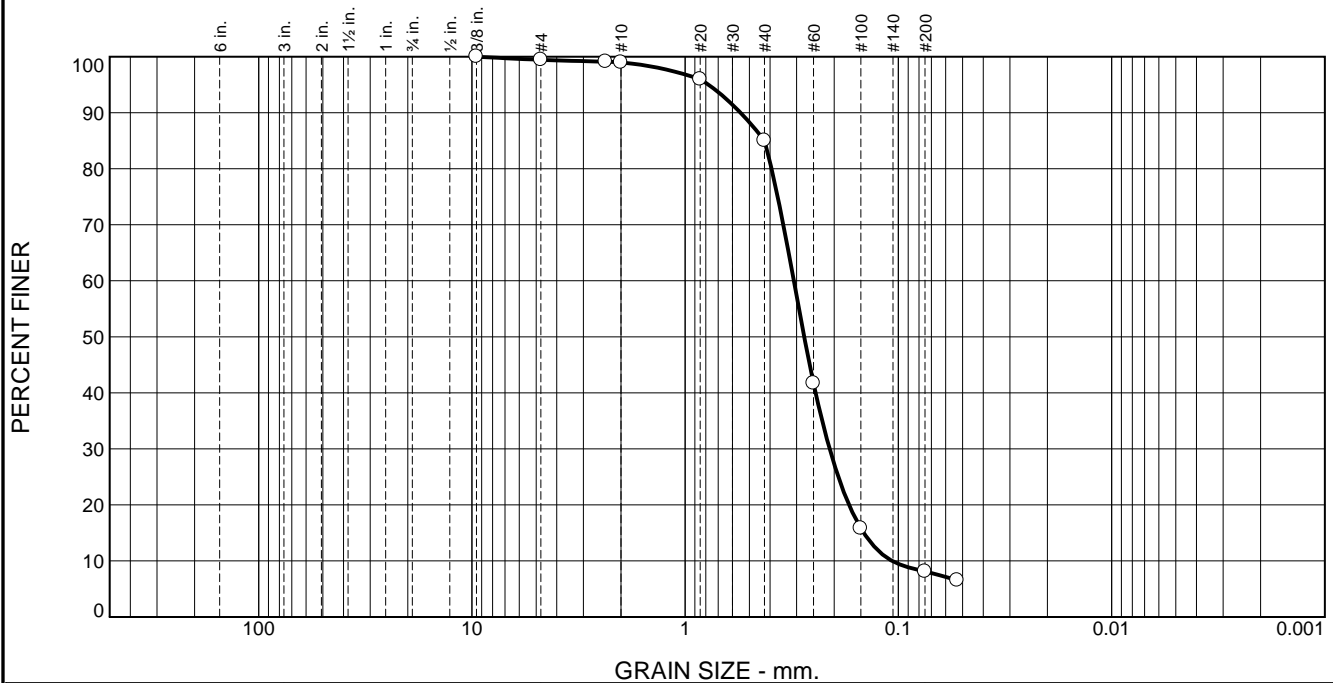
Client: Reichardt & Ebe Engineering, Inc.

Project: Ferndale Terrace

Project No: 20180513 E001

Figure

# Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.6	0.5	13.9	76.9	8.1	

TEST RESULTS			
Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3/8"	100.0		
#4	99.4		
#8	99.1		
#10	98.9		
#20	96.0		
#40	85.0		
#60	41.7		
#100	15.8		
#200	8.1		
#270	6.5		

\* (no specification provided)

## Material Description

SAND, some silt, trace gravel

## Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI=

## Classification

USCS (D 2487)= SP-SM AASHTO (M 145)= A-3

## Coefficients

D<sub>90</sub>= 0.5501 D<sub>85</sub>= 0.4247 D<sub>60</sub>= 0.3094  
D<sub>50</sub>= 0.2764 D<sub>30</sub>= 0.2103 D<sub>15</sub>= 0.1453  
D<sub>10</sub>= 0.1070 C<sub>u</sub>= 2.89 C<sub>c</sub>= 1.34

Remarks

Date Received: 02/05/2021 Date Tested: 02/16/2021

Tested By: NAS

Checked By: ADY/MM

Title:

Location: Onsite

Sample Number: EB-10

Depth: 1'

Date Sampled: 02/04/2021



associated  
earth sciences  
incorporated

Client: Reichardt & Ebe Engineering, Inc.

Project: Ferndale Terrace

Project No: 20180513 E001

Figure

## **APPENDIX C – NPDES PERMIT**



# Instructions for Transfer of Coverage

## Construction Stormwater General Permit

### Instructions

This form is used to process two types of permit transfers: 1) Complete Transfer, or 2) Partial Transfer. Determine which type of transfer applies to your situation before filling out this form.

**1. Complete Transfer:** The original permittee has sold, or otherwise released control of the entire site to another party.

#### Required Paperwork for Complete Transfer:

- Either the current permittee, or the new permittee(s), must submit a complete and accurate Transfer of Coverage form to Ecology for each new party. The form must be signed by the current permittee **and** the new permittee.

**2. Partial Transfer:** The original permittee retains control over some portion of the site after selling or releasing control over a portion of the site.

#### Required Paperwork for Partial Transfer

- Either the current permittee or the new permittee(s) must submit a complete and accurate Transfer of Coverage Form for each new operator to Ecology. The form must be signed by the current permittee and the new permittee.
- For partial transfers, once all transfers are submitted, the original permittee should submit the Notice of Termination only if the portion(s) they still own or control have undergone final stabilization and meet the criteria for termination.

#### For Your Information

- When this form is 1) completed, 2) signed by the current and new permittee, and 3) submitted to Ecology, permit transfers are effective on the date specified at the top of page 1 (unless Ecology notifies the current permittee and new permittee of its intention to revoke coverage under the General Permit or if Ecology sends notice that the application is incomplete). If no date for the transfer of coverage is specified, Ecology will use the date of the last signature.
- The new permittee should keep a copy of the signed Transfer of Coverage form (which serves as proof of permit coverage) until Ecology sends documentation in the mail.
- Following the transfer, the new permittee must either: (1) use the Stormwater Pollution Prevention Plan (SWPPP) developed by the original operator, and modified as necessary, or (2) develop and use a new SWPPP that meets the requirements of the Construction Stormwater General Permit.
- For projects for which the original permittee has completed a Proposed New Discharge to an Impaired Waterbody Form (ECY 070-399), or for projects that are operating on sites with soil or groundwater contamination: Upon completion of the Transfer of Coverage form, the new permittee will adopt any special provisions made to protect water quality for sites that have existing contamination or that discharge to an impaired waterbody.

*To request ADA accommodation including materials in a format for the visually impaired, call the Water Quality Program at 360-407-6600 or visit <https://ecology.wa.gov/accessibility>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call 877-833-6341.*

*This page is intentionally left blank*



# Transfer of Coverage

Permit # WAR\_\_\_\_\_

## Construction Stormwater General Permit

**This form transfers permit coverage for all, or a portion of a site to one or more new operators.**

Type of permit transfer (check one): ☐ Partial transfer (complete the Partial Transfer acreage below) ☐ Complete transfer

Specific date that permit responsibility, coverage, and liability is transferred to new operator: \_\_\_\_\_

*\*If no date is indicated Ecology will determine the date of transfer.*

Please see instructions for details on type of transfer.

**For PARTIAL TRANSFERS indicate the acreage remaining under your operational control:**

- List **total size of project/site** remaining under your operational control following the **partial transfer**: \_\_\_\_\_ acres.
- List **total area of soil disturbance** remaining under your operational control following the **partial transfer**: \_\_\_\_\_ acres.
- Submitting this form meets the requirement to submit an updated NOI (General Permit Condition G9)

### Current Operator/Permittee Information

Current Operator/Permittee Name:		Company:		
Business Phone:	Ext:	Mailing Address:		
Cell Phone:	Fax (optional):			
Email:		City:	State:	Zip+4:
Signature* (see signatory requirements in Section VIII):		Title:		
		Date:		

### New Operator/Permittee Information

(the remainder of this form applies to the **new** Operator/Permittee)

<b>I. New Operator/Permittee</b> (Party with operational control over plans and specifications or day-to-day operational control of activities which ensure compliance with Stormwater Pollution Prevention Plan (SWPPP) and permit conditions. Ecology will send correspondence and permit fee invoices to the permittee on record.)				
Name:		Company:		
Business Phone:	Ext:	Unified Business Identifier (UBI): (UBI is a nine-digit number used to identify a business entity. Write "none" if you do not have a UBI number.)		
Cell Phone (Optional):	Fax (Optional):	E-mail:		
Mailing Address:		City:	State:	Zip + 4:
<b>II. Property Owner</b> (The party listed on the County Assessor's records as owner and taxpayer of the parcel[s] for which permit coverage is requested. Ecology will <b>not</b> send correspondence and permit fee invoices to the Property Owner. The Property Owner information will be used for emergency contact purposes.)				
Name:		Company:		
Business Phone:	Ext:	Unified Business Identifier (UBI): (UBI is a nine-digit number used to identify a business entity. Write "none" if you do not have a UBI number.)		
Cell Phone (Optional):	Fax (Optional):	E-mail:		
Mailing Address:		City:	State:	Zip + 4:



<b>III. On-Site Contact Person(s)</b> (Typically the Certified Erosion and Sediment Control Lead or Operator/Permittee)				
Name:		Company:		
Business Phone:	Ext:	Mailing Address:		
Cell Phone:	Fax(Optional):	City:	State:	Zip+4:
Email:				
<b>IV. Site/Project Information</b>				
Site or Project Name		Site Acreage Total size of your site/project (that <b>you</b> own/control): _____ acres. (Note: 1 acre = 43,560 sq. ft.)		
Street Address or Location Description (If the site lacks a street address, list its specific location. For example, Intersection of Highway 61 and 34.)  <hr/> Parcel ID#: _____ (Optional)  Type of Construction Activity (check all that apply): <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Highway or Road (city ,county, state) <input type="checkbox"/> Utilities (specify): _____ <input type="checkbox"/> Other (specify): _____		Total area of soil disturbance for your site/project over the life of the project: _____ acres. Include grading, equipment staging, excavation, borrow pit, material storage areas, dump areas, haul roads, side-cast areas, off-site construction support areas, and all other soil disturbance acreage associated with the project. (Note: 1 acre = 43,560 sq. ft.)		
City (or nearest city):	Zip Code:	Estimated project start-up date (mm/dd/yy):		
County:		Estimated project completion date (mm/dd/yy):		
Record the latitude and longitude of the <i>main entrance</i> to the site or the approximate center of site.				
Latitude: _____ °N		Longitude: _____ °W		
<b>V. Existing Site Conditions</b>				
1. Are you aware of contaminated soils present on the site? <input type="checkbox"/> Yes <input type="checkbox"/> No  2. Are you aware of groundwater contamination located within the site boundary? <input type="checkbox"/> Yes <input type="checkbox"/> No  3. If you answered yes to questions 1 or 2, will any contaminated soils be disturbed or will any contaminated groundwater be discharged due to the proposed construction activity? <input type="checkbox"/> Yes <input type="checkbox"/> No  ("Contaminated" and "contamination" here mean containing any hazardous substance (as defined in WAC 173-340-200) that does not occur naturally or occurs at greater than natural background levels.)  If you answered yes to Question 3, please provide detailed information with the NOI (as known and readily available) on the natures and extent of the contamination (concentrations, locations, and depth), as well as pollution prevention and/or treatment Best Management Practices (BMPs) proposed to control the discharge of soil and/or groundwater contaminants in stormwater. This should include information that would be included in related portions of the Stormwater Pollution Prevention Plan (SWPPP) that describe how contaminated and potentially contaminated construction stormwater and dewatering water will be managed.				

## VI. WQWebDMR (Electronic Discharge Monitoring Reporting)

You must submit monthly discharge monitoring reports using Ecology's WQWebDMR system. To sign up for WQWebDMR, or to register a new site, go to <https://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance>. If you are unable to submit your DMRs electronically, you may contact Ecology to request a waiver. Ecology will generally only grant waiver requests to those permittees without internet access. Only a permittee or representative, designated in writing, may request access to or a waiver from WQWebDMR. To have the ability to use the system immediately, **you must submit the Electronic Signature Agreement with your transfer of coverage form**. If you have questions on this process, contact Ecology's WQWebDMR staff at [WebDMRPortal@ecy.wa.gov](mailto:WebDMRPortal@ecy.wa.gov) or 800/633-6193 or 360-407-7097 (local). Note: DMRs are optional for permitted sites under 1 acre that do not discharge to impaired waterbodies.

## VII. Discharge/Receiving Water Information

Indicate whether your site's stormwater and/or dewatering water could enter surface waters, **directly and/or indirectly**.

☐ Water will discharge directly or indirectly (through a storm drain system or roadside ditch) into one or more surface waterbodies (wetlands, creeks, lakes, and all other surface waters and water courses).

If your discharge is to a storm sewer system, provide the name of the operator of the storm sewer system:  
(e.g., City of Tacoma): \_\_\_\_\_

☐ Water will discharge to ground with 100% infiltration, with no potential to reach surface waters under any conditions.

If your project includes dewatering, you **must** include dewatering plans and discharge locations in your site Stormwater Pollution Prevention Plan.

### Location of Outfall into Surface Waterbody

Enter the outfall identifier code, waterbody name, and latitude/longitude of the point(s) where the site has the potential to discharge into a waterbody (the outfall). Enter all locations. **See illustration of Surface Waterbody Outfall locations at the end of this form.**

- Include the names and locations of both direct and indirect discharges to surface waterbodies, even if the risk of discharge is low or limited to periods of extreme weather. **Attach a separate list if necessary.**
- Give each point a unique 1-4 digit alpha numeric code. This code will be used for identifying these points in WQWebDMR.
- Some large construction projects (for example, subdivisions, roads, or pipelines) may discharge into several waterbodies.
- If the creek or tributary is unnamed, use a format such as "unnamed tributary to Deschutes River."
- If the site discharges to a stormwater conveyance system that in turn flows to a surface waterbody, include the surface waterbody name and location.

Outfall Identifier Code. These cannot be symbols. (Maximum of 4 characters).				Surface Waterbody Name at the Outfall	Latitude Decimal Degrees	Longitude Decimal Degrees
Example: 001A				Example: Puget Sound	47.5289247° N	-122.3123550° W
					° N	° W
					° N	° W
					° N	° W

If your site discharges to a waterbody that is on the impaired waterbodies list (e.g., 303[d] list) for turbidity, fine sediment, high pH, or phosphorus, Ecology will require additional documentation before issuing permit coverage and these sites will be subject to additional sampling and numeric effluent limits (per Permit Condition S8). Ecology will notify you if any additional sampling requirements apply. Information on impaired waterbodies is available online at: <https://www.ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-303d>.

**Before signing, please use the following checklist to ensure this form is complete:**

- ☐ All spaces on this form have been completed. (Attach additional sheets if necessary)
- ☐ The transfer form has been signed by both the current permittee (see Page 1) **and** the new permittee (see Section VIII below).
- ☐ The date permit responsibility was transferred is specified. (See Page 1)
- ☐ New Operator/Permittee: Before you submit this form to Ecology, please retain a copy for your records – this will serve as proof of permit coverage until documentation arrives from Ecology.
- ☐ For partial transfers: If the original permittee no longer owns or controls any portions of the site that meet the criteria for termination, the original permittee must submit a Notice of Termination (NOT) to terminate permit coverage. See the CSWGP website for a link to the NOT form: [www.ecology.wa.gov/constructionstormwaterpermit](http://www.ecology.wa.gov/constructionstormwaterpermit).
- ☐ For sites with contaminated soils/groundwater or a new discharger to an impaired waterbody: Any special provisions to protect water quality put in place at the time of initial coverage have been reviewed and adopted by the new permittee.

Administrative Order Docket No. \_\_\_\_\_

**VIII. Certification of New Permittee**

*"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

\_\_\_\_\_  
Printed/Typed Name

\_\_\_\_\_  
Company (operator/permittee only)

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature of New Operator/Permittee

\_\_\_\_\_  
Date

**Signature of Operator/Permittee requirements:**

- A. For a corporation: By a responsible corporate officer.
- B. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively.
- C. For a municipality, state, federal, or other public facility: By either a principal executive officer or ranking elected official.

Please sign and return this **ORIGINAL** document to the following address:

Department of Ecology – Construction Stormwater  
PO Box 47696  
Olympia, WA 98504-7696

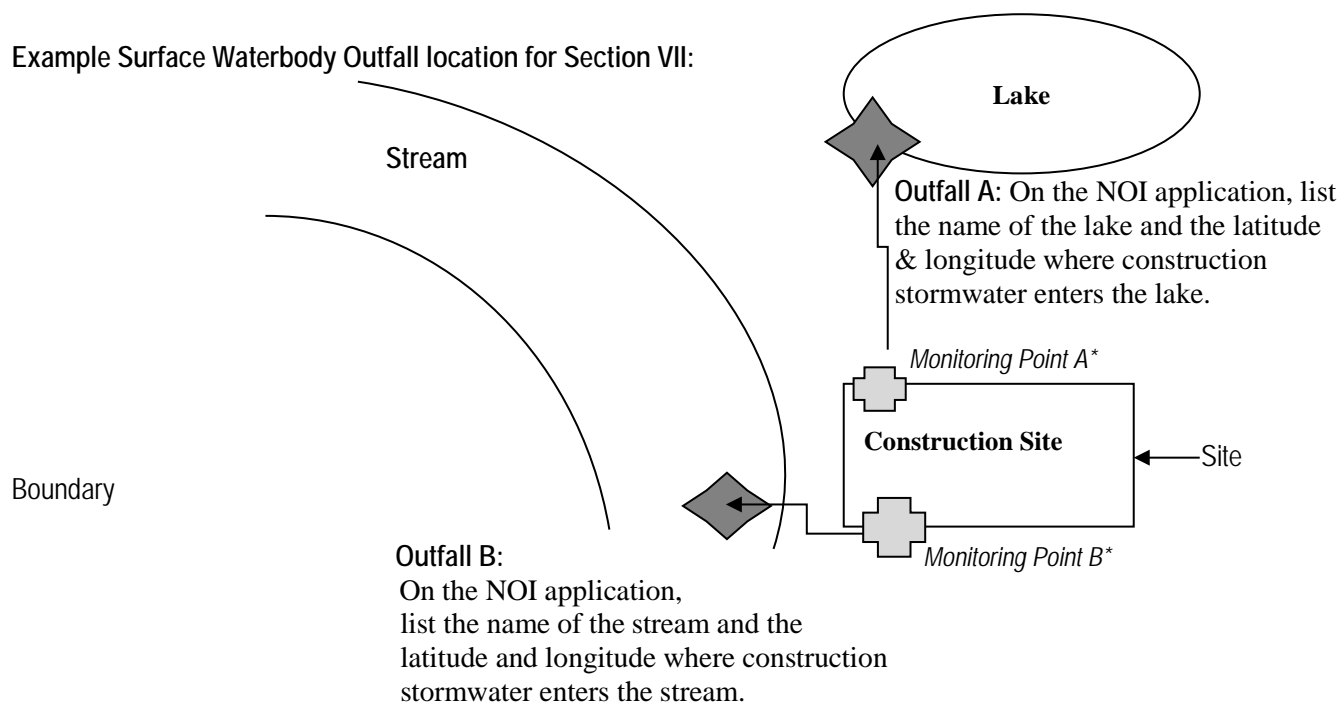
**If you have questions about this form, contact the following Ecology staff:**

Location	Contact Name	Phone	E-mail
City of Seattle, and Kitsap, Pierce, and Thurston counties	Josh Klimek	360-407-7451	<a href="mailto:josh.klimek@ecy.wa.gov">josh.klimek@ecy.wa.gov</a>
Island, King, and San Juan counties	RaChelle Stane	360-407-6556	<a href="mailto:rachelle.stane@ecy.wa.gov">rachelle.stane@ecy.wa.gov</a>
Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Skagit, Snohomish, Spokane, Stevens, Walla, Whatcom, and Whitman counties.	Shawn Hopkins	360-407-6442	<a href="mailto:shawn.hopkins@ecy.wa.gov">shawn.hopkins@ecy.wa.gov</a>
Benton, Chelan, Clallam, Clark, Cowlitz, Douglas, Grays Harbor, Jefferson, Kittitas, Klickitat, Lewis, Mason, Okanogan, Pacific, Skamania, Wahkiakum, and Yakima counties.	Joyce Smith	360-407-6858	<a href="mailto:joyce.smith@ecy.wa.gov">joyce.smith@ecy.wa.gov</a>

You must submit monthly discharge monitoring reports using Ecology's WQWebDMR system. To sign up for WQWebDMR, or to register a new site, go to [www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance](http://www.ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance). If you are unable to submit your DMRs electronically, you may contact Ecology to request a waiver. Ecology will generally only grant waiver requests to those permittees without internet access. Only a permittee or representative, designated in writing, may request access to or a waiver from WQWebDMR. To have the ability to use the system immediately, **you must submit the Electronic Signature Agreement with your application.**

If you have questions on this process, contact Ecology's WQWebDMR staff at [WQWebPortal@ecy.wa.gov](mailto:WQWebPortal@ecy.wa.gov) or 800-633-6193 or 360-407-7097 (local).

**Example Surface Waterbody Outfall location for Section VII:**



\*Note: The monitoring points are for illustration only and are not required on this Notice of Intent application form. Monitoring point information will be entered on the monthly discharge monitoring report as required for active permits.

*To request ADA accommodation including materials in a format for the visually impaired, call the Water Quality Program at 360-407-6600 or visit <https://ecology.wa.gov/accessibility>. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TYY at 877-833-6341.*



**STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY**

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

December 9, 2024

Jori Burnett  
City of Ferndale  
PO Box 936  
Ferndale, WA 98248  
Sent by email only: joriburnett@cityofferndale.org

**RE: Coverage under the Construction Stormwater General Permit**

<b>Permit number:</b>	<b>WAR314078</b>
<b>Site Name:</b>	<b>Ferndale Terrace Improvement Project</b>
<b>Location:</b>	<b>From intersection of Ferndale Terrace/Hendrickson Ave, easterly to Vista Dr</b>
	<b>Ferndale, WA                      County: Whatcom</b>
<b>Disturbed Acres:</b>	<b>3.32</b>

Dear Jori Burnett:

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 December 9, 2024.

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](#)<sup>1</sup>. 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 **January** and your first DMR must be submitted by **February 15, 2025**.

---

<sup>1</sup> <http://www.ecology.wa.gov/eCoverage-packet>

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](#)<sup>2</sup>. If you have questions, contact the portal staff at (360) 407-7097 (Olympia area), or (800) 633-6193/Option 3, or email [WQWebPortal@ecy.wa.gov](mailto: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](#)<sup>3</sup>.

### **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](mailto:wqfeeunit@ecy.wa.gov) or (800) 633-6193/Option 2. You can also visit [Water Quality Permit Fees Webpage](#)<sup>4</sup> for more information.

### **Ecology Field Inspector Assistance**

If you have questions regarding stormwater management at your construction site, please contact your Regional Inspector, Jen Baptist of Ecology's Bellingham Field Office at [jen.baptist@ecy.wa.gov](mailto:jen.baptist@ecy.wa.gov), or (564) 565-0327.

### **Questions or Additional Information**

Ecology is here to help. Please review our [Construction Stormwater General Permit webpage](#)<sup>5</sup> for more information. If you have questions about the Construction Stormwater General Permit, please contact your Permit Administrator, Melinda Wilson at [melinda.wilson@ecy.wa.gov](mailto:melinda.wilson@ecy.wa.gov), or (360) 870-8290.

Sincerely,



Jeff Killelea, Manager  
Permit and Technical Services Section  
Water Quality Program

---

<sup>2</sup> <https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Water-quality-permits-guidance/WQWebPortal-guidance>

<sup>3</sup> <https://apps.ecology.wa.gov/publications/summarypages/1710007.html>

<sup>4</sup> <https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-quality-permits/Fees>

<sup>5</sup> [www.ecology.wa.gov/constructionstormwaterpermit](http://www.ecology.wa.gov/constructionstormwaterpermit)

Issuance Date: November 18, 2020  
Effective Date: January 1, 2021  
Expiration Date: December 31, 2025

# CONSTRUCTION STORMWATER GENERAL PERMIT

National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge  
General Permit for Stormwater Discharges Associated with Construction Activity

**State of Washington**  
**Department of Ecology**  
Olympia, Washington 98504

In compliance with the provisions of  
Chapter 90.48 Revised Code of Washington  
(State of Washington Water Pollution Control Act)  
and  
Title 33 United States Code, Section 1251 et seq.  
The Federal Water Pollution Control Act (The Clean Water Act)

Until this permit expires, is modified, or revoked, Permittees that have properly  
obtained coverage under this general permit are authorized to discharge in accordance  
with the special and general conditions that follow.



---

Vincent McGowan, P.E.  
Water Quality Program Manager  
Washington State Department of Ecology

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## SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions within this permit for additional submittal requirements. Appendix A provides a list of definitions. Appendix B provides a list of acronyms.

**Table 1 Summary of Required Submittals**

Permit Section	Submittal	Frequency	First Submittal Date
<a href="#">S5.A</a> and <a href="#">S8</a>	High Turbidity/Transparency Phone Reporting	As Necessary	Within 24 hours
<a href="#">S5.B</a>	Discharge Monitoring Report	Monthly*	Within 15 days following the end of each month
<a href="#">S5.F</a> and <a href="#">S8</a>	Noncompliance Notification – Telephone Notification	As necessary	Within 24 hours
<a href="#">S5.F</a>	Noncompliance Notification – Written Report	As necessary	Within 5 Days of non-compliance
<a href="#">S9.D</a>	Request for Chemical Treatment Form	As necessary	Written approval from Ecology is required prior to using chemical treatment (with the exception of dry ice, CO <sub>2</sub> or food grade vinegar to adjust pH)
<a href="#">G2</a>	Notice of Change in Authorization	As necessary	
<a href="#">G6</a>	Permit Application for Substantive Changes to the Discharge	As necessary	
<a href="#">G8</a>	Application for Permit Renewal	1/permit cycle	No later than 180 days before expiration
<a href="#">S2.A</a>	Notice of Permit Transfer	As necessary	
<a href="#">G19</a>	Notice of Planned Changes	As necessary	
<a href="#">G21</a>	Reporting Anticipated Non-compliance	As necessary	

**NOTE:** \*Permittees must submit electronic Discharge Monitoring Reports (DMRs) to the Washington State Department of Ecology monthly, regardless of site discharge, for the full duration of permit coverage. Refer to Section S5.B of this General Permit for more specific information regarding DMRs.

**Table 2 Summary of Required On-site Documentation**

<b>Document Title</b>	<b>Permit Conditions</b>
Permit Coverage Letter	See Conditions S2, S5
Construction Stormwater General Permit (CSWGP)	See Conditions S2, S5
Site Log Book	See Conditions S4, S5
Stormwater Pollution Prevention Plan (SWPPP)	See Conditions S5, S9
Site Map	See Conditions S5, S9

# SPECIAL CONDITIONS

## S1. PERMIT COVERAGE

### A. Permit Area

This Construction Stormwater General Permit (CSWGP) covers all areas of Washington State, except for federal operators and Indian Country as specified in Special Condition S1.E.3 and 4.

### B. Operators Required to Seek Coverage Under this General Permit

1. Operators of the following construction activities are required to seek coverage under this CSWGP:
  - a. Clearing, grading and/or excavation that results in the disturbance of one or more acres (including off-site disturbance acreage related to construction-support activity as authorized in S1.C.2) and discharges stormwater to surface waters of the State; and clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more and discharge stormwater to surface waters of the State.
    - i. This category includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, and discharge to surface waters of the State (that is, forest practices that prepare a site for construction activities); and
  - b. Any size construction activity discharging stormwater to waters of the State that the Washington State Department of Ecology (Ecology):
    - i. Determines to be a significant contributor of pollutants to waters of the State of Washington.
    - ii. Reasonably expects to cause a violation of any water quality standard.
2. Operators of the following activities are not required to seek coverage under this CSWGP (unless specifically required under Special Condition S1.B.1.b, above):
  - a. Construction activities that discharge all stormwater and non-stormwater to groundwater, sanitary sewer, or combined sewer, and have no point source discharge to either surface water or a storm sewer system that drains to surface waters of the State.
  - b. Construction activities covered under an Erosivity Waiver (Special Condition S1.F).
  - c. Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

### C. Authorized Discharges

1. ***Stormwater Associated with Construction Activity.*** Subject to compliance with the terms and conditions of this permit, Permittees are authorized to discharge stormwater associated with construction activity to surface waters of the State or to a storm sewer system that drains to surface waters of the State. (Note that “surface waters of the

State” may exist on a construction site as well as off site; for example, a creek running through a site.)

2. ***Stormwater Associated with Construction Support Activity.*** This permit also authorizes stormwater discharge from support activities related to the permitted construction site (for example, an on-site portable rock crusher, off-site equipment staging yards, material storage areas, borrow areas, etc.) provided:
  - a. The support activity relates directly to the permitted construction site that is required to have an NPDES permit; and
  - b. The support activity is not a commercial operation serving multiple unrelated construction projects, and does not operate beyond the completion of the construction activity; and
  - c. Appropriate controls and measures are identified in the Stormwater Pollution Prevention Plan (SWPPP) for the discharges from the support activity areas.
3. ***Non-Stormwater Discharges.*** The categories and sources of non-stormwater discharges identified below are authorized conditionally, provided the discharge is consistent with the terms and conditions of this permit:
  - a. Discharges from fire-fighting activities.
  - b. Fire hydrant system flushing.
  - c. Potable water, including uncontaminated water line flushing.
  - d. Hydrostatic test water.
  - e. Uncontaminated air conditioning or compressor condensate.
  - f. Uncontaminated groundwater or spring water.
  - g. Uncontaminated excavation dewatering water (in accordance with S9.D.10).
  - h. Uncontaminated discharges from foundation or footing drains.
  - i. Uncontaminated or potable water used to control dust. Permittees must minimize the amount of dust control water used.
  - j. Routine external building wash down that does not use detergents.
  - k. Landscape irrigation water.

The SWPPP must adequately address all authorized non-stormwater discharges, except for discharges from fire-fighting activities, and must comply with Special Condition S3. At a minimum, discharges from potable water (including water line flushing), fire hydrant system flushing, and pipeline hydrostatic test water must undergo the following: dechlorination to a concentration of 0.1 parts per million (ppm) or less, and pH adjustment to within 6.5 – 8.5 standard units (su), if necessary.

#### **D. Prohibited Discharges**

The following discharges to waters of the State, including groundwater, are prohibited:

1. Concrete wastewater
2. Wastewater from washout and clean-up of stucco, paint, form release oils, curing compounds and other construction materials.
3. Process wastewater as defined by 40 Code of Federal Regulations (CFR) 122.2 (See Appendix A of this permit).
4. Slurry materials and waste from shaft drilling, including process wastewater from shaft drilling for construction of building, road, and bridge foundations unless managed according to Special Condition S9.D.9.j.
5. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
6. Soaps or solvents used in vehicle and equipment washing.
7. Wheel wash wastewater, unless managed according to Special Condition S9.D.9.
8. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed according to Special Condition S9.D.10.

#### **E. Limits on Coverage**

Ecology may require any discharger to apply for and obtain coverage under an individual permit or another more specific general permit. Such alternative coverage will be required when Ecology determines that this CSWGP does not provide adequate assurance that water quality will be protected, or there is a reasonable potential for the project to cause or contribute to a violation of water quality standards.

The following stormwater discharges are not covered by this permit:

1. Post-construction stormwater discharges that originate from the site after completion of construction activities and the site has undergone final stabilization.
2. Non-point source silvicultural activities such as nursery operations, site preparation, reforestation and subsequent cultural treatment, thinning, prescribed burning, pest and fire control, harvesting operations, surface drainage, or road construction and maintenance, from which there is natural runoff as excluded in 40 CFR Subpart 122.
3. Stormwater from any federal operator.
4. Stormwater from facilities located on **Indian Country** as defined in 18 U.S.C. §1151, except portions of the Puyallup Reservation as noted below.

**Indian Country** includes:

- a. All land within any Indian Reservation notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation. This includes all federal, tribal, and Indian and non-Indian privately owned land within the reservation.
- b. All off-reservation Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.
- c. All off-reservation federal trust lands held for Native American Tribes.

Puyallup Exception: Following the *Puyallup Tribes of Indians Land Settlement Act of 1989*, 25 U.S.C. §1773; the permit does apply to land within the Puyallup Reservation except for discharges to surface water on land held in trust by the federal government.

5. Stormwater from any site covered under an existing NPDES individual permit in which stormwater management and/or treatment requirements are included for all stormwater discharges associated with construction activity.
6. Stormwater from a site where an applicable Total Maximum Daily Load (TMDL) requirement specifically precludes or prohibits discharges from construction activity.

#### **F. Erosivity Waiver**

Construction site operators may qualify for an Erosivity Waiver from the CSWGP if the following conditions are met:

1. The site will result in the disturbance of fewer than five (5) acres and the site is not a portion of a common plan of development or sale that will disturb five (5) acres or greater.
2. Calculation of Erosivity “R” Factor and Regional Timeframe:
  - a. The project’s calculated rainfall erosivity factor (“R” Factor) must be less than five (5) during the period of construction activity, (See the CSWGP homepage <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html> for a link to the EPA’s calculator and step by step instructions on computing the “R” Factor in the *EPA Erosivity Waiver Fact Sheet*). The period of construction activity starts when the land is first disturbed and ends with final stabilization. In addition:
  - b. The entire period of construction activity must fall within the following timeframes:
    - i. For sites west of the Cascades Crest: June 15 – September 15.
    - ii. For sites east of the Cascades Crest, excluding the Central Basin: June 15 – October 15.
    - iii. For sites east of the Cascades Crest, within the Central Basin: no timeframe restrictions apply. The Central Basin is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches. For a map of the Central Basin (Average Annual Precipitation Region 2), refer to: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/resourcesguidance.html>.
3. Construction site operators must submit a complete Erosivity Waiver certification form at least one week before disturbing the land. Certification must include statements that the operator will:
  - a. Comply with applicable local stormwater requirements; and
  - b. Implement appropriate erosion and sediment control BMPs to prevent violations of water quality standards.
4. This waiver is not available for facilities declared significant contributors of pollutants as defined in Special Condition S1.B.1.b or for any size construction activity that could

reasonably expect to cause a violation of any water quality standard as defined in Special Condition S1.B.1.b.ii.

5. This waiver does not apply to construction activities which include non-stormwater discharges listed in Special Condition S1.C.3.
6. If construction activity extends beyond the certified waiver period for any reason, the operator must either:
  - a. Recalculate the rainfall erosivity “R” factor using the original start date and a new projected ending date and, if the “R” factor is still under 5 *and* the entire project falls within the applicable regional timeframe in Special Condition S1.F.2.b, complete and submit an amended waiver certification form before the original waiver expires; *or*
  - b. Submit a complete permit application to Ecology in accordance with Special Condition S2.A and B before the end of the certified waiver period.

## S2. APPLICATION REQUIREMENTS

### A. Permit Application Forms

#### 1. *Notice of Intent Form*

- a. Operators of new or previously unpermitted construction activities must submit a complete and accurate permit application (Notice of Intent, or NOI) to Ecology.
- b. Operators must apply using the electronic application form (NOI) available on Ecology’s website (<http://ecy.wa.gov/programs/wq/stormwater/construction/index.html>). Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology  
Water Quality Program - Construction Stormwater  
PO Box 47696  
Olympia, Washington 98504-7696

- c. The operator must submit the NOI at least 60 days before discharging stormwater from construction activities and must submit it prior to the date of the first public notice (See Special Condition S2.B, below, for details). The 30-day public comment period begins on the publication date of the second public notice. Unless Ecology responds to the complete application in writing, coverage under the general permit will automatically commence on the 31<sup>st</sup> day following receipt by Ecology of a *completed* NOI, or the issuance date of this permit, whichever is later; unless Ecology specifies a later date in writing as required by WAC173-226-200(2). See S8.B for Limits on Coverage for New Discharges to TMDL or 303(d)-Listed Waters.
- d. If an applicant intends to use a Best Management Practice (BMP) selected on the basis of Special Condition S9.C.4 (“demonstrably equivalent” BMPs), the applicant must notify Ecology of its selection as part of the NOI. In the event the applicant selects BMPs after submission of the NOI, the applicant must provide notice of the



selection of an equivalent BMP to Ecology at least 60 days before intended use of the equivalent BMP.

- e. Applicants must notify Ecology if they are aware of contaminated soils and/or groundwater associated with the construction activity. Provide detailed information with the NOI (as known and readily available) on the nature and extent of the contamination (concentrations, locations, and depth), as well as pollution prevention and/or treatment BMPs proposed to control the discharge of soil and/or groundwater contaminants in stormwater. Examples of such detail may include, but are not limited to:
  - i. List or table of all known contaminants with laboratory test results showing concentration and depth,
  - ii. Map with sample locations,
  - iii. Related portions of the Stormwater Pollution Prevention Plan (SWPPP) that address the management of contaminated and potentially contaminated construction stormwater and dewatering water,
  - iv. Dewatering plan and/or dewatering contingency plan.

## **2. *Transfer of Coverage Form***

The Permittee can transfer current coverage under this permit to one or more new operators, including operators of sites within a Common Plan of Development, provided:

- i. The Permittee submits a complete Transfer of Coverage Form to Ecology, signed by the current and new discharger and containing a specific date for transfer of permit responsibility, coverage and liability (including any Administrative Orders associated with the permit); and
- ii. Ecology does not notify the current discharger and new discharger of intent to revoke coverage under the general permit. If this notice is not given, the transfer is effective on the date specified in the written agreement.

When a current discharger (Permittee) transfers a portion of a permitted site, the current discharger must also indicate the remaining permitted acreage after the transfer. Transfers do not require public notice.

## **3. *Modification of Coverage Form***

Permittees must notify Ecology regarding any changes to the information provided on the NOI by submitting an Update/Modification of Permit Coverage form in accordance with General Conditions G6 and G19. Examples of such changes include, but are not limited to:

- i. Changes to the Permittee's mailing address,
- ii. Changes to the on-site contact person information, and
- iii. Changes to the area/acreage affected by construction activity.

## B. Public Notice

For new or previously unpermitted construction activities, the applicant must publish a public notice at least one time each week for two consecutive weeks, at least 7 days apart, in a newspaper with general circulation in the county where the construction is to take place. The notice must be run after the NOI has been submitted and must contain:

1. A statement that *“The applicant is seeking coverage under the Washington State Department of Ecology’s Construction Stormwater NPDES and State Waste Discharge General Permit.”*
2. The name, address, and location of the construction site.
3. The name and address of the applicant.
4. The type of construction activity that will result in a discharge (for example, residential construction, commercial construction, etc.), and the total number of acres to be disturbed over the lifetime of the project.
5. The name of the receiving water(s) (that is, the surface water(s) to which the site will discharge), or, if the discharge is through a storm sewer system, the name of the operator of the system and the receiving water(s) the system discharges to.
6. The statement: *Any persons desiring to present their views to the Washington State Department of Ecology regarding this application, or interested in Ecology’s action on this application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II antidegradation requirements under WAC 173-201A-320. Comments can be submitted to: Department of Ecology, PO Box 47696, Olympia, Washington 98504-7696 Attn: Water Quality Program, Construction Stormwater.*

## S3. COMPLIANCE WITH STANDARDS

- A. Discharges must not** cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), groundwater quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the Federal water quality criteria applicable to Washington. (40 CFR Part 131.45) Discharges that are not in compliance with these standards are prohibited.
- B. Prior to the discharge** of stormwater and non-stormwater to waters of the State, the Permittee must apply All Known, Available, and Reasonable methods of prevention, control, and Treatment (AKART). This includes the preparation and implementation of an adequate SWPPP, with all appropriate BMPs installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.
- C. Ecology presumes** that a Permittee complies with water quality standards unless discharge monitoring data or other site-specific information demonstrates that a discharge causes or contributes to a violation of water quality standards, when the Permittee complies with the following conditions. The Permittee must fully:

1. Comply with all permit conditions, including; planning, sampling, monitoring, reporting, and recordkeeping conditions.
  2. Implement stormwater BMPs contained in stormwater management manuals published or approved by Ecology, or BMPs that are demonstrably equivalent to BMPs contained in stormwater management manuals published or approved by Ecology, including the proper selection, implementation, and maintenance of all applicable and appropriate BMPs for on-site pollution control. (For purposes of this section, the stormwater manuals listed in Appendix 10 of the *Phase I Municipal Stormwater Permit* are approved by Ecology.)
- D. Where construction sites** also discharge to groundwater, the groundwater discharges must also meet the terms and conditions of this CSWGP. Permittees who discharge to groundwater through an injection well must also comply with any applicable requirements of the Underground Injection Control (UIC) regulations, Chapter 173-218 WAC.

## **S4. MONITORING REQUIREMENTS, BENCHMARKS, AND REPORTING TRIGGERS**

### **A. Site Log Book**

The Permittee must maintain a site log book that contains a record of the implementation of the SWPPP and other permit requirements, including the installation and maintenance of BMPs, site inspections, and stormwater monitoring.

### **B. Site Inspections**

Construction sites one (1) acre or larger that discharge stormwater to surface waters of the State must have site inspections conducted by a Certified Erosion and Sediment Control Lead (CESCL). Sites less than one (1) acre may have a person without CESCL certification conduct inspections. (See Special Conditions S4.B.3 and B.4, below, for detailed requirements of the Permittee's CESCL.)

Site inspections must include all areas disturbed by construction activities, all BMPs, and all stormwater discharge points under the Permittee's operational control.

1. The Permittee must have staff knowledgeable in the principles and practices of erosion and sediment control. The CESCL (sites one acre or more) or inspector (sites less than one acre) must have the skills to assess the:
  - a. Site conditions and construction activities that could impact the quality of stormwater; and
  - b. Effectiveness of erosion and sediment control measures used to control the quality of stormwater discharges. The SWPPP must identify the CESCL or inspector, who must be present on site or on-call at all times. The CESCL (sites one (1) acre or more) must obtain this certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology. (See BMP C160 in the manual, referred to in Special Condition S9.C.1 and 2.)
2. The CESCL or inspector must examine stormwater visually for the presence of suspended sediment, turbidity, discoloration, and oil sheen. BMP effectiveness must be evaluated to

determine if it is necessary to install, maintain, or repair BMPs to improve the quality of stormwater discharges.

Based on the results of the inspection, the Permittee must correct the problems identified, by:

- a. Reviewing the SWPPP for compliance with Special Condition S9 and making appropriate revisions within 7 days of the inspection.
  - b. Immediately beginning the process of fully implementing and maintaining appropriate source control and/or treatment BMPs, within 10 days of the inspection. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
  - c. Documenting BMP implementation and maintenance in the site log book.
3. The CESCL or inspector must inspect all areas disturbed by construction activities, all BMPs, and all stormwater discharge points at least once every calendar week and within 24 hours of any discharge from the site. (For purposes of this condition, individual discharge events that last more than one (1) day do not require daily inspections. For example, if a stormwater pond discharges continuously over the course of a week, only one (1) inspection is required that week.) Inspection frequency may be reduced to once every calendar month for inactive sites that are temporarily stabilized.
4. The Permittee must summarize the results of each inspection in an inspection report or checklist and enter the report/checklist into, or attach it to, the site log book. At a minimum, each inspection report or checklist must include:
  - a. Inspection date and time.
  - b. Weather information.
  - c. The general conditions during inspection.
  - d. The approximate amount of precipitation since the last inspection.
  - e. The approximate amount of precipitation within the last 24 hours.
  - f. A summary or list of all implemented BMPs, including observations of all erosion/sediment control structures or practices.
  - g. A description of:
    - i. BMPs inspected (including location).
    - ii. BMPs that need maintenance and why.
    - iii. BMPs that failed to operate as designed or intended, and
    - iv. Where additional or different BMPs are needed, and why.
  - h. A description of stormwater discharged from the site. The Permittee must note the presence of suspended sediment, turbidity, discoloration, and oil sheen, as applicable.

- i. Any water quality monitoring performed during inspection.
- j. General comments and notes, including a brief description of any BMP repairs, maintenance, or installations made following the inspection.
- k. An implementation schedule for the remedial actions that the Permittee plans to take if the site inspection indicates that the site is out of compliance. The remedial actions taken must meet the requirements of the SWPPP and the permit.
- l. A summary report of the inspection.
- m. The name, title, and signature of the person conducting the site inspection, a phone number or other reliable method to reach this person, and the following statement:  
*I certify that this report is true, accurate, and complete to the best of my knowledge and belief.*

**Table 3 Summary of Primary Monitoring Requirements**

Size of Soil Disturbance <sup>1</sup>	Weekly Site Inspections	Weekly Sampling w/ Turbidity Meter	Weekly Sampling w/ Transparency Tube	Weekly pH Sampling <sup>2</sup>	CESCL Required for Inspections?
Sites that disturb less than 1 acre, but are part of a larger Common Plan of Development	Required	Not Required	Not Required	Not Required	No
Sites that disturb 1 acre or more, but fewer than 5 acres	Required	Sampling Required – either method <sup>3</sup>		Required	Yes
Sites that disturb 5 acres or more	Required	Required	Not Required <sup>4</sup>	Required	Yes

<sup>1</sup> Soil disturbance is calculated by adding together all areas that will be affected by construction activity. Construction activity means clearing, grading, excavation, and any other activity that disturbs the surface of the land, including ingress/egress from the site.

<sup>2</sup> If construction activity results in the disturbance of 1 acre or more, and involves significant concrete work (1,000 cubic yards of concrete or recycled concrete placed or poured over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer stormwater collection system that drains to other surface waters of the State, the Permittee must conduct pH sampling in accordance with Special Condition S4.D.

<sup>3</sup> Sites with one or more acres, but fewer than 5 acres of soil disturbance, must conduct turbidity or transparency sampling in accordance with Special Condition S4.C.4.a or b.

<sup>4</sup> Sites equal to or greater than 5 acres of soil disturbance must conduct turbidity sampling using a turbidity meter in accordance with Special Condition S4.C.4.a.

### **C. Turbidity/Transparency Sampling Requirements**

#### **1. Sampling Methods**

- a. If construction activity involves the disturbance of five (5) acres or more, the Permittee must conduct turbidity sampling per Special Condition S4.C.4.a, below.
- b. If construction activity involves one (1) acre or more but fewer than five (5) acres of soil disturbance, the Permittee must conduct either transparency sampling *or* turbidity sampling per Special Condition S4.C.4.a or b, below.

#### **2. Sampling Frequency**

- a. The Permittee must sample all discharge points at least once every calendar week when stormwater (or authorized non-stormwater) discharges from the site or enters any on-site surface waters of the state (for example, a creek running through a site); sampling is not required on sites that disturb less than an acre.
- b. Samples must be representative of the flow and characteristics of the discharge.
- c. Sampling is not required when there is no discharge during a calendar week.
- d. Sampling is not required outside of normal working hours or during unsafe conditions.
- e. If the Permittee is unable to sample during a monitoring period, the Permittee must include a brief explanation in the monthly Discharge Monitoring Report (DMR).
- f. Sampling is not required before construction activity begins.
- g. The Permittee may reduce the sampling frequency for temporarily stabilized, inactive sites to once every calendar month.

#### **3. Sampling Locations**

- a. Sampling is required at all points where stormwater associated with construction activity (or authorized non-stormwater) is discharged off site, including where it enters any on-site surface waters of the state (for example, a creek running through a site).
- b. The Permittee may discontinue sampling at discharge points that drain areas of the project that are fully stabilized to prevent erosion.
- c. The Permittee must identify all sampling point(s) in the SWPPP and on the site map and clearly mark these points in the field with a flag, tape, stake or other visible marker.
- d. Sampling is not required for discharge that is sent directly to sanitary or combined sewer systems.
- e. The Permittee may discontinue sampling at discharge points in areas of the project where the Permittee no longer has operational control of the construction activity.

#### 4. Sampling and Analysis Methods

- a. The Permittee performs turbidity analysis with a calibrated turbidity meter (turbidimeter) either on site or at an accredited lab. The Permittee must record the results in the site log book in nephelometric turbidity units (NTUs).
- b. The Permittee performs transparency analysis on site with a 1¾ inch diameter, 60 centimeter (cm)-long transparency tube. The Permittee will record the results in the site log book in centimeters (cm).

**Table 4 Monitoring and Reporting Requirements**

Parameter	Unit	Analytical Method	Sampling Frequency	Benchmark Value
Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs
Transparency	Cm	Manufacturer instructions, or Ecology guidance	Weekly, if discharging	33 cm

#### 5. Turbidity/Transparency Benchmark Values and Reporting Triggers

The benchmark value for turbidity is 25 NTUs. The benchmark value for transparency is 33 centimeters (cm). Note: Benchmark values do not apply to discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus; these discharges are subject to a numeric effluent limit for turbidity. Refer to Special Condition S8 for more information and follow S5.F – Noncompliance Notification for reporting requirements applicable to discharges which exceed the numeric effluent limit for turbidity.

- a. Turbidity 26 – 249 NTUs, or Transparency 32 – 7 cm:

If the discharge turbidity is 26 to 249 NTUs; or if discharge transparency is 32 to 7 cm, the Permittee must:

- i. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs, and no later than 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.
- ii. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the date the discharge exceeded the benchmark.
- iii. Document BMP implementation and maintenance in the site log book.

- b. Turbidity 250 NTUs or greater, or Transparency 6 cm or less:

If a discharge point's turbidity is 250 NTUs or greater, or if discharge transparency is less than or equal to 6 cm, the Permittee must complete the reporting and adaptive

management process described below. For discharges which are subject to a numeric effluent limit for turbidity, see S5.F – Noncompliance Notification.

- i. Within 24 hours, telephone or submit an electronic report to the applicable Ecology Region's Environmental Report Tracking System (ERTS) number (or through Ecology's Water Quality Permitting Portal [WQWebPortal] – Permit Submittals when the form is available), in accordance with Special Condition S5.A.
  - **Central Region** (Okanogan, Chelan, Douglas, Kittitas, Yakima, Klickitat, Benton): (509) 575-2490
  - **Eastern Region** (Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman): (509) 329-3400
  - **Northwest Region** (Kitsap, Snohomish, Island, King, San Juan, Skagit, Whatcom): (425) 649-7000
  - **Southwest Region** (Grays Harbor, Lewis, Mason, Thurston, Pierce, Clark, Cowlitz, Skamania, Wahkiakum, Clallam, Jefferson, Pacific): (360) 407-6300

These numbers and a link to the ERTS reporting page are also listed at the following website: <http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>.

- ii. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing 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.
- iii. Sample discharges daily until:
  - a) Turbidity is 25 NTUs (or lower); or
  - b) Transparency is 33 cm (or greater); or
  - c) The Permittee has demonstrated compliance with the water quality standard for turbidity:
    - 1) No more than 5 NTUs over background turbidity, if background is less than 50 NTUs, or
    - 2) No more than 10% over background turbidity, if background is 50 NTUs or greater; or

\*Note: background turbidity in the receiving water must be measured immediately upstream (upgradient) or outside of the area of influence of the discharge.
  - d) The discharge stops or is eliminated.
- iv. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within seven (7) days of the date the discharge exceeded the benchmark.



- v. Document BMP implementation and maintenance in the site log book.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with permit benchmarks.

#### **D. pH Sampling Requirements – Significant Concrete Work or Engineered Soils**

If construction activity results in the disturbance of 1 acre or more, *and* involves significant concrete work (significant concrete work means greater than 1000 cubic yards placed or poured concrete or recycled concrete used over the life of a project) or the use of engineered soils (soil amendments including but not limited to Portland cement-treated base [CTB], cement kiln dust [CKD], or fly ash), and stormwater from the affected area drains to surface waters of the State or to a storm sewer system that drains to surface waters of the State, the Permittee must conduct pH sampling as set forth below. Note: In addition, discharges to segments of water bodies on Washington State's 303(d) list (Category 5) for high pH are subject to a numeric effluent limit for pH; refer to Special Condition S8.

1. The Permittee must perform pH analysis on site with a calibrated pH meter, pH test kit, or wide range pH indicator paper. The Permittee must record pH sampling results in the site log book.
2. During the applicable pH monitoring period defined below, the Permittee must obtain a representative sample of stormwater and conduct pH analysis at least once per week.
  - a. For sites with significant concrete work, the Permittee must begin the pH sampling period when the concrete is first placed or poured and exposed to precipitation, and continue weekly throughout and after the concrete placement, pour and curing period, until stormwater pH is in the range of 6.5 to 8.5 (su).
  - b. For sites with recycled concrete where monitoring is required, the Permittee must begin the weekly pH sampling period when the recycled concrete is first exposed to precipitation and must continue until the recycled concrete is fully stabilized with the stormwater pH in the range of 6.5 to 8.5 (su).
  - c. For sites with engineered soils, the Permittee must begin the pH sampling period when the soil amendments are first exposed to precipitation and must continue until the area of engineered soils is fully stabilized.
3. The Permittee must sample pH in the sediment trap/pond(s) or other locations that receive stormwater runoff from the area of significant concrete work or engineered soils before the stormwater discharges to surface waters.
4. The benchmark value for pH is 8.5 standard units. Anytime sampling indicates that pH is 8.5 or greater, the Permittee must either:
  - a. Prevent the high pH water (8.5 or above) from entering storm sewer systems or surface waters of the state; *or*
  - b. If necessary, adjust or neutralize the high pH water until it is in the range of pH 6.5 to 8.5 (su) using an appropriate treatment BMP such as carbon dioxide (CO<sub>2</sub>) sparging, dry ice or food grade vinegar. The Permittee must obtain written approval from Ecology before using any form of chemical treatment other than CO<sub>2</sub> sparging, dry ice or food grade vinegar.

## S5. REPORTING AND RECORDKEEPING REQUIREMENTS

### A. High Turbidity Reporting

Anytime sampling performed in accordance with Special Condition S4.C indicates turbidity has reached the 250 NTUs or more (or transparency less than or equal to 6 cm), high turbidity reporting level, the Permittee must notify Ecology within 24 hours of analysis either by calling the applicable Ecology Region's Environmental Report Tracking System (ERTS) number by phone or by submitting an electronic ERTS report (through Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals when the form is available). See the CSWGP website for links to ERTS and the WQWebPortal. (<http://www.ecy.wa.gov/programs/wq/stormwater/construction/index.html>) Also, see phone numbers in Special Condition S4.C.5.b.i.

### B. Discharge Monitoring Reports (DMRs)

Permittees required to conduct water quality sampling in accordance with Special Conditions S4.C (Turbidity/Transparency), S4.D (pH), S8 (303[d]/TMDL sampling), and/or G12 (Additional Sampling) must submit the results to Ecology.

Permittees must submit monitoring data using Ecology's WQWebDMR web application accessed through Ecology's Water Quality Permitting Portal.

Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper copy DMR at:

Department of Ecology  
Water Quality Program - Construction Stormwater  
PO Box 47696  
Olympia, WA 98504-7696

Permittees who obtain a waiver not to use WQWebDMR must use the forms provided to them by Ecology; submittals must be mailed to the address above. Permittees must submit DMR forms to be received by Ecology within 15 days following the end of each month.

If there was no discharge during a given monitoring period, all Permittees must submit a DMR as required with "no discharge" entered in place of the monitoring results. DMRs are required for the full duration of permit coverage (from the first full month following the effective date of permit coverage up until Ecology has approved termination of the coverage). For more information, contact Ecology staff using information provided at the following website: [www.ecy.wa.gov/programs/wq/permits/paris/contacts.html](http://www.ecy.wa.gov/programs/wq/permits/paris/contacts.html).

### C. Records Retention

The Permittee must retain records of all monitoring information (site log book, sampling results, inspection reports/checklists, etc.), Stormwater Pollution Prevention Plan, copy of the permit coverage letter (including Transfer of Coverage documentation) and any other documentation of compliance with permit requirements for the entire life of the construction project and for a minimum of five (5) years following the termination of permit coverage. Such information must include all calibration and maintenance records, and records of all data used to complete the application for this permit. This period of retention must be extended during

the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by Ecology.

#### **D. Recording Results**

For each measurement or sample taken, the Permittee must record the following information:

1. Date, place, method, and time of sampling or measurement.
2. The first and last name of the individual who performed the sampling or measurement.
3. The date(s) the analyses were performed.
4. The first and last name of the individual who performed the analyses.
5. The analytical techniques or methods used.
6. The results of all analyses.

#### **E. Additional Monitoring by the Permittee**

If the Permittee samples or monitors any pollutant more frequently than required by this permit using test procedures specified by Special Condition S4 of this permit, the sampling results for this monitoring must be included in the calculation and reporting of the data submitted in the Permittee's DMR.

#### **F. Noncompliance Notification**

In the event the Permittee is unable to comply with any part of the terms and conditions of this permit, and the resulting noncompliance may cause a threat to human health or the environment (such as but not limited to spills or fuels or other materials, catastrophic pond or slope failure, and discharges that violate water quality standards), or exceed numeric effluent limitations (see S8 – Discharges to 303(d) or TMDL Waterbodies), the Permittee must, upon becoming aware of the circumstance:

1. Notify Ecology within 24 hours of the failure to comply by calling the applicable Regional office ERTS phone number (refer to Special Condition S4.C.5.b.i, or go to <https://ecology.wa.gov/About-us/Get-involved/Report-an-environmental-issue> to find contact information for the regional offices.)
2. Immediately take action to prevent the discharge/pollution, or otherwise stop or correct the noncompliance, and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to Ecology within five (5) days of becoming aware of the violation (See S5.F.3, below, for details on submitting results in a report).
3. Submit a detailed written report to Ecology within five (5) days of the time the Permittee becomes aware of the circumstances, unless requested earlier by Ecology. The report must be submitted using Ecology's Water Quality Permitting Portal (WQWebPortal) – Permit Submittals, unless a waiver from electronic reporting has been granted according to S5.B. The report must contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Permittee must report any unanticipated bypass and/or upset that exceeds any effluent limit in the permit in accordance with the 24-hour reporting requirement contained in 40 C.F.R. 122.41(l)(6).

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply. Upon request of the Permittee, Ecology may waive the requirement for a written report on a case-by-case basis, if the immediate notification is received by Ecology within 24 hours.

#### **G. Access to Plans and Records**

1. The Permittee must retain the following permit documentation (plans and records) on site, or within reasonable access to the site, for use by the operator or for on-site review by Ecology or the local jurisdiction:
  - a. General Permit
  - b. Permit Coverage Letter
  - c. Stormwater Pollution Prevention Plan (SWPPP)
  - d. Site Log Book
  - e. Erosivity Waiver (if applicable)
2. The Permittee must address written requests for plans and records listed above (Special Condition S5.G.1) as follows:
  - a. The Permittee must provide a copy of plans and records to Ecology within 14 days of receipt of a written request from Ecology.
  - b. The Permittee must provide a copy of plans and records to the public when requested in writing. Upon receiving a written request from the public for the Permittee's plans and records, the Permittee must either:
    - i. Provide a copy of the plans and records to the requester within 14 days of a receipt of the written request; *or*
    - ii. Notify the requester within 10 days of receipt of the written request of the location and times within normal business hours when the plans and records may be viewed; and provide access to the plans and records within 14 days of receipt of the written request; *or*

Within 14 days of receipt of the written request, the Permittee may submit a copy of the plans and records to Ecology for viewing and/or copying by the requester at an Ecology office, or a mutually agreed location. If plans and records are viewed and/or copied at a location other than at an Ecology office, the Permittee will provide reasonable access to copying services for which a reasonable fee may be charged. The Permittee must notify the requester within 10 days of receipt of the request where the plans and records may be viewed and/or copied.

## S6. PERMIT FEES

The Permittee must pay permit fees assessed by Ecology. Fees for stormwater discharges covered under this permit are established by Chapter 173-224 WAC. Ecology continues to assess permit fees until the permit is terminated in accordance with Special Condition S10 or revoked in accordance with General Condition G5.

## S7. SOLID AND LIQUID WASTE DISPOSAL

The Permittee must handle and dispose of solid and liquid wastes generated by construction activity, such as demolition debris, construction materials, contaminated materials, and waste materials from maintenance activities, including liquids and solids from cleaning catch basins and other stormwater facilities, in accordance with:

- A. Special Condition S3, Compliance with Standards.
- B. WAC 173-216-110.
- C. Other applicable regulations.

## S8. DISCHARGES TO 303(d) OR TMDL WATERBODIES

### A. Sampling and Numeric Effluent Limits For Certain Discharges to 303(d)-Listed Water Bodies

1. Permittees who discharge to segments of water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH, or phosphorus, must conduct water quality sampling according to the requirements of this section, and Special Conditions S4.C.2.b-f and S4.C.3.b-d, and must comply with the applicable numeric effluent limitations in S8.C and S8.D.
2. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current listing by Ecology of impaired waters (Category 5) that exists on January 1, 2021, or the date when the operator's complete permit application is received by Ecology, whichever is later.

### B. Limits on Coverage for New Discharges to TMDL or 303(d)-Listed Waters

Construction sites that discharge to a TMDL or 303(d)-listed waterbody are not eligible for coverage under this permit *unless* the operator:

1. Prevents exposing stormwater to pollutants for which the waterbody is impaired, and retains documentation in the SWPPP that details procedures taken to prevent exposure on site; *or*
2. Documents that the pollutants for which the waterbody is impaired are not present at the site, and retains documentation of this finding within the SWPPP; *or*
3. Provides Ecology with data indicating the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retains such data on site with the SWPPP. The operator must provide data and other technical information to Ecology that sufficiently demonstrate:
  - a. For discharges to waters without an EPA-approved or -established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; *or*
  - b. For discharges to waters with an EPA-approved or -established TMDL, that there is sufficient remaining wasteload allocation in the TMDL to allow construction stormwater discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

Operators of construction sites are eligible for coverage under this permit only after Ecology makes an affirmative determination that the *discharge will not cause or contribute to the existing impairment or exceed the TMDL*.

**C. Sampling and Numeric Effluent Limits for Discharges to Water Bodies on the 303(d) List for Turbidity, Fine Sediment, or Phosphorus**

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for turbidity, fine sediment, or phosphorus must conduct turbidity sampling in accordance with Special Condition S4.C.2 and comply with either of the numeric effluent limits noted in Table 5 below.
2. As an alternative to the 25 NTUs effluent limit noted in Table 5 below (applied at the point where stormwater [or authorized non-stormwater] is discharged off-site), Permittees may choose to comply with the surface water quality standard for turbidity. The standard is: no more than 5 NTUs over background turbidity when the background turbidity is 50 NTUs or less, or no more than a 10% increase in turbidity when the background turbidity is more than 50 NTUs. In order to use the water quality standard requirement, the sampling must take place at the following locations:
  - a. Background turbidity in the 303(d)-listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.
  - b. Turbidity at the point of discharge into the 303(d)-listed receiving water, inside the area of influence of the discharge.
3. Discharges that exceed the numeric effluent limit for turbidity constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit must sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

**Table 5 Turbidity, Fine Sediment & Phosphorus Sampling and Limits for 303(d)-Listed Waters**

Parameter identified in 303(d) listing	Parameter Sampled	Unit	Analytical Method	Sampling Frequency	Numeric Effluent Limit <sup>1</sup>
<ul style="list-style-type: none"> <li>Turbidity</li> <li>Fine Sediment</li> <li>Phosphorus</li> </ul>	Turbidity	NTU	SM2130	Weekly, if discharging	25 NTUs, at the point where stormwater is discharged from the site; <b>OR</b> In compliance with the surface water quality standard for turbidity (S8.C.2.a)

<sup>1</sup> Permittees subject to a numeric effluent limit for turbidity may, at their discretion, choose either numeric effluent limitation based on site-specific considerations including, but not limited to, safety, access and convenience.

#### **D. Discharges to Water Bodies on the 303(d) List for High pH**

1. Permittees who discharge to segments of water bodies on the 303(d) list (Category 5) for high pH must conduct pH sampling in accordance with the table below, and comply with the numeric effluent limit of pH 6.5 to 8.5 su (Table 6).

**Table 6 pH Sampling and Limits for 303(d)-Listed Waters**

Parameter identified in 303(d) listing	Parameter Sampled/Units	Analytical Method	Sampling Frequency	Numeric Effluent Limit
High pH	pH /Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5 su

2. At the Permittee's discretion, compliance with the limit shall be assessed at one of the following locations:
  - a. Directly in the 303(d)-listed waterbody segment, inside the immediate area of influence of the discharge; *or*
  - b. Alternatively, the Permittee may measure pH at the point where the discharge leaves the construction site, rather than in the receiving water.
3. Discharges that exceed the numeric effluent limit for pH (outside the range of 6.5 – 8.5 su) constitute a violation of this permit.
4. Permittees whose discharges exceed the numeric effluent limit must sample discharges daily until the violation is corrected and comply with the non-compliance notification requirements in Special Condition S5.F.

#### **E. Sampling and Limits for Sites Discharging to Waters Covered by a TMDL or another Pollution Control Plan**

1. Discharges to a waterbody that is subject to a Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus must be consistent with the TMDL. Refer to <http://www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html> for more information on TMDLs.
  - a. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges must be consistent with any specific waste load allocations or requirements established by the applicable TMDL.
    - i. The Permittee must sample discharges weekly, unless otherwise specified by the TMDL, to evaluate compliance with the specific waste load allocations or requirements.
    - ii. Analytical methods used to meet the monitoring requirements must conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136.
    - iii. Turbidity and pH methods need not be accredited or registered unless conducted at a laboratory which must otherwise be accredited or registered.
  - b. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but has not identified specific requirements, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
  - c. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with Special Conditions S4 (Monitoring) and S9 (SWPPPs) will constitute compliance with the approved TMDL.
  - d. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

## S9. STORMWATER POLLUTION PREVENTION PLAN

The Permittee must prepare and properly implement an adequate Stormwater Pollution Prevention Plan (SWPPP) for construction activity in accordance with the requirements of this permit beginning with initial soil disturbance and until final stabilization.

### **A. The Permittee's SWPPP must meet the following objectives:**

1. To identify best management practices (BMPs) which prevent erosion and sedimentation, and to reduce, eliminate or prevent stormwater contamination and water pollution from construction activity.
2. To prevent violations of surface water quality, groundwater quality, or sediment management standards.
3. To control peak volumetric flow rates and velocities of stormwater discharges.



## **B. General Requirements**

1. The SWPPP must include a narrative and drawings. All BMPs must be clearly referenced in the narrative and marked on the drawings. The SWPPP narrative must include documentation to explain and justify the pollution prevention decisions made for the project. Documentation must include:
  - a. Information about existing site conditions (topography, drainage, soils, vegetation, etc.).
  - b. Potential erosion problem areas.
  - c. The 13 elements of a SWPPP in Special Condition S9.D.1-13, including BMPs used to address each element.
  - d. Construction phasing/sequence and general BMP implementation schedule.
  - e. The actions to be taken if BMP performance goals are not achieved—for example, a contingency plan for additional treatment and/or storage of stormwater that would violate the water quality standards if discharged.
  - f. Engineering calculations for ponds, treatment systems, and any other designed structures. When a treatment system requires engineering calculations, these calculations must be included in the SWPPP. Engineering calculations do not need to be included in the SWPPP for treatment systems that do not require such calculations.
2. The Permittee must modify the SWPPP if, during inspections or investigations conducted by the owner/operator, or the applicable local or state regulatory authority, it is determined that the SWPPP is, or would be, ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the site. The Permittee must then:
  - a. Review the SWPPP for compliance with Special Condition S9 and make appropriate revisions within 7 days of the inspection or investigation.
  - b. Immediately begin the process to fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, addressing the problems no later than 10 days from the inspection or investigation. If installation of necessary treatment BMPs is not feasible within 10 days, Ecology may approve additional time when an extension is requested by a Permittee within the initial 10-day response period.
  - c. Document BMP implementation and maintenance in the site log book.

The Permittee must modify the SWPPP whenever 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.

## **C. Stormwater Best Management Practices (BMPs)**

BMPs must be consistent with:

1. *Stormwater Management Manual for Western Washington* (most current approved edition at the time this permit was issued), for sites west of the crest of the Cascade Mountains; *or*

2. *Stormwater Management Manual for Eastern Washington* (most current approved edition at the time this permit was issued), for sites east of the crest of the Cascade Mountains; *or*
3. Revisions to the manuals listed in Special Condition S9.C.1 & 2, or other stormwater management guidance documents or manuals which provide an equivalent level of pollution prevention, that are approved by Ecology and incorporated into this permit in accordance with the permit modification requirements of WAC 173-226-230; *or*
4. Documentation in the SWPPP that the BMPs selected provide an equivalent level of pollution prevention, compared to the applicable stormwater management manuals, including:
  - a. The technical basis for the selection of all stormwater BMPs (scientific, technical studies, and/or modeling) that support the performance claims for the BMPs being selected.
  - b. An assessment of how the selected BMP will satisfy AKART requirements and the applicable federal technology-based treatment requirements under 40 CFR part 125.3.

#### **D. SWPPP – Narrative Contents and Requirements**

The Permittee must include each of the 13 elements below in Special Condition S9.D.1-13 in the narrative of the SWPPP and implement them unless site conditions render the element unnecessary and the exemption from that element is clearly justified in the SWPPP.

1. Preserve Vegetation/Mark Clearing Limits
  - a. Before beginning land-disturbing activities, including clearing and grading, clearly mark all clearing limits, sensitive areas and their buffers, and trees that are to be preserved within the construction area.
  - b. Retain the duff layer, native topsoil, and natural vegetation in an undisturbed state to the maximum degree practicable.
2. Establish Construction Access
  - a. Limit construction vehicle access and exit to one route, if possible.
  - b. Stabilize access points with a pad of quarry spalls, crushed rock, or other equivalent BMPs, to minimize tracking sediment onto roads.
  - c. Locate wheel wash or tire baths on site, if the stabilized construction entrance is not effective in preventing tracking sediment onto roads.
  - d. If sediment is tracked off site, clean the affected roadway thoroughly at the end of each day, or more frequently as necessary (for example, during wet weather). Remove sediment from roads by shoveling, sweeping, or pickup and transport of the sediment to a controlled sediment disposal area.
  - e. Conduct street washing only after sediment removal in accordance with Special Condition S9.D.2.d.
  - f. Control street wash wastewater by pumping back on site or otherwise preventing it from discharging into systems tributary to waters of the State.

### 3. Control Flow Rates

- a. Protect properties and waterways downstream of construction sites from erosion and the associated discharge of turbid waters due to increases in the velocity and peak volumetric flow rate of stormwater runoff from the project site, as required by local plan approval authority.
- b. Where necessary to comply with Special Condition S9.D.3.a, construct stormwater infiltration or detention BMPs as one of the first steps in grading. Assure that detention BMPs function properly before constructing site improvements (for example, impervious surfaces).
- c. If permanent infiltration ponds are used for flow control during construction, protect these facilities from sedimentation during the construction phase.

### 4. Install Sediment Controls

The Permittee must design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, the Permittee must:

- a. Construct sediment control BMPs (sediment ponds, traps, filters, infiltration facilities, etc.) as one of the first steps in grading. These BMPs must be functional before other land disturbing activities take place.
- b. Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site.
- c. Direct stormwater runoff from disturbed areas through a sediment pond or other appropriate sediment removal BMP, before the runoff leaves a construction site or before discharge to an infiltration facility. Runoff from fully stabilized areas may be discharged without a sediment removal BMP, but must meet the flow control performance standard of Special Condition S9.D.3.a.
- d. Locate BMPs intended to trap sediment on site in a manner to avoid interference with the movement of juvenile salmonids attempting to enter off-channel areas or drainages.
- e. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible.
- f. Where feasible, design outlet structures that withdraw impounded stormwater from the surface to avoid discharging sediment that is still suspended lower in the water column.

### 5. Stabilize Soils

- a. The Permittee must stabilize exposed and unworked soils by application of effective BMPs that prevent erosion. Applicable BMPs include, but are not limited to: temporary and permanent seeding, sodding, mulching, plastic covering, erosion

control fabrics and matting, soil application of polyacrylamide (PAM), the early application of gravel base on areas to be paved, and dust control.

- b. The Permittee must control stormwater volume and velocity within the site to minimize soil erosion.
- c. The Permittee must control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion.
- d. Depending on the geographic location of the project, the Permittee must not allow soils to remain exposed and unworked for more than the time periods set forth below to prevent erosion.

**West of the Cascade Mountains Crest**

During the dry season (May 1 - September 30): 7 days

During the wet season (October 1 - April 30): 2 days

**East of the Cascade Mountains Crest, except for Central Basin\***

During the dry season (July 1 - September 30): 10 days

During the wet season (October 1 - June 30): 5 days

**The Central Basin\*, East of the Cascade Mountains Crest**

During the dry Season (July 1 - September 30): 30 days

During the wet season (October 1 - June 30): 15 days

**\*Note: The Central Basin** is defined as the portions of Eastern Washington with mean annual precipitation of less than 12 inches.

- e. The Permittee must stabilize soils at the end of the shift before a holiday or weekend if needed based on the weather forecast.
- f. The Permittee must stabilize soil stockpiles from erosion, protected with sediment trapping measures, and where possible, be located away from storm drain inlets, waterways, and drainage channels.
- g. The Permittee must minimize the amount of soil exposed during construction activity.
- h. The Permittee must minimize the disturbance of steep slopes.
- i. The Permittee must minimize soil compaction and, unless infeasible, preserve topsoil.

**6. Protect Slopes**

- a. The Permittee must design and construct cut-and-fill slopes in a manner to minimize erosion. Applicable practices include, but are not limited to, reducing continuous length of slope with terracing and diversions, reducing slope steepness, and roughening slope surfaces (for example, track walking).
- b. The Permittee must divert off-site stormwater (run-on) or groundwater away from slopes and disturbed areas with interceptor dikes, pipes, and/or swales. Off-site stormwater should be managed separately from stormwater generated on the site.
- c. At the top of slopes, collect drainage in pipe slope drains or protected channels to prevent erosion.

- i. West of the Cascade Mountains Crest: Temporary pipe slope drains must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate predicted by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the Western Washington Hydrology Model (WWHM) to predict flows, bare soil areas should be modeled as "landscaped area."
  - ii. East of the Cascade Mountains Crest: Temporary pipe slope drains must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
- d. Place excavated material on the uphill side of trenches, consistent with safety and space considerations.
- e. Place check dams at regular intervals within constructed channels that are cut down a slope.
- 7. Protect Drain Inlets
  - a. Protect all storm drain inlets made operable during construction so that stormwater runoff does not enter the conveyance system without first being filtered or treated to remove sediment.
  - b. Clean or remove and replace inlet protection devices when sediment has filled one-third of the available storage (unless a different standard is specified by the product manufacturer).
- 8. Stabilize Channels and Outlets
  - a. Design, construct and stabilize all on-site conveyance channels to prevent erosion from the following expected peak flows:
    - i. West of the Cascade Mountains Crest: Channels must handle the peak 10-minute flow rate from a Type 1A, 10-year, 24-hour frequency storm for the developed condition. Alternatively, the 10-year, 1-hour flow rate indicated by an approved continuous runoff model, increased by a factor of 1.6, may be used. The hydrologic analysis must use the existing land cover condition for predicting flow rates from tributary areas outside the project limits. For tributary areas on the project site, the analysis must use the temporary or permanent project land cover condition, whichever will produce the highest flow rates. If using the WWHM to predict flows, bare soil areas should be modeled as "landscaped area."
    - ii. East of the Cascade Mountains Crest: Channels must handle the expected peak flow rate from a 6-month, 3-hour storm for the developed condition, referred to as the short duration storm.
  - b. Provide stabilization, including armoring material, adequate to prevent erosion of outlets, adjacent stream banks, slopes, and downstream reaches at the outlets of all conveyance systems.

## 9. Control Pollutants

Design, install, implement and maintain effective pollution prevention measures to minimize the discharge of pollutants. The Permittee must:

- a. Handle and dispose of all pollutants, including waste materials and demolition debris that occur on site in a manner that does not cause contamination of stormwater.
- b. Provide cover, containment, and protection from vandalism for all chemicals, liquid products, petroleum products, and other materials that have the potential to pose a threat to human health or the environment. Minimize storage of hazardous materials on-site. Safety Data Sheets (SDS) should be supplied for all materials stored. Chemicals should be kept in their original labeled containers. On-site fueling tanks must include secondary containment. Secondary containment means placing tanks or containers within an impervious structure capable of containing 110% of the volume of the largest tank within the containment structure. Double-walled tanks do not require additional secondary containment.
- c. Conduct maintenance, fueling, and repair of heavy equipment and vehicles using spill prevention and control measures. Clean contaminated surfaces immediately following any spill incident.
- d. Discharge wheel wash or tire bath wastewater to a separate on-site treatment system that prevents discharge to surface water, such as closed-loop recirculation or upland land application, or to the sanitary sewer with local sewer district approval.
- e. Apply fertilizers and pesticides in a manner and at application rates that will not result in loss of chemical to stormwater runoff. Follow manufacturers' label requirements for application rates and procedures.
- f. Use BMPs to prevent contamination of stormwater runoff by pH-modifying sources. The sources for this contamination include, but are not limited to: bulk cement, cement kiln dust, fly ash, new concrete washing and curing waters, recycled concrete stockpiles, waste streams generated from concrete grinding and sawing, exposed aggregate processes, dewatering concrete vaults, concrete pumping and mixer washout waters. (Also refer to the definition for "concrete wastewater" in Appendix A – Definitions.)
- g. Adjust the pH of stormwater or authorized non-stormwater if necessary to prevent an exceedance of groundwater and/or surface water quality standards.
- h. Assure that washout of concrete trucks is performed off-site or in designated concrete washout areas only. Do not wash out concrete truck drums onto the ground, or into storm drains, open ditches, streets, or streams. Washout of small concrete handling equipment may be disposed of in a formed area awaiting concrete where it will not contaminate surface or groundwater. Do not dump excess concrete on site, except in designated concrete washout areas. Concrete spillage or concrete discharge directly to groundwater or surface waters of the State is

prohibited. At no time shall concrete be washed off into the footprint of an area where an infiltration BMP will be installed.

- i. Obtain written approval from Ecology before using any chemical treatment, with the exception of CO<sub>2</sub>, dry ice or food grade vinegar, to adjust pH.
- j. Uncontaminated water from water-only based shaft drilling for construction of building, road, and bridge foundations may be infiltrated provided the wastewater is managed in a way that prohibits discharge to surface waters. Prior to infiltration, water from water-only based shaft drilling that comes into contact with curing concrete must be neutralized until pH is in the range of 6.5 to 8.5 (su).

#### 10. Control Dewatering

- a. Permittees must discharge foundation, vault, and trench dewatering water, which have characteristics similar to stormwater runoff at the site, in conjunction with BMPs to reduce sedimentation before discharge to a sediment trap or sediment pond.
- b. Permittees may discharge clean, non-turbid dewatering water, such as well-point groundwater, to systems tributary to, or directly into surface waters of the State, as specified in Special Condition S9.D.8, provided the dewatering flow does not cause erosion or flooding of receiving waters. Do not route clean dewatering water through stormwater sediment ponds. Note that "surface waters of the State" may exist on a construction site as well as off site; for example, a creek running through a site.
- c. Other dewatering treatment or disposal options may include:
  - i. Infiltration
  - ii. Transport off site in a vehicle, such as a vacuum flush truck, for legal disposal in a manner that does not pollute state waters.
  - iii. Ecology-approved on-site chemical treatment or other suitable treatment technologies (See S9.D.9.i, regarding chemical treatment written approval).
  - iv. Sanitary or combined sewer discharge with local sewer district approval, if there is no other option.
  - v. Use of a sedimentation bag with discharge to a ditch or swale for small volumes of localized dewatering.
- d. Permittees must handle highly turbid or contaminated dewatering water separately from stormwater.

#### 11. Maintain BMPs

- a. Permittees must maintain and repair all temporary and permanent erosion and sediment control BMPs as needed to assure continued performance of their intended function in accordance with BMP specifications.
- b. Permittees must remove all temporary erosion and sediment control BMPs within 30 days after achieving final site stabilization or after the temporary BMPs are no longer needed.

## 12. Manage the Project

- a. Phase development projects to the maximum degree practicable and take into account seasonal work limitations.
- b. Inspect, maintain and repair all BMPs as needed to assure continued performance of their intended function. Conduct site inspections and monitoring in accordance with Special Condition S4.
- c. Maintain, update, and implement the SWPPP in accordance with Special Conditions S3, S4, and S9.

## 13. Protect Low Impact Development (LID) BMPs

The primary purpose of on-site LID Stormwater Management is to reduce the disruption of the natural site hydrology through infiltration. LID BMPs are permanent facilities.

- a. Permittees must protect all LID BMPs (including, but not limited to, Bioretention and Rain Garden facilities) from sedimentation through installation and maintenance of erosion and sediment control BMPs on portions of the site that drain into the Bioretention and/or Rain Garden facilities. Restore the BMPs to their fully functioning condition if they accumulate sediment during construction. Restoring the facility must include removal of sediment and any sediment-laden bioretention/ rain garden soils, and replacing the removed soils with soils meeting the design specification.
- b. Permittees must maintain the infiltration capabilities of LID BMPs by protecting against compaction by construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment.
- c. Permittees must control erosion and avoid introducing sediment from surrounding land uses onto permeable pavements. Do not allow muddy construction equipment on the base material or pavement. Do not allow sediment-laden runoff onto permeable pavements or base materials.
- d. Permittees must clean permeable pavements fouled with sediments or no longer passing an initial infiltration test using local stormwater manual methodology or the manufacturer's procedures.
- e. Permittees must keep all heavy equipment off existing soils under LID BMPs that have been excavated to final grade to retain the infiltration rate of the soils.

### **E. SWPPP – Map Contents and Requirements**

The Permittee's SWPPP must also include a vicinity map or general location map (for example, a USGS quadrangle map, a portion of a county or city map, or other appropriate map) with enough detail to identify the location of the construction site and receiving waters within one mile of the site.

The SWPPP must also include a legible site map (or maps) showing the entire construction site. The following features must be identified, unless not applicable due to site conditions.

1. The direction of north, property lines, and existing structures and roads.
2. Cut and fill slopes indicating the top and bottom of slope catch lines.



3. Approximate slopes, contours, and direction of stormwater flow before and after major grading activities.
4. Areas of soil disturbance and areas that will not be disturbed.
5. Locations of structural and nonstructural controls (BMPs) identified in the SWPPP.
6. Locations of off-site material, stockpiles, waste storage, borrow areas, and vehicle/equipment storage areas.
7. Locations of all surface water bodies, including wetlands.
8. Locations where stormwater or non-stormwater discharges off-site and/or to a surface waterbody, including wetlands.
9. Location of water quality sampling station(s), if sampling is required by state or local permitting authority.
10. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply.
11. Location or proposed location of LID facilities.

## **S10. NOTICE OF TERMINATION**

Partial terminations of permit coverage are not authorized.

**A.** The site is eligible for termination of coverage when it has met any of the following conditions:

1. The site has undergone final stabilization, the Permittee has removed all temporary BMPs (except biodegradable BMPs clearly manufactured with the intention for the material to be left in place and not interfere with maintenance or land use), and all stormwater discharges associated with construction activity have been eliminated; *or*
2. All portions of the site that have not undergone final stabilization per Special Condition S10.A.1 have been sold and/or transferred (per Special Condition S2.A), and the Permittee no longer has operational control of the construction activity; *or*
3. For residential construction only, the Permittee has completed temporary stabilization and the homeowners have taken possession of the residences.

**B.** When the site is eligible for termination, the Permittee must submit a complete and accurate Notice of Termination (NOT) form, signed in accordance with General Condition G2, to:

Department of Ecology  
Water Quality Program - Construction Stormwater  
PO Box 47696  
Olympia, WA 98504-7696

When an electronic termination form is available, the Permittee may choose to submit a complete and accurate Notice of Termination (NOT) form through the Water Quality Permitting Portal rather than mailing a hardcopy as noted above.

The termination is effective on the 31st calendar day following the date Ecology receives a complete NOT form, unless Ecology notifies the Permittee that termination request is denied because the Permittee has not met the eligibility requirements in Special Condition S10.A.

Permittees are required to comply with all conditions and effluent limitations in the permit until the permit has been terminated.

Permittees transferring the property to a new property owner or operator/Permittee are required to complete and submit the Notice of Transfer form to Ecology, but are not required to submit a Notice of Termination form for this type of transaction.

# GENERAL CONDITIONS

## G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this general permit must be consistent with the terms and conditions of this general permit. Any discharge of any pollutant more frequent than or at a level in excess of that identified and authorized by the general permit must constitute a violation of the terms and conditions of this permit.

## G2. SIGNATORY REQUIREMENTS

- A. All permit applications must bear a certification of correctness to be signed:
  - 1. In the case of corporations, by a responsible corporate officer.
  - 2. In the case of a partnership, by a general partner of a partnership.
  - 3. In the case of sole proprietorship, by the proprietor.
  - 4. In the case of a municipal, state, or other public facility, by either a principal executive officer or ranking elected official.
- B. All reports required by this permit and other information requested by Ecology (including NOIs, NOTs, and Transfer of Coverage forms) must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by a person described above and submitted to Ecology.
  - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.
- C. Changes to authorization. If an authorization under paragraph G2.B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph G2.B.2 above must be submitted to Ecology prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section must make the following certification:

*I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

### **G3. RIGHT OF INSPECTION AND ENTRY**

The Permittee must allow an authorized representative of Ecology, upon the presentation of credentials and such other documents as may be required by law:

- A.** To enter upon the premises where a discharge is located or where any records are kept under the terms and conditions of this permit.
- B.** To have access to and copy, at reasonable times and at reasonable cost, any records required to be kept under the terms and conditions of this permit.
- C.** To inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, methods, or operations regulated or required under this permit.
- D.** To sample or monitor, at reasonable times, any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

### **G4. GENERAL PERMIT MODIFICATION AND REVOCATION**

This permit may be modified, revoked and reissued, or terminated in accordance with the provisions of Chapter 173-226 WAC. Grounds for modification, revocation and reissuance, or termination include, but are not limited to, the following:

- A.** When a change occurs in the technology or practices for control or abatement of pollutants applicable to the category of dischargers covered under this permit.
- B.** When effluent limitation guidelines or standards are promulgated pursuant to the CWA or Chapter 90.48 RCW, for the category of dischargers covered under this permit.
- C.** When a water quality management plan containing requirements applicable to the category of dischargers covered under this permit is approved, or
- D.** When information is obtained that indicates cumulative effects on the environment from dischargers covered under this permit are unacceptable.

### **G5. REVOCATION OF COVERAGE UNDER THE PERMIT**

Pursuant to Chapter 43.21B RCW and Chapter 173-226 WAC, the Director may terminate coverage for any discharger under this permit for cause. Cases where coverage may be terminated include, but are not limited to, the following:

- A.** Violation of any term or condition of this permit.
- B.** Obtaining coverage under this permit by misrepresentation or failure to disclose fully all relevant facts.
- C.** A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge.
- D.** Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- E.** A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations.
- F.** Nonpayment of permit fees or penalties assessed pursuant to RCW 90.48.465 and Chapter 173-224 WAC.

- G.** Failure of the Permittee to satisfy the public notice requirements of WAC 173-226-130(5), when applicable.

The Director may require any discharger under this permit to apply for and obtain coverage under an individual permit or another more specific general permit. Permittees who have their coverage revoked for cause according to WAC 173-226-240 may request temporary coverage under this permit during the time an individual permit is being developed, provided the request is made within ninety (90) days from the time of revocation and is submitted along with a complete individual permit application form.

## **G6. REPORTING A CAUSE FOR MODIFICATION**

The Permittee must submit a new application, or a supplement to the previous application, whenever a material change to the construction activity or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application must be submitted at least sixty (60) days prior to any proposed changes. Filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

## **G7. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit will be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

## **G8. DUTY TO REAPPLY**

The Permittee must apply for permit renewal at least 180 days prior to the specified expiration date of this permit. The Permittee must reapply using the electronic application form (NOI) available on Ecology's website. Permittees unable to submit electronically (for example, those who do not have an internet connection) must contact Ecology to request a waiver and obtain instructions on how to obtain a paper NOI.

Department of Ecology  
Water Quality Program - Construction Stormwater  
PO Box 47696  
Olympia, WA 98504-7696

## **G9. REMOVED SUBSTANCE**

The Permittee must not re-suspend or reintroduce collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of stormwater to the final effluent stream for discharge to state waters.

## **G10. DUTY TO PROVIDE INFORMATION**

The Permittee must submit to Ecology, within a reasonable time, all information that Ecology may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee must also submit to Ecology, upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

## **G11. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

## **G12. ADDITIONAL MONITORING**

Ecology may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

## **G13. PENALTIES FOR VIOLATING PERMIT CONDITIONS**

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars (\$10,000) and costs of prosecution, or by imprisonment at the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars (\$10,000) for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

## **G14. UPSET**

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Special Condition S5.F, and; 4) the Permittee complied with any remedial measures required under this permit.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

## **G15. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

## **G16. DUTY TO COMPLY**

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

## **G17. TOXIC POLLUTANTS**

The Permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

## **G18. PENALTIES FOR TAMPERING**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than \$20,000 per day of violation, or imprisonment of not more than four (4) years, or both.

## **G19. REPORTING PLANNED CHANGES**

The Permittee must, as soon as possible, give notice to Ecology of planned physical alterations, modifications or additions to the permitted construction activity. The Permittee should be aware that, depending on the nature and size of the changes to the original permit, a new public notice and other permit process requirements may be required. Changes in activities that require reporting to Ecology include those that will result in:

- A.** The permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b).
- B.** A significant change in the nature or an increase in quantity of pollutants discharged, including but not limited to: a 20% or greater increase in acreage disturbed by construction activity.
- C.** A change in or addition of surface water(s) receiving stormwater or non-stormwater from the construction activity.
- D.** A change in the construction plans and/or activity that affects the Permittee's monitoring requirements in Special Condition S4.

Following such notice, permit coverage may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

## **G20. REPORTING OTHER INFORMATION**

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to Ecology, it must promptly submit such facts or information.

## **G21. REPORTING ANTICIPATED NON-COMPLIANCE**

The Permittee must give advance notice to Ecology by submission of a new application or supplement thereto at least forty-five (45) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of

operation and degradation of effluent quality, must be scheduled during non-critical water quality periods and carried out in a manner approved by Ecology.

## **G22. REQUESTS TO BE EXCLUDED FROM COVERAGE UNDER THE PERMIT**

Any discharger authorized by this permit may request to be excluded from coverage under the general permit by applying for an individual permit. The discharger must submit to the Director an application as described in WAC 173-220-040 or WAC 173-216-070, whichever is applicable, with reasons supporting the request. These reasons will fully document how an individual permit will apply to the applicant in a way that the general permit cannot. Ecology may make specific requests for information to support the request. The Director will either issue an individual permit or deny the request with a statement explaining the reason for the denial. When an individual permit is issued to a discharger otherwise subject to the construction stormwater general permit, the applicability of the construction stormwater general permit to that Permittee is automatically terminated on the effective date of the individual permit.

## **G23. APPEALS**

- A.** The terms and conditions of this general permit, as they apply to the appropriate class of dischargers, are subject to appeal by any person within 30 days of issuance of this general permit, in accordance with Chapter 43.21B RCW, and Chapter 173-226 WAC.
- B.** The terms and conditions of this general permit, as they apply to an individual discharger, are appealable in accordance with Chapter 43.21B RCW within 30 days of the effective date of coverage of that discharger. Consideration of an appeal of general permit coverage of an individual discharger is limited to the general permit's applicability or nonapplicability to that individual discharger.
- C.** The appeal of general permit coverage of an individual discharger does not affect any other dischargers covered under this general permit. If the terms and conditions of this general permit are found to be inapplicable to any individual discharger(s), the matter shall be remanded to Ecology for consideration of issuance of an individual permit or permits.

## **G24. SEVERABILITY**

The provisions of this permit are severable, and if any provision of this permit, or application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

## **G25. BYPASS PROHIBITED**

### **A. Bypass Procedures**

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited for stormwater events below the design criteria for stormwater management. Ecology may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, 3 or 4) is applicable.

- 1. Bypass of stormwater is consistent with the design criteria and part of an approved management practice in the applicable stormwater management manual.
- 2. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.



Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health.

3. Bypass of stormwater is unavoidable, unanticipated, and results in noncompliance of this permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
  - b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
  - c. Ecology is properly notified of the bypass as required in Special Condition S5.F of this permit.
4. A planned action that would cause bypass of stormwater and has the potential to result in noncompliance of this permit during a storm event.

The Permittee must notify Ecology at least thirty (30) days before the planned date of bypass. The notice must contain:

- a. A description of the bypass and its cause
  - b. An analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing.
  - c. A cost-effectiveness analysis of alternatives including comparative resource damage assessment.
  - d. The minimum and maximum duration of bypass under each alternative.
  - e. A recommendation as to the preferred alternative for conducting the bypass.
  - f. The projected date of bypass initiation.
  - g. A statement of compliance with SEPA.
  - h. A request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated.
  - i. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.
5. For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above must be considered during

preparation of the Stormwater Pollution Prevention Plan (SWPPP) and must be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

Ecology will consider the following before issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, Ecology will approve, conditionally approve, or deny the request. The public must be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by Ecology under RCW 90.48.120.

#### **B. Duty to Mitigate**

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

## APPENDIX A – DEFINITIONS

**AKART** is an acronym for “**All Known, Available, and Reasonable** methods of prevention, control, and Treatment.” AKART represents the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants and controlling pollution associated with a discharge.

**Applicable TMDL** means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which was completed and approved by EPA before January 1, 2021, or before the date the operator’s complete permit application is received by Ecology, whichever is later. TMDLs completed after a complete permit application is received by Ecology become applicable to the Permittee only if they are imposed through an administrative order by Ecology, or through a modification of permit coverage.

**Applicant** means an *operator* seeking coverage under this permit.

**Benchmark** means a pollutant concentration used as a permit threshold, below which a pollutant is considered unlikely to cause a water quality violation, and above which it may. When pollutant concentrations exceed benchmarks, corrective action requirements take effect. Benchmark values are not water quality standards and are not numeric effluent limitations; they are indicator values.

**Best Management Practices (BMPs)** means schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control stormwater associated with construction activity, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**Buffer** means an area designated by a local jurisdiction that is contiguous to and intended to protect a sensitive area.

**Bypass** means the intentional diversion of waste streams from any portion of a treatment facility.

**Calendar Day** A period of 24 consecutive hours starting at 12:00 midnight and ending the following 12:00 midnight.

**Calendar Week** (same as **Week**) means a period of seven consecutive days starting at 12:01 a.m. (0:01 hours) on Sunday.

**Certified Erosion and Sediment Control Lead (CESCL)** means a person who has current certification through an approved erosion and sediment control training program that meets the minimum training standards established by Ecology (See BMP C160 in the SWMM).

**Chemical Treatment** means the addition of chemicals to stormwater and/or authorized non-stormwater prior to filtration and discharge to surface waters.

**Clean Water Act (CWA)** means the Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; USC 1251 et seq.

**Combined Sewer** means a sewer which has been designed to serve as a sanitary sewer and a storm sewer, and into which inflow is allowed by local ordinance.

**Common Plan of Development or Sale** means a site where multiple separate and distinct construction activities may be taking place at different times on different schedules and/or by different contractors, but still under a single plan. Examples include: 1) phased projects and projects with multiple filings or lots, even if the separate phases or filings/lots will be constructed under separate contract or by separate owners (e.g., a development where lots are sold to separate builders); 2) a development plan that may be phased over multiple years, but is still under a consistent plan for long-term development; 3) projects in a contiguous area that may be unrelated but still under the same contract, such as construction of a building extension and a new parking lot at the same facility; and 4) linear projects such as roads, pipelines, or utilities. If the project is part of a common plan of development or sale, the disturbed area of the entire plan must be used in determining permit requirements.

**Composite Sample** means a mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increases while maintaining a constant time interval between the aliquots).

**Concrete Wastewater** means any water used in the production, pouring and/or clean-up of concrete or concrete products, and any water used to cut, grind, wash, or otherwise modify concrete or concrete products. Examples include water used for or resulting from concrete truck/mixer/pumper/tool/chute rinsing or washing, concrete saw cutting and surfacing (sawing, coring, grinding, roughening, hydro-demolition, bridge and road surfacing). When stormwater comes in contact with concrete wastewater, the resulting water is considered concrete wastewater and must be managed to prevent discharge to waters of the State, including groundwater.

**Construction Activity** means land disturbing operations including clearing, grading or excavation which disturbs the surface of the land (including off-site disturbance acreage related to construction-support activity). Such activities may include road construction, construction of residential houses, office buildings, or industrial buildings, site preparation, soil compaction, movement and stockpiling of topsoils, and demolition activity.

**Construction Support Activity** means off-site acreage that will be disturbed as a direct result of the construction project and will discharge stormwater. For example, off-site equipment staging yards, material storage areas, borrow areas, and parking areas.

**Contaminant** means any hazardous substance that does not occur naturally or occurs at greater than natural background levels. See definition of "hazardous substance" and WAC 173-340-200.

**Contaminated soil** means soil which contains contaminants, pollutants, or hazardous substances that do not occur naturally or occur at levels greater than natural background.

**Contaminated groundwater** means groundwater which contains contaminants, pollutants, or hazardous substances that do not occur naturally or occur at levels greater than natural background.

**Demonstrably Equivalent** means that the technical basis for the selection of all stormwater BMPs is documented within a SWPPP, including:

1. The method and reasons for choosing the stormwater BMPs selected.
2. The pollutant removal performance expected from the BMPs selected.

3. The technical basis supporting the performance claims for the BMPs selected, including any available data concerning field performance of the BMPs selected.
4. An assessment of how the selected BMPs will comply with state water quality standards.
5. An assessment of how the selected BMPs will satisfy both applicable federal technology-based treatment requirements and state requirements to use all known, available, and reasonable methods of prevention, control, and treatment (AKART).

**Department** means the Washington State Department of Ecology.

**Detention** means the temporary storage of stormwater to improve quality and/or to reduce the mass flow rate of discharge.

**Dewatering** means the act of pumping groundwater or stormwater away from an active construction site.

**Director** means the Director of the Washington State Department of Ecology or his/her authorized representative.

**Discharger** means an owner or operator of any facility or activity subject to regulation under Chapter 90.48 RCW or the Federal Clean Water Act.

**Domestic Wastewater** means water carrying human wastes, including kitchen, bath, and laundry wastes from residences, buildings, industrial establishments, or other places, together with such groundwater infiltration or surface waters as may be present.

**Ecology** means the Washington State Department of Ecology.

**Engineered Soils** means the use of soil amendments including, but not limited, to Portland cement treated base (CTB), cement kiln dust (CKD), or fly ash to achieve certain desirable soil characteristics.

**Equivalent BMPs** means operational, source control, treatment, or innovative BMPs which result in equal or better quality of stormwater discharge to surface water or to groundwater than BMPs selected from the SWMM.

**Erosion** means the wearing away of the land surface by running water, wind, ice, or other geological agents, including such processes as gravitational creep.

**Erosion and Sediment Control BMPs** means BMPs intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, sediment traps, and ponds. Erosion and sediment control BMPs are synonymous with stabilization and structural BMPs.

**Federal Operator** is an entity that meets the definition of "Operator" in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

**Final Stabilization** (same as **fully stabilized** or **full stabilization**) means the completion of all soil disturbing activities at the site and the establishment of permanent vegetative cover, or equivalent permanent stabilization measures (such as pavement, riprap, gabions, or geotextiles) which will prevent erosion. See the applicable Stormwater Management Manual for more information on vegetative cover expectations and equivalent permanent stabilization measures.

**Groundwater** means water in a saturated zone or stratum beneath the land surface or a surface waterbody.

**Hazardous Substance** means any dangerous or extremely hazardous waste as defined in RCW 70.105.010 (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under chapter 70.105 RCW; any hazardous sub-stance as defined in RCW 70.105.010(14) or any hazardous substance as defined by rule under chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under section 101(14) of the federal cleanup law, 42U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment. The term hazardous substance does not include any of the following when contained in an underground storage tank from which there is not a release: crude oil or any fraction thereof or petroleum, if the tank is in compliance with all applicable federal, state, and local law.

**Injection Well** means a well that is used for the subsurface emplacement of fluids. (See **Well**.)

**Jurisdiction** means a political unit such as a city, town or county; incorporated for local self-government.

**National Pollutant Discharge Elimination System (NPDES)** means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Federal Clean Water Act, for the discharge of pollutants to surface waters of the State from point sources. These permits are referred to as NPDES permits and, in Washington State, are administered by the Washington State Department of Ecology.

**Notice of Intent (NOI)** means the application for, or a request for coverage under this general permit pursuant to WAC 173-226-200.

**Notice of Termination (NOT)** means a request for termination of coverage under this general permit as specified by Special Condition S10 of this permit.

**Operator** means any party associated with a construction project that meets either of the following two criteria:

- The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
- The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

**Permittee** means individual or entity that receives notice of coverage under this general permit.

**pH** means a liquid's measure of acidity or alkalinity. A pH of 7 is defined as neutral. Large variations above or below this value are considered harmful to most aquatic life.

**pH Monitoring Period** means the time period in which the pH of stormwater runoff from a site must be tested a minimum of once every seven days to determine if stormwater pH is between 6.5 and 8.5.

**Point Source** means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, and container from which pollutants are or may be discharged to surface waters of the State. This term does not include return flows from irrigated agriculture. (See the Fact Sheet for further explanation)

**Pollutant** means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, domestic sewage sludge (biosolids), munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste. This term does not include sewage from vessels within the meaning of section 312 of the CWA, nor does it include dredged or fill material discharged in accordance with a permit issued under section 404 of the CWA.

**Pollution** means contamination or other alteration of the physical, chemical, or biological properties of waters of the State; including change in temperature, taste, color, turbidity, or odor of the waters; or such discharge of any liquid, gaseous, solid, radioactive or other substance into any waters of the State as will or is likely to create a nuisance or render such waters harmful, detrimental or injurious to the public health, safety or welfare; or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses; or to livestock, wild animals, birds, fish or other aquatic life.

**Process Wastewater** means any non-stormwater which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product. If stormwater commingles with process wastewater, the commingled water is considered process wastewater.

**Receiving Water** means the waterbody at the point of discharge. If the discharge is to a storm sewer system, either surface or subsurface, the receiving water is the waterbody to which the storm system discharges. Systems designed primarily for other purposes such as for groundwater drainage, redirecting stream natural flows, or for conveyance of irrigation water/return flows that coincidentally convey stormwater are considered the receiving water.

**Representative** means a stormwater or wastewater sample which represents the flow and characteristics of the discharge. Representative samples may be a grab sample, a time-proportionate *composite sample*, or a flow proportionate sample. Ecology's Construction Stormwater Monitoring Manual provides guidance on representative sampling.

**Responsible Corporate Officer** for the purpose of signatory authority means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

**Sanitary Sewer** means a sewer which is designed to convey domestic wastewater.

**Sediment** means the fragmented material that originates from the weathering and erosion of rocks or unconsolidated deposits, and is transported by, suspended in, or deposited by water.

**Sedimentation** means the depositing or formation of sediment.

**Sensitive Area** means a waterbody, wetland, stream, aquifer recharge area, or channel migration zone.

**SEPA** (State Environmental Policy Act) means the Washington State Law, RCW 43.21C.020, intended to prevent or eliminate damage to the environment.

**Significant Amount** means an amount of a pollutant in a discharge that is amenable to available and reasonable methods of prevention or treatment; or an amount of a pollutant that has a reasonable potential to cause a violation of surface or groundwater quality or sediment management standards.

**Significant Concrete Work** means greater than 1000 cubic yards placed or poured concrete or recycled concrete used over the life of a project.

**Significant Contributor of Pollutants** means a facility determined by Ecology to be a contributor of a significant amount(s) of a pollutant(s) to waters of the State of Washington.

**Site** means the land or water area where any "facility or activity" is physically located or conducted.

**Source Control BMPs** means physical, structural or mechanical devices or facilities that are intended to prevent pollutants from entering stormwater. A few examples of source control BMPs are erosion control practices, maintenance of stormwater facilities, constructing roofs over storage and working areas, and directing wash water and similar discharges to the sanitary sewer or a dead end sump.

**Stabilization** means the application of appropriate BMPs to prevent the erosion of soils, such as, temporary and permanent seeding, vegetative covers, mulching and matting, plastic covering and sodding. See also the definition of Erosion and Sediment Control BMPs.

**Storm Drain** means any drain which drains directly into a *storm sewer system*, usually found along roadways or in parking lots.

**Storm Sewer System** means a means a conveyance, or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains designed or used for collecting or conveying stormwater. This does not include systems which are part of a *combined sewer* or Publicly Owned Treatment Works (POTW), as defined at 40 CFR 122.2.

**Stormwater** means that portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a stormwater drainage system into a defined surface waterbody, or a constructed infiltration facility.

**Stormwater Management Manual (SWMM) or Manual** means the technical Manual published by Ecology for use by local governments that contain descriptions of and design criteria for BMPs to prevent, control, or treat pollutants in stormwater.

**Stormwater Pollution Prevention Plan (SWPPP)** means a documented plan to implement measures to identify, prevent, and control the contamination of point source discharges of stormwater.



**Surface Waters of the State** includes lakes, rivers, ponds, streams, inland waters, salt waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

**Temporary Stabilization** means the exposed ground surface has been covered with appropriate materials to provide temporary stabilization of the surface from water or wind erosion. Materials include, but are not limited to, mulch, riprap, erosion control mats or blankets and temporary cover crops. Seeding alone is not considered stabilization. Temporary stabilization is not a substitute for the more permanent “final stabilization.”

**Total Maximum Daily Load (TMDL)** means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet state water quality standards. Percentages of the total maximum daily load are allocated to the various pollutant sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. The TMDL calculations must include a "margin of safety" to ensure that the waterbody can be protected in case there are unforeseen events or unknown sources of the pollutant. The calculation must also account for seasonable variation in water quality.

**Transfer of Coverage (TOC)** means a request for transfer of coverage under this general permit as specified by Special Condition S2.A of this permit.

**Treatment BMPs** means BMPs that are intended to remove pollutants from stormwater. A few examples of treatment BMPs are detention ponds, oil/water separators, biofiltration, and constructed wetlands.

**Transparency** means a measurement of water clarity in centimeters (cm), using a 60 cm transparency tube. The transparency tube is used to estimate the relative clarity or transparency of water by noting the depth at which a black and white Secchi disc becomes visible when water is released from a value in the bottom of the tube. A transparency tube is sometimes referred to as a “turbidity tube.”

**Turbidity** means the clarity of water expressed as nephelometric turbidity units (NTUs) and measured with a calibrated turbidimeter.

**Uncontaminated** means free from any contaminant. See definition of “contaminant” and WAC 173-340-200.

**Upset** means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

**Waste Load Allocation (WLA)** means the portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality based effluent limitation (40 CFR 130.2[h]).

**Water-Only Based Shaft Drilling** is a shaft drilling process that uses water only and no additives are involved in the drilling of shafts for construction of building, road, or bridge foundations.

**Water Quality** means the chemical, physical, and biological characteristics of water, usually with respect to its suitability for a particular purpose.

**Waters of the State** includes those waters as defined as "waters of the United States" in 40 CFR Subpart 122.2 within the geographic boundaries of Washington State and "waters of the State" as defined in Chapter 90.48 RCW, which include lakes, rivers, ponds, streams, inland waters, underground waters, salt

waters, and all other surface waters and water courses within the jurisdiction of the state of Washington.

**Well** means a bored, drilled or driven shaft, or dug hole whose depth is greater than the largest surface dimension. (See **Injection Well**.)

**Wheel Wash Wastewater** means any water used in, or resulting from the operation of, a tire bath or wheel wash (BMP C106: Wheel Wash), or other structure or practice that uses water to physically remove mud and debris from vehicles leaving a construction site and prevent track-out onto roads. When stormwater comes in contact with wheel wash wastewater, the resulting water is considered wheel wash wastewater and must be managed according to Special Condition S9.D.9.

## APPENDIX B – ACRONYMS

<b>AKART</b>	All Known, Available, and Reasonable Methods of Prevention, Control, and Treatment
<b>BMP</b>	Best Management Practice
<b>CESCL</b>	Certified Erosion and Sediment Control Lead
<b>CFR</b>	Code of Federal Regulations
<b>CKD</b>	Cement Kiln Dust
<b>cm</b>	Centimeters
<b>CPD</b>	Common Plan of Development
<b>CTB</b>	Cement-Treated Base
<b>CWA</b>	Clean Water Act
<b>DMR</b>	Discharge Monitoring Report
<b>EPA</b>	Environmental Protection Agency
<b>ERTS</b>	Environmental Report Tracking System
<b>ESC</b>	Erosion and Sediment Control
<b>FR</b>	Federal Register
<b>LID</b>	Low Impact Development
<b>NOI</b>	Notice of Intent
<b>NOT</b>	Notice of Termination
<b>NPDES</b>	National Pollutant Discharge Elimination System
<b>NTU</b>	Nephelometric Turbidity Unit
<b>RCW</b>	Revised Code of Washington
<b>SEPA</b>	State Environmental Policy Act
<b>SWMM</b>	Stormwater Management Manual
<b>SWPPP</b>	Stormwater Pollution Prevention Plan
<b>TMDL</b>	Total Maximum Daily Load
<b>UIC</b>	Underground Injection Control
<b>USC</b>	United States Code
<b>USEPA</b>	United States Environmental Protection Agency
<b>WAC</b>	Washington Administrative Code
<b>WQ</b>	Water Quality
<b>WWHM</b>	Western Washington Hydrology Model

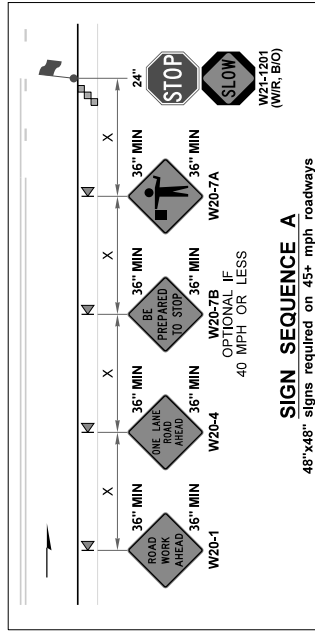
## **APPENDIX D – WSDOT TC PLANS**



9. FOR LEGEND, TABLES, AND ADDITIONAL NOTES: SEE TC420, SHEET 1.

10. WORK MAY BRIEFLY OCCUR WITHIN LANE CLOSURE ACROSS INTERSECTING ROADWAY APPROACHES BUSINESS ACCESSES OR DRIVEWAYS, MAY HOLD APPROACH OR ACCESS TRAFFIC FOR 5 MINUTES OR LESS (ENGINEER MAY ACCEPT HOLDS UP TO 10 MINUTES) WHILE RESTRICTING TURNS FROM MAINLINE. CHANNELIZATION DEVICES DELINEATING APPROACH OR ACCESS MAY BE REMOVED OR RELOCATED AS NEEDED.

11. SINGLE FLAGGER (WITH RED FLAG/RED GLOW CONE FLASHLIGHT) MAY BE ADDED TO THE INTERSECTING ROADWAY APPROACH TO HELP GUIDE ALTERNATING & TURNING TRAFFIC.



ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED (HIGHWAYS, 40 MPH OR LESS)

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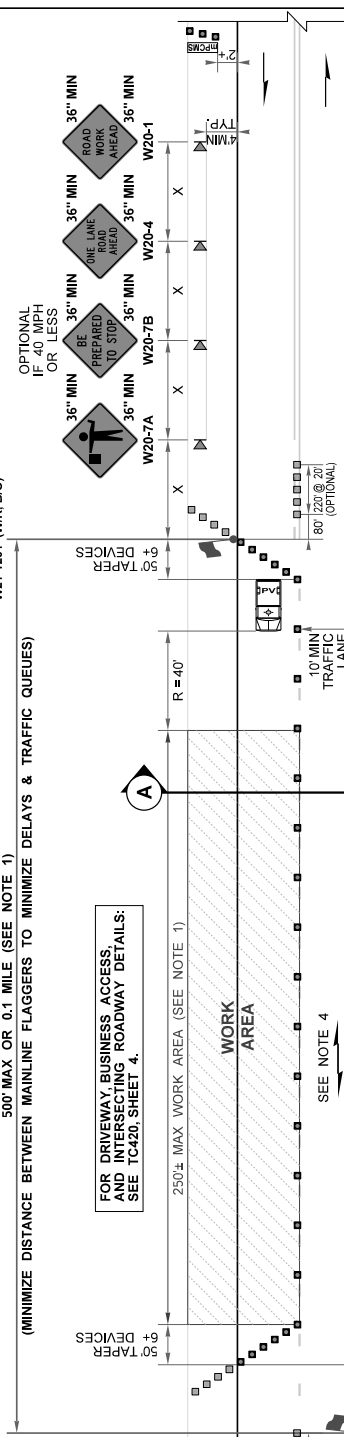
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## TYPICAL TRAFFIC CONTROL PLANS

RECOMMENDED SIGN SPACING = X (1)		
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350±
RURAL ROADS & URBAN ARTERIALS	25-30 MPH	200± (2)
RESIDENTIAL & BUSINESS DISTRICTS	10-20	60
URBAN STREETS	25 MPH OR LESS	100± (2)
URBAN STREETS	20-30	10-20
URBAN STREETS	10-20	40

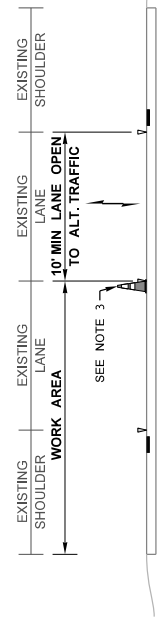
MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35-40	10-20	60
20-30	10-20	40

mPCMS		
1	2	3
FLAGGER WATCH 4	1 MILE STOPPED TRAFFIC AHEAD	2.0 SEC 2.0 SEC
FIELD LOCATE 1+1 MILE PRIOR TO FLAGGER OR PRIOR TO EXPECTED TRAFFIC QUEUE PER STD. SPEC. 1-10.3.3/C.		



NOTES:

1. DISTANCE GREATER THAN 500' BETWEEN MAINLINE FLAGGERS REQUIRES ACCEPTANCE FROM REGIONAL ENGINEER. FLAGGERS MUST BE PLACED AT 500' INTERVALS TO MAINTAIN 800+ VEHICLES/HOUR IN ALL DIRECTIONS. WORK AREA LENGTH ADJUSTS ACCORDINGLY.
2. FLAGGERS' GOAL IS TO MAXIMIZE TRAFFIC CAPACITY BY MINIMIZING TRAFFIC GAPS & LOST TIME. STRATEGIES:
  - (A) WAVE SLOWER DRIVERS THRU TO "CLOSE THE GAP"
  - (B) DON'T WAIT FOR APPROACHING TRAFFIC AFTER QUEUE RELEASED. LET THEM WAIT FOR THE NEXT TURN
  - (C) EFFECTIVELY USE 2-WAY RADIOS TO MINIMIZE LOST TIME WHEN CHANGING TRAFFIC RELEASE DIRECTIONS
3. MAY SHIFT LATERSALLY, 36" TRAFFIC CONES, 42" TALL CHANNELIZATION DEVICES, OR TRAFFIC SAFETY DRUMS OK.
4. PEDESTRIAN & BICYCLIST ACCOMMODATIONS (ENGINEER TO ACCEPT ANY ALTERNATIVE STRATEGIES):
  - (A) ALLOW PEDESTRIANS TO USE THE PAVED SHOULDER OR ADJACENT PATH OPPOSITE THE WORK AREA
  - (B) COMBINE BIKES & VEHICULAR TRAFFIC. BIKES TO CLEAR PRIOR TO RELEASING ONCOMING TRAFFIC
  - (C) PROVIDE FREE SHUTTLE (WORK TRUCK, VAN OR BUS MAY BE USED)
5. SEE STANDARD SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS:
  - 1-107.8/10 HIGH-VISIBILITY APPAREL
  - 1-107.8/10A FLAGGERS AND NIGHTTIME ILLUMINATION
  - 1-103.2/A TRAFFIC CONTROL PROCEDURES
  - 9-35.1 24-INCH STOP/SLOW PADDLE SIZE
6. FOR PROJECT-SPECIFIC REQUIREMENTS, SEE SPECIAL PROVISIONS.
7. SIGNS ARE BLACK ON ORANGE UNLESS OTHERWISE INDICATED.
8. FULL-SIZE PCMS (11" x 6" DISPLAY) MAY BE USED IN LIEU OF mPCMSs. PCMS MESSAGES MAY BE MODIFIED.
9. EXISTING PAVEMENT MARKINGS MAY VARY.



SECTION A-A

# ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED (HIGH VOLUME HIGHWAYS, 40 MPH OR LESS) NOT TO SCALE

LEGEND:

- TEMPORARY SIGN LOCATION
- 28" REFLECTIVE TRAFFIC CONE (SEE NOTE 3)
- OPTIONAL CHANNELIZATION DEVICE
- PROTECTIVE VEHICLE
- FLAGGER
- mini PORTABLE CHANGEABLE MESSAGE SIGN (PCMS OK, SEE NOTE 8)

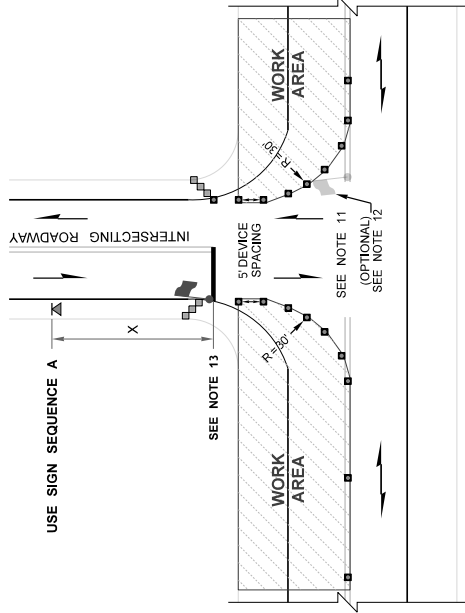
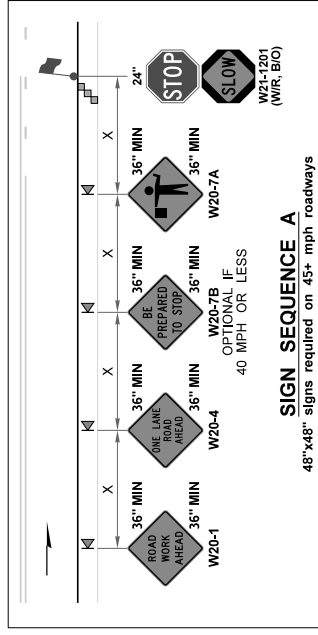
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TYPICAL TRAFFIC CONTROL PLANS		P.E. STAMP BOX DATE DATE

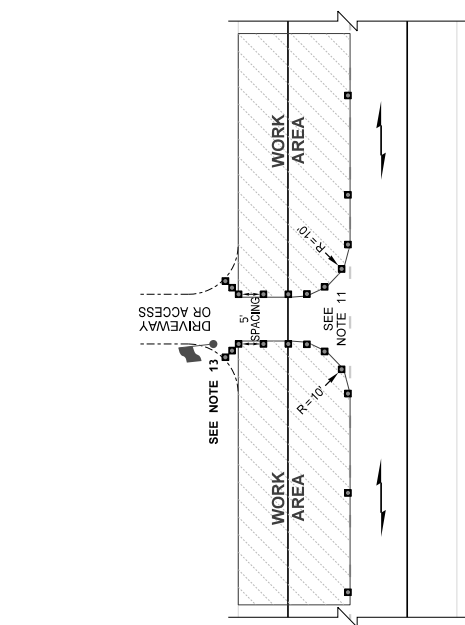
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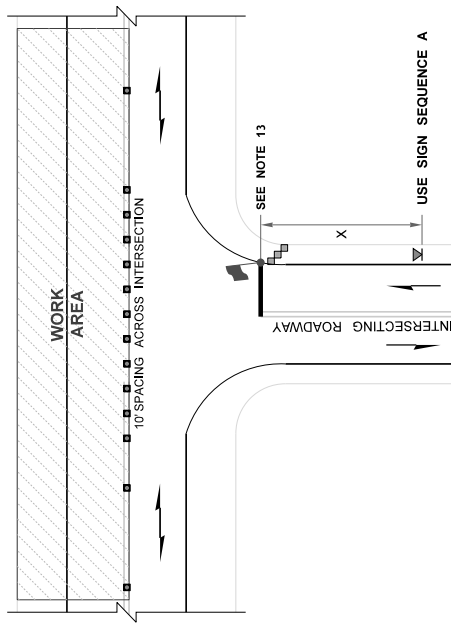
10. FOR LEGEND, TABLES AND ADDITIONAL NOTES: SEE TC420 SHEET 3.
11. WORK MAY BRIEFLY OCCUR WITHIN LANE CLOSURE ACROSS INTERSECTING BUSINESS "ACCESSES AND DRIVEWAYS ONLY MAY HOLD ACCESS TRAFFIC FOR LESS THAN 1 MINUTE WHILE RESTRICTING TURNS FROM MAINLINE. CHANNELIZATION DEVICES DELINEATING APPROACH OR ACCESS MAY BE REMOVED OR RELOCATED AS NEEDED.
12. SINGLE FLAGGER (WITH RED FLAG/RED GLOW CONE FLASHLIGHT) MAY BE ADDED TO THE INTERSECTING ROADWAY APPROACH TO HELP GUIDE ALTERNATING & TURNING TRAFFIC.
13. FLAGGERS MAY COLLABORATE TO RELEASE APPROACH ACCESS AND MAINLINE TRAFFIC TRAVELING IN THE SAME DIRECTION CONCURRENTLY.



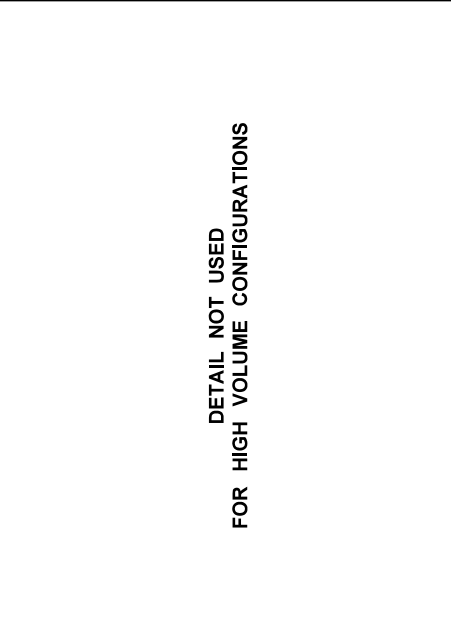
UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
SAME SIDE AS LANE CLOSURE (TWO OPEN LANES)



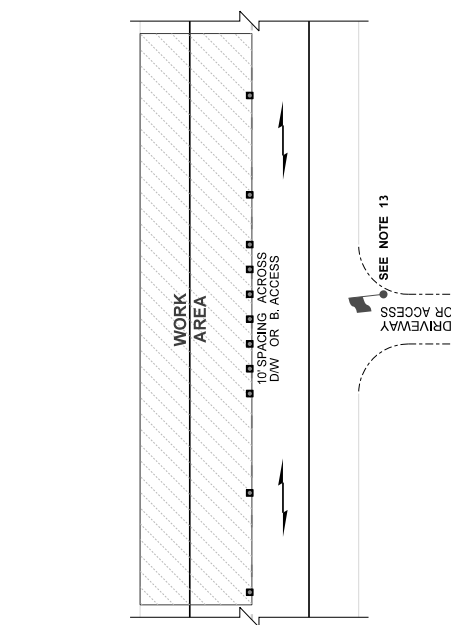
DRIVEWAY OR BUSINESS ACCESS CLOSURE  
SAME SIDE AS LANE CLOSURE



UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
OPPOSITE OF LANE CLOSURE



UNSIGNALIZED INTERSECTING ROADWAY DETAIL  
SAME SIDE AS LANE CLOSURE (SINGLE OPEN LANE)



DRIVEWAY OR BUSINESS ACCESS CLOSURE  
OPPOSITE OF LANE CLOSURE

ALTERNATING 1-LANE, 2-WAY TRAFFIC: FLAGGER-CONTROLLED (HIGH VOLUME HIGHWAYS, 40 MPH OR LESS)

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JOB NUMBER

CONTRACT NO.

LOCATION NO.

FED.AID PROJ.NO.

NO.

STATE

JOB NUMBER

CONTRACT NO.

LOCATION NO.

FED.AID PROJ.NO.

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JOB NUMBER

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LOCATION NO.

FED.AID PROJ.NO.

NO.

STATE

JOB NUMBER

CONTRACT NO.

LOCATION NO.



SIGN SPACING ■ X (1)		
RURAL ROADS & URBAN ARTERIALS	35-40 MPH	350' +/-
RURAL ROADS & URBAN ARTERIALS	25-30 MPH	200' +/- (2)
RESIDENTIAL & BUSINESS DISTRICTS		
URBAN STREETS	25 MPH OR LESS	100' +/- (2)
(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMP, AT-GRADE INTERSECTIONS AND DRIVEWAYS.		
(2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.		
ALL SIGNS ARE 48" X 48" BLACK ON ORANGE UNLESS OTHERWISE DESIGNATED		

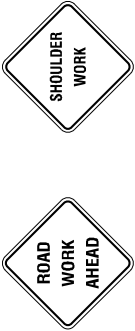
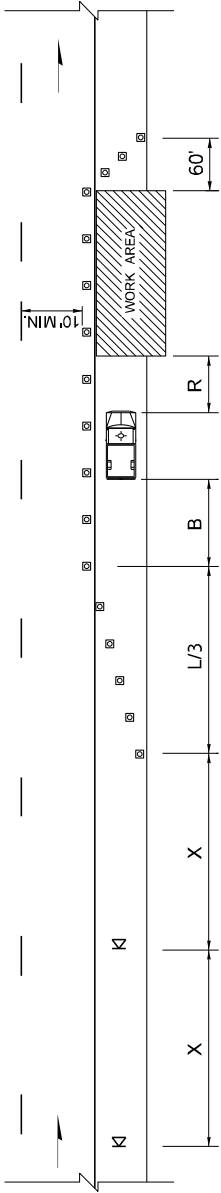
SHOULDER CLOSURE TAPER LENGTH ■ L/3		
SHOULDER WIDTH (feet)	SPEED (MPH)	
6	20	25
10	30	35
	40	40
	60	60
	90	90
FOR SHOULDERS LESS THAN 6', USE 3 DEVICES MINIMUM		

MAXIMUM CHANNELIZATION DEVICE SPACING (feet)		
MPH	TAPER	TANGENT
35-40	30	60
20-30	20	40

LONGITUDINAL BUFFER SPACE ■ B		
SPEED (MPH)	20	25
LENGTH (feet)	115	155
	200	250
	300	305

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE ■ R	
NO SPECIFIED DISTANCE REQUIRED. STRATEGICALLY POSITION WORK VEHICLE TO PROTECT WORK CREW.	

STATIONARY TRANSPORTABLE ATTENUATOR ROLL AHEAD DISTANCE ■ R	
HOST VEHICLE WEIGHT	R
9,900 TO 22,000 lbs.	100'
22,001+ lbs.	74'



W20-1



W21-5

#### NOTES

1. Address pedestrian control through or around the work area.
2. When used, device spacing for the downstream taper should be 20' O.C.

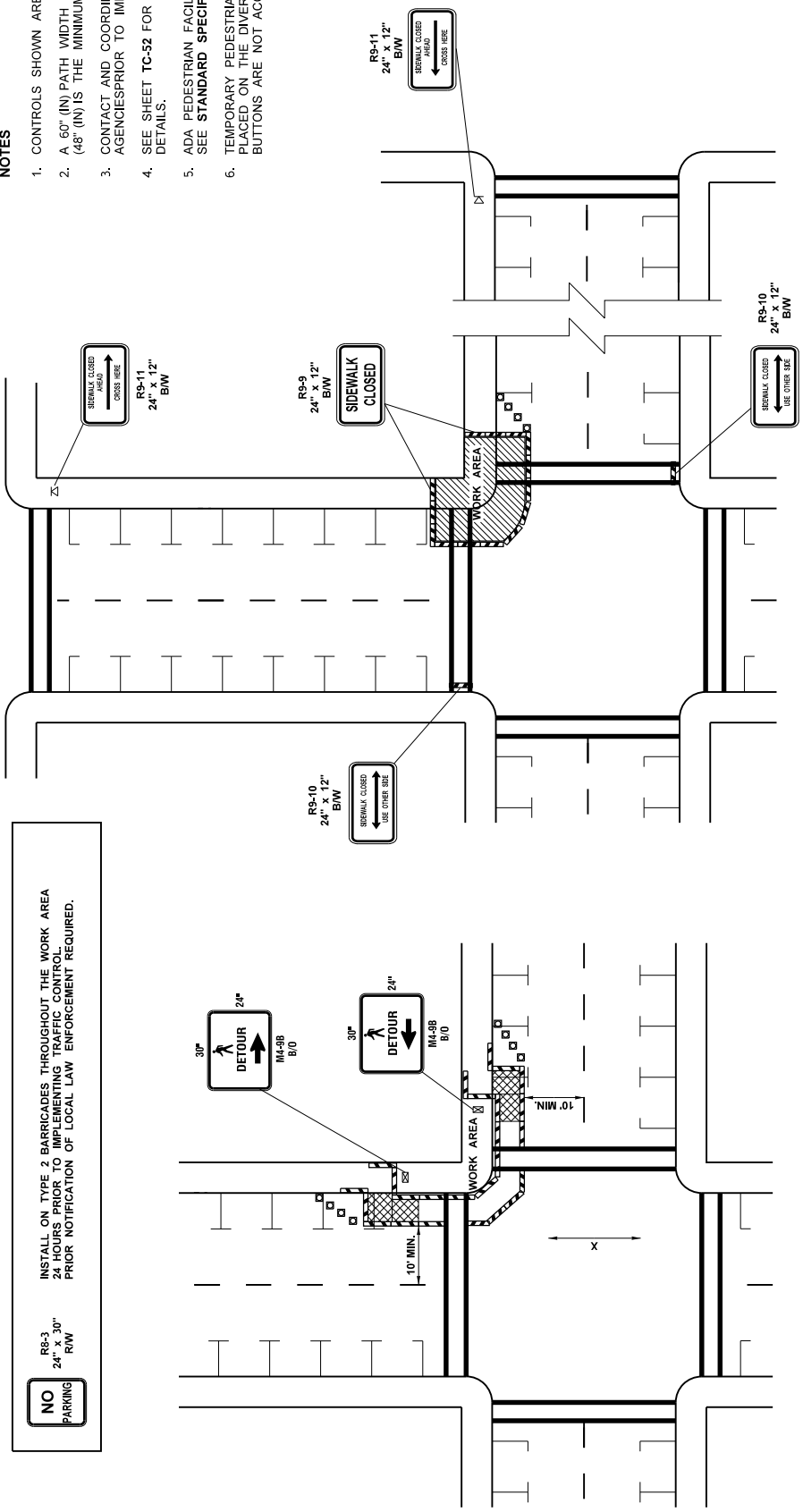
#### LEGEND

- SIGN LOCATION
- CHANNELIZING DEVICES
- PROTECTIVE VEHICLE - RECOMMENDED

TYPICAL SHOULDER CLOSURE - LOW SPEED (40 MPH OR LESS)

NOTES

1. CONTROLS SHOWN ARE FOR PEDESTRIAN TRAFFIC ONLY.
2. A 60" (IN) PATH WIDTH SHOULD BE MAINTAINED (48" (IN) IS THE MINIMUM).
3. CONTACT AND COORDINATE IMPACTED TRANSIT AGENCIES PRIOR TO IMPLEMENTING ANY CLOSURES.
4. SEE SHEET TC-52 FOR TEMPORARY PEDESTRIAN RAMP DETAILS.
5. ADA PEDESTRIAN FACILITIES MUST BE MAINTAINED. SEE STANDARD SPECIFICATION 1-10.2(1)B.
6. TEMPORARY PEDESTRIAN PUSH BUTTONS SHALL BE PLACED ON THE DIVERTED PATH WHEN EXISTING BUTTONS ARE NOT ACCESSIBLE TO PEDESTRIANS.



SIDEWALK DIVERSION

SIDEWALK DETOUR

LEGEND

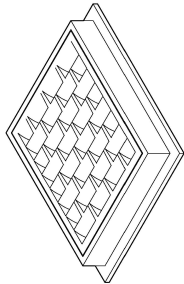
- TEMPORARY SIGN LOCATION
- CHANNELIZING DEVICES
- PEDESTRIAN CHANNELIZING DEVICES
- TEMPORARY PEDESTRIAN RAMP FOR SIDEWALKS

INTERSECTION PEDESTRIAN TRAFFIC CONTROL

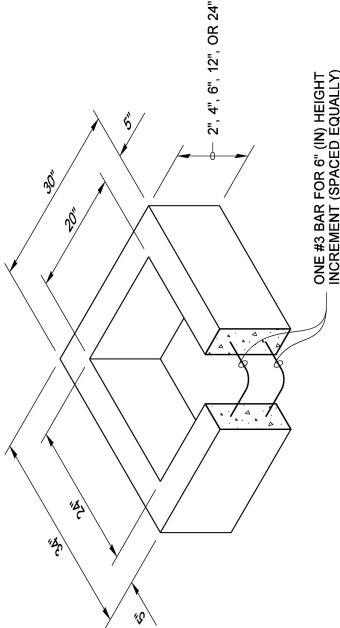
NOT TO SCALE

FILE NAME	S:\Design R PL 814-Standard3-Plan Sheet Library\01-Published PSL\TC Work Zone Traffic Control\TC-15 Intersection Pedestrian Traffic Control\TC-15.dgn	PLAN REF NO	TC16	PEDESTRIAN CONTROL AND PROTECTION
TIME	11:26:58 AM	SHEET	OF	
DATE	1/9/2016	STATE	WASH	Washington State Department of Transportation
PROJECTED BY	ilddaf	JOB NUMBER		
DESIGNED BY		CONTRACT NO.		DATE
CHECKED BY		LOCATION NO.		
PROJ. ENGR.		DATE	BY	P.E. STAMP BOX
REGIONAL ADM.		REVISION		

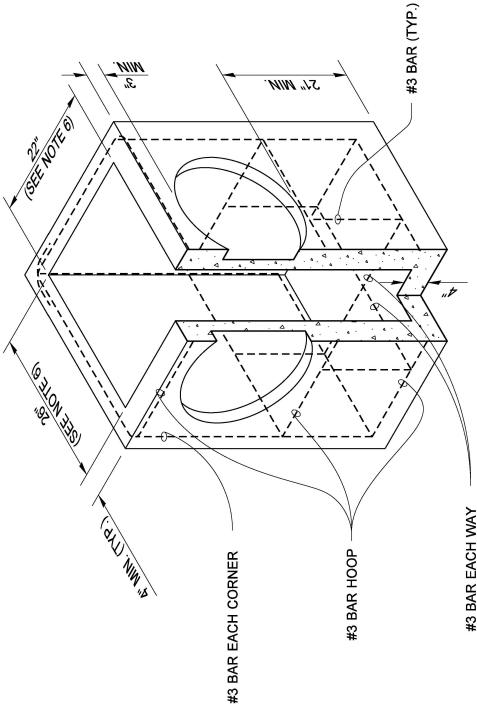
## **APPENDIX E – WSDOT STANDARD PLANS**



FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION



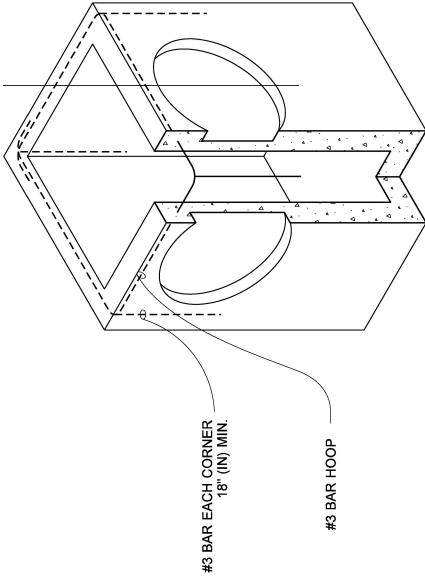
PRECAST BASE SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER (INCHES)
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP * (STD. SPEC. SECT. 9-05.20)	12"
SOLID WALL PVC (STD. SPEC. SECT. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. SECT. 9-05.12(2))	15"

\* CORRUGATED POLYETHYLENE STORM SEWER PIPE

NOTES

- As acceptable alternatives to the rebar shown in the **PRECAST BASE SECTION**, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the **ALTERNATIVE PRECAST BASE SECTION**. Wire mesh shall not be placed in the knockouts.
- The knockout diameter shall not be greater than 20" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
- The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
- The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
- The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
- The opening shall be measured at the top of the **Precast Base Section**.
- All pickup holes shall be grouted full after the basin has been placed.



ALTERNATIVE PRECAST BASE SECTION  
(SEE NOTE 1)



Julie Heilman  
2020.09.01 07:52:50 -07'00'

CATCH BASIN TYPE 1

STANDARD PLAN B-5.20-03

SHEET 1 OF 1 SHEET

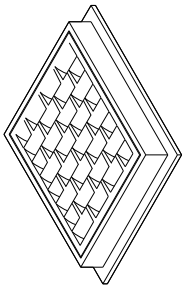
APPROVED FOR PUBLICATION

Roark, Steve

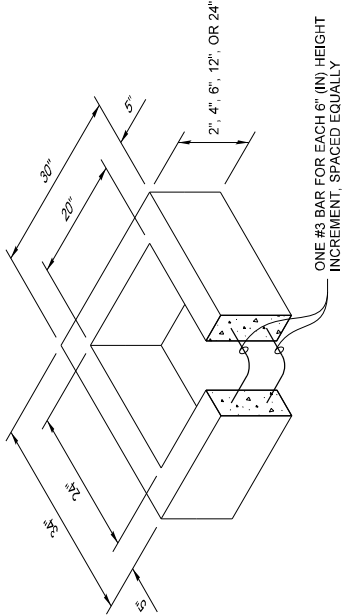
Digitally signed by Roark, Steve  
Date: 2020.09.09 09:45:23 -07'00'

STATE DESIGN ENGINEER

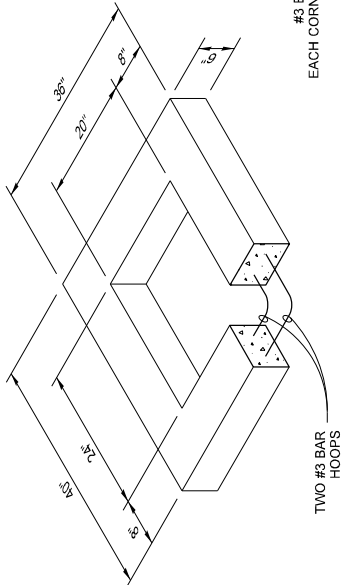
Washington State Department of Transportation



FRAME AND VANED GRATE



RECTANGULAR ADJUSTMENT SECTION



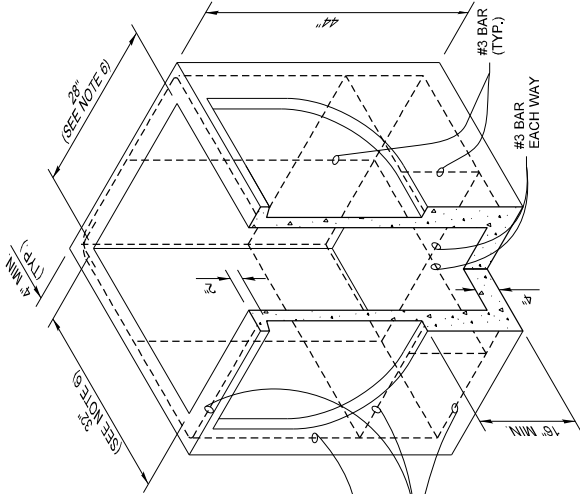
REDUCING SECTION

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER (INCHES)
REINFORCED OR PLAIN CONCRETE	18"
ALL METAL PIPE	21"
CPSSP * (STD. SPEC. SECT. 9-05.20)	18"
SOLID WALL PVC (STD. SPEC. SECT. 9-05.12(1))	21"
PROFILE WALL PVC (STD. SPEC. SECT. 9-05.12(2))	21"

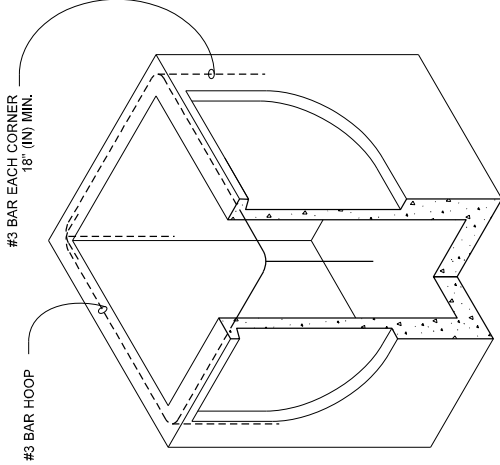
\* CORRUGATED POLYETHYLENE STORM SEWER PIPE

NOTES

- As acceptable alternatives to the rebar shown in the **PRECAST BASE SECTION**, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot, shall be used with the minimum required rebar shown in the **ALTERNATIVE PRECAST BASE SECTION**. Wire mesh shall not be placed in the knockouts.
- The knockout shall not be greater than 26" (in), in any direction. Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
- The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
- The frame and grate may be installed with the flange down or integrally cast into the adjustment section with flange up.
- The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
- The opening shall be measured at the top of the Precast Base Section.
- All pickup holes shall be grouted full after the basin has been placed.



PRECAST BASE SECTION



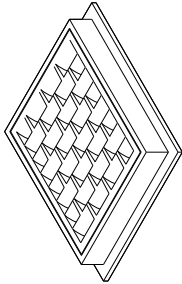
ALTERNATIVE PRECAST BASE SECTION



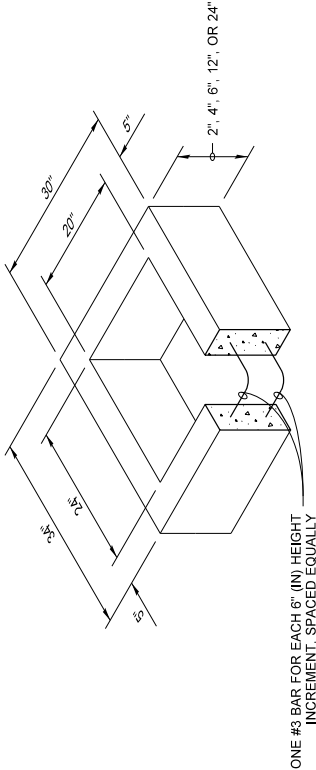
Heilman, Julie  
Jan 25 2017 2:56 PM

**CATCH BASIN TYPE 1L**  
**STANDARD PLAN B-5.40-02**  
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
Cynthia J. Jeff  
Jan 25 2017 8:49 AM  
STATE DESIGN ENGINEER  
Washington State Department of Transportation

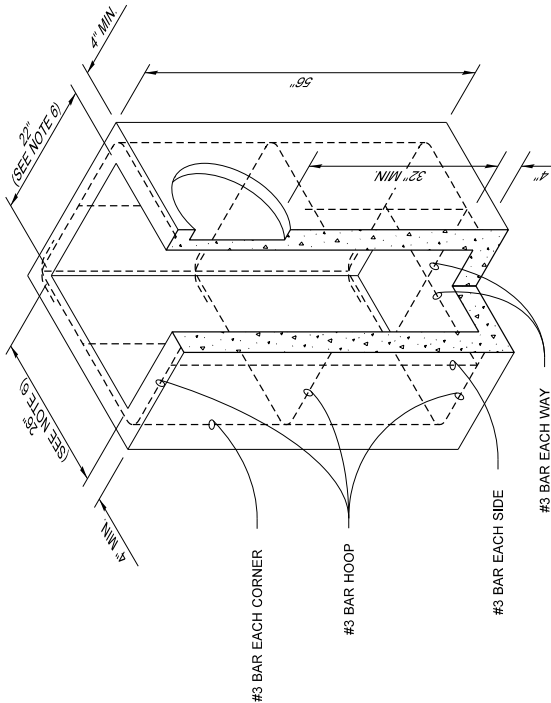


FRAME AND VANED GRATE

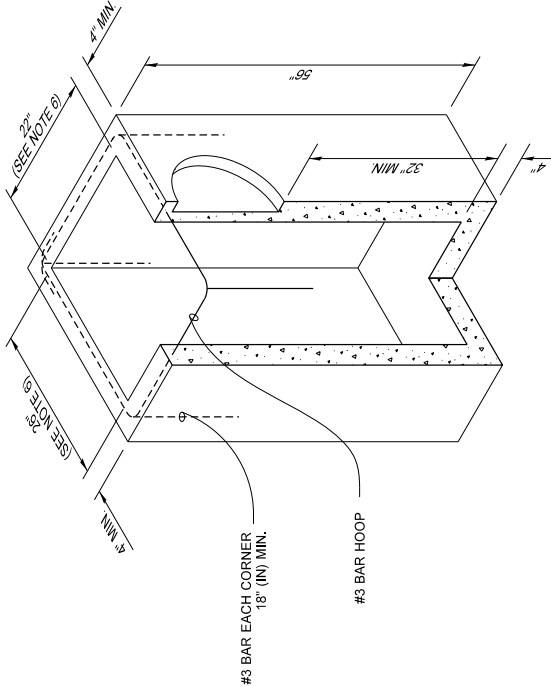


ONE #3 BAR FOR EACH 6" (IN) HEIGHT INCREMENT, SPACED EQUALLY

RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION



(SEE NOTE 1)

ALTERNATIVE PRECAST BASE SECTION

NOTES

1. As acceptable alternatives to the rebar shown in the **PRECAST BASE SECTION**, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot, shall be used with the minimum required rebar shown in the **ALTERNATIVE PRECAST BASE SECTION**. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 18" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with **Standard Specification Section 9-04.3**.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
4. The frame and grate may be installed with the flange down, or integrally cast into the adjustment section with flange up.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
6. The opening shall be measured at the top of the Precast Base Section.
7. All pickup holes shall be grouted full after the basin has been placed.



Julie Heilman  
Professional Engineer  
41819  
Jan 25 2017 2:56 PM  
design

**CATCH BASIN TYPE 1P  
(FOR PARKING LOT)**

**STANDARD PLAN B-5.60-02**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
Date: 1/25/2017  
Jan 26 2017 6:49 AM  
design

STATE DESIGN ENGINEER  
Washington State Department of Transportation

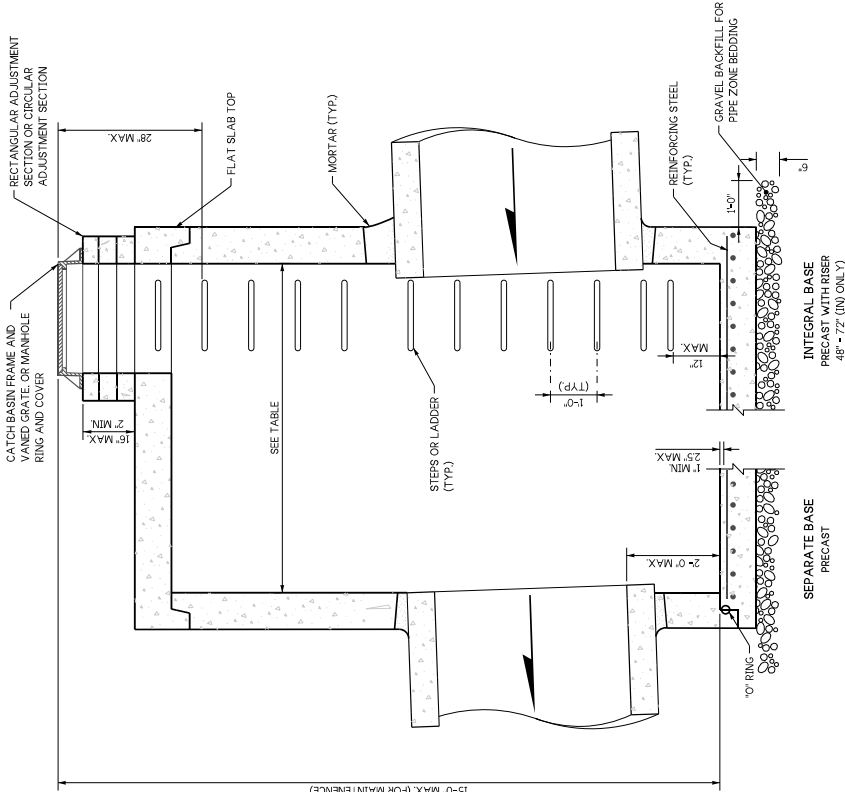
NOTES:

1. No steps are required when height is 4' or less.
2. The bottom of the precast catch basin may be sloped to facilitate cleaning.
3. The rectangular frame and grate may be installed with the flange up or down.
4. The frame may be cast into the adjustment section.
5. Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification Section 9-04.3.
5. Pipe allowances will vary depending on the pipe material used. Contact the Region Hydraulics Engineer for assistance.

CATCH BASIN DIMENSIONS					
CATCH BASIN DIAMETER	MIN WALL THICKNESS	MIN BASE THICKNESS	MAXIMUM KNOCKOUT SIZE	MINIMUM DISTANCE BETWEEN KNOCKOUTS	
48"	4"	6"	36"	8"	
54"	4.5"	8"	42"	8"	
60"	5"	8"	48"	8"	
72"	6"	8"	60"	12"	
84"	8"	12"	72"	12"	
96"	8"	12"	84"	12"	
120"	10"	12"	96"	12"	
144"	12"	12"	108"	12"	

PIPE ALLOWANCES					
CATCH BASIN DIAMETER	PIPE MATERIAL WITH MAXIMUM INSIDE DIAMETER			PROFILE	
	CONCRETE	ALL METAL	CPSP PP ①	SOLID WALL PVC ②	PVC ③
48"	24"	30"	24"	30"	30"
54"	30"	36"	30"	36"	36"
60"	36"	42"	36"	42"	42"
72"	42"	54"	42"	48"	48"
84"	54"	60"	54"	48"	48"
96"	60"	72"	60"	48"	48"
120"	66"	84"	60"	48"	48"
144"	78"	96"	60"	48"	48"

- ① Corrugated Polyethylene Storm Sewer Pipe (See Standard Specification Section 9-05.20)  
② (See Standard Specification Section 9-05.12(1))  
③ (See Standard Specification Section 9-05.12(2))  
④ Polypropylene Pipe (See Standard Specification Section 9-05.24)



Aug 23, 2023

CATCH BASIN TYPE 2

STANDARD PLAN B-10-20-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
Aug 23, 2023  
Mark A. Haines  
STATE DESIGN ENGINEER  
Washington State  
Department of Transportation

- 
- MANHOLE RING AND COVER
- CIRCULAR ADJUSTMENT SECTION (TYP.)
- ECCENTRIC CONE SECTION
- PRECAST RISER SECTIONS
- STEPS OR LADDER
- CHANNEL AND SHELF
- REINFORCING STEEL (TYP.)
- INTEGRAL BASE PRECAST WITH RISER
- SEPARATE BASE PRECAST
- GRAVEL BACKFILL FOR PIPE ZONE BEDDING
- 8' - 0" MAX.
- 25' - 0" MIN.
- 28" MAX.
- 16" MAX.
- 2" MIN.
- 16"
- 48", 54", OR 60"
- 16" MAX.
- 12" MAX.
- 24 : 1 SLOPE
- 12"
- 1" MIN.
- 2.5" MAX.
- 12"
- 6"
- 0" RING

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT  
BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY  
THE ENGINEER AND APPROVED FOR PUBLICATION, IS KEPT ON  
FILE AT THE WASHINGTON STATE DEPARTMENT OF TRANS-  
PORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

## MANHOLE TYPE 1

**STANDARD PLAN B-15.20-01**

**SHEET 1 OF 1 SHEET**

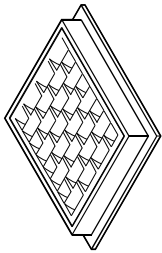
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**Pasco Bakotich III** 02-07-12  
STATE DESIGN ENGINEER DATE

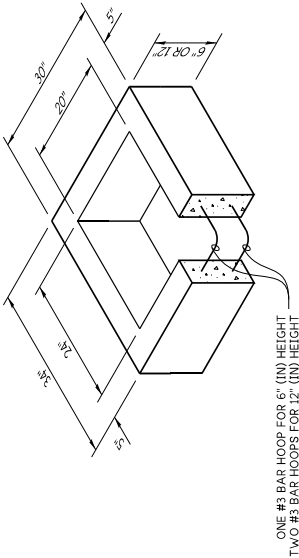
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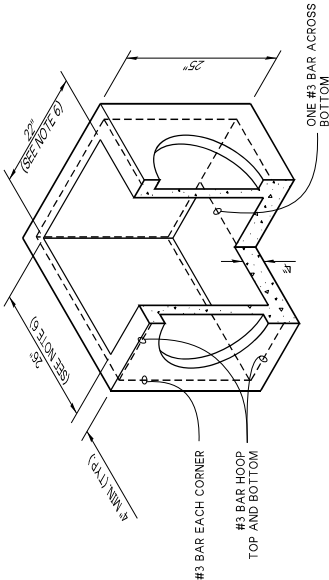


FRAME AND VANED GRATE



ONE #3 BAR HOOP FOR 6" (IN) HEIGHT  
TWO #3 BAR HOOPS FOR 12" (IN) HEIGHT

RECTANGULAR ADJUSTMENT SECTION



PRECAST BASE SECTION

NOTES

1. As acceptable alternatives to the rebar shown in the PRECAST BASE SECTION, fibers (placed according to the Standard Specifications), or wire mesh having a minimum area of 0.12 square inches per foot shall be used with the minimum required rebar shown in the ALTERNATIVE PRECAST BASE SECTION. Wire mesh shall not be placed in the knockouts.
2. The knockout diameter shall not be greater than 18" (in). Knockouts shall have a wall thickness of 2" (in) minimum to 2.5" (in) maximum. Provide a 1.5" (in) minimum gap between the knockout wall and the outside of the pipe. After the pipe is installed, fill the gap with joint mortar in accordance with Standard Specification Section 9-04.3.
3. The maximum depth from the finished grade to the lowest pipe invert shall be 5' (ft).
4. The frame and grate may be installed with the flange up or down. The frame may be cast into the adjustment section.
5. The Precast Base Section may have a rounded floor, and the walls may be sloped at a rate of 1 : 24 or steeper.
6. The opening shall be measured at the top of the precast base section.
7. All pickup holes shall be grouted full after the inlet has been placed.
8. Pipe allowances will vary depending on pipe material used. Contact the Region Hydraulic Engineer for assistance.

PIPE ALLOWANCES	
PIPE MATERIAL	MAXIMUM INSIDE DIAMETER (INCHES)
REINFORCED OR PLAIN CONCRETE	12"
ALL METAL PIPE	15"
CPSSP (STD. SPEC. SECT. 9-05.20)	12"
POLYPROPYLENE (STD. SPEC. SECT. 9-05.24)	12"
SOLID WALL PVC (STD. SPEC. SECT. 9-05.12(1))	15"
PROFILE WALL PVC (STD. SPEC. SECT. 9-05.12(2))	15"

★ CORRUGATED POLYETHYLENE  
STORM SEWER PIPE



Aug 23, 2023

CONCRETE INLET

STANDARD PLAN B-25.60-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

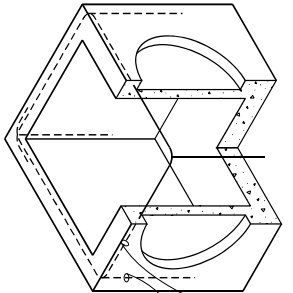
Aug 23, 2023

STATE DESIGN ENGINEER

Mark A. Davis

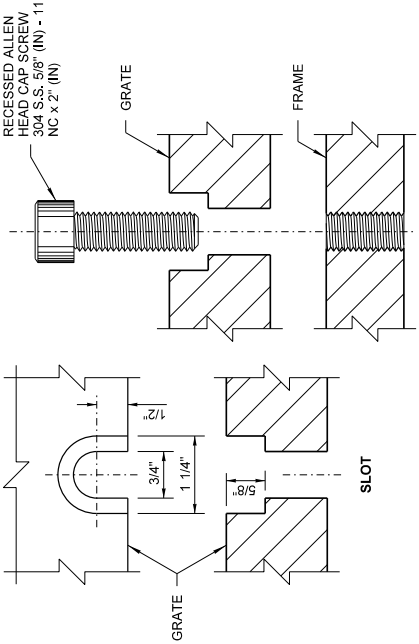
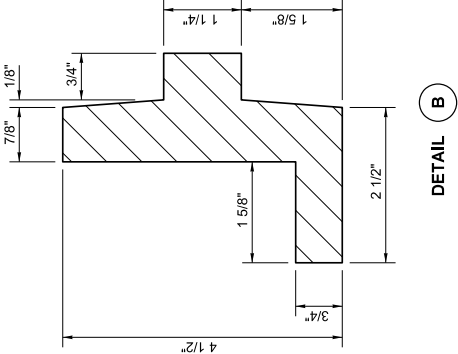
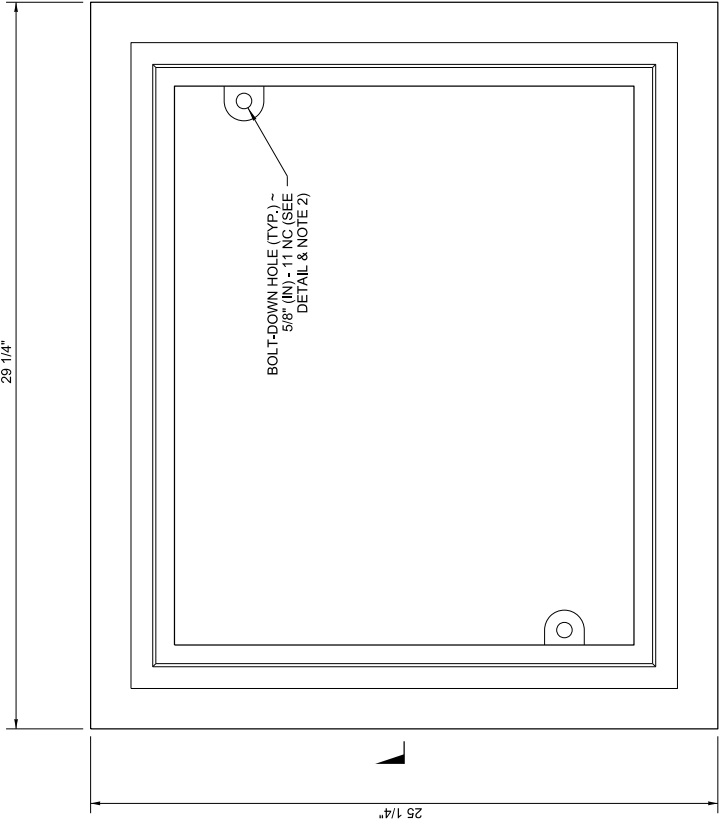
Washington State  
Department of Transportation

ALTERNATIVE PRECAST BASE SECTION  
(SEE NOTE 1)



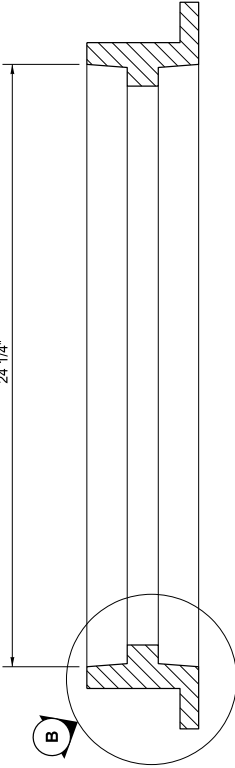
NOTES

1. This frame is designed to accommodate 20" (in) x 24" (in) grates or covers as shown on **Standard Plans B-30.20, B-30.30, B-30.40, and B-30.50.**
2. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
3. Refer to **Standard Specification Section 9-05.15 and 9-05.15(2)** for additional requirements.

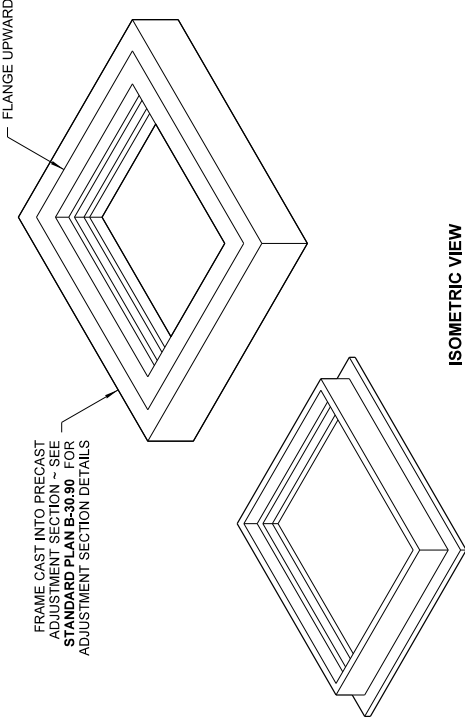


BOLT-DOWN DETAILS  
SEE NOTE 2

TOP



SECTION A



ISOMETRIC VIEW  
SHOWING THE VARIATIONS



Heilman, Julie  
Feb 20 2018 12:52 PM  
CO-891

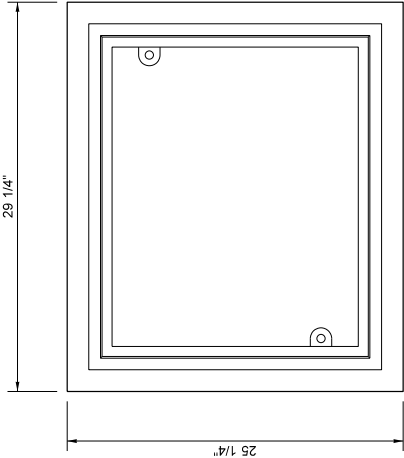
**RECTANGULAR FRAME  
(REVERSIBLE)**

**STANDARD PLAN B-30.10-03**  
SHEET 1 OF 1 SHEET

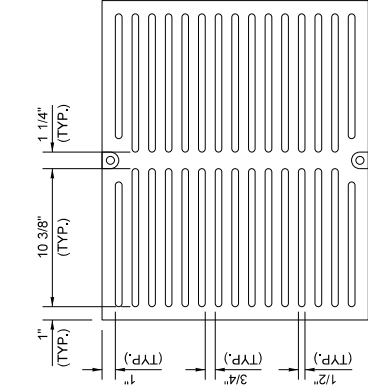
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Engineering and  
Construction  
Feb 27 2018 1:55 AM  
STATE DESIGN ENGINEER  
Washington State Department of Transportation

NOTES

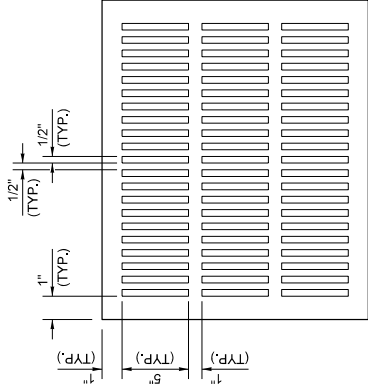
1. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) Allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
2. All grates shall be 20" (in) x 24" (in).
3. Grate alternatives shown for informational purposes. Grate design varies by manufacturer and must meet ADA requirements.
4. Refer to **Standard Specification Section 9-05.15 and 9-05.15 (2)** for additional requirements.



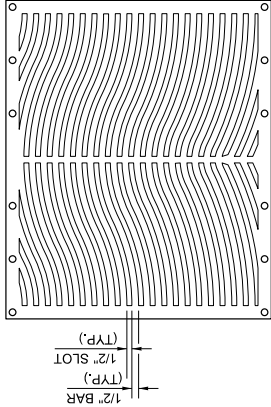
PLAN VIEW  
GRATE FRAME  
FOR DETAILS NOT SHOWN,  
SEE STANDARD PLAN B-30.10



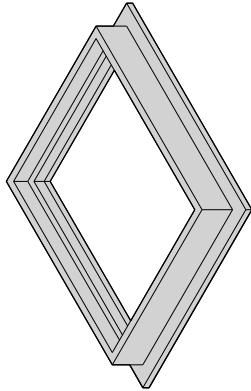
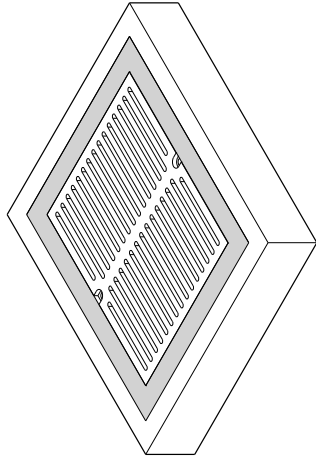
PLAN VIEW  
GRATE  
ALTERNATIVE 1



PLAN VIEW  
GRATE  
ALTERNATIVE 2



PLAN VIEW  
GRATE  
ALTERNATIVE 3



ISOMETRIC VIEWS  
(GRATE ALTERNATIVE 1 SHOWN)



Heilman, Julie  
Feb 20 2018 12:53 PM  
cogn

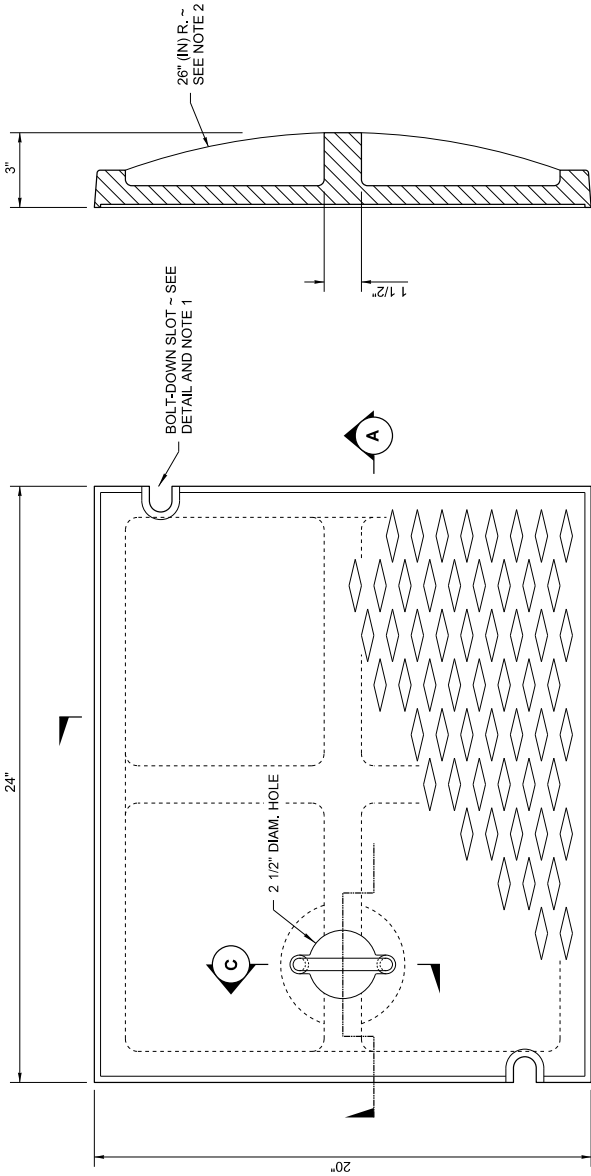
**ADA GRATES FOR  
RECTANGULAR FRAMES**  
**STANDARD PLAN B-30.15-00**  
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
Cameron, Jeff  
Feb 27 2018 7:56 AM  
cogn

STATE DESIGN ENGINEER  
Washington State Department of Transportation

NOTES

1. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
2. Alternative reinforcing designs are acceptable in lieu of the rib design.
3. Refer to **Standard Specification Section 9-05.15** and **9-05.15(2)** for additional requirements.
4. For frame details, see **Standard Plan B-30.10**.

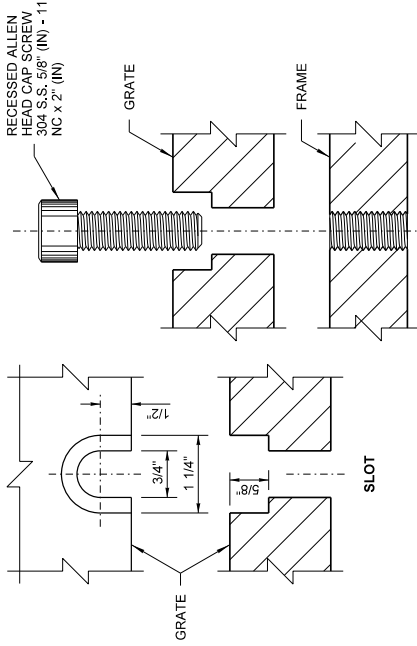


TOP

SECTION B

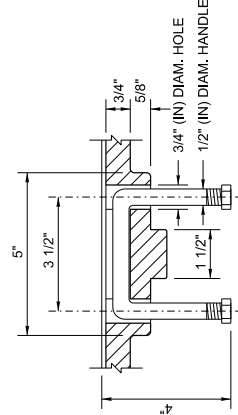
BOLT-DOWN DETAILS  
SEE NOTE 1

HOLE

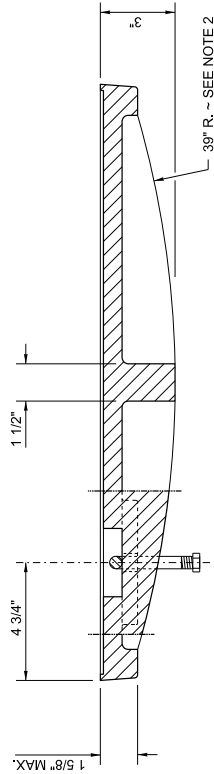


SECTION B

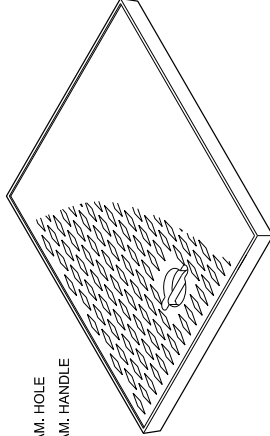
HOLE



SECTION C



SECTION A



ISOMETRIC



Heilman, Julie  
Feb 20 2018 12:53 PM  
ccoggo

**RECTANGULAR SOLID  
METAL COVER**

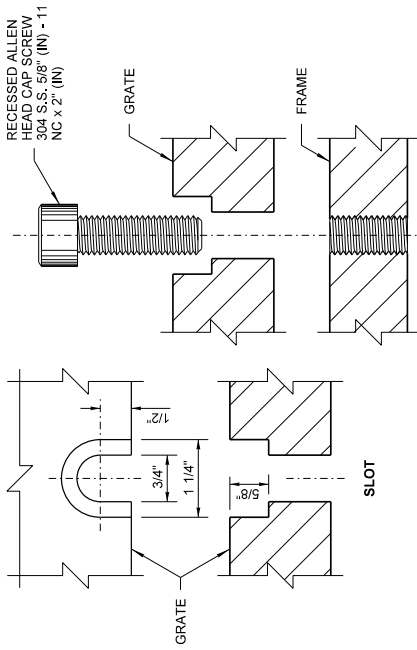
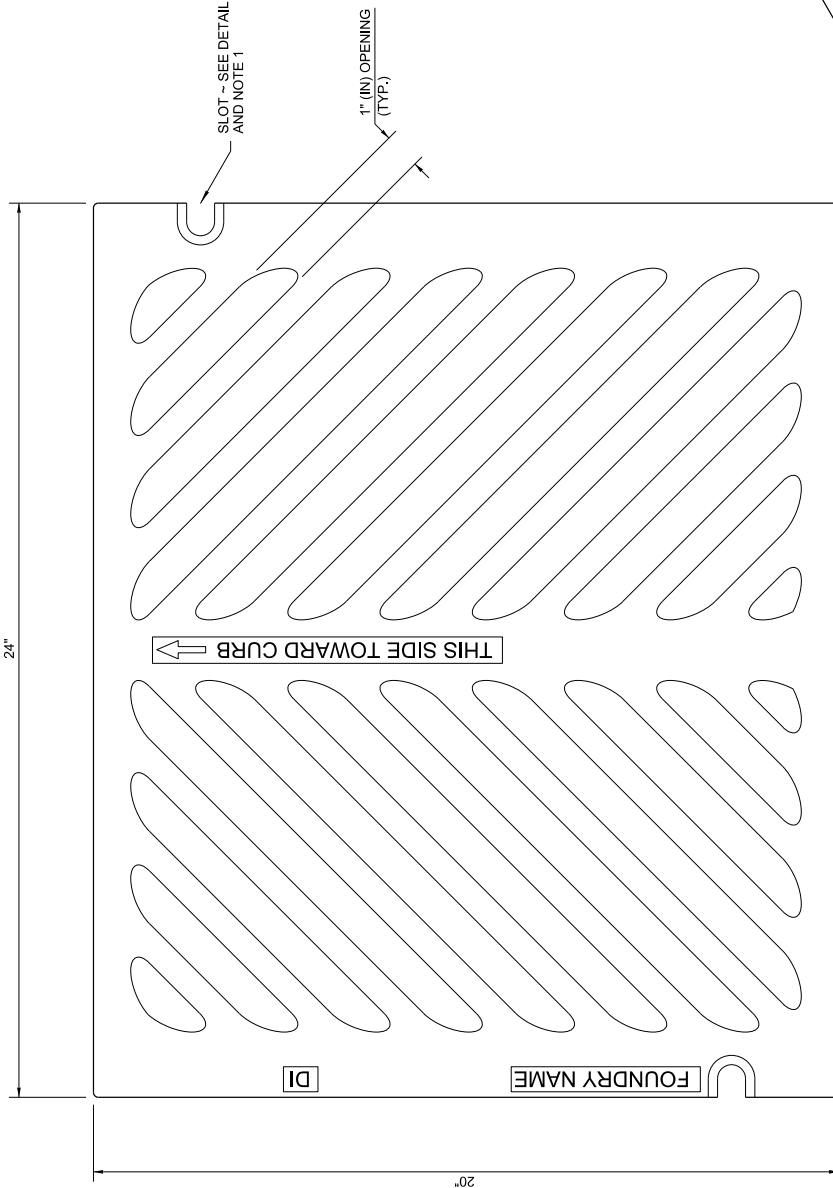
**STANDARD PLAN B-30.20-04**  
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
Exposition of  
Feb 20 2018 12:53 PM  
ccoggo

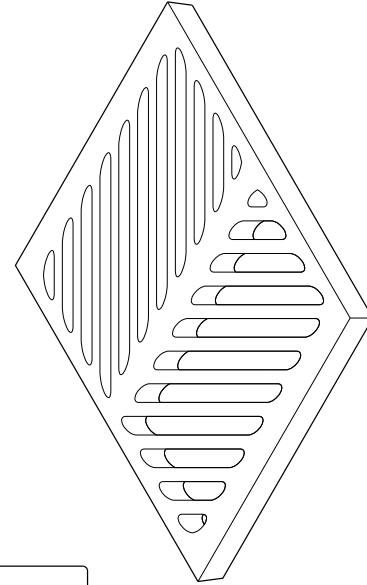
STATE DESIGN ENGINEER  
Washington State Department of Transportation

NOTES

1. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 2 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" (in) - 11 NC x 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt-down holes varies by manufacturer.
2. Refer to **Standard Specification section 9-05.15, and 9-05.15(2)** for additional requirements.
3. For frame details, see **Standard Plan B-30.10**.
4. The thickness of the grate shall not exceed 1 5/8" (in).



BOLT-DOWN DETAILS  
SEE NOTE 1



ISOMETRIC



Heilman, Julie  
Feb 20 2018 12:55 PM  
design

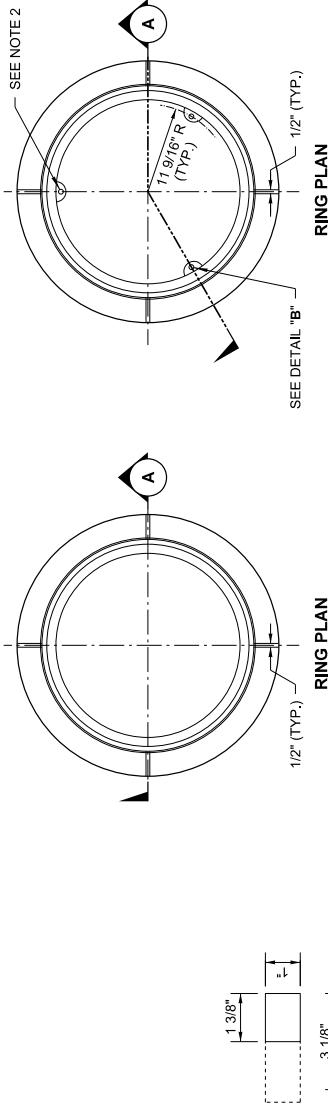
**RECTANGULAR  
HERRINGBONE GRATE**

**STANDARD PLAN B-30.50-03**

SHEET 1 OF 1 SHEET

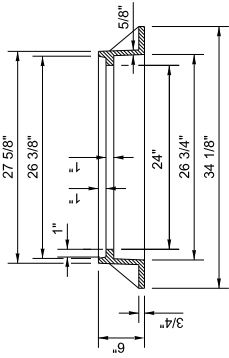
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Campaner, Jeff  
Feb 27 2018 7:59 AM

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Washington State Department of Transportation



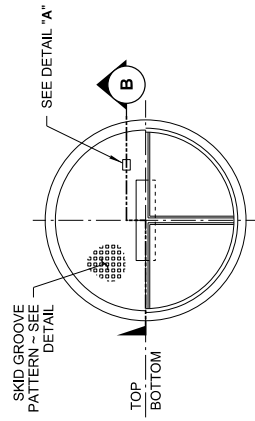
RING PLAN

RING SECTION A



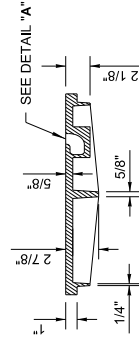
RING SECTION A

RING SECTION A



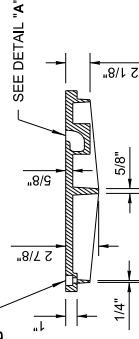
COVER PLAN

COVER PLAN



COVER SECTION A  
(SEE NOTE 7)

STANDARD  
TYPE 1

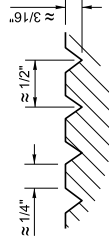


COVER SECTION A  
(SEE NOTE 7)

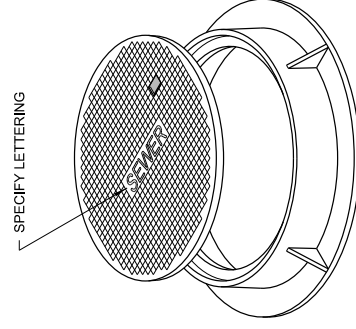
BOLT-DOWN / WATERTIGHT  
TYPE 2

## NOTES

1. The gasket and groove may be in the seat (frame) or in the underside of the cover. The gasket may be "T" shaped in section. The groove may be cast or machined.
2. Bolt-down capability is required on all frames, grates, and covers, unless specified otherwise in the Contract. Provide 3 holes in the frame that are vertically aligned with the grate or cover slots. The frame shall accept the 304 Stainless Steel (S.S.) 5/8" - 11 NC x 2" (in) allen head cap screw by being tapped, or other approved mechanism. Location of bolt down holes varies by manufacturer.
3. For bolt-down manhole ring and covers that are not designated "Watertight," the neoprene gasket, groove, and washer are not required.
4. Washer shall be neoprene (Detail "B").
5. In lieu of blind pick notch for manhole covers, a single 1" (in) pick hole is acceptable. Hole location and number of holes may vary by manufacturer.
6. Alternative reinforcing designs are acceptable in lieu of the rib design.
7. For clarity, the vertical scale of the Cover Section has been exaggerated, it is 1.5 times the horizontal scale (H:1.5V).



SKID GROOVE PATTERN  
DETAIL



ISOMETRIC VIEW



Heilman, Julie  
Feb 20 2018 12:55 PM  
COO

## CIRCULAR FRAME (RING) AND COVER

### STANDARD PLAN B-30.70-04

SHEET 1 OF 1 SHEET

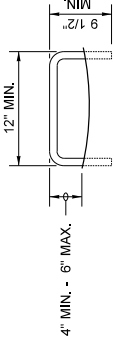
APPROVED FOR PUBLICATION  
DATE: 02/20/2018  
TIME: 12:59 AM

STATE DESIGN ENGINEER

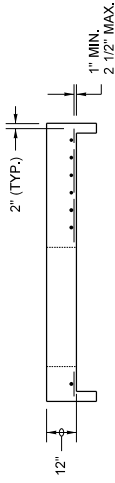
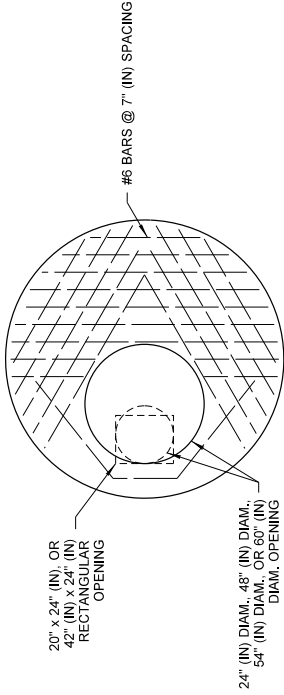
Washington State Department of Transportation

# NOTE

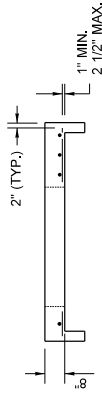
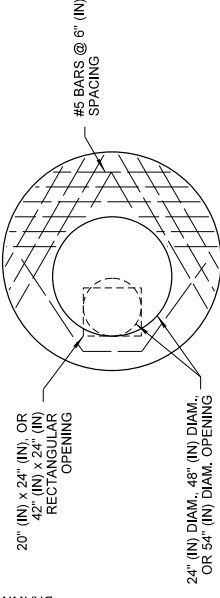
1. Ladder rungs for manholes and catch basins shall meet the requirements of **AASHTO M 199**.



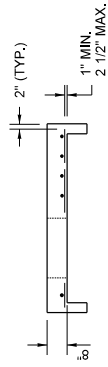
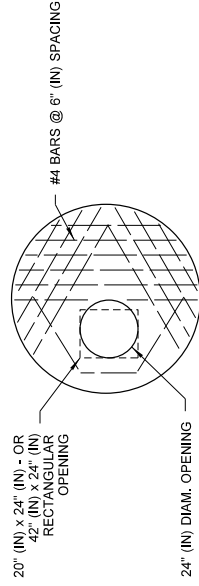
STEP



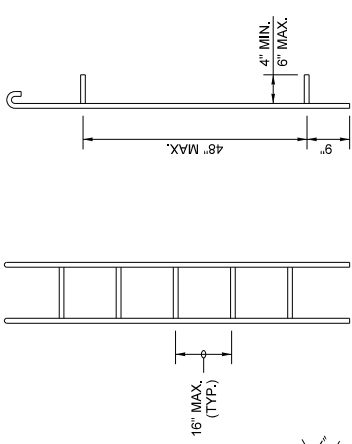
84" (IN) or 96" (IN) FLAT SLAB TOP



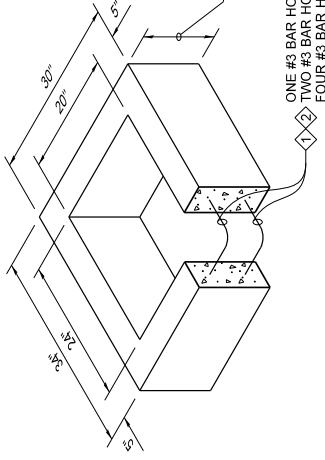
72" (IN) FLAT SLAB TOP



48" (IN), 54" (IN), or 60" (IN) FLAT SLAB TOP

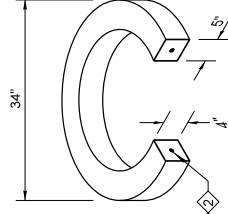


PREFABRICATED LADDER

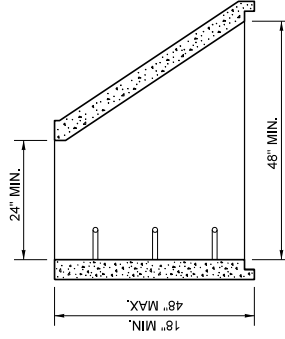


## RECTANGULAR ADJUSTMENT SECTION

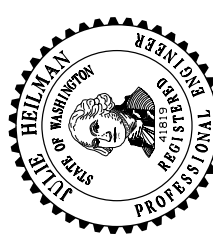
1. As an acceptable alternative to rebar, wire mesh having a minimum area of 0.12 square inches per foot may be used for adjustment sections.
2. As an acceptable alternative to conventional steel reinforcement, manufacturers shall use Synthetic Structural Fibers meeting the requirements of **Standard Specification Section 9-05.50(10)**.



- ONE #3 BAR HOOP FOR 2", 4", OR 6" (IN)  
TWO #3 BAR HOOPS FOR 12" (IN)
- CIRCULAR ADJUSTMENT SECTION**
- For rectangular and circular adjustment sections, approved alternate material compositions are acceptable in lieu of precast concrete designs



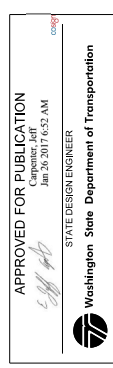
ECCENTRIC CONE SECTION



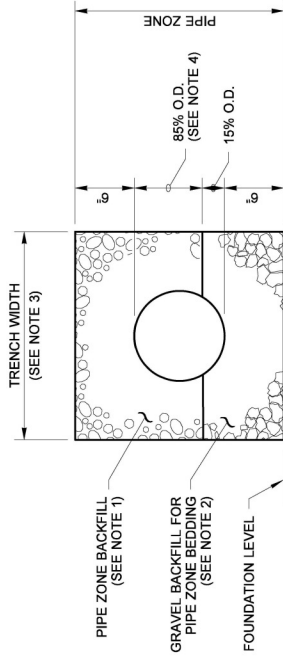
Julie Heilmann  
Professional Engineer  
Washington, Julie  
Jan 25 2017 3:01 PM  
csepi

## MISCELLANEOUS DETAILS FOR DRAINAGE STRUCTURES STANDARD PLAN B-30.90-02

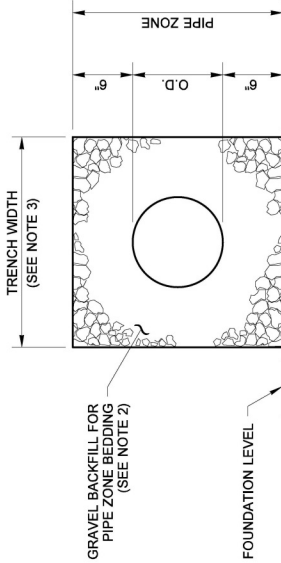
SHEET 1 OF 1 SHEET



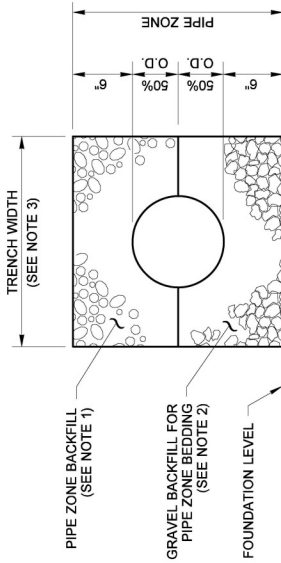
DRAWN BY: FERN LIDDELL



### CONCRETE AND DUCTILE IRON PIPE



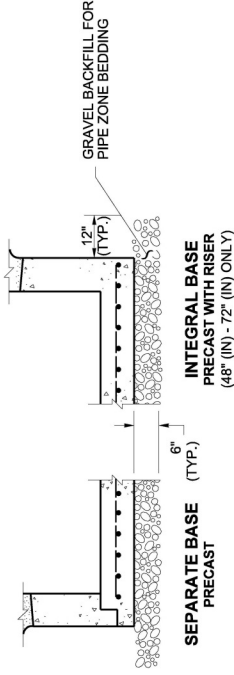
### THERMOPLASTIC PIPE



### METAL AND STEEL RIB REINFORCED POLYETHYLENE PIPE

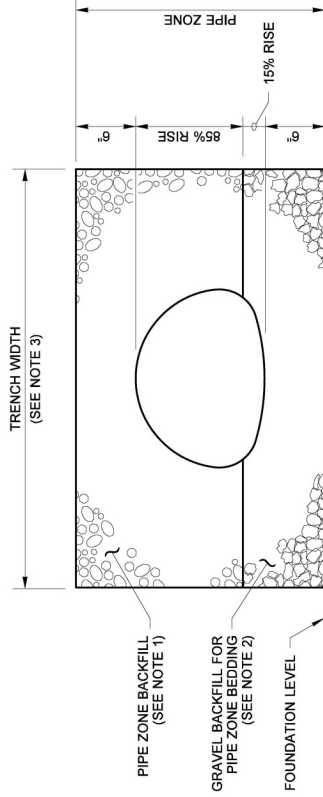
### NOTES

1. See **Standard Specifications Section 7-08.3(3)** for Pipe Zone Backfill.
2. See **Standard Specifications Section 9-03.12(3)** for Gravel Backfill for Pipe Zone Bedding.
3. See **Standard Specifications Section 2-09.4** for Measurement of Trench Width.
4. For sanitary sewer installation, concrete pipe shall be imbedded to spring line.



### TYPICAL CONDITION FOR DRAINAGE STRUCTURE

THIS DETAIL APPLIES TO STANDARD PLANS B-5.20,  
B-5.40, B-5.60, B-10.20, B-10.40, B-15.20, B-16.40, B-18.60,  
B-23.20, B-23.60, B-35.20 AND B-39.40.



### PIPE ARCHES

CLEARANCE BETWEEN PIPES FOR MULTIPLE INSTALLATIONS		
PIPE	SIZE	MINIMUM DISTANCE BETWEEN BARRELS
CIRCULAR PIPE (DIAMETER)	UP TO 48"	24"
METAL PIPE ARCH (SPAN)	48" AND LARGER	DIAMETER/2 OR 36" WHICHEVER IS LESS



Aug 17, 2021

### PIPE ZONE BEDDING AND BACKFILL

### STANDARD PLAN B-55.20-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Aug 17, 2021

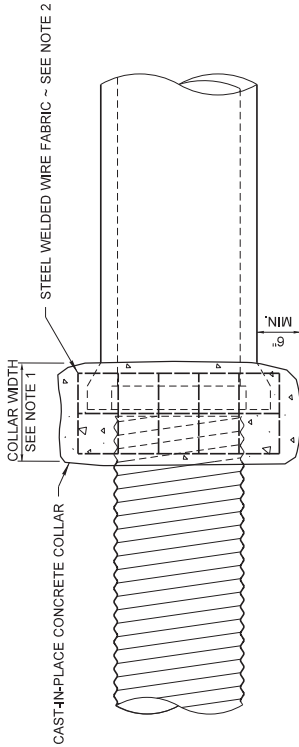
STATE DESIGN ENGINEER

Washington State Department of Transportation

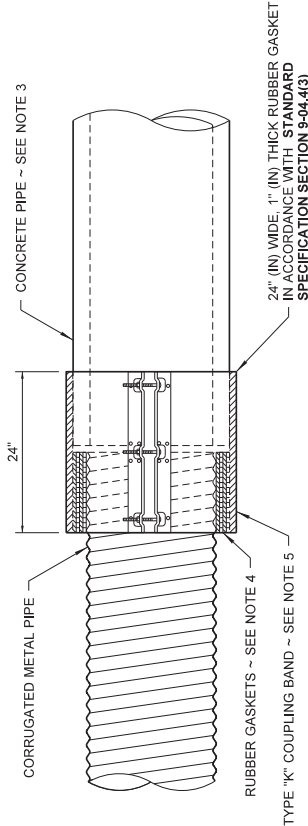


NOTES

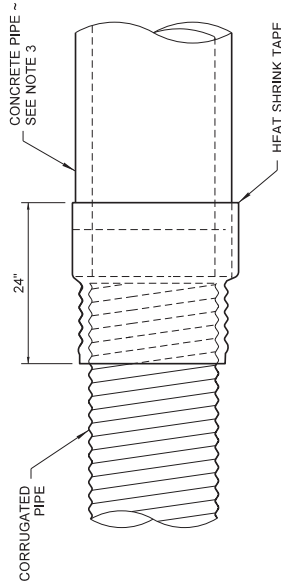
1. The Concrete Collar width shall be one half of the outside pipe diameter of the largest pipe. The minimum Concrete Collar width shall be 12" (in). Concrete Collars may be used with all pipe materials and diameters. The Concrete Collar option shall only be used to extend existing pipes. Concrete shall be Commercial Concrete in accordance with **Standard Specification Section 6-02.3(2)**.
2. Steel Welded Wire Fabric shall be in accordance with **Standard Specification Section 9-07.7**. Install two wraps for size 6 x 6 W1.4 x W1.4 (10 Gage) Steel Welded Wire Fabric or one wrap for any of the following sizes:
  - 6 x 6 W2.1 x W2.1 (8 Gage)
  - 6 x 6 W2.9 x W2.9 (6 Gage)
  - 4 x 4 W2.9 x W2.9 (6 Gage)
  - 4 x 4 W4.0 x W4.0 (4 Gage)Provide 1 1/2" min. covering over wire fabric.
3. When a Coupling Band connection requires attachment to the bell end of a concrete pipe, the bell end of the pipe shall be removed before the connection is installed.
4. Increase the outside diameter of the metal pipe to match the outside diameter of the concrete pipe by installing 12" (in) wide rubber gaskets, thickness as required (Coupling Band only). The rubber gaskets shall be in accordance with **Standard Specification Section 9-04.4(3)**.
5. Use a flat Type K Coupling Band. Type K Coupling Bands with dimples are not allowed for the installation detail shown. The Coupling Band option shall only be used for extending existing pipes that have an inside diameter of 36" (in) or less.
6. Heat shrink shall have a width of 24" (in). The material shall be wrapped around the outside of the pipe with a 2" (in) minimum overlap. There shall also be a 4" (in) minimum closure patch of material centered along the entire length of the seam.



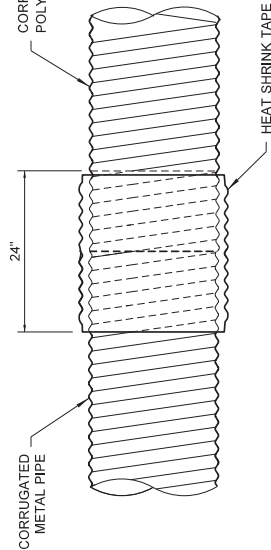
CONCRETE COLLAR OPTION



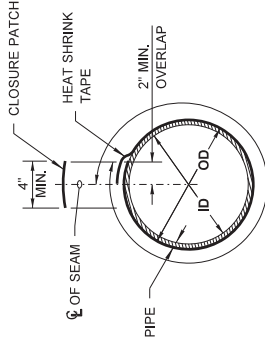
COUPLING BAND OPTION



HEAT SHRINK OPTION  
CORRUGATED PIPE TO CONCRETE PIPE



HEAT SHRINK OPTION  
CORRUGATED METAL PIPE TO CORRUGATED POLYETHYLENE PIPE



SECTION DETAIL



Julie Heilman  
2020.09.01 07:54:03 -0700

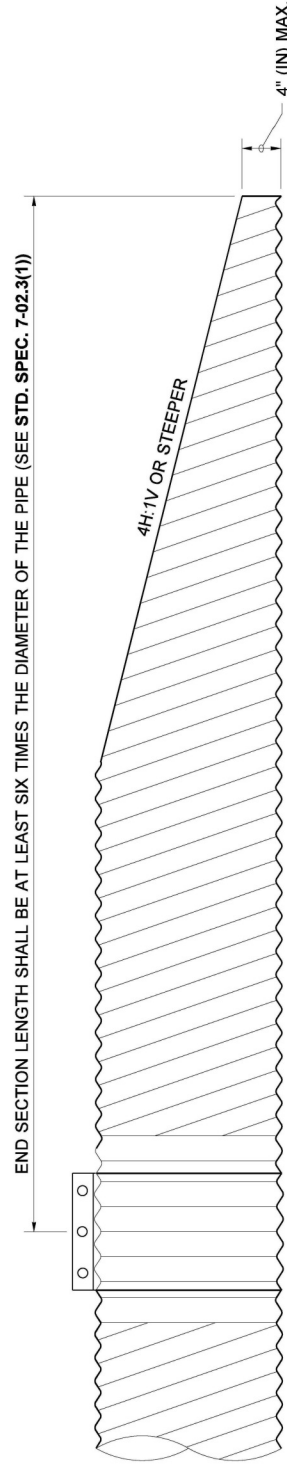
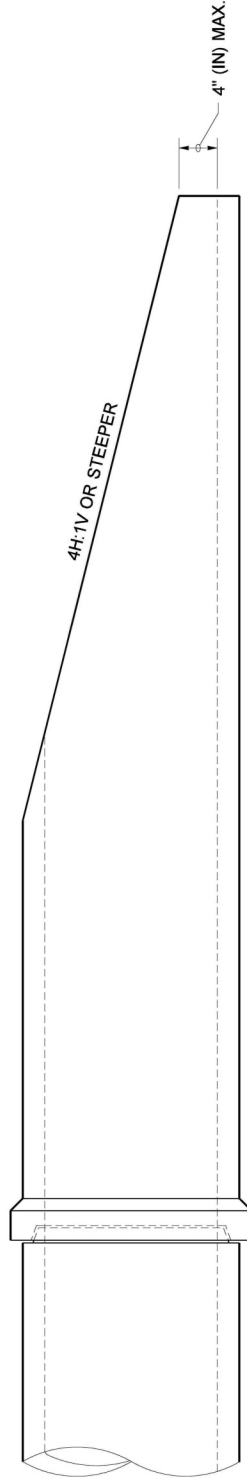
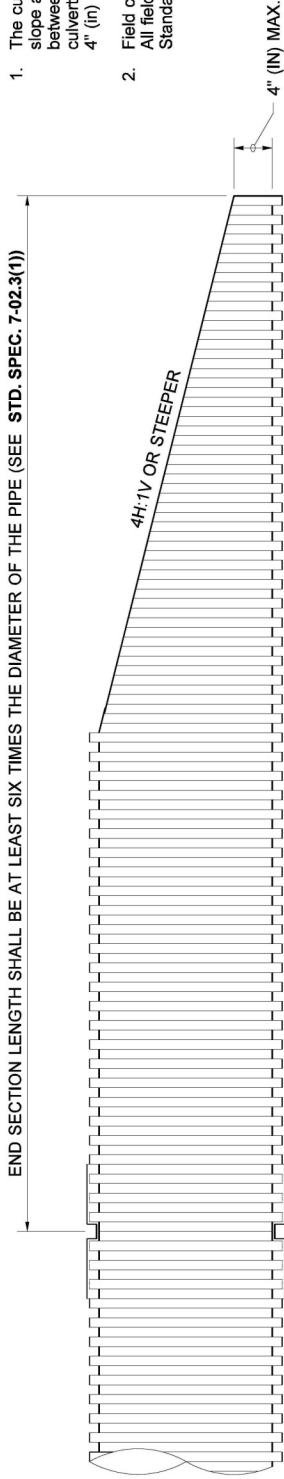
CONNECTION DETAILS FOR  
DISSIMILAR CULVERT PIPE  
STANDARD PLAN B-60.20-02

SHEET 1 OF 1 SHEET

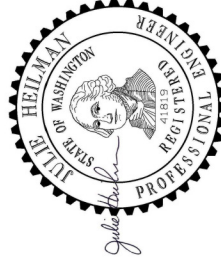
APPROVED FOR PUBLICATION  
Roark, Steve  
Digitally signed by Roark, Steve  
Date: 2020.09.09 09:52:35 -0700  
STATE DESIGN ENGINEER  
Washington State Department of Transportation

# NOTES

1. The culvert ends shall be mitered to match the embankment or ditch slope and shall not be mitered flatter than 4H : 1V. When slopes are between 4H : 1V and 6H : 1V, shape the slope in the vicinity of the culvert end to ensure that no part of the culvert protrudes more than 4" (in) above the ground line.
2. Field cutting of culvert ends is permitted when approved by the Engineer. All field-cut culvert pipe shall be treated with treatment as shown in the Standard Specifications or General Special Provisions.



FOR CULVERTS 30" (IN)  
DIAMETER OR LESS



Mar 14, 2022

## MITERED END SECTIONS

### STANDARD PLAN B-70.20-01

SHEET 1 OF 1 SHEET

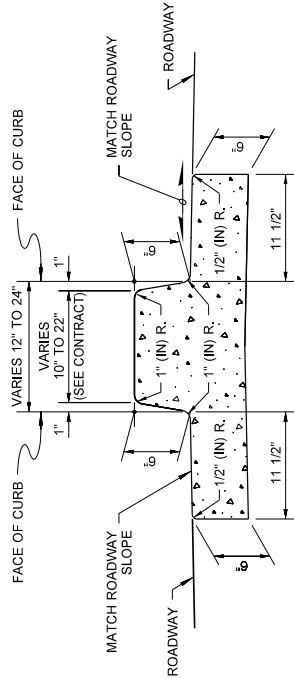
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Mark Garner

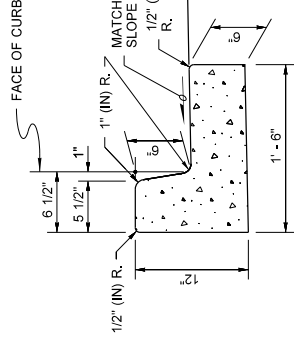
Mar 15, 2022

STATE DESIGN ENGINEER

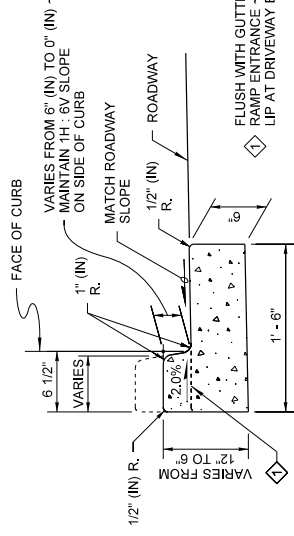
Washington State Department of Transportation



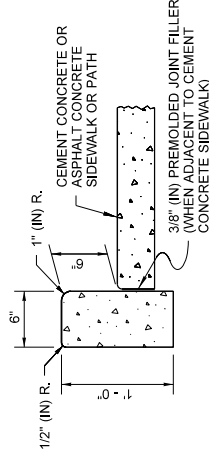
**DUAL-FACED CEMENT CONCRETE TRAFFIC CURB AND GUTTER**



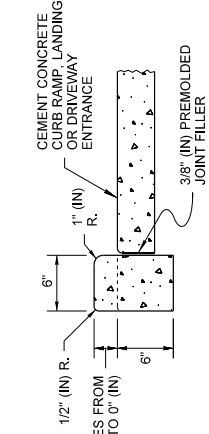
**CEMENT CONCRETE TRAFFIC CURB AND GUTTER**



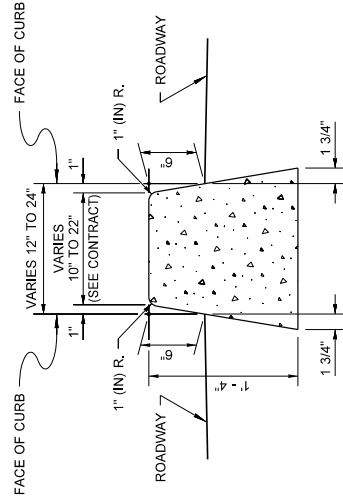
**DEPRESSED CURB AND GUTTER SECTION AT CURB RAMPS AND DRIVEWAY ENTRANCES**



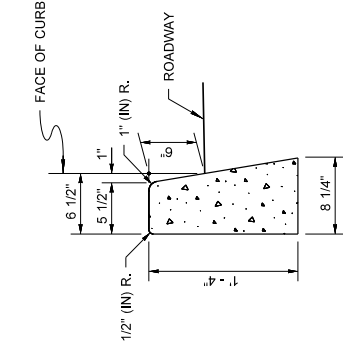
**CEMENT CONCRETE PEDESTRIAN CURB**



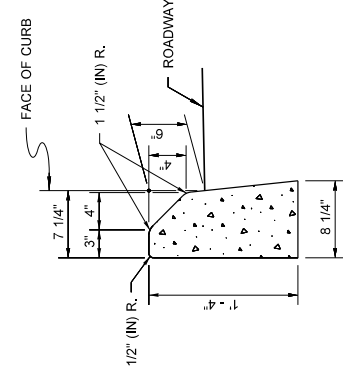
**CEMENT CONCRETE PEDESTRIAN CURB AT CURB RAMPS, LANDINGS, AND DRIVEWAY ENTRANCES**



**DUAL-FACED CEMENT CONCRETE TRAFFIC CURB**



**CEMENT CONCRETE TRAFFIC CURB**



**MOUNTABLE CEMENT CONCRETE TRAFFIC CURB**



Michael S  
Fleming

Digitally signed by Michael S  
Fleming  
Date: 2020.09.24 07:39:38 -0700

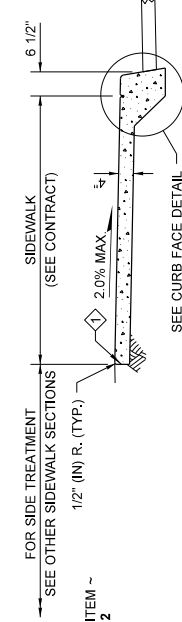
**CEMENT CONCRETE CURBS**

**STANDARD PLAN F-10.12-04**

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
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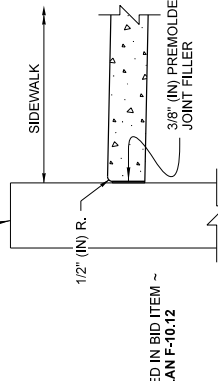
STATE DESIGN ENGINEER  
Washington State Department of Transportation



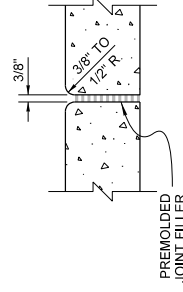
**MONOLITHIC CEMENT CONCRETE  
CURB AND SIDEWALK**

## NOTE

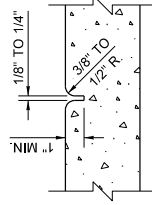
1. Gratings, Access Covers, Junction Boxes, Cable Vaults, Pull Boxes and other appurtenances within the sidewalk must have slip resistant surfaces, be flush with surface, and match grade of the sidewalk.



EXTEND SIDEWALK TRANSVERSE JOINTS TO INCLUDE RAISED EDGE



**© CONTRACTION JOINT**



Digitally signed by Michael S Fleming  
Date: 2020.09.24 07:40:16 -0700

## CEMENT CONCRETE SIDEWALK

SHEET 1 OF 1 SHEET

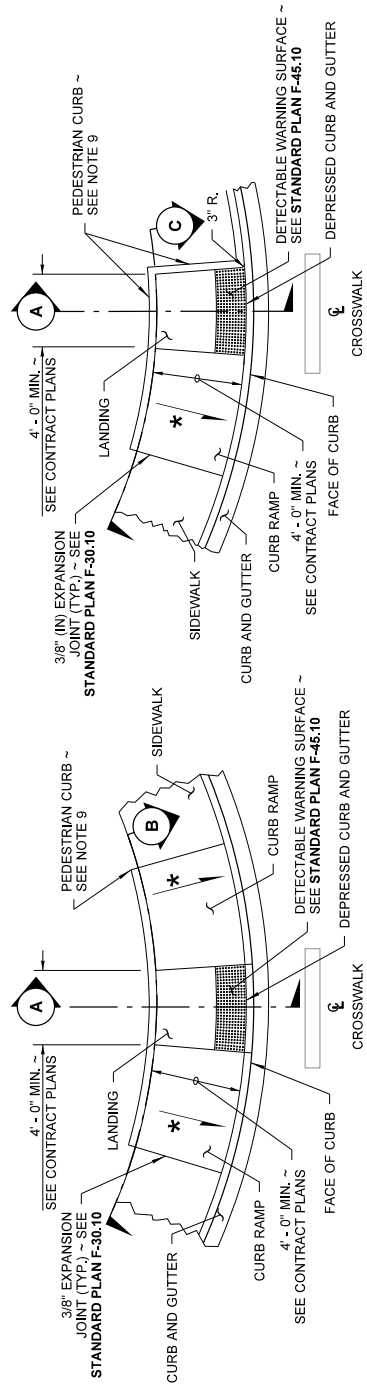
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Date: 2020.09.25  
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**Washington State Department of Transportation**  
STATE DESIGN ENGINEER

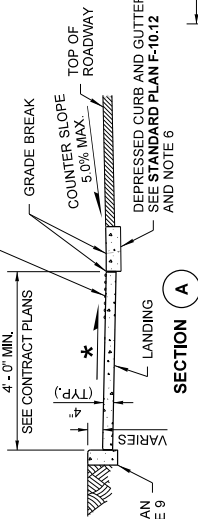
# NOTES

- At marked crosswalks, the connection between the landing and the roadway must be contained within the width of the crosswalk markings.
- Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
- Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in the Depressed Curb and Gutter where the Landing connects to the roadway.
- See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter, and Pedestrian Curb details.
- See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
- The Bid Item "Cement Concrete Curb Ramp Type \_\_\_\_" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
- The Curb Ramp length is not required to exceed 15 feet (unless otherwise shown in the Contract Plans). When applying the 15-foot max. length, the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet. Do not include abutting landing(s) in the 15-foot max. measurement. When a ramp is constructed on a radius, the 15-foot max. length is measured on the inside radius along the back of the walkway.
- Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14**.
- Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will be no material to retain.



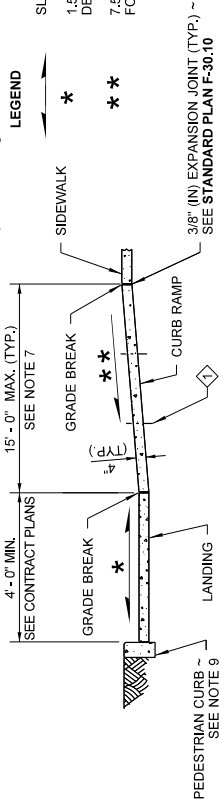
PLAN VIEW  
TYPE PARALLEL B

PLAN VIEW  
TYPE PARALLEL A



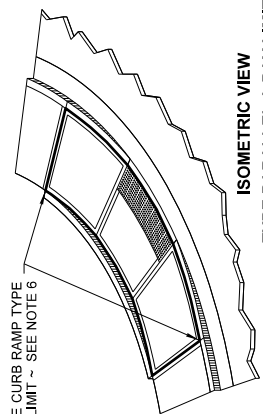
SECTION A

CONTRACTION JOINT (TYP.) ~ SEE **STANDARD PLAN F-30.1**  
FOR CURB RAMP LENGTHS GREATER THAN 8'. PROVIDE CONTRACTION JOINT EQUALLY SPACED 4'-0" MIN. OC.



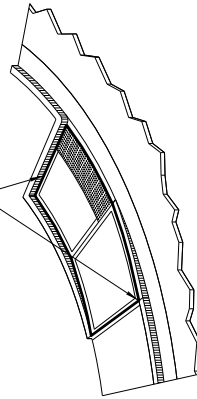
SECTION B

(ALONG INSIDE RADIUS AT BACK OF WALKWAY)



ISOMETRIC VIEW  
TYPE PARALLEL A PAY LIMIT

(ALONG INSIDE RADIUS AT BACK OF WALKWAY)



ISOMETRIC VIEW  
TYPE PARALLEL B PAY LIMIT



Zeller, Scott  
Jun 24 2016 7:19 AM  
CSES

## PARALLEL CURB RAMP

## STANDARD PLAN F-40.12-03

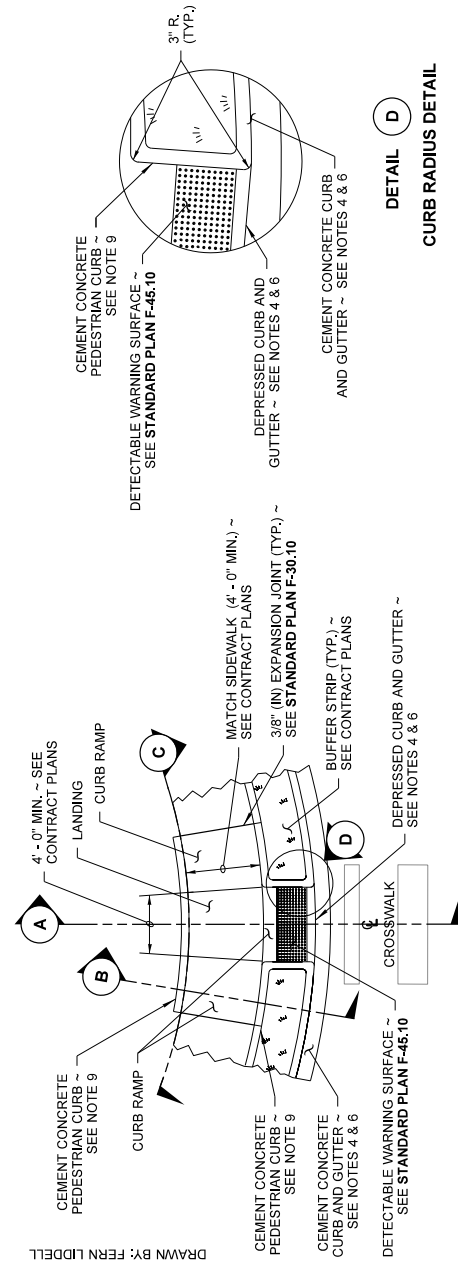
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
CARPENTER, Jeff  
JUN 23 2016 2:27 PM  
STATE DESIGN ENGINEER  
Washington State Department of Transportation



# NOTES

- At marked crosswalks, the connection between the curb ramp and the roadway must be contained within the width of the crosswalk markings.
- Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
- Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in the Depressed Curb and Gutter where the landing connects to the roadway.
- See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb, Gutter and Pedestrian Curb details.
- See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
- The Bid Item "Cement Concrete Curb Ramp Type \_\_\_\_" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
- The Curb Ramp length is not required to exceed 15 feet (unless otherwise shown in the Contract Plans). When applying the 15-foot max. length, the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk over a horizontal distance of 15 feet. Do not include the abutting landing in the 15-foot max. measurement. When a ramp is constructed on a radius, the 15-foot max. length is measured on the inside radius along the back of the walkway.
- Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14**.
- Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will not be material to retain.

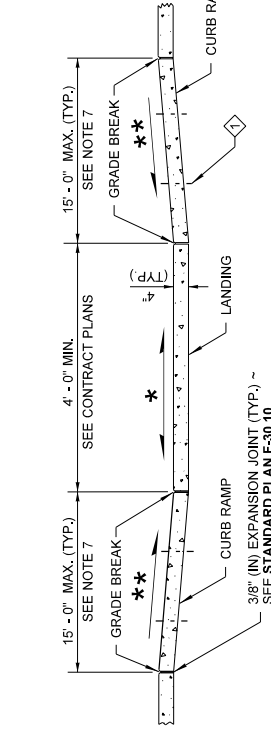


PLAN VIEW  
TYPE COMBINATION  
WITH BUFFER

DETAIL (D)  
CURB RADIUS DETAIL

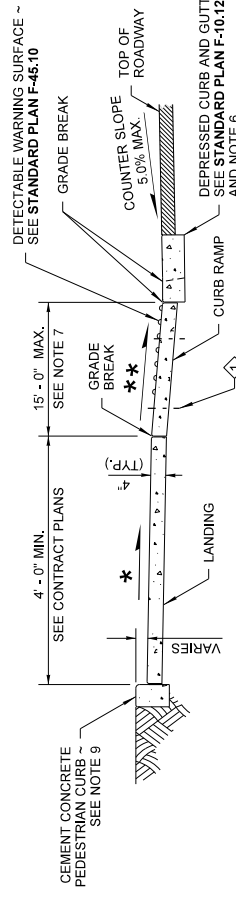
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- SLOPE IN EITHER DIRECTION
- \* 1.5 OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)
  - \*\* 7.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (8.3% MAX.)

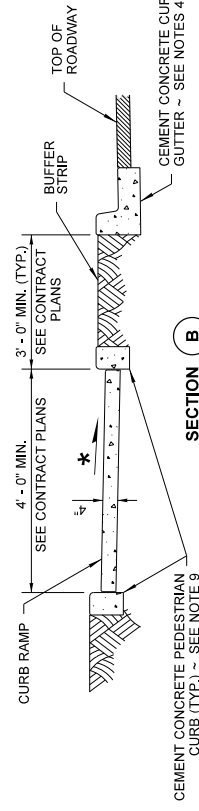


SECTION C  
(ALONG INSIDE RADIUS AT BACK OF WALKWAY)

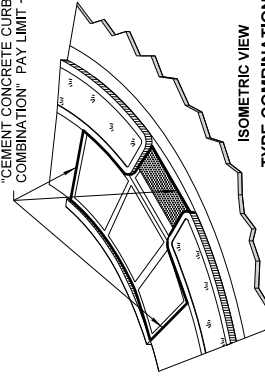
CONTRACTION JOINT (TYP.) ~ SEE **STANDARD PLAN F-30.10**  
FOR CURB RAMP LENGTHS GREATER THAN 8'-0" PROVIDE  
CONTRACTION JOINT EQUALLY SPACED 4'-0" MIN. OC.



SECTION A



SECTION B



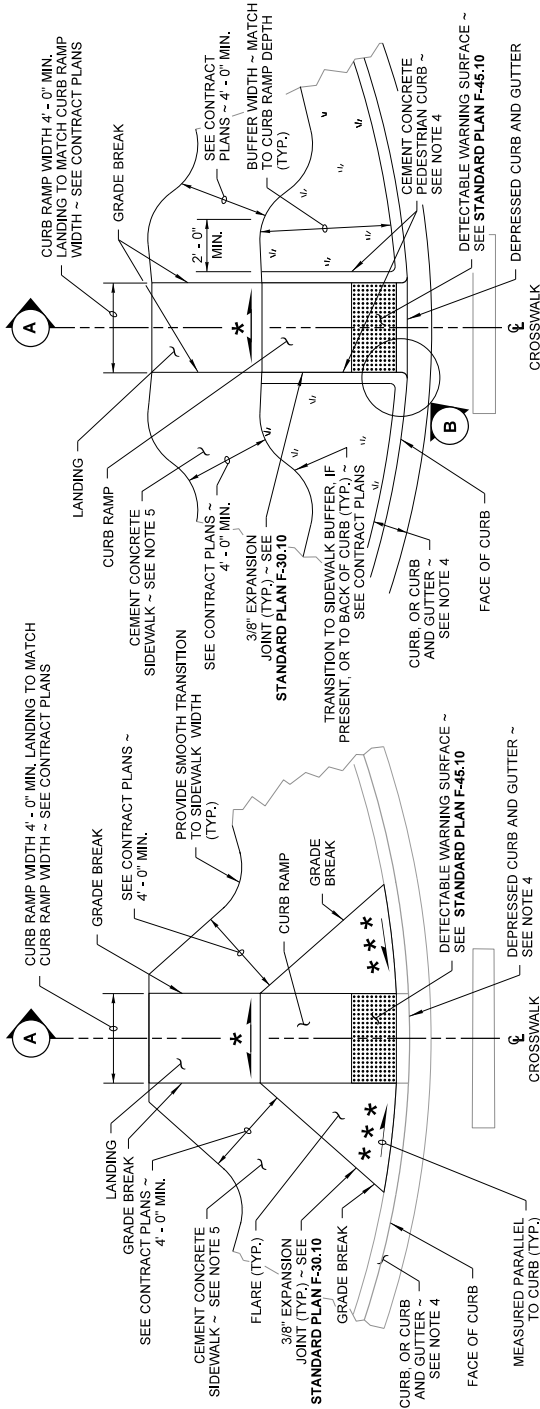
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Jun 24 2016 7:20 AM

## COMBINATION CURB RAMP STANDARD PLAN F-40.14-03

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
Carpenter, Jeff  
Jun 27 2016 2:38 PM

STATE DESIGN ENGINEER  
Washington State Department of Transportation



DRAWN BY: FERN LIDDELL

## NOTES

- At marked crosswalks, the connection between the curb ramp and the roadway must be contained within the width of the crosswalk markings.
- Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
- Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing, or in front of the Curb Ramp where it connects to the roadway.
- See Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb and Gutter, and Pedestrian Curb details.
- See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
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- Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14**.
- Pedestrian Curb may be omitted if the ground surface at the back of the Curb Ramp and/or Landing will be at the same elevation as the Curb Ramp or Landing and there will not be material to retain.

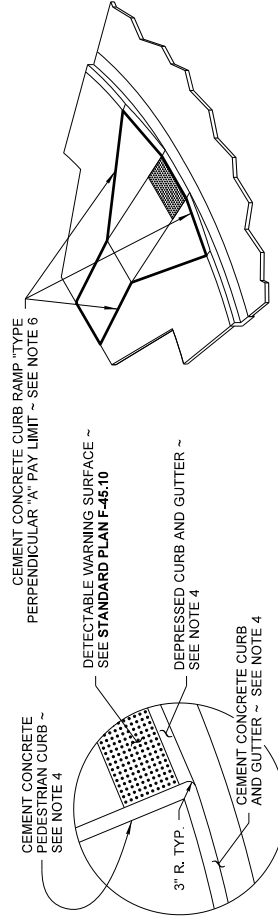
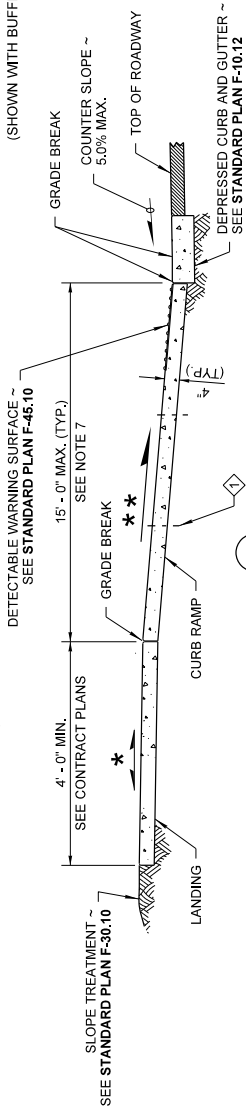
## PLAN VIEW TYPE PERPENDICULAR A

CONTRACTION JOINT (TYP.) ~ SEE **STANDARD PLAN F-30.10**  
FOR CURB RAMP LENGTHS GREATER THAN 8'-0" PROVIDE  
CONTRACTION JOINT EQUALLY SPACED 4'-0" MIN. OC.

## PLAN VIEW TYPE PERPENDICULAR B (SHOWN WITH BUFFER)

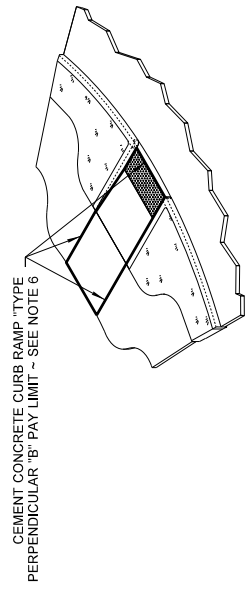
- LEGEND
- SLOPE IN EITHER DIRECTION
- \* 1.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (2% MAX.)
  - \* 7.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (8.3% MAX.)
  - \* 9.5% OR FLATTER RECOMMENDED FOR DESIGN/FORMWORK (10% MAX.)

## SECTION A



## CURB RADIUS DETAIL B

## ISOMETRIC VIEW TYPE PERPENDICULAR A PAY LIMIT



## ISOMETRIC VIEW TYPE PERPENDICULAR B PAY LIMIT

Digitally signed by R. Scott Zeller  
Date: 2020.09.22 13:23:53 -0700



## PERPENDICULAR CURB RAMP

## STANDARD PLAN F-40.15-04

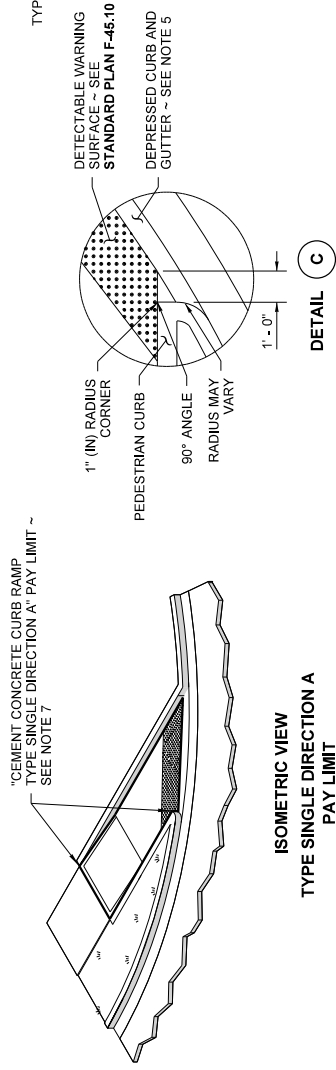
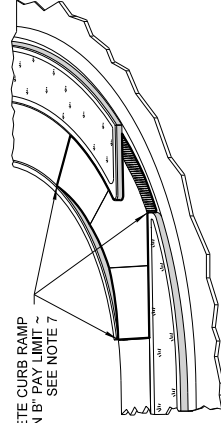
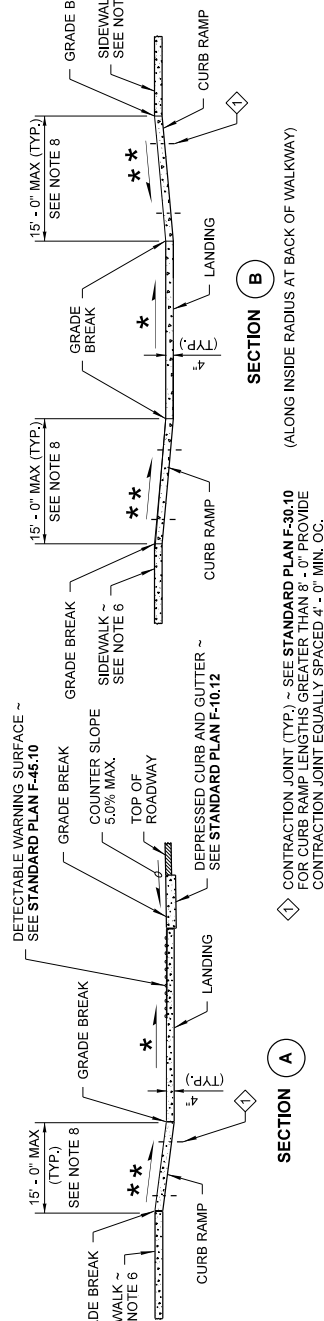
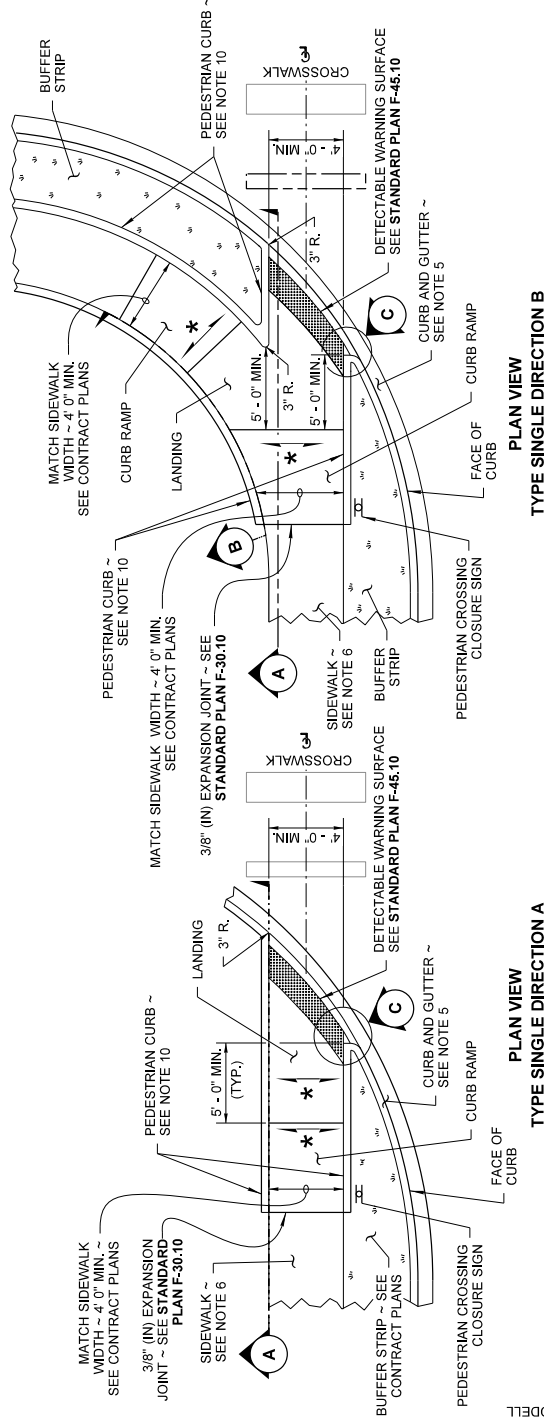
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
Date: 2020.09.25  
14:44:37 -0700

STATE DESIGN ENGINEER  
Washington State Department of Transportation

1. This plan is to be used where pedestrian crossing in one direction is not permitted.
2. At marked crosswalks, the connection between the Landing and the roadway must be contained within the width of the crosswalk markings.
3. Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.

1. This plan is to be used where pedestrian crossing in one direction is not permitted.
2. At marked crosswalks, the connection between the Landing and the roadway must be contained within the width of the crosswalk markings.
3. Where "GRADE BREAK" is called out, the entire length of the grade break between the two adjacent surface planes shall be flush.
4. Do not place Gratings, Junction Boxes, Access Covers, or other appurtenances on any part of the Curb Ramp or Landing or in the Depressed Curb and Gutter where the Landing connects to the roadway.
5. Provide Contract Plans for the curb design specified. See **Standard Plan F-10.12** for Curb, Curb and Gutter, Depressed Curb, Gutter and Pedestrian Curb details.
6. See **Standard Plan F-30.10** for Cement Concrete Sidewalk Details. See Contract Plans for width and placement of sidewalk.
7. The Bid Item "Cement Concrete Curb Ramp Type \_\_\_" does not include the adjacent Curb, Curb and Gutter, Depressed Curb and Gutter, Pedestrian Curb, or Sidewalks.
8. The Curb Ramp length is not required to exceed 15 feet (unless shown otherwise in the Contract Plans). When applying the 15-foot max. length (measured from back of sidewalk) the running slope of the curb ramp is allowed to exceed 8.3%. Use a single constant slope from bottom of ramp to top of ramp to match into the sidewalk above a horizontal distance of 15 feet.
9. Curb Ramps and Landings shall receive a broom finish. See **Standard Specifications 8-14**.



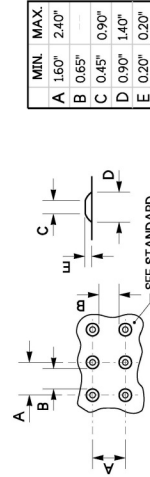

**Washington State Department of Transportation**  
 STATE DESIGN ENGINEER  
*Carpenter, Jeff*  
 Carpenter, Jeff  
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 APPROVED FOR PUBLICATION  


  
Zeller, Scott  
Jun 24 2016 7:21 AM  
**SINGLE DIRECTION  
CURB RAMP**  

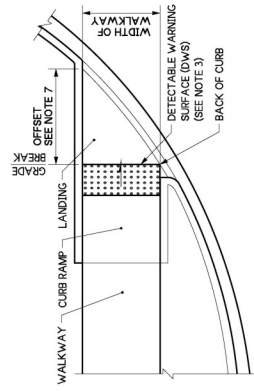



**STANDARD PLAN F-40.16-03**  
SHEET 1 OF 1 SHEET

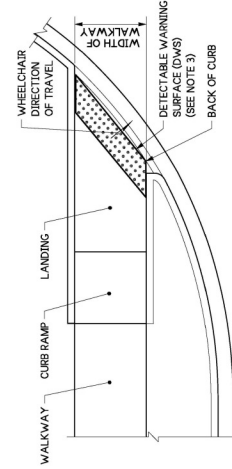




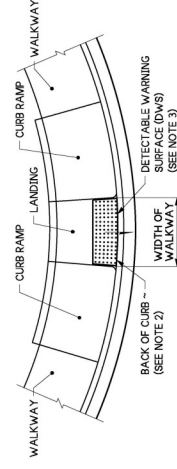
TRUNCATED DOME DETAILS  
(SEE NOTE 3)



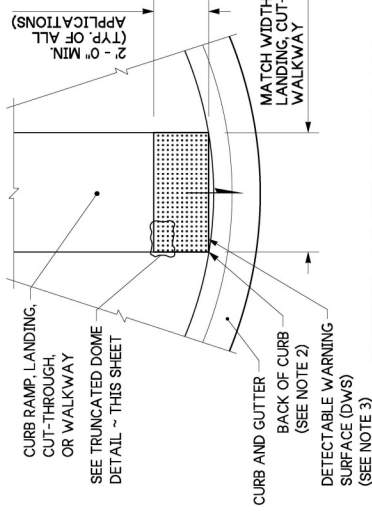
SINGLE DIRECTION CURB RAMP  
(GRADE BREAK BETWEEN CURB AND  
LANDING < 5 FEET FROM BACK OF CURB)  
(SEE NOTE 5)



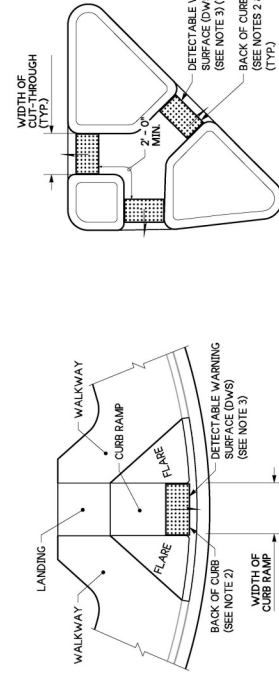
SINGLE DIRECTION CURB RAMP  
(GRADE BREAK BETWEEN CURB AND  
LANDING > 5 FEET FROM BACK OF CURB)  
(SEE NOTE 5)



PARALLEL CURB RAMP  
(SEE NOTE 6)

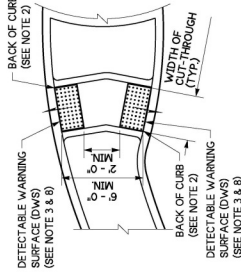


DETECTABLE WARNING SURFACE DETAIL

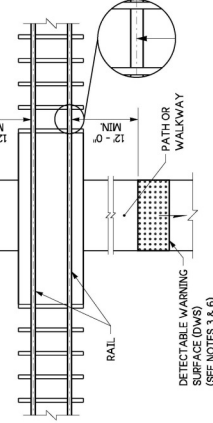


PERPENDICULAR CURB RAMP  
(SEE NOTE 6)

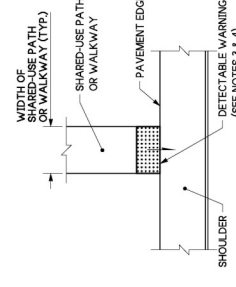
ISLAND CUT-THROUGH



ROUNDABOUT SPLITTER ISLAND



PEDESTRIAN RAILROAD CROSSING



SHARED-USE PATH CONNECTION  
(SEE NOTES 3 & 4)

NOTES:

- Permanent Detectable Warning Surfaces (DWS) shall extend the full width of the curb ramp, landing, or other roadway entrance as applicable. Exception: If the manufacturer of the DWS requires a concrete border around the DWS, a variance of up to 2' (n) on each side of the DWS is permitted.
- Permanent Detectable Warning Surfaces (DWS) shall be placed on a minimum 4" (n) thick concrete pad. The DWS panel shall be placed adjacent to the back of the curb and with no more than a 2' (n) gap between the DWS and the back of the curb measured at the center of the DWS panel. Exception: If the Manufacturer of the selected DWS requires a concrete border around the DWS, a variance of up to 2' (n) from the back of the curb is permitted (measured at the leading corners of the DWS panel).
- The rows of truncated domes shall be aligned to be parallel to the direction of travel, and perpendicular to the grade break at the back of curb.
- If curb and gutter are not present, such as a shared-use path connection, the Detectable Warning Surface shall be placed at the pavement edge.
- See Standard Plans for sidewalk and curb ramp details.
- If a curb ramp is required, the location of the Detectable Warning Surface must be at the bottom of the ramp and within the required distance from the rail crossing.
- When the grade break between the curb ramp and the landing is less than or equal to 5 feet from the back of curb at all points, place the Detectable Warning Surface on the bottom of the curb ramp directly above the grade break.
- Glued or stick down Detectable Warning Surfaces are allowed only for temporary work zone applications.

LEGEND  
DIRECTION OF TRAVEL



Jun 4, 2024

DETECTABLE WARNING  
SURFACE

STANDARD PLAN F-45.10-05

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

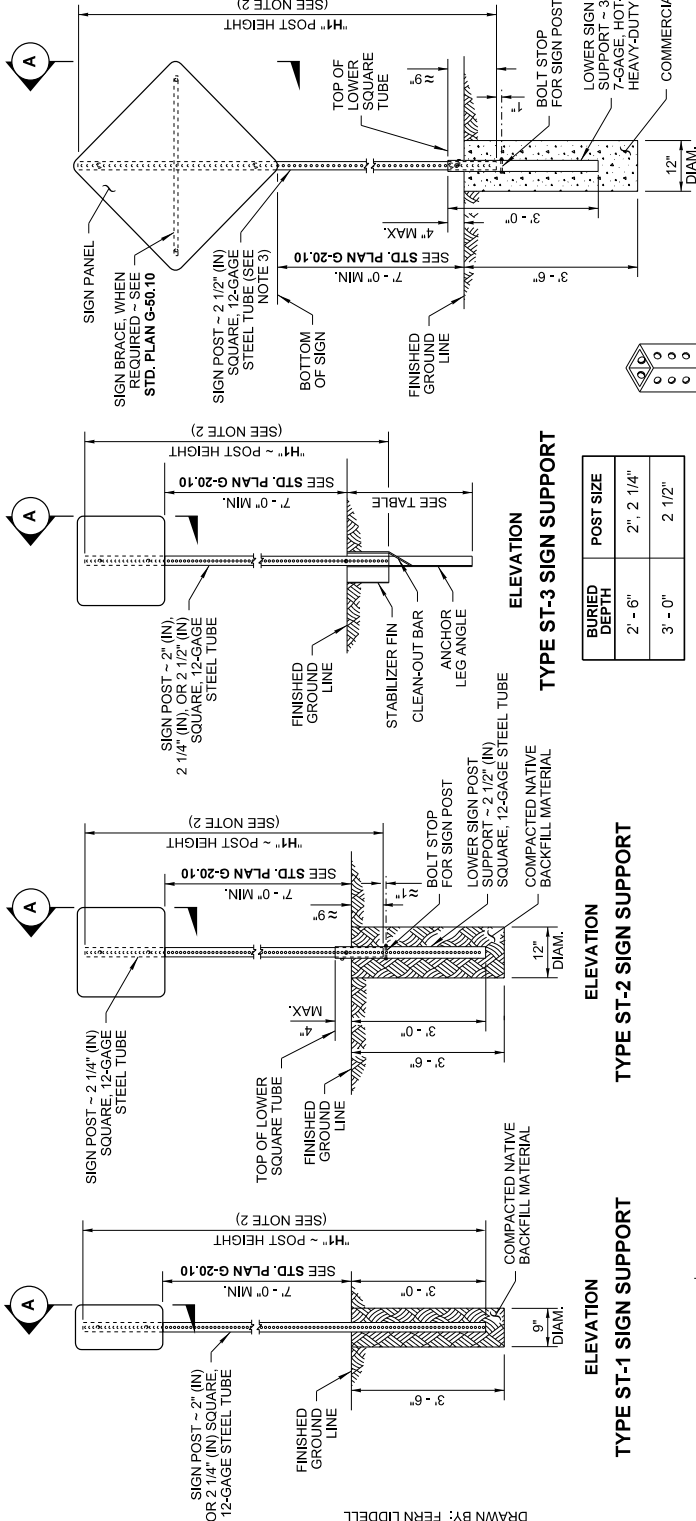
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STATE DESIGN ENGINEER

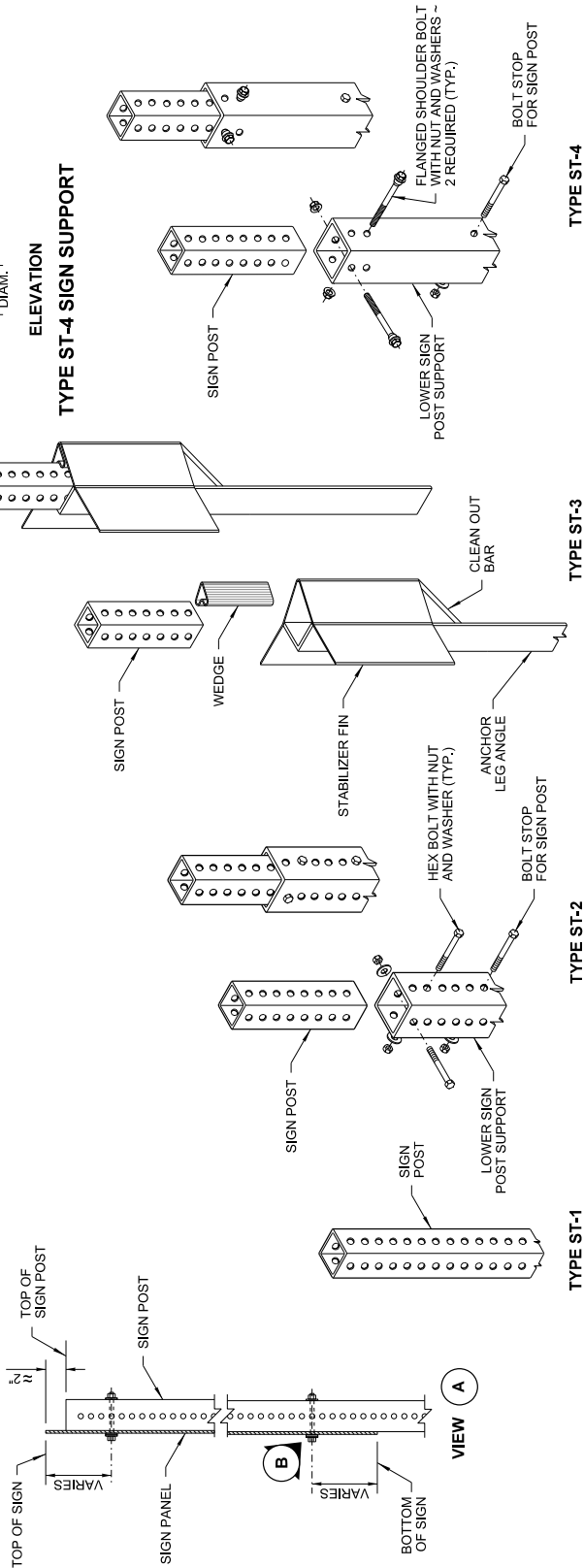
Washington State  
Department of Transportation

# NOTES

- Dimensions for the parts used to assemble the base connections are intentionally not shown. Base connections are patented, manufactured products that are in compliance with NCHRP 350 crash test criteria. The base connection details are shown on this plan only to illustrate how the parts are assembled.
- For "H1", refer to the Sign Specification Sheet in the Contract.
- A 2" (in) post with a 2 1/4" (in) PSST anchor or a 2 1/4" (in) post with a 2 1/2" (in) PSST anchor may be substituted. See Contract Plans.
- Perforated square steel post shall meet the requirements of **Standard Specification, Section 9-06**.
- Use only base connection manufacturer supplied hardware that meets the requirements of **Standard Specification, Sections 9-06 and 9-28**.



DRAWN BY: FERN LIDDELL



John Nisbett  
Aug 5 2019 1:46 PM  
cogit

## **STEEL SIGN SUPPORT TYPES ST-1 - ST-4 INSTALLATION DETAILS STANDARD PLAN G-24.50-05**

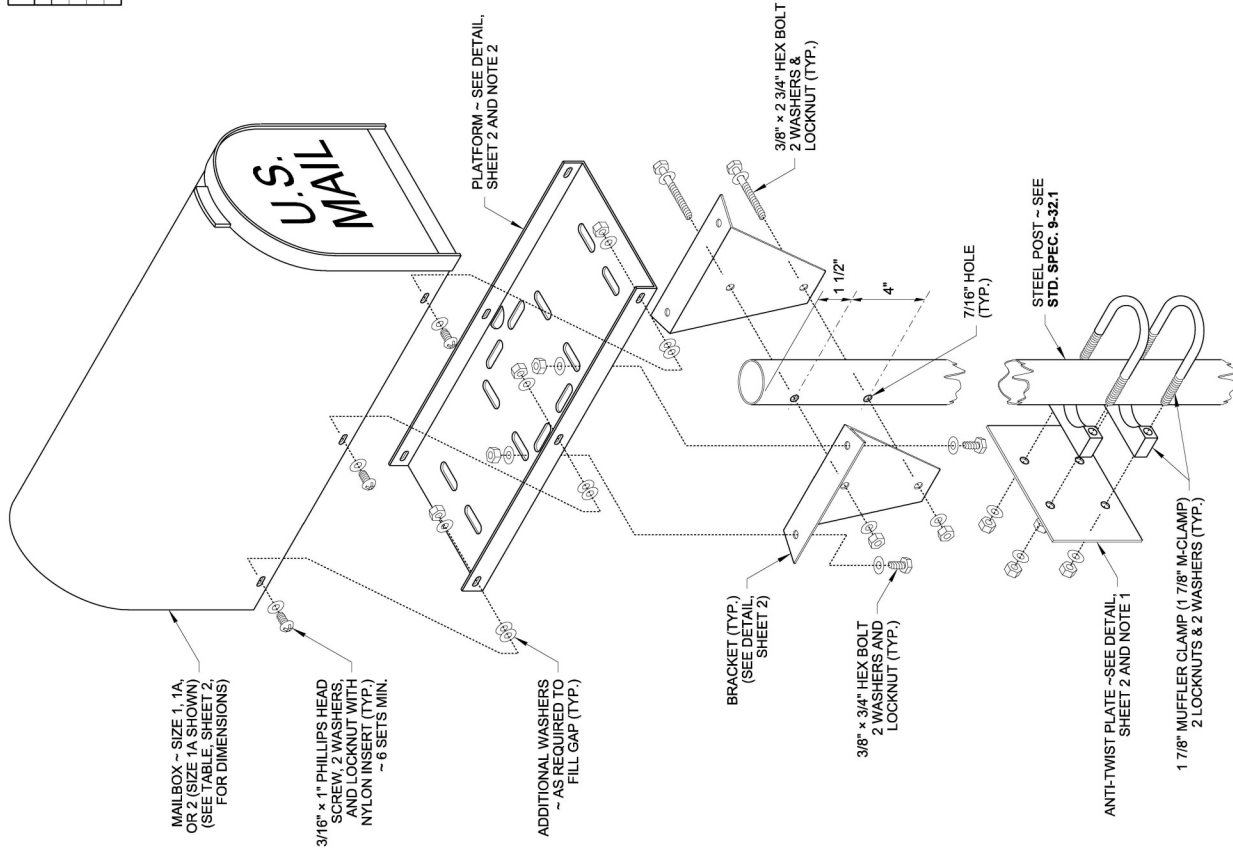
SHEET 1 OF 1 SHEET



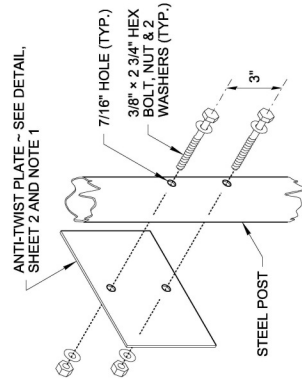
STEEL POST FASTENERS			
SIZE / TYPE	QUANTITY	WASHERS	LOCKNUTS
3/8" DIAM. x 2 3/4" BOLT	2	4	2
3/8" DIAM. x 3/4" BOLT	4	8	4
3/16" DIAM. x 1" SCREW	6	12	6
1 7/8" M-CLAMP	2	4	4

NOTES

- The anchoring system shall meet MASH crash test criteria. The anti-twist plate anchoring system shown on this plan is deemed MASH compliant by WSDOT. The V-Wing socket and wedge assembly in a concrete base shown on **Std. Plan H-70.20** is also deemed MASH compliant by WSDOT and may be substituted in lieu of the anti-twist plate designs shown. Other MASH compliant anchoring systems manufactured by or recommended by the Type 1 support manufacturer are allowed to be used in lieu of the anti-twist plate or V-wing socket and wedge assembly.
- The platform design shown on this plan features slots that accommodate several types of mailbox supports; only those slots necessary for assembling the type being installed are required. An adjustable platform may be used in lieu of this design, but it must fit the bracket design shown on this plan. Brackets are required for all single-post installations. Field drilling may be necessary.
- Center the mailbox on the platform to ensure space for the mailbox door to open and to allow space for installing the fasteners (see ALIGNMENT DETAIL, Sheet 2). Spacing of mailbox mounting holes varies among manufacturers. Attachment of the mailbox to the platform may require drilling additional holes through the mailbox to fit the platform.
- Attach a newspaper box to a steel post with two 1 7/8" (in) Muffler Clamps spaced 4" (in) apart. Field drill 7/16" (in) holes in the newspaper box to fit. Newspaper boxes must not extend beyond the front of the mailbox when the mailbox door is closed.
- A Type 2 Support (**Standard Plan H-70.20**) is required when 2 or more mailboxes are to be installed on one support.



STEEL POST ASSEMBLY DETAIL



ALTERNATE ANTI-TWIST PLATE DESIGN



Aug 17, 2021

MAILBOX SUPPORT  
TYPE 1

STANDARD PLAN H-70.10-02

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

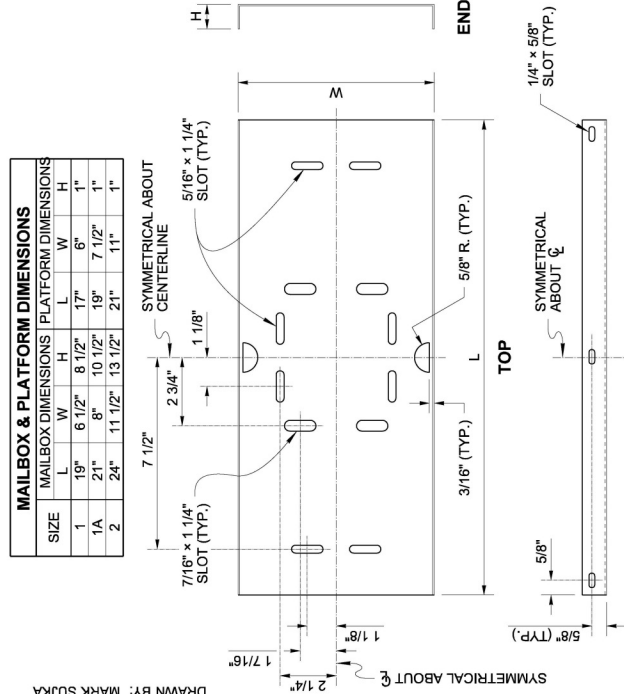
Aug 17, 2021

STATE DESIGN ENGINEER

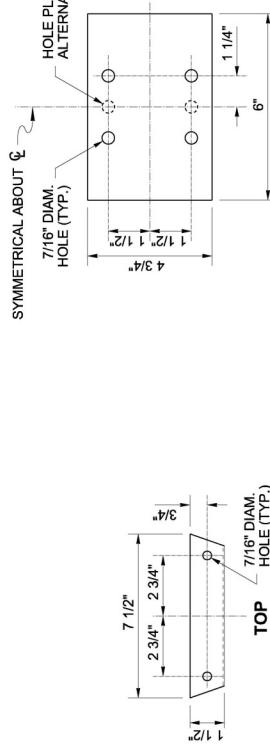
Washington State Department of Transportation

MAILBOX & PLATFORM DIMENSIONS									
SIZE	L	W	H	L	W	H	L	W	H
1	19"	6 1/2"	8 1/2"	17"	6"	1"	19"	6 1/2"	8 1/2"
1A	21"	8"	10 1/2"	19"	7 1/2"	1"	21"	8"	10 1/2"
2	24"	11 1/2"	13 1/2"	21"	11"	1"	24"	11 1/2"	13 1/2"

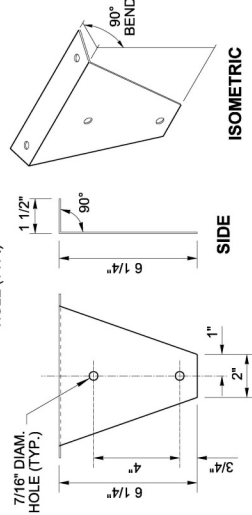
DRAWN BY: MARK SUJKA



### PLATFORM DETAIL



### ANTI-TWIST PLATE DETAIL

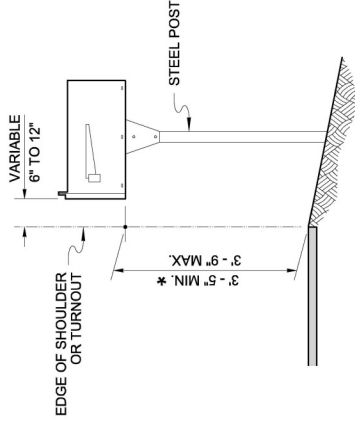


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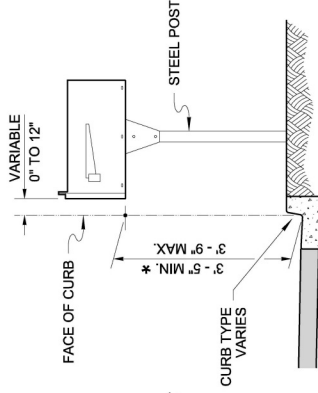
### BRACKET DETAIL

### SIDE

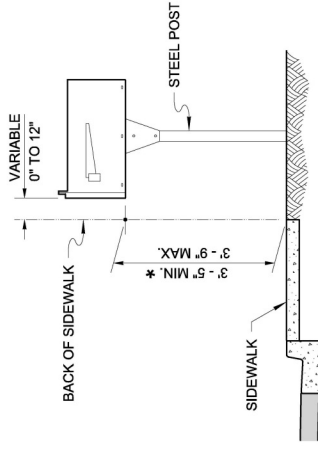
### ISOMETRIC



### AT EDGE OF SHOULDER

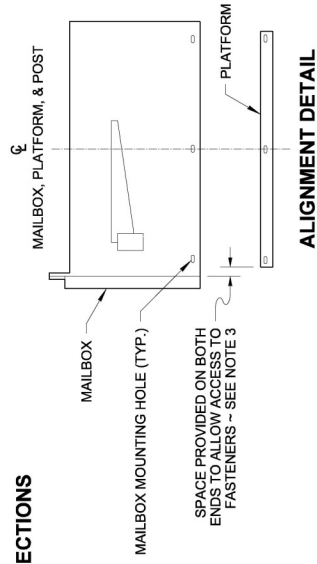


### BEHIND CURB

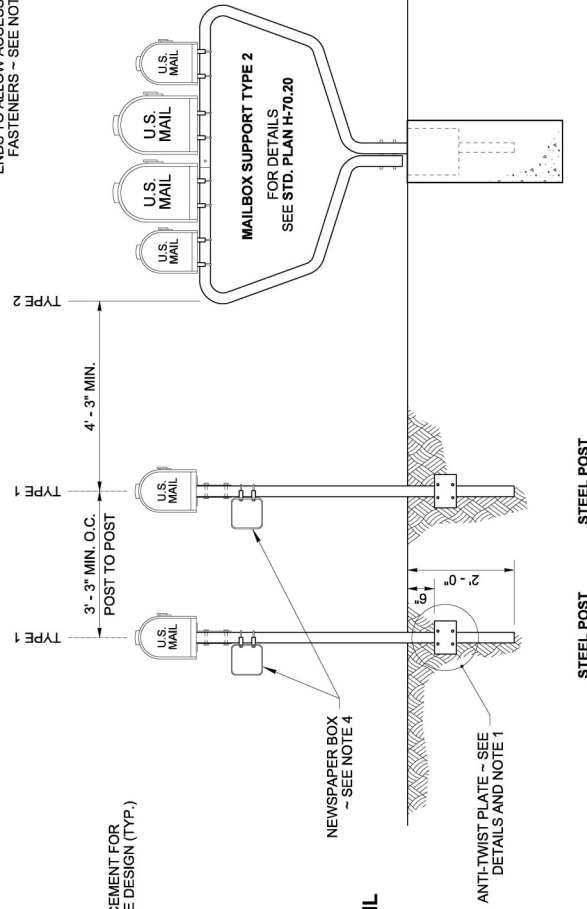


### BEHIND SIDEWALK

\* UNLESS OTHERWISE SHOWN IN THE PLANS  
MAILBOX PLACEMENT SECTIONS



### ALIGNMENT DETAIL



### STEEL POST

### STEEL POST

### POST PLACEMENT DETAIL



Aug 17, 2021

### MAILBOX SUPPORT TYPE 1

### STANDARD PLAN H-70-10-02

SHEET 2 OF 2 SHEETS

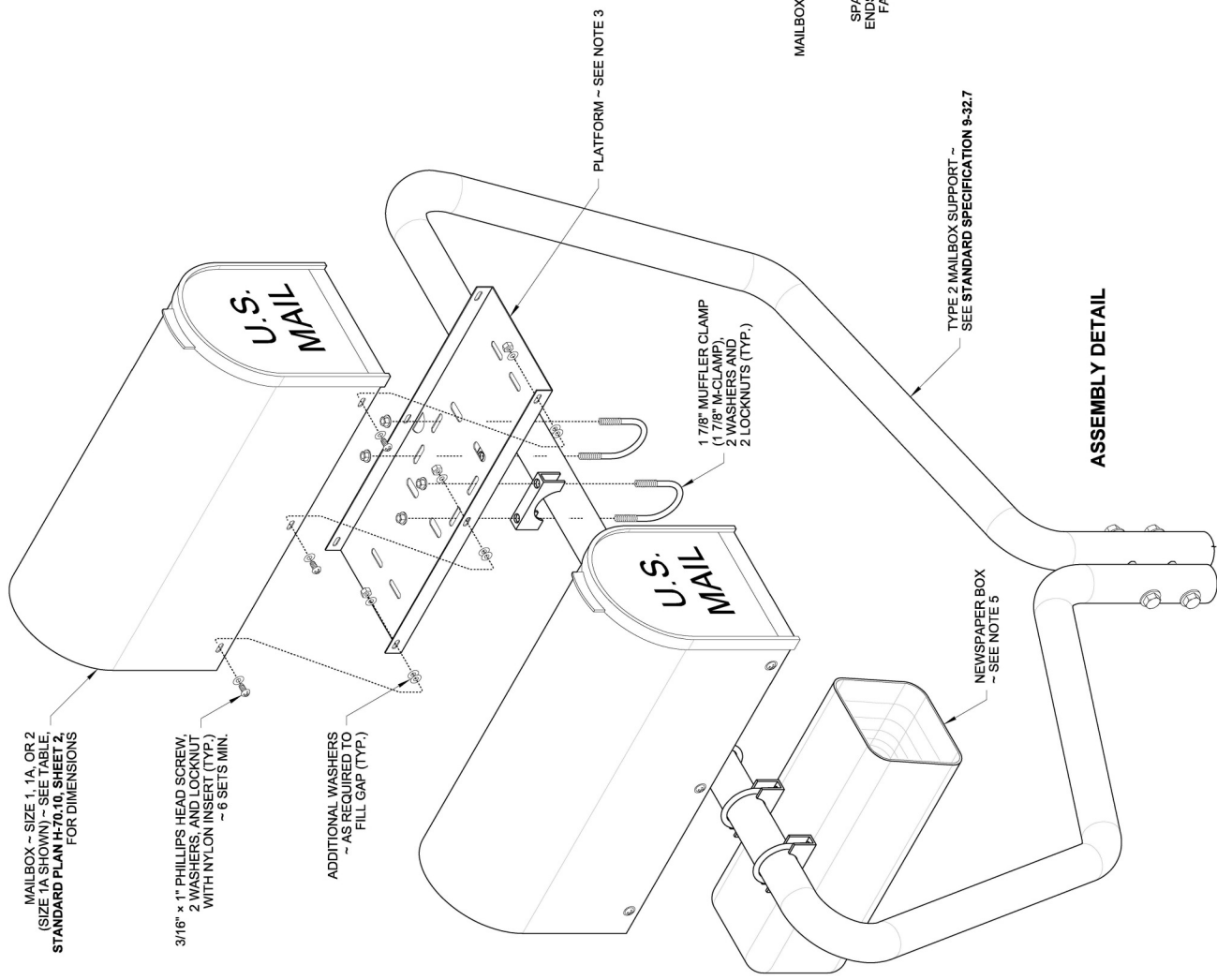
APPROVED FOR PUBLICATION

Aug 17, 2021

STATE DESIGN ENGINEER

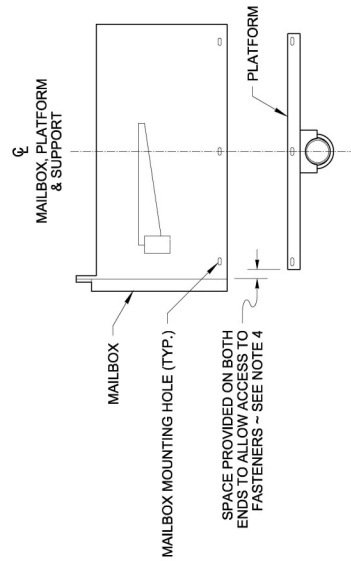
Washington State Department of Transportation





NOTES

1. The anchoring system shall meet MASH crash test criteria. The V-wing socket and wedge assembly installed in a concrete base as detailed in this plan is deemed MASH compliant by WSDOT. Other MASH compliant anchoring systems manufactured by or recommended by the Type 2 support manufacturer are allowed to be used in lieu of the V-wing socket and wedge assembly.
2. A maximum of five mailboxes may be installed on a Type 2 Support. The combined weight of the empty mailboxes shall not exceed 30 Lbs. If different sized mailboxes are used on a Type 2 support, the center position mailboxes must either be the same size as the edge position mailboxes or larger than the edge position mailboxes.
3. The Platform design shown in this plan is detailed in the PLATFORM DETAIL, **Standard Plan H-70.10, Sheet 2**. The design features slots that accommodate several types of mailbox supports; only those slots necessary for assembling the type being installed are required. An adjustable platform may be used in lieu of this platform design. Adjustable platforms must fit the 1 7/8" (in) M-Clamp.
4. Center the mailbox on the platform to ensure space for the mailbox door to open and to allow space for installing the fasteners (see ALIGNMENT DETAIL). Spacing of mailbox mounting holes varies among manufacturers. Attachment of the mailbox to the platform may require drilling additional holes through the mailbox to fit the platform.
5. Attach a newspaper box to a Type 2 Support with two 1 7/8" (in) Muffler Clamps spaced 4" (in) apart. Field drill 7/16" (in) holes in the newspaper box to fit. Newspaper boxes must not extend beyond the front of the mailbox when the mailbox door is closed.



ALIGNMENT DETAIL  
SEE NOTE 4



Aug 17, 2021

MAILBOX SUPPORT  
TYPE 2

STANDARD PLAN H-70.20-02

SHEET 1 OF 2 SHEETS

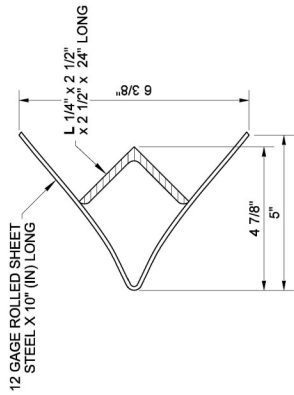
APPROVED FOR PUBLICATION

Aug 17, 2021

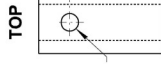
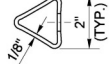
STATE DESIGN ENGINEER

Washington State Department of Transportation



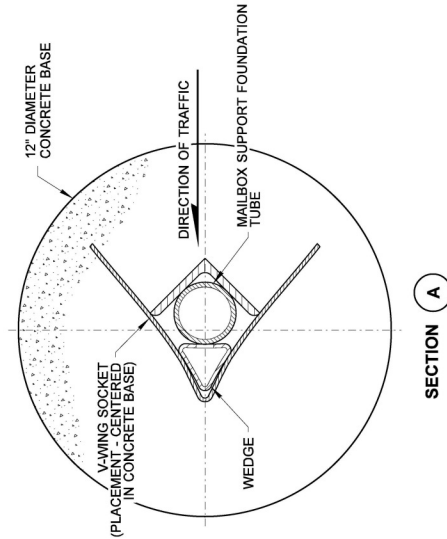


**TOP**  
**V-WING SOCKET DETAIL**



**ELEVATION**

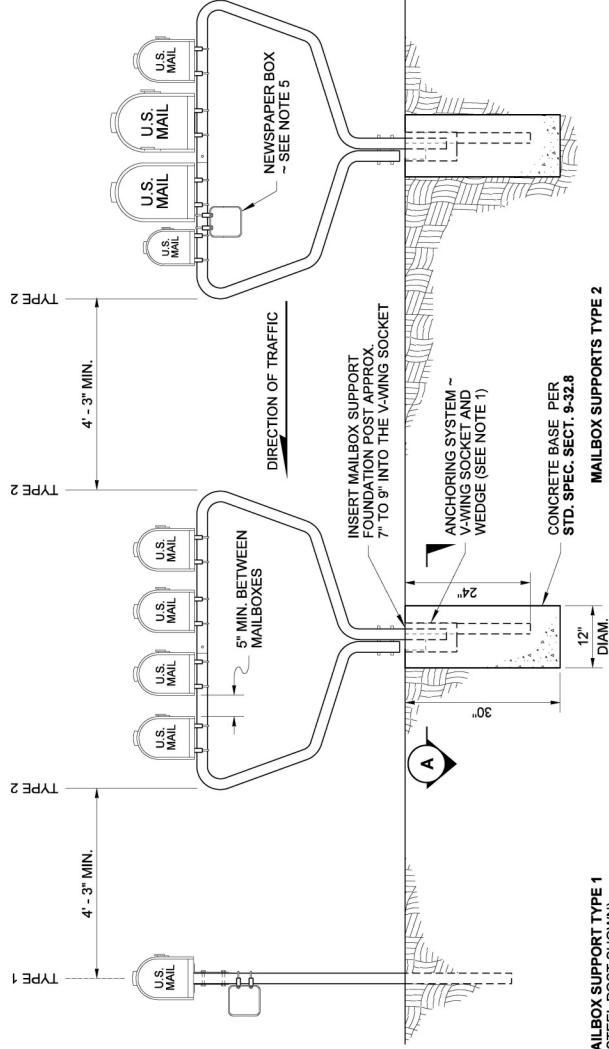
**WEDGE DETAIL**



**SECTION A**

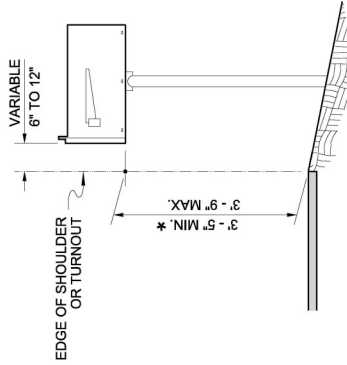
**V-WING SOCKET AND  
WEDGE ASSEMBLY DETAIL**  
(PLACE TOP OF ASSEMBLY  
FLUSH WITH CONCRETE BASE SURFACE)

MAILBOX SUPPORT TYPE 1  
(STEEL POST SHOWN)  
FOR DETAILS  
SEE STANDARD PLAN H-70.10

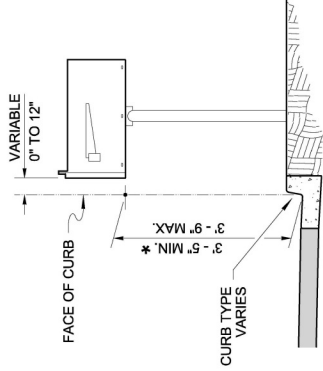


MAILBOX SUPPORTS TYPE 2

**SPACING DETAIL**

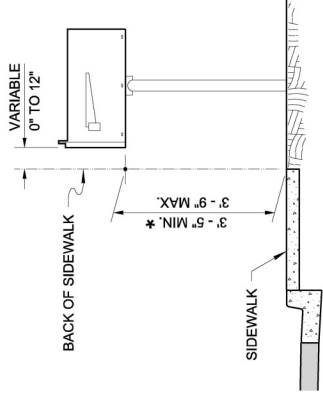


**AT EDGE OF  
SHOULDER**



**BEHIND CURB**

\* UNLESS OTHERWISE SHOWN IN THE PLANS  
**MAILBOX PLACEMENT SECTIONS**



**BEHIND SIDEWALK**



Aug 17, 2021

**MAILBOX SUPPORT  
TYPE 2**

**STANDARD PLAN H-70.20-02**

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

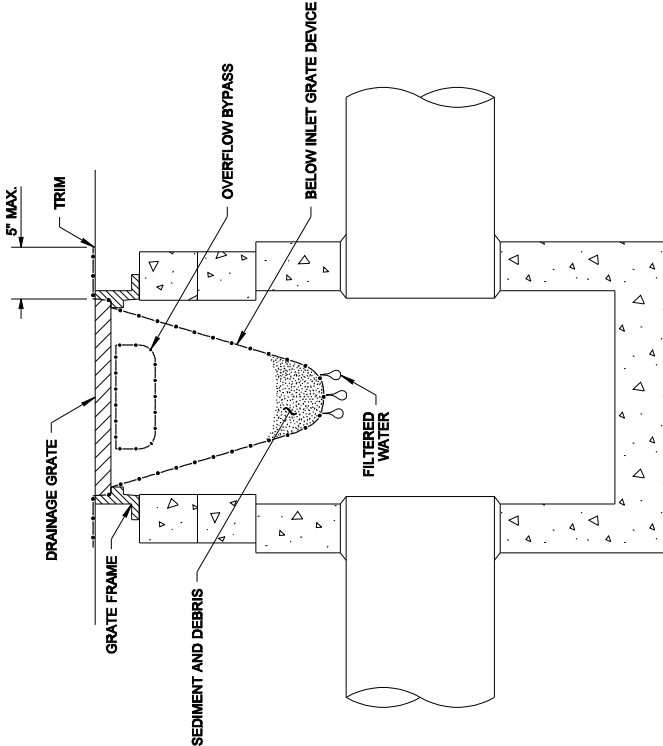
Aug 17, 2021

STATE DESIGN ENGINEER

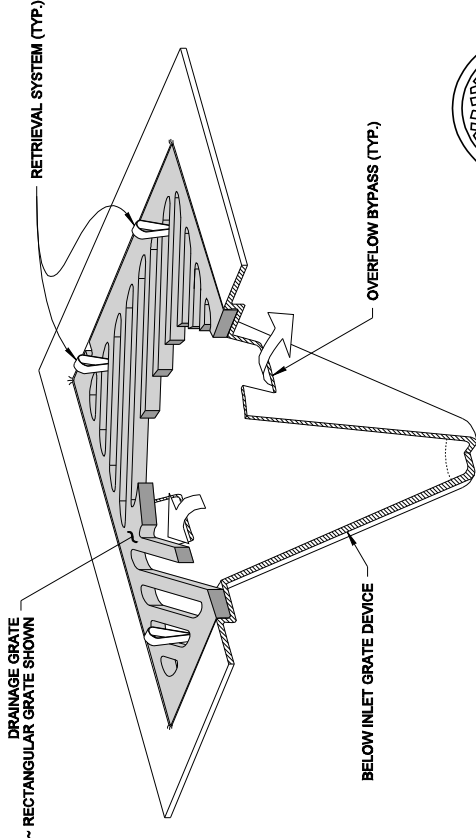
Washington State Department of Transportation

NOTES

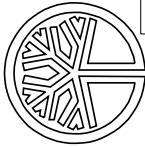
1. Size the Below Inlet Grate Device (BIGD) for the storm water structure it will service.
2. The BIGD shall have a built-in high-flow relief system (overflow bypass).
3. The retrieval system must allow removal of the BIGD without spilling the collected material.
4. Perform maintenance in accordance with Standard Specification 8-01.3(15).



SECTION VIEW  
NOT TO SCALE



ISOMETRIC VIEW



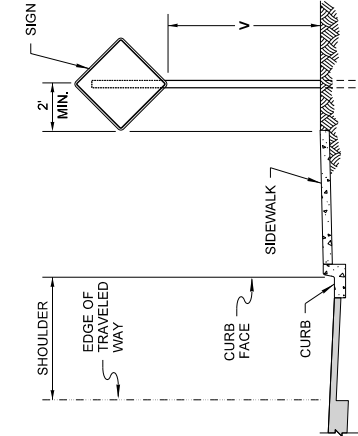
STATE OF WASHINGTON  
REGISTERED  
LANDSCAPE ARCHITECT  
MARK W. MAURER  
CERTIFICATE NO. 000598  
NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT. IT IS NOT A SUBSTITUTE FOR A PROFESSIONAL ENGINEER'S DESIGN AND CALCULATIONS. IT IS A PRELIMINARY DESIGN AND CALCULATIONS. IT IS NOT TO BE USED FOR CONSTRUCTION. A COPY MUST BE OBTAINED UPON REQUEST.

STORM DRAIN  
INLET PROTECTION  
STANDARD PLAN I-40.20-00  
SHEET 1 OF 1 SHEET

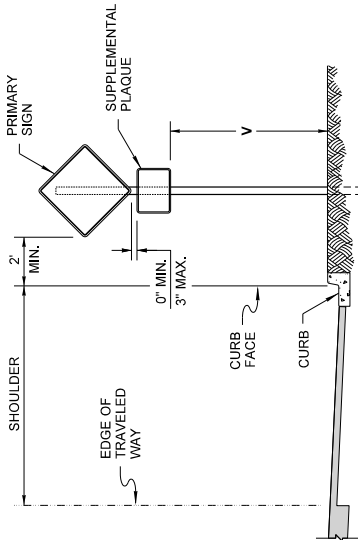
APPROVED FOR PUBLICATION  
Pasco Bakotich III 09-20-07  
STATE DESIGN ENGINEER  
Washington State Department of Transportation

NOTES

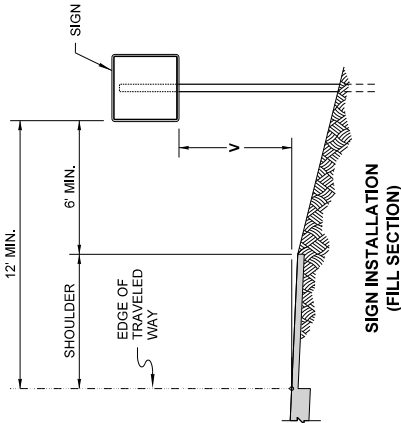
1. For sign installation details, see **Standard Plan G - series**.
2. Where it is impractical to locate a sign with the lateral offset, a minimum of 2(ft) offset may be used. A 1'(ft) lateral offset may be used in business, commercial or residential areas.
3. The "V" height for signs, with an area of more than 50 square feet and two or more sign supports, is 7 feet in both rural and urban areas.



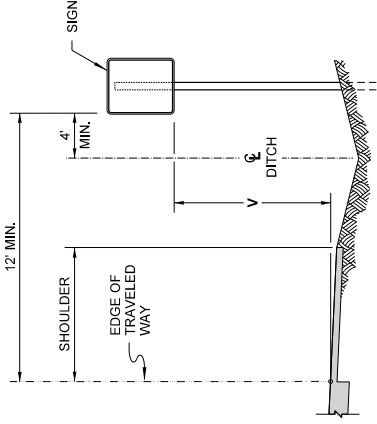
SIGN INSTALLATION  
(SIDEWALK AND CURB SECTION)



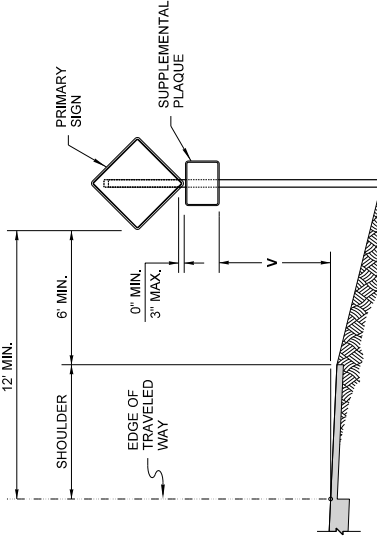
SIGN INSTALLATION  
(CURB SECTION)



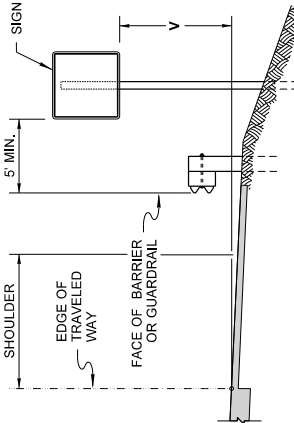
SIGN INSTALLATION  
(FILL SECTION)



SIGN INSTALLATION  
(DITCH SECTION)



SIGN WITH SUPPLEMENTAL  
PLAQUE INSTALLATION  
(FILL SECTION)



SIGN INSTALLATION  
(BEHIND TRAFFIC BARRIER)

HEIGHT V		
	TO BOTTOM OF SIGN (NO SUPPLEMENTAL PLAQUE)	TO BOTTOM OF SUPPLEMENTAL PLAQUE (WHEN REQUIRED)
RURAL	5' MINIMUM	4' MINIMUM
URBAN	7' MINIMUM	6' MINIMUM



2020.09.23 13:48:58  
-07'00"

**CLASS A**  
**CONSTRUCTION SIGNING**  
**INSTALLATION**  
**STANDARD PLAN K-80.10-02**

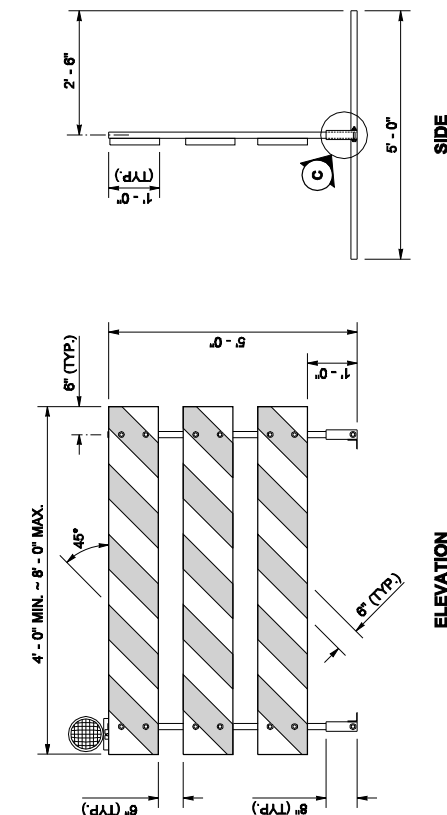
SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION  
Date: 2020.09.25  
14:46:01 -07'00"  
STATE DESIGN ENGINEER  
Washington State Department of Transportation

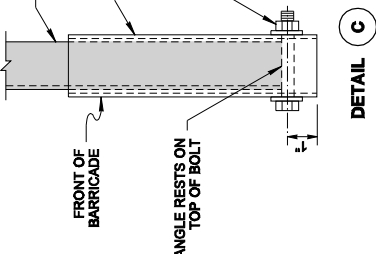
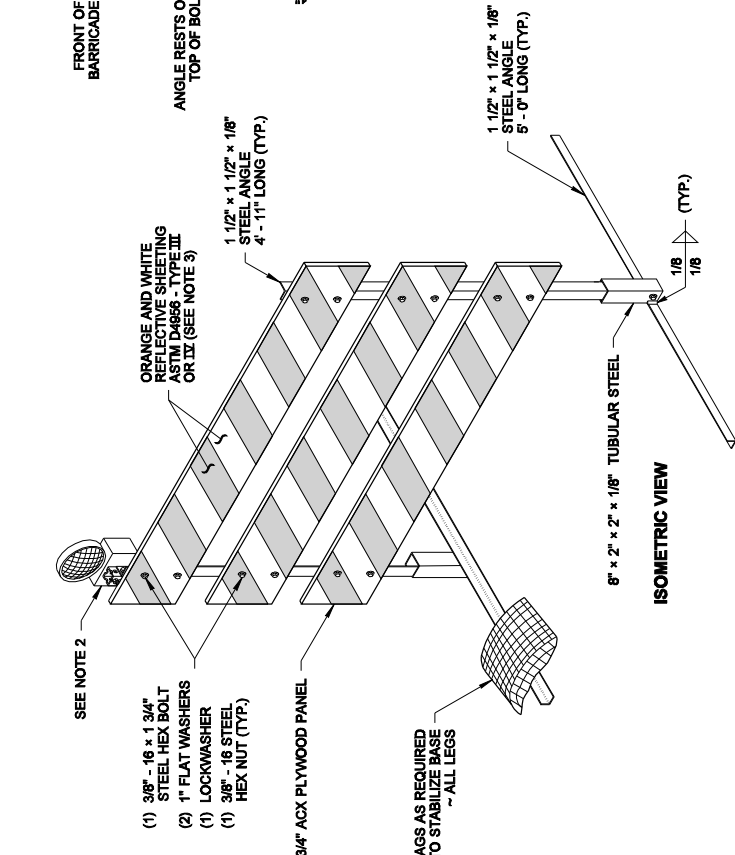
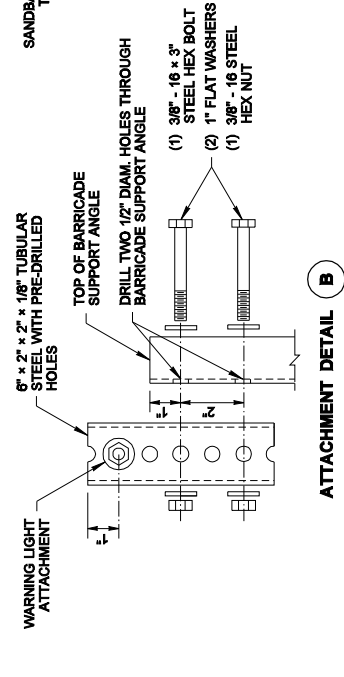
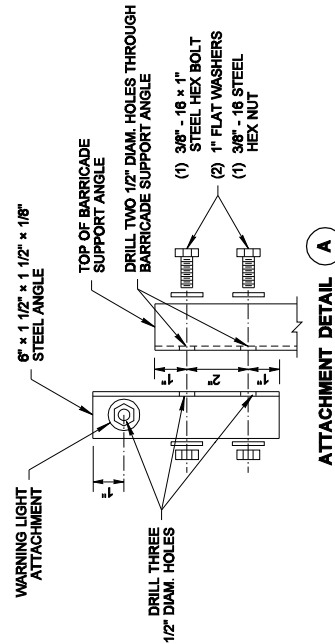
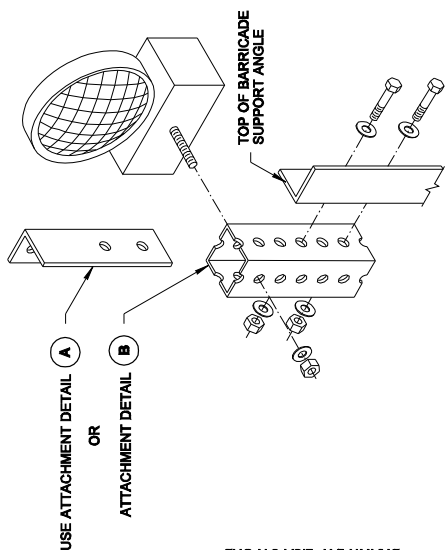


# NOTES

1. All fasteners may be zinc plated, galvanized or stainless steel. All steel angle and tubular steel shall be hot-rolled, high carbon steel, painted or galvanized.
2. Install one lightweight Type A Low-Intensity flashing warning light on the traffic side of the barricade. Install two Type A Low-Intensity flashing warning lights per barricade when the barricades are used to close a roadway. Attach the light to the barricade according to the light manufacturer's recommendations or use the details shown on this plan.
3. Stripes on barricade rails shall be alternating orange and white retroreflective stripes (sloping downward at an angle of 45 degrees in the direction traffic is to pass).
4. The Type 3 barricade design shown on this plan meets the crash test requirements of NCHRP 350. Alternative designs may be approved if they conform to the NCHRP 350 crash test criteria and the MUTCD.
5. When a sign is mounted on the barricade, it shall be securely bolted to at least two plywood panels. The top of the sign shall not be higher than the top panel of the barricade.
6. When sandbags are used in freezing weather, Urea fertilizer shall be mixed with the sand in a quantity to prevent the sand from freezing.



TYPE 3 BARRICADE



**TYPE 3 BARRICADE**

**STANDARD PLAN K-80-20-00**

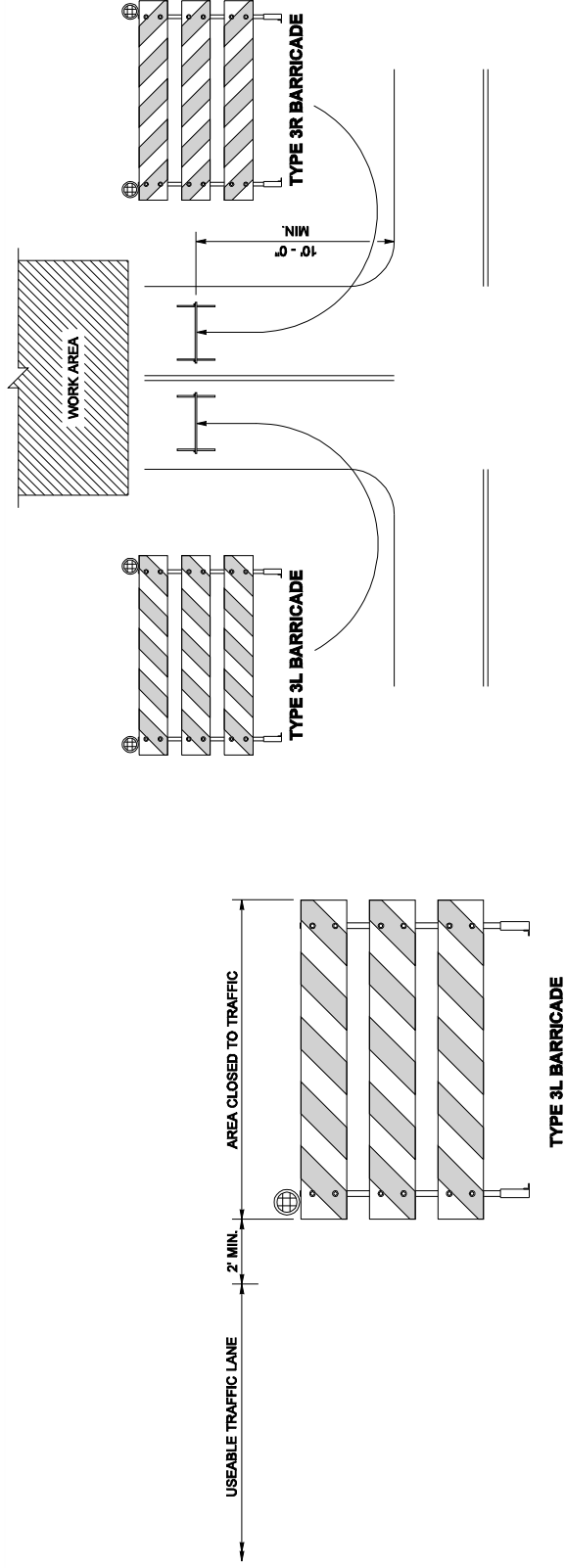
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

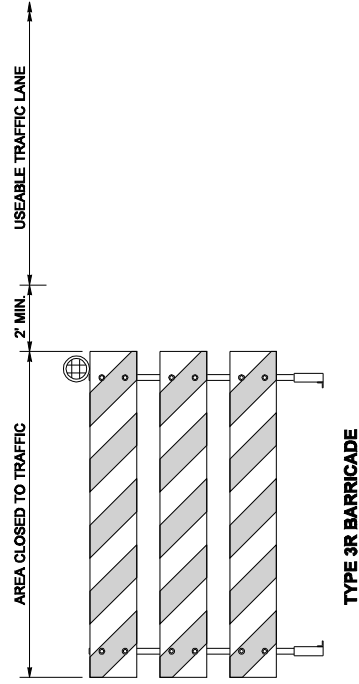
**Kevin J. Dayton**  
STATE DESIGN ENGINEER

**12-20-06**  
DATE

Washington State Department of Transportation

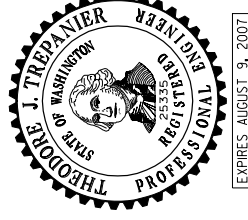


STRIPES ON THE BARRICADES SHALL SLOPE  
DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS



ROAD CLOSURE AT INTERSECTION

ROAD CLOSURE AT OTHER LOCATIONS



NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT  
UNTIL IT IS SIGNED AND APPROVED FOR PUBLICATION BY THE ENGINEER AND APPROVED FOR PUBLICATION BY THE WASHINGTON STATE DEPARTMENT OF TRANSPORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

### TYPE 3 BARRICADE

## STANDARD PLAN K-80.20-00

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

Kevin J. Dayton

STATE DESIGN ENGINEER

12-20-06

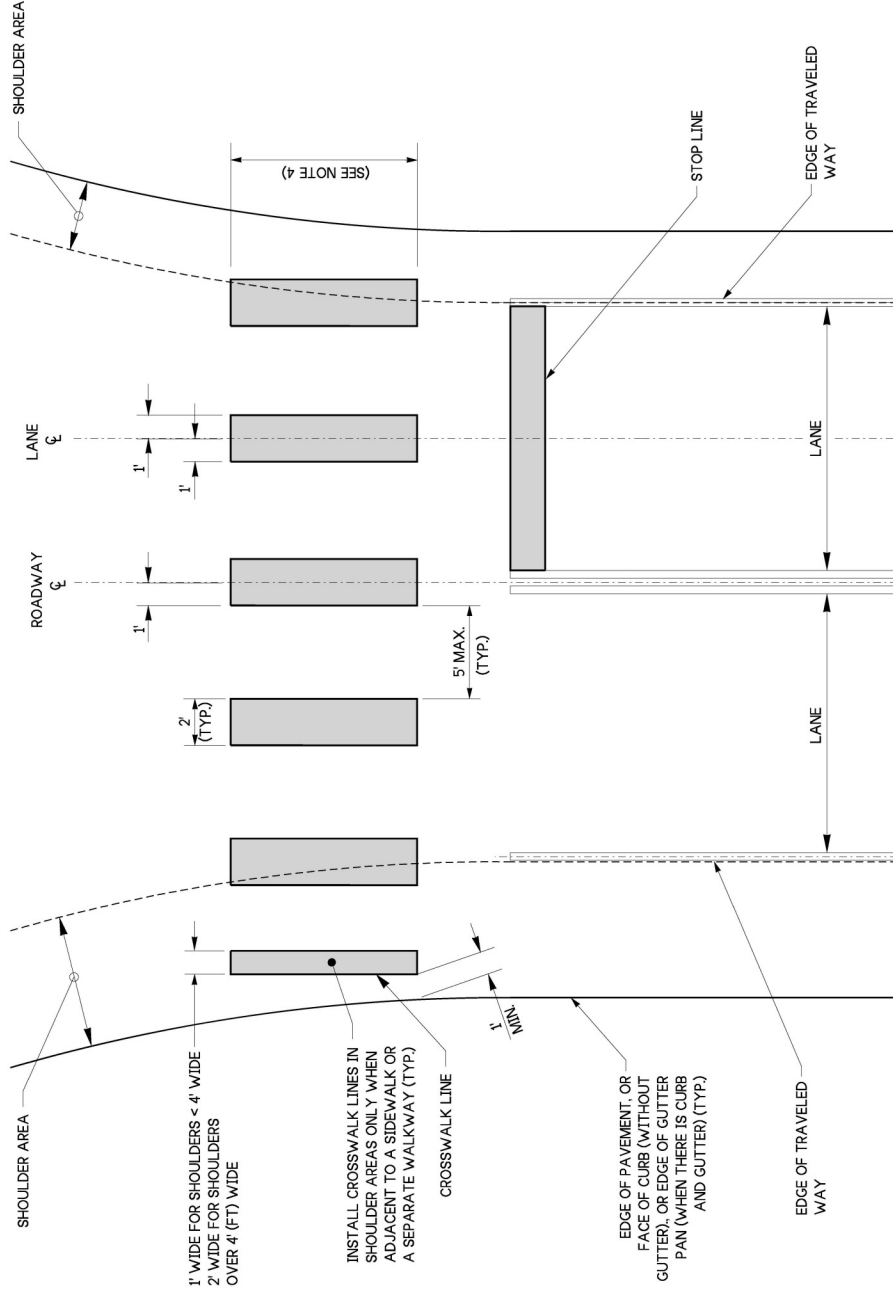
DATE

Washington State Department of Transportation

### BARRICADE PLACEMENT

NOTES:

1. See Contract Plans for crosswalk locations.
2. To the maximum extent possible, curb ramp centerline should be perpendicular to the crosswalk centerline.
3. To the maximum extent possible, crosswalks should be perpendicular to the traveled way centerline.
4. See Contract plans for crosswalk width.
5. To maximum extent possible, place crosswalk bars out of the wheel paths.



CROSSWALK DETAIL



Jul 17, 2023

CROSSWALK LAYOUT

STANDARD PLAN M-15.10-02

SHEET 1 OF 1 SHEET

APPROVED FOR PUBLICATION

Jul 17, 2023

Mark A. Davis  
Washington State  
Department of Transportation

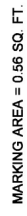
STATE DESIGN ENGINEER



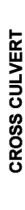
**MARKING AREA = 11.73 SQ.FT.**  
**HALF-MILE MARKER**



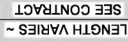
MARKING AREA = 0.56 SQ. FT.



### CROSS CULVERT



1. If Rumble Strips are present, install marking outside of the Rumble Strip.



WHITE OR YELLOW ~ SEE CONTRACT  
CHEVRON OR DIAGONAL

**W = 8" (IN) FOR POSTED SPEED LIMIT OF 40 MPH OR LOWER**  
**W = 12" (IN) FOR POSTED SPEED LIMIT OF 45 MPH OR HIGHER**



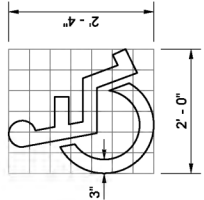
## DRAINAGE STRUCTURE INLET



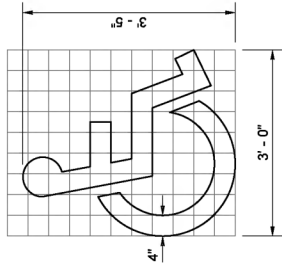
**STANDARD PLAN M-24.60-04**

APPROVED FOR PUBLICATION  
Bakotich, Pasco  
Jun 24 2014 4:43 PM

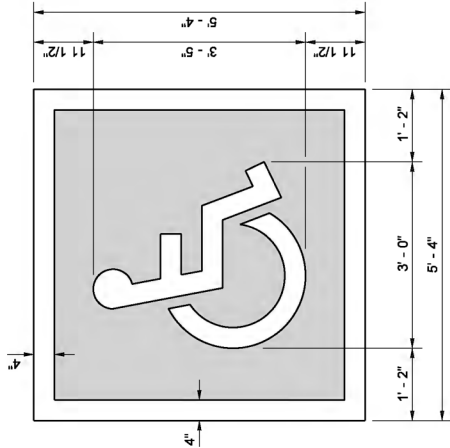




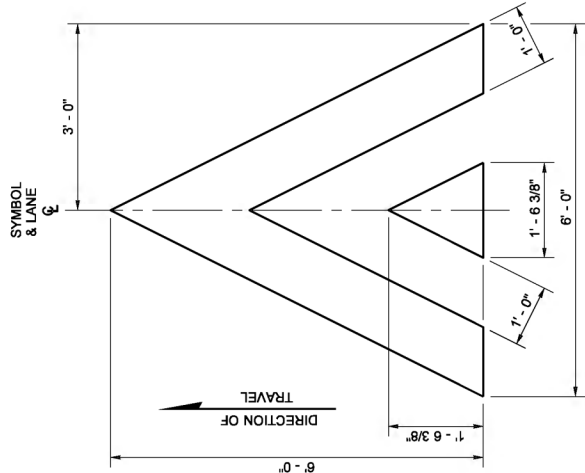
GRID IS 4" (IN) SQUARE MARKING AREA = 1.41 SQ.FT.  
ACCESS PARKING SPACE SYMBOL  
(MINIMUM)



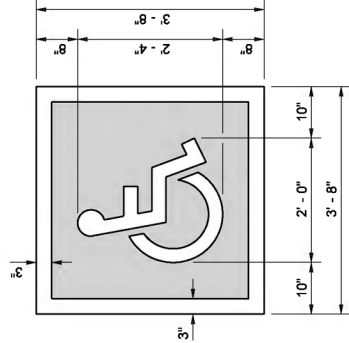
GRID IS 4" (IN) SQUARE MARKING AREA = 3.09 SQ.FT.  
ACCESS PARKING SPACE SYMBOL  
(STANDARD)



TOTAL MARKING AREA = 28.44 SQ.FT.  
WHITE = 9.76 SQ.FT. BLUE = 18.69 SQ.FT.  
ACCESS PARKING SPACE SYMBOL (STANDARD)  
WITH BLUE BACKGROUND AND WHITE BORDER  
(REQUIRED FOR CEMENT CONCRETE SURFACES)



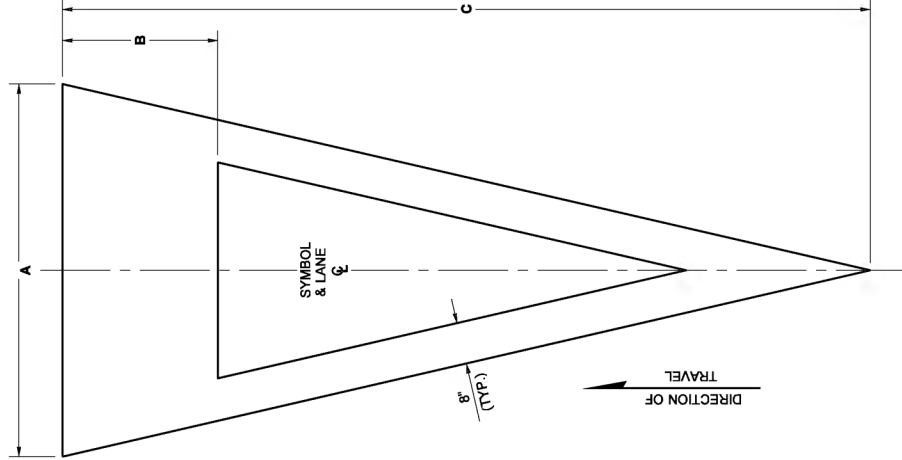
MARKING AREA = 12.08 SQ.FT.  
SPEED BUMP SYMBOL



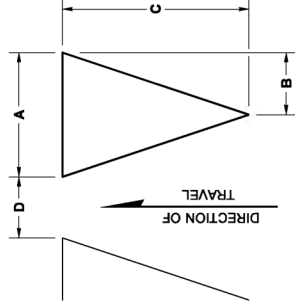
TOTAL MARKING AREA = 13.44 SQ.FT.  
WHITE = 4.82 SQ.FT. BLUE = 8.62 SQ.FT.  
ACCESS PARKING SPACE SYMBOL (MINIMUM)  
WITH BLUE BACKGROUND AND WHITE BORDER  
(REQUIRED FOR CEMENT CONCRETE SURFACES)

SYMBOL MARKING		A	B	C	D	USE	MARKING AREA
YIELD AHEAD SYMBOL	TYPE 1	6'-0"	2'-6"	13'-0"	N/A	LESS THAN 45 MPH	25.80 SQ.FT.
	TYPE 2	6'-0"	3'-0"	20'-0"	N/A	45 MPH OR GREATER	36.54 SQ.FT.
YIELD LINE SYMBOL	TYPE 1	1'-0"	6"	1'-6"	6"	LESS THAN 45 MPH	0.75 SQ.FT.
	TYPE 2	2'-0"	1'-0"	3'-0"	1'-0"	45 MPH OR GREATER	3.00 SQ.FT.
		2'-0"	1'-0"	3'-0"	1'-0"	ROUNDABOUT ENTRY	3.00 SQ.FT.

★ MINIMUM OF 4 IN LANE



YIELD AHEAD SYMBOL



YIELD LINE SYMBOL  
(MULTIPLE SYMBOLS REQUIRED  
FOR TRANSVERSE YIELD LINE -  
SEE CONTRACT)



Walsh, Brian  
Jun 24 2014 2:37 PM

CS&E

**SYMBOL MARKINGS  
MISCELLANEOUS**

**STANDARD PLAN M-24.60-04**

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION  
Bakotich, Pasco  
Jun 24 2014 4:43 PM

STATE DESIGN ENGINEER

Washington State Department of Transportation

## **APPENDIX F – AGC AGREEMENT**

# AGC-WSDOT EQUIPMENT RENTAL AGREEMENT

Effective Date: 07/16/2024      Until Further Notice

It is mutually agreed by the parties to this agreement that rental rates paid to Contractors for equipment used on force account will be established in accordance with Section 1-09.6 of the Standard Specifications and this agreement. The following rules have been agreed to:

## 1. **General**

The Rental Rate Blue Book® published by Equipment Watch™ (herein after simply referred to as Blue Book), as clarified or modified by this agreement, will be used to establish rental rates for equipment approved for use on force account work. Rate modifications for the State of Washington shall be used for all equipment covered under this agreement. Equipment rates established under the terms of this agreement will be the rates in effect for each section of the Blue Book at the time the equipment is used.

## 2. **Rental Rate**

The hourly rental rate for equipment utilized on force account shall be a combination of the following items:

- a. **Ownership Costs:** The ownership costs shall be calculated by using the Blue Book monthly rate multiplied by the Rate Adjustment factors for age and geographic location divided by 176. The geographic location used for calculating rates shall be Washington DOT.
- b. **Implements and Attachments** (hereafter simply referred to as attachments): will be included in the rental rate when the Engineer deems them necessary to accomplish the force account work. An approved attachment that is continuously attached and used intermittently during the work will be paid for the same duration as the host equipment. When multiple attachments are approved for use, and the attachments are being used interchangeably on the force account operation, only the one attachment having the higher rate will be paid for the same duration as the host equipment. Attachments that are continuously attached, but not used will be paid for at the standby rate in accordance with Section 3 of this agreement, unless it is more economical to remove the attachment. Removal of the attachment, when authorized by the Engineer, will be paid in accordance with Section 5 of this agreement.
- c. **Operating Costs:** The hourly operating cost for each hour that the equipment is in use. "In use" shall mean that the equipment is operating and the presence of the equipment is necessary for the operation. The equipment shall be present and not used for other activities while the force account work is underway. Under the circumstances, the equipment shall be paid at its hourly rate plus the hourly operating cost. If the equipment is not operating, but is necessary for the operation, it may be eligible for payment as Standby Time.

**3. Standby Time**

Standby time shall be defined as the time during which equipment is idled, but cannot be assigned to other work on the project. Only that equipment which has been utilized for work on the force account and is expected to be utilized again on the same force account will be eligible for standby compensation. The Contractor is expected to utilize idled equipment on other work if reasonable. Standby time will only be paid if the Engineer has had an opportunity to evaluate the cost of standby versus the cost of mobilizing and demobilizing and has ordered standby.

When ordered by the Engineer, standby time shall be paid at the standby rate established by Blue Book. The operating cost shall not be included in the calculation for establishing the standby rate. Standby time will not be compensated beyond that amount which will bring the resulting total of operated time and standby time to 8 hours in any one day or 40 hours in any one week.

**4. Rental Equipment**

If Contractor-owned equipment is not reasonably available, the Engineer may approve the use of rental equipment.

Equipment shall be compensated according to the provisions for rented equipment in section 3 of the force account specifications. If the invoice costs of non-operated equipment do not specifically say the fuel is included, the Blue Book hourly operating cost (see section 2c) shall be added for each hour the equipment operates.

When rental equipment is used on both force account and non-force account work, payment for the equipment will be a prorated share of the invoice cost. The time period covered by the invoice shall reflect the normal practice of the renting agency, except that the time period shall not exceed one month. When calculating the prorated share, the amounts of standby time for both types of work will be considered according to the formula:

Share of Invoice to be charged to force account =  $F/(F+NF)$

Where:

**F** = Number of hours equipment was utilized on force account including standby time.

**NF** = Number of hours equipment was utilized on non-force account including standby time.

**5. Mobilization**

Force account mobilization of equipment is defined as the preparatory work performed by the Contractor including procurement, loading and transportation of equipment that is intended for use in a force account. A pro rata adjustment will be made when the equipment is eventually used for regular Contract work in addition to the force account work. Mobilization also included the costs incurred during demobilization. The costs will be included in the appropriate sections (Labor, Equipment, Services, etc) depending on the nature of the cost. If the equipment being mobilized is hauled, payment will cover the



hauling vehicle (operated cost). In the event that equipment is transferred under its own power, the payment will cover the operated cost of the equipment plus operator costs. Move-out, or demobilization costs will provide for the return of the equipment to the location from which it was obtained. In the event that the move-out is to a different location, payment will not exceed the amount of the move-in.

If approved by the Engineer, payment will be allowed for moving equipment from work site to work site within the project after the equipment is on the job.

Charges for mechanic's time utilized in servicing equipment to ready it for use prior to moving to the project and similar charges will not be allowed.

**6. Blue Book Omissions**

In the event a rate has not been established for a particular piece of equipment in the Blue Book, a rate will be established, utilizing one or more of the following methods:

- a. Use a rate for the most similar model found in the applicable Blue Book. Such characteristics as manufacturer, capacity, horsepower, and fuel type will be used as the basis for selecting a similar model.
- b. Request a rate through the WSDOT HQ Construction Office for the rate not included in the Blue Book.
- c. Utilize a rate agreed upon by the parties.
- d. For equipment that is older than 20 years the oldest adjustment rate available in the Blue Book shall be used.

**7. Breakdown**

The Contractor shall provide reasonable maintenance efforts for equipment utilized in force account. When a breakdown occurs for any piece of equipment being used on force account work, the Contractor shall first divert idled equipment to replace it. If idled equipment is not available, the Engineer may order rental equipment.

Payment shall cease for the equipment that is broken down. Payment shall also cease for any other equipment that is idled as a result of the breakdown (there will be no standby payment). Payment for any labor that is idled as a result of the breakdown will be made in accordance with provisions of section 1 of the force account specifications, particularly as related to contractual obligations and normal practices of the Contractor.

**8. Shutdown**

If the Engineer orders a shutdown of any or all of the force account, the equipment idled as a result of the shutdown shall be diverted to other work. When diversion of equipment is not practical, standby time may be paid during non-operating hours as provided in Item 3 of this agreement.

The Engineer reserves the right to cease standby payment for equipment that is idled as a result of a shutdown when the shutdown is anticipated to be for an extended period of time.

No further payment shall be allowed after the date the Engineer makes this determination except as provided in Item 5 of this agreement, "Mobilization."

Standby time shall not be paid when shutdown is the result of the fault or negligence of the Contractor.

**9. Small Tools**

Any contractor-owned equipment listed in the Blue Book with a monthly rate of less than \$100 and any other equipment with a purchase price of less than \$500 shall be considered Small Tools and shall be paid by negotiation rather than using an hourly rate (except for rentals.) Any such small tool that is rented shall be paid according to the rental provisions in the Equipment section of this agreement. All other Small Tools shall be paid by agreement of the parties. After the force account work has been completed, (or more often, by agreement of the parties,) the Contractor shall promptly supply a list of small tools and equipment that have been utilized in the work. The list shall be supported by invoices or, in the event the item came from stock, by a Contractor affidavit of purchase cost. The negotiation of the Small Tools payment may include discussions of shared use with other work and of residual value, if appropriate. Once agreed upon, the small tools amount will be added to the payment amount in the Equipment section (Section 3 of the force account specification.)

**10. Concurrence, Review Time**

This agreement is issued after conference among representatives of the Associated General Contractors of Washington and the Washington State Department of Transportation and has the approval of both. Either party may request a review after a one-year period.

**Associated General Contractors of Washington**

**Washington State Department of  
Transportation**

  
\_\_\_\_\_  
Dave D'Hondt  
Executive Vice President

  
\_\_\_\_\_  
Robert E. Christopher III  
State Construction Engineer

## **APPENDIX G – MONITORING AND INADVERTENT DISCOVERY PLAN**

## PLAN AND PROCEDURES FOR THE UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES AND HUMAN SKELETAL REMAINS

### FERNDAL TERRACE STORMWATER IMPROVEMENT PROJECT WHATCOM COUNTY WASHINGTON

#### 1. INTRODUCTION

The City of Ferndale proposes to reconstruct Ferndale Terrace, between Hendrickson Avenue and Vista Drive. The project includes road widening (4-6 feet of widening west of Legoe Avenue; 12 feet of widening east of Legoe Avenue), installation of a new 5-foot-wide sidewalk along the south side of Ferndale Terrace, widening of the existing sidewalk to 5 feet along the north side of Ferndale Terrace and installation of new 5-foot-wide sidewalk along the north side of Ferndale Terrace between Legoe Avenue and Hendrickson Avenue. The finished roadway will include two 11-foot-wide vehicle travel lanes, 5-foot-wide bike lanes, and curb and gutter. In addition to the road improvements, the project will erect retaining walls where necessary, regrade and repave driveways, upgrade sewer lines, install water main, relocate utilities, and improve stormwater facilities.

The following Unanticipated Discovery Plan (UDP) outlines procedures to follow, in accordance with state and federal laws, if archaeological materials or human remains are discovered.

#### 2. RECOGNIZING CULTURAL RESOURCES

A cultural resource discovery could be precontact or historic. Examples include:

- An accumulation of shell, burned rocks, or other food related materials
- Bones or small pieces of bone,
- An area of charcoal or very dark stained soil with artifacts,
- Stone tools or waste flakes (i.e. an arrowhead, or stone chips),
- Clusters of tin cans or bottles, logging or agricultural equipment that appears to be older than 50 years,
- Buried railroad tracks, decking, or other industrial materials.

When in doubt, assume the material is a cultural resource.

#### 3. ON-SITE RESPONSIBILITIES

**STEP 1: STOP WORK.** If any employee, contractor or subcontractor believes that he or she has uncovered a cultural resource at any point in the project, all work in the immediate area of the discovery must stop (typically a 10 foot radius, but depends on site conditions). The discovery location should be secured at all times.

**STEP 2: NOTIFY MONITOR.** If there is an archaeological monitor for the project, notify that person. If there is a monitoring plan in place, the monitor will follow its provisions.

**STEP 3: NOTIFY PROJECT MANAGEMENT.** Contact the Project Manager and Ecology Staff  
Project Manager:

Project Manager: Name: Katy Radder Number: 360-685-2377 Email: <a href="mailto:KatyRadder@cityofferndale.org">KatyRadder@cityofferndale.org</a>	Ecology Staff Project Manager: Name: Sylvia Graham Phone: 360-255-4393 Email: <a href="mailto:Sylvia.graham@ecy.wa.gov">Sylvia.graham@ecy.wa.gov</a>
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## Alternates:

Project Manager Alternate:	Ecology Cultural Resource Specialist:
Name: Paul Knippel	Name: Liz Ellis
Number: 360-685-2357	Phone: 360-407-6429
Email: <a href="mailto:PaulKnippel@cityofferndale.org">PaulKnippel@cityofferndale.org</a>	Email: <a href="mailto:Liz.ellis@ecy.wa.gov">Liz.ellis@ecy.wa.gov</a>

The Project Manager or applicable staff will make all calls and necessary notifications. If human remains are encountered, treat them with dignity and respect at all times. Cover the remains with a tarp or other materials (not soil or rocks) for temporary protection in place and to shield them from being photographed. Do not call or speak with the media about the remains specifically. Do not call 911 or speak with the media. Do not take pictures unless directed to do so by DAHP. See Section 5.

#### 4. FURTHER CONTACTS AND CONSULTATION

##### A. Project Manager's Responsibilities:

- Protect Find: The Project Manager is responsible for taking appropriate steps to protect the discovery site. All work will stop in an area adequate to provide for the total security, protection, and integrity of the resource. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site. Work in the immediate area will not resume until treatment of the discovery has been completed following provisions for treating archaeological/cultural material as set forth in this document.
- Direct Construction Elsewhere On-site: The Project Manager may direct construction away from cultural resources to work in other areas prior to contacting the concerned parties.
- Contact the Department of Archaeology and Historic Preservation (DAHP): If the DAHP has not yet been contacted, the Project Manager will do so.
- Identify Find: The Project Manager will ensure that a qualified professional archaeologist examines the find to determine if it is archaeological. This will either be an archaeological consultant hired by the Project or staff from DAHP.
  - If the discovery is determined not archaeological, work may proceed with no further delay.
  - If the discovery is determined to be archaeological, the Project Manager will continue with notification.
  - If the discovery is human remains or funerary objects, the Project Manager will ensure that the DAHP State Physical Anthropologist examines the find. If the discovery is determined to be human remains, the procedure described in Section 5 will be followed.
- Notify DAHP: The Project Manager will contact the involved federal or permitting agencies (if any) and the Department of Archaeology and Historic Preservation (DAHP).

##### Department of Archaeology and Historic Preservation:

Dr. Allyson Brooks  
State Historic Preservation Officer  
360-586-3065

Dr. Rob Whitlam  
State Archeologist  
360-890-2615

The Project Manager will contact the interested and affected Tribes. Tribes consulted on this project are:

Tribe: Nooksack  
Name: Trevor Delgado  
Title: THPO  
Number: 360-592-5176 x 3234  
Email: [tdelgado@nooksack-nsn.gov](mailto:tdelgado@nooksack-nsn.gov)

Tribe: Lummi Nation  
Name: Lena Tao  
Title: THPO  
Number: 360-312-2257  
Email: [lenat@lummi-nsn.gov](mailto:lenat@lummi-nsn.gov)

Tribe: Samish  
 Name: Jackie Ferry  
 Title: THPO  
 Number: 360-293-6404 ext. 126  
 Email: [jferry@samishtribe.nsn.us](mailto:jferry@samishtribe.nsn.us)

Tribe: Sauk-Suiattle Tribe  
 Name: The Honorable Kevin Joseph  
 Title: THPO  
 Number: 360-436-0333  
 Email: [kJoseph@sauk-suiattle.com](mailto:kJoseph@sauk-suiattle.com)

Tribe: Upper Skagit  
 Name: Scott Schuyler  
 Title: Cultural Resources  
 Number: 360-854-7009  
 Email: [sschuyler@upperskagit.com](mailto:sschuyler@upperskagit.com)

## **B. Further Activities**

- Archaeological discoveries will be documented as described in Section 6.
- Construction in the discovery area may resume as described in Section 7.

## **5. SPECIAL PROCEDURES FOR THE DISCOVERY OF HUMAN SKELETAL MATERIAL**

Any human skeletal remains, regardless of antiquity or ethnic origin, will at all times be treated with dignity and respect.

If the project occurs on federal lands (e.g., national forest or park, military reservation) or Indian lands (e.g., reservations, allotments, communities) the provisions of the Native American Graves Protection and Repatriation Act of 1990 apply, and the responsible federal agency will follow its provisions. Note that state highways that cross federal and Indian lands are on easements and are not owned by the state.

If the project occurs on non-federal lands, it will comply with applicable state laws, and the following procedure:

### **A. Notify Law Enforcement Agency or Coroner's Office:**

In addition to the actions described in Sections 3 and 4, the Project Manager will immediately notify the local law enforcement agency or coroner's office.

The coroner (with assistance of law enforcement personnel) will determine if the remains are human, whether the discovery site constitutes a crime scene, and will notify DAHP.

Agency: City of Ferndale Police Department Number: 360-384-3390

### **B. Participate in Consultation:**

Per RCW 27.44.055, RCW 68.50, and RCW 68.60, DAHP will have jurisdiction over non-forensic human remains.

Guy Tasa, State Physical Anthropologist, (360) 790-1633

### **C. Further Activities:**

- Documentation of human skeletal remains and funerary objects will be agreed upon through the consultation process described in RCW 27.44.055, RCW 68.50, and RCW 68.60.
- When consultation and documentation activities are complete, construction in the discovery area may resume as described in Section 7.

## 6. DOCUMENTATION OF ARCHAEOLOGICAL MATERIALS

Archaeological deposits discovered during construction will be assumed eligible for inclusion in the National Register of Historic Places under Criterion D per 36CFR800.13(c) until a formal Determination of Eligibility is made. If the project does not have a federal nexus/compliance requirement, contact the Project Manager or DAHP regarding the possible need for an Emergency Excavation Permit per RCW27.53. In general, expect that:

- All precontact and historic cultural material discovered during project construction will be recorded by a professional archaeologist on State of Washington cultural resource site or isolate form using standard techniques. Site overviews, features, and artifacts will be photographed; stratigraphic profiles and soil/sediment descriptions will be prepared for subsurface exposures. Discovery locations will be documented on scaled site plans and site location maps.
- Cultural features, horizons and artifacts detected in buried sediments may require further evaluation using hand-dug test units. Units may be dug in controlled fashion to expose features, collect samples from undisturbed contexts, or interpret complex stratigraphy. A test excavation unit or small trench might also be used to determine if an intact occupation surface is present. Test units will be used only when necessary to gather information on the nature, extent, and integrity of subsurface cultural deposits to evaluate the site's significance. Excavations will be conducted using state-of-the-art techniques for controlling provenience.
- Spatial information, depth of excavation levels, natural and cultural stratigraphy, presence or absence of cultural material, and depth to sterile soil, regolith, or bedrock will be recorded for each probe on a standard form. Test excavation units will be recorded on unit-level forms, which include plan maps for each excavated level, and material type, number, and vertical provenience (depth below surface and stratum association where applicable) for all artifacts recovered from the level. A stratigraphic profile will be drawn for at least one wall of each test excavation unit.
- Sediments excavated for purposes of cultural resources investigation will be screened through 1/8-inch mesh, unless soil conditions warrant 1/4-inch mesh.
- All precontact and historic artifacts collected from the surface and from probes and excavation units will be analyzed, catalogued, and temporarily curated. Ultimate disposition of cultural materials will be determined in consultation with the federal agencies (if any), DAHP, and the affected tribes.

If assessment activity exposes human remains (burials, isolated teeth, or bones), the process described in Section 5 above will be followed.

## 7. PROCEEDING WITH CONSTRUCTION

Project construction outside the discovery location may continue while documentation and assessment of the cultural resources proceed. A Cultural Resources Specialist (either from DAHP, a consulting Tribe, or a professional consultant) must determine the boundaries of the discovery location. In consultation with DAHP and affected tribes, the Project Manager will determine the appropriate level of documentation and treatment of the resource. If federal agencies are involved, the agencies will make the final determinations about treatment and documentation.

Construction may continue at the discovery location only after the process outlined in this plan is followed and DAHP (and the federal agencies, if any) determine that compliance with state and federal laws is complete.

#### **8.RECIPIENT/PROJECT PARTNER RESPONSIBILITY**

The Project Recipient/Project Partner is responsible for developing an IDP. The IDP must be immediately available onsite, be implemented to address any discovery, and be available by request by any party. The Project Manager and staff will review the IDP during a project kickoff or pre-construction meeting.



**APPENDIX H – WASHINGTON STATE DEPARTMENT OF ECOLOGY  
STORMWATER FACILITY  
SPECIFICATIONS INSERT AND STANDARD CONTRACT CLAUSES**



**WASHINGTON STATE DEPARTMENT OF ECOLOGY**  
**STORMWATER FACILITY**  
**SPECIFICATIONS INSERT**

**General**

Partial funding of this project is being provided by the Washington State Department of Ecology's (Ecology) Stormwater Grant Program.

**Compliance with State and Local Laws**

The construction of the project, including all subcontracted work, shall conform to the applicable requirements of state and local laws and ordinances.

**State Interest Exclusion**

It is anticipated that this project will be funded in part by the Washington State Department of Ecology. Neither the State of Washington nor any of its departments or employees are, or shall be, a party to this contract or any subcontract.

**Third Party Beneficiary**

Partial funding of this project is being provided through the Washington State Department of Ecology Stormwater Grant Program. All parties agree that the State of Washington shall be, and is hereby, named as an express third-party beneficiary of this contract, with full rights as such.

**Access to the construction site and to records**

The contractor shall provide for the safe access to the construction site and to the contractor's records by Washington State Department of Ecology personnel.

The Contractor shall maintain accurate records and accounts to facilitate the Owner's audit requirements and shall ensure that all subcontractors maintain auditable records.

These Project records shall be separate and distinct from the Contractor's other records and accounts.

All such records shall be available to the Owner and to Washington State Department of Ecology personnel for examination. All records pertinent to this project shall be retained by the Contractor for a period of three (3) years after the final audit.

**Protection of the Environment**

No construction related activity shall contribute to the degradation of the environment, allow material to enter surface or ground waters, or allow particulate emissions to the atmosphere, which exceed state or federal standards. Any actions that potentially allow a discharge to state waters must have prior approval of the Washington State Department of Ecology.

### **Inadvertent Discovery of Archeological Resources**

The contractor shall obtain a copy of the Inadvertent Discovery Plan from the Project Owner. The contractor shall keep a copy of the inadvertent discovery plan for the project on the work site at all times. The contractor shall immediately stop all work if human remains, cultural, or archeological resources are discovered in the course of construction. The contractor shall follow the inadvertent discovery plan in dealing with the human remains, cultural, or archeological resources.

### **Project Signs**

The Contractor shall display Ecology's logo in a manner that informs the public that the project received financial assistance from the Washington State Stormwater Grant Program.

### **Utilization of Minority and Women Business Enterprises**

All bidders are encouraged to utilize certified minority-owned and women-owned businesses to the extent possible in the performance of this contract. All prospective bidders or persons submitting qualifications should take the following steps, when possible.

1. Include qualified minority and women's businesses on solicitation lists.
2. Assure that qualified minority and women's businesses are solicited whenever they are potential sources of services or supplies.
3. Divide the total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by qualified minority and women's businesses.
4. Establish delivery schedules, where work requirements permit, which will encourage participation of qualified minority and women's businesses.
5. Use the services and assistance of the State Office of Minority and Women's Business Enterprises (OMWBE) and the Office of Minority Business Enterprises of the U.S. Department of Commerce, as appropriate.

All prospective bidders must provide a list of the MBE/WBE subcontractors they intend to use during the project. This list must be provided with the bid package.



## WASHINGTON STATE DEPARTMENT OF ECOLOGY WATER QUALITY FINANCIAL ASSISTANCE

### STANDARD CONTRACT CLAUSES

#### **ECOLOGY grant/loan acknowledgment clause**

The following acknowledgment should be included on the cover sheet of both the construction plans and the contract documents/specifications:

"Funded in part by the Washington State Department of Ecology"

#### **State interest exclusion clause**

The following clause is to be included in the bid advertisement:

"It is anticipated that this project will be funded in part by the Washington State Department of Ecology. Neither the State of Washington nor any of its departments or employees are, or shall be, a party to any contract or any subcontract resulting from this solicitation for bids."

The following clause is to be included in the instructions to bidders and the special conditions or provisions of the contract documents/specifications:

"It is anticipated that this project will be funded in part by the Washington State Department of Ecology. Neither the State of Washington nor any of its departments or employees are, or shall be, a party to this contract or any subcontract."

#### **Third-party beneficiary clause**

The following clause is to be included in the special conditions or provisions of the contract documents/specifications and it is further suggested that this clause also be included in the contract agreement between the RECIPIENT and the contractor:

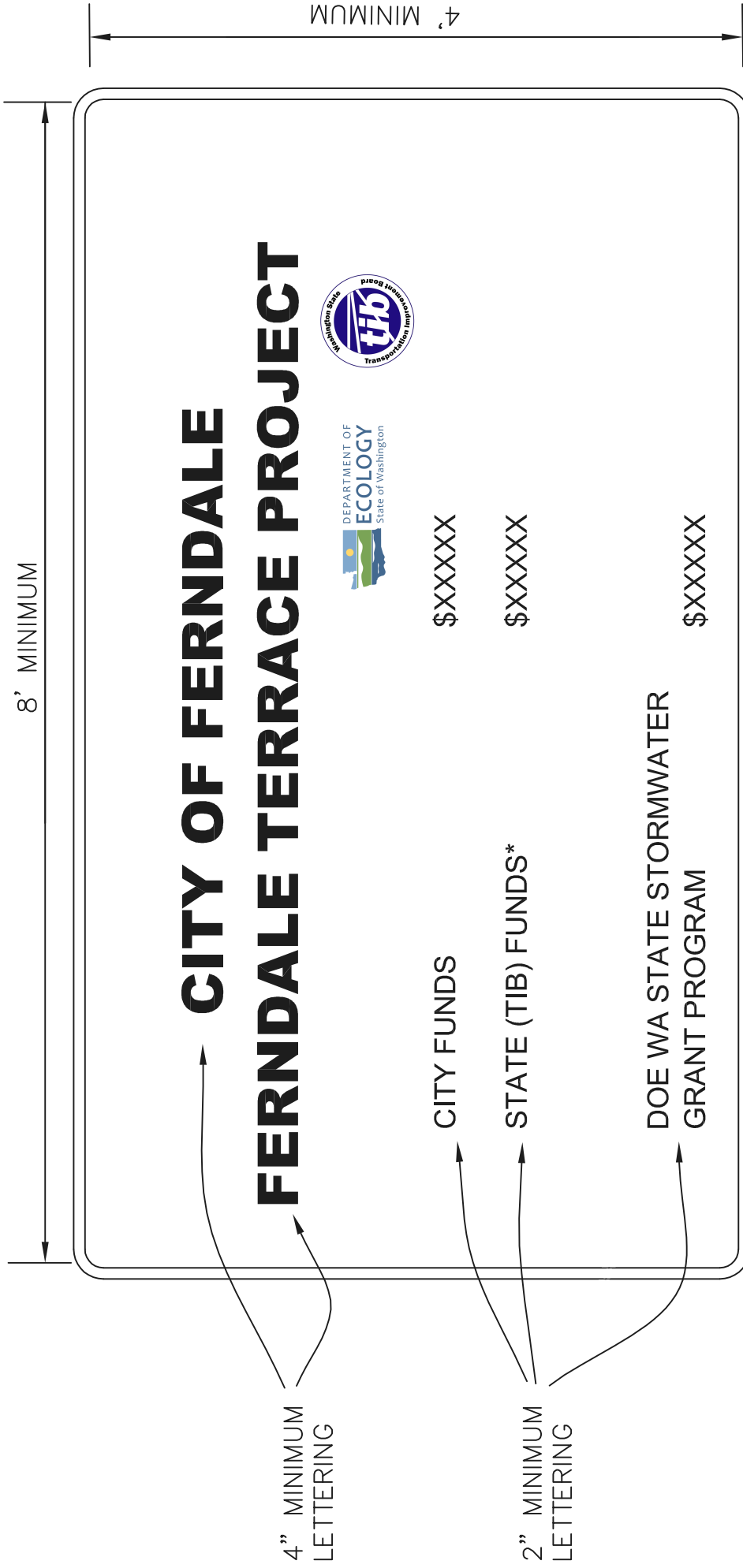
**Third-Party Beneficiary:** All parties agree that the State of Washington shall be, and is hereby, named as an express third-party beneficiary of this contract, with full rights as such."

#### **Environment protection clause**

The following clause is to be included in the special conditions or provisions of the contract documents/specifications and also in the general notes on the construction drawings:

**Protection of the Environment:** No construction related activity shall contribute to the degradation of the environment, allow material to enter surface or ground waters, or allow particulate emissions to the atmosphere, which exceed state or federal standards. Any actions that potentially allow a discharge to state waters must have prior approval of the Washington State Department of Ecology."

**APPENDIX I – WASHINGTON STATE DEPARTMENT OF ECOLOGY  
AND TRANSPORTATION IMPROVEMENT BOARD FUNDING SIGN**



## PROJECT SIGNS (2 EACH)

LOCATION AS APPROVED BY ENGINEER