

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE J	PAGE OF PAGES 1
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 04-Oct-2004	4. REQUISITION/PURCHASE REQ. NO. W68MD9-4188-6686		5. PROJECT NO.(If applicable)
6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT 4735 EAST MARGINAL WAY SOUTH SEATTLE WA 98134-2329	CODE W912DW	7. ADMINISTERED BY (If other than item 6) See Item 6		
8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		X	9A. AMENDMENT OF SOLICITATION NO. W912DW-04-B-0010	
		X	9B. DATED (SEE ITEM 11) 20-Sep-2004	
			10A. MOD. OF CONTRACT/ORDER NO.	
			10B. DATED (SEE ITEM 13)	
CODE	FACILITY CODE			
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS				
<input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.				
12. ACCOUNTING AND APPROPRIATION DATA (If required)				
13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.				
A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.				
B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).				
C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:				
D. OTHER (Specify type of modification and authority)				
E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office.				
14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) W912DW-04-B-0010-R0001 IDIQ VARIOUS ROAD REPAIRS AND IMPROVEMENTS FORT LEWIS, WASHINGTON See Continuation Page.				
Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.				
15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)		
		TEL: _____ EMAIL: _____		
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	16C. DATE SIGNED 04-Oct-2004	

The purpose of this amendment is to:

- A. Remove and Replace the following Technical Specification Sections:
 - 1. 00801 – Technical Exhibit 2 (TE2)
 - 2. 00801 – Technical Exhibit 3 (TE3)
 - 3. 01001
 - 4. 01356
 - 5. 02511
 - 6. 02551
 - 7. 02921

- B. Remove and replace Wage Determination 20030001 Modification 14 dated September 3, 2004 with Wage Determination 20030001 Modification 15 dated October 1, 2004.

- C. The closing date and time for this solicitation remains unchanged, at 2:00 P.M., Pacific Standard Time, October 20, 2004.

- D. All other terms and conditions of the solicitation remain unchanged.

- E. The attached revised sections are to be replaced in their entirety. Specifications changes are generally identified, for convenience, either by strikeout for deletions, and double underlining of text for additions or a single dark line in the margin. All portions of the revised sections shall apply whether or not changes have been indicated.

- F. NOTICE TO BIDDERS: Bidders must acknowledge receipt of this amendment by number and date on Standard Form 1442, Back, Block 19, or by telegram.

- G. All amendment are available for download this date on the U.S. Corps of Engineers web site at <http://www.nws.usace.army.mil/ct/>.

Enclosures:

Wage Determination WA20030001, Modification 15 dated October 1, 2004

Section 00801 – Technical Exhibit 2 (TE2) (revised)

Section 00801 - Technical Exhibit 3 (TE3) (revised)

Section 01001 (revised)

Section 01356 (revised)

Section 02511 (revised)

Section 02551 (revised)

Section 02921 (revised)

TECHNICAL EXHIBIT 2

1.0 The Principal Items of Work to be Accomplished are:

1.1 Replace deficient asphalt concrete pavement and base course materials in roads streets, driveways, and parking lots to match existing. Repair/replace failed, uneven pavement and eliminate low spots (bird baths) as required. (Line Item No. 0001, 0002, and 0003).

1.2 Replace deficient asphalt concrete and base course material damaged by tree roots. Work shall include removal of all roots to a depth of 1 foot and 1 foot beyond the edge of the existing pavement. Replacement of all excavated material, which shall be backfilled with compacted base course material to a depth of 9 inches. Wearing surface shall consist of 3 inches of hot-mix asphalt. The asphalt cuts shall be sealed. (Line Item No. 0004, 0005 and 0006).

1.3 Cracks and joints shall be cleaned prior to the application of crack seal with a stiff bristled broom and compressed air. Sealant shall be CSS-1 emulsified asphalt and topped with sand as required in WSDOT 5-04.3(5)C. (Line Item No. 0007).

1.4 Removal and disposal of existing asphalt surfacing to include roads, sidewalks, parking lots and driveways in thickness increments of 2 inches. The areas requiring asphalt removal will have little or no traffic. (Line Item No. 0008).

1.5 Removal and disposal of base course material in increments of 4 inches. (Line Item No. 0009).

1.6 Recycle asphalt concrete wearing course. (Line Item No. 0010 and 0011).

1.7 Cold mill asphalt concrete pavement and haul to disposal site or to plant for recycling as provided for in delivery order. (Line Item No. 0012 and 0013).

1.8 Provide base course. Work shall include subgrade preparation. (Line Item No. 0014 and 0015).

1.9 Provide shoulder ballast on edges of overlaid roadways wherever surface treatment, paved shoulders, curbs or stabilized shoulders are not present. Build up gravel shoulders to surface height of new asphalt overlay ~~or surface height of new asphalt overlay~~ or surface height of existing asphalt roadway if shoulders are to be paved. (Line Item No 0016, 0017, 0018 and 0019).

1.10 Provide slurry seal over existing surfacing. (Line Item No. 0020).

1.11 Prepare existing roadway and parking lot surfaces and provide single bituminous surface treatment as a seal coat over existing asphalt or double bituminous surface treatment. (Line Item No. 0021, 0022, 0023, 0024 and 0025).

- 1.12 Prepare existing roadway and parking lot surface and provide double bituminous surface treatment. Roads will range from 20-28 feet in width, in accordance with drawings. Parking lots will be ordered by increments of 20-foot widths. (Line Item No. 0026 and 0027).
- 1.13 Provide asphalt concrete overlay Class G between ½ to 1 ¼ inch compacted thickness. (Line Item No. 0028 and 0029).
- 1.14 Provide asphalt concrete pavement overlay Class B between 1 ½ to 3 inch compacted thickness. (Line Item No. 0030 and 0031).
- 1.15 Adjust pavement appurtenances including manholes, catch basins, monument cases and valve boxes for overlay. (Line Item No. 0032).
- 1.16 Adjust pavement appurtenances including manholes, catch basins, monument cases and valve boxes for other than a overlay. (Line Item No. 0033)
- 1.17 Replace traffic signal control accuator loop. (Line Item No. 0034).
- 1.18 Provide rubberized asphalt concrete. (Line Item No. 0035 and 0036)
- 1.19 Provide reinforced PCC pavement. (Line Item No. 0037).
- 1.20 Provide non-reinforced PCC pavement. (Line Item No. 0038).
- 1.21 Provide armored edge plates for reinforced PCC pavement. (Line Item No. 0039).
- 1.22 Clearing and grubbing area in preparation for earthwork. (Line Item No. 0040, 0041 and 0042)
- 1.23 Excavate area for subgrade preparation (Line Item No. 0043 and 0044).
- 1.24 Fill area for subgrade preparation. (Line Item No. 0045 and 0046).
- 1.25 Grade range roads. (Line Item No. 0047).
- 1.26 Provide gravel for range roads. (Line Item No. 0048).
- 1.27 Grade and gravel parking lots, areas greater than 100 SY. (Line Item No. 0049).
- 1.28 Provide Type 1 catch basin. (Line Item No. 0050).
- 1.29 3' utility cut across road. To include trenching 4' – 6' trench with backfill, compaction, ~~4" 2"~~ 4' 6" base course and ~~4" 2"~~ of Class B asphalt concrete pavement. (Line Item No. 0051).
- 1.30 Excavate and backfill storm drainage pipe. Depth of 4' – 6' (Line Item No. 0052).

- 1.31 Provide and install 6" diameter PVC pipe for storm drainage system. (Line Item No. 0053).
- 1.32 Provide and install 8" diameter PVC pipe for storm drainage system. (Line Item No. 0054).
- 1.33 Provide and install 10" diameter PVC pipe for storm drainage system. (Line Item No. 0055).
- 1.34 Provide and install 12" diameter PVC pipe for storm drainage system. (Line Item No. 0056).
- 1.35 Provide and install 8" diameter perforated PVC pipe for storm drainage system with aggregate and filter material. (Line Item No. 0057).
- 1.36 Provide and install 12" diameter perforated PVC pipe for storm drainage system with aggregate and filter material. (Line Item No. 0058).
- 1.37 Provide and install 12" diameter perforated reinforced PCC pipe for storm drainage system with aggregate and filter material. (Line Item No. 0059).
- 1.38 Provide and install 12" diameter reinforced PCC pipe. (Line Item No 0060).
- 1.39 Provide and install 18" diameter reinforced PCC pipe. (Line Item No 0061).
- 1.40 Provide and install 24" diameter reinforced PCC pipe. (Line Item No 0062).
- 1.41 Provide and install 30" diameter reinforced PCC pipe. (Line Item No 0063).
- 1.42 Provide and install 36" diameter reinforced PCC pipe. (Line Item No 0064).
- 1.43 Connect new storm drain into existing storm drain, catch basin or manhole. (Line Item No. 0065).
- 1.44 Provide cast-in-place PCC curb. (Line Item No. 0066).
- 1.45 Provide extruded PCC "Maxi" curb or equal. (Line Item No. 0067).
- 1.46 Provide integral PCC curb and gutter. (Line Item No. 0068).
- 1.47 Provide precast PCC curb, 6" x 10" x 6". (Line Item No. 0069).
- 1.48 Provide PCC sidewalk. (Line Item No. 0070).
- 1.49 Provide asphalt concrete sidewalk (Line Item No. 0071).
- 1.50 Paint and stripe solid line pavement markings. (Line Item No. 0072).

- 1.51 Paint and stripe broken line pavement markings (skip stripe). (Line Item No. 0073).
- 1.52 Paint and stripe arrows and miscellaneous markings. (Line Item No. 0074).
- 1.53 Paint and stripe parking lot stripes. (Line Item No. 0075).
- 1.54 Provide and install reflectorized traffic buttons. (Line Item No. 0076 and 0077).
- 1.55 Provide and install non-reflectorized traffic buttons. (Line Item No. 0078 and 0079).
- 1.56 Sawcut asphalt concrete. (Line Item No. 0080 and 0081).
- 1.57 Sawcut PCC. (Line Item No. 0082 and 0083).
- 1.58 Sawcut reinforced PCC (Line Item No. 0084 and 0085).
- 1.59 Remove cast-in-place PCC curb. (Line Item No. 0086).
- 1.60 Remove PCC sidewalk. (Line Item No. 0087).
- 1.61 Remove asphalt concrete sidewalk. (Line Item No. 0088).
- 1.62 Remove asphalt concrete curb. (Line Item No. 0089).
- 1.63 Provide railroad ballast material. (Line Item No. 0090).
- 1.64 Provide and install rip rap rock, 50 lb. average. (Line Item No. 0091).
- 1.65 Provide and install rip rap rock, 100 lb. average. (Line Item No. 0092).
- 1.66 Provide and install rip rap rock, 300 lb. average. (Line Item No. 0093).
- 1.67 Provide and install bollards. (Line Item No. 0094).
- 1.68 Provide and place topsoil. (Includes hand seeding if under 100 SY. (Line Item No. 0095) .
- 1.69 Hydroseed (for areas 100 SY and over) (Bid Item No. 0096).
- 1.70 Cut and waste material from longitudinal asphalt cold joints. (Line Item No. 0097).
- 1.71 Provide certified traffic control personnel during construction adjacent to or on streets. Units are based on one individual per hour. Includes required signage and equipment. (Bid Item No. 0098).

1.72 Non-prepriced Work shall not exceed 10% of the total Task Order prepriced amount. Items of work not covered by this contract but within its scope and general intent may be negotiated by the Contracting Officer or designated representative at any time during the contract term.

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**TECHNICAL EXHIBIT NO. 3
WORK ITEM PRICE LIST**

ITEM NO.	DESCRIPTION	UNIT	PRICE
GROUP 1 - PAVEMENT REPAIR			
0001.	Replace deficient asphalt concrete and base material. Seal cracks in asphaltic concrete. (quantities 1 - 50)	SF	5.37
0002.	Replace deficient asphalt concrete and base material. Seal cracks in asphaltic concrete. (quantities 51 - 1,000)	SF	5.00
0003.	Replace deficient asphalt concrete and base material. Seal cracks in asphaltic concrete (quantities 1,001 and over)	SF	4.25
0004.	Replace deficient asphalt concrete and base material damaged by tree roots. Seal cracks in asphaltic concrete. (quantities 1 - 100)	SF	6.71
0005.	Replace deficient asphalt concrete and base material damaged by tree roots. Seal cracks in asphaltic concrete. (quantities 101 - 1,000).	SF	5.37
0006.	Replace deficient asphalt concrete and base material damaged by tree roots. Seal cracks in asphaltic concrete. (quantities 1,000 and over).	SF	5.00
0007.	Clean and fill joints/cracks in roads and sidewalks.	LF	1.96
0008.	Remove and dispose of asphalt surfacing in thickness increments of 2 inches.	SY	5.31

ITEM NO.	DESCRIPTION	UNIT	PRICE
0009.	Remove and dispose of base course material in thickness increments of 4 inches.	SY	4.75
0010.	Recycle asphaltic concrete wearing course. (quantities 1 - 250)	TON	55.91
0011.	Recycle asphaltic concrete wearing course. (quantities 251 - 4,000)	TON	45.84
0012	Cold mill asphaltic concrete pavement. (quantities 1 - 250)	SY	6.71
0013	Cold mill asphaltic concrete pavement. (quantities 251 - 1,000)	SY	4.19
GROUP 2 - PAVING			
0014.	Provide base course. (quantities 1 - 250)	TON	16.77
0015.	Provide base course. (quantities 251 - 24,000)	TON	14.50
0016.	Provide shoulder ballast. Build up gravel shoulder to surface height of new asphalt overlay. (quantities 1 - 100)	TON	17.89
0017.	Provide shoulder ballast. Build up gravel shoulder to surface height of new asphalt overlay. (quantities 101 - 1,000)	TON	17.61
0018.	Provide shoulder ballast. Build up gravel shoulder to surface height of existing asphalt pavement. (quantities 1 - 100)	TON	17.89
0019.	Provide shoulder ballast. Build up gravel shoulder to surface height of existing asphalt pavement. (quantities 101 - 1,000)	TON	17.61

ITEM NO.	DESCRIPTION	UNIT	PRICE
0020.	Provide slurry seal coat.	SY	1.23
0021.	Provide single bituminous surface treatment. (quantities 1 - 100)	SY	6.15
0022.	Provide single bituminous surface treatment. (quantities 101 - 25,000)	SY	3.91
0023.	Provide single bituminous surface treatment. (quantities 25,001 - 35,000)	SY	2.80
0024.	Provide single bituminous surface treatment. (quantities 35,001 - 55,000)	SY	2.24
0025.	Provide single bituminous surface treatment. (quantities 55,001 and over)	SY	1.96
0026.	Provide double bituminous surface treatment. (quantities 1 - 200)	SY	6.15
0027.	Provide double bituminous surface treatment. (quantities 201 - 12,000)	SY	2.68
0028.	Provide asphalt concrete overlay, Class G (quantities 1 - 250)	TON	61.50
0029.	Provide asphalt concrete overlay, Class G (quantities 251 - 1,000)	TON	51.44
0030.	Provide asphalt concrete pavement, Class B (quantities 1 - 250)	TON	55.91
0031.	Provide asphalt concrete pavement, Class B (quantities 251 - 4,000)	TON	45.84
0032.	Adjust pavement appurtenances for overlay.	EA	251.59
0033.	Adjust pavement appurtenances for other than overlays.	EA	251.59

ITEM NO.	DESCRIPTION	UNIT	PRICE
0034.	Replace traffic signal concrete- controller accuator loop.	EA	2795.40
0035.	NOT USED		
0036.	NOT USED		
0037.	Provide reinforced PCC pavement	SY	39.14
0038.	Provide non-reinforced PCC pavement	SY	31.31
0039.	Provide armored edge plates for reinforced PCC pavement.	LF	19.01
GROUP 3 - EARTHWORK AND GRADING			
0040.	Clearing and grubbing area in preparation for earthwork. (quantities 1 - 500)	SY	3.35
0041.	Clearing and grubbing area in preparation for earthwork. (quantities 501 - 5,000)	SY	2.24
0042.	Clearing and grubbing area in preparation for earthwork. (quantities 5,001 and over)	SY	2.24
0043.	Excavate area for subgrade preparation. (quantities 1 - 250)	CY	11.18
0044.	Excavate area for subgrade preparation. (quantities 251 - 5,000)	CY	6,71
0045.	Fill area for subgrade preparation. (quantities 1 - 250)	CY	13.42
0046.	Fill area for subgrade preparation. (quantities 251 - 7,500)	CY	11.18
0047.	Grade range roads.	MILE	3913.56

ITEM NO.	DESCRIPTION	UNIT	PRICE
0048.	Provide gravel for range roads.	TON	12.30
0049.	Grade and gravel parking lots (areas greater than 100 S.Y.)	SY	1.68
GROUP 4 - DRAINAGE			
0050.	Provide Type I catch basin.	EA	1118.16
0051.	3' utility cut across road. To include trenching of 4' to 6' trench with backfill, compaction, 1' 6" of base course and 4" 2" of Class B asphalt.	LF	61.50
0052.	Excavate and backfill storm drainage pipe. Depth of 4' to 6'.	LF	16.77
0053.	Provide and install 6" diameter PVC pipe for storm drainage system.	LF	27.95
0054.	Provide and install 8" diameter PVC pipe for storm drainage system.	LF	33.54
0055.	Provide and install 10" diameter PVC pipe for storm drainage system.	LF	33.54
0056.	Provide and install 12" diameter PVC pipe for storm drainage system.	LF	33.54
0057.	Provide and install 8" diameter perforated PVC pipe for storm drainage system with aggregate and filter material.	LF	33.54
0058.	Provide and install 12" diameter perforated PVC pipe for storm drainage system with aggregate and filter material.	LF	39.14
0059.	Provide and install 12" diameter perforated reinforced PCC pipe for storm drainage system.	LF	33.54
0060.	Provide and install 12" diameter reinforced PCC pipe for storm drainage system.	LF	27.95

ITEM NO.	DESCRIPTION	UNIT	PRICE
0061.	Provide and install 18" diameter reinforced PCC pipe.	LF	39.14
0062.	Provide and install 24" diameter reinforced PCC pipe.	LF	55.91
0063.	Provide and install 30" diameter reinforced PCC pipe.	LF	67.09
0064.	Provide and install 36" diameter reinforced PCC pipe.	LF	72.68
0065.	Connect new storm drain into existing storm drain, catch basin or manhole.	LF	279.54
GROUP 5 - CURBS, GUTTERS & SIDEWALKS			
0066.	Provide cast-in-place PCC curb.	LF	15.65
0067.	Provide extruded PCC "Maxi" curb or equal.	LF	4.47
0068.	Provide integral PCC curb and gutter.	LF	16.77
0069.	Provide precast PCC curb 6" x 10" x 6'	LF	8.95
0070.	Provide PCC sidewalk.	SF	2.57
0071.	Provide asphalt concrete sidewalk.	TON	61.50
GROUP 6 - PAVEMENT MARKING & DELINEATORS			
0072.	Paint and stripe solid line pavement markings.	LF	0.09
0073.	Paint and stripe broken line pavement markings (skip stripe).	LF	0.04
0074.	Paint and stripe arrows and miscellaneous markings.	SF	1.34
0075.	Paint parking lot stripes.	LF	0.17

ITEM NO.	DESCRIPTION	UNIT	PRICE
0076.	Provide and install reflectorized traffic buttons. (quantities 1-50)	EA	5.59
0077.	Provide and install reflectorized traffic buttons. (quantities 51-500)	EA	3.91
0078.	Provide and install non-reflectorized traffic buttons. (quantities 1-250)	EA	2.24
0079.	Provide and install non-reflectorized traffic buttons. (quantities 251-2,500)	EA	1.96
GROUP 7 - MISCELLANEOUS			
0080.	Sawcut asphalt concrete. (quantities 1 - 250)	FI	1.96
0081.	Sawcut asphalt concrete. (quantities 251 - 2,000)	FI	0.84
0082.	Sawcut PCC. (quantities 1 - 250)	FI	2.52
0083.	Sawcut PCC. (quantities 251 - 2,000)	FI	0.84
0084.	Sawcut reinforced PCC. (quantities 1 - 250)	FI	5.59
0085.	Sawcut reinforced PCC. (quantities 251 - 2,000)	FI	0.84
0086.	Remove cast-in-place PCC curb.	LF	6.71
0087.	Remove PCC sidewalk.	SF	1.06
0088.	Remove asphalt concrete sidewalk.	SF	1.60
0089.	Remove asphalt concrete curb.	LF	1.12
0090.	Provide railroad ballast material.	CY	55.91
0091.	Provide and install rip rap rock, 50 lb average.	TON	55.91
0092.	Provide and install rip rap rock, 100 lb average.	TON	55.91
0093.	Provide and install rip rap rock, 300 lb average.	TON	83.86

ITEM NO.	DESCRIPTION	UNIT	PRICE
0094.	Provide and install bollards.	EA	223.63
0095.	Provide and place topsoil. (Includes hand seeding if under 100 SY).	CY	33.54
0096.	Hydroseed. (for areas 100 SY and over)	SY	1.12
0097.	Cut and waste material from longitudinal asphalt cold joints.	LF	1.12
0098.	Provide certified traffic control personnel during construction adjacent to or on streets. Units are based on one individual per hour. Includes required signage and equipment.	HR	33.54

NOTE: The unit measure FI is Foot x Inches. It is applicable to sawcutting where Foot is the length of cut and Inches is the thickness of cut.

GENERAL DECISION: WA20030001 10/01/2004 WA1

Date: October 1, 2004

General Decision Number: WA20030001 10/01/2004

Superseded General Decision Number: WA020001

State: Washington

Construction Types: Heavy (Heavy, and Dredging) and Highway

Counties: Washington Statewide.

HEAVY AND HIGHWAY AND DREDGING CONSTRUCTION PROJECTS (Excludes D.O.E. Hanford Site in Benton and Franklin Counties)

Modification Number	Publication Date
0	06/13/2003
1	01/23/2004
2	02/06/2004
3	02/13/2004
4	03/05/2004
5	03/12/2004
6	04/16/2004
7	05/14/2004
8	06/18/2004
9	06/25/2004
10	07/02/2004
11	07/23/2004
12	08/06/2004
13	08/20/2004
14	09/03/2004
15	10/01/2004

CARP0001-008 06/01/2004

	Rates	Fringes
Carpenters:		
COLUMBIA RIVER AREA -		
ADAMS, BENTON, COLUMBIA,		
DOUGLAS (EAST OF THE 120TH		
MERIDIAN), FERRY,		
FRANKLIN, GRANT, OKANOGAN		
(EAST OF THE 120TH		
MERIDIAN) AND WALLA WALLA		
COUNTIES		
GROUP 1:.....	\$ 23.88	7.45
GROUP 2:.....	\$ 24.99	7.45
GROUP 3:.....	\$ 24.15	7.45
GROUP 4:.....	\$ 23.88	7.45
GROUP 5:.....	\$ 59.17	7.45
GROUP 6:.....	\$ 28.02	7.45
SPOKANE AREA: ASOTIN,		
GARFIELD, LINCOLN, PEND		
OREILLE, SPOKANE, STEVENS		

AND WHITMAN COUNTIES

GROUP 1:.....	\$ 23.21	7.45
GROUP 2:.....	\$ 24.31	7.45
GROUP 3:.....	\$ 23.47	7.45
GROUP 4:.....	\$ 23.21	7.45
GROUP 5:.....	\$ 57.50	7.45
GROUP 6:.....	\$ 27.30	7.45

CARPENTERS CLASSIFICATIONS

GROUP 1: Carpenter; Burner-Welder; Rigger and Signaler; Insulators (all types), Acoustical, Drywall and Metal Studs, Metal Panels and Partitions; Floor Layer, Sander, Finisher and Astro Turf; Layout Carpenters; Form Builder; Rough Framer; Outside or Inside Finisher, including doors, windows, and jams; Sawfiler; Shingler (wood, composition) Solar, Fiberglass, Aluminum or Metal; Scaffold Erecting and Dismantling; Stationary Saw-Off Bearer; Wire, Wood and Metal Lather Applicator

GROUP 2: Millwright, machine erector

GROUP 3: Piledriver - includes driving, pulling, cutting, placing collars, setting, welding, or creosote treated material, on all piling

GROUP 4: Bridge, dock and wharf carpenters

GROUP 5: Divers

GROUP 6: Divers Tender

DEPTH PAYY FOR DIVERS:

Each foot over 50-100 feet	\$1.00
Each foot over 100-175 feet	2.25
Each foot over 175-250 feet	5.50

HAZMAT PROJECTS:

Anyone working on a HAZMAT job (task), where HAZMAT certification is required, shall be compensated at a premium, in addition to the classification working in as follows:

LEVEL D + \$.25 per hour - This is the lowest level of protection. No respirator is used and skin protection is minimal.

LEVEL C + \$.50 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B + \$.75 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical "splash suit".

LEVEL A +\$1.00 per hour - This level utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line.

CARP0003-006 06/01/2004

SOUTHWEST WASHINGTON: CLARK, COWLITZ, KLICKITAT,
LEWIS(Piledriver only), PACIFIC (South of a straight line made
by extending the north boundary line of Wahkiakum County west
to Willapa Bay to the Pacific Ocean), SKAMANIA AND WAHAKIYAKUM
COUNTIES and INCLUDES THE ENTIRE PENINSULA WEST OF WILLAPA BAY

SEE ZONE DESCRIPTION FOR CITIES BASE POINTS

ZONE 1:

	Rates	Fringes
Carpenters:		
CARPENTERS; ACOUSTICAL.....	\$ 27.72	10.70
DIVERS TENDERS.....	\$ 30.27	10.70
DIVERS.....	\$ 65.51	10.70
DRYWALL.....	\$ 27.72	10.70
FLOOR LAYERS & FLOOR FINISHERS (the laying of all hardwood floors nailed and mastic set, parquet and wood-type tiles, and block floors, the sanding and finishing of floors, the preparation of old and new floors when the materials mentioned above are to be installed); INSULATORS (fiberglass and similar irritating materils.....	\$ 27.87	10.70
MILLWRIGHTS.....	\$ 28.22	10.70
PILEDRIVERS.....	\$ 28.22	10.70

DEPTH PAY:

50 TO 100 FEET \$1.00 PER FOOT OVER 50 FEET
100 TO 150 FEET 1.50 PER FOOT OVER 100 FEET
150 TO 200 FEET 2.00 PER FOOT OVER 150 FEET

Zone Differential (Add up Zone 1 rates):

Zone 2 - \$0.85
Zone 3 - 1.25
Zone 4 - 1.70
Zone 5 - 2.00
Zone 6 - 3.00

BASEPOINTS: ASTORIA, LONGVIEW, PORTLAND, THE DALLES, AND
VANCOUVER, (NOTE: All dispatches for Washington State
Counties: Cowlitz, Wahkiakum and Pacific shall be from
Longview Local #1707 and mileage shall be computed from
that point.)

ZONE 1: Projects located within 30 miles of the respective
city hall of the above mentioned cities

ZONE 2: Projects located more than 30 miles and less than 40 miles of the respective city of the above mentioned cities
 ZONE 3: Projects located more than 40 miles and less than 50 miles of the respective city of the above mentioned cities
 ZONE 4: Projects located more than 50 miles and less than 60 miles of the respective city of the above mentioned cities.
 ZONE 5: Projects located more than 60 miles and less than 70 miles of the respective city of the above mentioned cities
 ZONE 6: Projects located more than 70 miles of the respected city of the above mentioned cities

 CARP0770-003 06/01/2004

	Rates	Fringes
Carpenters:		
CENTRAL WASHINGTON:		
CHELAN, DOUGLAS (WEST OF THE 120TH MERIDIAN), KITTITAS, OKANOGAN (WEST OF THE 120TH MERIDIAN) AND YAKIMA COUNTIES		
ACCOUSTICAL WORKERS.....	\$ 20.98	10.27
CARPENTERS AND DRYWALL APPLICATORS.....	\$ 20.72	10.27
CARPENTERS ON CREOSOTE MATERIAL.....	\$ 20.82	10.27
DIVERS TENDER.....	\$ 31.17	10.55
DIVERS.....	\$ 70.07	10.55
INSULATION APPLICATORS.....	\$ 20.72	10.27
MILLWRIGHT AND MACHINE ERECTORS.....	\$ 29.40	10.27
PILEDRIVER, BRIDGE DOCK AND WHARF CARPENTERS.....	\$ 28.40	10.27
PILEDRIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE TREATED MATERIAL, ALL PILING.....	\$ 28.60	10.27
SAWFILERS, STATIONARY POWER SAW OPERATORS, FLOOR FINISHER, FLOOR LAYER, SHINGLER, FLOOR SANDER OPERATOR AND OPERATORS OF OTHER STATIONARY WOOD WORKING TOOLS.....	\$ 20.85	10.27
WESTERN WASHINGTON:		
CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS (excludes piledrivers only), MASON, PACIFIC (North of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific		

Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES		
ACOUSTICAL WORKERS.....	\$ 28.56	10.55
CARPENTERS AND DRYWALL		
APPLICATORS.....	\$ 28.40	10.55
CARPENTERS ON CREOSOTE		
MATERIAL.....	\$ 28.50	10.55
DIVERS TENDER.....	\$ 31.17	10.55
DIVERS.....	\$ 70.07	10.55
INSULATION APPLICATORS.....	\$ 28.40	10.55
MILLWRIGHT AND MACHINE		
ERECTORS.....	\$ 29.40	10.55
PILEDRIIVER, BRIDGE, DOCK		
& WHARF CARPENTERS.....	\$ 28.40	10.55
PILEDRIIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE TREATED		
MATERIAL, ALL PILING.....	\$ 28.60	10.55
SAWFILERS, STATIONARY POWER SAW OPERATORS, FLOOR FINISHER, FLOOR LAYER, SHINGLER, FLOOR SANDER OPERATOR AND OPERATORS OF OTHER STATIONARY WOOD WORKING		
TOOLS.....	\$ 28.53	10.55

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIIVERS)

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

Seattle	Olympia	Bellingham
Auburn	Bremerton	Anacortes
Renton	Shelton	Yakima
Aberdeen-Hoquiam	Tacoma	Wenatchee
Ellensburg	Everett	Port Angeles
Centralia	Mount Vernon	Sunnyside
Chelan	Pt. Townsend	

Zone Pay:

0 -25 radius miles	Free
25-35 radius miles	\$1.00/hour
35-45 radius miles	\$1.15/hour
45-55 radius miles	\$1.35/hour
Over 55 radius miles	\$1.55/hour

(HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT AND PILEDRIIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center

Zone Pay:
 0 -25 radius miles Free
 25-45 radius miles \$.70/hour
 Over 45 radius miles \$1.50/hour

 ELEC0046-001 12/01/2003

CALLAM, JEFFERSON, KING AND KITSAP COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 36.85	3%+10.55
Electrician.....	\$ 33.50	3%+10.55

 ELEC0048-003 01/01/2004

CLARK, KLICKITAT AND SKAMANIA COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 31.40	3%+12.35
Electrician.....	\$ 31.15	3%+12.35

 ELEC0073-001 07/01/2004

ADAMS, FERRY, LINCOLN, PEND OREILLE, SPOKANE, STEVENS, WHITMAN COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 24.07	3%+11.58
Electrician.....	\$ 23.67	3%+11.58

 * ELEC0076-002 09/01/2004

GRAYS HARBOR, LEWIS, MASON, PACIFIC, PIERCE, AND THURSTON COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 34.13	3%+12.56
Electrician.....	\$ 30.75	3%+12.56

 ELEC0077-002 02/01/2004

	Rates	Fringes
Line Construction:		
CABLE SPLICERS.....	\$ 38.71	3.875%+8.75
GROUNDMEN.....	\$ 24.19	3.875%+7.00
LINE EQUIPMENT MEN.....	\$ 29.72	3.875%+7.00
LINEMEN, POLE SPRAYERS, HEAVY LINE EQUIPMENT MAN....	\$ 34.56	3.875%+8.75
POWDERMEN, JACKHAMMERMEN....	\$ 25.92	3.875%+7.00
TREE TRIMMER.....	\$ 20.27	3.875%+7.19

 ELEC0112-005 06/01/2004

ASOTIN, BENTON, COLUMBIA, FRANKLIN, GARFIELD, KITTITAS, WALLA
WALLA, YAKIMA COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 31.24	3%+12.28
Electrician.....	\$ 29.75	3%+12.28

* ELEC0191-003 09/01/2004

ISLAND, SAN JUAN, SNOHOMISH, SKAGIT AND WHATCOM COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 33.72	3%+10.33
Electrician.....	\$ 30.66	3%+10.33

* ELEC0191-004 09/01/2004

CHELAN, DOUGLAS, GRANT AND OKANOGAN COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 29.33	3%+10.28
Electrician.....	\$ 26.66	3%+10.28

ELEC0970-001 06/01/2004

COWLITZ AND WAHKIAKUM COUNTIES

	Rates	Fringes
Cable splicer.....	\$ 31.57	3%+9.40
Electrician.....	\$ 28.70	3%+9.40

ENGI0302-003 06/01/2004

CHELAN (WEST OF THE 120TH MERIDIAN), CLALLAM, DOUGLAS (WEST OF THE 120TH MERIDIAN), GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, KITTITAS, MASON, OKANOGAN (WEST OF THE 120TH MERIDIAN), SAN JUNA, SKAGIT, SNOHOMISH, WHATCOM AND YAKIMA (WEST OF THE 120TH MERIDIAN) COUNTIES

PROJECTS: CATEGORY A PROJECTS (EXCLUDES CATEGORY B PROJECTS, AS SHOWN BELOW)

Zone 1 (0-25 radius miles):

	Rates	Fringes
Power equipment operators:		
Group 1A.....	\$ 30.61	10.25
Group 1AA.....	\$ 31.15	10.25
Group 1AAA.....	\$ 31.67	10.25
Group 1.....	\$ 30.09	10.25
Group 2.....	\$ 29.63	10.25

Group 3.....	\$ 29.24	10.25
Group 4.....	\$ 27.01	10.25

Zone Differential (Add to Zone 1 rates):

- Zone 2 (26-45 radius miles) - \$.70
- Zone 3 (Over 45 radius miles) - \$1.00

BASEPOINTS: Aberdeen, Bellingham, Bremerton, Everett, Kent, Mount Vernon, Port Angeles, Port Townsend, Seattle, Shelton, Wenatchee, Yakima

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-over 300 tons, or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes 200 to 300 tons, or 250 ft of boom (including jib with attachments); Tower crane over 175 ft in height, base to boom

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft in height base to boom; Loaders-overhead, 8 yards and over; Shovels, excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes 45 tons thru 99 tons, under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Derricks on building work; Excavator, shovel, backhoes over 3 yards and under 6 yards; Hard tail end dump articulating off-road equipment 45 yards and over; Loader- overhead 6 yards to, but not including 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9, HD 41, D-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapers-self propelled 45 yards and over; Slipform pavers; Transporters, all truck or track type

GROUP 2 - Barrier machine (zipper); Batch Plant Operaor-Concrete; Bump Cutter; Cranes, 20 tons thru 44 tons with attachments; Crane-overhead, bridge type-20 tons through 44 tons; Chipper; Concrete Pump-truck mount with boom attachment; Crusher; Deck Engineer/Deck Winches (power); Drilling machine; Excavator, shovel, backhoe-3 yards and under; Finishing Machine, Bidwell, Gamaco and similar equipment; Guardrail punch; Horizontal/directional drill operator; Loaders-overhead under 6 yards; Loaders-plant feed; Locomotives-all; Mechanics-all; Mixers-asphalt plant; Motor patrol graders-finishing; Piledriver (other than crane mount); Roto-mill, roto-grinder; Screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self propelled, hard tail end dump, articulating off-road equipment-under 45 yards; Subgrade trimmer; Tractors, backhoes-over 75 hp; Transfer material service machine-shuttle buggy, blaw knox-roadtec; Truck crane oiler/driver-100 tons and over; Truck Mount portable conveyor; Yo Yo Pay dozer

GROUP 3 - Conveyors; Cranes-thru 19 tons with attachments; A-frame crane over 10 tons; Drill oilers-auger type, truck or crane mount; Dozers-D-9 and under; Forklift-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/boom trucks over 10 tons; Loader-elevating type, belt; Motor patrol grader-nonfinishing; Plant oiler- asphalt, crusher; Pumps-concrete; Roller, plant mix or multi-lift materials; Saws-concrete; Scrpers-concrete and carry-all; Service engineer-equipment; Trenching machines; Truck Crane Oiler/Driver under 100 tons; Tractors, backhoe 75 hp and under

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete finish mahine-laser screed; Cranes-A frame-10 tons and under; Elevator and Manlift-permanent or shaft type; Gradechecker, Stakehop; Forklifts under 3000 lbs. with attachments; Hydralifts/boom trucks, 10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Posthole digger, mechanical; Power plant; Pumps, water; Rigger and Bellman; Roller-other than plant mix; Wheel Tractors, farmall type; Shotcrete/gunite equipment operator

CATEGORY B PROJECTS: 95% OF THE BASIC HOURLY RATE FOR EACH GROUP PLUS FULL FRINGE BENEFITS APPLICABLE TO CATEGORY A PROJECTS SHALL APPLY TO THE FOLLOWING PROJECTS. REDUCED RATES MAY BE PAID ON THE FOLLOWING:

1. Projects involving work on structures such as buildings and bridges whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.
2. Projects of less than \$1 million where no building is involved. Surfacing and paving including, but utilities excluded.
3. Marine projects (docks, wharfs, ect.) less than \$150,000.

HANDLING OF HAZARDOUS WASTE MATERIALS: Personnel in all craft classifications subject to working inside a federally designed hazardous perimeter shall be elgible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing.

H-2 Class "C" Suit - Base wage rate plus \$.25 per hour.

H-3 Class "B" Suit - Base wage rate plus \$.50 per hour.

H-4 Class "A" Suit - Base wage rate plus \$.75 per hour.

ENGI0302-009 06/01/2004

CHELAN (WEST OF THE 120TH MERIDIAN), CLALLAM, DOUGLAS (WEST OF THE 120TH MERIDIAN), GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, KITTITAS, MASON, OKANOGAN (WEST OF THE 120TH MERIDIAN),

SAN JUNA, SKAGIT, SNOHOMISH, WHATCOM AND YAKIMA (WEST OF THE 120TH MERIDIAN) COUNTIES

ON PROJECTS DESCRIBED IN FOOTNOTE A BELOW, THE RATE FOR EACH GROUP SHALL BE 95% OF THE BASE RATE PLUS FULL FRINGE BENEFITS. ON ALL OTHER WORK, THE FOLLOWING RATES APPLY.

WORK PERFORMED ON HYDRAULIC DREDDGES:

Zone 1 (0-25 radius miles):

	Rates	Fringes
Power equipment operators:		
GROUP 1		
TOTAL PROJECT COST		
\$300,000 AND OVER.....	\$ 28.80	10.25
TOTAL PROJECT COST UNDER		
\$300,000.....	\$ 26.96	8.40
GROUP 2		
TOTAL PROJECT COST		
\$300,000 AND OVER.....	\$ 28.91	10.25
TOTAL PROJECT COST UNDER		
\$300,000.....	\$ 27.06	8.40
GROUP 3		
TOTAL PROJECT COST		
\$300,000 AND OVER.....	\$ 29.27	10.25
TOTAL PROJECT COST UNDER		
\$300,000.....	\$ 27.38	8.40
GROUP 4		
TOTAL PROJECT COST		
\$300,000 AND OVER.....	\$ 29.32	10.25
TOTAL PROJECT COST UNDER		
\$300,000.....	\$ 27.43	8.40
GROUP 5		
TOTAL PROJECT COST		
\$300,000 AND OVER.....	\$ 30.79	10.25
TOTAL PROJECT COST UNDER		
\$300,000.....	\$ 28.75	8.40
GROUP 6		
TOTAL PROJECT COST		
\$300,000 AND OVER.....	\$ 28.80	10.25
TOTAL PROJECT COST UNDER		
\$300,000.....	\$ 26.96	8.40

Zone Differential (Add to Zone 1 rates):

- Zone 2 (26-45 radius miles) - \$.70
- Zone 3 (Over 45 radius miles) - \$1.00

BASEPOINTS: Aberdeen, Bellingham, Bremerton, Everett, Kent, Mount Vernon, Port Angeles, Port Townsend, Seattle, Shelton, Wenatchee, Yakima

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

- GROUP 1 - ASSISTANT MATE (DECKHAND)
- GROUP 2 - OILER
- GROUP 3 - ASSISTANT ENGINEER (ELECTRIC, DIESEL, STEAM OR

BOOSTER PUMP); MATES AND BOATMEN
 GROUP 4 - CRANEMAN, ENGINEER WELDER
 GROUP 5 - LEVERMAN, HYDRAULIC
 GROUP 6 - MAINTENANCE

CATEGORY B PROJECTS: 95% OF THE BASIC HOURLY RATE FOR EACH GROUP PLUS FULL FRINGE BENEFITS APPLICABLE TO CATEGORY A PROJECTS SHALL APPLY TO THE FOLLOWING PROJECTS. REDUCED RATES MAY BE PAID ON THE FOLLOWING:

1. Projects involving work on structures such as buildings and bridges whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.
2. Projects of less than \$1 million where no building is involved. Surfacing and paving including, but utilities excluded.
3. Marine projects (docks, wharfs, ect.) less than \$150,000.

HEAVY WAGE RATES (CATEGORY A) APPLIES TO CLAM SHELL DREDGE, HOE AND DIPPER, SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND BULLDOZERS.

HANDLING OF HAZARDOUS WASTE MATERIALS: Personnel in all craft classifications subject to working inside a federally designed hazardous perimeter shall be eligible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing.

H-2 Class "C" Suit - Base wage rate plus \$.25 per hour.

H-3 Class "B" Suit - Base wage rate plus \$.50 per hour.

H-4 Class "A" Suit - Base wage rate plus \$.75 per hour.

 * ENGI0370-002 08/30/2004

ADAMS, ASOTIN, BENTON, CHELAN (EAST OF THE 120TH MERIDIAN), COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN (EAST OF THE 120TH MERIDIAN), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA (EAST OF THE 120TH MERIDIAN) COUNTIES

ZONE 1:

	Rates	Fringes
Power equipment operators:		
GROUP 1A.....	\$ 21.34	7.62
GROUP 1.....	\$ 21.89	7.62
GROUP 2.....	\$ 22.21	7.62
GROUP 3.....	\$ 22.82	7.62
GROUP 4.....	\$ 22.98	7.62
GROUP 5.....	\$ 23.14	7.62
GROUP 6.....	\$ 23.42	7.62
GROUP 7.....	\$ 23.69	7.62

GROUP 8.....\$ 24.79 7.62

ZONE DIFFERENTIAL (Add to Zone 1 rate): Zone 2 - \$2.00

Zone 1: Within 45 mile radius of Spokane, Moses Lake, Pasco, Washington; Lewiston, Idaho

Zone 2: Outside 45 mile radius of Spokane, Moses Lake, Pasco, Washington; Lewiston, Idaho

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1A: Boat Operator; Crush Feeder; Oiler; Steam Cleaner

GROUP 1: Bit Grinders; Bolt Threading Machine; Compressors (under 2000 CFM, gas, diesel, or electric power); Deck Hand; Drillers Helper (Assist driller in making drill rod connections, service drill engine and air compressor, repair drill rig and drill tools, drive drill support truck to and on the job site, remove drill cuttings from around bore hole and inspect drill rig while in operation); Fireman & Heater Tender; Grade Checker; Hydro-seeder, Mulcher, Nozzleman; Oiler Driver, & Cable Tender, Mucking Machine; Pumpman; Rollers, all types on subgrade, including seal and chip coatings (farm type, Case, John Deere & similar, or Compacting Vibrator), except when pulled by Dozer with operable blade; Welding Machine

GROUP 2: A-frame Truck (single drum); Assistant Refrigeration Plant (under 1000 ton); Assistant Plant Operator, Fireman or Pugmixer (asphalt); Bagley or Stationary Scraper; Belt Finishing Machine; Blower Operator (cement); Cement Hog; Compressor (2000 CFM or over, 2 or more, gas diesel or electric power); Concrete Saw (multiple cut); Distributor Leverman; Ditch Witch or similar; Elevator Hoisting Materials; Dope Pots (power agitated); Fork Lift or Lumber Stacker, hydra-lift & similar; Gin Trucks (pipeline); Hoist, single drum; Loaders (bucket elevators and conveyors); Longitudinal Float; Mixer (portable-concrete); Pavement Breaker, Hydra-Hammer & similar; Power Broom; Railroad Ballast Regulation Operator (self-propelled); Railroad Power Tamper Operator (self-propelled); Railroad Tamper Jack Operator (self-propelled); Spray Curing Machine (concrete); Spreader Box (self-propelled); Straddle Buggy (Ross & similar on construction job only); Tractor (Farm type R/T with attachment, except Backhoe); Tugger Operator

GROUP 3: A-frame Truck (2 or more drums); Assistant Refrigeration Plant & Chiller Operator (over 1000 ton); Backfillers (Cleveland & similar); Batch Plant & Wet Mix Operator, single unit (concrete); Belt-Crete Conveyors with power pack or similar; Belt Loader (Kocal or similar); Bending Machine; Bob Cat; Boring Machine (earth); Boring Machine (rock under 8 inch bit) (Quarry Master, Joy or similar); Bump Cutter (Wayne, Saginaw or similar); Canal Lining Machine (concrete); Chipper (without crane); Cleaning & Doping Machine (pipeline); Deck Engineer;

Elevating Belt-type Loader (Euclid, Barber Green & similar); Elevating Grader-type Loader (Dumor, Adams or similar); Generator Plant Engineers (diesel or electric); Gunnite Combination Mixer & Compressor; Locomotive Engineer; Mixermobile; Mucking Machine; Posthole Auger or Punch; Pump (grout or jet); Soil Stabilizer (P & H or similar); Spreader Machine; Tractor (to D-6 or equivalent) and Traxcavator; Traverse Finish Machine; Turnhead Operator

GROUP 4: Concrete Pumps (squeeze-crete, flow-crete, pump-crete, Whitman & similar); Curb Extruder (asphalt or concrete); Drills (churn, core, calyx or diamond)(operate drilling machine, drive or transport drill rig to and on job site and weld well casing); Equipment Serviceman; Greaser & Oiler; Hoist (2 or more drums or Tower Hoist); Loaders (overhead & front-end, under 4 yds. R/T); Refrigeration Plant Engineer (under 1000 ton); Rubber-tired Skidders (R/T with or without attachments); Surface Heater & Plant Machine; Trenching Machines (under 7 ft. depth capacity); Turnhead (with re-screening); Vacuum Drill (reverse circulation drill under 8 inch bit)

GROUP 5: Backhoe (under 45,000 gw); Backhoe & Hoe Ram (under 3/4 yd.); Carrydeck & Boom Truck (under 25 tons); Cranes (25 tons & under), all attachments including clamshell, dragline; Derricks & Stifflegs (under 65 tons); Drilling Equipment(8 inch bit & over) (Robbins, reverse circulation & similar)(operates drilling machine, drive or transport drill rig to and on job site and weld well casing); Hoe Ram; Piledriving Engineers; Paving (dual drum); Railroad Track Liner Operatr (self-propelled); Refrigeration Plant Engineer (1000 tons & over); Signalman (Whirleys, Highline Hammerheads or similar)

GROUP 6: Asphalt Plant Operator; Automatic Subgrader (Ditches & Trimmers)(Autograde, ABC, R.A. Hansen & similar on grade wire); Backhoe (45,000 gw and over to 110,000 gw); Backhoes & Hoe Ram (3/4 yd. to 3 yd.); Batch Plant (over 4 units); Batch & Wet Mix Operator (multiple units, 2 & incl. 4); Blade Operator (motor patrol & attachments, Athey & Huber); Boom Cats (side); Cable Controller (dispatcher); Clamshell Operator (under 3 yds.); Compactor (self-propelled with blade); Concrete Pump Boom Truck; Concrete Slip Form Paver; Cranes (over 25 tons, to and including 45 tons), all attachments including clamshell, dragline; Crusher, Grizzle & Screening Plant Operator; Dozer, 834 R/T & similar; Draglines (under 3 yds.); Drill Doctor; H.D. Mechanic; H.D. Welder; Loader Operator (front-end & overhead, 4 yds. incl. 8 yds.); Multiple Dozer Units with single blade; Paving Machine (asphalt and concrete); Quad-Track or similar equipment; Roller (finishing asphalt pavement); Roto Mill (pavement grinder); Scrapers, all, rubber-tired; Screed Operator; Shovel(under 3 yds.); Tractors (D-6 & equilvalent & over); Trenching Machines (7 ft. depth & over); Tug Boat Operator Vactor guzzler, super sucker

GROUP 7: Backhoe (over 110,000 gw); Backhoes & Hoe Ram (3 yds

& over); Blade (finish & bluetop) Automatic, CMI, ABC, Finish Athey & Huber & similar when used as automatic; Cableway Operators; Concrete Cleaning/Decontamination machine operator; Cranes (over 45 tons to but not including 85 tons), all attachments including clamshell and dragline; Derricks & Stiffleys (65 tons & over); Elevating Belt (Holland type); Heavy equipment robotics operator; Loader (360 degrees revolving Koehring Scooper or similar); Loaders (overhead & front-end, over 8 yds. to 10 yds.); Rubber-tired Scrapers (multiple engine with three or more scrapers); Shovels (3 yds. & over); Whirleys & Hammerheads, ALL

GROUP 8: Cranes (85 tons and over, and all climbing, overhead, rail and tower), all attachments including clamshell, dragline; Loaders (overhead and front-end, 10 yards and over); Helicopter Pilot

BOOM PAY: (All Cranes, Including Tower)
 180 ft to 250 ft \$.30 over scale
 Over 250 ft \$.60 over scale

NOTE:

In computing the length of the boom on Tower Cranes, they shall be measured from the base of the Tower to the point of the boom.

HAZMAT:

Anyone working on HAZMAT jobs, working with supplied air shall receive \$1.00 an hour above classification.

 * ENGI0370-006 06/01/2004

ADAMS, ASOTIN, BENTON, CHELAN (EAST OF THE 120TH MERIDIAN), COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN (EAST OF THE 120TH MERIDIAN), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA (EAST OF THE 120TH MERIDIAN) COUNTIES

WORK PERFORMED ON HYDRAULIC DREDGES

	Rates	Fringes
Hydraulic Dredge		
GROUP 1:.....	\$ 31.43	7.62
GROUP 2:.....	\$ 31.90	7.62
GROUP 3:.....	\$ 31.95	7.62
GROUP 4:.....	\$ 33.42	7.62
GROUP 5:.....	\$ 31.43	7.62
GROUP 6:.....	\$ 31.54	7.62

GROUP 1: Assistant Mate (Deckhand)
 GROUP 2: Assistant Engineer (Electric, Diesel, Steam, or Booster Pump); Mates and Boatmen
 GROUP 3: Engineer Welder
 GROUP 4: Leverman, Hydraulic
 GROUP 5: Maintenance

GROUP 6: Oiler

HEAVY WAGE RATES APPLIES TO CLAM SHELL DREDGE, HOE AND
DIPPER, SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND
BULLDOZERS.

ENGI0612-001 06/01/2004

LEWIS, PIERCE, PACIFIC (THAT PORTION WHICH LIES NORTH OF A
PARALLEL LINE EXTENDED WEST FROM THE NORTHERN BOUNDARY OF
WAHKAIKUM COUNTY TO THE SEA IN THE STATE OF WASHINGTON) AND
THURSTON COUNTIES

PROJECTS:
CATEGORY A PROJECTS (excludes Category B projects, as shown
below)

	Rates	Fringes
Power equipment operators:		
WORK PERFORMED ON		
HYDRAULIC DREDGES:Total		
Project cost \$300,000 and over		
GROUP 1.....	\$ 28.80	10.25
GROUP 2.....	\$ 28.91	10.25
GROUP 3.....	\$ 29.27	10.25
GROUP 4.....	\$ 29.32	10.25
GROUP 5.....	\$ 30.79	10.25
GROUP 6.....	\$ 28.80	10.25
WORK PERFORMED ON		
HYDRAULIC DREDGES:Total		
Project Cost under \$300,000		
GROUP 1.....	\$ 26.96	8.40
GROUP 2.....	\$ 27.06	8.40
GROUP 3.....	\$ 27.38	8.40
GROUP 4.....	\$ 27.43	8.40
GROUP 5.....	\$ 28.75	8.40
GROUP 6.....	\$ 26.96	8.40

ZONE 2 (26-45 radius miles) - Add \$.70 to Zone 1 rates
ZONE 3 (Over 45 radius miles) - Add \$1.00 to Zone 1 rates

BASEPOINTS: Tacoma, Olympia, and Centralia

CATEGORY B PROJECTS - 95% of the basic hourly rate for each
group plus full fringe benefits applicable to Category A
projects shall apply to the following projects: Reduced
rates may be paid on the following:

1. Projects involving work on structures such as buildings
and structures whose total value is less than \$1.5 million
excluding mechanical, electrical, and utility portions of
the contract.
2. Projects of less than \$1 million where no building is
involved. Surfacing and paving included, but utilities
excluded.
3. Marine projects (docts, wharfs, etc.) less than \$150,000

WORK PERFORMED ON HYDRAULIC DREDGES:

- GROUP 1: Assistant Mate (Deckhand
- GROUP 2: Oiler
- GROUP 3: Assistant Engineer (Electric, Diesel, Steam or Booster Pump); Mates and Boatmen
- GROUP 4: Craneman, Engineer Welder
- GROUP 5: Leverman, Hydraulic GROUP 6: Maintenance

HEAVY WAGE RATES APPLIES TO CLAM SHEEL DREDGE, HOE AND DIPPER, SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND BULLDOZERS

HANDLING OF HAZARDOUS WASTE MATERIALS

- H-1 - When not outfitted with protective clothing of level D equipment - Base wage rate
- H-2 - Class "C" Suit - Base wage rate + \$.25 per hour
- H-3 - Class "B" Suit - Base wage rate + \$.50 per hour
- H-4 - Class "A" Suit - Base wage rate +\$.75 per hour

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LEWIS, PIERCE, PACIFIC (portion lying north of a parallel line extending west from the northern boundary of Wahkaikum County to the sea) AND THURSTON COUNTIES

ON PROJECTS DESCRIBED IN FOOTNOTE A BELOW, THE RATE FOR EACH GROUP SHALL BE 90% OF THE BASE RATE PLUS FULL FRINGE BENEFITS. ON ALL OTHER WORK, THE FOLLOWING RATES APPLY.

Zone 1 (0-25 radius miles):

	Rates	Fringes
Power equipment operators:		
GROUP 1A.....	\$ 30.61	10.25
GROUP 1AA.....	\$ 31.15	10.25
GROUP 1AAA.....	\$ 31.67	10.25
GROUP 1.....	\$ 30.09	10.25
GROUP 2.....	\$ 29.63	10.25
GROUP 3.....	\$ 29.24	10.25
GROUP 4.....	\$ 27.01	10.25

Zone Differential (Add to Zone 1 rates):

- Zone 2 (26-45 radius miles) = \$.70
- Zone 3 (Over 45 radius miles) - \$1.00

BASEPOINTS: CENTRALIA, OLYMPIA, TACOMA

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

- GROUP 1 AAA - Cranes-over 300 tons or 300 ft of boom (including jib with attachments)
- GROUP 1AA - Cranes- 200 tonsto 300 tons, or 250 ft of boom

(including jib with attachments; Tower crane over 175 ft in height, base to boom)

GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft in height base to boom; Loaders-overhead, 8 yards and over; Shovels, excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes 45 tons thru 99 tons under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Derricks on building work; Excavator, shovel, backhoes over 3 yards and under 6 yards; Hard tail end dump articulating off-road equipment 45 yards and over; Loader- overhead, 6 yards to, but not including, 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9 HD 41, D-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapers-self-propelled 45 yards and over; Slipform pavers; Transporters, all track or truck type

GROUP 2 - Barrier machine (zipper); Batch Plant Operator-concrete; Bump Cutter; Cranes, 20 tons thru 44 tons with attachments; Crane-Overhead, bridge type, 20 tons through 44 tons; Chipper; Concrete pump-truck mount with boom attachment; Crusher; Deck engineer/deck winches (power); Drilling machine; Excavator, shovel, backhoe-3 yards and under; Finishing machine, Bidwell, Gamaco and similar equipment; Guardrail punch; Loaders, overhead under 6 yards; Loaders-plant feed; Locomotives-all; Mechanics- all; Mixers, asphalt plant; Motor patrol graders, finishing; Piledriver (other than crane mount); Roto-mill, roto-grinder; Screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self-propelled, hard tail end dump, articulating off-road equipment- under 45 yards; Subgrader trimmer; Tractors, backhoe over 75 hp; Transfer material service machine-shuttle buggy, Blaw Knox- Roadtec; Truck Crane oiler/driver-100 tons and over; Truck Mount Portable Conveyor; Yo Yo pay

GROUP 3 - Conveyors; Cranes through 19 tons with attachments; Crane-A-frame over 10 tons; Drill oilers-auger type, truck or crane mount; Dozer-D-9 and under; Forklift-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside Hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/boom trucks over 10 tons; Loaders-elevating type, belt; Motor patrol grader-nonfinishing; Plant oiler- asphalt, crusher; Pump-Concrete; Roller, plant mix or multi-lift materials; Saws-concrete; Scrapers, concrete and carry all; Service engineers-equipment; Trenching machines; Truck crane oiler/driver under 100 tons; Tractors, backhoe under 75 hp

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete Finish Machine-laser screed; Cranes A-frame 10 tons and under; Elevator and manlift (permanent and shaft

type); Forklifts-under 3000 lbs. with attachments;
 Gradechecker, stakehop; Hydralifts/boom trucks, 10 tons and
 under; Oil distributors, blower distribution and mulch
 seeding operator; Pavement breaker; Posthole
 digger-mechanical; Power plant; Pumps-water; Rigger and
 Bellman; Roller-other than plant mix; Wheel Tractors,
 farmall type; Shotcrete/gunite equipment operator

FOOTNOTE A- Reduced rates may be paid on the following:

1. Projects involving work on structures such as buildings and bridges whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.
2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.
3. Marine projects (docks, wharfs, etc.) less than \$150,000.

HANDLING OF HAZARDOUS WASTE MATERIALS: Personnel in all craft classifications subject to working inside a federally designated hazardous perimeter shall be eligible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing

H-2 Class "C" Suit - Base wage rate plus \$.25 per hour.

H-3 Class "B" Suit - Base wage rate plus \$.50 per hour.

H-4 Class "A" Suit - Base wage rate plus \$.75 per hour.

 ENGI0701-002 01/01/2004

CLARK, COWLITZ, KLICKKITAT, PACIFIC (SOUTH), SKAMANIA, AND WAHAKIAKUM COUNTIES

	Rates	Fringes
Power equipment operators: (See Footnote A)		
ZONE 1:		
GROUP 1.....	\$ 29.51	9.70
GROUP 1A.....	\$ 30.99	9.70
GROUP 1B.....	\$ 32.46	9.70
GROUP 2.....	\$ 28.25	9.70
GROUP 3.....	\$ 27.47	9.70
GROUP 4.....	\$ 26.93	9.70
GROUP 5.....	\$ 26.32	9.70
GROUP 6.....	\$ 23.91	9.70

Zone Differential (add to Zone 1 rates):
 Zone 2 - \$1.50
 Zone 3 - 3.00

For the following metropolitan counties: MULTNOMAH;
CLACKAMAS; MARION; WASHINGTON; YAMHILL; AND COLUMBIA;
CLARK; AND COWLITZ COUNTY, WASHINGTON WITH MODIFICATIONS AS
INDICATED:

All jobs or projects located in Multnomah, Clackamas and Marion Counties, West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Highway 26 and West of Mile Post 30 on Highway 22 and all jobs or projects located in Yamhill County, Washington County and Columbia County and all jobs or projects located in Clark & Cowlitz County, Washington except that portion of Cowlitz County in the Mt. St. Helens "Blast Zone" shall receive Zone I pay for all classifications.

All jobs or projects located in the area outside the identified boundary above, but less than 50 miles from the Portland City Hall shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the Portland City Hall, but outside the identified border above, shall receive Zone III pay for all classifications.

For the following cities: ALBANY; BEND; COOS BAY; EUGENE;
GRANTS PASS; KLAMATH FALLS; MEDFORD; ROSEBURG

All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone I pay for all classifications.

All jobs or projects located more than 30 miles and less than 50 miles from the respective city hall of the above mentioned cities shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone III pay for all classifications.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: CONCRETE: Batch Plant and/or Wet Mix Operator, three units or more; CRANE: Helicopter Operator, when used in erecting work; Whirley Operator, 90 ton and over; LATTICE BOOM CRANE: Operator 200 tons through 299 tons, and/or over 200 feet boom; HYDRAULIC CRANE: Hydraulic Crane Operator 90 tons through 199 tons with luffing or tower attachments; FLOATING EQUIPMENT: Floating Crane, 150 ton but less than 250 ton

GROUP 1A: HYDRAULIC CRANE: Hydraulic Operator, 200 tons and over (with luffing or tower attachment); LATTICE BOOM CRANE: Operator, 200 tons through 299 tons, with over 200 feet boom; FLOATING EQUIPMENT: Floating Crane 250 ton and over

GROUP 1B: LATTICE BOOM CRANE: Operator, 300 tons through 399 tons with over 200 feet boom; Operator 400 tons and over; FLOATING EQUIPMENT: Floating Crane 350 ton and over

GROUP 2: ASPHALT: Asphalt Plant Operator (any type); Roto Mill, pavement profiler, operator, 6 foot lateral cut and over; BLADE: Auto Grader or "Trimmer" (Grade Checker required); Blade Operator, Robotic; BULLDOZERS: Bulldozer operator over 120,000 lbs and above; Bulldozer operator, twin engine; Bulldozer Operator,tandem, quadnine, D10, D11, and similar type; Bulldozere Robotic Equipment (any type; CONCRETE: Batch Plant and/or Wet Mix Operator, one and two drum; Automatic Concrete Slip Form Paver Operator; Concrete Canal Line Operator; Concrete Profiler, Diamond Head; CRANE: Cableway Operator, 25 tons and over; HYDRAULIC CRANE: Hydraulic crane operator 90 tons through 199 tons (with luffing or tower attachment); TOWER/WHIRLEY OPERATOR: Tower Crane Operator; Whirley Operator, under 90 tons; LATTICE BOOM CRANE: 90 through 199 tons and/or 150 to 200 feet boom; CRUSHER: Crusher Plant Operator; FLOATING EQUIPMENT: Floating Clamshell, etc.operator, 3 cu. yds. and over; Floating Crane (derrick barge) Operator, 30 tons but less than 150 tons; LOADERS: Loader operator, 120,000 lbs. and above; REMOTE CONTROL: Remote controlled earth-moving equipment; RUBBER-TIRED SCRAPERS: Rubber-tired scraper operator, with tandem scrapers, multi-engine; SHOVEL, DRAGLINE, CLAMSHELL, SKOOPER OPERATOR: Shovel, Dragline, Clamshell, operator 5 cu. yds and over; TRENCHING MACHINE: Wheel Excavator, under 750 cu. yds. per hour (Grade Oiler required); Canal Trimmer (Grade Oiler required); Wheel Excavator, over 750 cu. yds. per hour; Band Wagon (in conjunction with wheel excavator); UNDERWATER EQUIPMENT: Underwater Equipment Operator, remote or otherwise; HYDRAULIC HOES-EXCAVATOR: Excavator over 130,000 lbs.

GROUP 3: BULLDOZERS: Bulldozer operator, over 70,000 lbs. up to and including 120,000 lbs.; HYDRAULIC CRANE: Hydraulic crane operator, 50 tons through 89 tons (with luffing or tower attachment); LATTICE BOOM CRANES: Lattice Boom Crane-50 through 89 tons (and less than 150 feet boom); FORKLIFT: Rock Hound Operator; HYDRAULIC HOES-EXCAVATOR: excavator over 80,000 lbs. through 130,000 lbs.; LOADERS: Loader operator 60,000 and less than 120,000; RUBBER-TIRED SCRAPERS: Scraper Operator, with tandem scrapers; Self-loading, paddle wheel, auger type, finish and/or 2 or more units; SHOVEL, DRAGLINE, CLAMSHELL,SKOOPER OPERATOR: Shovel, Dragline, Clamshell operators 3 cu. yds. but less than 5 cu yds.

GROUP 4: ASPHALT: Screed Operator; Asphalt Paver operator (screeman required); BLADE: Blade operator; Blade operator, finish; Blade operator, externally controlled by electronic, mechanical hydraulic means; Blade operator, multi-engine; BULLDOZERS: Bulldozer Operator over 20,000 lbs and more than 100 horse up to 70,000 lbs; Drill Cat

Operator; Side-boom Operator; Cable-Plow Operator (any type); CLEARING: Log Skidders; Chippers; Incinerator; Stump Splitter (loader mounted or similar type); Stump Grinder (loader mounted or similar type); Tub Grinder; Land Clearing Machine (Track mounted forestry mowing & grinding machine); Hydro Axe (loader mounted or similar type); COMPACTORS SELF-PROPELLED: Compactor Operator, with blade; Compactor Operator, multi-engine; Compactor Operator, robotic; CONCRETE: Mixer Mobile Operator; Screed Operator; Concrete Cooling Machine Operator; Concrete Paving Road Mixer; Concrete Breaker; Reinforced Tank Banding Machine (K-17 or similar types); Laser Screed; CRANE: Chicago boom and similar types; Lift Slab Machine Operator; Boom type lifting device, 5 ton capacity or less; Hoist Operator, two (2) drum; Hoist Operator, three (3) or more drums; Derrick Operator, under 100 ton; Hoist Operator, stiff leg, guy derrick or similar type, 50 ton and over; Cableway Operator up to twenty (25) ton; Bridge Crane Operator, Locomotive, Gantry, Overhead; Cherry Picker or similar type crane; Carry Deck Operator; Hydraulic Crane Operator, under 50 tons; LATTICE BOOM CRANE OPERATOR: Lattice Boom Crane Operator, under 50 tons; CRUSHER: Generator Operator; Diesel-Electric Engineer; Grizzley Operator; Drill Doctor; Boring Machine Operator; Driller-Percussion, Diamond, Core, Cable, Rotary and similar type; Cat Drill (John Henry); Directional Drill Operator over 20,000 lbs pullback; FLOATING EQUIPMENT: Diesel-electric Engineer; Jack Operator, elevating barges, Barge Operator, self-unloading; Piledriver Operator (not crane type) (Deckhand required); Floating Clamshell, etc. Operator, under 3 cu. yds. (Fireman or Diesel-Electric Engineer required); Floating Crane (derrick barge) Operator, less than 30 tons; GENERATORS: Generator Operator; Diesel-electric Engineer; GUARDRAIL EQUIPMENT: Guardrail Punch Operator (all types); Guardrail Auger Operator (all types); Combination Guardrail machines, i.e., punch auger, etc.; HEATING PLANT: Surface Heater and Planer Operator; HYDRAULIC HOES EXCAVATOR: Robotic Hydraulic backhoe operator, track and wheel type up to and including 20,000 lbs. with any or all attachments; Excavator Operator over 20,000 lbs through 80,000 lbs.; LOADERS: Belt Loaders, Kolman and Ko Cal types; Loaders Operator, front end and overhead, 25,000 lbs and less than 60,000 lbs; Elevating Grader Operator by Tractor operator, Sierra, Euclid or similar types; PILEDRIVERS: Hammer Operator; Piledriver Operator (not crane type); PIPELINE, SEWER WATER: Pipe Cleaning Machine Operator; Pipe Doping Machine Operator; Pipe Bending Machine Operator; Pipe Wrapping Machine Operator; Boring Machine Operator; Back Filling Machine Operator; REMOTE CONTROL: Concrete Cleaning Decontamination Machine Operator; Ultra High Pressure Water Jet Cutting Tool System Operator/Mechanic; Vacuum Blasting Machine Operator/mechanic; REPAIRMEN, HEAVY DUTY: Diesel Electric Engineer (Plant or Floating; Bolt Threading Machine operator; Drill Doctor (Bit Grinder); H.D. Mechanic; Machine Tool Operator; RUBBER-TIRED SCRAPERS: Rubber-tired Scraper Operator, single engine, single scraper; Self-loading, paddle wheel, auger type under 15

cu. yds.; Rubber-tired Scraper Operator, twin engine; Rubber-tired Scraper Operator, with push-ull attachments; Self Loading, paddle wheel, auger type 15 cu. yds. and over, single engine; Water pulls, water wagons; SHOVEL, DRAGLINE, CLAMSHELL, SKOOPER OPERATOR: Diesel Electric Engineer; Stationary Drag Scraper Operator; Shovel, Dragline, Clamshell, Operator under 3 cu yds.; Grade-all Operator; SURFACE (BASE) MATERIAL: Blade mounted spreaders, Ulrich and similar types; TRACTOR-RUBBERED TIRED: Tractor operator, rubber-tired, over 50 hp flywheel; Tractor operator, with boom attachment; Rubber-tired dozers and pushers (Michigan, Cat, Hough type); Skip Loader, Drag Box; TRENCHING MACHINE: Trenching Machine operator, digging capacity over 3 ft depth; Back filling machine operator; TUNNEL: Mucking machine operator

GROUP 5: ASPHALT: Extrusion Machine Operator; Roller Operator (any asphalt mix); Asphalt Burner and Reconditioner Operator (any type); Roto-Mill, pavement profiler, ground man; BULLDOZERS: Bulldozer operator, 20,000 lbs. or less or 100 horse or less; COMPRESSORS: Compressor Operator (any power), over 1,250 cu. ft. total capacity; COMPACTORS: Compactor Operator, including vibratory; Wagner Pactor Operator or similar type (without blade); CONCRETE: Combination mixer and Compressor Operator, gunite work; Concrete Batch Plant Quality Control Operator; Belcrete Operator; Pumpcrete Operator (any type); Pavement Grinder and/or Grooving Machine Operator (riding type); Cement Pump Operator, Fuller-Kenyon and similar; Concrete Pump Operator; Grouting Machine Operator; Concrete mixer operator, single drum, under (5) bag capacity; Cast in place pipe laying machine; maginnis Internal Full slab vibrator operator; Concrete finishing machine operator, Clary, Johnson, Bidwell, Burgess Bridge deck or similar type; Curb Machine Operator, mechanical Berm, Curb and/or Curb and Gutter; Concrete Joint Machine Operator; Concrete Planer Operator; Tower Mobile Operator; Power Jumbo Operator setting slip forms in tunnels; Slip Form Pumps, power driven hydraulic lifting device for concrete forms; Concrete Paving Machine Operator; Concrete Finishing Machine Operator; Concrete Spreader Operator; CRANE: Helicopter Hoist Operator; Hoist Operator, single drum; Elevator Operator; A-frame Truck Operator, Double drum; Boom Truck Operator; HYDRAULIC CRANE OPERATOR: Hydraulic Boom Truck, Pittman; DRILLING: Churn Drill and Earth Boring Machine Operator; Vacuum Truck; Directional Drill Operator over 20,000 lbs pullback; FLOATING EQUIPMENT: Fireman; FORKLIFT: Fork Lift, over 10 ton and/or robotic; HYDRAULIC HOES EXCAVATORS: Hydraulic Backhoe Operator, wheel type (Ford, John Deere, Case type); Hydraulic Backhoe Operator track type up to and including 20,000 lbs.; LOADERS: Loaders, rubber-tired type, less than 25,000 lbs; Elevating Grader Operator, Tractor Towed requiring Operator or Grader; Elevating loader operator, Athey and similar types; OILERS: Service oiler (Greaser); PIPELINE-SEWER WATER: Hydra hammer or simialr types; Pavement Breaker Operator; PUMPS: Pump Operator, more than

5 (any size); Pot Rammer Operator; RAILROAD EQUIPMENT: Locomotive Operator, under 40 tons; Ballast Regulator Operator; Ballast Tamper Multi-Purpose Operator; Track Liner Operator; Tie Spacer Operator; Shuttle Car Operator; Locomotive Operator, 40 tons and over; MATERIAL HAULERS: Cat wagon DJBs Volvo similar types; Conveyored material hauler; SURFACING (BASE) MATERIAL: Rock Spreaders, self-propelled; Pulva-mixer or similar types; Chiip Spreading machine operator; Lime spreading operator, construction job siter; SWEEPERS: Sweeper operator (Wayne type) self-propelled construction job site; TRACTOR-RUBBER TIRED: Tractor operator, rubber-tired, 50 hp flywheel and under; Trenching machine operator, maximum digging capacity 3 ft depth; TUNNEL: Dinkey

GROUP 6: ASPHALT: Plant Oiler; Plant Fireman; Pugmill Operator (any type); Truck mounted asphalt spreader, with screed; COMPRESSORS: Compressor Operator (any power), under 1,250 cu. ft. total capacity; CONCRETE: Plant Oiler, Assistant Conveyor Operator; Conveyor Operator; Mixer Box Operator (C.T.B., dry batch, etc.); Cement Hog Operator; Concrete Saw Operator; Concrete Curing Machine Operator (riding type); Wire Mat or Brooming Machine Operator; CRANE: Oiler; Fireman, all equipment; Truck Crane Oiler Driver; A-frame Truck Operator, single drum; Tugger or Coffin Type Hoist Operator; CRUSHER: Crusher Oiler; Crusher Feeder; CRUSHER: Crusher oiler; Crusher feeder; DRILLING: Drill Tender; Auger Oiler; FLOATING EQUIPMENT: Deckhand; Boatman; FORKLIFT: Self-propelled Scaffolding Operator, construction job site (exclduing working platform); Fork Lift or Lumber Stacker Operator, construction job site; Ross Carrier Operator, construction job site; Lull Hi-Lift Operator or Similar Type; GUARDRAIL EQUIPMENT: Oiler; Auger Oiler; Oiler, combination guardrail machines; Guardrail Punch Oiler; HEATING PLANT: Temporary Heating Plant Operator; LOADERS: Bobcat, skid steer (less than 1 cu yd.); Bucket Elevator Loader Operator, BarberGreene and similar types; OILERS: Oiler; Guardrail Punch Oiler; Truck Crane Oiler-Driver; Auger Oiler; Grade Oiler, required to check grade; Grade Checker; Rigger; PIPELINE-SEWER WATER: Tar Pot Fireman; Tar Pot Fireman (power agitated); PUMPS: Pump Operator (any power); Hydrostatic Pump Operator; RAILROAD EQUIPMENT: Brakeman; Oiler; Switchman; Motorman; Ballast Jack Tamper Operator; SHOVEL, DRAGLINE, CLAMSHELL, SKOOPER, ETC. OPERATOR: Oiler, Grade Oiler (required to check grade); Grade Checker; Fireman; SWEEPER: Broom operator, self propelled, construction job site; SURFACING (BASE) MATERIAL: Roller Operator, grading of base rock (not asphalt); Tamping Machine operartor, mechanical, self-propelled; Hydrographic Seeder Machine Operator; TRENCHING MACHINE: Oiler; Grade Oiler; TUNNEL: Conveyor operator; Air filtration equipment operator

ENGI0701-003 06/01/2004

CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH), SKAMANIA, AND

WAHAKIAKUM COUNTIES

DREDGING:

	Rates	Fringes
Dredging:		
ZONE A		
ASSISTANT ENGINEER.....	\$ 31.52	9.75
ASSISTANT MATE.....	\$ 27.62	9.75
LEVERMAN, DIPPER, FLOATING CLAMSHELL.....	\$ 33.84	9.75
LEVERMAN, HYDRAULIC.....	\$ 33.84	9.75
TENDERMAN.....	\$ 30.46	9.75
ZONE B		
ASSISTANT ENGINEER.....	\$ 33.52	9.75
ASSISTANT MATE.....	\$ 29.62	9.75
LEVERMAN, DIPPER, FLOATING CLAMSHELL.....	\$ 35.84	9.75
LEVERMAN, HYDRAULIC.....	\$ 35.84	9.75
TENDERMAN.....	\$ 32.46	9.75
ZONE C		
ASSISTANT ENGINEER.....	\$ 34.52	9.75
ASSISTANT MATE.....	\$ 30.62	9.75
LEVERMAN, DIPPER, FLOATING CLAMSHELL.....	\$ 36.84	9.75
LEVERMAN, HYDRAULIC.....	\$ 36.84	9.75
TENDERMAN.....	\$ 33.46	9.75

ZONE DESCRIPTION FOR DREDGING:

ZONE A - All jobs or projects located within 30 road miles of Portland City Hall.

ZONE B - Over 30-50 road miles from Portland City Hall.

ZONE C - Over 50 road miles from Portland City Hall.

*All jobs or projects shall be computed from the city hall by the shortest route to the geographical center of the project.

IRON0014-005 07/01/2004

ADAMS, ASOTIN, BENTON, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND ORIELLE, SPOKANE, STEVENS, WALLA WALLA AND WHITMAN COUNTIES

	Rates	Fringes
Ironworker.....	\$ 26.87	13.30

IRON0029-002 07/01/2004

CLARK, COWLITZ, KLICKITAT, PACIFIC, SKAMANIA, AND WAHKAIAKUM COUNTIES

	Rates	Fringes
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Ironworker.....\$ 28.47 13.30

IRON0086-002 07/01/2004

YAKIMA, KITTITAS AND CHELAN COUNTIES

Rates Fringes
Ironworker.....\$ 28.02 13.30

IRON0086-004 07/01/2004

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PIERCE, SKAGIT, SNOHOMISH, THURSTON, AND WHATCOM COUNTIES

Rates Fringes
Ironworker.....\$ 29.82 13.30

LAB00001-002 06/01/2004

ZONE 1:

Rates Fringes

Laborers:

CALLAM, GRAYS HARBOR,
ISLAND, JEFFERSON, KING,
KITSAP, LEWIS, MASON,
PACIFIC (NORTH OF STRAIGHT
LINE MADE BY EXTENDING THE
NORTH BOUNDARY WAHAKIUM
COUNTY WEST TO THE PACIFIC
OCEAN), PIERCE, SAN JUAN,
SKAGIT, SNOHOMISH,
THURSTON AND WHATCOM COUNTIES

GROUP 1.....\$ 19.96 7.70
GROUP 2.....\$ 20.28 7.70
GROUP 3.....\$ 24.96 7.70
GROUP 4.....\$ 25.44 7.70
GROUP 5.....\$ 25.80 7.70

CHELAN, DOUGLAS (WEST OF
THE 120TH MERIDIAN),
KITTITAS AND YAKIMA COUNTIES

GROUP 1.....\$ 14.70 7.70
GROUP 2.....\$ 17.02 7.70
GROUP 3.....\$ 18.74 7.70
GROUP 4.....\$ 19.22 7.70
GROUP 5.....\$ 19.58 7.70

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$.70
ZONE 3 - \$1.00

BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE, AND YAKIMA

ZONE 1 - Projects within 25 radius miles of the respective

city hall

ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall

ZONE 3 - More than 45 radius miles from the respective city hall

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective city hall

ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall

ZONE 3 - More than 45 radius miles from the respective city hall

LABORERS CLASSIFICATIONS

GROUP 1: Landscaping and Planting; Watchman; Window Washer/Cleaner (detail clean-up, such as but not limited to cleaning floors, ceilings, walls, windows, etc., prior to final acceptance by the owner)

GROUP 2: Batch Weighman; Crusher Feeder; Fence Laborer; Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Mortarman and Hodcarrier; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer

(lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Miner; Powderman; Re-Timberman; Hazardous Waste Worker (Level A).

LAB00238-004 06/01/2004

ADAMS, ASOTIN, BENTON, COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND OREILLE, STEVENS, SPOKANE, WALLA WALLA AND WHITMAN COUNTIES

	Rates	Fringes
Laborers:		
ZONE 1:		
GROUP 1.....	\$ 17.46	6.80
GROUP 2.....	\$ 19.56	6.80
GROUP 3.....	\$ 19.83	6.80
GROUP 4.....	\$ 20.10	6.80
GROUP 5.....	\$ 20.38	6.80
GROUP 6.....	\$ 21.75	6.80

Zone Differential (Add to Zone 1 rate): \$2.00

BASE POINTS: Spokane, Moses Lake, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office.

Zone 2: 45 radius miles and over from the main post office.

LABORERS CLASSIFICATIONS

GROUP 1: Flagman; Landscape Laborer; Scaleman; Traffic Control Maintenance Laborer (to include erection and maintenance of barricades, signs and relief of flagperson); Window Washer/Cleaner (detail cleanup, such as, but not limited to cleaning floors, ceilings, walls, windows, etc. prior to final acceptance by the owner)

GROUP 2: Asbestos Abatement Worker; Brush Hog Feeder; Carpenter Tender; Cement Handler; Clean-up Laborer; Concrete Crewman (to include stripping of forms, hand operating jacks on slip form construction, application of concrete curing compounds, pumpcrete machine, signaling, handling the nozzle of squeezecrete or similar machine, 6 inches and smaller); Confined Space Attendant; Concrete Signalman; Crusher Feeder; Demolition (to include clean-up, burning, loading, wrecking and salvage of all material); Dumpman; Fence Erector; Firewatch; Form Cleaning Machine Feeder, Stacker; General Laborer; Grout Machine Header Tender; Guard Rail (to include guard rails, guide and reference posts, sign posts, and right-of-way markers); Hazardous Waste Worker, Level D (no respirator is used and skin protection is minimal); Miner, Class "A" (to include all bull gang, concrete crewman, dumpman and pumpcrete crewman, including distributing pipe, assembly & dismantle, and nipper); Nipper; Riprap Man; Sandblast Tailhoseman;

Scaffold Erector (wood or steel); Stake Jumper; Structural Mover (to include separating foundation, preparation, cribbing, shoring, jacking and unloading of structures); Tailhoseman (water nozzle); Timber Bucker and Faller (by hand); Track Laborer (RR); Truck Loader; Well-Point Man; All Other Work Classifications Not Specially Listed Shall Be Classified As General Laborer

GROUP 3: Asphalt Raker; Asphalt Roller, walking; Cement Finisher Tender; Concrete Saw, walking; Demolition Torch; Dope Pot Firemen, non-mechanical; Driller Tender (when required to move and position machine); Form Setter, Paving; Grade Checker using level; Hazardous Waste Worker, Level C (uses a chemical "splash suit" and air purifying respirator); Jackhammer Operator; Miner, Class "B" (to include brakeman, finisher, vibrator, form setter); Nozzlemans (to include squeeze and flo-crete nozzle); Nozzlemans, water, air or steam; Pavement Breaker (under 90 lbs.); Pipelayer, corrugated metal culvert; Pipelayer, multi-plate; Pot Tender; Power Buggy Operator; Power Tool Operator, gas, electric, pneumatic; Railroad Equipment, power driven, except dual mobile power spiker or puller; Railroad Power Spiker or Puller, dual mobile; Rodder and Spreader; Tamper (to include operation of Barco, Essex and similar tampers); Trencher, Shawnee; Tugger Operator; Wagon Drills; Water Pipe Liner; Wheelbarrow (power driven)

GROUP 4: Air and Hydraulic Track Drill; Brush Machine (to include horizontal construction joint cleanup brush machine, power propelled); Caisson Worker, free air; Chain Saw Operator and Faller; Concrete Stack (to include laborers when laborers working on free standing concrete stacks for smoke or fume control above 40 feet high); Gunite (to include operation of machine and nozzle); Hazardous Waste Worker, Level B (uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical "splash suit"); High Scaler; Laser Beam Operator (to include grade checker and elevation control); Miner, Class C (to include miner, nozzleman for concrete, laser beam operator and rigger on tunnels); Monitor Operator (air track or similar mounting); Mortar Mixer; Nozzlemans (to include jet blasting nozzleman, over 1,200 lbs., jet blast machine power propelled, sandblast nozzle); Pavement Breaker (90 lbs. and over); Pipelayer (to include working topman, caulker, collarman, jointer, mortarman, rigger, jacker, shorer, valve or meter installer); Pipewrapper; Plasterer Tender; Vibrators (all)

GROUP 5 - Drills with Dual Masts; Hazardous Waste Worker, Level A (utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line); Miner Class "D", (to include raise and shaft miner, laser beam operator on riases and shafts)

GROUP 6 - Powderman

LAB00238-006 06/01/2004

COUNTIES EAST OF THE 120TH MERIDIAN: ADAMS, ASOTIN, BENTON, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND OREILLE, STEVENS, SPOKANE, WALLA WALLA, WHITMAN

	Rates	Fringes
Hod Carrier.....	\$ 21.05	6.80

LAB00335-001 06/01/2004		

CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH OF A STRAIGHT LINE MADE BY EXTENDING THE NORTH BOUNDARY LINE OF WAHAKIYAKUM COUNTY WEST TO THE PACIFIC OCEAN), SKAMANIA AND WAHAKIYAKUM COUNTIES

	Rates	Fringes
Laborers:		
ZONE 1:		
GROUP 1.....	\$ 23.73	7.50
GROUP 2.....	\$ 24.27	7.50
GROUP 3.....	\$ 24.68	7.50
GROUP 4.....	\$ 25.03	7.50
GROUP 5.....	\$ 21.44	7.50
GROUP 6.....	\$ 19.22	7.50
GROUP 7.....	\$ 16.30	7.50

Zone Differential (Add to Zone 1 rates):
 Zone 2 \$ 0.65
 Zone 3 - 1.15
 Zone 4 - 1.70
 Zone 5 - 2.75

BASE POINTS: GOLDENDALE, LONGVIEW, AND VANCOUVER

ZONE 1: Projects within 30 miles of the respective city all.
 ZONE 2: More than 30 miles but less than 40 miles from the respective city hall.
 ZONE 3: More than 40 miles but less than 50 miles from the respective city hall.
 ZONE 4: More than 50 miles but less than 80 miles from the respective city hall.
 ZONE 5: More than 80 miles from the respective city hall.

LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Plant Laborers; Asphalt Spreaders; Batch Weighman; Broomers; Brush Burners and Cutters; Car and Truck Loaders; Carpenter Tender; Change-House Man or Dry Shack Man; Choker Setter; Clean-up Laborers; Curing, Concrete; Demolition, Wrecking and Moving Laborers; Dumpers, road oiling crew; Dumpmen (for grading crew); Elevator Feeders; Guard Rail, Median Rail Reference Post, Guide Post, Right of Way Marker; Fine Graders; Fire Watch; Form Strippers (not swinging stages); General Laborers; Hazardous Waste Worker; Leverman or Aggregate Spreader (Flaherty and similar types); Loading Spotters; Material

Yard Man (including electrical); Pittsburgh Chipper Operator or Similar Types; Railroad Track Laborers; Ribbon Setters (including steel forms); Rip Rap Man (hand placed); Road Pump Tender; Sewer Labor; Signalman; Skipman; Slopers; Spraymen; Stake Chaser; Stockpiler; Tie Back Shoring; Timber Faller and Bucker (hand labor); Toolroom Man (at job site); Tunnel Bullgang (above ground); Weight-Man- Crusher (aggregate when used)

GROUP 2: Applicator (including pot power tender for same), applying protective material by hand or nozzle on utility lines or storage tanks on project; Brush Cutters (power saw); Burners; Choker Splicer; Clary Power Spreader and similar types; Clean- up Nozzleman-Green Cutter (concrete, rock, etc.); Concrete Power Buggyman; Concrete Laborer; Crusher Feeder; Demolition and Wrecking Charred Materials; Gunite Nozzleman Tender; Gunite or Sand Blasting Pot Tender; Handlers or Mixers of all Materials of an irritating nature (including cement and lime); Tool Operators (includes but not limited to: Dry Pack Machine; Jackhammer; Chipping Guns; Paving Breakers); Pipe Doping and Wrapping; Post Hole Digger, air, gas or electric; Vibrating Screed; Tampers; Sand Blasting (Wet); Stake-Setter; Tunnel-Muckers, Brakemen, Concrete Crew, Bullgang (underground)

GROUP 3: Asbestos Removal; Bit Grinder; Drill Doctor; Drill Operators, air tracks, cat drills, wagon drills, rubber-mounted drills, and other similar types including at crusher plants; Gunite Nozzleman; High Scalars, Strippers and Drillers (covers work in swinging stages, chairs or belts, under extreme conditions unusual to normal drilling, blasting, barring-down, or sloping and stripping); Manhole Builder; Powdermen; Concrete Saw Operator; Pwdermen; Power Saw Operators (Bucking and Falling); Pumpcrete Nozzlemen; Sand Blasting (Dry); Sewer Timberman; Track Liners, Anchor Machines, Ballast Regulators, Multiple Tampers, Power Jacks, Tugger Operator; Tunnel-Chuck Tenders, Nippers and Timbermen; Vibrator; Water Blaster

GROUP 4: Asphalt Raker; Concrete Saw Operator (walls); Concrete Nozzelman; Grade Checker; Pipelayer; Laser Beam (pipelaying)-applicable when employee assigned to move, set up, align; Laser Beam; Tunnel Miners; Motorman-Dinky Locomotive-Tunnel; Powderman-Tunnel; Shield Operator-Tunnel

GROUP 5: Traffic Flaggers

GROUP 6: Fence Builders

GROUP 7: Landscaping or Planting Laborers

LAB00335-010 06/01/2004

CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH OF A STRAIGHT LINE MADE BY EXTENDING THE NORTH BOUNDARY LINE OF WAHAKIUM COUNTY WEST TO THE PACIFIC OCEAN), SKAMANIA AND WAHAKIUM COUNTIES

	Rates	Fringes
Hod Carrier.....	\$ 25.49	7.50

PAIN0005-002 06/01/2003

STATEWIDE EXCEPT CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH),
SKAMANIA, AND WAHKIAKUM COUNTIES

	Rates	Fringes
Painters: STRIPERS.....	\$ 21.25	6.42

PAIN0005-004 03/01/2004

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,
MASON, PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND
WHATCOM COUNTIES

	Rates	Fringes
Painter.....	\$ 24.36	6.41

PAIN0005-006 07/01/2004

ADAMS, ASOTIN; BENTON AND FRANKLIN (EXCEPT HANFORD SITE);
CHELAN, COLUMBIA, DOUGLAS, FERRY, GARFIELD, GRANT, KITTITAS,
LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA,
WHITMAN AND YAKIMA COUNTIES

	Rates	Fringes
Painters: Application of Cold Tar Products, Epoxies, Polyure thanes, Acids, Radiation Resistant Material, Water and Sandblasting, Bridges, Towers, Tanks, Stacks, Steeple.....	\$ 19.89	6.43
Brush, Roller, Striping, Steam-cleaning and Spray....	\$ 18.89	6.43
Lead Abatement, Asbestos Abatement.....	\$ 19.89	6.43
TV Radio, Electrical Transmission Towers.....	\$ 20.64	6.43

*\$.70 shall be paid over and above the basic wage rates
listed for work on swing stages and high work of over 30 feet.

PAIN0055-002 07/01/2003

CLARK, COWLITZ, KLICKITAT, PACIFIC, SKAMANIA, AND WAHKIAKUM
COUNTIES

	Rates	Fringes
Painters:		
Brush & Roller.....	\$ 17.61	6.12
High work - All work 60 ft. or higher.....	\$ 18.36	6.12
Spray and Sandblasting.....	\$ 18.21	6.12

PAIN0055-007 06/01/2004

CLARK, COWLITZ, KLICKITAT, SKAMANIA and WAHKIAKUM COUNTIES

	Rates	Fringes
Painters:		
HIGHWAY AND PARKING LOT STRIPER.....	\$ 23.99	8.05

PLAS0072-004 06/01/2004

ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY,
FRANKLIN, GARFIELD, GRANT, KITTITAS, LINCOLN, OKANOGAN, PEND
OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN, AND YAKIMA
COUNTIES

	Rates	Fringes
Cement Mason ZONE 1:.....	\$ 22.48	7.28

Zone Differential (Add to Zone 1 rate): Zone 2 - \$2.00

BASE POINTS: Spokane, Pasco, Moses Lake, Lewiston
Zone 1: 0 - 45 radius miles from the main post office
Zone 2: Over 45 radius miles from the main post office

PLAS0528-001 06/01/2004

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,
MASON, PACIFIC (NORTH), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH,
THURSTON, AND WHATCOM COUNTIES

	Rates	Fringes
Cement Masons:		
CEMENT MASON.....	\$ 29.14	10.87
COMPOSITION, COLOR MASTIC, TROWEL MACHINE, GRINDER, POWER TOOLS, GUNNITE NOZZLE.	\$ 29.39	10.87

PLAS0555-002 06/01/2004

CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH), SKAMANIA, AND
WAHKIAKUM COUNTIES

ZONE 1:

	Rates	Fringes
Cement Masons:		
CEMENT MASONS DOING BOTH COMPOSITION/POWER MACHINERY AND SUSPENDED/HANGING SCAFFOLD..	\$ 26.95	10.80
CEMENT MASONS ON SUSPENDED, SWINGING AND/OR HANGING SCAFFOLD.....	\$ 26.47	10.80
CEMENT MASONS.....	\$ 25.99	10.80
COMPOSITION WORKERS AND POWER MACHINERY OPERATORS...	\$ 26.47	10.80

Zone Differential (Add To Zone 1 Rates):

Zone 2 -	\$0.65
Zone 3 -	1.15
Zone 4 -	1.70
Zone 5 -	2.75

BASE POINTS: BEND, CORVALLIS, EUGENE, LONGVIEW, MEDFORD,
PORTLAND, SALEM, THE DALLES, VANCOUVER

- ZONE 1: Projects within 30 miles of the respective city hall
- ZONE 2: More than 30 miles but less than 40 miles from the
respective city hall.
- ZONE 3: More than 40 miles but less than 50 miles from the
respective city hall.
- ZONE 4: More than 50 miles but less than 80 miles from the
respective city hall.
- ZONE 5: More than 80 miles from the respective city hall

PLUM0032-002 06/01/2004

CLALLAM, KING AND JEFFERSON COUNTIES

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 34.63	15.28

PLUM0032-003 06/01/2004

CHELAN, KITTITAS (NORTHERN TIP), DOUGLAS (NORTH), AND OKANOGAN
(NORTH) COUNTIES

	Rates	Fringes
Plumbers and Pipefitters.....	\$ 25.43	12.63

PLUM0044-003 06/01/2003

ADAMS (NORTHERN PART), ASOTIN (CLARKSTON ONLY), FERRY (EASTERN
PART), LINCOLN (EASTERN PART), PEND ORIELLE, STEVENS, SPOKANE,
AND WHITMAN COUNTIES

	Rates	Fringes
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Plumbers and Pipefitters.....\$ 26.01 10.74

PLUM0082-001 01/01/2004

CLARK (NORTHERN TIP INCLUDING WOODLAND), COWLITZ, GRAYS HARBOR,
LEWIS, MASON (EXCLUDING NE SECTION), PACIFIC, PIERCE SKAMANIA,
THURSTON AND WAHKIAKUM COUNTIES

Rates Fringes

Plumbers and Pipefitters.....\$ 30.40 13.17

PLUM0265-003 01/01/2004

ISLAND, SKAGIT, SNOHOMISH, SAN JUAN AND WHATCOM COUNTIES

Rates Fringes

Plumbers and Pipefitters.....\$ 30.20 13.17

PLUM0290-003 04/01/2004

CLARK (ALL EXCLUDING NORTHERN TIP INCLUDING CITY OF WOODLAND)

Rates Fringes

Plumbers and Pipefitters.....\$ 32.58 14.07

PLUM0598-005 06/01/2004

ADAMS (SOUTHERN PART), ASOTIN (EXCLUDING THE CITY OF
CLARKSTON), BENTON, COLUMBIA, DOUGLAS (EASTERN HALF), FERRY
(WESTERN PART), FRANKLIN, GARFIELD, GRANT, KITTITAS (ALL BUT
NORTHERN TIP), KLICKITAT, LINCOLN (WESTERN PART), OKANOGAN
(EASTERN), WALLA WALLA AND YAKIMA COUNTIES

Rates Fringes

Plumber.....\$ 31.57 15.25

PLUM0631-001 01/01/2004

MASON (NE SECTION), AND KITSAP COUNTIES

Rates Fringes

Plumbers and Pipefitters
All new construction,
additions, and remodeling
of commercial building
projects such as: cocktail
lounges and taverns,
professional buildings,
medical clinics, retail
stores, hotels and motels,
restaurants and fast food
types, gasoline service

stations, and car washes
 where the plumbing and
 mechanical cost of the
 project is less than
 \$100,000.....\$ 20.85 4.58
 All other work where the
 plumbing and mechanical
 cost of the project is
 \$100,000 and over.....\$ 29.29 13.17

 TEAM0037-002 06/01/2004

CLARK, COWLITZ, KLICKITAT, PACIFIC (South of a straight line
 made by extending the north boundary line of Wahkiakum County
 west to the Pacific Ocean), SKAMANIA, AND WAHKIAKUM COUNTIES

	Rates	Fringes
Truck drivers:		
ZONE 1		
GROUP 1.....	\$ 24.15	9.50
GROUP 2.....	\$ 24.27	9.50
GROUP 3.....	\$ 24.40	9.50
GROUP 4.....	\$ 24.66	9.50
GROUP 5.....	\$ 24.88	9.50
GROUP 6.....	\$ 25.04	9.50
GROUP 7.....	\$ 25.24	9.50

Zone Differential (Add to Zone 1 Rates):

Zone 2 - \$0.65
 Zone 3 - 1.15
 Zone 4 - 1.70
 Zone 5 - 2.75

BASE POINTS: ASTORIA, THE DALLES, LONGVIEW AND VANCOUVER

ZONE 1: Projects within 30 miles of the respective city hall.

ZONE 2: More than 30 miles but less than 40 miles from the
 respective city hall.

ZONE 3: More than 40 miles but less than 50 miles from the
 respective city hall.

ZONE 4: More than 50 miles but less than 80 miles from the
 respective city hall.

ZONE 5: More than 80 miles from the respective city hall.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: A Frame or Hydra lift truck w/load bearing
 surface; Articulated dump truck; Battery Rebuilders; Bus or
 Manhaul Driver; Concrete Buggies (power operated); Concrete
 pump truck; Dump Trucks, side, end and bottom dumps,
 including Semi Trucks and Trains or combinations there of:
 up to and including 10 cu. yds.; Lift Jitneys, Fork Lifts

(all sizes in loading, unloading and transporting material on job site); Loader and/or Leverman on Concrete Dry Batch Plant (manually operated); Pilot Car; Pickup truck; Solo Flat Bed and misc. Body Trucks, 0-10 tons; Truck Tender; Truck Mechanic Tender; Water Wagons (rated capacity) up to 3,000 gallons; Transit Mix and Wet or Dry Mix - 5 cu. yds. and under; Lubrication Man, Fuel Truck Driver, Tireman, Wash Rack, Steam Cleaner or combinations; Team Driver; Slurry Truck Driver or Leverman; Tireman

GROUP 2: Boom truck/hydra lift or retracting crane; Challenger; Dumpsters or similar equipment all sizes; Dump Trucks/articulated dumps 6 cu to 10 cu.; Flaherty Spreader Driver or Leverman; Lowbed Equipment, Flat Bed Semi-trailer or doubles transporting equipment or wet or dry materials; Lumber Carrier, Driver-Straddle Carrier (used in loading, unloading and transporting of materials on job site); Oil Distributor Driver or Leverman; Transit mix and wet or dry mix trucks: over 5 cu. yds. and including 7 cu. yds.; Vacuum trucks; Water truck/Wagons (rated capacity) over 3,000 to 5,000 gallons

GROUP 3: Ammonia nitrate distributor driver; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 10 cu. yds. and including 30 cu. yds. includes Articulated dump trucks; Selfpropelled street sweeper; Transit mix and wet or dry mix truck: over 7 cu yds. and including 11 cu yds.; Truck Mechanic-Welder-Body Repairman; Utility and cleanup truck; Water Wagons (rated capacity) over 5,000 to 10,000 gallons

GROUP 4: Asphalt burner; Dump Trucks, side, end and bottom dumps, including Semi-Trucks and Trains or combinations thereof: over 30 cu. yds. and including 50 cu. yds. includes articulated dump trucks; Fire guard; Transit Mix and Wet or Dry Mix Trucks, over 11 cu. yds. and including 15 cu. yds.; Water Wagon (rated capacity) over 10,000 gallons to 15,000 gallons

GROUP 5: Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 50 cu. yds. and including 60 cu. yds. includes articulated dump trucks

GROUP 6: Bulk cement spreader w/o auger; Dry prebatch concrete mix trucks; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains of combinations thereof: over 60 cu. yds. and including 80 cu. yds., and includes articulated dump trucks; Skid truck

GROUP 7: Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 80 cu. yds. and including 100 cu. yds., includes articulated dump trucks; Industrial lift truck (mechanical tailgate)

TEAM0174-001 06/01/2004

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PACIFIC (North of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES

	Rates	Fringes
Truck drivers:		
ZONE A:		
GROUP 1:.....	\$ 26.39	11.08
GROUP 2:.....	\$ 25.81	11.08
GROUP 3:.....	\$ 23.41	11.08
GROUP 4:.....	\$ 19.16	11.08
GROUP 5:.....	\$ 26.15	11.08

ZONE B (25-45 miles from center of listed cities*): Add \$.70 per hour to Zone A rates.

ZONE C (over 45 miles from centr of listed cities*): Add \$1.00 per hour to Zone A rates.

*Zone pay will be calculated from the city center of the following listed cities:

BELLINGHAM	CENTRALIA	RAYMOND	OLYMPIA
EVERETT	SHELTON	ANACORTES	BELLEVUE
SEATTLE	PORT ANGELES	MT. VERNON	KENT
TACOMA	PORT TOWNSEND	ABERDEEN	BREMERTON

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 - "A-frame or Hydralift" trucks and Boom trucks or similar equipment when "A" frame or "Hydralift" and Boom truck or similar equipment is used; Buggymobile; Bulk Cement Tanker; Dumpsters and similar equipment, Tournorockers, Tournowagon, Tournotrailer, Cat DW series, Terra Cobra, Le Tourneau, Westinghouse, Athye Wagon, Euclid Two and Four-Wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump Trucks, side, end and bottom dump, including semi-trucks and trains or combinations thereof with 16 yards to 30 yards capacity: Over 30 yards \$.15 per hour additional for each 10 yard increment; Explosive Truck (field mix) and similar equipment; Hyster Operators (handling bulk loose aggregates); Lowbed and Heavy Duty Trailer; Road Oil Distributor Driver; Spreader, Flaherty Transit mix used exclusively in heavy construction; Water Wagon and Tank Truck-3,000 gallons and over capacity

GROUP 2 - Bulllifts, or similar equipment used in loading or unloading trucks, transporting materials on job site; Dumpsters, and similar equipment, Tournorockers, Tournowagon, Turnotrailer, Cat. D.W. Series, Terra Cobra, Le Tourneau, Westinghouse, Athye wagon, Euclid two and four-wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump trucks, side, end and bottom dump, including semi-trucks and trains

or combinations thereof with less than 16 yards capacity; Flatbed (Dual Rear Axle); Grease Truck, Fuel Truck, Greaser, Battery Service Man and/or Tire Service Man; Leverman and loader at bunkers and batch plants; Oil tank transport; Scissor truck; Slurry Truck; Sno-Go and similar equipment; Swampers; Straddler Carrier (Ross, Hyster) and similar equipment; Team Driver; Tractor (small, rubber-tired)(when used within Teamster jurisdiction); Vacuum truck; Water Wagon and Tank trucks-less than 3,000 gallons capacity; Winch Truck; Wrecker, Tow truck and similar equipment

GROUP 3 - Flatbed (single rear axle); Pickup Sweeper; Pickup Truck. (Adjust Group 3 upward by \$2.00 per hour for onsite work only)

GROUP 4 - Escort or Pilot Car

GROUP 5 - Mechanic

HAZMAT PROJECTS

Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C: +\$.25 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B: +\$.50 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical "splash suit."

LEVEL A: +\$.75 per hour - This level utilizes a fully-encapsulated suit with a self-contained breathing apparatus or a supplied air line.

TEAM0760-002 06/01/2004

ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA COUNTIES

	Rates	Fringes
Truck drivers: (ANYONE WORKING ON HAZMAT JOBS SEE FOOTNOTE A BELOW)		
ZONE 1: (INCLUDES ALL OF YAKIMA COUNTY)		
GROUP 1.....	\$ 17.83	9.50
GROUP 2.....	\$ 20.10	9.50
GROUP 3.....	\$ 20.60	9.50
GROUP 4.....	\$ 20.93	9.50
GROUP 5.....	\$ 21.04	9.50
GROUP 6.....	\$ 21.21	9.50
GROUP 7.....	\$ 21.74	9.50
GROUP 8.....	\$ 22.07	9.50

Zone Differential (Add to Zone 1 rate: Zone 2 - \$2.00)

BASE POINTS: Spokane, Moses Lake, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office.

Zone 2: 45 radius miles and over from the main post office

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Escort Driver or Pilot Car; Employee Haul; Power Boat Hauling Employees or Material

GROUP 2: Fish Truck; Flat Bed Truck; Fork Lift (3000 lbs. and under); Leverperson (loading trucks at bunkers); Trailer Mounted Hydro Seeder and Mulcher; Seeder & Mulcher; Stationary Fuel Operator; Tractor (small, rubber-tired, pulling trailer or similar equipment)

GROUP 3: Auto Crane (2000 lbs. capacity); Buggy Mobile & Similar; Bulk Cement Tanks & Spreader; Dumptor (6 yds. & under); Flat Bed Truck with Hydraulic System; Fork Lift (3001-16,000 lbs.); Fuel Truck Driver, Steamcleaner & Washer; Power Operated Sweeper; Rubber-tired Tunnel Jumbo; Scissors Truck; Slurry Truck Driver; Straddle Carrier (Ross, Hyster, & similar); Tireperson; Transit Mixers & Truck Hauling Concrete (3 yd. to & including 6 yds.); Trucks, side, end, bottom & articulated end dump (3 yards to and including 6 yds.); Warehouseperson (to include shipping & receiving); Wrecker & Tow Truck

GROUP 4: A-Frame; Burner, Cutter, & Welder; Service Greaser; Trucks, side, end, bottom & articulated end dump (over 6 yards to and including 12 yds.); Truck Mounted Hydro Seeder; Warehouseperson; Water Tank truck (0-8,000 gallons)

GROUP 5: Dumptor (over 6 yds.); Lowboy (50 tons & under); Self-loading Roll Off; Semi-Truck & Trailer; Tractor with Steer Trailer; Transit Mixers and Trucks Hauling Concrete (over 6 yds. to and including 10 yds.); Trucks, side, end, bottom and end dump (over 12 yds. to & including 20 yds.); Truck-Mounted Crane (with load bearing surface either mounted or pulled, up to 14 ton); Vacuum Truck (super sucker, guzzler, etc.)

GROUP 6: Flaherty Spreader Box Driver; Flowboys; Fork Lift (over 16,000 lbs.); Dumps (Semi-end); Mechanic (Field); Semi-end Dumps; Transfer Truck & Trailer; Transit Mixers & Trucks Hauling Concrete (over 10 yds. to & including 20 yds.); Trucks, side, end, bottom and articulated end dump (over 20 yds. to & including 40 yds.); Truck and Pup; Tournarocker, DWs & similar with 2 or more 4 wheel-power tractor with trailer, gallonage or yardage scale, whichever is greater Water Tank Truck (8,001- 14,000 gallons)

GROUP 7: Oil Distributor Driver; Stringer Truck (cable operated trailer); Transit Mixers & Trucks Hauling Concrete (over 20 yds.); Truck, side, end, bottom end dump (over 40 yds. to & including 100 yds.); Truck Mounted Crane (with

load bearing surface either mounted or pulled (16 through 25 tons);

GROUP 8: Prime Movers and Stinger Truck; Trucks, side, end, bottom and articulated end dump (over 100 yds.); Helicopter Pilot Hauling Employees or Materials

Footnote A - Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C-D: - \$.50 PER HOUR (This is the lowest level of protection. This level may use an air purifying respirator or additional protective clothing.

LEVEL A-B: - \$1.00 PER HOUR (Uses supplied air in conjunction with a chemical splash suit or fully encapsulated suit with a self-contained breathing apparatus.

NOTE:

Trucks Pulling Equipment Trailers: shall receive \$.15/hour over applicable truck rate

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the

Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

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SECTION 01001

SUPPLEMENTARY REQUIREMENTS

PART 1 GENERAL

1.1 DEFINITIONS

The references listed below are to be defined as indicated wherever they may be used in the TECHNICAL SPECIFICATIONS.

"SUPPLEMENTARY REQUIREMENTS " shall be read to pertain to any of the sections of the DIVISION 1 as required by the content of the section or paragraph containing the reference.

Specification "SECTION 01300 – SUBMITTALS" shall be read as a specification "SECTION 01330 – SUBMITTAL PROCEDURES".

Specification "SECTION 01400 – CONTRACTOR QUALITY CONTROL" shall be read as specification "SECTION 01451- CONTRACTOR QUALITY CONTROL".

1.2 CONSTRUCTION SCHEDULING

1.2.1 CONSTRUCTION PROGRESS CHARTS AND STATUS REPORTS: The instructions and information herein supplement the requirements of Paragraph SCHEDULE FOR CONSTRUCTION CONTRACTS IN THE CONTRACT CLAUSES. The proposed Construction Progress Chart shall be prepared on ENG Form 2454. Additional instructions are obtained in INSTRUCTIONS AND INFORMATION FOR CONTRACTORS, a manual furnished to the Contractor by the Contracting Officer. This manual is available for inspection in the Office of the Seattle District, Corps of Engineers, 4735 East Marginal Way South, Seattle, Washington.

NOTE: Contract Progress Schedules and Reports shall be required and submitted only when work ordered on an individual delivery/task order is in an amount which allows work to be performed for 60 days or more to complete.

1.2.2 The Minimum principal contract features (activities) to be included on ENG Form 2454 shall represent the work in each of the following divisions:

- (a) Site Work
 - (1) Clearing and Grubbing
 - (2) Drainage
 - (3) Earthwork
 - (4) Base and Paving
 - (5) Pavement Markings and Delineators

1.2.3 The Construction Progress chart shall show the total price amount distributed among the features shown on the chart. The schedule shall show the percentage of completion at the close of each weekly period. This percentage shall be based on percentage of physical completion of the work. (NOTE: Mobilization and demobilization shall not be listed as a separate payment item unless so noted in the schedule.)

1.2.4 The Construction Progress chart shall be submitted within 10 calendar days after the date of receipt of notice to proceed.

1.2.5 The Contractor shall prepare and submit a monthly project status report. The report shall tell whether the project as a whole is on, ahead of, or behind schedule. If the project is behind schedule, the Contractor shall explain what actions he will ~~take~~ take to regain his schedule. The report shall include a description of problem areas, delaying factors and their impact, and an explanation of corrective actions taken or proposed. Any delays caused by the Government shall be identified. Any significant items or events that occurred during the report month shall also be detailed.

1.3 CORRESPONDENCE

1.3.1 All correspondence shall be addressed to the Contracting Officer, shall be serially numbered commencing with Number 1, with no numbers missing or duplicated and shall be forwarded in quintuplicate, as directed by the authorized representative of the Contracting Officer, and shall include an additional copy forwarded to a separate designated location. All copies provided shall be legible. Enclosures attached or transmitted with the correspondence shall also be furnished with the original and each copy. Each serial letter shall make reference to the contract name, contract number and shall have only one subject.

1.3.2 All correspondence from the Contracting Officer will be also serially numbered with no numbers missing or duplicated. Letters to the Contractor will be forwarded in duplicate.

1.3.3 In the event there is more than one project within a contract, correspondence shall contain separate and distinct submittals to identify each project by name.

1.3.4 For submission of Contractor payment requests, See Section 01025, MEASUREMENT AND PAYMENT.

1.4 ADVANCED NOTICE OF CONTRACTOR PERFORMED ACCEPTANCE TESTING

Not Used

1.5 CONTRACTOR'S FILES

Contractor shall maintain "Approved (Action Code "A") and "Approved Except as Noted (Action Code "B") shop drawing files in fabrication shops and at project sites for government use.

1.6 AUDIO-VIDEO RECORDINGS

Not used.

1.7 MECHANICAL AND ELECTRICAL LAYOUT DRAWINGS

Not used.

1.8 PROJECT PHOTOGRAPHS

Not used.

1.9 COLOR BOARDS

Not used.

1.10 SAMPLE ROOM

Not used.

1.11 Registered And Previously ID'd (RAPID) Gate Program

1.11.1 Commercial Vehicle Access To Fort Lewis – Registered And Previously ID'd (RAPID) Gate Program

Procedures for commercial vehicle access to Fort Lewis are subject to change without prior notice. Current access information may be obtained by calling (253) 967-1733. As of 1 May 2004, the following requirements apply:

(a) Unless the contractor voluntarily participates in the RAPID Gate Program, commercial vehicle access to Fort Lewis will be allowed only at the Logistics Center Gate (Exit 123 from I-5) and through the D Street Commercial Vehicle Inspection Point on North Fort. Both gates are open Monday through Friday, excluding federal holidays. These gates will be open for inbound commercial vehicle access and inspection between 0530 hours and 2100 hours. These gates are closed on weekends (Saturdays and Sundays) and federal holidays. On Saturdays, Sundays and federal holidays, commercial vehicles must use the Main Gate (Exit 120 from I-5). Main Gate is open 24 hours per day everyday. A visitor pass must be obtained. All commercial vehicles will be searched. The Contractor should anticipate delays in getting commercial vehicles on post. The Contractor must also allow additional time for commercial vehicles to reach their destination by driving through Fort Lewis.

If the commercial vehicle is carrying a load of cement concrete or hot asphalt concrete for delivery, the driver shall notify the gate guard as soon as possible and request that the vehicle be given priority for being searched; however, the Government does not guarantee that the vehicle will be given priority.

On weekends large vehicles (needing greater than 12'-5" clearance) will require a time stamped "searched" label to gain access to North Fort Lewis. "Searched" labels will be issued at the Main Gate, as appropriate. Drivers needing access to North Fort Lewis must inform the gate guard that their vehicle is over 12'-5" in height and that they will require access to North Fort Lewis. The driver will receive a briefing on proper procedures and a "searched" label. The Contractor shall ensure that its drivers, including drivers of subcontractors at any tier, comply with the procedures as explained to them for access to North Fort Lewis.

(b) If the contractor participates in the RAPID Gate Program, contractor vehicles may enter the installation through any RAPID gate lane except at Force Protection Level Charlie or Delta. During Force Protection Level Charlie or Delta, all contractor vehicles must enter through the Logistics Center gate or, if the Logistics Center Gate is closed, through the Main Gate. All passengers in the contractor vehicle must have a RAPID identification card; otherwise, the contractor vehicle must enter through the Logistics Center Gate or the Main Gate, as appropriate and obtain visitor passes. Once the RAPID Gate Program is fully implemented, RAPID gate lanes will be at the Main (Liberty) Gate, the East Gate, the DuPont Gate, the D Street Gate, the Logistics Center Gate, the Madigan Army Medical Center Gate, and the North Fort Gate. The contractor shall use only those lanes specifically marked as RAPID lanes.

(c) NOTE: The RAPID Gate Program is a test program which is scheduled to end on 30 April 2005 but may be terminated by the Government or by Eid Passports, Inc., at any time. If the program is terminated, the contractor will be allowed access only through the Logistics Center Gate or the D Street Gate or, when they are closed, the Main Gate unless the contractor is otherwise notified by the Contracting Officer.

1.11.2 Identification of Employees and Military Regulations:

1.11.2.1 Compliance with Regulations

The Contractor shall be responsible for compliance with all regulations and orders of the Commanding Officer of the Military Installation, respecting identification of employees, movements on installation, parking, truck entry, and all other military regulations which may affect the work.

1.11.2.2 Specific Requirement for Vehicle Registration

The Commanding Officer of Fort Lewis, Washington, has initiated the following specific requirement regarding vehicle registration for this contract:

- a) Contractors performing work on Fort Lewis shall, after award, register all vehicles to be used on the installation with the Vehicle Registration Section of the Law Enforcement Command. Contractor employees entering the installation in privately owned vehicles (POVs) shall also register their vehicles. A copy of contract award, proof of liability insurance, current driver's license and state vehicle registration shall be required to register Contractor, subcontractor, and employee vehicles.
- b) Upon completion of the contract, it shall be the prime Contractor's responsibility to collect all vehicle decals issued under the contract including those issued to employees and subcontractors. Decals are to be carefully removed from the vehicle, placed in an envelope and attached to the original documentation (i.e., post vehicle registration document) received with the decal. Decals, with documentation, must be returned to Vehicle Registration, Building 2140. Proof of decal clearance for all vehicles registered under this contract will be issued to the prime Contractor and shall be returned to the Contracting Officer prior to final payment.
- c) In the event of contract extension, it shall be the prime Contractor's responsibility to report time extension to Vehicle Registration, with evidence of same. For further information, contact Vehicle Registration at Waller Hall, Building 2140 (Telephone: (253) 967-5065), Fort Lewis, Washington 98433-9500.

1.11.3 Employee Access and Identification

- a) Each employee who requires access to Fort Lewis to perform work under any contract, at any tier, must obtain either a RAPID identification badge or a visitor's pass to obtain access to Fort Lewis. A RAPID identification badge will only be issued to an employee, at any tier, if the employee requires access to Fort Lewis more than twice per week. Contractor employees, at any tier, who require access to Fort Lewis twice per week or less often or who do not participate in the RAPID Gate Program shall obtain a visitor's pass at the Main (Liberty) Gate, the Logistics Center Gate or the D Street Gate. The visitor's pass will be issued for a maximum of 30 days at a time. A RAPID identification badge will only be issued to contractor employees if the contractor participates in the RAPID Gate Program. The RAPID Gate Program is a voluntary program. The production of RAPID badges has been contracted out and the cost of the identification card shall be borne by the contractor. Current established costs are: \$99.00 for company start-up and \$99.00 per individual.
- b) If an employee no longer needs an identification badge for any reason (e.g., quits his/her job or no longer performs work under the contract), the contractor shall return the identification badge to Eid within two (2) calendar days of such change. If the identification badge cannot be returned within the required time frame for any reason, the contractor shall immediately notify both Eid and the Contracting Officer verbally, followed up in writing the next work day. An employee's inability to obtain entrance to a Government installation because he/she does not have the required identification badge or visitor's pass shall not excuse timely performance of the requirements of this contract. Eid or the Government may change the location at which identification badges are issued or returned, with or without advance notice to the contractor. Any such changes shall not be a basis for adjusting the contract price under any clause of this contract.
- c) RAPID identification badges shall not be reproduced or copied by the contractor, its subcontractors, or their employees. If an employee's identification badge is lost, stolen, or reproduced, the contractor shall verbally report the loss, theft, or reproduction to both Eid and the Contracting Officer on the day such loss, theft, or reproduction is discovered, followed by a written report of the circumstances to both Eid and the Contracting Officer within one (1) calendar day after the loss, theft, or reproduction is discovered.

d) Each contractor employee shall wear the RAPID identification badge while performing work under the contract. The identification badge shall be worn on the upper front of the outer garment unless precluded by OSHA regulation(s). The identification badge shall not be used for access to any Government installation except for performance of work under the contract for which it was issued.

e) The contractor shall, upon expiration or termination of the contract, collect all identification badges and turn them in to Eid. The final invoice will not be considered proper for purposes of the Prompt Payment Act (FAR 52.232-25 or FAR 52.212-4(i)) until all identification badges have been accounted for.

1.11.3.1 Issuance of RAPID Identification Badge

The contractor shall provide information as required by Eid Passport, Inc. (Eid), to enable Eid to conduct a criminal history background check (CHBC) on contractor employees who are to have access to Fort Lewis. The contractor is responsible for paying Eid the fee per employee for conducting the CHBC and issuing the RAPID identification card. If the CHBC is not adverse, a RAPID identification badge will be issued by Eid to the contractor employee. If the CHBC is adverse, Eid is prohibited from issuing a RAPID identification badge to the contractor employee. If a RAPID identification badge is denied for any reason, the contractor employee may only enter the installation by obtaining a visitor's pass; however, if the contractor employee does not meet the criteria for being issued a RAPID identification badge, the Government may, in its sole discretion, decide not to issue a visitor's pass to the contractor employee.

1.11.4 Compliance with Rules, Regulations, and Statutes. All contractor employees shall observe and comply with all applicable local, State, and Federal rules, regulations, and statutes including those concerning fire, safety, sanitation, security, vehicle safety, and hazardous material handling.

1.11.5 Firearms. Contractor personnel while performing work under this contract shall carry no firearms.

1.11.6 Entrance Denial by Military Police. Contractor employees may be denied entry to the Installation by Military Police if it is determined that such entry may be contrary to good order, discipline, or the security of the Installation.

1.11.7 Work hours in the construction area shall be restricted to 7:30 a.m. to 4:30 p.m. daily, Monday through Friday, excluding Federal holidays. Work hours other than as specified above shall be coordinated with and approved by the Contracting Officer.

1.12 PERMITS OBTAINED BY GOVERNMENT AND CONTRACTOR RESPONSIBILITIES

It will be the responsibility of the Contractor to obtain all other permits/licenses required for this project. See the Contract Clause paragraph entitled PERMITS AND RESPONSIBILITIES.

1.13 PRESERVATION OF HISTORICAL, ARCHEOLOGICAL AND CULTURAL RESOURCES (1985 JAN OCE):

(a) Known historical, archeological and cultural resources within the Contractor's work area are designated on the contract drawings. The Contractor shall install protection for these resources as shown on the drawings and shall be responsible for their preservation during the contract.

(b) If, during construction activities, the Contractor observes items that might have historical or archeological value, such observations shall be reported immediately to the Contracting Officer's Representative so that the appropriate authorities may be notified and a determination can be made as to their significance and what, if any, special disposition of the finds should be made. The Contractor shall cease all activities that may result in the destruction of these resources and shall prevent his employees from trespassing on, removing, or otherwise damaging such resources.

1.14 SPECIAL SAFETY REQUIREMENTS:

All construction activities shall be conducted in strict compliance with the Corps of Engineers Safety and Health Requirements Manual EM 385-1-1, and Occupational Safety and Health Administration regulations, as applicable. The manual is available on line at:

<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em385-1-1/toc.htm>

1.14.1 In addition to Safety and Health Requirements Manual EM 385-1-1, and all applicable OSHA standards, the Contractor shall comply with the requirements listed below. Paragraph numbers refer to EM 385-1-1 or are added thereto.

(a) Paragraph 01.A.12: Add new paragraph: Safety Personnel. The Contractor shall designate a person on his staff to manage the Contractor's safety and accident prevention program. This person will provide a point of contact for the Contracting Officer on matters of job safety, and shall be responsible for ensuring the health and safety of on site personnel.

(b) Paragraph 01.D.02, revise as follows:

(1) Replace paragraph 01.D.02c with the following:

"c. Property damage in excess of \$2,000.00

(2) Add new paragraph d as follows:

"An injury resulting in a lost workday, not including the day of injury."

1.15 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (ER 415-1-15 31 OCT 89)

This Paragraph specifies the procedure for the determination of time extensions for unusually severe weather in accordance with the CONTRACT CLAUSE entitled "Default (Fixed Price Construction)". In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

1.15.1 The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.

1.15.2 The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the contractor.

1.15.3 The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The contractor's progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY
WORK DAYS BASED ON (5) DAY WORK WEEK

<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	
9	8	8	4	2	3	1	2	4	7	10	10	Ft Lewis/McChord AFB

1.15.4 Upon acknowledgment of the notice to proceed (NTP) and continuing throughout the contract, the contractor will record on the daily QCQ report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delays must prevent work on critical activities for 50 percent or more of the contractor's scheduled work day.

1.15.5 The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in previous month), be calculated chronologically from the first to the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph 1.15.3, above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a modification in accordance with the contract clause entitled " Default (Fixed Price Construction)".

1.15.6 Exclusionary period: No work will be required or performed during the period between 1 November and 31 March inclusive, and such period will not be considered in computing the time allowed for completion. Should a window of opportunity arise during the exclusionary period where the contractor may perform this work, contractor shall notify the government construction inspector and government contracting officer 24 hours prior to performing any work.

1.16 SALVAGE MATERIALS AND EQUIPMENT FOR THE GOVERNMENT

The Contractor shall maintain adequate property control records for all materials or equipment specified to be salvaged. These records may be in accordance with the Contractor's system of property control, if approved by the property administrator. The Contractor shall be responsible for the adequate storage and protection of all salvaged materials and equipment, and shall replace, at no cost to the Government, all salvage materials and equipment which are broken or damaged during salvage operations as the result of his negligence, or while in his care. Point of contact concerning Government salvaged items is DRMO, telephone 253-967-7896.

1.17 COMPLIANCE WITH DAVIS-BACON ACT

1.17.1 Contractor POC

Within 14 days after award of the contract, the Contractor shall designate a point of contact (POC) within their organization who will be responsible for the Davis -Bacon Act Labor Program for the Contractor and all subcontractors under this contract as required by the Contract Clauses and FAR 52.222.

1.17.2 Responsibilities

The designated Contractor POC shall be responsible for Davis -Bacon Act Labor Program activities including, but not limited to:

Documentation and record keeping

Submittal and accuracy of certified payrolls

Submittal of required labor forms including requests for additional classifications and rates, Statements and Acknowledgement, etc.

Posting of the wage determination, approved additional classifications and rates, labor and EEO posters

Coordination with the Contracting Officer's Labor Program POC

Prior to submittal to the Government, payrolls shall be reviewed for compliance to all applicable labor standards, to include, but not be limited to the following items: correct wage rates, correct overtime classification and pay, misclassification of workers for work actually performed, apprentice to journeyman ratios, and registration of apprentice. Corrective actions shall be taken as necessary to ensure Contractor compliance with applicable contract and FAR clauses.

1.17.3 Certification

The Contractor POC shall provide a signed certification stating the following: "I certify that the submitted items being forwarded have been reviewed in detail and are correct and in strict conformance with the Labor Standards of the contract except as otherwise stated."

PARTS 2 AND 3 NOT USED

END OF SECTION

SECTION 01356
STORM WATER POLLUTION PREVENTION MEASURES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM INTERNATIONAL (ASTM)

ASTM D 4439	(2002) Geosynthetics
ASTM D 4491	(1999a) Water Permeability of Geotextiles by Permittivity
ASTM D 4533	(1991; R 1996) Trapezoid Tearing Strength of Geotextiles
ASTM D 4632	(1991; R 1996) Grab Breaking Load and Elongation of Geotextiles
ASTM D 4751	(1999a) Determining Apparent Opening Size of a Geotextile
ASTM D 4873	(2002) Identification, Storage, and Handling of Geosynthetic Rolls and Samples

1.2 GENERAL

The Contractor shall implement the storm water pollution prevention measures specified in this section in a manner which will meet the requirements of Section 01355A ENVIRONMENTAL PROTECTION, and the requirements of the National Pollution Discharge Elimination System (NPDES) permit attached to that Section.

1.3 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-07 Certificates

Mill Certificate or Affidavit;

Certificate attesting that the Contractor has met all specified requirements.

1.4 EROSION AND SEDIMENT CONTROLS

The controls and measures required by the Contractor are described below.

1.4.1 Stabilization Practices

The stabilization practices to be implemented shall include temporary seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, erosion control mats, protection of trees, preservation of mature vegetation, etc. On his daily CQC Report, the Contractor shall record the dates when the major grading activities occur, (e.g., clearing and grubbing, excavation, embankment, and grading; when construction

activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated. Except as provided in paragraphs UNSUITABLE CONDITIONS and NO ACTIVITY FOR LESS THAN 21 DAYS, stabilization practices shall be initiated as soon as practicable, but no more than 14 days, in any portion of the site where construction activities have temporarily or permanently ceased.

1.4.1.1 Unsuitable Conditions

Where the initiation of stabilization measures by the fourteenth day after construction activity [temporarily or] permanently ceases is precluded by unsuitable conditions caused by the weather, stabilization practices shall be initiated as soon as practicable after conditions become suitable.

1.4.1.2 No Activity for Less Than 21 Days

Where construction activity will resume on a portion of the site within 21 days from when activities ceased (e.g., the total time period that construction activity is temporarily ceased is less than 21 days), then stabilization practices do not have to be initiated on that portion of the site by the fourteenth day after construction activity temporarily ceased.

1.4.2 Structural Practices

Structural practices shall be implemented to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices shall be implemented in a timely manner during the construction process to minimize erosion and sediment runoff. Structural practices shall include the following devices. Location and details of installation and construction are shown on the drawings.

1.4.2.1 Silt Fences

The Contractor shall provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Silt fences shall be properly installed to effectively retain sediment immediately after completing each phase of work where erosion would occur in the form of sheet and rill erosion (e.g. clearing and grubbing, excavation, embankment, and grading). Silt fences shall be installed in the locations indicated on the drawings. Final removal of silt fence barriers shall be upon approval by the Contracting Officer.]

1.4.2.2 Straw Bales

The Contractor shall provide bales of straw as a temporary structural practice to minimize erosion and sediment runoff. Bales shall be properly placed to effectively retain sediment immediately after completing each phase of work (e.g., clearing and grubbing, excavation, embankment, and grading) in each independent runoff area (e.g., after clearing and grubbing in a area between a ridge and drain, bales shall be placed as work progresses, bales shall be removed/replaced/relocated as needed for work to progress in the drainage area). Areas where straw bales are to be used are shown on the drawings. Final removal of straw bale barriers shall be upon approval by the Contracting Officer. Rows of bales of straw shall be provided as follows:

- a. Along the downhill perimeter edge of all areas disturbed.
- b. Along the top of the slope or top bank of drainage ditches, channels, swales, etc. that traverse disturbed areas.
- c. Along the toe of all cut slopes and fill slopes of the construction areas.
- d. Perpendicular to the flow in the bottom of existing drainage ditches, channels, swales, etc. that traverse disturbed areas or carry runoff from disturbed areas. Rows shall be spaced as shown on the drawings

e. Perpendicular to the flow in the bottom of new drainage ditches, channels, and swales. Rows shall be spaced as shown on the drawings

f. At the entrance to culverts that receive runoff from disturbed areas.

1.4.2.3 Diversion Dikes

Diversion dikes shall have a maximum channel slope of 2 percent and shall be adequately compacted to prevent failure. The minimum height measured from the top of the dike to the bottom of the channel shall be 18 inches. The minimum base width shall be 6 feet ~~and or~~ the minimum top width shall be 2 feet. The Contractor shall ensure that the diversion dikes are not damaged by construction operations or traffic. Diversion dikes shall be located as shown on the drawings.

PART 2 PRODUCTS

2.1 COMPONENTS FOR SILT FENCES

2.1.1 Filter Fabric

The geotextile shall comply with the requirements of ASTM D 4439, and shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistance to deterioration due to ultraviolet and heat exposure. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of - 0 to 120 degrees F. The filter fabric shall meet the following requirements:

FILTER FABRIC FOR SILT SCREEN FENCE

PHYSICAL PROPERTY	TEST PROCEDURE	STRENGTH REQUIREMENT
Grab Tensile Elongation (%)	ASTM D 4632	100 lbs. min. 30 % max.
Trapezoid Tear	ASTM D 4533	55 lbs. min.
Permittivity	ASTM D 4491	0.2 sec-1
AOS (U.S. Std Sieve)	ASTM D 4751	20-100

2.1.2 Silt Fence Stakes and Posts

The Contractor may use either wooden stakes or steel posts for fence construction. Wooden stakes utilized for silt fence construction, shall have a minimum cross section of 2 inches by 2 inches when oak is used and 4 inches by 4 inches when pine is used, and shall have a minimum length of 5 feet. Steel posts (standard "U" or "T" section) utilized for silt fence construction, shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of 5 feet.

2.1.3 Mill Certificate or Affidavit

A mill certificate or affidavit shall be provided attesting that the fabric and factory seams meet chemical, physical, and manufacturing requirements specified above. The mill certificate or affidavit shall specify the actual Minimum Average Roll Values and shall identify the fabric supplied by roll identification numbers. The Contractor shall submit a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the filter fabric.

2.1.4 Identification Storage and Handling

Filter fabric shall be identified, stored and handled in accordance with ASTM D 4873.

2.2 COMPONENTS FOR STRAW BALES

The straw in the bales shall be stalks from oats, wheat, rye, barley, rice, or from grasses such as byhalia, bermuda, etc., furnished in air dry condition. The bales shall have a standard cross section of 14 inches by 18 inches. All bales shall be either wire-bound or string-tied. The Contractor may use either wooden stakes or steel posts to secure the straw bales to the ground. Wooden stakes utilized for this purpose, shall have a minimum dimensions of 2 inches x 2 inches in cross section and shall have a minimum length of 3 feet. Steel posts (standard "U" or "T" section) utilized for securing straw bales, shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of 3 feet.

PART 3 EXECUTION

3.1 INSTALLATION OF SILT FENCES

Silt fences shall extend a minimum of 400 mm 16 inches above the ground surface and shall not exceed 34 inches above the ground surface. Filter fabric shall be from a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, filter fabric shall be spliced together at a support post, with a minimum 6 inch overlap, and securely sealed. A trench shall be excavated approximately 4 inches wide 4 inches deep on the upslope side of the location of the silt fence. The 4-inch by 4-inch trench shall be backfilled and the soil compacted over the filter fabric. Silt fences shall be removed upon approval by the Contracting Officer.

3.2 INSTALLATION OF STRAW BALES

Straw bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another. Straw bales shall be installed so that bindings are oriented around the sides rather than along the tops and bottoms of the bales in order to prevent deterioration of the bindings. The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4 inches. After the bales are staked and chinked (gaps filled by wedging with straw), the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side and shall be built up to 4 inches against the uphill side of the barrier. Loose straw shall be scattered over the area immediately uphill from a straw bale barrier to increase barrier efficiency. Each bale shall be securely anchored by at least two stakes driven through the bale. The first stake or steel post in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or steel pickets shall be driven a minimum 18 inches deep into the ground to securely anchor the bales.

3.3 MAINTENANCE

The Contractor shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by repair of erosion and sediment control measures and other protective measures. The following procedures shall be followed to maintain the protective measures.

3.3.1 Silt Fence Maintenance

Silt fences shall be inspected in accordance with paragraph INSPECTIONS. Any required repairs shall be made promptly. Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting. Should the fabric on a silt fence decompose or become ineffective, and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits shall be removed when deposits reach

one-third of the height of the barrier. When a silt fence is no longer required, it shall be removed. The immediate area occupied by the fence and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall receive erosion control be seeded in accordance with Section 02921, SEEDING.

3.3.2 Straw Bale Maintenance

Straw bale barriers shall be inspected in accordance with paragraph INSPECTIONS. Close attention shall be paid to the repair of damaged bales, end runs and undercutting beneath bales. Necessary repairs to barriers or replacement of bales shall be accomplished promptly. Sediment deposits shall be removed when deposits reach one-half of the height of the barrier. Bale rows used to retain sediment shall be turned uphill at each end of each row. When a straw bale barrier is no longer required, it shall be removed. The immediate area occupied by the bales and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be seeded in accordance with Section 02921, SEEDING.

3.3.3 Diversion Dike Maintenance

Diversion dikes shall be inspected in accordance with paragraph INSPECTIONS. Close attention shall be paid to the repair of damaged diversion dikes and necessary repairs shall be accomplished promptly. When diversion dikes are no longer required, they shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be seeded in accordance with Section 02921, SEEDING.

3.4 INSPECTIONS

3.4.1 General

The Contractor shall inspect disturbed areas of the construction site, areas used for storage of materials that are exposed to precipitation that have not been finally stabilized, stabilization practices, structural practices, other controls, and area where vehicles exit the site at least once every seven (7) calendar days and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall at the site. Where sites have been finally stabilized, such inspection shall be conducted at least once every month.

3.4.2 Inspections Details

Disturbed areas [and areas used for material storage that are exposed to precipitation] shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the Storm Water Pollution Prevention Plan shall be observed to ensure that they are operating correctly. Discharge locations or points shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles exit the site shall be inspected for evidence of offsite sediment tracking.

3.4.3 Inspection Reports

For each inspection conducted, the Contractor shall prepare a report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, maintenance performed, and actions taken. The report shall be furnished to the Contracting Officer within 24 hours of the inspection as a part of the Contractor's daily CQC REPORT. A copy of the inspection report shall be maintained on the job site.

3.4.4 Monthly Inspection Report and Certification Form for Erosion and Sediment Controls

On the first working day of each month the Contractor shall complete, sign, and submit the original form to the State of Washington at the following address: Department of Ecology, 300 Desmond Drive SE, Lacey, WA 98503.

A copy of the Monthly Inspection Report and Certification Form for Erosion and Sediment Controls is attached to the end of this section. On the first working day of each month the Contractor shall also furnish one copy of the form submitted to the Contracting Officer as part of the Contractor's daily CQC Report and attach a copy of the completed form to the Plan. Unless otherwise notified the Contractor shall submit the Monthly Inspection Report and Certification Forms for an additional two months after the final completion of all storm water pollution prevention measures required in this contract have been implemented.

-- End of Section --

SECTION 02511

CONCRETE SIDEWALKS AND CURBS AND GUTTERS AND CHANNEL CONCRETE

1. GENERAL:

1.1 References: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

1.1.1 American Society for Testing and Materials (ASTM):

ASTM A 615	(2000) Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
ASTM C 31/31M-03a	(2003) Making and Curing Concrete Test Specimens in the Field
ASTM C 94/C94M-03	(2003) Ready Mixed Concrete
ASTM C 143	Slump of Portland Cement Concrete
ASTM C 171-03	(2003) Sheet Materials for Curing Concrete
ASTM C 172-99	(1999) Sampling Freshly Mixed Concrete
ASTM C 173/C173M-01e1	(2001) Air Content of Freshly Mixed Concrete by the Volumetric Method
ASTM C 231-03	(2003) Air Content of Freshly Mixed concrete by the Pressure Method
ASTM C 309-03	(2003) Liquid Membrane-Forming Compounds for Curing Concrete
ASTM D 1751-99	(1999) Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types)
ASTM D 1752-84	(1996e1) Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction

1.1.2 Washington State Department of Transportation Standard Specification (WSDOT):

M41-10	(2004) Standard Specifications for Road, Bridge, and Municipal Construction
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1.1.3 American Association of State Highway and Transportation Officials (AASHTO):

AASHTO M 224 (1968; Rev. 1974) Protective Coatings for Portland Cement Concrete

1.2 Submittals

1.2.1 Test Reports: Copies of all test reports for tests specified in paragraphs "CONCRETE" and "FIELD QUALITY CONTROL" shall be submitted within 24 hours of the completion of the test.

1.2.2 Records: Copies of certified delivery tickets for all concrete used in the construction shall be submitted to the Government inspector on the job site at the time material is delivered or within 24 hours.

1.3 Weather Limitations.

1.3.1 Placing During Cold Weather: Concrete placement shall be discontinued when the air temperature reaches 40 degrees F and is falling. Placement may begin when the air temperature reaches 35 degrees F and is rising. Provisions shall be made to protect the concrete from freezing during the specified curing period. If necessary to place concrete when the temperature of the air, aggregates, or water is below 35 degrees F, placement shall be approved in advance by the Government.

1.3.2 Placing During Warm Weather: The temperature of the concrete as placed shall not exceed 85 degrees F except where an approved retarder is used. The mixing water and/or aggregates shall be cooled, if necessary, to maintain a satisfactory placing temperature. In no case shall the placing temperature exceed 95 degrees F.

1.4 Plant, Equipment, Machines, and Tools: Plant, equipment, machines, and tools used in the work shall be subject to approval and shall be maintained in a satisfactory working condition at all times. The equipment shall have the capability of producing the required product, meeting grade controls, thickness control and smoothness requirements as specified. Use of the equipment shall be discontinued if it produces unsatisfactory results. The Contracting Officer shall have access at all times to the plant and equipment to ensure proper operation and compliance with specifications.

2. PRODUCTS:

2.1 Concrete: Concrete shall conform to the applicable requirements of ASTM C94. Concrete shall have a minimum compressive strength of 3000 psi at 28 days.

2.1.1 Air Content: Mixtures shall have air content by volume of concrete of 5 to 7 percent, based on measurements made immediately after discharge from the mixer.

2.1.2 Slump: The concrete slump shall be 2 to 3 inches where determined in accordance with ASTM C 143.

2.2 Concrete Curing Materials.

2.2.1 Impervious Sheet Materials: Impervious sheet materials shall conform to ASTM C 171, type optional, except that polyethylene film, if used, shall be white opaque.

2.2.2 White Pigmented Membrane-Forming Curing Compound: White pigmented membrane-forming curing compound shall conform to ASTM C 309, Type 2.

2.3 Joint Filler Strips.

2.3.1 Contraction Joint Filler for Curb and Gutter: Contraction joint filler for curb and gutter shall consist of hard-pressed fiberboard.

2.3.2 Expansion Joint Filler, Premolded: Expansion joint filler, premolded, shall conform to ASTM D 1751 or ASTM D 1752, 3/8-inch thick, unless otherwise indicated.

2.4 Form Work: Form work shall be designed and constructed to insure that the finished concrete will conform accurately to the indicated dimensions, lines, and elevations, and within the tolerances specified. Forms shall be of wood or steel, straight, of sufficient strength to resist springing during depositing and consolidating concrete. Wood forms shall be surfaced plank, 2-inch nominal thickness, straight and free from warp, twist, loose knots, splits or other defects. Wood forms shall have a nominal length of 10 feet. Radius bends may be formed with 3/4-inch boards, laminated to the required thickness. Steel forms shall be channel-formed sections with a flat top surface and with welded braces at each end and at not less than two intermediate points. Ends of steel forms shall be interlocking and self-aligning. Steel forms shall include flexible forms for radius forming, corner forms, form spreaders, and fillers. Steel forms shall have a nominal length of 10 feet with a minimum of two welded stake pockets per form. Stake pins shall be solid steel rods with chamfered heads and pointed tips designed for use with steel forms.

2.4.1 Sidewalk Forms: Sidewalk forms shall be of a height equal to the full depth of the finished sidewalk.

2.4.2 Curb and Gutter Forms: Curb and gutter outside forms shall have a height equal to the full depth of the curb or gutter. The inside form of curb shall have batter as indicated and shall be securely fastened to and supported by the outside form. Rigid forms shall be provided for curb returns, except that benders or thin plank forms may be used for curb or curb returns with a radius of 10 feet or more, where grade changes occur in the return, or where the central angle is such that a rigid form with a central angle of 90 degrees cannot be used. Back forms for curb returns may be made of 1-1/2 inch benders, for the full height of the curb, cleated together.

3. EXECUTION:

3.1 Subgrade Preparation: The subgrade shall be constructed to the specified grade and cross section prior to concrete placement. Subgrade shall be placed and compacted to conform with applicable requirements of M41-10, Section 2-06.

3.1.1 Sidewalk Subgrade: The subgrade shall be tested for grade and cross section with a template extending the full width of the sidewalk and supported between side forms.

3.1.2 Curb and Gutter Subgrade: The subgrade shall be tested for grade and cross section by means of a template extending the full width of the curb and gutter. The subgrade shall be of materials equal in bearing quality to the subgrade under the adjacent pavement.

3.1.3 Maintenance of Subgrade: The subgrade shall be maintained in a smooth, compacted condition in conformity with the required section and established grade until the concrete is placed. The subgrade shall be in a moist condition when concrete is placed. The subgrade shall be prepared and protected so as to produce a subgrade free from frost when the concrete is deposited.

3.2 Form Setting: Forms shall be carefully set to the indicated alignment, grade and dimensions. Forms shall be held rigidly in place by a minimum of three stakes per form placed at intervals not to exceed 4 feet. Corners, deep sections, and radius bends shall have additional stakes and braces, as required. Clamps, spreaders, and braces shall be used where required to insure rigidity in the forms. Forms shall be removed without injuring the concrete. Bars or heavy tools shall not be used against the concrete in removing the forms. Any concrete found defective after form removal shall be promptly and satisfactorily repaired. Forms shall be cleaned and coated with form oil each time before concrete is placed. Wood forms may, instead, be thoroughly wetted with water before concrete is placed, except that with probable freezing temperatures, oiling is mandatory.

3.2.1 Sidewalks: Forms for sidewalks shall be set with the upper edge true to line and grade with an allowable tolerance of 1/8 inch in any 10-foot long section. After forms are set, grade and alignment shall be checked with a 10-foot straightedge. Forms shall have a transverse slope of 1/4-inch per foot with the low side adjacent to the roadway. Side forms shall not be removed for 12 hours after finishing has been completed.

3.2.2 Curbs and Gutters: The forms of the front of the curb shall be removed not less than 2 hours nor more than 6 hours after the concrete has been placed. Forms back of curb shall remain in place until the face and top of the curb have been finished as specified for concrete finishing. Gutter forms shall not be removed while the concrete is sufficiently plastic to slump in any direction.

3.3 Sidewalk Concrete Placement and Finishing.

3.3.1 Formed Sidewalks: Concrete shall be placed in the forms in one layer of such thickness that when consolidated and finished the sidewalks will be of the thickness indicated. After concrete has been placed in the forms, a strike-off guided by side forms shall be used to bring the surface to proper section to be compacted. The concrete shall be consolidated with an approved vibrator, and the surface shall be finished to grade with a wood float, bull float, or darby, edged and broom finished.

3.3.2 Concrete Finishing: After straight edging, when most of the water sheen has disappeared, and just before the concrete hardens, the surface shall be finished to a smooth and uniformly fine granular or sandy texture free of waves, irregularities, or tool marks. A scored surface shall be produced by brooming with a fiber-bristle brush

in a direction transverse to that of the traffic.

3.3.3 Edge and Joint Finishing: All slab edges, including those at formed joints, shall be finished carefully with an edger having a radius of 1/8 inch. Transverse joint shall be edged before brooming, and the brooming shall eliminate the flat surface left by the surface face of the edger. Corners and edges which have crumbled and areas which lack sufficient mortar for proper finishing shall be cleaned and filled solidly with a properly proportioned mortar mixture and then finished.

3.3.4 Slip-Formed Sidewalks: Concrete shall be placed to the desired section in a single pass. When the paver approaches a header at the end of a paving lane, a sufficient amount of concrete shall be maintained ahead of the paver to allow a roll of concrete to spill over the header. The amount of extra concrete shall be sufficient to prevent the slurry that is formed and carried along ahead of the paver from being deposited adjacent to the header. The spud vibrators on the front of the paver should be brought as close to the header as possible before they are lifted. Additional consolidation shall be provided adjacent to the headers by hand-manipulated vibrators. When the slip form paver is operated between or adjacent to previously constructed slabs, provisions shall be made to prevent damage to the previous construction. Transversely oscillating screeds shall be electronically controlled from the previously placed slab to prevent the screed from applying pressure to the existing concrete. When the paver travels on existing pavement, provisions shall be made to prevent damage to the existing pavement. Finished surface at the edges shall not produce an edge slump exceeding 0.25 inch over 85 percent of the finished work and 100 percent of the work shall not have an edge slump exceeding 0.75 inch.

3.3.5 Surface and Thickness Tolerances: Finished surfaces shall not vary more than 5/16 inch from the testing edge of a 10-foot straightedge. Permissible deficiency in section thickness will be up to 0.25 inch.

3.4 Curb and Gutter Concrete Placement and Finishing

3.4.1 Formed Curb and Gutter: Concrete shall be placed to the section required in a single lift. Consolidation shall be achieved by using approved mechanical vibrators.

3.4.2 Concrete Finishing: Exposed surfaces shall be floated and finished with a smooth wood float until true to grade and section and uniform in texture. Floated surfaces shall then be brushed with a fine-hair brush with longitudinal strokes. The edges of the gutter and top of the curb shall be rounded with an edging tool to a radius of 1/2 inch. Immediately after removing the front curb form, the face of the curb shall be rubbed with a wood or concrete rubbing block and water until blemishes, form marks, and tool marks have been removed. The front curb surface, while still wet, shall be brushed in the same manner as the gutter and curb top. The top surface of gutter and entrance shall be finished to grade with a wood float.

3.4.3 Joint Finishing: Curb edges at formed joints shall be finished as indicated.

3.4.4 Curb Forming Machine: Concrete shall be placed to the desired section in a single pass. When the paver approaches a header at the end of a paving segment, a sufficient amount of concrete shall be maintained ahead of the paver to allow a roll of concrete to spill over the header. The amount of extra concrete shall be sufficient to prevent the slurry that is formed and carried along ahead of the paver from being deposited adjacent to the header. The paver vibrators should be brought as close to the header as possible before they are lifted. Additional consolidation shall be provided by hand-manipulated vibrators when required. When the curb forming machine is operated between or adjacent to previously constructed curbs, provisions shall be made to prevent damage to the previous construction and the machine. Finished surface at the edges shall not produce an edge slump exceeding 0.25 inch over 85 percent of the finished work and 100 percent of the work shall not have an edge slump exceeding 0.75 inch.

3.4.5 Surface and Thickness Tolerances: Finished surfaces shall not vary more than 1/4 inch from the testing edge of a 10-foot straightedge. Permissible deficiency in section thickness will be up to 0.25 inch.

3.5 Sidewalk Joints: Sidewalk joints shall be constructed to divide the surface into rectangular areas. Transverse contraction joints shall be spaced at a distance equal to the sidewalk width or 5 feet on centers, whichever is less, and shall be continuous across the slab. Longitudinal contraction joints shall be constructed

along the centerline of all sidewalks 10 feet or more in width. Transverse expansion joints shall be installed at sidewalk returns and opposite expansion joints in adjoining curbs. Where the sidewalk is not in contact with the curb, transverse expansion joints shall be installed as indicated. Expansion joints shall be formed about structures and features which project through or into the sidewalk pavement, using joint filler of the type, thickness, and width indicated.

3.5.1 Contraction Joints: The contraction joints shall be formed in the fresh concrete by cutting a groove in the top portion of the slab to a depth of at least one-fourth of the sidewalk slab thickness, using a jointer to cut the groove, or by sawing a groove in the hardened concrete with a power-driven saw, unless otherwise approved. Sawed joints shall be constructed by sawing a groove in the concrete with a 1/8-inch blade to the depth indicated. An ample supply of saw blades shall be available on the job before concrete placement is started, and at least one standby sawing unit in good working order shall be available at the jobsite at all times during the sawing operations.

3.5.2 Expansion Joints: Expansion joints shall be formed with 3/8-inch joint filler strips. Joint filler shall be placed with top edge 1/4 inch below the surface and shall be held in place with steel pins or other devices to prevent warping of the filler during floating and finishing. Immediately after finishing operations are completed, joint edges shall be rounded with an edging tool having a radius of 1/8 inch, and concrete over the joint filler shall be removed. At the end of the curing period, expansion joints shall be carefully cleaned.

3.6 Curb and Gutter Joints: Curb and gutter joints shall be constructed at right angles to the line of curb and gutter.

3.6.1 Contraction Joints: Contraction joints shall be constructed directly opposite contraction joints in abutting portland cement concrete pavements and spaced so that monolithic sections between curb returns will not be less than 5 feet nor greater than 15 feet in length. Contraction joints shall be constructed by means of 1/8-inch thick separators and of a section conforming to the cross section of the curb and gutter. Separators shall be removed as soon as practicable after concrete has set sufficiently to preserve the width and shape of the joint and prior to finishing.

3.6.2 Expansion Joints: Expansion joints shall be formed by means of preformed expansion joint filler material cut and shaped to the cross section of curb and gutter. Expansion joints shall be provided in curb and gutter directly opposite expansion joints of abutting portland cement concrete pavement, and shall be of the same type and thickness as joints in the pavement. Where curb and gutter do not abut portland cement concrete pavement, expansion joints at least 3/8 inch in width shall be provided at intervals not less than 30 feet nor greater than 120 feet.

3.7 Curing and Protection

3.7.1 General Requirements: Concrete shall be protected against loss of moisture and rapid temperature changes for at least 7 days from the beginning of the curing operation. Unhardened concrete shall be protected from rain and flowing water. All equipment needed for adequate curing and protection of the concrete shall be on hand and ready for use before actual concrete placement begins. Protection shall be provided as necessary to prevent cracking of the pavement due to temperature changes during the curing period.

3.7.2 Backfilling: After curing, debris shall be removed and the area adjoining the concrete shall be backfilled, graded, and compacted to conform to the surrounding area in accordance with lines and grades indicated.

3.7.3 Protection: Completed concrete shall be protected from damage until accepted. The Contractor shall repair damaged concrete and clean concrete discolored during construction.

3.7.4 Protective Coating: Protective coating shall be applied to exposed-to-view concrete surfaces in accordance with AASHTO M 224.

3.7.4.1 Application: Curing and backfilling operation shall be completed prior to applying protective coating. Concrete shall be surface dry and thoroughly clean before each application. Coverage shall be not more than 50 square yards per gallon for first application and not more than 70 square yards per gallon for second application, except that the number of applications and coverage for each application for commercially prepared mixture shall be in

accordance with the manufacturer's instructions. Coated surfaces shall be protected from vehicular and pedestrian traffic until dry.

3.7.4.2 Precautions: Protective coating shall not be heated by direct application of flame or electrical heaters and shall be protected from exposure to open flame, sparks, and fire adjacent to open containers or applicators. Material shall not be applied at temperatures lower than 50 degrees F.

3.8 Field Quality Control

3.8.1 General Requirements: The Contractor shall perform the inspections and tests described and meet the specified requirements for inspection details and frequency of testing. Based upon the results of these inspections and tests, the Contractor shall take the action and submit reports as required below, and any additional tests to insure that the requirements of these specifications are met.

3.8.2 Concrete Testing

3.8.2.1 Strength Testing: The Contractor shall provide molded concrete specimens for strength tests. Samples of concrete placed each day shall be taken not less than once a day nor less than once for every 250 cubic yards of concrete. The samples for strength tests shall be taken in accordance with ASTM C 172. Cylinders for acceptance shall be molded in conformance with ASTM C 31 by an approved testing laboratory. Each strength test result shall be the average of two test cylinders from the same concrete sample tested at 28 days, unless otherwise specified or approved. Also a third test cylinder shall be tested at 7 days. Concrete specified on the basis of compressive strength will be considered satisfactory if the averages of all sets of three consecutive strength test results equal or exceed the specified strength, and no individual strength test result falls below the specified strength by more than 500 psi.

3.8.2.2 Air Content: Air content shall be determined in accordance with ASTM C 173 or ASTM C 231. ASTM C 231 shall be used with concretes and mortars made with relatively dense natural aggregates. Two tests for air content shall be made on randomly selected batches of each class of concrete placed during each shift. Additional tests shall be made when excessive variation in concrete workability is reported by the placing foreman or the Government inspector. If results are out of tolerance, the placing foreman shall be notified and he shall take appropriate action to have the air content corrected at the plant. Additional tests for air content shall be performed on each truckload of material until such time as the air content is within the tolerance specified.

3.8.2.3 Slump Test: Two slump tests shall be made on randomly selected batches of each class of concrete for every 250 cubic yards, or fraction thereof, of concrete placed during each shift. Additional tests shall be performed when excessive variation in the workability of the concrete is noted or when excessive crumbling or slumping is noticed along the edges of slip-formed concrete.

3.8.3 Surface Smoothness Determination: After the concrete has hardened sufficiently to permit walking thereon, but no later than 36 hours after placement, the surface of the completed section shall be tested by the Contractor, in the presence of the (QAE) inspector, with a 10-foot straightedge or other approved device, operated in such a manner as to reveal all surface irregularities exceeding the specified tolerances. The entire area of sidewalks shall be tested in both the longitudinal and the transverse direction on longitudinal parallel lines 3 feet apart or less and transverse lines 10 feet apart or less. Curb and gutter shall be tested in the longitudinal direction along the center of the gutter and top of curb. The straightedge shall be held in contact with the surface and moved ahead 1/2 the length of the straightedge for each successive measurement. Straightedge lines shall be carried continuously across joints. The height of high areas on pavement surfaces shall be determined by placing the center of the straightedge at the center of high areas, rocking the straightedge until one end comes in contact with the pavement, then measuring the distance between the pavement surface and the bottom of the straightedge at the opposite end, and taking one-half the distance as the height of the high area. Other devices that reveal surface irregularities exceeding specified tolerances may be used when approved.

3.8.4 Edge Slump Determination: After the concrete has hardened sufficiently to permit walking thereon, the surface shall be tested with a 10-foot straightedge or other approved device to reveal irregularities exceeding the edge slump requirements. The edge slump shall be determined at each edge of each sidewalk or curb and gutter

constructed. Measurements shall be made at 5- to 25-foot spacing commencing at the header where paving is initiated. The measurements shall be made by the Contractor, in the presence of the Contracting Officer, and will be properly referenced in accordance with established paving lane identification of the adjacent slab and stationing.

3.8.5 Thickness Evaluation: The anticipated thickness of the concrete shall be determined prior to placement by passing a template through the formed section or by measuring the depth of opening of the extrusion template of the curb forming machine. If a slip form paver is used for sidewalk placement, the subgrade shall be true to grade prior to concrete placement and the thickness will be determined by measuring each edge of the completed slab.

3.8.6 Surface Evaluation: The finished surface of each category of the completed work shall be uniform in color and free of blemishes and form or tool marks.

3.9 Surface Deficiencies and Corrections

3.9.1 Thickness Deficiency: When measurements indicate that the completed concrete section is deficient in thickness by more than 0.25 inch the deficient section shall be removed, between regularly scheduled joints, and replaced.

3.9.2 High Areas: In areas not meeting surface smoothness and plan grade requirements, high areas shall be reduced either by rubbing the freshly finished concrete with carborundum brick and water when the concrete is less than 36 hours old or by grinding the hardened concrete with an approved surface grinding machine after the concrete is 36 hours old or more. The area corrected by grinding the surface of the hardened concrete shall not exceed 5 percent of the area of any integral slab, and the depth of grinding shall not exceed 1/4 inch. All pavement areas requiring grade or surface smoothness corrections in excess of the limits specified above shall be removed and replaced.

3.9.3 Excessive Edge Slump: High areas revealed by the edge slump measurements will be subject to the tolerances specified. The concrete within the limits of excessive edge slump shall be removed and replaced. Partial slabs removed and replaced shall extend across the full width of the section.

3.9.4 Appearance: Exposed surfaces of the finished work will be inspected by the Government and any deficiencies in appearance will be identified. Areas which exhibit excessive cracking, discoloration, form marks, or tool marks or which are otherwise inconsistent with the overall appearances of the work shall be removed and replaced.

3.10 Removal and Replacement of Defective Concrete: Defective or damaged concrete shall be removed and replaced as specified herein, and a method of curing shall be employed as directed. All removed concrete shall be replaced with concrete of the thickness and quality required by these specifications. In no case shall the removal and replacement of concrete result in a slab less than the full sidewalk or curb and gutter width or a joint less than 5 feet from a regularly scheduled transverse joint. The defective concrete shall be removed carefully so that the adjacent section is not damaged. When a portion of the unfractured slab is replaced, a full depth saw cut shall be made transversely across the slab in the required location, and the concrete shall be removed to provide a vertical face in the remaining portion of the slab. Prior to placement of the fresh concrete, the face of the slab shall be cleaned of debris and loose concrete. Transverse joints of the replaced slab or portion thereof shall be constructed as indicated. The joints shall be sealed as specified. Removal and replacement of defective or damaged concrete shall be accomplished by the Contractor at no additional cost to the Government.

3.11 Channel Concrete

~~3.01.1~~ ~~3.11.1~~ General: Provide reinforced concrete slabs ~~at the Muck Creek and South Creek fords~~ to the lines and grades indicated and as specified herein. Channel concrete shall be in accordance with ACI 318 and with the preceding provisions of this Section 02511 except as modified in this paragraph 3.11 CHANNEL CONCRETE.

~~3.01.2~~ ~~3.11.2~~ Pollution Prevention: Construction equipment shall not enter the water. The work shall be performed in the dry and in a manner to prevent the discharge of oil, grease, silt, or other contaminants into the

stream.

~~3.01.3-3.11.3~~ Stream Diversion: Where water is present in the creek, one-half of the work shall be performed at a time with the water diverted to the far side of the channel. |

~~3.01.4-3.11.4~~ Concrete Strength: Concrete shall have a minimum compressive strength of ~~3,500~~ 3,000 psi at 28 days. |

~~3.01.5-3.11.5~~ Reinforcement: Bar reinforcement shall be Grade 60 billet steel conforming to ASTM A 615. Mesh reinforcement shall not be used. |

END OF SECTION

SECTION 02551

BITUMINOUS PAVING FOR ROADS, STREETS AND OPEN STORAGE AREAS

1. GENERAL:

1.1 References: The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

1.1.1 AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM):

ASTM C 88-99a	(1999) Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C 127-01	(2001) Specific Gravity and Absorption of Coarse Aggregate
ASTM C 128-01e1	(2001) Specific Gravity and Absorption of Fine Aggregate
ASTM C 131-03	(2003) Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C 136-01	(2001) Sieve Analysis of Fine and Coarse Aggregates
ASTM C 183-02	(2002) Sampling and Acceptance of Hydraulic Cement
ASTM D 75-03	(2003) Sampling Aggregates
ASTM D 242 (2000)e1	(2000) Mineral Filler for Bituminous Paving Mixtures
ASTM D 977-98	(1998) Emulsified Asphalt
ASTM D 2397-98	(1998) Cationic Emulsified Asphalt

1.1.2 MILITARY STANDARDS (MIL-STD):

MIL-STD-620	(Rev. A; Notice 1) Test Methods for Bituminous Paving Materials
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1.1.3 WASHINGTON STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION:

M41-10	(2004) Standard Specifications for Road, Bridge, and Municipal Construction
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1.2 Measurement: The bituminous material and aggregate to be paid for will be the measured quantities used in the accepted work.

1.3 Waybills and Delivery Tickets: At the jobsite, the Contractor shall provide to the Government inspector certified waybills and delivery tickets for aggregate and bituminous material used in the bituminous surface treatment.

1.4 Submittals

1.4.1 Test Reports: Copies of test results shall be furnished to the Government inspector within 24 hours after completion of each test.

1.4.2 Records: Copies of waybills and delivery tickets shall be submitted during progress of the work.

1.5 Safety Precautions: No smoking or open flames shall be permitted within 25 feet of heating, distributing, or transferring operations of bituminous materials other than bituminous emulsions.

1.6 Equipment, Tools, and Machines: All machines, tools, and equipment used in the performance of work shall be maintained in satisfactory operating condition. Equipment operating on roads and runways shall display low speed traffic markings and traffic warning lights.

1.7 Sampling and Testing: The sampling and testing shall be the responsibility of the Contractor. Sampling and testing shall be performed by an approved commercial testing laboratory, or by the Contractor, subject to approval. Sampling shall be in accordance with ASTM D 75 for aggregates and ASTM D 140 for bituminous material, unless otherwise directed. Tests shall be performed in sufficient number to insure that materials meet specified requirements.

1.7.1 Wear Test: The wear test shall be performed in accordance with ASTM C 131 to insure that aggregates have a percentage of wear not exceeding 40 percent after 500 revolutions.

1.7.2 Soundness Test: The soundness test shall be performed as specified by ASTM C 88 to insure that aggregates have a weight loss not greater than 18 percent when subjected to five cycles of the magnesium sulfate test.

1.8 Weather Limitations: Bituminous surface treatment shall be applied only when the existing surface or base course is dry. Bituminous surface treatment shall not be applied when either the atmospheric temperature, in the shade, is below 50 degrees F or the pavement surface to be treated is below 70 degrees F unless otherwise directed.

2. PRODUCTS

2.1 Aggregates:

2.1.1 General: Sampling and testing shall be the responsibility of the contractor. Sampling and testing shall be accomplished by an approved commercial testing laboratory or by the contractor, subject to approval. Test Reports of aggregates shall be furnished by the Contractor for approval of aggregate sources and stockpiles prior to the start of production and at times during production of the bituminous mixtures. Test Reports will be the basis of approval of specific sources or stockpiles of aggregates for aggregate requirements. Unless otherwise directed, ASTM D 75 shall be used in sampling coarse and fine aggregate, and ASTM C 183 shall be used in sampling mineral filler. All tests necessary to determine compliance with requirements specified herein will be made by the Government.

2.1.2 Sources: Sources of aggregates shall be selected well in advance of the time the materials are required in the work. If a sample of material fails to meet specification requirements, the material represented by the sample shall be replaced, and the cost of testing the replaced sample will be at the expense of the Contractor. Approval of the source of aggregate does not relieve the Contractor of responsibility for delivery at the jobsite of aggregates that meet the requirements specified herein.

2.2 Bituminous Hot Mix: Shall consist of coarse aggregate, fine aggregate, mineral filler, bituminous material, and approved additives, if required, of the qualities and in the proportions specified and shall conform to the requirements contained in paragraph "PROPORTIONING OF MIXTURE".

2.2.1 Aggregates: Aggregates shall consist of crushed stone, crushed gravel, crushed slag, screening, sand, and mineral filler, as required. The portion of materials retained on the No. 4 sieve shall be known as coarse aggregate, the portion passing the No. 4 sieve and retained on the No. 200 sieve as fine aggregate, and the portion passing the No. 200 sieve as mineral filler.

2.2.1.1 Aggregate shall be of such size that percentage composition by weight, as determined by ASTM C 136, will conform to Washington State Department of Transportation Standard Specification M41-10 for aggregate for Class B and Class G. Class B work shall be used for Asphalt Concrete Pavement. Class G work shall be used for

Asphalt Concrete Overlays from 1/2" to 1 1/4" thick. Class B shall be used for 1 1/2" - 2" Overlays.

TABLE I. AGGREGATE GRADATION

Sieve Size	Class B	Class G
5/8 inch	100	
1/2 inch	90-100	100
3/8 inch	75-90	97-100
1/4 inch	55-75	60-88
No. 10	32-48	32-53
No. 40	11-24	11-24
No. 80	6-15	6-15
No. 200	3.0-7.0	3-7

2.2.1.2 The table is based on aggregates of uniform specific gravity; percentages passing various sieves may be changed with Contracting Officer approval when aggregates of varying specific gravity are used.

2.2.1.3 Coarse Aggregate: Coarse aggregate shall consist of clean, sound, durable particles meeting the following requirements.

a. Percentage of loss shall not exceed 40 after 500 revolutions, as determined in accordance with ASTM C 131.

b. Percentage of loss shall not exceed 18 after five cycles performed in accordance with ASTM C 88, using magnesium sulfate.

c. Crushed gravel retained on the No. 4 sieve and each coarser sieve shall contain at least 75 percent by weight of crushed pieces having one or more fractured faces with the area of each face equal to at least 75 percent of the smallest midsectional area of piece. When two fractures are contiguous, the angle between planes of fractures shall be at least 30 degrees to count as two fractured faces.

2.2.1.4 Fine Aggregate: Fine aggregates shall consist of clean, durable, natural sands; manufactured sand prepared by crushing stone or gravel or any combination of natural and manufactured sands. Natural sands shall consist of grains of clean, hard durable rock and be a maximum of 25 percent of total aggregate. The percentage of loss shall not exceed 15 after five cycles of the soundness test performed in accordance with ASTM C 88, using magnesium sulfate.

2.2.1.5 Mineral Filler: Mineral filler shall conform to ASTM D 242.

2.2.1.6 Bituminous Material: Asphalt cement shall conform to viscosity grade AR-400OW, of M41-10 section 9-02.1.

2.2.1.7 Additives: The use of additives such as antistripping and antifoaming agents is subject to approval.

2.2.1.8 Emulsified Asphalt: Emulsified asphalt shall conform to ASTM D 977 or D 2397, Grade CSS-1.

2.2.2 PROPORTIONING OF MIXTURE:

2.2.2.1 Job Mix Formula: The Job-Mix Formula shall be developed by the Contractor using Rice mix design criteria. The mix design shall meet the test requirements presented in this section and shall show the following:

a. The percentage and specific gravity of each bin fraction of aggregate. (This will be used to determine the specific gravity.)

b. Amount of natural sand.

c. Absorption of the entire blend.

d. Specific gravity of the asphalt.

e. Reduction in stability by immersion. Previously established by test result will be accepted provided that the tests were performed within the last two years. The job-mix formula will be allowed tolerances given in Table II herein.

TABLE II.
JOB-MIX FORMULA TOLERANCE FOR
SURFACE AND INTERMEDIATE COURSES

Material	Tolerance, Plus or Minus
Aggregate passing 1/4-inch sieve or larger	5 percent
Aggregate passing Nos. 10, 40, and 80 sieves	4 percent
Aggregate passing No. 200 sieves	2 percent
Bitumen content (moving average of 1st five tests)	0.25 percent
Bitumen content (individual test)	0.50 percent
Temperature of mixing	25 degrees F

Bitumen content and aggregate gradation may be adjusted within the limits of tables specified herein to improve the paving mixtures, if directed, without adjustments in contract price.

2.2.3 Test Properties of Bituminous Mixtures: Finished mixture shall meet requirements described below when tested in accordance with Rice mix design criteria.

2.2.3.1 Stability, Flow, and Voids: Requirements for stability, flow, and voids are shown in TABLES III and IV for nonabsorptive and absorptive aggregates, respectively.

TABLE III. NONABSORPTIVE-AGGREGATE MIXTURE

	Wearing Course	Intermediate Course
Stability minimum, pounds	500	500
Flow maximum, 1/100-inch units	20	20
Voids total mix, percent	3-5	4-6
Voids filled with bitumen, percent	75-85	65-75

TABLE IV. ABSORPTIVE-AGGREGATE MIXTURE

	Wearing Course	Intermediate Course
Stability minimum, pounds	500	500
Flow maximum, 1/100-inch units	20	20
Voids total mix, percent	2-4	3-5
Voids filled with bitumen, percent	80-90	70-80

a. When the water-absorption value of the entire blend of aggregate does not exceed 2.5 percent as determined by ASTM C 127 and ASTM C 128, aggregate is designated as nonabsorptive. The apparent specific gravity shall be used in computing the voids total mix and voids filled with bitumen; the mixture shall meet the requirements of Table III herein.

b. When the water-absorption value of the entire blend of aggregate exceeds 2.5 percent as determined in accordance with ASTM C 127 and ASTM C 128, aggregate is designated as absorptive. The theoretical specific gravity computed from the bulk-impregnated specific gravity method contained in MIL-STD-620, Method 105 shall be used in computing percentages of voids total mix and voids filled with bitumen; the mixture shall meet requirements in TABLE IV.

2.2.3.2 Stability: The index of retained stability must be greater than 75 percent as determined by MIL-STD-

620, Method 104. When the index of retained stability is less than 75, the aggregate stripping tendencies may be countered by the use of hydrated lime or by treating the bitumen with an approved antistripping agent. The hydrated lime is considered as mineral filler and should be considered in the gradation requirements. The amount of hydrated lime or antistripping agent added to bitumen shall be sufficient, as approved, to produce an index of retained stability of not less than 75 percent. No additional payment will be made to the Contractor for addition of antistripping agent required.

3. EXECUTION

3.1 PROTECTION OF PAVEMENT: After final rolling, no vehicular traffic of any kind shall be permitted on the pavement until the pavement has cooled to 140 degrees F and hardened or for at least four hours.

3.2 CONDITIONS OF BASE COURSE OR EXISTING PAVEMENT: Previously constructed base course or existing pavement shall be conditioned as specified herein. In all cases prior to placing bituminous course, surface shall be cleaned.

3.3 Base Course Conditioning: The surface of the base course will be inspected for adequate compaction and surface tolerances specified in M41-10, Section 4-04.3 (5). Unsatisfactory areas shall be corrected.

3.4 Pavement Repair: Existing pavement shall be repaired in accordance with Section: PAVEMENT REPAIRS (ASPHALTIC CONCRETE).

3.5 Existing Pavement Conditioning: Immediately before applying the tack coat, all loose materials, dirt, clay, or other objectionable material shall be removed from the surface to be treated. To assure a uniform spread of the bituminous material, the portion of the subgrade, subbase, or base course prepared for treatment, if excessively dry, shall be sprinkled with water immediately before the application, as directed.

3.6 TRANSPORTATION OF BITUMINOUS MIXTURE: Transportation from paving plant to site shall be in trucks having tight, clean, smooth beds lightly coated with an approved releasing agent to prevent adhesion of the mixture to the truck bodies. Excessive releasing agent shall be drained prior to loading. Each load shall be covered with canvas or other approved material of ample size to protect mixture from weather and to prevent loss of heat. Loads that have crusts of cold, unworkable material or that have become wet will be rejected. Hauling over freshly placed material will not be permitted.

3.7 SURFACE PREPARATION OF UNDERLYING COURSE: Prior to placing of the intermediate or wearing course, the underlying course shall be cleaned of all foreign or objectionable matter with power brooms and hand brooms. Prime coating of base course shall be accomplished in accordance with M41-10.

3.8 TACK COATING:

3.8.1 Bituminous Materials: Emulsified asphalt for the tack coat shall conform to ASTM D 977 and D 2397, Grades RS-1, SS-1, SS-1h, CRS-1, CSS-1, or CSS-1h.

3.8.2 Application Rate: The tack coat shall be applied at the rate of .05 to .15 gallon per square yard. The exact quantities within the ranges specified may be varied to suit field conditions.

3.8.3 Application temperatures for the emulsified asphalt shall provide an application viscosity between 10 and 60 seconds, saybolt furol, or between 20 and 120 centistokes, kinematic. The temperature viscosity relation shall be furnished to the Government inspector within 24 hours. These temperature ranges may exceed the flashpoint of the material and care should be taken in their heating.

3.8.4 Application: Following preparation and subsequent inspection of the surface, a tack coat shall be applied at the specified rate with uniform distribution over the surface to be treated. Following application of the tack coat and prior to application of the pavement, the material shall be allowed to cure (all moisture must be allowed to evaporate out of the emulsion). Until the succeeding layer of pavement is placed, the tacked area shall be maintained by protecting the surface against damage and by repairing and retacking deficient areas at no additional cost to the

Government. No more tack coat material shall be placed than can be covered in the same day. If required, clean, dry sand shall be spread to effectively blot up excess bituminous material.

3.9 PLACING:

3.9.1 Surface Preparation: Prior to placing of surface course, the underlying course shall be cleared of all foreign or objectionable matter with power blowers, power brooms or hand brooms. Existing asphalt edges, to be placed against, shall be cut back vertical prior to applying tack coat and placing new asphalt concrete.

3.9.2 Spraying of Contact Surfaces of Structures: Contact surfaces of previously constructed pavement, cattleguards, curbs, manholes, and similar structures shall be sprayed with a thin coat of bituminous tack coat material conforming to the requirements of Paragraph TACK COATING.

3.10 COMPACTION OF MIXTURE: Rolling shall begin as soon after placing as the mixture will bear a roller without undue displacement. Delays in rolling freshly spread mixture will not be permitted. After initial rolling, preliminary tests of crown, grade, and smoothness shall be made by the Contractor. Deficiencies shall be corrected so that the finished course will conform to requirements for grade and smoothness specified herein. After the Contractor is assured of meeting crown, grade, and smoothness requirements, rolling shall be continued until a mat density of 95 percent Rice and a joint density of 92 percent Rice of density of laboratory-compacted specimens of the same mixture is obtained.

3.11 Correcting Deficient Areas: Mixtures that become contaminated or are defective shall be removed to the full thickness of the course. Edges of the area to be removed shall be cut so that sides are perpendicular and parallel to the direction of traffic and so that the edges are vertical. Edges shall be sprayed with bituminous materials conforming to paragraph "TACK COATING". Fresh paving mixture shall be placed in the excavated areas in sufficient quantity so that the finished surface will conform to grade and smoothness requirements. Paving mixture shall be compacted to the density specified herein. Skin patching of an area that has been rolled shall not be permitted.

3.12 JOINTS:

3.13 General: The placing of the surface course shall be as nearly continuous as possible, and the roller shall pass over the unprotected end of the freshly laid mixture only when the laying of the course is discontinued for such length of time as to permit the mixture to become chilled. When the work is resumed, the previously compacted mixture shall be cut back to produce a slightly beveled edge for the full thickness of the course. Where a transverse joint is being made in the wearing course, strips of heavy wrapping paper shall be used. The wrapping paper shall be removed and the joint trimmed to a slightly beveled edge for the full thickness of the course prior to resumption of paving. The material which is cut away shall be wasted and new mix shall be laid against the fresh cut. Rollers or tamping irons shall be used to seal the joint. The surface against which new material is placed shall be sprayed with a thin, uniform coat of tack coat material conforming to requirements of Paragraph TACK COATING.

3.14 EDGES OF PAVEMENT adjacent to shoulders shall be trimmed neatly to line. An earth berm of selected material not less than 1-foot wide shall be placed against and to the full height of the pavement surface as soon as practicable after final rolling has been completed and pavement has sufficiently hardened.

3.15 PROTECTION OF PAVEMENT: After final rolling of the pavement, no vehicular traffic of any kind shall be permitted until the pavement has cooled and hardened or for at least 4 hours.

3.16 SURFACE REQUIREMENTS:

3.16.1 Bituminous Surface Course: Surface course, upon completion of final rolling, shall be smooth and true to grade and cross section. When a 10-foot straight edge is laid on the surface parallel with the centerline of the paving lane, the surface shall not vary more than 1/8 inch from straight edge. When the 10-foot straight edge is laid on surface transverse to centerline of the paving lane, surface shall not vary more than 1/4 inch from the straight edge. Areas which experience checking, cracks or tearing will be considered defective. Low or defective areas with greater than 1/4 inch thickness deficiency shall be immediately corrected by cutting out faulty areas and replacing

with fresh, hot mixture and compacting area to conform to remainder of pavement. High areas shall be repaired by grinding with an approved grinding machine or by removal and replacement as described above.

3.17 INSPECTION OF PLANT AND EQUIPMENT: The Contracting Officer shall have access at all times to all parts of the paving plant for checking adequacy of equipment in use; for inspecting operation of plant; verifying weights, proportions, and character of materials; and for checking temperatures maintained in preparation of mixtures.

3.18 PAINTING: Repainting of any markings in areas that have been repaved shall be done in accordance with Section: ~~02580.02761~~ PAVEMENT MARKINGS to match existing.

3.19 TEST RESULTS FROM BATCH PLANT shall be required every time the job mix is modified and submitted to the contract inspector (QAE).

3.20 AIRFIELD PAVING: Uncompressed cold joints shall be cut back to expose a clean compressed surface of full thickness of the course. The edge shall be given a light tack coat of sealant prior to placement of the next course.

END OF SECTION

SECTION 02921

SEEDING

1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM C 602-95a	(2001) Agricultural Liming Materials
ASTM D 4972-01	(2001) pH of Soils
ASTM D 5268-02	(1992; R 1996) Topsoil Used for Landscaping Purposes

U.S. DEPARTMENT OF AGRICULTURE (USDA)

AMS Seed Act	(1995) Federal Seed Act Regulations Part 201
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1.2 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-03 Product Data

Equipment; FIO
Chemical Treatment Material; FIO
Soil Testing Laboratory; FIO

Manufacturer's literature including physical characteristics, application and installation instructions for equipment, surface erosion control material and chemical treatment material.

A listing of equipment to be used for the seeding operation.

Qualifications of the soil-testing laboratory.

Delivery; FIO

Delivery schedule.

Quantity Check; FIO

Bag counts (and published weights for each type and size of bag) or bulk weight measurements of material used compared with area covered to determine the application rate and quantity installed.

Seed Establishment Period; FIO

Calendar time period for the seed establishment period. When there is more than one seed establishment period, the boundaries of the seeded area covered for each period shall be described.

Maintenance Record; FIO

Maintenance work performed, area repaired or reinstalled, diagnosis for unsatisfactory stand of grass plants.

SD-07 Certificates

Seed; FIO
Fertilizer; FIO
Mulch; FIO
Tackifier; FIO

Prior to the delivery of materials, certificates of compliance attesting that materials meet the specified requirements. Certified copies of the material certificates shall include the following:

- a. Seed. Classification, botanical name, common name, percent pure live seed, minimum percent germination and hard seed, maximum percent weed seed content, and date tested.
- b. Fertilizer. Chemical analysis and composition percent.
- c. Mulch: Composition and source.
- d. Tackifier: Composition and source.

SD-09 Reports

Topsoil testing; FIO

Contractor shall collect and submit one representative sample of topsoil to a certified testing laboratory and for testing in accordance with ASTM D 5268 and ASTM D 4972 for determining the particle size, pH, organic matter content, textural class, chemical analysis, soluble salts analysis, and mechanical analysis. Laboratory shall make recommendations, based on proposed seed mixture, for fertilizer composition.

1.3 DELIVERY, INSPECTION, STORAGE, AND HANDLING

1.3.1 Delivery

A delivery schedule shall be provided at least 10 calendar days prior to the first day of delivery.

1.3.2 Inspection

Seed shall be inspected upon arrival at the job site for conformity to species and quality. Seed that is wet, moldy, or bears a test date five months or older, shall be rejected. Other materials shall be inspected for compliance with specified requirements. The following shall be rejected: open soil amendment containers or wet soil amendments; topsoil that contains slag, cinders, stones, lumps of soil, sticks, roots, trash or other material over a minimum 1-1/2 inch diameter; and topsoil that contains viable plants and plant parts. Unacceptable materials shall be removed from the job site.

1.3.3 Storage

Materials shall be stored in designated areas. Seed, mulch, tackifier, and fertilizer shall be stored in cool, dry locations away from contaminants. Chemical treatment material shall be stored according to manufacturer's instructions and not with seeding operation materials.

1.3.4 Handling

Except for bulk deliveries, materials shall not be dropped or dumped from vehicles.

1.3.5 Time Limitation

Hydroseeding time limitation for holding seed in the slurry shall be a maximum 24 hours.

2 PRODUCTS

2.1 SEED

2.1.1 Seed Classification

All seed shall be Washington State certified seed of the latest season's crop and shall be provided in original sealed packages bearing the producer's guaranteed analysis for percentages of mixture, purity, germination, origin, hard seed, weed seed content, and inert material. Labels shall conform to Washington State Laws and Regulations. Cultivars shall be individually listed on the label. Weed seed shall not exceed 1 percent by weight of the total mixture. Seed shall be free of restricted and prohibited noxious weed seed. Crop seed shall not exceed 0.05 percent by weight of the total mixture. Inert matter shall not exceed 4 percent by weight.

2.1.2 Seed Species and Mixtures

Seed species and mixtures shall be proportioned by weight as follows:

Botanical Name	Common Name*	Mixture Percent By Weight	Notes
Lolium Perenne	Barclay perennial ryegrass (3 or more, cultivars, equal parts of each)	30	
Festuca rubra	Red Creeping Fescue, Chewings Fescue (equal parts of each)	30	
Festuca longifolia	Hard Fescue	20	
Festuca ovina	Sheep Fescue	20	

All cultivars are to be selected from those printed in bold in the Washington State University publication, "1992 Turfgrass Field Day," pages 33 and 34.

Seed mixtures shall not contain millet or any other large-seed producing grass.

2.1.3 Quality

Weed seed shall be a maximum 1 percent by weight of the total mixture.

2.1.4 Seed Mixing

The mixing of seed may be done by the seed supplier prior to delivery, or on site as directed.

2.1.5 Substitutions

Substitutions will not be allowed without written request and approval from the Contracting Officer.

2.3 FERTILIZER

The proper fertilizer mixture and proportioning shall be determined by the recommendations of the soil testing laboratory. Fertilizer shall be controlled release commercial grade, free flowing, uniform in composition, and consist of a nitrogen-phosphorus-potassium ratio. The fertilizer shall be derived from sulphur-coated urea, urea formaldehyde, plastic or polymer coated pills, or isobutylenediurea (IBDU). Fertilizer shall be balanced with the inclusion of trace minerals and micronutrients.

Should the Contracting Officer approve, the soil testing may be deleted from the work and fertilizer shall be applied to all areas receiving seed as follows:

Treblesuperphosphate (0-45-0): Apply at a rate of 10 pounds per 1,000 square feet.

Ammonium sulfate (21-0-0): Apply at a rate of 4 pounds per 1,000 square feet.

ESN poly-coated urea (42-0-0): Apply at a rate of 2 pounds per 1,000 square feet.

2.4 MULCH

Mulch shall be free from weeds, mold, and other deleterious materials. Mulch materials shall be wood cellulose fiber or paper fiber and be capable of being applied with the hydroseeding equipment.

Wood cellulose fiber shall not contain any growth or germination-inhibiting factors and shall be dyed an appropriate color to facilitate placement during application. Composition on air-dry weight basis: 9 to 15 percent moisture, pH range from 4.5 to 6.0.

Paper fiber mulch shall be recycled newsprint that is shredded for the purpose of mulching seed.

2.5 TACKIFIER

Tackifier shall used to bind the seed and mulch to the topsoil surface and shall be applied in quantities sufficient to equal the retention properties of guar when applied at the rate of 60 pounds per acre. Tackifier shall contain no growth or germination inhibiting materials nor significantly reduce infiltration rates. Tackifier shall hydrate in water and readily blend with other slurry materials. Tackifier shall be derived from natural organic plant sources. Synthetic tackifier may be used should the product Material Safety Data Sheet demonstrate to the satisfaction of the Contracting Officer that the product is not harmful to the environment.

2.6 OTHER SOIL AMENDMENTS

In addition to fertilizer, should the soil test report recommend, other soil amendments shall be applied at the recommended rates. Other amendments may include lime, organics, and soil conditioners.

2.6.1 Lime

Agricultural lime shall be of standard manufacture, flour grade, meeting the requirements of ASTM C-602.

2.6.2 Organic Amendments

Organic amendments shall consist of compost products that contain composted plant material derived from the aerobic decomposition of recycled plant waste. The compost shall have a moisture content

between 35 and 50 percent, a pH of 5.5 to 8.0 (as determined in saturated paste), and a maximum carbon to nitrogen ratio of 35:1. The organic content shall be a minimum of 50 percent based on dry weight and determined by ash method.

2.6.3 Other Amendments

Soil conditioner, and pH adjuster shall be applied at the rates recommended by the soil-testing laboratory in accordance with the manufacturer's product application guidelines. Gypsum shall be commercially packaged, free flowing, and contain minimum 95 percent calcium sulfate by volume. Laundry Borax shall be commercially packaged, free flowing, and contain minimum

2.6.4 Alternative Application

Should the Contracting Officer approve, the soil testing may be deleted from the work and the topsoil shall be amended as follows:

Soil sulfur: Apply at a rate of 45 pounds per 100 cubic yards of imported topsoil.

Gypsum (calcium sulfate): Apply at a rate of 160 pounds per 100 cubic yards of topsoil.

Laundry Borax: Apply at a rate of 8 ounces per 100 cubic yards of topsoil.

Zinc Sulfate: Apply at a rate of 40 ounces per 100 cubic yards of topsoil

2.6 WATER

Water shall be the responsibility of the Contractor, unless otherwise noted. Water shall not contain elements toxic to plant life.

2.8 SURFACE EROSION CONTROL MATERIAL

The Contractor shall protect all hydroseeded surfaces during the seed establishment period. The Contractor may elect to install surface erosion control material that conforms to the following:

2.8.1 Surface Erosion Control Blanket

Blanket shall be machine produced mat of wood excelsior formed from a web of interlocking wood fibers; covered on one side with either knitted straw blanket-like mat construction; covered with biodegradable plastic mesh; or interwoven biodegradable thread, plastic netting, or twisted kraft paper cord netting.

2.8.2 Surface Erosion Control Fabric

Fabric shall be knitted construction of polypropylene yarn with uniform mesh openings 3/4 to 1 inch square with strips of biodegradable paper. Filler paper strips shall have a minimum life of 6 months.

2.8.3 Surface Erosion Control Net

Net shall be heavy, twisted jute mesh, weighing approximately 1.22 pounds per linear yard and 4 feet wide with mesh openings of approximately 1 inch square.

2.8.4 Surface Erosion Control Chemicals

Chemicals shall be high-polymer synthetic resin or cold-water emulsion of selected petroleum resins.

2.8.5 Hydrophilic Colloids

Hydrophilic colloids shall be physiologically harmless to plant and animal life without phytotoxic agents. Colloids shall be naturally occurring, silicate powder based, and shall form a water insoluble membrane after curing. Colloids shall resist mold growth.

3 EXECUTION

3.1 INSTALLING SEED TIME AND CONDITIONS

3.1.1 Seeding Time

Seed shall be installed from March 1 to May 15 for spring establishment and from August 15 to September 30 for summer establishment.

3.1.2 Seeding Conditions

Seeding operations shall be performed only during periods when beneficial results can be obtained. When drought, excessive moisture, gusty or windy conditions, or other unsatisfactory conditions prevail, the work shall be stopped when directed. When special conditions warrant a variance to the seeding operations, proposed alternate times shall be submitted for approval.

3.1.3 Soil Test

Delivered topsoil, existing soil in smooth graded areas, and stockpiled topsoil shall be tested at the direction of the Contracting Officer in accordance with ASTM D 5268 and ASTM D 4972 for determining the particle size, pH, organic matter content, textural class, chemical analysis, soluble salts analysis, and mechanical analysis. Sample collection on site shall be random over the entire site. Sample collection for stockpiled topsoil shall be at different levels in the stockpile. The test shall determine the quantities and type of soil amendments and fertilizer required to meet local growing conditions for the seed species specified.

3.2 SITE PREPARATION

3.2.1 Finished Grade and Topsoil

The Contractor shall verify that finished grades are as indicated on drawings, and the placing of topsoil, smooth grading, and compaction requirements have been completed in accordance with Section ~~02300~~ 02225 EARTHWORK, prior to the commencement of the seeding operation.

3.2.2 Application of Soil Amendments

Fertilizer and amendments shall be applied at the rates recommended by the topsoil test, or, if directed by the Contracting Officer, at the alternative rates specified.

3.2.4 Prepared Surface

3.2.4.1 Preparation

The prepared surface shall transition to smoothly match the adjoining grade of any surfaced area. The prepared surface shall be completed with a light raking to remove debris.

3.2.4.2 Lawn Area Debris

Debris and stones over a minimum 5/8-inch in any dimension shall be removed from the surface.

3.2.4.3 Protection

The prepared surface areas shall be protected from compaction or damage by vehicular or pedestrian traffic and surface erosion.

3.3 INSTALLATION

Prior to installing seed, any previously prepared surface compacted or damaged shall be reworked to meet the requirements of paragraph SITE PREPARATION. Seeding operations shall not take place when the wind velocity will prevent uniform seed distribution.

3.3.1 Installing Seed

Seeding method shall be Hydroseeding. Seeding procedure shall ensure even coverage. Gravity feed applicators, which drop seed directly from a hopper onto the prepared soil, shall not be used because of the difficulty in achieving even coverage, unless otherwise approved. Absorbent polymer powder shall be mixed with the dry seed at the rate recommended by the manufacturer.

3.3.2 Hydroseeding

Seed shall be mixed to ensure broadcast at the rate of 4.5 pounds per 1000 square feet. Seed and fertilizer shall be added to water and thoroughly mixed to meet the rates specified. The time period for the seed to be held in the slurry shall be a maximum 24 hours. Wood cellulose fiber mulch and tackifier shall be added at the specified rates after the seed, fertilizer, and water have been thoroughly mixed to produce a homogeneous slurry. Slurry shall be uniformly applied under pressure over the entire area. The area shall not be rolled following the hydroseed application.

3.3.3 Mulching

Wood cellulose fiber mulch shall be applied as part of the hydroseeding operation. The mulch shall be mixed and applied in accordance with the manufacturer's recommendations at a rate of 2,000 pounds per acre.

3.3.3.3 Tackifier

Organic tackifier shall be applied at the rate recommended by the manufacturer, using hydraulic equipment suitable for thoroughly mixing with water. A uniform mixture shall be applied over the seeded area at the time of seeding.

3.3.4 Watering Seed

Watering shall be started immediately after completing the seeding of an area. Water shall be applied to supplement rainfall at a rate sufficient to ensure moist soil conditions to a minimum 1-inch depth. Run-off and puddling shall be prevented. Water is not available on site and shall be entirely provided by the Contractor. Equipment and trucks shall not be driven over seeded areas, unless otherwise directed.

3.4 SURFACE EROSION CONTROL

Where necessary to prevent erosion of prepared topsoil or hydroseeded areas, or as directed, surface erosion control material shall be installed in accordance with manufacturer's instructions. Placement of the material shall be accomplished without damage to installed material or without deviation to finished grade.

3.5 QUANTITY CHECK

For materials provided in bags, the empty bags shall be retained for recording the amount used. For materials provided in bulk, the weight certificates shall be retained as a record of the amount used. The amount of material used shall be compared with the total area covered to determine the rate of application used. Differences between the quantity applied and the quantity specified shall be adjusted as directed.

3.6 APPLICATION OF PESTICIDE

Not Used.

3.7 RESTORATION AND CLEAN UP

3.7.1 Restoration

Contractor shall restore all new topsoil areas and existing topsoil areas disturbed during the course of the work. Existing turf areas, pavements, and facilities that have been damaged from the seeding operation shall be restored to original condition at Contractor's expense. New topsoil areas shall be restored to match existing in accordance with these requirements.

3.8 PROTECTION OF INSTALLED AREA S

Immediately upon completion of the seeding operation in an area, the area shall be protected against traffic or other use by erecting barricades and providing signage as necessary, or as directed.

3.9 SEED ESTABLISHMENT PERIOD

3.9.1 Commencement

The seed establishment period to obtain a healthy stand of grass plants shall begin on the first day of seeding work under this contract and shall continue through the remaining life of the contract and end 12 months after the last day of the seeding operation required by this contract. Written calendar time period shall be furnished for the seed establishment period. The seed establishment period shall be modified for inclement weather, shut down periods, or for separate completion dates of areas.

3.9.2 Satisfactory Stand of Grass Plants

Grass plants shall be evaluated for species and health when the grass plants are a minimum 1-inch high. A satisfactory stand of grass plants from the seeding operation for a lawn area shall be a minimum 100 grass plants per square foot. Bare spots shall be a maximum 9 inches square and the total bare spots shall not exceed 2 percent of the total seeded area.

3.9.3 Maintenance During Establishment Period

Maintenance of the seeded areas shall include eradicating weeds, insects and diseases; protecting embankments and ditches from surface erosion; maintaining erosion control materials and mulch; protecting installed areas from traffic; watering; and post-fertilization.

3.9.3.1 Post-Fertilization

Nitrogen carrier fertilizer shall be applied at the rate recommended by a soils testing laboratory after the first month and again at 3 months prior to final acceptance. Should the Contracting Officer approve, the soil test shall not be performed and fertilization shall be performed at 1 month post-seeding and 3 months.

3.9.3.2 Repair or Reinstall

Unsatisfactory stand of grass plants and mulch shall be repaired or reinstalled, and eroded areas shall be repaired in accordance with paragraph SITE PREPARATION.

3.9.3.3 Maintenance Record

A written record of each site visit shall be furnished, describing the maintenance work performed; areas repaired or reinstalled; and diagnosis for unsatisfactory stand of grass plants.

*** END OF SECTION ***

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