

Prepared By: City of Arlington Department of Public Works Engineering Division

67th Ave Phase III Reconstruction Contract Provisions – Volume II

City Project #: P02.341 TIB Project #:9-P-817(004)-1 Federal Aid # STPUS-2699 (001)



November 20, 2012





James X Kelly, **Public Works Director**

November 20, 2012

Date

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APPENDIX A

PREVAILING WAGES

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State of Washington Department of Labor & Industries Prevailing Wage Section - Telephone 360-902-5335 PO Box 44540, Olympia, WA 98504-4540

Washington State Prevailing Wage

The PREVAILING WAGES listed here include both the hourly wage rate and the hourly rate of fringe benefits. On public works projects, worker's wage and benefit rates must add to not less than this total. A brief description of overtime calculation requirements are provided on the Benefit Code Key.

Journey Level Prevailing Wage Rates for the Effective Date: 11/17/2012

<u>County</u>	<u>Trade</u>	Job Classification	<u>Wage</u>	Holiday	Overtime	Note
Snohomish	Asbestos Abatement Workers	Journey Level	\$40.83	<u>5D</u>	<u>1H</u>	
Snohomish	<u>Boilermakers</u>	Journey Level	\$60.24	<u>5N</u>	<u>1C</u>	
Snohomish	Brick Mason	Brick And Block Finisher	\$42.21	<u>5A</u>	<u>1M</u>	
Snohomish	Brick Mason	Journey Level	\$49.07	<u>5A</u>	<u>1M</u>	
Snohomish	Brick Mason	Pointer-Caulker-Cleaner	\$49.07	<u>5A</u>	<u>1M</u>	
Snohomish	Building Service Employees	Janitor	\$9.04		<u>1</u>	
Snohomish	Building Service Employees	Shampooer	\$9.23		<u>1</u>	
Snohomish	Building Service Employees	Waxer	\$9.23		<u>1</u>	
Snohomish	Building Service Employees	Window Cleaner	\$13.48		<u>1</u>	
Snohomish	Cabinet Makers (In Shop)	Journey Level	\$15.08		<u>1</u>	
Snohomish	<u>Carpenters</u>	Acoustical Worker	\$49.57	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Carpenters</u>	Bridge, Dock And Wharf Carpenters	\$49.57	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Carpenters</u>	Carpenter	\$49.57	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Carpenters</u>	Carpenters on Stationary Tools	\$49.70	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Carpenters</u>	Creosoted Material	\$49.67	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Carpenters</u>	Floor Finisher	\$49.57	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Carpenters</u>	Floor Layer	\$49.57	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Carpenters</u>	Scaffold Erector	\$49.57	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Cement Masons</u>	Journey Level	\$50.13	<u>7A</u>	<u>1M</u>	
Snohomish	Divers & Tenders	Diver	\$100.28	<u>5D</u>	<u>1M</u>	<u>8A</u>
Snohomish	Divers & Tenders	Diver On Standby	\$56.68	<u>5D</u>	<u>1M</u>	
Snohomish	Divers & Tenders	Diver Tender	\$52.23	<u>5D</u>	<u>1M</u>	
Snohomish	Divers & Tenders	Surface Rcv & Rov Operator	\$52.23	<u>5D</u>	<u>1M</u>	
Snohomish	Divers & Tenders	Surface Rcv & Rov Operator Tender	\$48.67	<u>5A</u>	<u>1B</u>	
Snohomish	Dredge Workers	Assistant Engineer	\$49.57	<u>5D</u>	<u>1T</u>	<u>8L</u>
Snohomish	Dredge Workers	Assistant Mate(deckhand)	\$49.06	<u>5D</u>	<u>1T</u>	<u>8L</u>

Snohomish	Dredge Workers	Engineer Welder	\$49.62	5D	1T	8L
Snohomish	Dredge Workers	Leverman, Hydraulic	\$51.19	 5D	 1T	8L
Snohomish	Dredge Workers	Maintenance	\$49.06	 5D	 1T	8L
Snohomish	Dredge Workers	Mates And Boatmen	\$49.57	 5D	 1T	8L
Snohomish	Dredge Workers	Oiler	\$49.19	 5D	 1T	8L
Snohomish	Drywall Applicator	Journey Level	\$49.74	<u>5D</u>	<u> </u>	
Snohomish	Drywall Tapers	Journey Level	\$49.79	<u>5P</u>	<u>1E</u>	
Snohomish	<u>Electrical Fixture Maintenance</u> Workers	Journey Level	\$13.76		<u>1</u>	
Snohomish	Electricians - Inside	Cable Splicer	\$59.21	<u>7H</u>	<u>1E</u>	
Snohomish	Electricians - Inside	Construction Stock Person	\$29.16	<u>7H</u>	<u>1D</u>	
Snohomish	<u>Electricians - Inside</u>	Journey Level	\$55.19	<u>7H</u>	<u>1E</u>	
Snohomish	Electricians - Motor Shop	Craftsman	\$15.37		<u>1</u>	
Snohomish	Electricians - Motor Shop	Journey Level	\$14.69		<u>1</u>	
Snohomish	<u>Electricians - Powerline</u> <u>Construction</u>	Cable Splicer	\$64.95	<u>5A</u>	<u>4A</u>	
Snohomish	<u>Electricians - Powerline</u> <u>Construction</u>	Certified Line Welder	\$59.37	<u>5A</u>	<u>4A</u>	
Snohomish	<u>Electricians - Powerline</u> <u>Construction</u>	Groundperson	\$42.16	<u>5A</u>	<u>4A</u>	
Snohomish	<u>Electricians - Powerline</u> <u>Construction</u>	Head Groundperson	\$44.50	<u>5A</u>	<u>4A</u>	
Snohomish	<u>Electricians - Powerline</u> <u>Construction</u>	Heavy Line Equipment Operator	\$59.37	<u>5A</u>	<u>4A</u>	
Snohomish	<u>Electricians - Powerline</u> <u>Construction</u>	Jackhammer Operator	\$44.50	<u>5A</u>	<u>4A</u>	
Snohomish	<u>Electricians - Powerline</u> <u>Construction</u>	Journey Level Lineperson	\$59.37	<u>5A</u>	<u>4A</u>	
Snohomish	Electricians - Powerline Construction	Line Equipment Operator	\$49.95	<u>5A</u>	<u>4A</u>	
Snohomish	<u>Electricians - Powerline</u> <u>Construction</u>	Pole Sprayer	\$59.37	<u>5A</u>	<u>4A</u>	
Snohomish	<u>Electricians - Powerline</u> <u>Construction</u>	Powderperson	\$44.50	<u>5A</u>	<u>4A</u>	
Snohomish	Electronic Technicians	Journey Level	\$30.10		<u>1</u>	
Snohomish	Elevator Constructors	Mechanic	\$75.24	<u>7D</u>	<u>4A</u>	
Snohomish	Elevator Constructors	Mechanic In Charge	\$82.00	<u>7D</u>	<u>4A</u>	
Snohomish	Fabricated Precast Concrete Products	Journey Level - In-Factory Work Only	\$13.50		1	
Snohomish	Fence Erectors	Fence Erector	\$14.00		<u>1</u>	
Snohomish	<u>Flaggers</u>	Journey Level	\$34.61	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Glaziers</u>	Journey Level	\$52.76	<u>7L</u>	<u>1Y</u>	
Snohomish	Heat & Frost Insulators And Asbestos Workers	Journeyman	\$56.93	<u>5J</u>	<u>15</u>	
Snohomish	Heating Equipment Mechanics	Journey Level	\$68.52	<u>7F</u>	<u>1E</u>	
Snohomish	Hod Carriers & Mason Tenders	Journey Level	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	Industrial Engine And Machine	Journey Level	\$15.65		<u>1</u>	

	Mechanics					
Snohomish	Industrial Power Vacuum	Journey Level	\$9.24		<u>1</u>	
	<u>Cleaner</u>					
Snohomish	Inland Boatmen	Boat Operator	\$52.32	<u>5B</u>	<u>1K</u>	
Snohomish	Inland Boatmen	Cook	\$48.89	<u>5B</u>	<u>1K</u>	
Snohomish	Inland Boatmen	Deckhand	\$48.96	<u>5B</u>	<u>1K</u>	
Snohomish	Inland Boatmen	Deckhand Engineer	\$49.95	<u>5B</u>	<u>1K</u>	
Snohomish	<u>Inland Boatmen</u>	Launch Operator	\$51.16	<u>5B</u>	<u>1K</u>	
Snohomish	<u>Inland Boatmen</u>	Mate	\$51.16	<u>5B</u>	<u>1K</u>	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Cleaner Operator, Foamer Operator	\$9.73		<u>1</u>	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Grout Truck Operator	\$11.48		<u>1</u>	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Head Operator	\$12.78		1	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Technician	\$9.04		1	
Snohomish	Inspection/Cleaning/Sealing Of Sewer & Water Systems By Remote Control	Tv Truck Operator	\$10.53		1	
Snohomish	Insulation Applicators	Journey Level	\$49.57	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Ironworkers</u>	Journeyman	\$59.02	<u>7N</u>	<u>10</u>	
Snohomish	<u>Laborers</u>	Air, Gas Or Electric Vibrating Screed	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Airtrac Drill Operator	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Ballast Regular Machine	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Batch Weighman	\$34.61	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Brick Pavers	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Brush Cutter	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Brush Hog Feeder	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Burner	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Caisson Worker	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Carpenter Tender	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Caulker	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Cement Dumper-paving	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Cement Finisher Tender	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Change House Or Dry Shack	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Chipping Gun (under 30 Lbs.)	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Chipping Gun(30 Lbs. And Over)	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Choker Setter	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Chuck Tender	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Clary Power Spreader	\$41.59	<u>7A</u>	<u>2Y</u>	

Snohomish	<u>Laborers</u>	Clean-up Laborer	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Concrete Dumper/chute Operator	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Concrete Form Stripper	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Concrete Placement Crew	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Concrete Saw Operator/core Driller	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Crusher Feeder	\$34.61	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Curing Laborer	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Demolition: Wrecking & Moving (incl. Charred Material)	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Ditch Digger	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Diver	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Drill Operator (hydraulic,diamond)	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Dry Stack Walls	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Dump Person	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Epoxy Technician	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Erosion Control Worker	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Faller & Bucker Chain Saw	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Fine Graders	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Firewatch	\$34.61	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Form Setter	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Gabian Basket Builders	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	General Laborer	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Grade Checker & Transit Person	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Grinders	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Grout Machine Tender	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Groutmen (pressure)including Post Tension Beams	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Guardrail Erector	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Hazardous Waste Worker (level A)	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Hazardous Waste Worker (level B)	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Hazardous Waste Worker (level C)	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	High Scaler	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Jackhammer	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Laserbeam Operator	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Maintenance Person	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Manhole Builder-mudman	\$41.59	<u>7A</u>	<u>2Y</u>	
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Snohomish	<u>Laborers</u>	Material Yard Person	\$40.83	<u>7A</u>	<u>2Y</u>	

Snohomish	<u>Laborers</u>	Nozzleman (concrete Pump, Green Cutter When Using Combination Of High Pressure Air & Water On Concrete & Rock, Sandblast, Gunite, Shotcrete, Water Bla	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Pavement Breaker	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Pilot Car	\$34.61	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Pipe Layer Lead	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Pipe Layer/tailor	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Pipe Pot Tender	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Pipe Reliner	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Pipe Wrapper	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Pot Tender	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Powderman	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Powderman's Helper	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Power Jacks	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Railroad Spike Puller - Power	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Raker - Asphalt	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Re-timberman	\$42.11	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Remote Equipment Operator	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Rigger/signal Person	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Rip Rap Person	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Rivet Buster	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Rodder	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Scaffold Erector	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Scale Person	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Sloper (over 20")	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Sloper Sprayer	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Spreader (concrete)	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Stake Hopper	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Stock Piler	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Tamper & Similar Electric, Air & Gas Operated Tools	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Tamper (multiple & Self- propelled)	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Timber Person - Sewer (lagger, Shorer & Cribber)	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Toolroom Person (at Jobsite)	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Topper	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Track Laborer	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Track Liner (power)	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	<u>Laborers</u>	Traffic Control Laborer	\$37.01	<u>7A</u>	<u>2Y</u>	<u>8R</u>
Snohomish	<u>Laborers</u>	Traffic Control Supervisor	\$37.01	<u>7A</u>	<u>2Y</u>	<u>8R</u>
Snohomish	<u>Laborers</u>	Truck Spotter	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Tugger Operator	\$41.59	<u>7A</u>	<u>2Y</u>	

Snohomish	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 0-30 psi	\$55.89	<u>7A</u>	<u>2Y</u>	<u>8Q</u>
Snohomish	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 30.01-44.00 psi	\$60.92	<u>7A</u>	<u>2Y</u>	<u>8Q</u>
Snohomish	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 44.01-54.00 psi	\$64.60	<u>7A</u>	<u>2Y</u>	<u>8Q</u>
Snohomish	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 54.01-60.00 psi	\$70.30	<u>7A</u>	<u>2Y</u>	<u>8Q</u>
Snohomish	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 60.01-64.00 psi	\$72.42	<u>7A</u>	<u>2Y</u>	<u>8Q</u>
Snohomish	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 64.01-68.00 psi	\$77.52	<u>7A</u>	<u>2Y</u>	<u>8Q</u>
Snohomish	<u>Laborers</u>	Tunnel Work-Compressed Air Worker 68.01-70.00 psi	\$79.42	<u>7A</u>	<u>2Y</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 70.01-72.00 psi	\$81.42	<u>7A</u>	<u>1H</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Compressed Air Worker 72.01-74.00 psi	\$83.42	<u>7A</u>	<u>1H</u>	<u>8Q</u>
Snohomish	<u>Laborers</u>	Tunnel Work-Guage and Lock Tender	\$42.21	<u>7A</u>	<u>2Y</u>	<u>8Q</u>
Snohomish	Laborers	Tunnel Work-Miner	\$42.21	<u>7A</u>	<u>2Y</u>	<u>8Q</u>
Snohomish	Laborers	Vibrator	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Vinyl Seamer	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Watchman	\$31.46	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Welder	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Well Point Laborer	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers	Window Washer/cleaner	\$31.46	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers - Underground Sewer <u>& Water</u>	General Laborer & Topman	\$40.83	<u>7A</u>	<u>2Y</u>	
Snohomish	Laborers - Underground Sewer & Water	Pipe Layer	\$41.59	<u>7A</u>	<u>2Y</u>	
Snohomish	Landscape Construction	Irrigation Or Lawn Sprinkler Installers	\$17.31		<u>1</u>	
Snohomish	Landscape Construction	Landscape Equipment Operators Or Truck Drivers	\$20.06		<u>1</u>	
Snohomish	Landscape Construction	Landscaping Or Planting Laborers	\$14.13		<u>1</u>	
Snohomish	Lathers	Journey Level	\$49.74	<u>5D</u>	<u>1H</u>	
Snohomish	Marble Setters	Journey Level	\$49.07	<u>5A</u>	<u>1M</u>	
Snohomish	Metal Fabrication (In Shop)	Fitter	\$15.38		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Laborer	\$9.79		1	
Snohomish	Metal Fabrication (In Shop)	Machine Operator	\$9.04		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Painter	\$9.98		<u>1</u>	
Snohomish	Metal Fabrication (In Shop)	Welder	\$15.38		<u><u>1</u></u>	
Snohomish	<u>Millwright</u>	Journey Level	\$50.67	<u>5D</u>	<u>1M</u>	
Snohomish	<u>Modular Buildings</u>	Journey Level	\$9.04		<u>1</u>	
Snohomish	Painters	Journey Level	\$37.51	<u>6Z</u>	<u>2B</u>	
Snohomish	Pile Driver	Journey Level	\$49.82	<u>5D</u>	<u>1M</u>	
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Snohomish	<u>Plasterers</u>	Journey Level	\$48.23	<u>7Q</u>	<u>1R</u>	
Snohomish	<u>Playground & Park Equipment</u> Installers	Journey Level	\$11.94		<u>1</u>	
Snohomish	Plumbers & Pipefitters	Journey Level	\$61.57	<u>5A</u>	<u>1G</u>	
Snohomish	Power Equipment Operators	Asphalt Plant Operators	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Assistant Engineer	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Barrier Machine (zipper)	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Batch Plant Operator, Concrete	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Bobcat	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Brokk - Remote Demolition Equipment	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Brooms	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Bump Cutter	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cableways	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Chipper	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Compressor	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Concrete Finish Machine -laser Screed	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Conveyors	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 20 Tons Through 44 Tons With Attachments Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (including Jib With	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 100 Tons Through 199 Tons, or 150' of boom (including jib with attachments); Overhead, bridge type, 100 tons and over; Tower crane up to 175' in height, base to boom.	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 200 Tons To 300 Tons, Or 250' Of Boom (including Jib With Attachments)	\$53.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>

		(including Jib With Attachments)				
Snohomish	Power Equipment Operators	Cranes: A-frame - 10 Tons And Under	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: Friction 100 Tons Through 199 Tons	\$53.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: Friction Over 200 Tons	\$53.57	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: Over 300 Tons Or 300' Of Boom (including Jib With Attachments)	\$53.57	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Crusher	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Deck Engineer/deck Winches (power)	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Derricks, On Building Work	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Dozer Quad 9, HD 41, D10 and Over	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Dozers D-9 & Under	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Drill Oilers: Auger Type, Truck Or Crane Mount	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Drilling Machine	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Elevator And Man-lift: Permanent And Shaft Type	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Forklift: 3000 Lbs And Over With Attachments	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Forklifts: Under 3000 Lbs. With Attachments	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Gradechecker/stakeman	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Guardrail Punch	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Guardrail Punch/Auger	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Horizontal/directional Drill Locator	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Horizontal/directional Drill Operator	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Hydralifts/boom Trucks Over 10 Tons	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Hydralifts/boom Trucks, 10	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>

		Tons And Under				
Snohomish	Power Equipment Operators	Loader, Overhead 8 Yards. & Over	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Loaders, Overhead Under 6 Yards	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Loaders, Plant Feed	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Loaders: Elevating Type Belt	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Locomotives, All	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Material Transfer Device	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Mixers: Asphalt Plant	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Motor Patrol Grader - Non- finishing	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Motor Patrol Graders, Finishing	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Overhead, Bridge Type: 100 Tons And Over	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Pavement Breaker	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Pile Driver (other Than Crane Mount)	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Plant Oiler - Asphalt, Crusher	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Posthole Digger, Mechanical	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Power Plant	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Pumps - Water	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Quad 9, Hd 41, D10 And Over	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Rigger And Bellman	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Rollagon	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
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Snohomish	Power Equipment Operators	Roller, Other Than Plant Mix	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Roller, Plant Mix Or Multi-lift Materials	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Roto-mill, Roto-grinder	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Saws - Concrete	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Scraper, Self Propelled Under 45 Yards	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Scrapers - Concrete & Carry All	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Scrapers, Self-propelled: 45 Yards And Over	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Service Engineers - Equipment	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Shotcrete/gunite Equipment	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$53.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Slipform Pavers	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Spreader, Topsider & Screedman	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Subgrader Trimmer	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Tower Bucket Elevators	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Tower Crane Over 175'in Height, Base To Boom	\$53.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Tower Crane Up To 175' In Height Base To Boom	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Transporters, All Track Or Truck Type	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Trenching Machines	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Truck Crane Oiler/driver - 100 Tons And Over	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Truck Crane Oiler/driver Under 100 Tons	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Truck Mount Portable Conveyor	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Welder	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Wheel Tractors, Farmall Type	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators	Yo Yo Pay Dozer	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Asphalt Plant Operators	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>

Snohomish	Power Equipment Operators- Underground Sewer & Water	Assistant Engineer	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Barrier Machine (zipper)	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Batch Plant Operator, Concrete	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Bobcat	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Brokk - Remote Demolition Equipment	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Brooms	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Bump Cutter	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cableways	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Chipper	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Compressor	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Over 42 M	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Concrete Finish Machine -laser Screed	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Concrete Pump - Mounted Or Trailer High Pressure Line Pump, Pump High Pressure.	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Concrete Pump: Truck Mount With Boom Attachment Up To 42m	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Conveyors	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 20 Tons Through 44 Tons With Attachments Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 100 Tons Through 199 Tons, Or 150' Of Boom (including Jib With	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 200 Tons To 300 Tons, Or 250' Of Boom (including Jib With Attachments)	\$53.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: 45 Tons Through 99 Tons, Under 150' Of Boom (including Jib With Attachments)	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: A-frame - 10 Tons And Under	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
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Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: Friction 100 Tons Through 199 Tons	\$53.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: Friction Over 200 Tons	\$53.57	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: Over 300 Tons Or 300' Of Boom (including Jib With Attachments)	\$53.57	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Cranes: Through 19 Tons With Attachments A-frame Over 10 Tons	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Crusher	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Deck Engineer/deck Winches (power)	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Derricks, On Building Work	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Dozer Quad 9, HD 41, D10 and Over	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Dozers D-9 & Under	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Drill Oilers: Auger Type, Truck Or Crane Mount	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Drilling Machine	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Elevator And Man-lift: Permanent And Shaft Type	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Finishing Machine, Bidwell And Gamaco & Similar Equipment	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Forklift: 3000 Lbs And Over With Attachments	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Forklifts: Under 3000 Lbs. With Attachments	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Grade Engineer: Using Blue Prints, Cut Sheets, Etc	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Gradechecker/stakeman	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Guardrail Punch	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Guardrail Punch/Auger	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off- Road Equipment 45 Yards. & Over	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Hard Tail End Dump Articulating Off-road Equipment Under 45 Yards	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Horizontal/directional Drill Locator	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-	Horizontal/directional Drill	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>

Snohomish	Power Equipment Operators- Underground Sewer & Water	Hydralifts/boom Trucks Over 10 Tons	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Hydralifts/boom Trucks, 10 Tons And Under	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead 8 Yards. & Over	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loader, Overhead, 6 Yards. But Not Including 8 Yards	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loaders, Overhead Under 6 Yards	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loaders, Plant Feed	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Loaders: Elevating Type Belt	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Locomotives, All	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Material Transfer Device	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Mechanics, All (leadmen - \$0.50 Per Hour Over Mechanic)	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Mixers: Asphalt Plant	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Motor Patrol Grader - Non- finishing	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Motor Patrol Graders, Finishing	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Mucking Machine, Mole, Tunnel Drill, Boring, Road Header And/or Shield	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Oil Distributors, Blower Distribution & Mulch Seeding Operator	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Outside Hoists (elevators And Manlifts), Air Tuggers,strato	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type Crane: 20 Tons Through 44 Tons	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type: 100 Tons And Over	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Overhead, Bridge Type: 45 Tons Through 99 Tons	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Pavement Breaker	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Pile Driver (other Than Crane Mount)	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Plant Oiler - Asphalt, Crusher	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Posthole Digger, Mechanical	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators-	Power Plant	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>

	Underground Sewer & Water					
Snohomish	Power Equipment Operators- Underground Sewer & Water	Pumps - Water	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Quad 9, Hd 41, D10 And Over	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Quick Tower - No Cab, Under 100 Feet In Height Based To Boom	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Remote Control Operator On Rubber Tired Earth Moving Equipment	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Rigger And Bellman	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Rollagon	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Roller, Other Than Plant Mix	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Roller, Plant Mix Or Multi-lift Materials	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Roto-mill, Roto-grinder	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Saws - Concrete	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Scraper, Self Propelled Under 45 Yards	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Scrapers - Concrete & Carry All	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Scrapers, Self-propelled: 45 Yards And Over	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Service Engineers - Equipment	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Shotcrete/gunite Equipment	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Shovel , Excavator, Backhoe, Tractors Under 15 Metric Tons.	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoe: Over 30 Metric Tons To 50 Metric Tons	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes, Tractors: 15 To 30 Metric Tons	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 50 Metric Tons To 90 Metric Tons	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Shovel, Excavator, Backhoes: Over 90 Metric Tons	\$53.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Slipform Pavers	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Spreader, Topsider & Screedman	\$51.89	<u>7</u> A	<u>3C</u>	<u>8P</u>

Snohomish	Power Equipment Operators- Underground Sewer & Water	Subgrader Trimmer	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Tower Bucket Elevators	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Tower Crane Over 175'in Height, Base To Boom	\$53.01	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Tower Crane Up To 175' In Height Base To Boom	\$52.44	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Transporters, All Track Or Truck Type	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Trenching Machines	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/driver - 100 Tons And Over	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Truck Crane Oiler/driver Under 100 Tons	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Truck Mount Portable Conveyor	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Welder	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Wheel Tractors, Farmall Type	\$48.62	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Equipment Operators- Underground Sewer & Water	Yo Yo Pay Dozer	\$51.40	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Power Line Clearance Tree Trimmers	Journey Level In Charge	\$42.91	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Spray Person	\$40.73	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Tree Equipment Operator	\$41.29	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Tree Trimmer	\$38.38	<u>5A</u>	<u>4A</u>	
Snohomish	Power Line Clearance Tree Trimmers	Tree Trimmer Groundperson	\$28.95	<u>5A</u>	<u>4A</u>	
Snohomish	Refrigeration & Air Conditioning Mechanics	Mechanic	\$61.57	<u>5A</u>	<u>1G</u>	
Snohomish	Residential Brick Mason	Journey Level	\$20.00		<u>1</u>	
Snohomish	Residential Carpenters	Journey Level	\$38.60	<u>5D</u>	<u>1M</u>	
Snohomish	Residential Cement Masons	Journey Level	\$14.00	<u> </u>	<u><u>1</u></u>	
Snohomish	Residential Drywall Applicators	Journey Level	\$38.08	<u>5D</u>	<u>1M</u>	
Snohomish	Residential Drywall Tapers	Journey Level	\$49.79	<u>5P</u>	<u>1E</u>	
Snohomish	Residential Electricians	Journey Level	\$30.62	<u>7F</u>	<u>1D</u>	
Snohomish	Residential Glaziers	Journey Level	\$34.60	<u>7L</u>	<u>1H</u>	
Snohomish	Residential Insulation Applicators	Journey Level	\$25.68		<u><u>1</u></u>	
Snohomish	Residential Laborers	Journey Level	\$20.73		<u>1</u>	
Snohomish	Residential Marble Setters	Journey Level	\$30.74		1	
Snohomish	Residential Painters	Journey Level	\$17.46		1	
		+			<u>⊢</u>	+

Snohomish	<u>Residential Plumbers &</u> <u>Pipefitters</u>	Journey Level	\$28.99		<u>1</u>	
Snohomish	Residential Refrigeration & Air Conditioning Mechanics	Journey Level	\$38.78	<u>5A</u>	<u>1G</u>	
Snohomish	Residential Sheet Metal Workers	Journey Level (Field or Shop)	\$41.30	<u>7F</u>	<u>1R</u>	
Snohomish	Residential Soft Floor Layers	Journey Level	\$41.78	<u>5A</u>	<u>3D</u>	
Snohomish	<u>Residential Sprinkler Fitters</u> (Fire Protection)	Journey Level	\$41.31	<u>5C</u>	<u>2R</u>	
Snohomish	Residential Stone Masons	Journey Level	\$30.74		<u>1</u>	
Snohomish	<u>Residential Terrazzo Workers</u>	Journey Level	\$9.04		<u>1</u>	
Snohomish	<u>Residential Terrazzo/Tile</u> <u>Finishers</u>	Journey Level	\$21.60		<u>1</u>	
Snohomish	Residential Tile Setters	Journey Level	\$25.17		<u>1</u>	
Snohomish	Roofers	Journey Level	\$43.90	<u>5A</u>	<u>1R</u>	
Snohomish	<u>Roofers</u>	Using Irritable Bituminous Materials	\$46.90	<u>5A</u>	<u>1R</u>	
Snohomish	Sheet Metal Workers	Journey Level (Field or Shop)	\$68.52	<u>7F</u>	<u>1E</u>	
Snohomish	Shipbuilding & Ship Repair	Boilermaker	\$35.83	<u>7M</u>	<u>1H</u>	
Snohomish	Shipbuilding & Ship Repair	Carpenter	\$34.13	<u>7R</u>	<u>2B</u>	
Snohomish	Shipbuilding & Ship Repair	Electrician	\$32.88	<u>5T</u>	<u>3E</u>	
Snohomish	Shipbuilding & Ship Repair	Heat & Frost Insulator	\$56.93	<u>5J</u>	<u>15</u>	
Snohomish	Shipbuilding & Ship Repair	Laborer	\$24.59	<u>5T</u>	<u>3E</u>	
Snohomish	Shipbuilding & Ship Repair	Machinist	\$32.88	<u>5T</u>	<u>3E</u>	
Snohomish	Shipbuilding & Ship Repair	Painter	\$37.51	<u>6Z</u>	<u>2B</u>	
Snohomish	Shipbuilding & Ship Repair	Shipfitter	\$32.88	<u>5T</u>	<u>3E</u>	
Snohomish	Shipbuilding & Ship Repair	Welder/Burner	\$32.88	<u>5T</u>	<u>3E</u>	
Snohomish	<u>Sign Makers & Installers</u> (<u>Electrical)</u>	Sign Installer	\$26.56		<u>1</u>	
Snohomish	<u>Sign Makers & Installers</u> (<u>Electrical)</u>	Sign Maker	\$20.50		<u>1</u>	
Snohomish	<u>Sign Makers & Installers (Non- Electrical)</u>	Sign Installer	\$22.56		<u>1</u>	
Snohomish	<u>Sign Makers & Installers (Non- Electrical)</u>	Sign Maker	\$20.50		<u>1</u>	
Snohomish	<u>Soft Floor Layers</u>	Journey Level	\$41.78	<u>5A</u>	<u>3D</u>	
Snohomish	Solar Controls For Windows	Journey Level	\$9.04		<u>1</u>	
Snohomish	<u>Sprinkler Fitters (Fire</u> <u>Protection)</u>	Journey Level	\$69.44	<u>5C</u>	<u>1X</u>	
Snohomish	<u>Stage Rigging Mechanics (Non</u> <u>Structural)</u>	Journey Level	\$13.23		<u>1</u>	
Snohomish	Stone Masons	Journey Level	\$49.07	<u>5A</u>	<u>1M</u>	
Snohomish	Street And Parking Lot Sweeper Workers	Journey Level	\$15.00		1	
Snohomish	Surveyors	Assistant Construction Site Surveyor	\$50.98	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	Surveyors	Chainman	\$50.46	<u>7A</u>	<u>3C</u>	<u>8P</u>

Snohomish	<u>Surveyors</u>	Construction Site Surveyor	\$51.89	<u>7A</u>	<u>3C</u>	<u>8P</u>
Snohomish	<u>Telecommunication</u> <u>Technicians</u>	Journey Level	\$22.38		<u>1</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Cable Splicer	\$35.09	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Hole Digger/Ground Person	\$19.22	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Installer (Repairer)	\$33.63	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Special Aparatus Installer I	\$35.09	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Special Apparatus Installer II	\$34.37	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Telephone Equipment Operator (Heavy)	\$35.09	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Telephone Equipment Operator (Light)	\$32.62	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Telephone Lineperson	\$32.62	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Television Groundperson	\$18.65	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Television Lineperson/Installer	\$24.66	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Television System Technician	\$29.42	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Television Technician	\$26.43	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Telephone Line Construction -</u> <u>Outside</u>	Tree Trimmer	\$32.95	<u>5A</u>	<u>2B</u>	
Snohomish	<u>Terrazzo Workers</u>	Journey Level	\$45.43	<u>5A</u>	<u>1M</u>	
Snohomish	<u>Tile Setters</u>	Journey Level	\$45.43	<u>5A</u>	<u>1M</u>	
Snohomish	<u>Tile, Marble & Terrazzo</u> <u>Finishers</u>	Finisher	\$37.76	<u>5A</u>	<u>1B</u>	
Snohomish	Traffic Control Stripers	Journey Level	\$41.27	<u>7A</u>	<u>1K</u>	
Snohomish	Truck Drivers	Asphalt Mix Over 16 Yards (W. WA-Joint Council 28)	\$47.91	<u>5D</u>	<u>3A</u>	<u>8L</u>
Snohomish	Truck Drivers	Asphalt Mix To 16 Yards (W. WA-Joint Council 28)	\$47.07	<u>5D</u>	<u>3A</u>	<u>8L</u>
Snohomish	Truck Drivers	Dump Truck	\$37.94		1	
Snohomish	Truck Drivers	Dump Truck And Trailer	\$38.52		<u><u>1</u></u>	
Snohomish	Truck Drivers	Other Trucks	\$38.52		1	
Snohomish	Truck Drivers	Transit Mixer	\$38.00	<u>61</u>	<u>1B</u>	
Snohomish	Well Drillers & Irrigation Pump Installers	Irrigation Pump Installer	\$17.05		<u>1</u>	
Snohomish	Well Drillers & Irrigation Pump Installers	Oiler	\$13.93		<u>1</u>	
Snohomish	Well Drillers & Irrigation Pump Installers	Well Driller	\$19.01		<u>1</u>	

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General Decision Number: WA120001 11/16/2012 WA1

Superseded General Decision Number: WA20100001

State: Washington

Construction Type: Highway

Counties: Washington Statewide.

HIGHWAY (Excludes D.O.E. Hanford Site in Benton and Franklin Counties)

Modification	Number	Publication	Date
0		01/06/2012	
1		01/13/2012	
2		02/10/2012	
3		02/17/2012	
4		03/23/2012	
5		04/06/2012	
6		04/13/2012	
7		04/27/2012	
8		05/04/2012	
9		06/08/2012	
10		06/15/2012	
11		06/29/2012	
12		07/06/2012	
13		07/20/2012	
14		08/03/2012	
15		08/10/2012	
16		09/07/2012	
17		09/21/2012	
18		10/05/2012	
19		11/16/2012	

CARP0001-008 09/01/2009

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:\$ 27.73	10.56
GROUP 2:\$ 29.73	10.56
GROUP 3:\$ 28.00	10.56
GROUP 4:\$ 27.73	10.56
GROUP 5:\$ 63.50	10.56
GROUP 6\$ 30.75	10.56
GROUP 7\$ 31.75	10.56
GROUP 8\$ 28.00	10.56
GROUP 9\$ 33.75	10.56
SPOKANE AREA: ASOTIN,	
GARFIELD, LINCOLN, PEND	

OREILLE, SPOKANE, STEVENS AND WHITMAN COUNTIES GROUP 1:....\$ 26.06 10.56 GROUP 2:....\$ 28.06 10.56 GROUP 3:....\$ 26.32 10.56 GROUP 4:....\$ 26.06 10.56 GROUP 5:....\$ 60.14 10.56 GROUP 6:....\$ 29.07 10.56 GROUP 7....\$ 30.07 10.56 GROUP 8.....\$ 27.32 10.56 GROUP 9.....\$ 33.07 10.56 CARPENTER & DIVER CLASSIFICATIONS: GROUP 1: Carpenter GROUP 2: Millwright, machine erector GROUP 3: Piledriver - includes driving, pulling, cutting, placing collars, setting, welding, or creosote treated material, on all piling GROUP 4: Bridge carpenters GROUP 5: Diver Wet GROUP 6: Diver Tender, Manifold Operator, ROV Operator GROUP 7: Diver Standby, Bell/Vehicle or Submersible operator Not Under Pressure GROUP 8: Assistant Tender, ROV Tender/Technician GROUP 9: Manifold Operator-Mixed Gas ZONE PAY: ZONE 1 0-40 MILES FREE 41-65 MILES ZONE 2 \$2.25/PER HOUR 66-100 MILES \$3.25/PER HOUR ZONE 3 ZONE 4 OVER 100 MILES \$4.75/PER HOUR **DISPATCH POINTS:** CARPENTERS/MILLWRIGHTS: PASCO (515 N Neel Street) or Main Post Office of established residence of employee (Whichever is closest to the worksite). CARPENTERS/PILEDRIVER: SPOKANE (127 E. AUGUSTA AVE.) or Main Post Office of established residence of employee (Whichever is closest to the worksite). CARPENTERS: WENATCHEE (27 N. CHELAN) or Main Post Office of established residence of employee (Whichever is closest to the worksite). CARPENTERS: COEUR D' ALENE (1839 N. GOVERNMENT WAY) or Main Post Office of established residence of employee (Whichever is closest to the worksite). CARPENTERS: MOSCOW (302 N. JACKSON) or Main Post Office of

established residence of employee (Whichever is closest to the worksite). DEPTH PAY FOR DIVERS BELOW WATER SURFACE: 50-100 feet \$2.00 per foot 101-150 feet \$3.00 per foot 151-220 feet \$4.00 per foot 221 feet and deeper \$5.00 per foot PREMIUM PAY FOR DIVING IN ENCLOSURES WITH NO VERTICAL ASCENT: 0-25 feet Free 26-300 feet \$1.00 per Foot SATURATION DIVING: The standby rate applies until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. the diver rate shall be paid for all saturation hours. WORK IN COMBINATION OF CLASSIFICATIONS: Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift. HAZMAT PROJECTS: Anyone working on a HAZMAT job (task), where HAZMAT certification is required, shall be compensated at a premium, in addition to the classification working in as follows: LEVEL D + \$.25 per hour - This is the lowest level of protection. No respirator is used and skin protection is minimal. LEVEL C + \$.50 per hour - This level uses an air purifying respirator or additional protective clothing. LEVEL B + \$.75 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical "splash suit". LEVEL A +\$1.00 per hour - This level utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line. _____ CARP0003-006 10/01/2011

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

SEE ZONE DESCRIPTION FOR CITIES BASE POINTS

ZONE 1:

	Rates	Fringes
Carpenters: CARPENTERS	32.04 36.34 77.08 27.56 32.19 33.04 CR 50 FEET VER 101 FEE DVER 151 FE	14.18 14.18 14.18 14.18 14.18 14.18 14.18
Zone Differential (Add up Zone 1 r Zone 2 - \$0.85 Zone 3 - 1.25 Zone 4 - 1.70 Zone 5 - 2.00 Zone 6 - 3.00	rates):	
BASEPOINTS: ASTORIA, LONGVIEW, VANCOUVER, (NOTE: All dispatch Counties: Cowlitz, Wahkiakum and Longview Local #1707 and mileage that point.)	PORTLAND, nes for Was Pacific s shall be	THE DALLES, AND shington State shall be from computed from
ZONE 1: Projects located within city hall of the above mentioned ZONE 2: Projects located more t miles of the respective city of ZONE 3: Projects located more t miles of the respective city of ZONE 4: Projects located more t miles of the respective city of ZONE 5: Projects located more t miles of the respective city of ZONE 6: Projects located more t city of the above mentioned citi	a 30 miles d cities than 30 mil the above than 40 mil the above than 50 mil the above than 60 mil the above than 70 mil es	of the respective les and less than 40 mentioned cities les and less than 50 mentioned cities les and less than 60 mentioned cities. les and less than 70 mentioned cities les of the respected
CARP0770-003 06/01/2010		
Carpenters: CENTRAL WASHINGTON: CHELAN, DOUGLAS (WEST OF THE 120TH MERIDIAN), KITTITAS, OKANOGAN (WEST OF THE 120TH MERIDIAN) AND YAKIMA COUNTIES CARPENTERS ON CREOSOTE MATERIAL	Rates 35.49 35.39 39.15 87.20 36.39	Fringes 12.60 12.60 12.60 12.60 12.60

PILEDRIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE TREATED MATERIAL, ALL PILING.....\$ 35.59 12.60 (HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIVERS Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities: Olympia Bellingham Bremerton Anacortes Shelton Yakima Seattle Auburn Renton ADDELGEEN-HoquiamTacomaWenatcheeEllensburgEverettPort AngelesCentraliaMount VernonSunnysideChelanPt. Townsend Zone Pay: 0 -25 radius miles Free 26-35 radius miles \$1.00/hour 36-45 radius miles\$1.15/hour46-55 radius miles\$1.35/hour Over 55 radius miles \$1.55/hour (HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT AND PILEDRIVER ONLY) Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center Zone Pay: 0 -25 radius miles Free 26-45 radius miles \$.70/hour Over 45 radius miles \$1.50/hour _____ CARP0770-006 06/01/2010 Rates Fringes Carpenters: 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 BRIDGE CARPENTERS.....\$ 35.39 13.08 CARPENTERS ON CREOSOTE

MATERIAL....\$ 35.49 13.08 CARPENTERS.....\$ 35.39 13.08 DIVERS TENDER.....\$ 39.15 13.08 DIVERS.....\$ 87.20 13.08 MILLWRIGHT AND MACHINE ERECTORS.....\$ 36.39 13.08 PILEDRIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE TREATED MATERIAL, ALL PILING.....\$ 35.59 13.08 (HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - ALL CLASSIFICATIONS EXCEPT MILLWRIGHTS AND PILEDRIVERS Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities: Olympia Bellingham Bremerton Anacortes Shelton Yakima Seattle Auburn Renton Aberdeen-Hoquiam Tacoma Wenatchee Aberdeen-hoquiamfacomawenatcheeEllensburgEverettPort AngelesCentraliaMount VernonSunnysideChelanPt. Townsend Zone Pay: 0 -25 radius miles Free 26-35 radius miles \$1.00/hour 36-45 radius miles \$1.15/hour 46-55 radius miles \$1.35/hour Over 55 radius miles \$1.55/hour (HOURLY ZONE PAY: WESTERN AND CENTRAL WASHINGTON - MILLWRIGHT AND PILEDRIVER ONLY) Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center Zone Pay: 0 -25 radius miles Free 26-45 radius miles \$.70/hour Over 45 radius miles \$1.50/hour _____ * ELEC0046-001 07/02/2012 CALLAM, JEFFERSON, KING AND KITSAP COUNTIES Rates Fringes CABLE SPLICER.....\$ 45.66 38+15.71 ELECTRICIAN.....\$ 41.51 _____ * ELEC0048-003 07/02/2012 CLARK, KLICKITAT AND SKAMANIA COUNTIES Rates Fringes

CABLE SPLICER.....\$ 40.75 18.41 ELECTRICIAN.....\$ 37.05 18.41 HOURLY ZONE PAY: Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities: Portland, The Dalles, Hood River, Tillamook, Seaside and Astoria Zone Pay: Zone 1: 31-50 miles \$1.50/hour Zone 2: 51-70 miles \$3.50/hour Zone 3: 71-90 miles \$5.50/hour Zone 4: Beyond 90 miles \$9.00/hour *These are not miles driven. Zones are based on Delorrne Street Atlas USA 2006 plus. ELEC0048-029 07/02/2012 COWLITZ AND WAHKIAKUM COUNTY Rates Fringes 15.36 CABLE SPLICER.....\$ 40.75 15.36 ELECTRICIAN.....\$ 37.05 _____ ELEC0073-001 07/01/2012 ADAMS, FERRY, LINCOLN, PEND OREILLE, SPOKANE, STEVENS, WHITMAN COUNTIES Rates Fringes CABLE SPLICER.....\$ 31.70 15.39 15.39 ELECTRICIAN.....\$ 28.82 _____ _____ ELEC0076-002 09/01/2011 GRAYS HARBOR, LEWIS, MASON, PACIFIC, PIERCE, AND THURSTON COUNTIES Rates Fringes CABLE SPLICER.....\$ 37.54 21.62 ELECTRICIAN.....\$ 34.13 21.62 _____ ELEC0112-005 06/01/2011 ASOTIN, BENTON, COLUMBIA, FRANKLIN, GARFIELD, KITTITAS, WALLA WALLA, YAKIMA COUNTIES

Rates

Fringes

 CABLE SPLICER.......\$ 37.70
 35+14.63

 ELECTRICIAN......\$ 35.90
 3%+14.63

ELEC0191-003 07/01/2011

ISLAND, SAN JUAN, SNOHOMISH, SKAGIT AND WHATCOM COUNTIES

	Rates	Fringes	
CABLE SPLICER ELECTRICIAN	\$ 42.91 \$ 39.01	15.39 15.39	

ELEC0191-004 07/01/2011

CHELAN, DOUGLAS, GRANT AND OKANOGAN COUNTIES

	Rates	Fringes	
CABLE SPLICER	\$ 39.28	15.24	
ELECTRICIAN	\$ 35.71	15.24	

ENGI0302-003 06/01/2011

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: 15.15 Group 1A.....\$ 35.79 Group 1AA.....\$ 36.36 15.15 Group 1AAA.....\$ 36.92 15.15 15.15 Group 1.....\$ 35.24 Group 2....\$ 34.75 15.15 Group 3.....\$ 34.33 15.15 Group 4.....\$ 31.97 15.15 Zone Differential (Add to Zone 1 rates): Zone 2 (26-45 radius miles) - \$1.00 Zone 3 (Over 45 radius miles) - \$1.30 BASEPOINTS: Aberdeen, Bellingham, Bremerton, Everett, Kent, Mount Vernon, Port Angeles, Port Townsend, Seattle, Shelton, Wenatchee, Yakima POWER EQUIPMENT OPERATORS CLASSIFICATIONS GROUP 1AAA - Cranes-over 300 tons, or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes 200 to 300 tons, or 250 ft of boom

http://www.wdol.gov/wdol/scafiles/davisbacon/WA1.dvb?v=19

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

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

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

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

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

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

Category B Projects: 95% of the basic hourly reate for each group plus full fringe benefits applicable to category A projects shall apply to the following projects. A Reduced rates may be paid on the following:

1. Projects involving work on structures such as buildings and bridges whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.

2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.

3. Marine projects (docks, wharfs, etc.) less than \$150,000.

HANDLING OF HAZARDOUS WASTE MATERIALS:

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

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

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.

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:

 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.
 Projects of less than \$1 million where no building is involved. Surfacing and paving including, but utilities excluded.
 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.

ENGI0370-002 06/01/2011

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	\$ 24.41	12.05
GROUP 1	\$ 24.76	12.05
GROUP 2	\$ 25.08	12.05
GROUP 3	\$ 25.69	12.05
GROUP 4	\$ 25.85	12.05
GROUP 5	\$ 26.01	12.05
GROUP 6	\$ 26.29	12.05
GROUP 7	\$ 26.56	12.05
GROUP 8	\$ 27.66	12.05
ZONE DIFFERENTIAL (Add to Zone	1 rate): Zone 2	- \$2.00
Zone 1: Within 45 mile radiu Lewiston, Idaho	ıs of Spokane, Pas	sco, Washington;
Zone 2: Outside 45 mile rad: Washington; Lewiston, Idaho	ius of Spokane, Pa	isco,

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; Hydro-seeder, Mulcher, Nozzleman; Oiler Driver, & Cable Tender, Mucking Machine; Pumpman; Rollers, all types on subgrade, including seal and chip coatings (farm type, Case, John Deere & similar, or Compacting Vibrator), except when pulled by Dozer with operable blade; Welding Machine; Crane Oiler-Driver (CLD required) & Cable Tender, Mucking Machine

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

GROUP 3: A-frame Truck (2 or more drums); Assistant Refrigeration Plant & Chiller Operator (over 1000 ton); Backfillers (Cleveland & similar); Batch Plant & Wet Mix Operator, single unit (concrete); Belt-Crete Conveyors with power pack or similar; Belt Loader (Kocal or similar); Bending Machine; Bob Cat (Skid Steer); Boring Machine (earth); Boring Machine (rock under 8 inch bit) (Quarry Master, Joy or similar); Bump Cutter (Wayne, Saginau or similar); Canal Lining Machine (concrete); Chipper (without crane); Cleaning & Doping Machine (pipeline); Deck Engineer; Elevating Belt-type Loader (Euclid, Barber Green & similar); Elevating Grader-type Loader (Dumor, Adams or similar); Generator Plant Engineers (diesel or electric); Gunnite Combination Mixer & Compressor; Locomotive Engineer; Mixermobile; Mucking Machine; Posthole Auger or Punch; Pump (grout or jet); Soil Stabilizer (P & H or similar); Spreader Machine; Dozer/Tractor (up to D-6 or equivalent) and Traxcavator; Traverse Finish Machine; Turnhead Operator

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

GROUP 5: Backhoe (under 45,000 gw); Backhoe & Hoe Ram (under 3/4 yd.); Carrydeck & Boom Truck (under 25 tons); Cranes (25 tons & under), all attachments including clamshell, dragline; Derricks & Stifflegs (under 65 tons); Drilling Equipment(8 inch bit & over) (Robbins, reverse circulation & similar); Hoe Ram; Piledriving Engineers; Paving (dual drum); Railroad Track Liner Operaotr (self-propelled); Refrigeration Plant Engineer (1000 tons & over); Signalman (Whirleys, Highline Hammerheads or similar); Grade Checker

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

GROUP 7: Backhoe (over 110,000 gw); Backhoes & Hoe Ram (3 yds & over); Blade (finish & bluetop) Automatic, CMI, ABC, Finish Athey & Huber & similar when used as automatic; Cableway Operators; Concrete Cleaning/Decontamination machine operator; Cranes (over 45 tons to but not including 85 tons), all attachments including clamshell and dragine; Derricks & Stiffleys (65 tons & over); Elevating Belt (Holland type); Heavy equipment robotics operator; Loader (360 degrees revolving Koehring Scooper or similar); Loaders (overhead & front-end, over 8 yds. to 10 yds.); Rubber-tired Scrapers (multiple engine with three or more scrapers); Shovels (3 yds. & over); Whirleys & Hammerheads, ALL; H.D. Mechanic; H.D. Welder; Hydraulic Platform Trailers (Goldhofer, Shaurerly and Similar); Ultra High Pressure Wateriet Cutting Tool System Operator (30,000 psi); Vacuum Blasting Machine Operator
GROUP 8: Cranes (85 tons and over, and all climbing, overhead, rail and tower), all attachments including clamshell, dragline; Loaders (overhead and front-end, 10 yards and over); Helicopter Pilot BOOM PAY: (All Cranes, Including Tower) 180 ft to 250 ft \$.50 over scale Over 250 ft \$.80 over scale NOTE: In computing the length of the boom on Tower Cranes, they shall be measured from the base of the Tower to the point of the boom. HAZMAT: Anyone working on HAZMAT jobs, working with supplied air shall receive \$1.00 an hour above classification. _____ ENGI0612-006 06/01/2011 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: 15.15 GROUP 1A.....\$ 35.79 GROUP 1AA.....\$ 36.36 15.15 GROUP 1AAA.....\$ 36.92 15.15 GROUP 1.....\$ 35.24 15.15 GROUP 2.....\$ 34.75 15.15 15.15 GROUP 3.....\$ 34.33 GROUP 4.....\$ 31.97 15.15 Zone Differential (Add to Zone 1 rates): Zone 2 (26-45 radius miles) = \$.70Zone 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, bas to boom GROUP 1A - Cranes, 100 tons thru 199 tons, or 150 ft of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft in height

base to boom; Loaders-overhead, 8 yards and over; Shovels, excavator, backhoes-6 yards and over with attachments

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

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

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

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

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

1. Projects involving work on structures such as buildings and bridges whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract. 2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded. 3. Marine projects (docks, wharfs, etc.) less than \$150,000. HANDLING OF HAZARDOUS WASTE MATERIALS: Personnel in all craft classifications subject to working inside a federally designated hazardous perimeter shall be elgible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan. H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing 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 01/01/2012 CLARK, COWLITZ, KLICKKITAT, PACIFIC (SOUTH), SKAMANIA, AND WAHKIAKUM COUNTIES POWER RQUIPMENT OPERATORS: ZONE 1 Rates Fringes Power equipment operators: (See Footnote A) GROUP 1.....\$ 37.27 12.08 GROUP 1A.....\$ 39.13 12.08 12.08 GROUP 1B.....\$ 41.00 GROUP 2.....\$ 35.64 12.08 GROUP 3.....\$ 34.64 12.08 GROUP 4.....\$ 33.71 12.08 GROUP 5....\$ 32.60 12.08 GROUP 6.....\$ 29.61 12.08 Zone Differential (add to Zone 1 rates): Zone 2 - \$3.00 Zone 3 - \$6.00 For the following metropolitan counties: MULTNOMAH; CLACKAMAS; MARION; WASHINGTON; YAMHILL; AND COLUMBIA; CLARK; AND COWLITZ COUNTY, WASHINGTON WITH MODIFICATIONS AS INDICATED: All jobs or projects located in Multnomah, Clackamas and Marion Counties, West of the western boundary of Mt. Hood National Forest and West of Mile Post 30 on Interstate 84 and West of Mile Post 30 on State Highway 26 and West of

Mile Post 30 on Highway 22 and all jobs or projects located

in Yamhill County, Washington County and Columbia County and all jobs or porjects located in Clark & Cowlitz County, Washington except that portion of Cowlitz County in the Mt. St. Helens "Blast Zone" shall receive Zone I pay for all classifications.

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

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

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

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

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

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

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: CONCRETE: Batch 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 (without 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: Rubbertired 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.; HYDRAULIC CRANE: Hydraulic crane operator, 50 tons through 89 tons (with luffing or tower attachment);

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 (without 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, selfunloading; Piledriver Operator (not crane type) (Deckhand required); Floating Clamshelll, 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 20,0000 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; Stationay Drag Scraper Operator; Shovel, Dragline, Clamshell, Operator under 3 cy 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; Beltcrete 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 mahine 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: Churm 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 HAULRS: 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 Feederman; CRUSHER: Crusher oiler; Crusher feederman; 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

IRON0014-005 01/01/2012

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

	Rates	Fringes	
IRONWORKER	\$ 31.35	20.10	
IRON0029-002 01/01/2012			
CLARK, COWLITZ, KLICKITAT, COUNTIES	PACIFIC, SKAMANIA,	AND WAHKAIKUM	
	Rates	Fringes	
IRONWORKER	\$ 33.87	20.10	
IRON0086-002 07/01/2012			
YAKIMA, KITTITAS AND CHELAN	I COUNTIES		

Rates

Fringes

http://www.wdol.gov/wdol/scafiles/davisbacon/WA1.dvb?v=19

IRONWORKER.....\$ 31.35 20.10 _____ IRON0086-004 01/01/2012 CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PIERCE, SKAGIT, SNOHOMISH, THURSTON, AND WHATCOM COUNTIES Rates Fringes IRONWORKER.....\$ 37.89 20.10 _____ LABO0001-002 06/01/2009 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 WAHKIAKUM COUNTY WEST TO THE PACIFIC OCEAN), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES GROUP 1.....\$ 21.77 9.07 GROUP 2.....\$ 24.86 9.07 9.07 GROUP 3.....\$ 30.96 GROUP 4.....\$ 31.70 9.07 GROUP 5.....\$ 32.21 9.07 CHELAN, DOUGLAS (WEST OF THE 120TH MERIDIAN), KITTITAS AND YAKIMA COUNTIES GROUP 1.....\$ 17.95 9.07 GROUP 2.....\$ 20.58 9.07 GROUP 3.....\$ 22.54 9.07 GROUP 4.....\$ 23.09 9.07 GROUP 5.....\$ 23.48 9.07 BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT, SEATTLE, KENT, TACOMA, OLYMPIA, CENTRALIA, ABERDEEN, SHELTON, PT. TOWNSEND, PT. ANGELES, AND BREMERTON ZONE 1 - Projects within 25 radius miles of the respective city hall ZONE 2 - More than 25 but less than 45 radius miles from the respective city hall ZONE 3 - More than 45 radius miles from the respective city hall ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES): ZONE 2 - \$1.00 ZONE 3 - \$1.30

BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE, AND YAKIMA

ZONE 1 - Projects within 25 radius miles of the respective city hall ZONE 2 - More than 25 radius miles from the respective city hall

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES): ZONE 2 - \$2.25

LABORERS CLASSIFICATIONS

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

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

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

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B: uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical "splash suit"); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20 ft); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Miner; Mortarman and Hodcarrier; Powderman; Re-Timberman; Hazardous Waste Worker (Level A: utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line).

LAB00238-004 06/01/2012

PASCO AREA: ADAMS, BENTON, COLUMBIA, DOUGLAS (East of 120th Meridian), FERRY, FRANKLIN, GRANT, OKANOGAN, WALLA WALLA

SPOKANE AREA: ASOTIN, GARFIELD, LINCOLN, PEND OREILLE, SPOKANE, STEVENS & WHITMAN COUNTIES

	Rates	Fringes
LABORER (PASCO)		
GROUP 1\$	3 21.71	10.30
GROUP 2\$	3 23.81	10.30
GROUP 3\$	24.08	10.30
GROUP 4\$	24.35	10.30
GROUP 5\$	24.63	10.30
LABORER (SPOKANE)		
GROUP 1\$	21.41	10.30
GROUP 2\$	23.51	10.30
GROUP 3	3 23.78	10.30
GROUP 4	24.05	10.30
GROUP 5\$	\$ 24.33	10.30

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

BASE POINTS: Spokane, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office. Zone 2: 45 radius miles and over from the main post office.

LABORERS CLASSIFICATIONS

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

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

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

GROUP 3: Aspahlt 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); Nozzleman (to include squeeze and flo-crete nozzle); Nozzleman, water, air or steam; Pavement Breaker (under 90 lbs.); Pipelayer, corrugated metal culvert; Pipelayer, multi- plate; Pot Tender; Power Buggy Operator; Power Tool Operator, gas, electric, pneumatic; Railroad Equipment, power driven, except dual mobile power spiker or puller; Railroad Power Spiker or Puller, dual mobile; Rodder and Spreader; Tamper (to include operation of Barco, Essex and similar tampers); Trencher, Shawnee; Tugger Operator; Wagon Drills; Water Pipe Liner; Wheelbarrow (power driven)

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

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

GROUP 6 - Powderman

LABO0238-006 06/01/2012

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

	Rates	Fringes
Hod Carrier	.\$ 23.78	10.30
LABO0335-001 06/01/2012		
CLARK, COWLITZ, KLICKITAT, PACIF MADE BY EXTENDING THE NORTH BOUN WEST TO THE PACIFIC OCEAN), SKAMA	IC (SOUTH OF A S DARY LINE OF WAH ANIA AND WAHKIAK	TRAIGHT LINE KIAKUM COUNTY UM COUNTIES
	Rates	Fringes
Laborers: ZONE 1: GROUP 1 GROUP 2 GROUP 3 GROUP 4 GROUP 5 GROUP 6 GROUP 7.	.\$ 28.24 .\$ 28.84 .\$ 29.28 .\$ 29.66 .\$ 25.74 .\$ 23.32 .\$ 20.12	9.70 9.70 9.70 9.70 9.70 9.70 9.70 9.70
Zone Differential (Add to Zone 1 Zone 2 \$ 0.65 Zone 3 - 1.15 Zone 4 - 1.70 Zone 5 - 2.75	rates):	
BASE POINTS: GOLDENDALE, LONGVI	EW, AND VANCOUVE	R
ZONE 1: Projects within 30 miles ZONE 2: More than 30 miles but respective city hall. ZONE 3: More than 40 miles but respective city hall. ZONE 4: More than 50 miles but respective city hall. ZONE 5: More than 80 miles from	s of the respect t less than 40 m t less than 50 m t less than 80 m om the respectiv	ive city all. iles from the iles from the iles from the e city hall.
LABORERS CLASSIFICATIONS		
GROUP 1: Asphalt Plant Laborer Weighman; Broomers; Brush Burne Truck Loaders; Carpenter Tender Shack Man; Choker Setter; Clear Concrete; Demolition, Wrecking Dumpers, road oiling crew; Dump	rs; Asphalt Spre ers and Cutters; r; Change-House n-up Laborers; C and Moving Labo omen (for gradin	aders; Batch Car and Man or Dry uring, rers; g crew);

Elevator Feeders; Median Rail Reference Post, Guide Post, Right of Way Marker; Fine Graders; Fire Watch; Form Strippers (not swinging stages); General Laborers; Hazardous Waste Worker; Leverman or Aggregate Spreader (Flaherty and similar types); Loading Spotters; Material

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

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

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

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

GROUP	5:	Traffic Flaggers		
GROUP	6:	Fence Builders		
GROUP	7:	Landscaping or Planting	Laborers	
LABO()335-	-019 06/01/2012		
			Rates	Fringes
Hod Ca	arrie	er	\$ 30.30	9.70
PAIN)005-			

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

	Rates	Fringes
Painters: STRIPERS	.\$ 27.96	12.77
PAIN0005-004 03/01/2009		
CLALLAM, GRAYS HARBOR, ISLAND, J MASON, PIERCE, SAN JUAN, SKAGIT, WHATCOM COUNTIES	EFFERSON, K SNOHOMISH,	ING, KITSAP, LEWIS, THURSTON AND
	Rates	Fringes
PAINTER	.\$ 20.82	7.44
* PAIN0005-006 07/01/2012		
ADAMS, ASOTIN; BENTON AND FRANKL CHELAN, COLUMBIA, DOUGLAS, FERRY LINCOLN, OKANOGAN, PEND OREILLE, WHITMAN AND YAKIMA COUNTIES	IN (EXCEPT , GARFIELD, SPOKANE, S	HANFORD SITE); GRANT, KITTITAS, TEVENS, WALLA WALLA,
	Rates	Fringes
Painters: Application of Cold Tar Products, Epoxies, Polyure thanes, Acids, Radiation Resistant Material, Water		
and Sandblasting Over 30'/Swing Stage Work.	.\$ 25.99 .\$ 22.20	9.99 7.98
Steam-cleaning and Spray Lead Abatement, Asbestos	.\$ 20.99	9.99
Abatement	.\$ 21.50	7.98
*\$.70 shall be paid over and a listed for work on swing stage feet.	bove the ba s and high	sic wage rates work of over 30
PAIN0055-002 07/01/2012		
CLARK, COWLITZ, KLICKITAT, PACIF COUNTIES	IC, SKAMANI.	A, AND WAHKIAKUM
	Rates	Fringes
Painters: Brush & Roller High work - All work 60	.\$ 20.61	8.42
ft. or higher Spray and Sandblasting	.\$ 21.36 .\$ 21.21	8.42 8.42

http://www.wdol.gov/wdol/scafiles/davisbacon/WA1.dvb?v=19

11/17/2012

PAIN0055-007 07/01/2011

CLARK, COWLITZ, KLICKITAT, SKAMANIA and WAHKIAKUM COUNTIES

Rates Fringes

Painters:

HIGHWAY & PARKING LOT		
STRIPER	\$ 33.19	9.05

PLAS0072-004 06/01/2012

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

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER ZONE 1	.\$ 25.43	11.97
Zone Differential (Add to Zone 1	rate): Zone 2 -	\$2.00
BASE POINTS: Spokane, Pasco, Le Zone 1: 0 - 45 radius miles fro Zone 2: Over 45 radius miles fr	wiston; Wenatche m the main post om the main post	e office office
PLAS0528-001 06/01/2012		
CLALLAM, COWLITZ, GRAYS HARBOR, KITSAP, LEWIS, MASON, PACIFIC, P SNOHOMISH, THURSTON, WAHKIAKUM A	ISLAND, JEFFERSO IERCE, SAN JUAN, ND WHATCOM COUNT	N, KING, SKAGIT, IES
	Rates	Fringes
Cement Masons: CEMENT MASON COMPOSITION, TROWEL	.\$ 35.88	14.25
TOOLS, GUNNITE NOZZLE	.\$ 36.38	14.25
ON COMPOSITION	.\$ 36.38	14.25
PLAS0555-002 06/01/2012		
CLARK, KLICKITAT AND SKAMANIA CO	UNTIES	
ZONE 1:		
	Rates	Fringes
Cement Masons: CEMENT MASONS DOING BOTH COMPOSITION/POWER MACHINERY AND SUSPENDED/HANGING SCAFFOLD.	.\$ 30.58	17.76
CERENT PIASONS ON		

SUSPENDED, SWINGING AND/OR HANGING SCAFFOLD.....\$ 30.58 17.76 CEMENT MASONS.....\$ 29.98 17.76 COMPOSITION WORKERS AND POWER MACHINERY OPERATORS...\$ 31.18 17.76 Zone Differential (Add To Zone 1 Rates): Zone 2 - \$0.65 Zone 3 - 1.15 Zone 4 - 1.70 Zone 5 - 3.00 BASE POINTS: BEND, CORVALLIS, EUGENE, MEDFORD, PORTLAND, SALEM, THE DALLES, VANCOUVER ZONE 1: Projects within 30 miles of the respective city hall ZONE 2: More than 30 miles but less than 40 miles from the respective city hall. ZONE 3: More than 40 miles but less than 50 miles from the respective city hall. ZONE 4: More than 50 miles but less than 80 miles from the respective city hall. ZONE 5: More than 80 miles from the respective city hall _____

TEAM0037-002 06/01/2012

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.....\$ 26.90 13.25 GROUP 2.....\$ 27.02 13.25 GROUP 3.....\$ 27.15 13.25 GROUP 4.....\$ 27.41 13.25 13.25 GROUP 5.....\$ 27.63 GROUP 6.....\$ 27.79 13.25 GROUP 7.....\$ 27.99 13.25 Zone Differential (Add to Zone 1 Rates): Zone 2 - \$0.65 Zone 3 - 1.15 Zone 4 - 1.70 Zone 5 - 2.75 BASE POINTS: ASTORIA, THE DALLES, LONGVIEW AND VANCOUVER ZONE 1: Projects within 30 miles of the respective city hall. ZONE 2: More than 30 miles but less than 40 miles from the respective city hall. ZONE 3: More than 40 miles but less than 50 miles from the respective city hall.

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

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

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: A Frame or Hydra lifrt truck w/load bearing surface; Articulated Dump Truck; Battery Rebuilders; Bus or Manhaul Driver; Concrete Buggies (power operated); Concrete Pump Truck; Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations there of: up to and including 10 cu. yds.; Lift Jitneys, Fork Lifts (all sizes in loading, unloading and transporting material on job site); Loader and/or Leverman on Concrete Dry Batch Plant (manually operated); Pilot Car; Pickup Truck; Solo Flat Bed and misc. Body Trucks, 0-10 tons; Truck Tender; Truck Mechanic Tender; Water Wagons (rated capacity) up to 3,000 gallons; Transit Mix and Wet or Dry Mix - 5 cu. yds. and under; Lubrication Man, Fuel Truck Driver, Tireman, Wash Rack, Steam Cleaner or combinations; Team Driver; Slurry Truck Driver or Leverman; Tireman

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

GROUP 3: Ammonia Nitrate Distributor Driver; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 10 cu. yds. and including 30 cu. yds. includes Articulated Dump Trucks; Self-Propelled Street Sweeper; Transit mix and wet or dry mix truck: over 7 cu yds. and including 11 cu yds.; Truck Mechanic-Welder-Body Repairman; Utility and Clean-up Truck; Water Wagons (rated capacity) over 5,000 to 10,000 gallons

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

GROUP 5: Composite Crewman; Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 50 cu. yds. and including 60 cu. yds. includes Articulated Dump Trucks

GROUP 6: Bulk Cement Spreader w/o Auger; Dry Pre-Batch concrete Mix Trucks; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains of combinations

thereof: over 60 cu. yds. and including 80 cu. yds., and includes Articulated Dump Trucks; Skid Truck

GROUP 7: Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 80 cu. yds. and including 100 cu. yds., includes Articulated Dump Trucks; Industrial Lift Truck (mechanical tailgate)

* TEAM0174-001 06/29/2012

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: GROUP 2:

-			
GROUP	1:\$	31.68	16.23
GROUP	2:\$	30.84	16.23
GROUP	3:\$	28.03	16.23
GROUP	4:\$	23.06	16.23
GROUP	5:\$	31.23	16.23

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 fullyencapsulated suit with a self-contained breathing apparatus or a supplied air line.

TEAM0760-002 06/01/2009

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:		
GROUP 1\$	20.02	10.86
GROUP 2\$	22.29	10.86
GROUP 3\$	22.79	10.86
GROUP 4\$	23.12	10.86

GROUP	5\$	23.23	10.86
GROUP	6\$	23.40	10.86
GROUP	7\$	23.93	10.86
GROUP	8\$	24.26	10.86

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: Outside 45 radius miles from the main post office

TRUCK DRIVERS CLASSIFICATIONS

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

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

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

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

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

GROUP 6: Flaherty Spreader Box Driver; Flowboys; Fork Lift (over 16,000 lbs.); Dumps (Semi-end); Mechanic (Field); Semi- end Dumps; Transfer Truck & Trailer; Transit Mixers & Trucks Hauling Concrete (over 10 yds. to & including 20 yds.); Trucks, side, end, bottom and articulated end dump (over 20 yds. to & including 40 yds.); Truck and Pup; Tournarocker, DWs & similar with 2 or more 4 wheel-power tractor with trailer, gallonage or yardage scale, whichever is greater Water Tank Truck (8,001- 14,000 gallons); Lowboy(over 50 tons) GROUP 7: Oil Distributor Driver; Stringer Truck (cable oeprated trailer); Transit Mixers & Trucks Hauling Concrete (over 20 yds.); Truck, side, end, bottom end dump (over 40 yds. to & including 100 yds.); Truck Mounted Crane (with load bearing surface either mounted or pulled (16 through 25 tons);

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

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

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

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

Employees shall be paid Hazmat pay in increments of four(4) and eight(8) hours.

NOTE:

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

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

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

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters, PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rate.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union rates, LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

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

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

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the

Branch of Construction Wage Determinations. Write to:

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

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

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

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

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

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

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

END OF GENERAL DECISION

APPENDIX B

GEOTECHNICAL REPORT

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Geotechnical Engineering Services

67th Avenue Phase III Improvement Project Arlington, Washington

for HDR Engineering, Inc.

November 4, 2010





Geotechnical Engineering Services

67th Avenue Phase III Improvement Project Arlington, Washington

for HDR Engineering, Inc.

November 4, 2010

8410 154th Avenue NE Redmond, Washington 98052 425.861.6000



Geotechnical Engineering Services

67th Avenue Phase III Improvement Project Arlington, Washington

File No. 5430-006-00

November 4, 2010

Prepared for:

HDR Engineering, Inc. 500 108th Avenue NE Bellevue, Washington 98004-5549

Attention: Eric Dawson

Prepared by:

GeoEngineers, Inc. 8410 154th Avenue NE Redmond, Washington 98052 425.861.6000

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WLT:DPC:TAT:nlu

Five hard copies submitted



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INTRODUCTION

This report presents the preliminary results of our geotechnical engineering services for evaluation of the soil and groundwater conditions and provides recommendations for the design and construction of the proposed 67th Avenue Phase III roadway improvements to be located in Arlington, Washington. The site is shown relative to surrounding physical features on the Vicinity Map (Figure 1) and the Site Plans (Figures 2, 3, and 4).

This report was issued in draft form on September 21, 2010. This final report incorporates review comments from the City of Arlington's Natural Resources, Public Works Administration, and Engineering departments. This final report supersedes the prior draft report.

PROJECT DESCRIPTION

GeoEngineers understanding of the project is based on discussions with Eric Dawson with HDR Engineering, Inc. We understand that the City of Arlington proposes roadway improvements along 67th Avenue NE, starting at the intersection of 67th Avenue NE and 204th Street NE and continuing north for approximately 0.7 miles. The proposed roadway improvements include widening portions of the existing alignment to allow three lanes of traffic, the addition of sidewalks along the west side of the alignment, construction of retaining walls, construction of multiple infiltration facilities, and installation of a multi-modal pedestrian facility along the east side of the roadway corridor.

SCOPE OF SERVICES

The purpose of this study is to complete subsurface explorations at the project site and to provide geotechnical engineering conclusions and recommendations for the design and construction of the proposed improvements.

GeoEngineers' geotechnical engineering services were completed in general accordance with our services agreement executed on August 5, 2009. Our specific scope of services for this phase of the project includes the following tasks:

- 1. Review geologic maps and subsurface information in our files for the site vicinity.
- 2. Explore subsurface soil and groundwater conditions by completing nine geotechnical explorations, which including three monitoring well installations.
- 3. Complete laboratory testing on selected soil samples obtained from the explorations.
- 4. Classify the soils encountered in the explorations and evaluate pertinent engineering and physical characteristics.
- 5. Provide infiltration rates for design of stormwater facilities.
- 6. Address City of Arlington Sensitive Areas ordinance issues.
- 7. Assess seismic hazards at the site, including liquefaction and lateral spreading.

- 8. Provide deign recommendations for:
 - Site preparation and earthwork,
 - Pavement and pavement subgrade preparation,
 - Earth retention systems,
 - Sedimentation and erosion control,
 - Foundation support for pedestrian bridge and culverts, and
 - Dewatering requirements for fish passage culvert construction.
- 9. Prepare a draft report, which was issued on September 21, 2010, and this final report presenting our conclusions and recommendations along with supporting field and laboratory data.

FIELD EXPLORATIONS AND LABORATORY TESTING

Field Explorations

Subsurface soil and groundwater conditions at the site were evaluated by completing nine geotechnical borings (MW-1, B-2, B-3, MW-4, B-5, MW-6, and B-7 through B-9). Of these nine borings, three were installed with monitoring wells (MW-1, MW-4, and MW-6) along the project alignment. The borings were completed to depths ranging from $11\frac{1}{2}$ to $26\frac{1}{2}$ feet below the existing ground surface. The approximate locations of these borings are shown on the Site Plans, Figures 2, 3 and 4. Details of the field exploration program and logs of the explorations are presented in Appendix A.

Laboratory Testing

Soil samples were obtained during drilling and taken to our laboratory for further evaluation. Selected samples were tested for the determination of moisture content, fines content, particle size distribution and California Bearing Ratio (CBR). A description of the laboratory testing and the test results are presented in Appendix B.

SITE DESCRIPTION

Site Geology

The site is located along the eastern edge of the Stillaguamish River Valley. According to the Geologic Map of the Arlington West Quadrangle (Minard 1985), the project site is located on an outcropping of Recessional Outwash, specifically the Marysville Sand Member in the southern portion of the site and the Arlington Gravel Member in the northern portion of the site.

The recessional outwash was deposited by meltwater flowing south from the stagnating and receding Vashon Glacier. The Marysville Sand Member is characterized by well draining stratified outwash sand, with some gravel and areas of silt and clay. This deposit is up to 65 feet thick and is generally underlain by glacial till. The Arlington gravel member consists of well drained stratified sand and gravel deposits; oxidation and iron oxide cementation are common in this unit. The deposit may be up to 85 feet thick, and is also generally underlain by glacial till.

Surface Conditions

The site is bounded by 204th Street NE to the south, the 67th Avenue NE Right of Way (ROW) to the west, the Burlington Northern Santa Fe (BNSF) Railway Company ROW to the east, and extends north to North Olympic Avenue. The focus of this geotechnical report is the portion of the project from the intersection of 67th Avenue NE and 204th Street NE (Station 100+00) and extends approximately 0.7 miles north along 67th Avenue NE (Station 138+00). The project alignment is shown on the attached Site Plans, Figures 2, 3, and 4.

The property around the proposed project alignment is developed for commercial and residential use and is occupied by restaurants, residential buildings, and small retail stores. The BNSF railroad alignment and ROW border the eastern boundary of the roadway corridor. The BNSF railroad embankment is elevated above portions of the roadway. Portions of the grade transition slope downward towards 67th Avenue NE at moderate inclination and portions of the slope are truncated by a 3 to 4 feet high concrete cantilever retaining wall. Site grade along the southern portion of the project is generally at Elevation 133 feet and slopes downward to Elevation 109 feet at the northern limits of our geotechnical study area.

The vegetation along the street consists largely of landscape berms with small trees and shrubs. Several small creeks cut across the southern portion of project alignment. North of 211th Place NE there is a mapped wetland area northwest of the road corridor. This wetland area is separated from the roadway by a steep slope that parallels the west side of 67th Avenue NE.

Existing utilities within or near the project area include overhead power, business signs and communication lines and buried gas, fiber optic, storm sewer, sanitary sewer, and water.

City of Arlington Critical Areas

As part of our services for the project, we reviewed the City of Arlington's critical areas map folio for the site and surrounding area. Based on our review of the maps, we note the following:

- No seismic hazards are mapped at the site.
- Steep slope hazard areas mapped along the northern portion of the project alignment between 211th Place NE north to approximately the intersection of 67th Avenue NE and Lebanon Street. These areas are classified as a severe hazard.
- Two streams are mapped with a 150-foot stream buffer in the southern portion of the alignment; Prairie Creek crosses 67th Avenue NE at 204th Street NE and Portage Creek south of 211th Place NE.
- Wetland critical areas are mapped along the northwest portion of the alignment as well as in the southeast portion of the alignment, within the stream buffer zone. The wetland critical areas in the northwest portion are not within the limits of the project.

We also completed a geologic reconnaissance of the site to better define and confirm the critical areas identified during our map review. Our reconnaissance indicates that the critical areas are portrayed fairly accurately in the published maps. Along the southern portion of the alignment, we observed no evidence of soil exposure on the slopes, landslide scarps, hummocky features,

tension cracks, surface displacement, groundwater seeps or any other indication of slope instability on the native or fill slope areas.

SUBSURFACE EXPLORATIONS

Soil Conditions

We evaluated the subsurface conditions at the site by drilling nine borings (MW-1, B-2, B-3, MW-4, B-5, MW-6, and B-7 through B-9) to depths ranging from 11¹/₂ to 26¹/₂ feet below the ground surface (bgs) at the approximate locations shown on Figures 2, 3, and 4. Monitoring wells were installed in three of the borings, MW-1, MW-4, and MW-6. Figures A-2 through A-10 in Attachment A present a detailed description of our field exploration procedures and logs of the nine explorations.

The subsurface conditions encountered in the borings generally include 6 to 8 inches of grass/sod and root zone horizon underlain by $4\frac{1}{2}$ to 9 feet of fill. Recessional outwash deposits were encountered below the fill and extended to the maximum depth explored in each boring.

The grass/sod layer consisted of silty sand with gravel, roots and other organic matter in the upper 6 to 8 inches. The fill soil generally consists of loose to medium dense silty sand with varying amounts of gravel and cobbles. The thickness of the fill layer ranges from 4½ to 9 feet and is likely associated with previous grading activities at the site. The recessional outwash consists of medium dense to very dense sand and gravel with varying amounts of silt and cobble content. Large cobbles and boulders were not encountered in the borings we completed; however, large cobbles and boulders are known to occur in recessional outwash soils.

Groundwater Conditions

Static groundwater was not observed in any of the borings at the time of exploration. We did encountered evidence of perched water in borings MW-6 and B-9 at 10 and 15 feet below ground surface, respectively. Groundwater observations represent conditions observed during drilling and may not represent the groundwater conditions throughout the year. Groundwater conditions are expected to fluctuate as a result of season, precipitation and other factors.

CONCLUSIONS AND RECOMMENDATIONS

General

We conclude that the proposed roadway improvement for the 67th Avenue Phase III project can be successfully completed from a geotechnical perspective provided the considerations presented in this report are incorporated in the project planning and design. A summary of the geotechnical considerations is provided below:

Based on our observations of the site and the results of the soil explorations, it is our opinion that the proposed retaining walls and bridge foundations can be constructed on conventional shallow foundations. Foundation support may consist of conventional shallow footings supported on the native soil or structural fill placed over native soil. We recommend an allowable soil bearing pressure of 4,000 pounds per square foot (psf) be used for footings supported by native medium dense soil or structural fill placed over native soil.

- We anticipate that the soils at the site can be excavated using conventional construction equipment. However, cobbles were encountered in our explorations, and the contractor should be prepared to deal with cobbles and boulders in the outwash soils. Ideally, earthwork should be undertaken during extended periods of dry weather when the soils will be less susceptible to disturbance and provide better support for construction equipment. Dry weather construction will help reduce earthwork costs.
- Effective erosion and sedimentation control must be implemented during construction so that potential impacts to the adjacent sensitive areas are reduced. The erosion potential of the on-site soils is moderate to high. The erosion and sedimentation control measures used for this project should be in accordance with applicable regulatory standards.
- The soils below the bottom of the planned infiltration facilities are medium dense to dense and contain a variable percentage of fines, which limits the infiltration capacity. Preliminary estimates of infiltration performance based on published correlations indicate design infiltration rates are in the range of 0.5 to 3 inches per hour.

The following sections of this report present our conclusions and recommendations for site development, foundation support and performance estimates for the associated site developments.

Site Preparation and Earthwork

General

We recommend that site preparation and earthwork be completed during the normally dry season of the year (generally July through September) if practical, as the workability of the soil becomes difficult and the erosion potential of the on-site soils is increased during extended periods of wet weather.

Earthwork Considerations

Grass/sod, fill, and outwash deposits were observed in the explorations. We anticipate that these soils can be excavated with conventional excavation equipment, such as trackhoes or dozers. Cobbles were encountered in our explorations and boulders are known to occur in glacial outwash deposits. Therefore, the contractor should be prepared to deal with cobbles and boulders in the fill and outwash.

Clearing and Grubbing

The work area should be cleared of all surface and subsurface deleterious matter, including debris, trees, shrubs and associated stumps and root wads, and should be stripped of the sod and organic soil. The woody debris should be removed from the project site for disposal. Based on our experience, we anticipate that stripping depths will generally be less than 8 inches. The stripped vegetative material and organic soil can be stockpiled and later reused in landscaping if desirable.
Removal and demolition of existing structures should include removal of below-grade elements. Existing voids or new depressions created during site preparation should be cleaned of loose soil or debris and backfilled with structural fill.

Sedimentation and Erosion Control

In our opinion, the erosion potential of the undisturbed on-site soils is moderate to high. Excavation work on the sloping portions of the roadway corridor will expose soils to potential erosion.

The amount and potential impacts of erosion are in part a function of the time of year construction occurs. Wet weather construction will increase the amount and extent of erosion. We expect that exposed soils will have moderate erosion potential during wet weather. It will therefore be necessary to put in place effective erosion controls during and after construction. These should include proper control of surface water runoff to prevent uncontrolled, concentrated surface water runoff over slope areas and minimizing the time of exposure in the areas stripped during construction through prompt re-vegetation.

Effective erosion and sedimentation control during construction may consist of interceptor swales and silt fences to prevent water from flowing off site. Because the runoff is likely to be silty, we recommend that the collected water be passed through a temporary desilting facility prior to discharging the water into the stormwater collection system. Completion of initial clearing and grading activities during the drier months and limiting the disturbance of the existing ground surface and vegetation where possible will also reduce the risks of erosion. Material stockpiles should be covered during wet weather to prevent erosion and soil loss. All areas disturbed during construction should be seeded and planted as soon as practical to reduce the potential for erosion. Erosion and sedimentation control measures should be installed and maintained in accordance with applicable regulatory standards.

Subgrade Preparation

We recommend that all subgrade soils be evaluated by a representative of GeoEngineers before placement of structural fill, wall foundation, and roadway/sidewalk construction to identify any soft or unsuitable subgrade soils that are observed during this evaluation should be removed and replaced with compacted structural fill. Where subgrade soils have high fines content, construction during the wet season can result in significant disturbance. In areas where high fines content are observed in the subgrade soils, we recommend 2 to 4 inches of crushed rock be placed on the prepared foundation subgrade to protect it and avoid softening the silty subgrade soils during wet weather construction. Haul roads and laydown areas should also include crushed rock surfacing to protect them during wet weather construction.

Structural Fill

All fill, whether on-site or imported soil, that will support pavement areas or foundations, or in utility trenches should meet the criteria for structural fill presented below. The suitability of soil for use as structural fill depends on its gradation and moisture content.

MATERIALS

Structural fill material quality varies depending upon its use, as described below:

- Structural fill placed to construct embankments, to backfill utility trenches, to support wall foundations and to provide subgrade for pavement should consist of common borrow as described in Section 9-03.14(3) of the 2010 Washington State Department of Transportation (WSDOT) Standard Specifications. If structural fill is placed during wet weather, it should consist of gravel borrow as described in Section 9-03.14(1) of the 2010 WSDOT Standard Specifications.
- 2. Structural fill placed adjacent to below-grade and retaining walls (drainage zone) should consist of gravel backfill for walls in conformance with Section 9-03.12(2) of the 2010 WSDOT Standard Specifications.
- 3. Structural fill placed as crushed surfacing base course below pavements should conform to Section 9-03.9(3) of the 2010 WSDOT Standard Specifications.

USE OF ON-SITE SOILS

Most of the near-surface soils observed in the explorations generally contain a high percentage of fines (silt/clay) and are moisture-sensitive. Portions of the on-site soils that meet the requirements for common borrow may be suitable for use as common borrow during dry weather, provided it can be properly moisture-conditioned prior to placement. These soils will likely be limited to the sand, sand with silt, and gravel encountered in the borings.

The on-site soils that meet the requirements for common borrow are expected to be suitable for structural fill in areas requiring compaction to at least 95 percent of the maximum dry density (MDD) estimated in general accordance with American Society for Testing and Materials (ASTM) D 1557, provided the work is completed during the normally dry season (June through September) and that the soil can be properly moisture-conditioned. It may be necessary to import sand and gravel with a low fines content to achieve adequate compaction for support of pavement areas for wet weather construction. Imported structural fill consisting of sand and gravel (WSDOT gravel borrow) should be planned if construction occurs during wet weather.

The use of on-site soils that meet the requirements for common borrow as structural fill during wet weather should be planned only for areas requiring compaction to 90 percent of the MDD or less, as long as the soils are properly protected from wet weather and not placed during periods of precipitation. The contractor should plan to cover and maintain all fill stockpiles with plastic sheeting if the soil will be used as structural fill. The reuse of on-site soils is highly dependent on the skill of the contractor and the schedule, and we will work with the design team and contractor to maximize the reuse of on-site soils during the wet and dry seasons.

STRUCTURAL FILL PLACEMENT

Structural fill should generally be placed in loose lifts not exceeding about 8 to 10 inches in thickness. Each lift should be conditioned to the proper moisture content and compacted to the specified density before placing subsequent lifts. If structure fill is placed adjacent to existing slopes, the existing slope should be benched prior to the fill placement and compaction to avoid an unstable interface zone. Structural fill placed in areas used to support footings or retaining walls should be compacted to at least 95 percent of MDD as determined by the ASTM D-1557 test method. Pavement area fill, including utility trench backfill, should be compacted to at least

90 percent of MDD, except for the upper 2 feet below finished subgrade surface, which should be compacted to at least 95 percent of MDD. Structural fill to support sidewalks should be placed after the subgrade is evaluated and be compacted to at least 90 percent of MDD.

We recommend that a representative from GeoEngineers, Inc. be present during structural fill placement to observe the work and perform in-place density tests to evaluate whether or not the specified compaction is being achieved.

Excavations

General

Trafficability on the site is not expected to be difficult during dry weather conditions. However, the fill soils will be susceptible to disturbance from construction equipment during wet weather conditions, and pumping and rutting of the exposed soils under equipment loads may occur. Ideally, earthwork should be undertaken during extended periods of dry weather, when the surficial soils will be less susceptible to disturbance and provide better support for construction equipment. Dry weather construction will help reduce earthwork costs and increase the potential for reusing the on-site soils as fill.

Temporary and Permanent Slopes

All temporary cut slopes must comply with the provisions of Title 296 Washington Administrative Code (WAC), Part N, "Excavation, Trenching and Shoring." The contractor performing the work has the primary responsibility for protection of workers and adjacent improvements.

Temporary cut slopes may be utilized around the site during construction. We recommend that temporary cut slopes be inclined no steeper than $1\frac{1}{2}$:1 (horizontal to vertical). Flatter slopes may be necessary if seepage is present on the face of the cut slopes or if localized sloughing occurs.

Because the contractor has control of the construction operations, the contractor should be made responsible for the stability of cut slopes, as well as the safety of the excavations. Shoring and temporary slopes must conform to applicable local, state and federal safety regulations. The final configuration for temporary excavation slopes should be evaluated during construction, as it is a function of the soil and groundwater conditions encountered and the contractor's approach to excavation.

Permanent cut and fill slopes should be inclined no steeper than 2H:1V except along the creeks. Permanent creek banks should be inclined no steeper than 3H:1V. Permanent slopes should be planted or hydroseeded as soon as practicable after grading. We recommend that all fill be placed as structural fill, as described above.

Slope Stability Assessment

Based on our explorations and geotechnical evaluation, it is our opinion that there is low risk of slope instability within the project area. Our assessment assumes that the existing slopes associated with the creek channel will not be compromised by temporary over steeping and/or the removal of vegetation. In addition, we conclude that permanent slopes constructed in accordance

with the recommendations in the Earthwork section of this report will perform well from a slope stability standpoint.

Construction Dewatering

General

Static groundwater was not observed in any of the borings at the time of exploration. Therefore, shallow facilities such as utility trenches and traffic signal or luminaire foundations will likely not encounter groundwater.

Dewatering during construction of the new culverts and possibly the pedestrian bridge may be required, even if the creeks are diverted (piped) during construction. Conservatively, local groundwater levels during construction of the culverts should be assumed at the same elevation as the corresponding water levels in the nearby creek. Based on the soil conditions and our experience in the area, we expect that groundwater in excavations less than about 1 to 2 feet below the static groundwater level can be controlled by open pumping using sump pumps. For excavations deeper than 2 feet below the water table, or in artesian water conditions, dewatering using well points or deep wells might be necessary. We recommend that the contractor be required to submit a proposed dewatering system design and plan layout to the City of Arlington and the Engineer for review and comment prior to beginning construction.

The level of effort required for dewatering will depend to a great extent on the time of year during which construction is accomplished. Less seepage into the work areas should be expected if construction is accomplished in the late summer or early fall months, and correspondingly, more seepage should be expected during the wetter periods of the year. We recommend that construction be completed in the late summer or early fall months when the creek flows are typically at their lowest. In our opinion, this will result in significant cost savings for the dewatering.

A general discussion of the dewatering methods anticipated for the project is presented below.

Open Pumping

This dewatering method involves removing water that has seeped into the excavation by pumping from a sump that has been excavated at one end of the excavation or trench. Drainage ditches that are connected to the sump are typically excavated along the sidewalls at the base of the excavation or trench. The excavation for the sump and the drainage ditches should be backfilled with gravel or crushed rock to reduce the amount of erosion and associated sediment in the water pumped from the sump. In our experience, a slotted casing or perforated 55-gallon drum that is installed in the sump backfill provides a suitable housing for a submersible pump.

The amount of water removed from the excavation by open pumping should be minimized because of high turbidity levels. Temporary storage of dewatering effluent from the sumps in a settlement tank or basin may be required to meet discharge permit requirements and reduce sediment content prior to discharging the water to surface water courses.

Pumped Wells

Individually pumped wells may be considered for dewatering the construction areas. Pumped wells that have been properly installed and developed are capable of producing the high discharge rates that are necessary to dewater highly permeable sand deposits. Pumped wells are generally the most effective dewatering method in areas where dewatering to deeper than about 15 feet below the ground surface is necessary.

We recommend that all dewatering wells installed for this project be properly developed to remove fine sediment from the immediate vicinity of the well screens. Proper development is essential for producing efficient wells and greatly reduces the turbidity of the water discharged from the well. Filter packs consisting of graded sand, or sand and fine gravel should be installed around the well screens in areas where the aquifer contains a high percentage of fine sand and silt.

Well Points

Well points are effective for dewatering all types of soils, whether pumping small amounts of water from silt or large quantities of water from coarse sand and gravel. The volume of water generated by a well point system is typically less than the volume generated by a corresponding system of pumped wells because the well points are generally completed at a shallower depth. Because of the shallower completion depth, the volume of aquifer that contributes water to a well point system is less than for a comparable deep well system.

Well point systems are most suitable for dewatering shallow excavations where the water table must be lowered no more than about 15 feet below ground surface. Multiple well point stages are generally required beyond that depth because of the physical limitations of suction lift. Dewatering can be accomplished at depths greater than 15 feet where the excavation can be open cut to permit installation of the well point system below original grade. This technique increases the depth to which the water table can be lowered with well points.

Earthquake Engineering

Design Earthquake Parameters

The seismic design of the proposed improvements can be completed using the design criteria presented in the American Association of State Highway and Transportation Officials (AASHTO) seismic design information. The AASHTO Guide Specifications recommend a 7 percent probability of exceedance in 75 years (nominal 1,000-year earthquake) design event for development of a design spectrum. Based on these criteria, we recommend the parameters for site class, seismic zone, acceleration coefficient and spectral acceleration coefficients presented in the following table.

AASHTO SEISMIC PARAMETERS

AASHTO Seismic Parameter	Recommended Value
Site Class	D
Seismic Zone for $0.30 < S_{\text{D1}} \leq 0.50$	3
Effective Peak Ground Acceleration Coefficient $A_S = F_{pga}PGA = (1.17)(0.333)$	0.39
Design Spectral Acceleration Coefficient at 0.2 Second period S_{DS} = F_aS_s = (1.20)(0.753)	0.904
Design Spectral Acceleration Coefficient at 1.0 Second period $S_{D1} = F_v S_1 = (1.89)(0.255)$	0.482

Seismic Hazards

We evaluated the site conditions for seismic hazards including liquefaction, lateral spreading and seismically induced landsliding. Our evaluation indicates the site has low risk of liquefaction because of the relatively low groundwater and presence of medium dense to very dense outwash deposits below the site. Because there is a low risk of liquefaction, the site has a low risk of liquefaction-induced ground disturbance including lateral spreading. Our evaluation of seismically induced landsliding indicates that there is also a low risk for seismically induced landsliding.

Shallow Foundations

General

Based on soils observed in our explorations located near the proposed culverts and pedestrian bridge (MW-1, B-3, and B-9), we anticipate that medium dense or denser sand and gravel soils (recessional outwash) will be present below approximately 5 feet from existing grades. We recommend that the proposed bridge structure or culverts be supported on conventional spread footings bearing on the native sand and gravel soils observed in the borings at and below about 5 feet from existing grades, or on properly placed and compacted structural fill that extends down to the competent native soils.

Foundation Design Parameters

Footings may be designed using an allowable soil bearing value of 4 kips per square foot (ksf) on properly compacted structural fill or native medium dense or denser sand and gravel soils. The allowable soil bearing values apply to the total of dead and long-term live loads and may be increased by up to one-third for wind or seismic loads. Footings should be at least 2-feet-wide.

Where bridge footings are sited on or near sloping ground such as a creek bank, we recommend that the bridge footings be founded a minimum of 4 feet below the lowest adjacent grade. In level ground areas, the bridge footings should be founded a minimum of 2 feet below the lowest adjacent grade. Culvert footings should be founded a minimum of 2 feet below the level of the creek channel bottom.

Settlement

Provided all loose soil is removed and the subgrade is prepared as recommended under "Construction Considerations" below, we estimate the total settlement of shallow foundations will be on the order of $\frac{1}{2}$ to 1 inch. The settlements will occur rapidly, essentially as loads are applied. Differential settlement between the bridge abutments is expected to be less than 1 inch.

Lateral Resistance

Lateral foundation loads may be resisted by passive resistance on the sides of footings and by friction on the base of the footings. For footings supported on native soils or on structural fill placed and compacted in accordance with our recommendations, the allowable frictional resistance may be computed using a coefficient of friction of 0.4 applied to vertical dead-load forces.

The allowable passive resistance of soils may be computed using an equivalent fluid density of 300 pounds per cubic foot (pcf) (triangular distribution) if these elements are poured directly against undisturbed native soils or surrounded by structural fill. No passive resistance should be allowed for soils located on the creek-side of the abutment.

The above coefficient of friction and passive equivalent fluid density values incorporate a factor of safety of about 1.5.

Construction Considerations

Subgrade disturbance may occur if footing excavations are completed during wet weather. A working mat of lean concrete or compacted crushed rock should be placed over the footing subgrade immediately following excavation to prevent softening and disturbance of the footing subgrade if construction occurs during wet weather.

If soft areas are present at the footing subgrade elevation, the soft areas should be removed and replaced with structural fill at the direction of the Geotechnical Engineer. In such instances, the zone of structural fill should extend laterally beyond the footing edges a horizontal distance at least equal to the thickness of the fill.

Given the relatively high allowable bearing pressures presented above, the condition of all footing excavations must be observed by the Geotechnical Engineer or their representative to evaluate if the work is completed in accordance with our recommendations and that the subsurface conditions are as anticipated.

Pile Foundation Support

In our opinion the proposed bridge may be supported on 3-inch or 4-inch diameter driven steel pipe piles. We recommend that the pipe piles be galvanized. The pipe pile spacing should be determined by the project structural engineer.

We recommend that the driven steel pipe piles be installed using pneumatic impact equipment capable of penetrating a sufficient depth to develop the design loads. Local contractors have developed pile driving criteria for various sizes of pneumatic impact equipment for the two sizes of

pipe piles. The following table presents practical refusal driving criteria for the two pile sizes and various hammer weights.

Hammer Size	3-inch	4-inch
850 lbs	10 sec/inch	16 sec/inch
1100 lbs	6 sec/inch	10 sec/inch

We recommend that 3-inch and 4-inch diameter piles installed as recommended be designed for allowable capacities of 6 and 10 tons, respectively. We estimate that foundation total settlements of less than $\frac{1}{2}$ inch will develop for properly installed pipe piles

On the basis of the available data, we estimate that the pile embedment lengths will be on the order of 25 feet, or a minimum embedment depth of 10 feet into the bearing soil. Typically 3-inch and 4-inch diameter piles come in 20 foot sections. Accordingly, the contractor installing the pipe piles should be prepared to splice and extend the piles until the required refusal rate and capacity is achieved.

Traffic Signal and Luminaire Foundations

We understand that new traffic signals and luminaires are planned for the project. Pole foundation dimensions and loading have not been finalized; however, we anticipate that all project poles and foundations will comply with WSDOT preapproved signal pole and foundation designs. The following recommendations are based on the WSDOT GDM.

New signal poles may be designed using a soil unit weight of 125 pcf, a soil friction angle of 30 degrees, and an allowable lateral bearing pressure of 1,500 psf. Alternatively, these poles can be sized using a standard foundation in accordance with Exhibit 1330-13 of the WSDOT Design Manual M 22-01.06 (June 2009) and a lateral bearing pressure of 1,500 psf. It should be noted that the June 2009 Design Manual is now superseded; however, the current Design Manual dated December 2009 does not include the standard signal pole foundation depth chart. In our opinion, the June 2009 Design Manual is appropriate for the design of traffic signals and luminaire foundations for this project.

Retaining/Abutment Walls

General

We recommend that the proposed bridge abutments consist of concrete cantilever walls bearing on shallow foundations. If retaining walls are necessary to retain the approach fills along the sides of each abutment, we recommend that these walls consist of concrete cantilever walls. The following paragraphs present our recommendations for retaining walls.

If the retaining walls are restrained against rotation, we recommend that the walls be designed for an at-rest earth pressure taken as an equivalent fluid density of 55 pcf. Rigid walls are walls that deflect less than about 0.002H under the at-rest pressure loading, where H is the height of the retaining wall. Once the wall moves approximately 0.002H, the active pressure state is achieved. For retaining walls that are allowed to deflect about 0.002H under loading, we recommend that the walls be designed for the active earth pressure taken as an equivalent fluid density of 35 pcf for well-draining gravel backfill for walls. If the ground within 5 feet of the retaining wall rises at an inclination of 2H:1V or steeper, the retaining wall should be designed using an equivalent fluid density of 60 pcf. For adjacent slopes flatter than 2H:1V, soil pressures can be interpolated between this range of values. Other conditions should be evaluated on a case-by-case basis.

Typically, retaining walls are designed for a surcharge pressure for traffic loading. For traffic loading, we recommend that retaining walls be designed for a uniform surcharge pressure determined by increasing the height of the wall by 2 feet. Other surcharge loads should be included as appropriate.

If seismic earth pressure are considered in design we recommend that a rectangular seismic earth pressure distribution equal to 7H in pounds per square foot (where H is the wall height) be added to the static lateral earth pressures presented above for the rigid wall or active earth pressure condition, whichever is appropriate.

Drainage

The above lateral earth pressures assume that the backfill behind the retaining walls is drained. Drainage consisting of either a perforated drain pipe installed near the base of the retaining walls or installation of weepholes near the base of the retaining wall should be incorporated in the design. If a drain pipe is used, the drains should consist of a perforated pipe a minimum of 4 inches in diameter enveloped within a minimum thickness of 6 inches of gravel backfill for drains, WSDOT Standard Specification 9-03.12(4). Clean-outs for the collector pipe should be installed as appropriate. Alternatively, the walls can be provided with weepholes designed in accordance with WSDOT Standard Plans.

Construction Considerations

Backfill placed within 5 feet of below grade walls should be compacted to densities of at least 90 percent of the maximum dry density (MDD) obtained in accordance with the ASTM D-1557 procedure to reduce the potential for development of excess pressure on the walls. If sidewalks or pavement will be placed adjacent to the wall, we recommend that the upper 2 feet of fill be compacted to 95 percent of the MDD. Measures should be taken to prevent the buildup of excess lateral soil pressures due to over-compaction of the backfill behind the wall; for example, by using hand-operated mechanical vibrators.

For walls designed to retain the approach fills, the walls should bear on the native soils or on properly placed structural fill that extends down to the competent native soils. Approach fill retaining walls should be embedded at least 2 feet below finished grade where the ground surface is inclined less than 2H:1V.

Stormwater Infiltration

Recommended Infiltration Values

Two methods were used to evaluate an appropriate design (long-term) infiltration rate for the soils encountered in the explorations. The two methods consist of correlations based on United States Department of Agriculture (USDA) soil textural classification and ASTM gradation testing, as

discussed in Section 3.3.6 of the Stormwater Management Manual for Western Washington (Ecology, 2005).

The following table presents a summary of the subsurface soil and groundwater conditions encountered in selected explorations and the estimated infiltration rate based on the USDA textural class and on ASTM laboratory gradation testing.

Test Pit	Sample Depth (foot)	Classification	USDA Textural	ASTM D ₁₀	Approximate Groundwater	Estim Infiltrat (inches	iate of ion Rate \$/hour) ¹	
	(ieel)		Class	(11111)	Deptil (It) -	USDA	ASTM	
MW-1	5	SP-SM	Sand	0.15	Not Encountered	2	3	
MW-1	10	SP-SM	Sand	0.15	Not Encountered	2	3	
B-2	10	GW-GM	Loamy Sand	0.075	Not Encountered	0.5	1.5	
B-3	5	SP-SM	Loamy Sand/Sand	0.25	Not Encountered	2	5	
B-3	211/2	SM	Loamy Sand/Sand	0.05	Not Encountered	2	0.8	
MW-4	5	SW-SM	Sand	0.075	Not Encountered	2	1.5	
MW-4	71⁄2	SP-SM	Loamy Sand/Sand	0.1	Not Encountered	2	2	
B-5	5	SP-SM	Loamy Sand	0.075	Not Encountered	0.5	1.5	
B-5	71⁄2	SM	Silty Loam	<0.05	Not Encountered	-	-	
MW-6	5	SM	Loamy Sand	0.05	Not Encountered	0.5	0.8	
MW-6	15	SP-SM	Loamy Sand	0.075	Not Encountered	0.5	1.5	
B-7	10	SM	Sandy Loam	0.05	Not Encountered	0.25	0.8	
B-8	71⁄2	SM	Loamy Sand	0.05	Not Encountered	0.5	0.8	
B-9	5	GP-GM	Loamy Sand/Sand	0.2	Not Encountered	2	3.5	
B-9	71⁄2	GW-GM	Loamy Sand	0.15	Not Encountered	0.5	3	

Notes:

¹Infiltration rates shown for two different methodologies (Ecology, 2005).

The native soils encountered in areas where infiltration is being considered consist of medium dense to very dense sand and gravel with varying silt content. In areas the soils may contain a significant percentage of fines, which limits the infiltration capacity. Infiltration is generally not considered feasible/practical for soils with an infiltration capacity less than 0.25 inches per hour. Based on our analysis, it is our opinion that the on-site soils are generally suitable for moderate stormwater infiltration.

We evaluated three samples of the native soils to determine the Cation Exchange Capacity (CEC) of the soil. The Ecology Manual requires that for soils to be chemically suitable for treatment, the "treatment soils" must have a minimum CEC of 5 milliequivalents (meq) per 100 grams of material.

The sample from boring B-1 at a depth of 5 feet exceeded this threshold; however, the samples from borings B-3 at 5 feet and B-5 at 10 feet did not meet this criteria. Therefore, we recommend considering that the site soils do not meet this Ecology criteria for treatment soils.

Drainage Considerations

General

We recommend that all surfaces be sloped to drain away from the existing and proposed structures and improvements. Pavement surfaces and open space areas should be sloped such that the surface water is collected and routed to suitable discharge points.

We anticipate that shallow groundwater seepage may enter excavations depending on the time of year construction takes place, especially in the winter months. However, we expect that this seepage water can be handled by digging interceptor trenches in the excavations and pumping from sumps. If not intercepted and removed from the excavations, the seepage water will make it difficult to place and compact structural fill and may destabilize cut slopes.

Pavement Recommendations

The design of the pavement areas will depend significantly on whether the pavement is intended to be traditional hot mix asphalt (HMA) or porous pavement. Our recommendations for design of porous and traditional HMA pavement sections are presented in the following sections.

Porous Pavement Design

GENERAL

The design of porous pavements for stormwater management should consider storage capacity of the pervious pavement system and infiltration rate of the subgrade soils, as well as water quality treatment. Porous pavement may consist of porous concrete, porous HMA, porous pavers or some type of stabilized gravel surface. Our recommendations for design of porous pavement are presented in the following subsections.

INFILTRATION

The long-term infiltration rate is dependent on several factors, including site variability, degree of long-term maintenance, pretreatment for total suspended solids and depth to groundwater. For design of porous pavements, it is typically assumed that there will be low to moderate long-term maintenance and pretreatment. Refer to our "Stormwater Infiltration" section of this report for recommended infiltration rate values.

STORAGE CAPACITY

The total stormwater storage capacity of the porous pavement system includes the capacity of the porous pavement and the capacity of the crushed rock subbase and underlying on-site soils in the planned improvement areas. The storage capacity is directly dependent on the effective porosity (or percent voids that can be filled with stormwater) of the pavement, subbase, and on-site materials. The porosity of pervious pavement depends on the mix design. The effective porosity used for design should be adjusted to account for naturally occurring moisture.

We recommend that shoulder ballast be used for the crushed rock subbase below the porous pavement. The shoulder ballast should meet the criteria described in Section 9-03.9(2) of the

WSDOT Standard Specifications. Based on previous laboratory testing of crushed rock samples (1¼-inch and 5%-inch clean crushed rock), we anticipate a total porosity of approximately 40 to 45 percent. For design, we recommend an effective porosity of 35 percent to account for natural moisture. The storage capacity for the crushed rock subbase should be calculated by multiplying the volume of subbase by the effective porosity. Typical subbase thicknesses range from 12 to 36 inches, depending on storage needs. A minimum of 12 inches of subbase should be used at this site to provide adequate support of traffic and to help "bridge" over the amended subgrade soils.

Additionally, landscaping areas adjacent to the pavement should be sloped to drain away from the path so that fines in runoff from the landscaping areas can be prevented from contaminating the pavement and crushed rock and reducing the storage capacity.

WATER QUALITY TREATMENT

Pavement areas are pollution-generating sources, and oils occur most prominently on busy streets and busy portions of parking lots. If porous paving is used, we recommend that the upper 2 feet of the underlying subgrade soils be mixed with compost at a rate of approximately 10 percent compost to 90 percent soil (per volume). Compost used for amending the subgrade soils below porous pavements must meet the Washington State compost regulations in Chapter 173-350 Washington Administrative Code (WAC). The 2 feet of mixed soil should be recompacted to a minimum of 90 percent of the MDD per ASTM D 1557.

It is our opinion that the amended subgrade soils will meet the Ecology requirements for "treatment soils" with a minimum CEC of 5 meq per 100 grams of material. We recommend that CEC testing of the amended subgrade soils be completed during construction to verify that the amended soil meets Ecology requirements. The organics in the topsoil attract and bind contaminants typically found in runoff from pavement areas, and studies have shown that when stormwater is infiltrated through soils with adequate CEC, the groundwater leaving the site typically has contaminant levels equivalent to undeveloped areas. Additionally, studies have shown that porous pavement breaks down some oil pollutants through the biochemical activity of microbiota that use the pavement as a substrate (Ferguson, 2005).

Conventional Pavement Design

DESIGN CONSIDERATIONS

We recommend that the subgrade soils in conventional pavement areas be prepared and evaluated as described below in the "Site Preparation and Earthwork" section of this report. Based on the results of our laboratory California Bearing Ratio test of a composite sample taken from the site a CBR value of about 23 can be used for pavement design.

For conventional hot mixed asphalt (HMA) pavement, based on City of Arlington Department of Public Works Standard Details for a typical roadway section, we recommend at least 3 inches of HMA CL ¹/₂", PG-64-22, over 4 inches HMA CL 1", PG 64-22, over 6 inches of crushed surfacing base course. The crushed surfacing base course should meet the requirements of Section 9-03.9(3) of the WSDOT Standard Specifications. The crushed rock base course should be compacted to at least 95 percent of the MDD prior to the placement of the asphalt concrete.

We recommend that the geotechnical engineer observe the proof-rolling of the compacted base course prior to paving.

In addition, GeoEngineers performed a preliminary evaluation of the recommended pavement section above based on assumed design input values using the AASHTO Guide. Below is a summary of the design values assumed:

- Average Daily Traffic (ADT) 5,683 (single direction)
- Average Daily Trucks 1,050 (single direction)
- Design life 20 years
- Growth factor 10 percent
- Truck factor 1.0
- Overall standard deviation 0.45
- Reliability level 90 percent
- Original serviceability index 4.5
- Terminal serviceability index 2

Based on these assumptions the results of our evaluation showed that the pavement section recommended above should perform adequately.

LIMITATIONS

We have prepared this report for the exclusive use by HDR Engineering Inc, and their authorized agents for the geotechnical elements of the proposed 67th Avenue Phase III Improvement project to be located in Arlington, Washington.

Within the limitations of scope, schedule and budget, our services have been executed in accordance with generally accepted practices in the field of geotechnical engineering in this area at the time this report was prepared. No warranty or other conditions, expressed or implied, should be understood.

Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

Please refer to the attachment titled Report Limitations and Guidelines for Use for additional information pertaining to use of this report.

REFERENCES

Ferguson, Bruce K., "Porous Pavements," 2005.

- Minard, "Geologic Map of the Arlington West 75 Minute Quad, Snohomish County, Washington," 1985.
- Washington State Department of Ecology, "Stormwater Management Manual for Western Washington." 2005.
- Washington State Department of Transportation, "Standard Specifications for Road, Bridge and Municipal Construction," 2010.













Legend

B-7 + Proposed boring location

Notes: 1. The locations of all features shown are approximate.

2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.

Reference: Drawing provided by HDR Engineering. Inc. from CAD drawing "00V-BP01-01.dwg. 00V-BP02-01.dwg. and 00C-SP03-20.dwg." dated 7/23/10.







APPENDIX A FIELD EXPLORATIONS

We explored subsurface conditions at the site of the proposed 67th Avenue Phase III Improvement project by completing nine borings (MW-1, B-2, B-3, MW-4, B-5, MW-6, and B7 through B-9). The drilling was performed by Geologic Drill on August 25 and 26, 2010.

The locations of the explorations were estimated in the field by measuring distances from site features through taping/pacing in the field. The approximate exploration locations are shown on the Site Plans, Figures 2, 3, and 4. Boring elevations were estimated based on a CAD drawing provided by HDR Engineering, Inc. dated July 23, 2010.

Borings

Borings were completed using trailer-mounted, continuous-flight, hollow-stem auger drilling equipment. The borings were continuously monitored by a geotechnical engineer from our firm who examined and classified the soils encountered, obtained representative soil samples, observed groundwater conditions and prepared a detailed log of each exploration.

The soils encountered in the borings were generally sampled at 2½- or 5-foot vertical intervals with a 2-inch outside diameter split-barrel standard penetration test (SPT) sampler. The samples were obtained by driving the sampler 18 inches into the soil with a 140-pound hammer with a rope and cathead free-falling 30 inches. The number of blows required for each 6 inches of penetration was recorded. The blow count ("N-value") of the soil was calculated as the number of blows required for the final 12 inches of penetration. This resistance, or N-value, provides a measure of the relative density of granular soils and the relative consistency of cohesive soils. Where very dense soil conditions precluded driving the full 18 inches, the penetration resistance for the partial penetration was entered on the logs. The blow counts are shown on the boring logs at the respective sample depths.

Soils encountered in the borings were visually classified in general accordance with the classification system described in Figure A-1. A key to the boring log symbols is also presented in Figure A-1. The logs of the borings are presented in Figures A-2 through A-10. The boring logs are based on our interpretation of the field and laboratory data and indicate the various types of soils and groundwater conditions encountered. The logs also indicate the depths at which these soils or their characteristics change, although the change may actually be gradual. If the change occurred between samples, it was interpreted. The densities noted on the boring logs are based on the blow count data obtained in the borings and judgment based on the conditions encountered.

Observations of groundwater conditions were made during drilling. The groundwater conditions encountered during drilling are presented on the boring logs. Groundwater conditions observed during drilling represent a short-term condition and may or may not be representative of the long-term groundwater conditions at the site. Groundwater conditions observed during drilling should be considered approximate.

			SYME	BOLS	TYPICAL
		UNO	GRAPH	LETTER	DESCRIPTIONS
	GRAVEL	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES
	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL SAND MIXTURES
COARSE BRAINED SOILS	MORE THAN 50% OF COARSE FRACTION	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
ORE THAN 50%	SAND	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS
AINED ON NO. 200 SIEVE	AND SANDY SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
	SIEVE	(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
				ML	INORGANIC SILTS, ROCK FLOUR, CLAYEY SILTS WITH SLIGHT PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
SOILS			m	OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
ORE THAN 50% SSING NO. 200 SIEVE				МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS SILTY SOILS
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INORGANIC CLAYS OF HIGH PLASTICITY
			hipi	ОН	ORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY
H	IIGHLY ORGANIC S	SOILS	<u> </u>	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS
Blow of blo dista	Samples 2.4- 2.4- Star She Pist Direc Substructures Count is record Substructures Strop.	r Symbol De inch I.D. split I ndard Penetrat lby tube con ect-Push k or grab rded for driven to advance sar	escription parrel sion Test (ion Test (sampler 12 in log for h	SPT) SPT) s as the r nches (o ammer v	number r veight
and					

ADDITIONAL MATERIAL SYMBOLS

SYM	BOLS	TYPICAL
GRAPH	LETTER	DESCRIPTIONS
	СС	Cement Concrete
	AC	Asphalt Concrete
	CR	Crushed Rock/ Quarry Spalls
	TS	Topsoil/ Forest Duff/Sod

- Measured groundwater level in exploration, well, or piezometer
- Groundwater observed at time of exploration
- Perched water observed at time of exploration
- Measured free product in well or piezometer

Graphic Log Contact

Ζ

- Distinct contact between soil strata or geologic units
- Approximate location of soil strata change within a geologic soil unit

Material Description Contact

- Distinct contact between soil strata or geologic units
- Approximate location of soil strata change within a geologic soil unit

Laboratory / Field Tests

- Percent fines
- Atterberg limits
- Chemical analysis
- P Laboratory compaction test
- Consolidation test
- Direct shear
- Hydrometer analysis Moisture content
- Moisture content and dry density
- Organic content
- Permeability or hydraulic conductivity
- Pocket penetrometer
- Sieve analysis
- Triaxial compression
- Unconfined compression
- Vane shear

Sheen Classification

- No Visible Sheen
- Slight Sheen
- Moderate Sheen Heavy Sheen
- Not Tested

NOTE: The reader must refer to the discussion in the report text and the logs of explorations for a proper understanding of subsurface conditions. Descriptions on the logs apply only at the specific exploration locations and at the time the explorations were made; they are not warranted to be representative of subsurface conditions at other locations or times.

representative of subsurface conditions at other locations or times. KEY TO EXPLORATION LOGS FIGURE A-1



Project Number:

5430-006-00

Figure A-2 Sheet 1 of 1

Date:9

ſ	Drilled	Start prilled End 8/25/2010 Total Depth (ft) 1 urface Elevation (ft) ertical Datum 115.0 NAVD88										16.5 Logged By WBH Checked By DPC Driller Geologic Drill Drilling Method Drilling Hammer Rope and Cathead Drilling Deep							
	Surface Vertica	e Elev I Datu	vation um	(ft)		1 NA	15.0 AVD88				Har Dat	nmer Ro a 140	pe and Cathead (lbs) / 30 (in) Drop	E	Drilling Equipr	g ment	Deep Rock XL		
	Latitud Longitu	e ıde									Sys Dat	stem um	N/A	<u>(</u>	Groun Date M	dwate leasure	er Depth to ed Water (ft) Elevation (ft)		
l	Notes:	Auge	er Dat	a: 3ț	∕₄ inc	hes I.C).; 7 inch	nes ().D.										
ſ				F	IEL	.D DA	ΛTA												
	Elevation (feet	o Depth (feet) 	Interval		Blows/foot	Collected Samp	<u>Sample Name</u> Testing	Water Level	Graphic Log	Group	014331110411011	M/ DES	ATERIAL CRIPTION		Moisture Content, %	Dry Density, (pcf)	REMARKS		
	. ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	-		3	10		1			SOD SM)	Light brown silty fir gravel and occas dense, moist) (fi	e to medium sand with ional cobbles (medium ll)						
	-^	5 —	1	,	15		2					Gravel content incre	ases	-	-				
		-	1	0	32		3			GW-G	iΜ	Brown gravel with s cobbles (dense, r	and, silt, and occasional noist)		4		SA; %F=6		
-	_105	3^{9} 10 $-$ 11 17 4 3^{10} 3^{10}									M	Brown fine to coarse – occasional cobbl (recessional outw	e sand with silt, gravel and es (medium dense, moist) /ash)						
NDARD	_100										м -	Light brown fine to occasional grave	medium sand with silt and l (medium dense, moist)						
ahw:reDMOND/PROJECTS/5543000600/GINT643000600 GPJ DBTemplate/LibTemplate/CEOENGINEERS8.GDT/GEI8_GEOTECH_S1	Note: See Figure A-1 for explanation of symbols.																		
:9/16/10 Pat												Log of B	Boring B-2						
tedmond: Date	G	E	οE	N	G	INE	ER	S		J		Project: Project Locatio	City of Arlingto	n\67 shing	th A	ven	ue Phase III Figure A-3		

Project Number: 5430-006-00

Figure A-3 Sheet 1 of 1

GEOENGINEERS

ſ	Drilleo	1 8/2	<u>Start</u> 5/20	10	<u>En</u> 8/25	<u>d</u> /2010	Total Depth	tal 24 Logged By WBH Checked By DPC Driller Geologic Drill Drilling Ho Method Mo								Holiow-stem Drilling Auger/SPT/Dames & Method Moore		
	Surfac Vertica	e Elev al Datu	vatior um	ח (ft)		1 NA	14.0 VD88			Ha Da	ammer Ro ata 140	pe and Cathead [bs) / 30 (in) Drop		Drilling Equipr	nent	Deep Rock XL		
	Latitud Longitu	e ude								Sy Da	ystem atum	N/A		Groun Date M	dwate easure	r <u>Depth to</u> d Water (ft) Elevation (ft)		
l	Notes	: Auge	er Da	ata: 3	3¼ inc	hes I.D	.; 7 inch	es O.	D.									
ſ					FIEL	.D DA	TA											
	Elevation (feet	o Depth (feet) I	Interval	Recovered (in)	Blows/foot	Collected Samp	<u>Sample Name</u> Testing	Water Level	Group	Classification	M/ DES	ATERIAL CRIPTION		Moisture Content, %	Dry Density, (pcf)	REMARKS		
-	- - -	-		12	23		1		SI	<u>M</u>	Light brown silty fin gravel (medium	e to medium sand with dense, moist) (fill)		-				
-	7 42 3 3										Brown fine to coarse and occasional c (recessional outw	s and with silt and gravel obbles (dense, moist) (ash)	-	3		SA; %F=9 Rock in shoe		
-	$-\sqrt{5^3}$ $-\sqrt{9}$ $-\sqrt{9}$ $-\sqrt{66}$ $-\sqrt{4}$ $-\sqrt{3P}$										Brown fine to coarse and occasional c moist) (recession	sand with silt and gravel obbles (dense to very dens al outwash)		-		Bouncing on gravel		
CH_STANDARD	$\begin{bmatrix} & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & & \\ & & & \\ & & & & \\ $										- - - - Grades to less grave		-		Bouncing on gravel			
DENGINEERS8.GDT/GEI8_GEOTE	- & - -	- 20 -		7	17		6		SP-	M 	Brown silty fine to n (medium dense,) Brown fine to mediu	medium sand with gravel moist) m sand with silt (dense,	 - - -	7		SA; %F=15 Bouncing on gravel; used Dames and Moore sampler at 20 feet		
10 Path:W:IREDMONDIPROJECTS\S\S430006\00\GINT\543000600.GPJ DBTemplate/LibTemplate:GE	Not		e Fig	ure	A-1 fo	r explar	nation of	symb	pols.			oring B-3]				
:e:9/16/10 F											Log of B	City of Arlipot		7th ^	Ven	ue Phase III		
Redmond: Dat	Ģ	ΞEO	b E	ĒN	IG	INE	ER	s /	D		Project Locatio	n: Arlington, Wa	shington Figure A-4					

Project Number: 5430-006-00

Figure A-4 Sheet 1 of 1



Drilled	8/2	<u>Start</u> 5/20	10	<u>En</u> 8/25/	<u>d</u> /2010	Total Depth	ו (ft)	11	1.5		Logged By WBH Checked By DPC	Driller Geologic Drill				Drilling Method Moore
Surface Vertical	Elev Datı	/atioi um	n (ft)		N	103.0 AVD88				Ha Da	mmer Ro ta 140	ope and Cathead (lbs) / 30 (in) Drop	Dr Eq	illing Juipn	nent	Deep Rock XL
Latitude Longitur	de									Sy Da	stem tum	N/A	Gr Da	round	dwate easure	er Depth to red Water (ft) Elevation (ft)
Notes:	Auge	er Da	ata: 3	3¼ inc	hes I.	D.; 7 inch	les C).D.	_	_						
				FIEL	D D	ATA										
Elevation (feet)	Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group Classification		M. DES	ATERIAL SCRIPTION		Moisture Content, %	Dry Density, (pcf)	REMARKS
- 00	-		0	8		1			SOD SP-SM) M	Linch sod Light brown silty fir gravel and occas medium dense, 1	ne to medium sand with sional cobbles (loose to moist) (fill)	-			
-	5—		11	21		2					-		-	5		SA; %F=11
- _ళా -	-		18	48		3			SM	-	Brown silty fine to a occasional cobb outwash)	medium sand with gravel and les (dense, moist) (recessional	-	5		Bouncing on gravel SA; %F=13
-	10 —		4 9	50 40		4					-		-			Gravel in shoe Used Dames and Moore sampler at 11 feet

Redmond: Date:9/16/10 Path/W:REDMOND/PROJECTS/5430006/00/GINT/543006600.GPJ DBTemplate/LibTemplate/CEOENGINEERS8.GDT/GEI8_GEOTECH_STANDARD

Note: See Figure A-1 for explanation of symbols.

Log of Boring B-5



Project:City of Arlington\67th Avenue Phase IIIProject Location:Arlington, WashingtonProject Number:5430-006-00Figure A-6
Sheet 1 of 1



Project Number:

5430-006-00

Figure A-7 Sheet 1 of 1

	Drillec	1 8/2	<u>Start</u> 6/20	10	<u>En</u> 8/26	<u>id</u> 3/2010	Total Depth	ו (ft)) 21	1.5		Logged By WBH Checked By DPC	+	Driller Geologic Drill				Drilling Method	Hollow-stem	Auger/SPT
s v	urfac 'ertica	e Elev al Dati	vatior um	ı (ft)		1 NA	08.0 VD88				Ha Da	ammer ata 1	Rop 40 (I	be and Cathead bs) / 30 (in) Drop	E	Drilling quipr	nent		Deep Roc	k XL
L	atitud ongitu	le ude						_	_		Sy Da	ystem atum	_	N/A		Groun Date <u>M</u>	dwate	<u>r</u> d	Depth to Water (ft)	Elevation (ft)
Ľ	lotes:	: Aug	er Da	ita: 3	3¼ inc	hes I.D).; 7 inch	es (0.D.											
	Elevation (feet)	b Depth (feet)	Interval	Recovered (in)	Blows/foot	Collected Sample	Sample Name Testing	Water Level	Graphic Log	Group	Classification	DI	MA ES(TERIAL CRIPTION		Moisture Content, %	Dry Density, (pcf)		REMAR	RKS
ERSEGRIGERGEGEGESTANDARD	$- \frac{1}{5}$ $- \frac{1}{13}$ 7 1 $- \frac{1}{5}$ $- \frac{1}{13}$ 7 1 $- \frac{1}{5}$ $- \frac{1}{13}$ 7 3 $- \frac{1}{5}$ $- \frac{1}{13}$ 7 3 $- \frac{1}{5}$ $- $											 l-inch sod Dark brown silty and occasion Grayish tan fine occasional gr (recessional of Grades to fine sa Grayish tan silty (medium den Gray fine to coar occasional co moist) 	/ fine lal col to me ravel outwa and / fine nse, m	to medium sand with grave bbles (loose, moist) (fill) edium sand with silt and (loose to dense, moist) ash) sand with occasional grave noist)		19			Trace organi SA; %F	=36
	Note: See Figure A-1 for explanation of symbols.																			
Redmond: [G	E	oE		١G	INE	ER	5		1		Project Loca	atior	n: Arlington, Wash	ning	Iton				Figure A-8

Project Number: 5430-006-00

Figure A-8 Sheet 1 of 1

ſ	Drilleo	d 8/2	<u>Start</u> 6/20	10	<u>En</u> 8/26	<u>id</u> /2010	Total Depth	al 21.5 Logged By WBH Checked By DPC Driller Geologic Drill Drilling Method Hollow							Drilling Method Hollow-stem Auger/SPT				
	Surfac Vertica	e Elev al Datu	vatio um	n (ft)		N	109.0 AVD88				H	ammer ata	Rope 140 (lt	e and Cathead os) / 30 (in) Drop	E	Drilling Equipr	g ment	Deep Rock XL	
-	Latituc Longit	le ude									S D	ystem atum		N/A	(Groun	dwate	Depth to	
	Notes	: Aug	er Da	ata: 3	3¼ inc	hes I.I	D.; 7 inch	es (0.D.						<u>L</u>	Jate IVI	easure	$\frac{20}{20}$ <u>Water (π)</u> Elevation (π)	
Ì					FIEL	D DA	ATA												
	(feet)	et)		d (in)	t	sample	ame	lel	Б Б		tion		MA	TERIAL				DEMARKS	
	vation	pth (fee	erval	covere	ws/foo	lected 9	mple N sting	ter Lev	aphic L	dnc	issifica		DESC	RIPTION		sture itent, %	Density	REMARKS	
	Ele	o Del	Inte	Re	Blo	<u>8</u>	<u>Sar</u> Tes	Wa	ि जनस	S Gro		1-inch grass	/sod			Mai Con	D D D D D		
-		-								SN	M	- Dark brown and occa	silty fine t sional cob	to medium sand with grav obles (very loose, moist)	vel –				
-	\$	-		7	3		1					-			-	-		Trace organic matter	
	<u>~</u> 0.	- 5 —			_		2					 Grades to br 	own		_				
╞		-		6	3		2					F			-				
F		-		13	15		3			SN	M	Brown silty – occasion	fine to coa	arse sand with gravel and (medium dense, moist)	_	11		SA; %F=13	
	,00	-								SP-S	SM	Gray fine to	coarse sa	sn) nd with silt, gravel, and (medium dense to dense					
_		10		13	40		4					moist)	ai coobles	(incurum dense to dense;	,				
E		-										_			-				
_	ණ	_										-			-	-			
NDARD		15 —		13	48		5					_			_				
ECH_STA		-										-			-	-			
EI8_GEOT	00	-										-			-	-			
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DBTempia																			
600.6PJ																			
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NHROJEC																			
REDMOND	No	te: Se	e Fig	gure	A-1 fo	r expla	anation of	syr	nbols	i.									
														oring R 8					
Date:9/16/1												Project:		City of Arlingto	n\67	′th A	ven	ue Phase III	
admond: [C	BE	b	ĒN	١G	IN	EER	S	0	J		Project L	ocatior	n: Arlington, Was	shing	gton		Figure A-9	
۳								-	-			Project N	lumber	5430-006-00				Sheet 1 of 1	

Drilled	<u>8</u> /2	<u>Start</u> 5/20	10	<u>En</u> 8/25/	<u>d</u> /2010	Total Depth	n (ft)	16	6.5	Log Cheo	ged By cked By	WBH DPC	Drille	r Geologi	ic Drill				Drilling Method	Hollow-s Auger/S Moore	tem PT/Dames &	
Surface Vertical	Elev Datu	atior Im	ו (ft)		N	111.0 AVD88			F	lammer Data	r	Ro 140	ope and (lbs) / 3	l Cathead 30 (in) Dro	р	Dril Equ	lling uipm	nent		Deep	Rock XL	
Latitude Longitue	e de								S	System Datum			N	/A		<u>Gro</u> Dat	ounc e Me	<u>dwate</u> easure	<u>r</u> d	Depth to Water (ft)	Eleva	ation (ft)
Notes:	Auge	er Da	ata: 3	3¼ inc	hes I.	D.; 7 inch	ies ().D.														
\int_{-}				FIEL	.D D/ I≗	ATA																
ation (feet	th (feet)	val	overed (in)	/s/foot	cted Samp	<u>iple Name</u> ing	er Level	ohic Log	up sification			M/ DES	ATER CRIP	IAL TION		hre	ent, %	Jensity,		REM	/ ARKS	
Elev	o Dep	Inter	Reo	Blov	Colle	<u>Test</u>	Wat	С С Т			inch aree	s/sod				Mois	Cont	Dry [(pcf)				
	-								SM	- \ <u>-</u> Bi	rown silty occasio	y fine to 1 nal cobbl	nedium les (very	sand with g	gravel and bist)							
-	_		13	50/5"		1				-						_			Trac	e organic	matter (grass/rc	ots)
- - -	- 5 -		11	57		2		000	GP-GM	t Ві — -	Brown fine gravel with sand, silt, and occasional cobbles (very dense, moist) (recessional outwash)						3			SA Rig Bounci	; %F=6 shaking ng on gravel	
-			6 9	53 93		3 4		1000	GW-GN	a − Bı	rown fine occasio moist)	to coars	e gravel les (dens	with sand, se to very d	silt, and lense,	-	4		Ro	Bounci ck in shoe Moore sa	ng on gravel Used Dames a npler at 8 feet	nd
- _,00	10 —		12	34		5		20°0		-						-				34	, /01-0	
-	_							2000		-						-						
- - _%	- 15 — -		18	46		6				_						_			Wet a	Grav at the tip b	el in shoe ut no standing	water
Note: See Figure A-1 for explanation of symbols.																						
											Loç	g of E	Borin	g B-9			_					
G	EC	DE	ĒN	IG	IN	EER	S		J	Pr Pr	oject: oject l	_ocatio	Con: A	rlington	riington\6 n, Washi	o7th ngto	n Av on	veni	ue Pha	se III	Figure <i>i</i>	A-10

Project Number: 5430-006-00

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Figure A-10 Sheet 1 of 1


APPENDIX B LABORATORY TESTING

General

Soil samples obtained from the explorations were transported to GeoEngineers' laboratory and examined to confirm or modify field classifications, as well as to evaluate index properties of the soil samples. Representative samples were selected for laboratory testing consisting of the determination of the sieve analyses and California Bearing Ratio. The tests were performed in general accordance with test methods of the American Society for Testing and Materials (ASTM) or other applicable procedures.

The sieve analyses test results are presented in Figures B-1 through B-4. The results of the moisture content and percent passing the U.S. No. 200 sieve determinations are presented at the respective sample depths on the exploration logs in Appendix A.

Sieve Analyses

Sieve analyses were performed on selected samples in general accordance with ASTM D 422 to determine the sample grain size distribution. The wet sieve analysis method was used to determine the percentage of soil greater than the U.S. No. 200 mesh sieve. The results of the sieve analyses were plotted and classified in general accordance with the Unified Soil Classification System (USCS).

CBR Testing

A California Bearing Ratio (CBR) test was performed on a composite soil sample in general accordance with ASTM D 1883. The composite sample consisted of soil taken from ½ to 2 feet below ground surface from explorations MW-1, B-2, B-5 and MW-6. The results of the CBR test are presented in the following table.

Exploration	Sample Depth (feet)	Soil Type	Dry Density (pcf)	Percent Maximum Dry Density	CBR
Composite		SM	124	93	18
	½ to 2		130	98	51
			135	100	83

Note:

pcf = pounds per cubic foot













APPENDIX C REPORT LIMITATIONS AND GUIDELINES FOR USE¹

This attachment provides information to help you manage your risks with respect to the use of this report.

Geotechnical Services Are Performed For Specific Purposes, Persons and Projects

This report has been prepared for the exclusive use of The city of Arlington, HDR Engineering, Inc. and their authorized agents. This report is not intended for use by others, and the information contained herein is not applicable to other sites.

GeoEngineers structures our services to meet the specific needs of our clients. For example, a geotechnical or geologic study conducted for a civil engineer or architect may not fulfill the needs of a construction contractor or even another civil engineer or architect that are involved in the same project. Because each geotechnical or geologic study is unique, each geotechnical engineering or geologic report is unique, prepared solely for the specific client and project site. Our report is prepared for the exclusive use of our Client. No other party may rely on the product of our services unless we agree in advance to such reliance in writing. This is to provide our firm with reasonable protection against open-ended liability claims by third parties with whom there would otherwise be no contractual limits to their actions. Within the limitations of scope, schedule and budget, our services have been executed in accordance with our Agreement with the Client and generally accepted geotechnical practices in this area at the time this report was prepared. This report should not be applied for any purpose or project except the one originally contemplated.

A Geotechnical Engineering Or Geologic Report Is Based On A Unique Set Of Project-Specific Factors

This report has been prepared for the proposed 67th Avenue Phase III Improvement project in Arlington, Washington. GeoEngineers considered a number of unique, project-specific factors when establishing the scope of services for this project and report. Unless GeoEngineers specifically indicates otherwise, do not rely on this report if it was:

- not prepared for you;
- not prepared for your project;
- not prepared for the specific site explored; or
- completed before important project changes were made.

For example, changes that can affect the applicability of this report include those that affect:

- the function of the proposed structure;
- elevation, configuration, location, orientation or weight of the proposed structure;
- composition of the design team; or
- project ownership.

¹ Developed based on material provided by ASFE, Professional Firms Practicing in the Geosciences; www.asfe.org.

If important changes are made after the date of this report, GeoEngineers should be given the opportunity to review our interpretations and recommendations and provide written modifications or confirmation, as appropriate.

Subsurface Conditions Can Change

This geotechnical or geologic report is based on conditions that existed at the time the study was performed. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, or by natural events such as floods, earthquakes, slope instability or groundwater fluctuations. Always contact GeoEngineers before applying a report to determine if it remains applicable.

Most Geotechnical And Geologic Findings Are Professional Opinions

Our interpretations of subsurface conditions are based on field observations from widely spaced sampling locations at the site. Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. GeoEngineers reviewed field and laboratory data and then applied our professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ, sometimes significantly, from those indicated in this report. Our report, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.

Geotechnical Engineering Report Recommendations Are Not Final

Do not over-rely on the preliminary construction recommendations included in this report. These recommendations are not final, because they were developed principally from GeoEngineers' professional judgment and opinion. GeoEngineers' recommendations can be finalized only by observing actual subsurface conditions revealed during construction. GeoEngineers cannot assume responsibility or liability for this report's recommendations if we do not perform construction observation.

Sufficient monitoring, testing and consultation by GeoEngineers should be provided during construction to confirm that the conditions encountered are consistent with those indicated by the explorations, to provide recommendations for design changes should the conditions revealed during the work differ from those anticipated, and to evaluate whether or not earthwork activities are completed in accordance with our recommendations. Retaining GeoEngineers for construction observation for this project is the most effective method of managing the risks associated with unanticipated conditions.

A Geotechnical Engineering Or Geologic Report Could Be Subject To Misinterpretation

Misinterpretation of this report by other design team members can result in costly problems. You could lower that risk by having GeoEngineers confer with appropriate members of the design team after submitting the report. Also retain GeoEngineers to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering or geologic report. Reduce that risk by having GeoEngineers participate in pre-bid and preconstruction conferences, and by providing construction observation.

Do Not Redraw The Exploration Logs

Geotechnical engineers and geologists prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering or geologic report should never be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, but recognize that separating logs from the report can elevate risk.

Give Contractors A Complete Report And Guidance

Some owners and design professionals believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering or geologic report, but preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with GeoEngineers and/or to conduct additional study to obtain the specific types of information they need or prefer. A pre-bid conference can also be valuable. Be sure contractors have sufficient time to perform additional study. Only then might an owner be in a position to give contractors the best information available, while requiring them to at least share the financial responsibilities stemming from unanticipated conditions. Further, a contingency for unanticipated conditions should be included in your project budget and schedule.

Contractors Are Responsible For Site Safety On Their Own Construction Projects

Our geotechnical recommendations are not intended to direct the contractor's procedures, methods, schedule or management of the work site. The contractor is solely responsible for job site safety and for managing construction operations to minimize risks to on-site personnel and to adjacent properties.

Read These Provisions Closely

Some clients, design professionals and contractors may not recognize that the geoscience practices (geotechnical engineering or geology) are far less exact than other engineering and natural science disciplines. This lack of understanding can create unrealistic expectations that could lead to disappointments, claims and disputes. GeoEngineers includes these explanatory "limitations" provisions in our reports to help reduce such risks. Please confer with GeoEngineers if you are unclear how these "Report Limitations and Guidelines for Use" apply to your project or site.

Geotechnical, Geologic And Environmental Reports Should Not Be Interchanged

The equipment, techniques and personnel used to perform an environmental study differ significantly from those used to perform a geotechnical or geologic study and vice versa. For that reason, a geotechnical engineering or geologic report does not usually relate any environmental findings, conclusions or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. Similarly, environmental reports are not used to address geotechnical or geologic concerns regarding a specific project.

Biological Pollutants

GeoEngineers' Scope of Work specifically excludes the investigation, detection, prevention or assessment of the presence of Biological Pollutants. Accordingly, this report does not include any interpretations, recommendations, findings, or conclusions regarding the detecting, assessing, preventing or abating of Biological Pollutants and no conclusions or inferences should be drawn regarding Biological Pollutants, as they may relate to this project. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and/or any of their byproducts.

If Client desires these specialized services, they should be obtained from a consultant who offers services in this specialized field.





www.geoengineers.com

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EXCERPT OF CITY OF ARLINGTON DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS, WSDOT STANDARD PLANS, and SNOHOMISH COUNTY STANDARD PLANS

APPENDIX C

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- 1. FORMS SHALL BE TRUE TO LINE AND GRADE AND SECURELY STAKED.
- 2. DUMMY JOINTS SHALL BE PLACED 15 FEET ON CENTERS. DUMMY JOINTS SHALL BE 1/2" x 1-1/2".
- 3. THRU JOINTS SHALL BE PLACED ADJACENT TO CATCH BASINS, INLETS AND AT POINTS OF TANGENCY ON STREETS, ALLEY AND DRIVEWAY RETURNS. MAXIMUM SPACING SHALL BE 30 FT. PRE-MOLDED JOINT FILLER SHALL BE 1/2" WIIDE AND CONFORM TO AASHTO DESIGN M213.
- 4. ALL JOINTS SHALL BE CLEAN AND EDGED.
- 5. CONCRETE SHALL BE CEMENT CONCRETE, CLASS 3000.
- 6. STEEL FORMS ONLY SHALL BE USED ON TANGENT SECTIONS. WOOD FORMS MAY BE USED ON CURVED SECTIONS.
- 7. FINISH SHALL BE LIGHT BROOM FINISH.
- 8. THE FINISHED CURB SHALL BE SPRAYED WITH A TRANSPARENT CURING COMPOUND AND COVERED BY WATERPROOF PAPER OR PLASTIC MEMBRANE IN THE EVENT OF RAIN OR OTHER INCLEMENT WEATHER. CURING TIME SHALL BE A MINIMUM OF 72 HOURS.
- 9. ALL CURB AND GUTTER SHALL BE PLACED ON A MIN OF 2" OF CRUSHED SURFACING TOP COURSE.
- 10. DUMMY JOINT 1/2" × 1 1/2" BETWEEN TYPE 1 CURB AND GUTTER AND THE SIDEWALK.

CITYOA	APPROVED BY	L. OLIVE 07/31/2008	DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS	STANDARD DETAIL NUMBER
(• *** ** * *)	REF STD SPEC			
			CEMENT CONCRETE CURB AND	R-180
VEINGTO			GUTTER TYPE 1	







PARKING STALL GEOMETRY DETAIL

	SEE STD PLAN NO. R-210 FOR TYPICAL PARKING LAYOUT.														
PARKING ANGLE	(DEGREES)	STALL WIDTH PERPENDICULAR TO STALL LINES	stall width Parallel To Aisle	LENGTH OF STALL LINE	STALL DEPTH Perpendicular To Aisle	AISLE WIDTH BETWEEN STALL LINES (SEE NOTE 1)	STALL DEPTH INTERLOCKING	MODULE, WALL TO INTERLOCK	MODULE, INTERLOCK TO INTERLOCK	MODULE, INTERLOCK TO CURB	BUMPER, OVERHANG (TYPICAL)	OFFSET	SETBACK	CROSS AISLE (ONE WAY)	CROSS AISLE (TWO WAY)
ļ	١	В	с	D	E	F	G	н	I	J	к	L	м	N	N
45	5	9.0	12.7	27.5	19.5	12	16.5	48.0	45	46.0	2.0	6.4	13.1	14	24
		9.5	13.4	27.5	19.5	11	16.5	47.0	44	45.0	2.0	6.4	13.1	14	24
	С	8.0	11.3	22.5	16.0	11					2.0			14	24
	Н	13.0	18.3	27.5	19.5	11					2.0			14	24
	٧	16.0	22.5	32.0	22.6	12					2.0			14	24
60)°	9.0	10.4	23.7	20.5	16	18.5	55.0	53	53.7	2.3	2.6	9.3	14	24
	, 	9.5	11.0	23.7	20.5	15	18.5	54.0	52	51.7	2.3	2.6	9.3	14	24
	С	8.0	9.3	19.5	16.7	14					2.3			14	24
	Н	13.0	15.0	23.7	20.5	15					2.3			14	24
	V	16.0	18.5	26.9	23.3	16					2.3			14	24
75	5	9.0	9.3	20.9	20.0	23	19.0	62.0	61	59.5	2.5	.6	4.8	14	24
	·	9.5	9.8	20.9	20.0	22	19.0	61.0	60	58.5	2.5	.6	4.8	14	24
	С	8.0	8.3	17.0	16.3	18					2.5			14	24
	Н	13.0	13.5	20.9	20.0	22					2.5			14	24
	V	16.0	16.6	23.2	22.4	24					2.5	_		14	24
	•۱	9.0	9.0	19.0	19.0	26	19.0	66	66	66	2.5	0	0	14	24
90	, 	9.5	9.5	19.0	19.0	25	19.0	63	63	63	2.5	0	0	14	24
	С	8.0	8.0	15.0	15.0	22					2.5		0	14	24
	Н	13.0	13.0	18.5	18.5	25					2.5		11	14	24
	V	16.0	16.0	20.0	20.0	24					2.5			14	24

- 1. AISLE WIDTH MAY BE REQUIRED TO BE WIDER IF MULTIPLE UTILITY LINES ARE LOCATED WITHIN THE AISLE CORRIDOR.
- 2. C = COMPACT SPACE. EACH SPACE SHALL BE IDENTIFIED BY PAINTING "COMPACT" ON PAVEMENT.
- 3. H = HANDICAP SPACE, SEE WASHINGTON STATE REGULATIONS FOR BARRIER FREE FACILITIES.
- 4. V = HANDICAP VAN ACCESSIBLE SPACE, SEE WASHINGTON STATE REGULATIONS FOR BARRIER FREE FACILITIES.

XTY O	APPROVED BY	L. OLIVE	DEPARTMENT OF PUBLIC WORKS	
	DATE	07/31/2008	STANDARD DETAILS	NUMBER
(• 615 15 60 •)	REF STD SPEC			
			PARKING LOT DETAIL	R - 250
VINGT				



FRAME AND GRATE, SEE APPLICABLE STANDARD DETAILS



2"X4"X8" SOLID BRICK USED FOR FINAL ADJUSTMENT TO GRADE, 6" HIGH MAX.



6" CONCRETE RISER SECTION



PRE-CAST BASE SECTION (MEASUREMENT AT THE TOP OF THE BASE)

NOTES:

- 1. CONCRETE INLET TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 & C890 UNLESS OTHERWISE SHOWN ON THE PLANS OR NOTED IN THE STANDARD SPECIFICATIONS. ALL CONCRETE SHALL BE CLASS 4000.
- REINFORCING SHALL BE EQUIVALENT TO WELDED WIRE FABRIC (WWF) HAVING A MINIMUM AREA OF 0.12 SQUARE INCH PER FOOT. WWF SHALL COMPLY TO ASTM A497. WWF SHALL NOT BE PLACED IN KNOCKOUTS.
- 3. THE BOTTOM OF THE PRE-CAST BASE SECTION MAY BE ROUNDED.
- 4. PRE-CAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MIN. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.
- KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTSIDE DIAMETER PLUS CONCRETE INLET WALL THICKNESS. KNOCKOUTS MAY BE ROUND OR "D" SHAPED AND MAY BE ON ALL 4 SIDES WITH MAXIMUM DIAMETER OF 17".
- 6. THE MAXIMUM DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
- THE TAPER ON THE SIDES OF THE PRE-CAST BASE SECTION AND RISER SECTION SHALL NOT EXCEED 1/2" PER FOOT.
- 8. FRAME AND GRATE SHALL BE IN ACCORDANCE WITH WSDOT/APWA SPECIFICATIONS. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
- 9. FRAME AND GRATE MAY BE INSTALLED WITH FLANGE DOWN OR CAST INTO RISER.

CITYOA	APPROVED BY DATE	L OLIVE 07/31/2008	DEPARTMENT OF PUBLIC WORKS STANDARD DETAIL	STANDARD DETAIL NUMBER
(• 848 18 84) •)	REF STAN SPEC			
			CONCRETE INLET	SD-010
VINGTO				

و،



FRAME AND GRATE (OR SOLID COVER), SEE APPLICABLE STANDARD DETAILS



2"X4"X8" SOLID BRICK USED FOR FINAL ADJUSTMENT TO GRADE, 6" HIGH MAX.





PRE-CAST BASE SECTION (MEASUREMENT AT THE TOP OF THE BASE)

- 1. CONCRETE INLET TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C478 & C890 UNLESS OTHERWISE SHOWN ON THE PLANS OR NOTED IN THE STANDARD SPECIFICATIONS. ALL CONCRETE SHALL BE CLASS 4000.
- REINFORCING SHALL BE EQUIVALENT TO WELDED WIRE FABRIC (WWF) HAVING A MINIMUM AREA OF 0.12 SQUARE INCH PER FOOT. WWF SHALL COMPLY TO ASTM A497. WWF SHALL NOT BE PLACED IN KNOCKOUTS.
- 3. THE BOTTOM OF THE PRE-CAST BASE SECTION MAY BE ROUNDED.
- 4. PRE-CAST BASES SHALL BE FURNISHED WITH CUTOUTS OR KNOCKOUTS. KNOCKOUTS SHALL HAVE A WALL THICKNESS OF 2" MIN. ALL PIPE SHALL BE INSTALLED IN FACTORY PROVIDED KNOCKOUTS. UNUSED KNOCKOUTS NEED NOT BE GROUTED IF WALL IS LEFT INTACT.
- KNOCKOUT OR CUTOUT HOLE SIZE IS EQUAL TO PIPE OUTSIDE DIAMETER PLUS CATCH BASIN WALL THICKNESS. KNOCKOUTS MAY BE ROUND OR "D" SHAPED AND MAY BE ON ALL 4 SIDES WITH MAXIMUM DIAMETER OF 20".
- 6. THE MAXIMUM DEPTH FROM THE FINISHED GRADE TO THE PIPE INVERT IS 5'-0".
- 7. THE TAPER ON THE SIDES OF THE PRE-CAST BASE SECTION AND RISER SECTION SHALL NOT EXCEED 1/2" PER FOOT.
- 8. FRAME AND GRATE SHALL BE IN ACCORDANCE WITH WSDOT/APWA SPECIFICATIONS. MATING SURFACES SHALL BE FINISHED TO ASSURE NON-ROCKING FIT WITH ANY COVER POSITION.
- 9. FRAME AND GRATE MAY BE INSTALLED WITH FLANGE DOWN OR CAST INTO RISER.
- 10. EDGE OF RISER OR BRICK SHALL NOT BE MORE THAN 2" FROM VERTICAL EDGE OF CATCH BASIN WALL.









		CURB & GU	MATCH EXISTING SLOPE	
CITYON	APPROVED BY	L. OLIVE	DEPARTMENT OF PUBLIC WORKS STANDARD DETAIL	STANDARD DETAIL
THE INGULA	REF STAN SPEC		TYPICAL FRAME AND GRATE INSTALLATION	SD-090





- 3. APPROXIMATE WEIGHT OF RING IS 215 LBS.
- 4. TRAFFIC RATING: H-20.

CLTYOA	APPROVED BY DATE	L. OLIVE 07/31/2008	DEPARTMENT OF PUBLIC WORKS STANDARD DETAIL	STANDARD DETAIL NUMBER
(• 8.4<u>8</u> \$ \$.84) •)	REF STAN SPEC		10	
			24" BOLT-LOCKING MANHOLE	SD-110
TLINGTO			RING & COVER	

3. APPROXIMATE WEIGHT OF COVER IS 150 LBS.

4. TRAFFIC RATING: H-20.

- 1. MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH AASHTO M-199 (ASTM C 478) UNLESS OTHERWISE SHOWN ON PLANS OR NOTED IN STANDARD SPECIFICATIONS.
- 2. ALL REINFORCED CAST IN PLACE CONCRETE SHALL BE CLASS 4000. NON-REINFORCED CONCRETE IN CHANNEL AND SHELF SHALL BE CLASS 3000. ALL PRECAST CONCRETE SHALL BE CLASS 4000.
- 3. PRECAST BASES SHALL BE FURNISHED WITH CUTOUTS.
- 4. ALL BASE REINFORCING STEEL SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI AND BE PLACED IN THE UPPER HALF OF THE BASE WITH 1" MINIMUM CLEARANCE.
- 7. FOR DEPTHS OVER 25' MANHOLE BASE SLAB DESIGN SHALL BE DESIGNED BY A STRUCTURAL ENGINEER.
- 8. ALL INTERIOR AND EXTERIOR JOINTS TO BE GROUTED (SEE GROUT SPECIFICATIONS). GROUT TO BE 1/2" THICK MINIMUM AND 3" EACH SIDE OF JOINT MINIMUM. THEY MUST BE INSPECTED PRIOR TO BACKFILL.
- 9. CORE DRILLING ONLY, HAMMERING KNOCKOUTS WILL NOT BE ALLOWED. KOR-N-SEAL FACTORY INSTALLED BOOTS ARE ALLOWED.
- 10. MANHOLES 5'-7' DEEP MUST BE FLAT TOPS.



- 1. SADDLE MANHOLE MAY ONLY BE USED WHEN PLACING A NEW MANHOLE OVER AN EXISTING SEWER LINE. SIZE, LOCATION, AND ANGLE MUST BE AS REQUIRED BY PLANS.
- OPENINGS IN PRECAST UNITS ARE TO BE 4" MINIMUM TO 8" MAXIMUM LARGER THAN THE OUTSIDE DIAMETER OF THE PROPOSED PIPE.
- 3. CONSTRUCT BENCH AND INVERT TO ALLOW SMOOTH TRANSITION OF FLOW FROM NEW SEWER TO EXISTING SEWER.
- 4. ALL NOTES ON SS-010 AND SS-015 ALSO APPLY TO THIS DETAIL.







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FOUR LANE ROAD

OFFSET MARKER TO INDICATE WHICH SIDE OF STREET HYDRANT IS ON. MARKER TO BE PLACED 4" TO 6" OFF OF DOTS OR PAINTED LANE DIVIDER.

FIVE LANE ROAD

OFFSET MARKER TO INDICATE WHICH SIDE OF STREET HYDRANT IS ON. MARKER TO BE PLACED 4" TO 6" OFF OF DOTS OR PAINTED LANE DIVIDER.

NOTE:

MARKER: TYPE 88 AB STIMSONITE TWO WAY (BLUE)

CITYOA	APPROVED BY	L. OLIVE 07/31/2008	DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS	STANDARD DETAIL
THUNGTON	REF STAD SPEC			
			FIRE HYDRANT MARKER	W-015

TYO	APPROVED BY	L. OLIVE	DEPARTMENT OF PUBLIC WORKS	
	DATE	07/31/2008	STANDARD DETAILS	
(• *** ******)	REF STAD SPEC			
			FIRE HYDRANT CONCRETE PAD	W - 020
LINGTO				
				<u>j</u>

- 1. CONCRETE SHALL BE CLASS 3000 PSI MIN.
- 2. INSTALL 1/4" EXPANSION JOINT MATERIAL WITH FULL DEPTH OF CONCRETE PAD AROUND HYDRANT.




NOTES AND MATERIALS:

- (1) 1" CC SERVICE SADDLE W/DOUBLE STAINLESS STEEL STRAP OR DIRECT TAP CC THREAD CORP SEE TABLE 1.1 ABOVE.
- (2) 1" BALL VALVE CORPORATE STOP CC X COMPRESSION WITH KEY FACING UP, MUELLER OR FORD ONLY.
- (3) 1" HDPE CTS CLASS 200 HIGH SERVICE PIPE (200 PSI RATING) WITH STAINLESS STEEL STIFFENER AND 10 GAUGE COATED COPPER TRACER WIRE WRAPPED AROUND THE PIPE AND ATTACHED ON BOTH ENDS.
- FOR 5/8"X3/4" METER, A 1" COMPRESSION ANGLE METER BALL VALVE x 5/8" METER IS REQUIRED. FOR 1" METER, A 1" COMPRESSION ANGLE METER BALL VALVE x 1" METER IS REQUIRED. BALL VALVES ARE LOCKABLE.
- (5) METER SHALL BE INSTALLED BY CITY UTILITIES DIVISION AT OWNER'S EXPENSE.
- (6) METER BOX SHALL BE MIDSTATES PLASTICS 1324-12 W/SOLID DI LID WITH 1 3/4" HOLE FOR TOUCH READ PAD (TRP).
- (7) 5/8" x 3/4" METERS REQUIRE A 3/4" ANGLE METER CHECK COUPLING x 5/8" METER WITH A 3/4" MIPT x 1" COMPRESSION ADAPTER. 1" METER REQUIRES A 1" ANGLE METER CHECK COUPLING x 1" METER.
- (8) 1" COMPRESSION x FIPT ADAPTER WITH 1" PLASTIC PLUG.
- (9) EXTEND SERVICE PIPE 10' BEYOND PROPERTY LINE AND AN ADDITIONAL 5' BEYOND EASEMENT LINE.
- (1) METER LENGTH BLANK STUB.

CITYOA	APPROVED BY DATE	L. OLIVE 07/31/2008	DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS	STANDARD DETAIL	
(• *** *********)	REF STAD SPEC				
			$5/8 \times 3/4 \& 1$	W-040	
FLINGTO			RESIDENTIAL WATER SERVICE		



NOTES AND MATERIALS:

- (1) 2" CC SERVICE SADDLE W/DOUBLE STAINLESS STEEL STRAP.
- (2) 2" BALL VALVE CORPORATE STOP COMPRESSION WITH KEY FACING UP, MUELLER OR FORD ONLY.
- 3 2" HDPE CTS CLASS 200 HIGH SERVICE PIPE (200 PSI RATING) WITH STAINLESS STEEL STIFFENER AND 10 GAUGE COATED COPPER TRACER WIRE WRAPPED AROUND THE PIPE AND ATTACHED ON BOTH ENDS.
- (4) 2" COMPRESSION ANGLE METER BALL VALVE (LOCKABLE).
- (5) METER (SIZE AS SHOWN IN PLAN) SHALL BE INSTALLED BY CITY UTILITIES DIVISION AT OWNER'S EXPENSE. CITY WILL INSTALL ADAPTERS AT BOTH ENDS OF METER IF THE METER IS NOT 2".
- 6 METER BOX SHALL BE MIDSTATES PLASTICS (1730-18) W/SOLID DI LID WITH 1 3/4" HOLE FOR TOUCH READ PAD (TRP).
- (7) 2" ANGLE METER CHECK COUPLING (LOCKABLE).
- (8) COMPRESSION \times FIPT ADAPTER WITH PLASTIC PLUG.
- (9) EXTEND SERVICE PIPE 10' BEYOND PROPERTY LINE AND AN ADDITIONAL 5' BEYOND EASEMENT LINE.
- (10) METER LENGTH BLANK STUB FOR A 2" METER, W=17-1/4".
- (11) 2" METER SETTER, FORD OR MUELLER.
- (12) BYPASSES MUST BE HIGH BYPASS OR SIDE-BY SIDE WITH THE METER.

CITYON	APPROVED BY DATE	L. OLIVE 07/31/2008	DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS	STANDARD DETAIL	
(• 815 11 64 •)	REF STAD SPEC				
			2 AND SMALLER	W = 050	
FINGTO			NON-RESIDENTIAL WATER SERVICE	000	



ELEVATION

MATERIAL LIST:

- UL-FM LISTED WASHINGTON STATE APPROVED REDUCED PRESSURE BACKFLOW ASSEMBLY INCLUDING TWO BALL VALVES, AND TESTS COCKS.
- INSULATED PROTECTIVE ENCLOSURE (HOT BOX) REQUIRED FOR OUTSIDE INSTALLATIONS. THE PROTECTIVE ENCLOSURE MUST BE PROVIDED WITH DRAINS AT BOTH ENDS OF THE BOTTOM SUFFICIENTLY SIZED TO PROVIDED FREE GRAVITY DRAINAGE OF MAXIMUM DISCHARGE OF RELIEF VALVE PORT (2" MIN).
- (3) 90' ELBOW WITH A CLOSE NIPPLE AND UNION ON VERTICAL.

NOTES:

- 1. ASSEMBLY REQUIRES CERTIFICATION UPON INSTALLATION AND RECERTIFICATION ANNUALLY, BY OWNER.
- 2. THE ENCLOSURE MUST BE INSTALLED ON A 4" THICK CONCRETE PAD.
- 3. AN ELECTRICAL OUTLET MUST BE PROVIDED.
- 4. GUARD POSTS SHALL BE INSTALLED IF LOCATED IN A TRAFFIC AREA.
- 5. ALL BRANCH CONNECTIONS SHALL BE LOCATED ON THE DOWNSTREAM SIDE OF THE ASSEMBLY.

	TYO	APPROVED BY	L. OLIVE	DEPARTMENT OF PUBLIC WORKS	STANDARD DETAIL
L		DATE	07/31/2008	STANDARD DETAILS	NUMBER
	(• ****** •)	REF STAD SPEC		DEDUCED DESCUDE DACKELOW ASSEMBLY	
				(DDA) 9" AND SMALLED	W-130
	LINGT			(RFDA) 2 AND SMALLER	



VALVE BOX AND EXTENSION

VALVE OPERATING NUT EXTENSION

NOTES:

- 1. VALVE OPERATING NUT EXTENSIONS ARE REQUIRED WHEN THE VALVE NUT IS MORE THAN THREE (3) FEET BELOW FINISHED GRADE. EXTENSIONS ARE TO BE A MINIMUM OF ONE (1) FOOT LONG. ONLY ONE EXTENSION WILL BE ALLOWED PER VALVE.
- 2. ALL VALVE OPERATING NUT EXTENSIONS ARE TO BE MADE OF STEEL, SIZED AS NOTED, AND PAINTED WITH TWO (2) COATS OF METAL PAINT.
- 3. VALVE BOXES SHALL BE CAST IRON, TWO PIECE UNITS, DESIGNED WITH DEEP SKIRT (2") LIDS W/LUGS, EQUAL TO "RICH NO. 940" AS MANUFACTURED BY RICH OR SATHER.
- 4. 4" THICK CONCRETE PAD AROUND VALVE BOXES OUTSIDE OF PAVED AREAS. 2'x2' SQUARE AROUND SINGLE VALVE BOXES AND 4'x4' AROUND MULTIPLE VALVE BOXES.

	APPROVED BY DATE	L. OLIVE 07/31/2008	DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS	STANDARD DETAIL NUMBER	
	REF STAD SPEC				
			VALVE BOX AND	W-190	
VLINGTO			OPERATING NUT EXTENSION		







DUAL-FACED CEMENT CONCRETE TRAFFIC CURB **CEMENT CONCRETE TRAFFIC CURB**

MOUNTABLE CEMENT CONCRETE TRAFFIC CURB

LIDDEL FERN щ DRAWN

1. See Standard Plan F-30.10 for Curb Expansion and

CEMENT CONCRETE CURBS

분 No

STANDARD PLAN F-10.12-02









NOTES

1. This plan is to be used where pedestrian crossing in one direction is not





POST AND RAIL SPECIFICATIONS					<u>3 1/2"</u>
	PIPE	ROLL FORMED		H - COLUMN	
POST	NOM. SIZE (SCH. 40) I.D.	SECTION	WEIGHT (lb/ft)	WEIGHT (lb/ft)	
END, CORNER, OR PULL POST	2 1/2" DIAM.	(Y)	5.10		FENCE LINE
LINE OR BRACE POST	2" DIAM.	Z	1.85	3.26	$\begin{array}{c c} FABRIC LOOP \\ \sim 2 \text{ SIDES} \end{array} \begin{array}{c} \checkmark \end{array} \begin{array}{c} \Upsilon \end{array} \end{array} \begin{array}{c} \Upsilon \end{array} \end{array} \begin{array}{c} \blacksquare \end{array} \begin{array}{c} \blacksquare \end{array} \end{array} \begin{array}{c} \blacksquare \\ \blacksquare \end{array} \begin{array}{c} \blacksquare \\ \blacksquare \end{array} \begin{array}{c} \blacksquare \\ \blacksquare \end{array} \end{array} \begin{array}{c} \blacksquare \\ \blacksquare \\ \blacksquare \end{array} \begin{array}{c} \blacksquare \\ \blacksquare $

TYPE 4

BRACE POST

METHOD OF FASTENING STRETCHER BAR TO POST (SHOWN FOR ROUND POST)



NOTE: BUT AN THE EN FILE AT PORTAT

CHAIN LINK FENCE TYPES 3 AND 4

STANDARD PLAN L-20.10-01

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION







NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMEN BUT AN ELECTRONIC DUPLICATE: THE ORIGINAL, SIGNED BY THE ENGINEER AND APPOLED FOR UPBLICATION, IS KEPT C FILE AT THE WASHINGTON SIGNEE DEPARTMENT OF TRANS-PORTATION. A COPY MAY BE OBTAINED UPON REQUEST.

CHAIN LINK FENCE TYPES 3 AND 4

STANDARD PLAN L-20.10-01

SHEET 2 OF 2 SHEETS APPROVED FOR PUBLICATION







SINGLE GATE

CHAIN LINK FENCE TYPE 3 OR 4 PAY LIMIT

TENSION WIRE



CHAIN LINK GATE

STANDARD PLAN L-30.10-01

SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION









NOTE: THIS BUT AN ELEC THE ENGINEI FILE AT THE PORTATION.

TENSION WIRE (TYP.) (NOT REQUIRED FOR CHAIN LINK FENCE TYPE 4)

CHAIN LINK GATE

STANDARD PLAN L-30.10-01

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION



Property Fence



_		CUSTOM OPTIONS:
POST SIZE	5" X 5" X 96" (.150 HEAVY WALL)	
RAIL SIZE - TOP	2" X 7" X 95"	
RAIL SIZE – MID	-	
RAIL SIZE - BOTTOM	2" X 7" X 95"	
BOARD SIZE	⁷ /8°" X 6" X 56 5⁄8"	
SPACE	0"	
HEIGHT	72"	
POST CAP	5" X 5" PYRAMID CAP	BALL CAP GOTHIC NEW ENGLAND
COLOR		X KHAKI W/MULTI-GRAIN BOARDS TAN TAN W/MULTI-GRAIN BOARDS

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APPENDIX D

ENVIRONMENTAL PERMITS

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DEPARTMENT OF THE ARMY SEATTLE DISTRICT, CORPS OF ENGINEERS P.O. BOX 3755 SEATTLE, WASHINGTON 98124-3755

REPLY TO ATTENTION OF

Regulatory Branch

SEP 1 8 2012

Mr. Eric Scott City of Arlington 238 North Olympic Avenue Arlington, Washington 98223

> Reference: NWS-2009-1202 Arlington, City of

Dear Mr. Scott:

We have reviewed your application to widen 67th Avenue NE and construct a segment of the Centennial Trail at the City of Arlington, Washington. Based on the information you provided to us, Nationwide Permit (NWP) 23, Categorical Exclusions (Federal Register February 21, 2012, Vol. 77, No. 34), authorizes your proposal as depicted on the enclosed drawings dated August 15, 2011.

In order for this authorization to be valid, you must ensure the work is performed in accordance with the enclosed *NWP 23*, *Terms and Conditions* and the following special conditions:

a. You must implement and abide by the Endangered Species Act (ESA) requirements and/or agreements set forth in the document entitled *Biological Assessment 67th Avenue NE Phase III Improvement Project* dated January 2011. The U.S. Fish and Wildlife Service (USFWS) concurred with a finding of "may affect, not likely to adversely affect" based on this document dated March 1, 2011 (USFWS Reference Number 13410-2011-I-0140). The National Marine Fisheries Service (NMFS) concurred with a finding of "may affect, not likely to adversely affect" based on this document on March 10, 2011 (NFMS Reference Number 2011/00325). We will inform both agencies of this permit issuance. Failure to comply with the commitments made in this document constitutes non-compliance with ESA and your U.S. Army Corps of Engineers permit. The USFWS and NMFS are the appropriate authorities to determine compliance with ESA.

b. In order to protect the listed threatened and endangered species in the project area, you may conduct the authorized activities in the work window as agreed to and documented in writing through consultation by the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (Services) in any year this permit is valid. If changes to the originally authorized work window are proposed, you must re-coordinate these changes with the Services and receive written concurrence on the changes. Copies of the concurrence(s) must be sent to the U.S. Army Corps of Engineers, Regulatory Branch, within 10 days of the date of the revised concurrence.

For this project, the Federal Highway Administration is the Federal lead agency responsible for compliance with the Endangered Species Act, the Magnuson-Stevens Fishery Conservation and Management Act, and the National Historic Preservation Act. For the purpose of this Department of the Army authorization, we have determined this project will comply with the requirements of these laws provided you comply with all of the permit general and special conditions.

Please note that Seattle District NWP Regional General Condition 6, Cultural Resources and Human Burials, found in the *Nationwide Permit Terms and Conditions* enclosure, details procedures should an inadvertent discovery occur. You must ensure that you comply with this condition during the construction of your project.

The authorized work complies with the Washington State Department of Ecology's (Ecology) Water Quality Certification and the Coastal Zone Management Act requirements for this NWP. No further coordination with Ecology is required.

Our verification of this NWP authorization is valid for two years from the date of this letter unless the NWP is modified, reissued, or revoked prior to that date. If the authorized work has not been completed by that date, please contact us to discuss the status of your authorization. Failure to comply with all terms and conditions of this NWP verification invalidates this authorization and could result in a violation of Section 404 of the Clean Water Act. You must also obtain all State and local permits that apply to this project.

You are cautioned that any change in project location or plans will require that you submit a copy of the revised plans to this office and obtain our approval before you begin work. Deviating from the approved plans could result in the assessment of criminal or civil penalties.

Upon completing the authorized work, you must fill out and return the enclosed *Certificate* of *Compliance with Department of the Army Permit* form. Thank you for your cooperation during the permitting process. If you have any questions, please contact me via email at rebecca.e.mcandrew@usace.army.mil or at (206) 764-6912.

Sincerely,

Dinf Martin

Alisa A. Ralph, Chief Special Programs Section

Enclosures



AUTHORIZED FILL VOLUMES AND AREAS, BY SITE

Lebanonsy

Page 2 of 4

City of Arlington

	Stream CY	Wetland CY	Stream SF	Wetland SF	Drawing Page	
 A 67th West Portage Creek creek bed fill B 67th West Portage Creek wetland fill 	32	44	445	352	3 3	
C 67 th East Portage Creek creek bed fill D 67 th East Portage Creek Wetland fill	5	2	215	86	3 3	
E Trail East Portage Creek creek bed fill F Trail East Portage Creek Wetland fill	5	13	37	46	3 3	
G 67 th West Prairie Creek creek bed fill H 67 th West Prairie Creek Wetland fill	62 104	<u>1</u> 60	920 1.617	<u>15</u> 499	4 4	

<11th PINE



2.







RCW 77.55.021 - See appeal process at end of HPA

North Puget Sound 16018 Mill Creek Boulevard Mill Creek, WA 98012-1296 (425) 775-1311

Issue Date: July 09, 2012 Project Expiration Date: December 31, 2014 Control Number: 123904-2 FPA/Public Notice #: N/A

PERMITTEEAUTHORIZED AGENT OR CONTRACTORCity of Arlington Project ManagerHDR Engineering IncATTENTION: Eric ScottATTENTION: Karissa Kawamoto238 N Olympic Ave500 108th Avenue NE Suite 1200Arlington, WA 98223Bellevue, WA 98004360-403-3512425-450-6249Fax: 425-453-7107

Project Name: 67th Ave NE Phase III Improvement Project

Project Description: Improve approximately 5,000' of 67th Ave NE between 204th Street NE and Lebanon Street NE as well as connect the Centennial Trail through the City.

Project includes upgrade of 3 undersized culverts to 3 fish passable bottomless culverts.

PROVISIONS

1. TIMING: The project may begin IMMEDIATELY and shall be completed by December 31, 2014, provided all in water work is completed July 1 to October 1 in any given year.

2. NOTIFICATION REQUIREMENT: The Area Habitat Biologist (AHB) listed below shall receive written notification (FAX or mail) from the person to whom this Hydraulic Project Approval (HPA) is issued (permittee) or the agent/contractor no less than three working days prior to the start of construction activities. The notification shall include the permittee's name, project location, starting date for work, and the control number for this HPA.

3. APPROVED PLANS: Work shall be accomplished per plans and specifications approved by the Washington Department of Fish and Wildlife entitled "67th Ave NE Phase 3 Improvement Project" and dated May 27, 2011, except as modified by this Hydraulic Project Approval. A copy of these plans shall be available on site during construction.

4. The culverts shall be installed and maintained to ensure unimpeded fish passage.

5. The culverts shall be installed to maintain structural integrity to the 100-year peak flow with consideration of the debris likely to be encountered.

6. Fill associated with the culvert installation shall be protected from erosion to the 100-year peak flow.

7. The culverts shall be installed and maintained to avoid inlet scouring and to prevent erosion of stream banks downstream of the project.



RCW 77.55.021 - See appeal process at end of HPA

North Puget Sound 16018 Mill Creek Boulevard Mill Creek, WA 98012-1296 (425) 775-1311

Issue Date: July 09, 2012 Project Expiration Date: December 31, 2014 Control Number: 123904-2 FPA/Public Notice #: N/A

8. The culvert facility shall be maintained by the owner(s) per RCW 77.57.030 to ensure continued, unimpeded fish passage. If the structure becomes a hindrance to fish passage, the owner(s) shall be responsible for obtaining an Hydraulic Project Approval and providing prompt repair. Financial responsibility for maintenance and repairs shall be that of the owner(s).

9. The bottomless culverts shall not exceed dimensions listed below:

- A. Prairie Creek: 81 linear feet, 14 foot 5 inch alumimum box
- B. Portage Creek, 67th Ave: 72 linear feet, 20 foot by 4 inch alumimum box culvert
- C. Portage Creek 69th Ave: 49 linear feet, 13 foot by 7 inch alumimum box culvert

10. Approach material shall be structurally stable and be composed of material that, if eroded into the stream, shall not be detrimental to fish life.

11. BYPASS INSTALLATION: A temporary bypass to divert flow around the work area shall be in place prior to initiation of other work in the wetted perimeter.

12. The permittee shall capture and safely move food fish, game fish, and other fish life from the job site. The permittee shall have fish capture and transportation equipment ready and on the job site. Captured fish shall be immediately and safely transferred to free-flowing water downstream of the project site. The permittee may request the Washington Department of Fish and Wildlife assist in capturing and safely moving fish life from the job site to free-flowing water, and assistance may be granted if personnel are available.

13. Any device used for diverting water from a fish-bearing stream shall be equipped with a fish guard to prevent passage of fish into the diversion device pursuant to RCW 77.57.010 and 77.57.070. The pump intake shall be screened by one of the following:

a. Perforated plate: 0.094 inch (maximum opening diameter).

b. Profile bar: 0.069 inch (maximum width opening).

c. Woven wire: 0.087 inch (maximum opening in the narrow direction).

The minimum open area for all types of fish guards is 27%. The screened intake shall consist of a facility with enough surface area to ensure that the velocity through the screen is less than 0.4 feet per second. Screen maintenance shall be adequate to prevent injury or entrapment of juvenile fish and the screen shall remain in place whenever water is withdrawn from the stream through the pump intake.

14. WATER QUALITY: Every effort shall be taken during all phases of this project to ensure that sediment-laden water is not allowed to enter the stream. This may be accomplished by placing a series of low gravel bag dams downstream of the project. The gravel bag dams shall consist of burlap bags filled with pea gravel. The streambed and dams shall be overlain with filter fabric on the upstream side of the dams. Accumulated silt shall be removed with the filter fabric upon completion of the project and the burlap bags shall be slit to allow the pea gravel to disperse downstream. Where necessary, hand tools may be used to ensure stream flow and fish passage are not impeded by the gravel.

Washington Department of FISH and WILDLIFE

RCW 77.55.021 - See appeal process at end of HPA

North Puget Sound 16018 Mill Creek Boulevard Mill Creek, WA 98012-1296 (425) 775-1311

Issue Date: July 09, 2012 Project Expiration Date: December 31, 2014 Control Number: 123904-2 FPA/Public Notice #: N/A

15. Wastewater from project activities and water removed from within the work area shall be routed to an area landward of the ordinary high water line to allow removal of fine sediment and other contaminants prior to being discharged to the stream.

16. All waste material such as construction debris, silt, excess dirt or overburden resulting from this project shall be deposited above the limits of flood water in an approved upland disposal site.

17. If high flow conditions that may cause siltation are encountered during this project, work shall stop until the flow subsides.

18. Extreme care shall be taken to ensure that no petroleum products, hydraulic fluid, fresh cement, sediments, sediment-laden water, chemicals, or any other toxic or deleterious materials are allowed to enter or leach into the stream.

19. Alteration or disturbance of the bank and bank vegetation shall be limited to that necessary to construct the project. Within seven calendar days of project completion, all disturbed areas shall be protected from erosion using vegetation or other means.

20. If at any time, as a result of project activities, fish are observed in distress, a fish kill occurs, or water quality problems develop (including equipment leaks or spills), immediate notification shall be made to the Washington Military Department's Emergency Management Division at 1-800-258-5990, and to the Area Habitat Biologist listed below.

PROJECT LOCATIONS

Location #1	67th Ave NE	

WORK S	WORK START:July 09, 2012WORK END:October 01, 2012								
WRIA: Waterbody: Tributary to:									
05.0036 Portage Creek					South Slough				
1/4 SEC:	Section:	Township:	Range:	Latitude:	Longitude:	County:			
All	11	31 N	05 E N 48.1809		W 122.1404 Snohomish				
Location #1 Driving Directions									



RCW 77.55.021 - See appeal process at end of HPA

North Puget Sound 16018 Mill Creek Boulevard Mill Creek, WA 98012-1296 (425) 775-1311

Issue Date: July 09, 2012 Project Expiration Date: December 31, 2014 Control Number: 123904-2 FPA/Public Notice #: N/A

Location #2 67th Ave NE, Prairie Creek

WORK START:July 09, 2012WORK END:October 01, 2014								
WRIA: Waterbody:						Tributary to:		
05.0058 Prairie Creek				Portage Creek				
1/4 SEC:	Section:	Township:	Range:	Latitude:		Longitude		County:
All	11	31 N	05 E	N				Snohomish
Location #2 Driving Directions								

Location #3 Centennial trail crossing

WORK START:July 09, 2012WORK END:October 01, 2014								
WRIA: Waterbody:				Tributary to:				
05.0036 Portage Creek					South Slough			
1/4 SEC:	Section:	Township:	Range:	Latitude:		Longitude	<u>:</u>	County:
All	11	31 N	05 E	N				Snohomish
Location #3 Driving Directions								

APPLY TO ALL HYDRAULIC PROJECT APPROVALS

This Hydraulic Project Approval pertains only to those requirements of the Washington State Hydraulic Code, specifically Chapter 77.55 RCW (formerly RCW 77.20). Additional authorization from other public agencies may be necessary for this project. The person(s) to whom this Hydraulic Project Approval is issued is responsible for applying for and obtaining any additional authorization from other public agencies (local, state and/or federal) that may be necessary for this project.

This Hydraulic Project Approval shall be available on the job site at all times and all its provisions followed by the person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work.

This Hydraulic Project Approval does not authorize trespass.

The person(s) to whom this Hydraulic Project Approval is issued and operator(s) performing the work may be held liable for any loss or damage to fish life or fish habitat that results from failure to comply with the provisions of this Hydraulic Project Approval.

Failure to comply with the provisions of this Hydraulic Project Approval could result in a civil penalty of up to one hundred dollars per day and/or a gross misdemeanor charge, possibly punishable by fine and/or imprisonment.

All Hydraulic Project Approvals issued under RCW 77.55.021 are subject to additional restrictions, conditions, or revocation if the Department of Fish and Wildlife determines that changed conditions require such action. The person(s) to whom this Hydraulic Project Approval is issued has the right to appeal those decisions. Procedures for


HYDRAULIC PROJECT APPROVAL

RCW 77.55.021 - See appeal process at end of HPA

North Puget Sound 16018 Mill Creek Boulevard Mill Creek, WA 98012-1296 (425) 775-1311

Issue Date: July 09, 2012 Project Expiration Date: December 31, 2014 Control Number:123FPA/Public Notice #:N/A

123904-2

appeals are listed below.

NOTE: You may request changes to this HPA. If you paid an application fee for your original HPA you must include payment of \$150 with your written request or request billing to an account previously established with Washington Department of Fish and Wildlife. If you did not pay an application fee for the original HPA, no fee is required for a change to it. Requests for changes must include the HPA number, check number or billing account number, and a description of the requested change. Send your written requests and payment, if applicable, by mail to: Washington Department of Fish and Wildlife, PO Box 43234, Olympia, Washington 98504-3234. If you are charging the fee to a billing account number or you are not subject to the fee, you may email your request to HPAapplications@dfw.wa.gov.

APPEALS INFORMATION

If you wish to appeal the issuance, denial, conditioning, or modification of a Hydraulic Project Approval (HPA), Washington Department of Fish and Wildlife (WDFW) recommends that you first contact the department employee who issued or denied the HPA to discuss your concerns. Such a discussion may resolve your concerns without the need for further appeal action. If you proceed with an appeal, you may request an informal or formal appeal. WDFW encourages you to take advantage of the informal appeal process before initiating a formal appeal. The informal appeal process includes a review by department management of the HPA or denial and often resolves issues faster and with less legal complexity than the formal appeal process. If the informal appeal process does not resolve your concerns, you may advance your appeal to the formal process. You may contact the HPA Appeals Coordinator at (360) 902-2534 for more information.

A. INFORMAL APPEALS: WAC 220-110-340 is the rule describing how to request an informal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete informal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request an informal appeal of that action. You must send your request to WDFW by mail to the Washington Department of Fish and Wildlife HPA Appeals Coordinator, 600 Capitol Way North, Olympia, Washington 98501-1091; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. WDFW must receive your request within 30 days from the date you receive notice of the decision. If you agree, and you applied for the HPA, resolution of the appeal may be facilitated through an informal conference with the WDFW employee responsible for the decision and a supervisor. If a resolution is not reached through the informal conference, or you are not the person who applied for the HPA, the HPA Appeals Coordinator or designee will conduct an informal hearing and recommend a decision to the Director or designee. If you are not satisfied with the results of the informal appeal, you may file a request for a formal appeal.

B. FORMAL APPEALS: WAC 220-110-350 is the rule describing how to request a formal appeal of WDFW actions taken under Chapter 77.55 RCW. Please refer to that rule for complete formal appeal procedures. The following information summarizes that rule.

A person who is aggrieved by the issuance, denial, conditioning, or modification of an HPA may request a formal appeal of that action. You must send your request for a formal appeal to the clerk of the Pollution Control Hearings Boards and serve a copy on WDFW within 30 days from the date you receive notice of the decision. You may serve WDFW by mail to the Washington Department of Fish and Wildlife HPA Appeals Coordinator, 600 Capitol Way North, Olympia, Washington 98501-1091; e-mail to HPAapplications@dfw.wa.gov; fax to (360) 902-2946; or hand-delivery to the Natural Resources Building, 1111 Washington St SE, Habitat Program, Fifth floor. The time period for requesting a formal appeal is suspended during consideration of a timely informal appeal. If there has been an informal appeal, you may request a formal appeal within 30 days from the date you receive the Director's or designee's written decision in response to the informal appeal.

C. FAILURE TO APPEAL WITHIN THE REQUIRED TIME PERIODS: If there is no timely request for an appeal, the WDFW action shall be final and unappealable.



HYDRAULIC PROJECT APPROVAL

RCW 77.55.021 - See appeal process at end of HPA

North Puget Sound 16018 Mill Creek Boulevard Mill Creek, WA 98012-1296 (425) 775-1311

Issue Date: July 09, 2012 Project Expiration Date: December 31, 2014 Control Number: 123904-2 FPA/Public Notice #: N/A

ENFORCEMENT: Sergeant Lambert (41) P2									
Habitat Biologist	bailsjlb@dfw.wa.gov	Jamutails	for Director						
Jamie Bails	425-379-2309		WDFW						

CC:

APPENDIX E

WSDOT FISH EXCLUSIONS PROTOCOLS AND

STANDARDS

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WSDOT Fish Exclusion Protocols and Standards

Work below the Ordinary High-Water Mark (or Mean Higher High-Water Mark) shall, in general, be conducted in isolation from flowing waters. Exceptions to this general rule or performance measure include: 1) implementation of the work area isolation and fish capture and removal protocols described in this document; 2) placement or removal of small quantities of material (e.g., wood or rock), or installation of structural best management practices (e.g., turbidity curtain), under site conditions where potential exposures and effects to fish life are minimized without isolation from flowing waters¹; 3) work conducted under a declared emergency or under emergency conditions; or, 4) work conducted where flow conditions prevent safe implementation of work area isolation and fish capture and removal protocols.

Implementation of the work area isolation and fish capture and removal protocols shall be planned and directed by a WSDOT biologist, or qualified biologist under contract to WSDOT, possessing all necessary knowledge, training, and experience (the directing biologist). If electrofishing will or may be used as a means of fish capture, the directing biologist shall have a minimum of 100 hours electrofishing experience in the field using similar equipment, and any individuals operating electrofishing equipment shall have a minimum of 40 hours electrofishing experience under direct supervision. All individuals participating in fish capture and removal operations shall have the training, knowledge, skills, and ability to ensure safe handling of fish, and to ensure the safety of staff conducting the operations.

The directing biologist shall work with Maintenance, Construction, and/or Environmental staff (as appropriate) to plan the staging and sequence for work area isolation, fish capture and removal, and dewatering. This plan should consider the size and channel characteristics of the area to be isolated, the method(s) of dewatering (e.g., diversion with bypass flume or culvert; diversion with sandbag, sheet pile or similar cofferdam; etc.), and what sequence of activities will provide the best conditions for safe capture and removal of fish. Where the area to be isolated is small, depths are shallow, and conditions are conducive to fish capture, it may be possible to isolate the work area and remove all fish life prior to dewatering or flow diversion. Where the area to be isolated is large, depths are not shallow, where flow volumes or velocities are high, and/or conditions are not conducive to easy fish capture, it may be necessary to commence with dewatering or flow diversion staged in conjunction with fish capture and removal. The directing biologist shall use his/her best professional judgment in deciding what sequence of activities is likely to minimize exposure of fish to conditions causing stress or injury

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¹ WSDOT shall make this determination with consultation or input from the regulatory agencies with jurisdiction, including the Washington State Department of Fish and Wildlife (WDFW), U.S. Fish and Wildlife Service (FWS), and NOAA-National Marine Fisheries Service (NMFS) as appropriate; also, this exception shall not permit work that requires in-water excavation or that presents a risk of increased turbidity beyond the immediate work area or for a duration of more than 15 minutes.

(including stranding, exposure to extremes of temperature or reduced dissolved oxygen, risk of injury resulting from electrofishing, etc.).

The directing biologist shall plan work area isolation, fish capture and removal, and dewatering with consideration for the following: habitat connectivity and fish habitat requirements; the duration and extent of planned in-water work; anticipated flow and temperature conditions over the duration of planned in-water work; and, the risk of exposure to turbidity or other unfavorable conditions during construction. If the area to be isolated includes only a portion of the wetted channel width (e.g., large or deep rivers where diversion from the entirety of the wetted channel is difficult or impossible), or if the bypass flume or culvert will effectively maintain connectivity and fish passage for the duration of construction activities, it may be less important whether fish are herded (and/or captured and released) upstream or downstream of the isolated work area. However, if the area to be isolated includes the entire wetted channel width, and especially if conditions make it unlikely that connectivity (i.e., upstream/ downstream fish passage) can be effectively maintained for the duration of construction activities, then the directing biologist should carefully consider whether to herd fish (and/or capture and release fish) upstream or downstream of the isolated streat.

If conditions upstream of the isolated work area will or may become unfavorable during construction, then fish should not be herded or released to an upstream location; this situation is probably most common where the waterbody in question is small, where seasonal flows are substantially diminished, and conditions of elevated temperature and/or reduced dissolved oxygen are foreseeable. However, the directing biologist shall also consider whether planned in-water work presents a significant risk of downstream turbidity and sedimentation; fish herded or released to a downstream location may be exposed to these conditions.

If large numbers of fish are to be herded (and/or captured and released), and in order to avoid overcrowding or concentrating fish in areas where their habitat needs cannot be met, it may be appropriate to relocate fish both upstream and downstream of the isolated work area. At locations where habitat connectivity or quality is poor, including along reaches upstream and/or downstream of the isolated work area, the directing biologist should carefully consider whether relocated fish can meet their minimum habitat requirements for the duration of planned in-water work. On rare occasions it may be appropriate to relocate fish at a greater distance upstream and/or downstream (e.g., thousands of feet or miles), so as to ensure fish are not concentrated in areas where their habitat needs cannot be met, or where they may be exposed to unfavorable conditions during construction. On those rare occasions where relocation to a greater distance is deemed necessary, the WSDOT shall provide notice to the agencies with jurisdiction in advance of the operations.

Plans for staging work area isolation, fish capture and removal, and dewatering must comply with WSDOT safety requirements. Safe implementation is a high priority. The directing biologist shall design and adjust the plan as necessary to ensure the safety of all individuals implementing the plan. Under some conditions it may be appropriate to conduct work without isolation from flowing waters, without placement of block nets, fish capture or removal; for a fuller discussion of this topic see page 1.

In order to comply with WSDOT safety requirements, work in or around water outside of daylight hours is not generally permissible. If, under unusual circumstances, the directing biologist identifies work that will or may be necessary outside of daylight hours, he/she shall coordinate and gain approval for this work with appropriate managers (including the WSDOT safety officer and/or supervisors with authority).

Work Area Isolation

The directing biologist shall determine appropriate locations for the placement of block nets, based on site characteristics and a consideration of the type and extent of planned in-water work. Sites that exhibit reduced flow volume or velocity, uniformity of depth, and good accessibility are preferred; sites with heavy vegetation, large cobble or boulders, undercut banks, deep pools, etc. should be avoided due to the difficulty of securing and/or maintaining nets. Sites with a narrow channel cross-section ("constriction") should be avoided if foreseeable flow conditions might overwhelm or dislodge the block nets, posts, or anchors.

Except when planning and intending to herd fish upstream, an upstream block net shall be placed first. With a block net secured to prevent movement of fish into the work area from upstream, a second block net should be used as a seine to herd fish in a downstream direction. Where the area to be isolated includes a culvert(s), deep pools, undercut banks, or other cover attractive to fish (e.g., thick overhanging vegetation, rootwads, logjams, etc.) it may be appropriate to isolate a portion or portions of the work area, rather than attempting to herd fish from the entirety of the work area in a single downstream pass. Fish capture and removal will be most successful if an effort is made to strategically focus and concentrate fish in areas where they can be easily seined and netted. Care shall be taken not to concentrate fish where they are exposed to sources of stress, or to leave them concentrated in such areas for a long duration (e.g., more than 30 minutes).

Depending upon site characteristics, and the planned staging and sequence for work area isolation and dewatering, it may or may not be necessary to place a downstream block net. Typically, however, site characteristics and/or the duration of planned in-water work will necessitate placement of a net(s) to prevent movement of fish into the work area from downstream. If groundwater seepage or site drainage has a tendency to re-wet the area, if the area to be isolated is low-gradient or subject to a backwatering influence, or if the area to be isolated is large and considerable effort will be expended in capturing and removing fish life, a downstream block net should be placed. If foreseeable flow conditions over the duration of planned in-water work might enable fish to re-enter the work area from downstream, a downstream block net should be placed.

In most instances where gradual dewatering or flow diversion is staged in conjunction with fish capture and removal, it is appropriate to delay installation of the downstream block net(s) until after fish have been given sufficient time to move downstream by their own choosing. If flows are reduced gradually over the course of several hours, or the length of an entire workday, some (perhaps many) fish will make volitional movements downstream beyond the area to be isolated. Gradual dewatering can be an effective means by which to reduce the risk of fish stress or injury. Gradual dewatering and the encouragement of volitional movement are particularly important where the area to be isolated is large and may hold many fish. However, where the area to be isolated includes a culvert(s), deep pools, undercut banks, or other cover attractive to fish, some (perhaps many) fish will not choose to move downstream regardless of how gradually flows are reduced. The directing biologist should use his/her best professional judgment in deciding what sequence of activities is likely to minimize fish stress or injury (including stranding).

Where the area to be isolated is small, depths are shallow, and conditions are conducive to fish capture, it may be possible to remove all fish life prior to dewatering, or to implement plans for dewatering staged with fish capture over a relatively short timeframe (e.g., 1-2 hours). Where the area to be isolated is large, depths are not shallow, where flow volumes or velocities are high, and/or conditions are not conducive to easy fish capture, dewatering or flow diversion should be staged in conjunction with fish capture and removal over a longer timeframe (e.g., 3-6 hours). The largest areas and/or most difficult site conditions may warrant or require that plans for dewatering and fish capture proceed over the length of an entire workday, or multiple workdays. Where this is the case, fish shall be given sufficient time and a means to move downstream by their own choosing so as to reduce the total number of fish exposed to sources of stress and injury (including fish handling).

The directing biologist shall select suitable block nets. Type of material, length, and depth may vary based on site conditions. It may be necessary and appropriate to contact other WSDOT Regions or offices with access to nets (or other materials) suitable for placement under unique or unusual circumstances. Typically block nets will be composed of 9.5 millimeter stretched nylon mesh and should be installed at an angle to the direction of flow (i.e., not directly perpendicular to flow) so as to reduce the risk of impinging fish. Anchor bags filled (or half-filled) with clean, washed gravel are preferred over sandbags, especially for nets and anchors that will or may remain in-place for a long duration (i.e., more than two weeks). Any use or movement of native substrates or other materials found on-site should be incidental and shall not appreciably affect channel bed or bank conditions.

Block nets shall remain in-place until work is complete and conditions are suitable for the reintroduction of fish². Block nets require frequent inspection and debris removal. A

 $^{^2}$ If plans for work area isolation and fish capture and removal include the installation of temporary cofferdams, and once the directing biologist has confirmed fish life have been successfully excluded from the entire area enclosed by the cofferdam(s), it may be appropriate to remove block nets and allow fish to re-enter the previously isolated work area; this approach is particularly relevant and appropriate where many weeks or months of construction are planned for completion within temporary cofferdams (i.e., isolated from flowing waters).

qualified biologist, or other field staff trained in safe fish handling, shall be assigned the responsibility of inspecting the nets and safely capturing and relocating any impinged fish. The frequency of these inspections shall be determined on a case-by-case basis. However, block nets shall, at a minimum, be inspected for impinged fish (especially juvenile fish) at least three times daily for the first 48 hours after installation (approximate), and for the first 24 hours after significant rainfall (or change in flow volume or velocity). In the event fish are found impinged on the net(s), or if weather or flow conditions change significantly, the directing biologist shall re-consider and adjust the frequency of net inspections so as to minimize the risk of impinging and injuring fish.

Field staff shall be assigned the responsibility of frequently checking and maintaining the nets for accumulated debris, general stability, and proper function. The frequency of these inspections shall be determined on a case-by-case basis, dependent upon the site, seasonal, and weather conditions. Block nets must be secured along both banks and the channel bottom to prevent failure as a result of debris accumulation, high flows, and/or flanking. Some locations may require additional block net support (e.g., galvanized hardware cloth, affixed metal fence posts, etc.).

Fish Capture and Removal

If dewatering and/or flow diversion are deemed necessary¹, this work (including related fish capture and removal operations) shall comply with any provisions contained in the Hydraulic Project Approval (HPA), or applicable General HPA, issued by the WDFW. If the FWS and/or NMFS have provided relevant Terms and Conditions from a Biological Opinion addressing the work (or action), this work shall also comply with those Terms and Conditions.

If pumps are used to temporarily bypass water or to dewater residual pools or cofferdams, pump intakes shall be screened to prevent aquatic life from entering the intake. Fish screens or guards shall comply with Washington State law (RCW 77.57.010 and 77.57.070), with guidelines prescribed by the NMFS³, and any more stringent requirements contained in the HPA or General HPA issued by the WDFW. If pumps are to be used on a more permanent basis, as the primary or secondary method for diverting flow around the isolated work area, plans for dewatering shall address contingencies (i.e., extremes of flow or weather). These plans shall include ready access to a larger or additional "back-up" pump with screened intake. If the directing biologist has confirmed that all fish life has been successfully excluded from the area, if there is no risk of entraining fish, and adequate plans are in-place to address contingencies (including a routine schedule for inspection), then pumps may be operated without a screened intake.

³ National Marine Fisheries Service. 1997. Fish screening criteria for anadromous salmonids. NMFS Southwest Region, January 1997, 12p. << http://swr.nmfs.noaa.gov/hcd/fishscrn.pdf >>.

Fish Capture and Removal Methods:

Methods for safe capture and removal of fish from the isolated work area are described below. These methods are given in order of preference. At most locations, a combination of methods will be necessary. In order to avoid and minimize the risk of injury to fish, attempts to seine and/or net fish shall always precede the use of electrofishing equipment. Visual observation techniques (e.g. snorkeling, surveying with polarized glasses or Plexiglas bottomed buckets, etc.) may be used to assess the effectiveness of these methods, to identify locations where fish are concentrating, or otherwise adjust methods for greater effectiveness.

If the planned fish capture and removal operations have not been addressed through consultation (or programmatic consultation), if seining and netting are impracticable (i.e., electrofishing is deemed the only viable means of fish capture), and fish listed under the ESA will or may be present, the directing biologist shall provide notice to the FWS and/or NMFS (as appropriate). This notice shall be provided in advance of the operations, and shall include an explanation of the unique site conditions or circumstances. Work conducted under a declared emergency (or emergency conditions) shall follow established ESA notification protocols.

Where fish listed under the ESA will or may be present, the directing biologist shall ensure that fish capture and removal operations adhere to the following minimum performance measures or expectations:

- 1) Only dip nets and seines composed of soft (non-abrasive) nylon material shall be used.
- 2) The operations shall not resort to the use of electrofishing equipment unless and until other, less injurious methods have been effective in removing most or all of the adult and sub-adult fish (i.e., fish in excess of 300 millimeters); the operations shall conduct a minimum of three complete passes without capture using seines and/or nets.
- 3) The operations shall confirm success of fish capture and removal before completely dewatering or commencing with other work within the isolated work area; the operations shall conduct a minimum of two complete passes without capture using electrofishing equipment.
- 4) Fish listed under the ESA shall not be held in containers for more than 10 minutes, unless those containers are dark-colored, lidded, and fitted with a portable aerator.

• Seining shall be the preferred method for fish capture. Other methods shall be used when seining is not possible, or when/after attempts at seining have proven ineffective. Seines, once pursed, shall remain partially in the water while fish are removed with dip nets. Seines with a "bag" minimize handling stress and are preferred. Seines with a bag

are also preferred where obstructions make access to the water (or deployment/ retrieval of the seine) difficult.

In general, seining will be more effective if fish, especially juvenile fish, are moved (or "flushed") out from under cover. Methods which may increase effectiveness and/or efficiency include conducting seining operations at dawn or dusk (i.e., during low-light conditions), in conjunction with snorkeling, and/or flushing of the cover. In flowing waters, and especially where flow volume or velocity is high or moderately-high, seines that employ a heavy lead line and variable mesh size are preferred. Small mesh sizes are more effective across the full range of fish size (and age class), but also increase resistance and can make deployment/ retrieval more difficult in flowing waters. Seines which use a small mesh size in the bag (or body), and a larger, less resistant mesh size in the wings may under some conditions be most effective and efficient.

• **Baited Minnow Traps** are typically used before and in conjunction with seining. Traps may be left in the isolated work area overnight. Traps shall be inspected at least four times daily to remove captured fish and thereby minimize predation within the trap. Traps should be checked more frequently if temperatures are in excess of 15 degrees C. Predation within the trap may be an unacceptable risk when/ where minnow traps are left in-place over night; large sculpin and other predators that feed on juvenile fish are typically much more active at night. The directing biologist shall consider the need and plan for work outside daylight hours (i.e., inspection and removal) before leaving minnow traps in-place over night.

• **Dip Nets** shall be used in conjunction with seining. This method is particularly effective when employed during gradual dewatering or flow diversion. To be most effective, and to minimize stress and risk of injury to fish (including stranding), the directing biologist shall coordinate fish capture operations with plans for dewatering or flow diversion. Plans for dewatering and/or flow diversion shall proceed at a measured pace (within constraints), to encourage the volitional downstream movement of fish, and reduce the risk of stranding. Plans for dewatering and/or flow diversion shall not proceed unless there are sufficient staff and materials on-site to capture and safely remove fish in a timely manner. Generally this will require a minimum of two persons (three if electrofishing), but the directing biologist may find that some sites (especially large or complicated sites) warrant or require a more intensive effort (i.e., additional staffing).

Once netted, fish shall remain partially in water until transferred to a bucket, cooler, or holding tank. Dip nets which retain a volume of water ("sanctuary nets") are preferred. However, sanctuary nets may be ineffective where flow volume or velocity is high or moderately-high (i.e., increased resistance lessens ability to net and capture fish). In addition, where water depths are very shallow and/or fish are concentrated in very small receding pools or coarse substrate, "aquarium" nets may be a better, more effective choice. Use of dip nets in conjunction with snorkeling, flushing of the cover, or around the hours of dawn or dusk (i.e., during low-light conditions), can be effective for capturing fish sheltered below cover.

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• **Connecting Rod Snakes** may be used to flush fish out of stream crossing structures (i.e., culverts). Connecting rod snakes are composed of wood sections approximately three feet in length. Like other cover attractive to fish, culverts (especially long culverts), can present a challenge to fish capture and removal operations. The directing biologist should plan a strategy for focusing and concentrating fish in areas where they can be easily seined and netted, and should take active steps to prevent fish from evading capture. When first implementing plans for work area isolation, fish capture and removal, and dewatering, it may be appropriate to place block nets immediately upstream and/or downstream of culverts so as to minimize the number of fish that might seek cover within the culvert(s). Once most or all of the fish have been removed from other parts of the work area, the block net placed downstream of the culvert(s) should be removed to encourage volitional downstream movement of fish.

• **Electrofishing** shall be performed only when other methods of fish capture and removal have proven impracticable or ineffective at removing all fish. The directing biologist shall ensure that attempts to seine and/or net fish always precede the use of electrofishing equipment. Larger fish (i.e., adult and sub-adult fish with comparatively longer spine lengths) are more susceptible to electrofishing injury than smaller fish. To minimize the risk of injury (and the number of fish potentially injured), the directing biologist shall confirm that other methods have been effective in removing most or all of the adult and sub-adult fish before resorting to the use of electrofishing equipment; see the related performance measure appearing on page 6. As a general rule or performance measure, electrofishing should not be conducted under conditions that offer poor visibility (i.e., visibility of less than 0.5 meter).

The following performance measures shall apply to the use of electrofishing equipment as a means of fish capture and removal:

1. If the planned fish capture and removal operations have not been addressed through consultation (or programmatic consultation), and fish listed under the ESA will or may be present, WSDOT shall provide notice to the FWS and/or NMFS prior to the initiation of electrofishing attempts. Upon request, the WSDOT shall permit the FWS, NMFS, and/or their designated representative to observe fish capture and removal operations. Work conducted under a declared emergency (or emergency conditions) shall follow established ESA notification protocols.

2. Electrofishing shall only be conducted when a biologist with at least 100 hours of electrofishing experience is on-site to conduct or direct all related activities. The directing biologist shall be familiar with the principles of electrofishing, including the effects of voltage, pulse width and pulse rate on fish, and associated risk of injury or mortality. The directing biologist shall have knowledge regarding galvanotaxis, narcosis and tetany, their relationships to injury/mortality rates, and shall have the ability to recognize these responses when exhibited by fish.

3. The directing biologist shall ensure that electrofishing attempts use the minimum voltage, pulse width, and rate settings necessary to achieve the desired response

(galvanotaxis). Water conductivity shall be measured in the field prior to each electrofishing attempt to determine appropriate settings. Electrofishing methods and equipment shall comply with guidelines outlined by the NMFS⁴.

4. The initial and maximum settings identified below shall serve as guidelines when electrofishing in waters that may support ESA-listed fish. Only DC or pulsed DC current shall be used. [Note: some newer, late-model electrofishing equipment includes a "set-up" or initialization function; the directing biologist shall have the discretion to use this function as a means to identify proper initial settings.]

	Initial Settings	Conductivity (µS/cm)	Maximum Settings
Voltage	100 V	≤ 300 > 300	800 V 400 V
Pulse Width	500 µs		5 ms
Pulse Rate	15 Hz		60 Hz [<i>In general</i> , exceeding 40 Hz will injure more fish.]

Guidelines	for initial a	and maximum	settings for	backpack	electrofishing. ⁵
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Each attempt shall begin with low settings for pulse width and pulse rate. If fish present in the area being electrofished do not exhibit a response, the settings shall be gradually increased until the appropriate response is achieved (galvanotaxis). The lowest effective settings for pulse width, pulse rate and voltage shall be used to minimize risks to both personnel and fish. Safe implementation is a high priority. The directing biologist shall ensure the safety of all individuals assisting with electrofishing attempts; this includes planning for and providing all necessary safety equipment and materials (e.g., insulated waders and gloves, first aid/cpr kit, a current safety plan with emergency contacts and phone numbers, etc.). Only individuals that are trained and familiar with the use of electrofishing equipment shall provide direct assistance during electrofishing attempts.

5. Electrofishing shall not be conducted where spawning adults or redds with incubating eggs may be exposed to the electrical current. As a general rule or performance measure, waters that support anadromous salmon should not be electrofished from October 15 through May 15, and resident waters from November 1 through May 15. If located within waters that support bull trout, especially waters located within a local bull trout population (i.e., that support spawning and rearing), seasonal limitations on the use of electrofishing equipment may be more restrictive; if you have questions, contact the

⁴ National Marine Fisheries Service. 2000. Guidelines for electrofishing waters containing salmonids listed under the Endangered Species Act. NMFS Northwest Region, June 2000, 5p.

<< http://www.nwr.noaa.gov/ESA-Salmon-Regulations-Permits/4d-Rules/upload/electro2000.pdf >>.

⁵ Adapted from NMFS (June 2000) and WDFW Electrofishing Guidelines for Stream Typing (May 2001).

FWS. If any, more restrictive work windows have been identified through consultation, those windows shall apply. The directing biologist shall ensure that electrofishing attempts are made only during appropriate times of year, and not where spawning adults or redds with incubating eggs may be exposed to the electrical current.

6. An individual shall be stationed at the downstream block net(s) during electrofishing attempts to recover stunned fish in the event they are flushed downstream and/or impinged against the block net(s).

7. The operator shall use caution so as to prevent fish from coming into direct contact with the anode. Under most conditions, the zone of potential fish injury extends approximately 0.5 meter from the anode. Netting shall not be attached to the anode, as this practice presents an increased risk of direct contact and injury. Extra care shall be taken near in-water structures or undercut banks, in shallow waters, or where fish densities are high. Under these conditions fish are more likely to come into close or direct contact with the anode and/or voltage gradients may be intensified. Voltage and other settings shall be readjusted to accommodate changing conditions in the field, including channel depth. When electrofishing near undercut banks, overhanging vegetation, large cobble or boulders, or where structures provide cover, fish that avoid capture may be exposed to the electrical current repeatedly. Repeated or prolonged exposures to the electrical current present a higher risk of injury, and therefore galvanotaxis should be used to draw fish out of cover.

8. Electrofishing shall be conducted in a manner that minimizes harm to fish. Once an appropriate fish response (galvanotaxis) is achieved, the isolated work area shall be worked systematically. The number of passes shall be kept to a minimum, but is dependent upon the numbers of fish and site characteristics and shall be at the discretion of the directing biologist. Electrofishing shall not be conducted unless there are sufficient staff and materials on-site, to both minimize the number of passes required and to locate, net, recover, and release fish in a timely manner. Generally this will require a minimum of three persons, but the directing biologist may find that some sites (especially large or complicated sites) warrant or require a more intensive effort (i.e., additional staffing). Care shall be taken to remove fish from the electrical field immediately and to avoid exposing the same fish repeatedly. Fish shall not be held in dip nets while electrofishing is in progress (i.e., while continuing to capture additional fish). [Note: where flow velocity or turbulence is high or moderately-high (e.g., within riffles) it may be difficult to see and net fish; these fish may evade capture (resulting in repeated exposure), or may become impinged on the downstream block net(s); a "frame" net, or small and portable block net approximately 3 feet in width, can be effective under these conditions when held downstream in close proximity to the anode.]

9. The condition of captured fish shall be carefully observed and documented. Dark bands on the body and/or extended recovery times are signs of stress or injury. When such signs are noted, settings for the electrofishing unit may require readjustment. The directing biologist shall also review and consider changes to the manner in which the electrofishing attempt is proceeding. If adjustments to the electrofishing attempt do not lessen the frequency (or severity) of observed stress, the directing biologist shall have the authority to postpone fish capture and removal operations⁶. Each fish shall be capable of remaining upright and actively swimming prior to release (see Fish Handling, Holding and Release).

10. Electrofishing shall not be conducted when turbidity reduces visibility to less than 0.5 meter, when water conductivity exceeds 350 μ S/cm, or when water temperature is above 18°C or below 4°C.

Fish Handling, Holding and Release:

• Fish handling shall be kept to the minimum necessary to remove fish from the isolated work area. Fish capture and removal operations shall be planned and conducted so as to minimize the amount and duration of handling. The operations shall maintain captured fish in water to the maximum extent possible during seining/netting, handling, and transfer for release.

• The directing biologist shall document and maintain accurate records of the operations, including: fish species, number, age/size class estimate, condition at release, and release location. Fish shall not be sampled or anesthetized, unless for valid purposes consistent with the WSDOT's Section 10 scientific collection permits.

• Individuals handling fish shall ensure that their hands are free of harmful and/or deleterious products, including but not limited to sunscreen, lotion, and insect repellent.

• The operations shall ensure that water quality conditions are adequate in the buckets, coolers, or holding tanks used to hold and transfer captured fish. The operations shall use aerators to provide for clean, cold, well-oxygenated water, and/or shall stage capture, temporary holding, and release to minimize the risks associated with prolonged holding. The directing biologist shall ensure that conditions in the holding containers are monitored frequently and operations adjusted appropriately to minimize fish stress. If fish listed under the ESA will or may be held for more than a few minutes prior to release, the directing biologist should consider using dark-colored, lidded containers only. Fish listed under the ESA shall not be held in containers for more than 10 minutes, unless those containers are dark-colored, lidded, and fitted with a portable aerator; small coolers meeting this description are preferred over buckets.

• The operations shall provide a healthy environment for captured fish, including low densities in holding containers to avoid effects of overcrowding. Large fish shall be kept

⁶ If the FWS and/or NMFS have provided an Incidental Take Statement from a Biological Opinion addressing the work (or action), the directing biologist shall ensure limits on take have not been exceeded; if the limits on take are exceeded, or if take is approaching these limits, the directing biologist shall postpone fish capture and removal operations and immediately notify the federal agency (or agencies) with jurisdiction.

separate from smaller fish to avoid predation. The operations shall use water-to-water transfers whenever possible.

• The release site(s) shall be determined by the directing biologist. The directing biologist should consider both site characteristics (e.g., flow, temperature, available refuge and cover, etc.) and the types of fish captured (e.g., out-migrating smolt, kelt, prespawn migrating adult, etc.) when selecting a release site(s). More than one site may be designated to provide for varying needs, and to separate prey-sized fish from larger fish. The directing biologist shall consider habitat connectivity and fish habitat requirements, seasonal flow and temperature conditions, and the duration and extent of planned in-water work when selecting a fish release site(s). If conditions upstream of the isolated work area will or may become unfavorable during construction, then fish should not be released to an upstream location. However, the directing biologist should also consider whether planned in-water work presents a significant risk of downstream turbidity and sedimentation; fish released to a downstream location may be exposed to these conditions. Site conditions may warrant releasing fish both upstream and downstream, or relocating fish at a greater distance (e.g., thousands of feet or miles), so as to ensure fish are not concentrated in areas where their habitat needs cannot be met. For a fuller discussion of this topic see page 2.

• The directing biologist shall ensure that each fish is capable of remaining upright and has the ability to actively swim upon release.

• Any ESA-listed fish incidentally killed as a result of fish capture and removal operations shall be preserved and delivered to the appropriate authority upon request (see Documentation).

• If the limits on take of ESA-listed species are exceeded (harm or harassment), or if incidental take is approaching and may exceed specified limits, the directing biologist shall postpone fish capture and removal operations and immediately notify the federal agency (or agencies) with jurisdiction. If dewatering or flow diversion is incomplete and still in-progress, WSDOT shall take remedial actions directed at maintaining sufficient quantity and quality of flow and lessening sources of fish stress and/or injury. If conditions contributing to fish stress and/or injury may worsen before the federal agency with jurisdiction can be contacted, WSDOT should attempt to move fish to a suitable location near the capture site while keeping fish in water and reducing stress as much as possible.

Reintroduction of Flow and Fish to the Isolated Work Area

If conducting work in isolation from flowing waters has required placement of a block net(s), fish capture and removal, and temporary dewatering, the directing biologist shall ensure that the block net(s) remain in-place until work is complete and conditions are suitable for the reintroduction of fish². Flows shall be gradually reintroduced to the isolated work area, so as to prevent channel bed or bank instability, excessive scour, or turbidity and sedimentation. The directing biologist shall inspect the work area and

downstream reach to ensure no fish are stranded or in distress during reintroduction of flows. If conditions causing or contributing to fish stress and/or injury are observed, WSDOT shall take remedial actions directed at lessening these sources of stress. This may include a more gradual reintroduction of flow, so as to reduce resulting turbidity and sedimentation.

All temporary structures and materials (e.g., block nets, posts, and anchors; bypass flume or culvert; sandbag, sheet pile or similar cofferdam; etc) shall be removed at the completion of work. The directing biologist shall document in qualitative terms the final condition of the isolated work area (including temporary bypass). The directing biologist shall identify and document any obvious signs of channel bed or bank instability resulting from the work, and shall report these conditions to the appropriate Maintenance, Construction, and/or Environmental staff for remedy. WSDOT shall document any additional actions taken to correct channel instability, and the final condition of the isolated work area (including temporary bypass).

To avoid and minimize the risk of introducing or spreading nuisance or invasive species, aquatic parasites, or disease, the directing biologist shall ensure that all equipment and materials are cleaned and dried before transporting them for use at another site or waterbody.

Documentation

• All work area isolation, and fish capture and handling shall be documented in a log book with the following information: project location, date, methods, personnel, water temperature, conductivity, visibility, electrofishing equipment settings, and other comments.

• All fish captured or handled shall be documented: species, number of each species, age/ size class estimate, condition at release, and location of release.

• If at any time, fish are observed in distress, a fish kill occurs, or water quality problems develop (including equipment leaks or spills), WSDOT shall provide immediate notification to the WDFW consistent with any provisions contained in the HPA (or applicable General HPA). Notification shall consist of a phone call or voice mail message directed to the Area Habitat Biologist identified on the HPA and/or the Washington Military Department Emergency Management Division at (800) 258-5990, as appropriate.

• Any ESA-listed fish incidentally killed as a result of fish capture and removal operations shall be documented with notification provided to the appropriate authority (FWS and/or NMFS) within two working days. Initial notifications may consist of a phone call or voice mail message. Initial notifications shall be directed to the following: (FWS) the nearest FWS Law Enforcement Office, and the Washington Fish and Wildlife Office at (360) 753-9440; (NMFS) the NMFS Office of Law Enforcement at (800) 853-1964, and the Washington State Habitat Office at (360) 753-9530. Any dead specimens

shall be kept whole and preserved on-ice or frozen until WSDOT receives a response and further directions from the appropriate authority; if WSDOT receives no response within 5 working days, the directing biologist shall have the discretion to dispose of specimens. Initial notifications shall be followed by a second notification in writing. All notifications shall provide at a minimum the following: date, time, WSDOT point-of-contact (the directing biologist and/or supervisor), project name (and FWS and/or NMFS tracking number if available), precise location of any incidentally killed or injured and unrecovered fish, number of specimens and species, and cause of death or unrecoverable injury. If the limits on incidental take are exceeded (harm or harassment), the written notification shall also include an explanation of the circumstances causing or contributing to observed levels of take.

• The final condition of the isolated work area (including temporary bypass) shall be documented in qualitative terms, including any obvious signs of channel bed or bank instability resulting from the work. WSDOT shall document any additional actions taken to correct channel instability, and the final condition of the isolated work area (including temporary bypass).

APPENDIX F

POTHOLE DATA

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APS DATA

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7/27/2011	2030-3P0A0KQ	2637 V AC	FRONTIER
DATE:	FRONTIER#	10B #	CLIENT:

SEE FIELD NOTES

Applied Professional Services Inc.

r (ARLINGTON,WA)	Subsurface	Composition/Comments	NATIVE/SAND	NATIVE/SAND	NATIVE/SAND	NATIVE/SAND	NATIVE/SAND	NATIVE/SAND												
EBENON TO 204TH ST	Concrete	Thickness	2	2	z	z	z	z	2	2	2	z	2	2	2					
37TH AVE NE, L	Asphalt	Thickness	9"	6"	7"	8	7"	7"	7"	7"	7"	6"	.9		8					
PROJECT: 6	Pipe Material		CONCRETE DUCT	PVC	CONCRETE DUCT	CLAY DUCT	CLAY DUCT	CLAY DUCT												
	Pipe/Conduit	size inches	22" WIDE	30" WIDE	32" WIDE	39" WIDE	36" WIDE	38" WIDE	34" WIDE	36" WIDE	(1) 1"	30" WIDE	32" WIDE	33" WIDE	19" WIDE					
	Depth to Bot of	util. In inches	62"	64"	68"	82"	69"	61"	61"	108"	56"	70"	62"	63"	103"					
	Depth to top of	util. In inches	42"	42"	43"	63"	47"	45"	41"	.99	55"	46"	41"	41"	82"					
FRONTIER WAYNE WENDELL	Target	Utility	FRONTIER	COM	FRONTIER	FRONTIER	FRONTIER	FRONTIER												
CLIENT:	Pothole #	Core #	#1	#2	#3	#4	#5	9#	2#7	8 #	# 8A	6#	# 10	# 11	# 12					
2	Pothole	Date	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/26/2011	7/22/2011	7/22/2011	7/26/2011	7/22/2011	7/22/2011	7/22/2011					

ME 7-22/7-26-11

2030-3POA0KQ FRONTIER WAYNE WENDELL

JOB # CLIENT: POC:

Applied Professional Services Inc.

PROJECT:

67th AVE NE, Lebenon to 204th ST NE

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		TEST HOLE	E DATA SHEET
Applied		APS Job #	Date: 7-26-11
Professional			
Services, Inc.	Pothole#:	Asphalt Thickness	inches. Utility type: Com
	Utility Size: 20 inches	Utility Material:	(gas, water, etc.), <u>NCDUCT</u> Soil Cond. <u>NATIVE</u>
	Pipe Direction (circle one)	Top of utility from grade:	<u>42</u> inches.
	E & W	Dotter of with free as 1	67"
	SW & NE	Bottom of utility from grade	inches.
	SE & NW	Width of Structure if neces	sary: <u>22</u> inches.
Additional utilities found in	samě location:		Vac Crew
Test hole#			Lead:
Utility Type:	Top: Bot: Size:	Ut Material	Cody
Test hole#	_		Assistant:
Utility Type:	Top: Bot: Size:	Ut Material	Devin
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<u>67th Ave N</u>	E Cent 8'5"	er hinc mH	S west Ave
	<u>. '33'</u>	Ser MH.	
		200	mon st.

Sketch to include street name(s), North arrow, distance to (2) permanent markers & distance to fogline or centerline.

Be sure to include a description of each permanent marker

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	TEST HOLE DATA SHEET						
		APS Job # 2637	7-26-11 Date:7-26-11				
Applied V							
Professional Services, Inc.	Pothole#:	Asphalt Thickness	inches. Utility type: COM				
	Utility Size: 22_inches	Utility Material:	Soil Cond. Wallk				
	Pipe Direction (circle ane) E & W N & S SW & NE SE & NW	Top of utility from grade: Bottom of utility from grade Width of Structure if necess	<u> </u>				
Additional utilities found in a	ama localiaa:						
Tost belot			Vac Crew				
	- -		Lead: Cody				
Cunty Type:	lop: Bot: Size:	Ut Material					
			Assistant: DeVIA				
T	Nin city Foods Fire & Fire	5	phone phone pec				
G7thAve NE		52'-	- N				
	PH-2		CurB edge				
Side walk							
			, rail med				

Any known building address, or side street address in the vicinity should be included

		TEST HOLE DATA SHEET
Applied		APS Job # Date:26-11
Professional		
services, inc.	Pothole#: 3	Asphalt Thickness $+$ inches. Utility type: COM
	Utility Size: 25 inches	(gas, water, etc.) Utility Material: CONC DUCT Soil Cond. NATIVE
	Pipe Direction (circle one)	Top of utility from grade: 43^{N} inches.
	N&S	Bottom of utility from grade:68inches.
	SE & NW	Width of Structure if necessary:32 ~inches.
Additional utilities found	in samé location:	Vac Crew
Test hole#		Lead:
Utility Type:	Top: Bot: Size:	Ut Material
Test hole#		Assistant:
Utility Type:	Top: Bot: Size:	Ut Material
/	PWR pote	Twin city Foods building
67th Ave M	53'5"	
	PH 3	
Side Walk		$\sim_{\mathcal{V}}$
		rail, road, Tracks

Any known building address, or side street address in the vicinity should be included

	TEST HOLE DATA SHEET						
Apolled		APS Job #	57	Date: 7-26-11			
Professional			11				
Services, Inc.	Pothole#:_/	Asphalt Thickness	<u>8</u> inches.	Utility type: (OM)			
	Utility Size:Qinches	Utility Material:	onc act	(gas, water, etc.) Soil Cond <u>₩atiVe</u>			
	Pipe Direction (circle one)	Top of utility from grade:	63''	_inches.			
	E & W N & S	Bottom of utility from grade	r 82''	inches			
	SW & NE SE & NW	Width of Structure if neces	ssary: 39	11 inches.			
Additional utilities found in							
Test bolott	same location:		Vac Crew				
I tility Type:	- Tao: Data o:	114.84.4.5.4	Lead:	Cody			
Test hole#	Top: Bot: Size:	Ut Material					
Utility Type:	 Top: Bot: Size:	Ut Material	Assistant:	Devin			
	X	3	Fire Hydront P	city Foods			
	PHy	-224"	67	Th Ave NE			
	Com MH 9 39'4"						
-	Ĺ	ק		Sidenalk			
rail road		1					

Any known building address, or side street address in the vicinity should be included

	TEST HOLE DATA SHEET						
Applied		APS Job # Date:					
Professional							
services, inc.	Pothole#: 5	Asphalt Thickness \underline{f}^{μ} inches. Utility type: <u>(CVM</u>)					
	Utility Size: <u> </u>	Utility Material: Conc DCT Soil Cond. NOTIVE					
	Pipe Direction (circle one)	Top of utility from grade:inches.					
	E & W	(911					
	N&S SW&NE	Bottom of utility from grade: G (inches.					
,	SE & NW	Width of Structure if necessary: 36 inches					
Additional utilities found in	same location:	Vac Crew					
Test hole#	_	Lead:					
Utility Type:	Top: Bot: Size:	Ut Material					
Test hole#	-	Assistant:					
Utility Type:	Top: Bot: Size:	Ut Material Vevin					
	Pupple	D Kot					
	26 -						
67 THAVE NE							
Curb edge	- 11- PH 5	H61 EXCB					
		side walk.					
	rail	Road tracks					

Any known building address, or side street address in the vicinity should be included

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		TEST HOLE DATA SHEET				
Applied		APS Job # 263	7-26-11 Date:			
Professional	ſ	فوراه هاز می اور از با اطاعی است. از از با بینی در بار است از ا	· · · · · · · · · · · · · · · · · · ·			
Services, Inc.	Pothole#:	Asphalt Thickness	$\underline{\mathcal{F}}_{inches.}$ Utility type: <u>COM</u>			
	Utility Size: 16 inches	Utility Material:	(gas,water, etc.)			
	Pipe Direction (circle one)	Top of utility from grade:	<u> </u>			
	N&S SW&NE	Bottom of utility from grade	a:inches.			
,	SE & NW	Width of Structure if neces	inches.			
Additional utilities found in sar	ne location:		Vac Crew			
Test hole#			Lead: Coly			
Utility Type: T	op: Bot: Size:	Ut Material				
Test hole#			Assistant: Devin			
Utility Type: T	op: Bot: Size:	Ut Material	Ĩ			
	guard rail	<u>\</u>				
	and a second					
67 AVEN	JE		Centes Line			
	57'6	11 -55				
b	(B)	PH 8'-	Curb edge			
······································	side walk		5			
	- Bail Poad	Tacks				

Any known building address, or side street address in the vicinity should be included

	TEST HOLE DATA SHEET						
		APS Job # 26	37	7-26-11 Date:			
Applied V							
Professional	1		711				
Services, Inc.	Pothole#:	Asphalt Thickness	inches.	Utility type: <u>COM</u>			
	Utility Size: 26 ¹ inches	Utility Material:	N puct	(gas,water, etc.) Soil Cond. <u>NATIK</u> SOBT			
	Pipe Direction (circle one)	Top of utility from grade:		inches.			
	E & W		61				
	N&S	Bottom of utility from grade	e:	inches.			
•	SE & NW	Width of Structure if neces		inches			
Additional utilities found in s	ame location:		Vac Crew				
Test hole#			Lead:	Cody			
Utility Type:	Top: Bot: Size:	Ut Material		tay			
Test hole#			Assistant:				
Utility Type:	Top: Bot: Size:	Ut Material		Jann			
	Pur o pole						
67th AVE NP			(eni	Fes hile			
	~	416	-8'6''	140 ¹ CB			
Side walk		PWP W Vault	<u> </u>				
111	1 Caro tracks						

Sketch to include street name(s), North arrow, distance to (2) permanent markers & distance to fogline or centerline.

Be sure to include a description of each permanent marker

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		TEST HOLI	E DATA S	SHEET
		APS Job #6	37	Date: 7-26-11
Applied				
Professional Services, Inc.	Pothole#:9	Asphalt Thickness	<u>6</u> inches.	
	Utility Size:inches	Utility Material:	NC DUCT	(gas,water, etc.) Soil Cond.
	Pipe Direction(circle one) E & W	Top of utility from grade:	46	inches.
•	N & S SW & NE SF & NW	Bottom of utility from grad	e: <u>70</u>	inches. \
			ssary:	
Additional utilities found in	same location:		Vac Crew	
Test hole#	_		Lead:	
Utility Type:	Top: Bot: Size	Ut Material		(ody
Test hole#			A	
Utility Type:	Ton: Bot: Size	l lt Matariai	Assistant:	Devin
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67th Ave MI	کې بې		Center 1	Line
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C'ha maria		<u>YIT 1</u>		
SICE MULK				8
-1 1 (ai)	wood Tracks		1	



		TEST HOLE	E DATA S	HEET
		APS Job #5	7	Date: 7-22-1(
Applied V				
Professional	11		J. n	Cana
Services, Inc.	Pothole#:	Asphalt Thickness	inches.	Utility type:
		2 Clay Rigts	Stucked	h 10 p(gas, water, etc.)
	Utility Size:inches	Utility Material:	oncapu	Soil Cond. IVUIVE
	Disc Direction (circle and)	Tan of with firm and a	41	50[-1]
		rop of utility from grade:		_mones.
	N&S	Bottom of utility from grade	. 63	inches.
	SW & NE	, ,	~~	11
	SE & NW	Width of Structure if neces	sary: <u>55</u>	inches.
Additional utilities found in	same location:		Vac Crew	
Test hole#	_		Lead:	Cody
Utility Type:	Top: Bot: Size:	Ut Material)
Test hole#	-		Assistant:	Devin
Utility Type:	Top: Bot: Size:	Ut Material		
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APS Job # 2637 Date: 7-22-
Services, Inc. Pothole#: 12 Asphalt Thickness $S^{(1)}$ inches. Utility type: COM Utility Size: 21 inches 2 clay Ducts Stanked (gas, water, etc.), Utility Size: 21 inches 2 clay Ducts Stanked (gas, water, etc.), Soil Cond Native
Pipe Direction (circle one) Top of utility from grade:
F&W
N & S Bottom of utility from grade: 03 inches
SW-8 NE
SE & NW Width of Structure if necessary:inches.
Additional utilities found in same location: Vac Crew
Test hole#Lead:
Utility Type: Top: Bot: Size: Ut Material (_OCV)
Test hole#
Utility Type: Too: Bot: Size: Lit Material
old Brick Noute Noute Noute Noute Noute Note Note Note Noute
67 th AVE NE
Side walk CB

Sketch to include street name(s), North arrow, distance to (2) permanent markers & distance to fogline or centerline.

Be sure to include a description of each permanent marker
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Applied Professional Services Inc.

<pre> Common Section</pre>	sile of street does not lo ide of street does not lo unsue of what there is to visive possible three block ind this potrole
PROJECT: PROJEC	ated on this obstruction west obstruction we t what this is
2411 1227 23" 37" 33" 37" 54" 64" 54" 64" 24" 28" 54" 64" 23" 27" 23" 23" 23" 23" 23" 33" 24" 33"	oun not loc by one contracts Found concracts any unsur o
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	DR	TEST HOLE	E DATA S	HEET
		APS JOD # 26 73		Date: 14/13/11
Applied Prolessional Services, Inc.	Pothole#:_/	Concrete Asphalt Thickness_	5″_inches	Utility type: <u>Cory</u>
	Utility Size: <u>4"</u> inches	Utility Material: <u>P</u> U	6	(gas, water, etc.) Soil Cond. <u>Sof</u>
	Pipe Direction(circle one) E & W	Top of utility from grade:	23"	_inches.
	N&S SW&NE	Bottom of utility from grad	de. 27"	inches
Additional utilities found	SE & NW	Width of Structure if neci	Vac Crew	inches.
Test hole# 48 /A	Concrete 5"	11 Ut Maragial NT	Lead:	
Test hole# <u>1B</u>	Asphalt 12"	Ut Material Sty	Assistant:	
Utility Type: <u>gas</u>	10p: <u>~7</u> Bot: <u>~7</u> Size: <u>~</u>		<u> </u>	<u>10</u>
e ut	ility Pole			Â
(2'-6")	2'-6" 2 (2'	-6") [15]	' <u>- '')</u>	(67 A
tence	X		Double	WE NE
huin link		pratch ba	isiA Kellow	
Y	- and a state of the			

	DR	TEST HOL	E DATA S	SHEET
A	73	APS Job # 267	3	Date: / Ø/13/11
Applied Prolessional Services, Inc.	Pothole#: <u>Z</u> Utility Size: 6" inch	Asphalt Thickness	<u>7"</u> inches	Utility type: <u>GQS</u> (gas.water, etc.) Soil Cond. <u>Soff</u>
	Pipe Direction (circle one) E&W N & S SW & NE	Top of utility from grade Bottom of utility from g	e:35'' rade:4/''	inches. inches
	SE & NW	Width of Structure if ne	ecessary:	inches.
Additional utilities fou	ind in same location:	and the second	Vac Crew	
Test hole#			Lead:	
Utility Type:	Top: Bot: Size:_	Ut Material	Λ	uatt
Test hole#			Assistant:	
Utility Type:	Top: Bot: Size:_	Ut Material	<u> </u>	Levin
	7 ALENE)			
	e (se	wer) of Sur		(204 th ST NE)
Traffic sig	mal 0 (71'-2')	(7#)		atch besig

	PR	TEST HO	LE DATA S	SHEET
	42	APS Job #_	2673	Date: 10/13/11
Applied Prolessional Services, Inc.	Pothole#. <u>3</u>	Asphalt Thickness	sinches	Utility type: <u>Water</u> (gas.water, etc.)
	Utility Size: 10 inch	es Utility Material:	D.I	Soil Cond. Soft
	Pipe Direction (circle one)	Top of utility from grad	te34"	inches.
	E&W	Detter of tills from a	uu"	inches
	SW & NE	Bottom of utility from g	grade. <u> </u>	
	SE & NW	Width of Structure if n	ecessary:	inches.
Additional utilities fou	und in same location:	and a second discount of the second second second	Vac Crew	
Test hole#			Lead:	
Utility Type:	Top: Bot: Size:	Ut Material	M	att
Test hole#			Assistant:	
Utility Type:	Top: Bot: Size:	Ut Material	- K	evin
hudrant	(#3)	(24') (24')	A May	(67 Ave NE)

	P)	R		TEST HOL	E DATA	SHEET
Amiled				APS Job # 267	3	Date: <u> </u>
Professional Services, Inc.		Pothole	+: <u> 4 </u>	Asphalt Thickness	<u>4'</u> inche	es Utility type: <u>water</u> (gas,water, etc.)
	Utility Si	zə:	inches	Utility Material:	South Concrete	Soil Cond. 304
	Pipe	Direction (cir	cle one)	Top of utility from grad	e18"	inches.
		N&S SW&NE	>	Bottom of utility from g	rade:	inches
		SE & NW		Width of Structure if ne	ecessary:	inches.
			AND THE OWNER STATES		Mag Crow	
Additional utilities found i	n same locati	on:			Vac Cress	<mark>a dan mengeri</mark> t Menjan tana lain. Interna (terma di terma dan menjari dan kenalara dan sebelah dan di terma dan
Test hole#				and and a second second	Lead:	
Utility Type:	Top:	Bot:	Size:	Ut Material	A	yatt
Test hole#	-				Assistant:	
Utility Type:	Top:	Bot:	Size:	Ut Material	k	eviq
A	Triple tellow	Fooling (67 AUCNE)	<u>(10'-6")</u>	Sewer (28) Hard (SW-44) (SW-44)	¹ . 61) Wa	ater valve

Be sure to include a description of each permanent marker

			TEST HC	DLE DATA S	HEET
	>		APS Job #6	73	Date: 18/13/11
V					Constant and the second data of the
	Pothole	#:_5	Asphalt Thicknes	ssinches	Utility type: Water
Utility Si	ze <u>lo</u>	inches	Utility Material:	DeI	Soil Cond. soft
Pipe	Direction (ci	rcle one)	Top of utility from gra	ade:41''	inches.
	E&W	>	Bottom of utility from	grade: <u>51''</u>	inches
	SW & NE SE & NV	=	Width of Structure if	necessary:	inches.
nd in same locati	on:			Vac Crew	
				Lead:	
Top:	Bot:	Size:	Ut Material	M	att
				Assistant:	
Top:	Bot:	Size:	Ut Material	K-	evin
1 (45)	(7'-6"	Fogline	Double tellow	ANNE)	A
	Utility Si Pipe	Pothole Utility Size:	Pothole#: 5 Utility Size:inches Pipe Direction (circle one) E & W MADE SW & NE SE & NW rd in same location: Top: Bot: Size: Top: Bot: Size:	TEST HC APS Job # _26 Pothole#. 5	TEST HOLE DATA S APS Job # _2673 Pothole#: 5 Asphalt Thickness inches Utility Size: /0'^ inches Utility Material: / Pipe Direction (circle one) Top of utility from grade/'' E & W Sottom of utility from grade MARE Sottom of utility from grade SW & NE Sottom of utility from grade Material Ind in samé location:

Be sure to include a description of each permanent marker

Culvert Crossing

A	PS		TEST HO	LE DATA	SHEET Date: <u>1ø/13/11</u>
Applied Prolessional Services, Inc.	Pothole Utility Size:	5 ⁴ inches	Asphalt Thickness Utility Material:	Direct bury	s Utility type: <u>C0M</u> (gas.water.etc.) Soil Cond <u>Soff</u>
	Pipe Direction (ci E & W N & S SW & N SE & NV	rcle one) > E V	Top of utility from grad Bottom of utility from Width of Structure if r	de <u>34</u> " grade <u>35</u> " necessary:	inches. inches inches.
Additional utilities four Test hole# Utility Type: Test hole# Utility Type:	nd in samé location: Top: Bot: Top: Bot:	Size: Size:	Ut Material	Vac Crew Lead: - <u>M</u> Assistant:	аН evinj
A		(67 Ave NE)	(91-) Fogline	() () () () () () () () () () () () () (S) GTE

	DR	TEST HOLE (DATA SHEET
Ą		APS Job # 2673	Date: 16 /14/11
Applied Projessional	/	u companya na sana ang ang ang ang ang ang ang ang ang	
services, inc.	Pothole#:	Asphalt Thickness <u></u>	inches Utility type: (gas.water, etc.)
	Utility Size: <u>4</u> '' inches	Utility Material: <u>P.E</u>	Soil Cond 50ft
	Pipe Direction (circle one)	Top of utility from grade	29" inches.
	N&S	Bottom of utility from grade:	33 ⁺¹ inches
	SW & NE SE & NW	Width of Structure if necessa	ry:inches.
Additional utilities found	d in same location:		/ac Crew
Test hole#		L	.ead:
Utility Type:	Top: Bot: Size:	Ut Material	Matt

Assistant:

Kevin

	Kegline	9 Sewer
Double tellow	7 AVE NE)	(8')
	2)	(# H)

Ut Material

Size:

Sketch to include street name(s), North arrow, distance to (2) permanent markers & distance to fogline or centerline.

Be sure to include a description of each permanent marker

Top:

Bot:

Test hole#

Utility Type:

	PS	TEST HOL	E DATA SHEET
oplied		AF3 JUU # <u>~67</u>	
rvices, Inc.	Pothole#: <u>8</u>	Asphalt Thickness	inches Utility type: <u>Gas</u> (gas,water, etc.)
	Utility Size 4" inches	Utility Material:	P.E Soil Cond
	Pipe Direction (circle one)	Top of utility from grade	e
	E&W N&S SW&NE	Bottom of utility from g	rade: <u>37''</u> inches
	SE & NW	Width of Structure if ne	acessary:inches.
dditional utilities four	id in samé location:		Vac Crew
est hole#			Lead:
Itility Type:	Top: Bot: Size:	Ut Material	Matt
est hole#			Assistant:
Jtility Type:	Top: Bot: Size:	Ut Material	lavin
Mutal Fence 3t fall	(30°) (30°)	(20'-1'')	NE) NE)
Black	Utility Pole		Double 67 Ave

	DR	TEST HOLE	E DATA S	HEET	
	5	APS Job #	3	Date: 10/,,/)	/]
lppiled Prolessional Services, Inc.	Pothole#	Asphalt Thickness_	inches	Utility type: <u>9a</u>	<u>s</u>
	Utility Size: <u>4"</u> inches	Utility Material: <u>PE</u>	2	(gas,water, et Soil Cond. <u>sof</u>	c.) 7
	Pipe Direction (circle one)	Top of utility from grade:	2.411	inches.	
	E&W N&S SW&NE	Bottom of utility from grad	inches		
	SE & NW	Width of Structure if nece	essary:	inches.	
Test hole# <u><u></u><u></u> Utility Type:<u></u><u></u><u></u> Test hole# Utility Type:</u>	Top: <u>54</u> Bot: <u>64</u> Size: <u>10</u> Top: Bot: Size:	Ut Material <u>D</u> , T	Lead: <u>M</u> Assistant: K	att	
<u>Drivewu</u> (#9)	1 Money Saver Mini Storag	ge (4	Double villow	(67 Ave NE)	
للنلنط	y Alle O (6')	THE REAL			AN

		2		TEST HOI	LE DATA	SHEET
				APS Job # <u>2673</u>		Date: 10/12/4
Applied Professional Services, Inc.	Utility Siz	Pothole# ze <u>4</u> ′		Asphalt Thickness <i>Concrete</i> Utility Material:	<u>9"</u> inche 4" P.E	s Utility type: <u>9 6 s</u> (gas, water, etc.) Soil Cond. <u>Soft</u>
	Pipe (Direction (circ	le one)	Top of utility from grad	e 677"	inches.
	0	E&W N&S SW&NE		Bottom of utility from g	irade: 7/"	inches
		SE & NW		Width of Structure if n	ecessary:	inches.
Additional utilities found	t in same locatio	on:			Vac Crew	
Test hole#					Lead:	a carta da c
Utility Type:	Top:	Bot:	Size:	Ut Material		nott
Test hole#					Assistant:	
Utility Type:	Top:	Bot:	Size:	Ut Material	k	evin .
(211 ¹² PL A	tge of cu (#10)			156-6	1)	O Manhole (67

	DR	TEST HOLE	DATA S	HEET
		APS Job # <u>2673</u>	-	Date: ////////////////////////////////////
Applied Protessional Services, Inc.	Pothole#	Asphalt Thickness 6	/inches	Utility type: <u>Water</u> (gas,water, etc.)
	Utility Size: <u>6</u> inches Pipe Direction (circle one)	Utility Material: \underline{D} , \underline{T} Top of utility from grade:	34"	Soil Cond. <u>Soff(rockS</u> inches.
	N&S SW&NE	Bottom of utility from grade:	40"	inches
	SE & NW	Width of Structure if necess	ary:	inches.
Additional utilities fou Test hole# <u> A</u>	Dug 2'x7' Slot cut did	not Find	Vac Crew Lead:	41
Utility Type: <u>>/ 5 R</u> Test hole#	Direce Top: Bot: Size:		Assistant:	
Utility Type:	Top: Bot: Size:		<u> </u>	evir .
	Fog	[「山口」	
M	(26	(- <u>Z</u> ")		(2')
t .	hydra		(6')	
	Ŧ	67 Ave 1	F	Catch basin
		(#IA RE-Dig	to 5'-6")	

Sketch to include street name(s), North arrow, distance to (2) permanent markers & distance to fogline or centerline. Be sure to include a description of each permanent marker 1 Any known building address, or side street address in the vicinity should be included à

ADR				TEST HOLE DATA SHEET			
Ą		5		APS Job # <u>26</u>	73	Date: 10/11/11	
Applied	V						
Professional Services, Inc.		Pothole;	#: 12	Asphalt Thicknes	inches	Utility type: <u>water</u> (gas,water, etc.)	
	Utility S	ize: /c	<u>o</u> inches	Utility Material:	D.I	Soil Cond. Soft	
	Pipe	Pipe Direction (circle one)		Top of utility from gra	ade 45"	inches.	
		E&W		Bottom of utility from	grade: <u>55"</u>	inches	
		SE & NW		Width of Structure if	necessary:	inches.	
Additional utilities for	und in same locat	ion:		han an a	Vac Crew		
Test hole#					Lead:		
Utility Type:	Тор:	Bot:	Size:	_ Ut Material	- M	att	
Test hole#					Assistant:		
Utility Type:	Top:	Bot:	Size:	Ut Material		Luin	

catch basin	-B (3')	(1-71) Fogline doshed yellow	
	-		, vin

Be sure to include a description of each permanent marker

	DR		TEST HOLE DATA SHEET		
	2		APS Job # 26 72	3	Date: 10/14/11
Applied Prolessional Services, Inc.	Pothol	e#. <u>[3</u>	Asphalt Thickness_	inches	Utility type: <u>9a-5</u>
	Utility Size 2	<u>f</u> inches	Utility Material:	P.E	Soil Cond Tocky
	Pipe Direction ((circle one)	Top of utility from grade:	33'	inches.
	E&W N&S	>	Bottom of utility from grade: $37''$ inches		
	SW & N SE & N	IW	Width of Structure if neo	essary:	inches.
Additional utilities found in s	amé location:	<u></u>		Vac Craw	
Test hole# 13A	-		D	Lead:	
Utility Type: Sewer	Top: 56 Bot: 6	Y Size: D	Ut Material PVC	M64	
Test hole#	- Too: Bot:	Size:	Ut Material	Assistant. Kavin	n
Unity 1900		n fan son ferste skinde skreen			
		Y	- Lawanan Haltin (2.1.	•
			to Mility 1	ok q	
			dee	6-	
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Ave		Line			γ
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		AX			e
	Han	eled			
	N.	44		+ N	

Be sure to include a description of each permanent marker

AT&T DATA

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	CABLE PLACING REEL ND. BEGINNING STATION ENDING STATION REEL LENGTH (FT) CABLE LENGTH (FT) CABLE CODE MORAN CONDUIT PLACING CONDUIT STATION LENGTH (FT) ACCOUNT ND. OF CCNDUITS 1. NNERDUCT CABLE LENGTH THIS PAGE, 56	50 74 0.06 0.1991 11 4714+50 50 4720+00 416 40 13-1* No* INCL COIL
	DWNERSHIP: 100% ISD FILE ND: CABLE GED: L53ZAAZ CABLE CLLI: BLANWAU001	PROPRIETARY
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	NOTESI RANDON RA	Communications Western Region
		LIGHTQUIDE SYSTEM WHALLEY, BRITISH COLUMBIA TO EVERETT, WASHINGTON
50 100	123+45 Ho. 5-36 - MARKER I A - C DIST. FROM C E OF ROAD DI OUST. FROM M OUST. ROAD H	ABLE TO ITEE: TO BLAINE CODE F278 BLAINE TO EVERETT BRADUE WASHINGTON
		WR-34105-237


















FRONTIER DATA

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MIKE HUPF

FRONTIER 360-343-4000





FRONTIER 360-343-4000

APPENDIX G

FRANCHISE UTILITY DRAWINGS

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PROJECT NO.: 8613972 CLLI CODE: BLANWAU0010 **SPECIFICATION: WR 34105**

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WESTERN TERRITORY LIGHTGUIDE PROJECTS WHALLEY, B.C. TO EVERETT, WA LIGHTGUIDE SYSTEM

67TH AVENUE NE

CABLE RELOCATION PLAN ARLINGTON, WA **BID ISSUE** JULY 19, 2012



ue Bid 0600 67th



LOCUS MAP NOT TO SCALE



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LIST OF DRAWINGS

PT001 PT002 WR-34105-236 TO 239 DN001 - DN020 PP001 - PP020 DT001 - DT002 DT003 DT003 DT004 DT005 DT006 - DT007 DT008 - DT015 DT016 COVER LIST OF DRAWINGS LEGEND CABLE RECORD PLANS CABLE RELOCATION PLANS PLAN AND PROFILES CABLE PULLING DIAGRAM CONCRETE MANHOLE DETAIL - 38Y-SHORT CONCRETE MANHOLE DETAIL - 38Y-SHORT CONCRETE MANHOLE DETAIL - 444-LA TYPICAL MANHOLE GROUNDING DETAILS TYPICAL TRENCH DETAILS BUTTERFLY DIAGRAMS MANHOLE ARRANGEMENT DETAILS

SIENA ENGINEERING GROUP, INC. C:\temp\AcPublish_5196\12-70600 67th Avenue Bid Issue. Jul 19,2012 - 8:52am by jconnor



PLANIMETRIC SYMBOL LEGEND

¢₩X	UTILITY POLE W/LIGHT	тмн 🔵	TELEPHONE MANHOLE	
PP -0-	POWER POLE	WM 🖽	WATER METER	X
\longrightarrow	UTILITY POLE ANCHOR	hyd 📿	2-NOZZLE FIRE HYDRANT	\bigcirc
	PAD MOUNTED TRANSFORMER	WG 🖂	WATER GATE	X
\square	TRANSMISSION TOWER	SMH 🔵	SEWER MANHOLE	<u> </u>
Ρ	POWER VAULT	DMH 🔵	DRAIN MANHOLE	
GM 🔘	GAS METER	СВ	CATCH BASIN	
GG 🕅	GAS VALVE		MAIL BOX	
	TELEPHONE RISER	Д	SIGN	
T	TELEPHONE VAULT			

PLANIMETRIC ABBREVIATIONS LEGEND

PROP. DMH	PROPOSED DRAIN MANHOLE
PROP. SMH	PROPOSED SEWER MANHOLE
PROP. S.W.	PROPOSED SIDEWALK
PROP. E.O.P.	PROPOSED EDGE OF PROPOSED PAVEMENT

✓ 48" → DEPTH AT EXISTING GRADE (PROFILE VIEW ONLY)

(48") DEPTH AT PROPOSED GRADE (PROFILE VIEW ONLY)

LINETYPE LEGEND

PROPOSED UTILITIES

PROPOSED	BURIED	ELECT	RIC LIN
PROPOSED	SANITA	RY SEV	VER LIN
PROPOSED	STORM	DRAIN	LINE
DRODOSED			

EXISTING SURFACE FEATURES

	RAILROAD TRACKS
<u> </u>	DITCH
V	VEGETATION LINE
·uuu·	TREE LINE
OO	GUARD RAIL
×	FENCE

_ __ __ __ __ _ _ _ ____ ____

dwg Bid Issue. Aver 00 67th



EXISTING UTILITIES

PROPOSED WATER LINE

NE NE

UNPAVED DRIVEWAY — — — UNPAVED ROAD

	E — — — — — — — — — — — — — — — — — — —
_	SAN
	SD

SHRUBBERY
CONIFER TREE
DECIDUOUS TREE
YARD LIGHT
WETLAND
EXISTING AT&T SPLIC
PROPOSED AT&T SPL
PROPOSED AT&T MAN
PROPOSED CITY OF A

CE MANHOLE ICE MANHOLE NHOLE

ARLINGTON MANHOLE

<u>AT&T CONDUIT</u>

ON
•

ROADWAY IMPROVEMENTS

	EXISTING RIGHT OF WAY
	EXISTING PROPERTY LINE
	PROPOSED ROADWAY CENTERLINE
W. ——	PROPOSED RIGHT OF WAY
ENT - —	PROPOSED EASEMENT

REVISIONS:
1. JULY 19. 2012 BID ISSUE
NOTES
NOTES.
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- 1. MANHOLES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST REVISION OF AT&T STANDARD SPECIFICATIONS FOR OUTSIDE PLANT CABLE CONSTRUCTION AND REMOVAL,
- 2. GASKET AND ENTIRE JOINT AREA BETWEEN MANHOLE SECTIONS MUST BE FREE OF DIRT AND STONES WHEN THE MANHOLE SECTIONS ARE JOINED.
- 3. THE MANHOLE SECTIONS MUST BE PROPERLY ALIGNED WHEN JOINED. IF THEY ARE NOT, REMOVE THE MISALIGNED SECTION, REMOVE THE GASKET AND CLEAN THE JOINT AREA, INSTALL A NEW GASKET, AND REJOIN THE MANHOLE SECTIONS.
- BASED ON PLANS TITLED 38Y-506-AT VAULT ASSEMBLY, SHORT INTERCEPT, STANDARD PRODUCT, DRAWING NUMBER CN-0184, REV G, PREPARED BY UTILITY VAULTS COMPANY, AUBURN, WA. (OLDCASTLE PRECAST INC.) DATED 3/24/95.
- 5. MANHOLES SHALL COMPLY TO HS 20 LOAD RATINGS FOR PLACEMENT IN ROADWAYS.
- 6. MANHOLE RACKING TO CONFORM WITH AT&T SPECIFICATIONS. REFER TO RACKING DETAIL SHEET.
- 7. SPLICE MANHOLES SHALL INCLUDE AC/DC FILTER PROTECTION PER AT&T SPECIFICATIONS.
- 8. STEP 1: MANHOLE LID SHALL BE SET TO EXISTING GRADE BY CONTRACTOR. STEP 2: MANHOLE LID SHALL BE ADJUSTED TO FINAL GRADE BY CONTRACTOR.

CONNECTION BETWEEN FRAME & RISER

RISERS USED AS NECESSARY TO OBTAIN PROPER GRADE HEIGHT

GALVANIZED "C" CHANNEL FOR RACKING PURPOSES (TYP.)

TERM-A-DUCTS OR APPROVED EQUIVALENT AS REQUIRED

GROUND CLAMP

7/8" DIA. PULLING IRON, GALVANIZED 1 EACH CORNER

1/2" DIA. BRONZE GROUNDING INSERT (EXTERIOR OF VAULT) (TYP.)

PERFORATED POLYMER COVER PLATE









REVISIONS: 1. JULY 19. 2012 BID ISSUE NOTES: 6" WIDE EXTRA STRENGTH NON-DETECTABLE WARNING TAPE ACP PART NUMBER 401004N-ND LABELED: "WARNING, AT&T, CALL 1-800-252-1133, AT&T FIBER OPTIC CABLE BURIED BELOW" CLEAN SAND BACKFILL PLACED IN ACCORDANCE WITH CITY OF ARLINGTON Call before you dig. Washington Utilities **Coordinating Council** 1-800-424-5555 **AT&T PROPRIETARY** (Internal Use Only) Not for disclosure outside the AT&T companies, except under written agreement. 2012 AT&T Intellectual Property, Al **Rights Reserved** AT&T PROPRIETARY-This information idential trade secrets an mmercial or financial information owne by AT&T and is shared for Critical frastructure Protection purposes only. It exempt from disclosure under the Free of Information Act (5 U.S.C. 552), xemptions (b)(3)&(4), and its disclosure prohibited under the Trade Secrets Act (18 U.S.C. 1905), the Critical Infrastructur Information Act of 2002, 6 U.S.C. 133, and any State or local law requiring disclosure information or records. This information must not be copied or distributed to other not agreed upon by AT&T, but in all event do not copy or distribute to such others without notification pursuant to Executiv Order 12600. PREPARED FOR RECORD PROVED FOR UTSIDE PLANT ENGINEER at&t 6" WIDE EXTRA STRENGTH NON-DETECTABLE WARNING TAPE ACP PART NUMBER 401004N-ND IENA LABELED: "WARNING, AT&T, CALL 1-800-252-1133, AT&T FIBER OPTIC CABLE BURIED BELOW" PROPRIETARY CLEAN SAND BACKFILL PLACED SPECIFICATION WR-34105 IN ACCORDANCE WITH CITY OF ARLINGTON 8613972 OJECT NUMBER OWNERSHIP: 100% ISD LINE CODE: BLANWAU0010 ABLE CLLI: SCALE: AS NOTED 67TH AVENUE NE WHALLEY, BC TO EVERETT, WA CABLE PULLING DIAGRAM DT006





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SIGN SPACING =	X (FEET)			
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GNS ARE 48"X 48"BLACK ON ORANGE UNLESS RWISE DESIGNATED.				

(1) ALL SPACING MAY BE ADJUSTED TO ACCOMMODATE INTERCHANGE RAMPS, AT-GRADE INTERSECTIONS, AND DRIVEWAYS (2) THIS SPACING MAY BE REDUCED IN URBAN AREAS TO FIT ROADWAY CONDITIONS.

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BUFFER DATA											
LONGITUDINAL BUFFER SPACE = B											
SPEED (MPH)	25	30	35	40	45	50	55	60	65	70	
LENGTH (feet)	155	200	250	305	360	425	495	570	645	730	

WHEN A TMA IS USED, THE ROLL AHEAD DISTANCE IS 30' MINIMUM TO 100' MAXIMUM.

PROTECTIVE VEHICLE MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.

NOTES

1. NIGHT WORK REDUIRES ADDITIONAL ROADWAY LIGHTING AT FLAGGING STATIONS.

2. RECOMMEND EXTENDING CHANNELIZING DEVICE TAPER ACROSS SHOULDER.

3. PROTECTIVE VEHICLE RECOMMENDED - MAY BE A WORK VEHICLE STRATEGICALLY LOCATED TO SHIELD THE WORK AREA.

4. WHEN USED THE DOWNSTREAM TAPER DEVICE SPACING SHOULD BE 20 O.C.

5. FOR LOW-VOLUME SITUATIONS WITH SHORT WORK ZONES ON STRAIGHT ROADWAYS WHERE THE FLAGGER IS VISIBLE TO ROAD USERS APPROACHING FROM BOTH DIRECTIONS.

A SINGLE FLAGGER, POSITIONED TO BE VISIBLE FROM BOTH DIRECTIONS MAY BE USED. 6. LONGITUDINAL BUFFER SPACE IS USED TO POSITION THE TAPER IN ADVANCE OF A CURVE.



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6. LONGITUDINAL BUFFER SPACE IS USED TO POSITION THE TAPER IN ADVANCE OF A CURVE.





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APPENDIX H

BNSF C&M AGREEMENT

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GRADE CROSSING CONSTRUCTION AND MAINTENANCE AGREEMENT

BNSF File No.: 092097B Mile Post 6.75 Line Segment 406 U.S. DOT Number 092097B Arlington Spur (Bellingham Sub)

This Agreement ("Agreement"), is executed to be effective as of this <u>22</u> day of <u>MAY</u>, 20<u>12</u> ("Effective Date"), by and between BNSF RAILWAY COMPANY, a Delaware corporation ("BNSF"), and the City of Arlington, a political subdivision of the State of WA ("Agency").

RECITALS:

WHEREAS, BNSF owns and operates a line of railroad in and through the City of Arlington, State of WA;

WHEREAS, in the interest of aiding vehicular travel and public safety, the Agency is undertaking a project to improve and widen the existing Lebanon Street at-grade crossing, located at BNSF Line Segment 406 and Milepost 6.75, and designated by D.O.T. No. 092097B, by widening the roadway with a sidewalk across the BNSF rightof-way as indicated on the Exhibit A, attached

WHEREAS, the parties agree that the RAILROAD will receive no ascertainable benefit from the installation of advance warning signs, pavement marking stop bars or crossing signal equipment (hereinafter collectively called, "Crossing Signal Equipment"); and

WHEREAS, the BNSF agrees to purchase and install, at AGENCY'S sole expense, the new crossing surface described in the scope of work herein, and upon the terms and conditions set forth below.

NOW, THEREFORE, in consideration of the mutual covenants and agreements of the parties contained herein, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I) SCOPE OF WORK

1. The term **"Project"** as used herein includes any and all work related to the reconstruction and widening of the Lebanon Street by Agency and installation of a new crossing surfaces at U.S. D.O.T No. 092097B, (hereinafter referred to as the **"Crossing"**) by BNSF, more particularly described on the <u>Exhibit A</u>, including, but not limited to, any and all changes to telephone, telegraph, signal and electrical lines and appurtenances, temporary and permanent track work, fencing, grading, alterations to or new construction of drainage facilities, preliminary and construction engineering and contract.

ARTICLE II) RAILROAD OBLIGATIONS

In consideration of the covenants of Agency set forth herein and the faithful performance thereof, BNSF agrees as follows:

1. In consideration of the faithful performance of the Agency's covenants contained herein, BNSF hereby grants to Agency, its successors and assigns, upon and subject to the terms and conditions set forth in this Agreement, a temporary non-exclusive license (hereinafter called, "Temporary Construction License") to construct the Crossing across or upon the portion of BNSF's right-of-way described further on <u>Exhibit A-1</u>, attached hereto and incorporated herein, excepting and reserving BNSF's rights, and the rights of any others who have obtained, or may obtain, permission or authority from BNSF, to do the following:

- (a) Operate, maintain, renew and/or relocate any and all existing railroad track or tracks, wires, pipelines and other facilities of like character upon, over or under the surface of said right-of-way;
- (b) Construct, operate, maintain, renew and/or relocate upon said right-of-way, without limitation, such facilities as the BNSF may from time to time deem appropriate;
- (c) Otherwise use or operate the right-of-way as BNSF may from time to time deem appropriate.

Prior to commencing any work on BNSF's property or right-of-way, Agency must pay BNSF the sum of thirteen thousand, one hundred sixty one and No/100 Dollars (\$13,161.00) as compensation for the Temporary Construction License. The term of the Temporary Construction License begins on the Effective Date and ends on the earlier of (i) substantial completion of the Structure, or (ii) twelve (12) months following the Effective Date. The Temporary Construction License and related rights given by BNSF to Agency in this provision are without warranty of title of any kind, express or implied, and no covenant of warranty of title will be implied from the use of any word or words herein contained. <u>The Temporary Construction License is for construction of the</u> <u>Crossing only and shall not be used by Agency for any other purpose</u>. Agency acknowledges and agrees that Agency shall not have the right, under the Temporary Construction License, to use the Crossing. In the event Agency is evicted by anyone owning, or claiming title to or any interest in said right-of-way, BNSF will not be liable to Agency for any damages, losses or any expenses of any nature whatsoever. The granting of similar rights to others, subsequent to the date of this Agreement, will not impair or interfere with the rights granted to Agency herein.

Upon receiving the payment from Agency described in the subsequent sentence and provided Agency is in compliance with the terms and conditions of this Agreement, BNSF will grant to Agency, its successors and assigns, an easement (hereinafter called, the "Easement") to enter upon and use that portion of BNSF's right-of-way as is necessary to use and maintain the Crossing, substantially in the form of <u>Exhibit B</u> attached to this Agreement. Agency must pay BNSF the sum of twenty one thousand, eight hundred sixteen and No/100 Dollars (\$21,816.00) as compensation for the Easement within thirty (30) days of issuing a Notice to Proceed pursuant to Article III, Section 8 of this Agreement. If Agency fails to pay BNSF within the thirty day time period set forth in the preceding sentence, BNSF may stop construction of the Project until full payment is received by BNSF.

2. BNSF will furnish all labor, materials, tools, and equipment for railroad work required for the construction of the Project, such railroad work and the estimated cost thereof being as shown on <u>Exhibit D</u> attached hereto and made a part hereof. In the event construction on the Project has not commenced within six (6) months following the Effective Date, BNSF may, in its sole and absolute discretion, revise the cost estimates set forth in said <u>Exhibit D</u>. In such event, the revised cost estimates will become a part of this Agreement as though originally set forth herein. Any item of work incidental to the items listed on <u>Exhibit D</u> not specifically mentioned therein may be included as a part of this Agreement upon written approval of Agency, which approval will not be unreasonably withheld. Construction of the Project must include the following railroad work by BNSF:

- (a) Procurement of materials, equipment and supplies necessary for the railroad work;
- (b) Preliminary engineering, design, and contract preparation;
- (c) Furnishing of flagging services during construction of the Project as required and set forth in further detail on <u>Exhibit C</u>, attached to this Agreement and made a part hereof;
- (d) Furnishing engineering and inspection as required in connection with the construction of the Project;
- (e) Removal and disposal of the existing crossing surfaces from the Crossing;

- (f) Installation of two 80-foot concrete crossing surfaces for the one track, complete with new rail, ties, ballast, fasteners, along with appropriate surfacing, to carry the improved roadway and sidewalks
- (g) Make such changes in the alignment, location and elevation of its telephone, telegraph, signal and/or wire lines and appurtenances along, over or under the tracks, both temporary and permanent, as may become necessary by reason of the construction of the Project.

3. BNSF will do all railroad work set forth in Article II, Section 2 above on an actual cost basis, when BNSF, in its sole discretion, determines it is required by its labor agreements to perform such work with its own employees working under applicable collective bargaining agreements.

4. Agency agrees to reimburse BNSF for work of an emergency nature caused by Agency or Agency's contractor in connection with the Project which BNSF deems is reasonably necessary for the immediate restoration of railroad operations, or for the protection of persons or BNSF property. Such work may be performed by BNSF without prior approval of Agency and Agency agrees to fully reimburse BNSF for all such emergency work.

5. BNSF may charge Agency for insurance expenses, including self-insurance expenses, when such expenses cover the cost of Employer's Liability (including, without limitation, liability under the Federal Employer's Liability Act) in connection with the construction of the Project. Such charges will be considered part of the actual cost of the Project, regardless of the nature or amount of ultimate liability for injury, loss or death to BNSF's employees, if any.

During the construction of the Project, BNSF will send Agency progressive 6. invoices detailing the costs of the railroad work performed by BNSF under this Agreement. Agency must reimburse BNSF for completed force-account work within thirty (30) days of the date of the invoice for such work. Upon completion of the Project, BNSF will send Agency a detailed invoice of final costs, segregated as to labor and materials for each item in the recapitulation shown on Exhibit D. Pursuant to this section and Article IV, Section 7 herein, Agency must pay the final invoice within ninety (90) days of the date of the final invoice. BNSF will assess a finance charge of .033% per day (12% per annum) on any unpaid sums or other charges due under this Agreement which are past its credit terms. The finance charge continues to accrue daily until the date payment is received by BNSF, not the date payment is made or the date postmarked on the payment. Finance charges will be assessed on delinquent sums and other charges as of the end of the month and will be reduced by amounts in dispute and any unposted payments received by the month's end. Finance charges will be noted on invoices sent to Agency under this section.

AGENCY OBLIGATIONS

In consideration of the covenants of BNSF set forth herein and the faithful performance thereof, Agency agrees as follows:

1. Agency must furnish to BNSF plans and specifications for the Project. Said plans (reduced size 11" x 17"), showing the plan and profile of the roadway work on BNSF right-of-way and marked as <u>Exhibit A</u>, attached hereto and made a part hereof, must be submitted to BNSF for the development of railroad cost estimates.

2. Agency must make any required application and obtain all required permits and approvals for the construction of the Project.

3. Agency must acquire all rights of way necessary for the construction of the Project.

4. Agency must make any and all arrangements for the installation or relocation of wire lines, pipe lines and other facilities owned by private persons, companies, corporations, political subdivisions or public utilities other than BNSF which may be necessary for the construction of the Project.

5. Agency must construct the Project as shown on the attached <u>Exhibit A</u> and do all work ("Agency's Work") provided for in the plans and specifications for the Project, except railroad work that will be performed by BNSF hereunder. Agency must furnish all labor, materials, tools and equipment for the performance of Agency's Work. The principal elements of Agency's Work are as follows:

- (a) Design and Reconstruction/Construction of Lebanon Street;
- (b) Installation of a pavement marking stop bar in accordance with the Manual on Uniform Traffic Control Devices (hereinafter called, "MUTCD");
- (c) Installation of advance warning signs in accordance with the MUTCD
- (d) Perform all necessary grading and paving, including backfill of excavations and restoration of disturbed vegetation on BNSF's right-of-way;
- (e) Provide suitable drainage, both temporary and permanent;
- (f) Provide all barricades, lights, flagmen or traffic control devices necessary for preventing vehicular traffic from using a portion of the Crossing, during the installation of the concrete crossing surfaces, and also during the installation of the Crossing Signal Equipment.
- (g) Construct asphalt/concrete roadway surface on approaches to each track. Roadway surface will match elevation of the Main (and Siding) Track crossing surface(s) and remain level to a point at least thirty (30) feet from nearest rail. Any concrete headers will be constructed no closer than 5'-6"

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(preferably 6'-0") from centerline of each track to provide for a minimum of 11'-0" (preferably 12'-0") opening for track and railroad crossing surface;

(h) Job site cleanup including removal of all construction materials, concrete debris, surplus soil, refuse, contaminated soils, asphalt debris, litter and other waste materials to the satisfaction of BNSF;

6. The Agency will approve the location of the signals and signal bungalow prior to the installation by BNSF.

7. The Agency must have advanced railroad crossing signs and standard pavement markings in place at the crossing shown on <u>Exhibit A</u> (if the same are required by the MUTCD) prior to the acceptance of this Project by the Agency.

8. The Agency must give BNSF's Manager Public Projects written notice to proceed ("**Notice to Proceed**") with the railroad portion of the work after receipt of necessary funds for the Project. BNSF will not begin the railroad work (including, without limitation, procurement of supplies, equipment or materials) until written notice to proceed is received from Agency.

9. The Agency's Work must be performed by Agency or Agency's contractor in a manner that will not endanger or interfere with the safe and timely operations of BNSF and its facilities.

10. For any future inspection or maintenance, either routine or otherwise, performed by subcontractors on behalf of the Agency, Agency shall require the subcontractors to execute the C documents. Prior to performing any future maintenance with its own personnel, Agency shall: comply with all of BNSF's applicable safety rules and regulations; require any Agency employee performing maintenance to complete the safety training program at the BNSF's Internet Website "contractororientation.com"; notify BNSF when, pursuant to the requirements of exhibit C, a flagger is required to be present; procure, and have approved by BNSF's Risk Management Department, Railroad Protective Liability insurance.

11. Agency must require its contractor(s) to notify BNSF's Roadmaster at least thirty (30) calendar days prior to requesting a BNSF flagman in accordance with the requirements of <u>Exhibit C</u> attached hereto. Additionally, Agency must require its contractor(s) to notify BNSF's Manager of Public Projects thirty (30) calendar days prior to commencing work on BNSF property or near BNSF tracks.

12. Agency must include the following provisions in any contract with its contractor(s) performing work on said Project:

(a) The Contractor is placed on notice that fiber optic, communication and other cable lines and systems (collectively, the "Lines") owned by various telecommunications companies may be buried on BNSF's

property or right-of-way. The locations of these Lines have been information based on from the included on the plans telecommunications companies. The contractor will be responsible for contacting BNSF's Engineering Representative, Dave Johnson at (206) 625-6189 and/or the telecommunications companies and notifying them of any work that may damage these Lines or facilities and/or interfere with their service. The contractor must also mark all Lines shown on the plans or marked in the field in order to verify their locations. The contractor must also use all reasonable methods when working in the BNSF right-of-way or on BNSF property to determine if any other Lines (fiber optic, cable, communication or otherwise) may exist.

(b) Failure to mark or identify these Lines will be sufficient cause for BNSF's engineering representative Dave Johnson at (206) 625-6189 to stop construction at no cost to the Agency or BNSF until these items are completed.

In addition to the liability terms contained elsewhere in this Agreement, the contractor hereby indemnifies, defends and holds harmless BNSF for, from and against all cost, liability, and expense whatsoever (including, without limitation, attorney's fees and court costs and expenses) arising out of or in any way contributed to by any act or omission of Contractor, its subcontractors, agents and/or employees that cause or in any way or degree contribute to (1) any damage to or destruction of any Lines by Contractor, and/or its subcontractors, agents and/or employees, on BNSF's property or within BNSF's right-of-way, (2) any injury to or death of any person employed by or on behalf of any telecommunications company, and/or its contractor, agents and/or employees, on BNSF's property or within BNSF's right-of-way, and/or (3) any claim or cause of action for alleged loss of profits or revenue by, or loss of service by a customer or user of such telecommunication company(ies).THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY, DEATH, CAUSE OF ACTION OR CLAIM WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF BNSF, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR SOLE NEGLIGENCE OF BNSF.

> (c) The Contractor will be responsible for the rearrangement of any facilities or Lines determined to interfere with the construction. The Contractor must cooperate fully with any telecommunications company(ies) in performing such rearrangements.

13. Agency must require compliance with the obligations set forth in this agreement, including Exhibit C and Exhibit C-1, and incorporate in each prime contract for construction of the Project, or the specifications therefor (i) the provisions set forth in

Article III; (ii) the provisions set forth in Article IV; and (iii) the provisions set forth in <u>Exhibit C</u> and <u>Exhibit C-I</u>, attached hereto and by reference made a part hereof.

14. Except as otherwise provided below in this Section 13, all construction work performed hereunder by Agency for the Project will be pursuant to a contract or contracts to be let by Agency, and all such contracts must include the following:

- (a) All work performed under such contract or contracts within the limits of BNSF's right-of-way must be performed in a good and workmanlike manner in accordance with plans and specifications approved by BNSF;
- (b) Changes or modifications during construction that affect safety or BNSF operations must be subject to BNSF's approval;
- (c) No work will be commenced within BNSF's right-of-way until each of the prime contractors employed in connection with said work must have (i) executed and delivered to BNSF a letter agreement in the form of <u>Exhibit</u> <u>C-1</u>, and (ii) delivered to and secured BNSF's approval of the required insurance; and
- (d) If it is in Agency's best interest, Agency may direct that the construction of the Project be done by day labor under the direction and control of Agency, or if at any time, in the opinion of Agency, the contractor has failed to prosecute with diligence the work specified in and by the terms of said contract, Agency may terminate its contract with the contractor and take control over the work and proceed to complete the same by day labor or by employing another contractor(s) provided; however, that any contractor(s) replacing the original contractor(s) must comply with the obligations in favor of BNSF set forth above and, provided further, that if such construction is performed by day labor, Agency will, at its expense, procure and maintain on behalf of BNSF the insurance required by <u>Exhibit</u> <u>C-1</u>.
- (e) To facilitate scheduling for the Project, Agency shall have its contractor give BNSF's Roadmaster 90 days advance notice of the proposed times and dates for work windows. BNSF and Agency's contractor will establish mutually agreeable work windows for the Project. BNSF has the right at any time to revise or change the work windows, due to train operations or service obligations. BNSF will not be responsible for any additional costs and expenses resulting from a change in work windows. Additional costs and expenses resulting from a change in work windows shall be accounted for in the contractor's expenses for the Project.

15. Agency must advise the appropriate BNSF Manager Public Projects, in writing, of the completion date of the Project within thirty (30) days after such completion date. Additionally, Agency must notify BNSF's Manager Public Projects, in writing, of the date

on which Agency and/or its Contractor will meet with BNSF for the purpose of making final inspection of the Project.

TO THE FULLEST EXTENT PERMITTED BY LAW, AGENCY HEREBY 16. RELEASES, INDEMNIFIES, DEFENDS AND HOLDS HARMLESS BNSF, ITS AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS AND ATTORNEYS' FEES) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON (INCLUDING, WITHOUT LIMITATION, THE EMPLOYEES OF THE PARTIES HERETO) OR ENTITY DIRECTLY OR INDIRECTLY ARISING OUT OF, RESULTING FROM OR RELATED TO (IN WHOLE OR IN PART) (I) THE USE, OCCUPANCY OR PRESENCE OF AGENCY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES OR AGENTS IN, ON, OR ABOUT THE CONSTRUCTION SITE, (II) THE PERFORMANCE, OR FAILURE TO PERFORM BY THE AGENCY, ITS CONTRACTORS, SUBCONTRACTORS, EMPLOYEES, OR AGENTS, ITS WORK OR ANY OBLIGATION UNDER THIS AGREEMENT, (III) THE ACTS OR OMISSIONS OF AGENCY, ITS SOLE OR CONTRIBUTING CONTRACTORS, SUBCONTRACTORS, EMPLOYEES, OR AGENTS IN, ON, OR ABOUT THE CONSTRUCTION SITE, (IV) AGENCY'S BREACH OF THE TEMPORARY CONSTRUCTION LICENSE OR EASEMENT GRANTED TO AGENCY PURSUANT TO ARTICLE II OF THIS AGREEMENT, (V) ANY RIGHTS OR INTERESTS GRANTED TO AGENCY PURSUANT TO THE TEMPORARY CONSTRUCTION LICENSE OR EASEMENT DISCUSSED IN ARTICLE II OF THIS AGREEMENT, (VI) AGENCY'S OCCUPATION AND USE OF BNSF'S PROPERTY RIGHT-OF-WAY, INCLUDING, WITHOUT LIMITATION. SUBSEQUENT OR MAINTENANCE OF THE STRUCTURE BY AGENCY, OR (VII) AN ACT OR OMISSION OF AGENCY OR ITS OFFICERS, AGENTS, INVITEES, EMPLOYEES OR CONTRACTORS OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER. THE LIABILITY ASSUMED BY AGENCY WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DAMAGE, DESTRUCTION, INJURY OR DEATH WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF BNSF, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENTIONAL **MISCONDUCT OR GROSS NEGLIGENCE OF BNSF.**

JOINT OBLIGATIONS

IN CONSIDERATION of the premises, the parties hereto mutually agree to the following:

1. All work contemplated in this Agreement must be performed in a good and workmanlike manner and each portion must be promptly commenced by the party

obligated hereunder to perform the same and thereafter diligently prosecuted to conclusion in its logical order and sequence. Furthermore, any changes or modifications during construction which affect BNSF will be subject to BNSF's approval prior to the commencement of any such changes or modifications.

2. The work hereunder must be done in accordance with the <u>Exhibit A</u> and the detailed plans and specifications approved by BNSF.

3. Agency must require its contractor(s) to reasonably adhere to the Project's construction schedule for all Project work. The parties hereto mutually agree that BNSF's failure to complete the railroad work in accordance with the construction schedule due to inclement weather or unforeseen railroad emergencies will not constitute a breach of this Agreement by BNSF and will not subject BNSF to any liability. Regardless of the requirements of the construction schedule, BNSF reserves the right to reallocate the labor forces assigned to complete the railroad work in the event of an emergency to provide for the immediate restoration of railroad operations (BNSF or its related railroads) or to protect persons or property on or near any BNSF owned property. BNSF will not be liable for any additional costs or expenses resulting from any such reallocation of its labor forces. The parties mutually agree that any reallocation of labor forces by BNSF pursuant to this provision and any direct or indirect consequences or costs resulting from any such reallocation by BNSF.

4. BNSF will have the right to stop construction work on the Project if any of the following events take place: (i) Agency (or any of its contractors) performs the Project work in a manner contrary to the plans and specifications approved by BNSF; (ii) Agency (or any of its contractors), in BNSF's opinion, prosecutes the Project work in a manner which is hazardous to BNSF property, facilities or the safe and expeditious movement of railroad traffic; (iii) the insurance described in the attached Exhibit C-1 is canceled during the course of the Project; or (iv) Agency fails to pay BNSF for the Temporary Construction License or the Easement pursuant to Article II, Section 1 of this Agreement. The work stoppage will continue until all necessary actions are taken by Agency or its contractor to rectify the situation to the satisfaction of BNSF's Division Engineer or until additional insurance has been delivered to and accepted by BNSF. In the event of a breach of (i) this Agreement, (ii) the Temporary Construction License, or (iii) the Easement, BNSF may immediately terminate the Temporary Construction License or the Easement. Any such work stoppage under this provision will not give rise to any liability on the part of BNSF. BNSF's right to stop the work is in addition to any other rights BNSF may have including, but not limited to, actions or suits for damages or lost profits. In the event that BNSF desires to stop construction work on the Project, BNSF agrees to immediately notify the following individual in writing:

> Eric Scott City of Arlington 238 North Olympic Ave Arlington, WA 98223

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5. Agency must supervise and inspect the operations of all Agency contractors to assure compliance with the plans and specifications approved by BNSF, the terms of this Agreement and all safety requirements of the BNSF railroad. If BNSF determines that proper supervision and inspection is not being performed by Agency personnel at any time during construction of the Project, BNSF has the right to stop construction (within or adjacent to its operating right-of-way). Construction of the Project will not proceed until Agency corrects the situation to BNSF's reasonable satisfaction. If BNSF feels the situation is not being corrected in an expeditious manner, BNSF will immediately notify Eric Scott for appropriate corrective action.

6. Pursuant to this section and Article II, Section 6 herein, Agency must, out of funds made available to it for the construction of the Project, reimburse BNSF in full for the **actual costs** of all work performed by BNSF under this Agreement.

7. All expenses detailed in statements sent to Agency pursuant to Article II, Section 6 herein will comply with the terms and provisions of the Federal Aid Highway Program Manual, U.S. Department of Transportation, as amended from time to time, which manual is hereby incorporated into and made a part of this Agreement by reference. The parties mutually agree that BNSF's preliminary engineering, design, and contract preparation costs described in Article II, Section 2 herein are part of the costs of the Project even though such work may have preceded the date of this Agreement.

8. The construction of the Project will not commence until Agency gives BNSF's Manager Public Projects thirty (30) days prior written notice of such commencement. The commencement notice will reference BNSF's file number and D.O.T. Crossing No. 092097B and must state the time that construction activities will begin.

9. In addition to the terms and conditions set forth elsewhere in this Agreement, BNSF and the Agency agree to the following terms upon completion of construction of the Project:

- (a) Agency will own and be fully responsible for repairs, maintenance, future construction or reconstruction of the Lebanon Street roadway.
- (b) Agency will maintain the elevation of the Lebanon Street roadway approaches to match the elevation on the railroad track crossing surfaces and to be no more than three (3) inches above or six (6) inches below top-of-rail elevation at a distance measured thirty (30) feet from the nearest rail..
- (c) Agency will maintain the advanced railroad crossing warning signs and pavement markings and agrees to hold harmless and indemnify BNSF for any claims, damages or losses, in whole or in part, caused by or due to the Agency's failure to maintain the advanced warning signs and markings or other requirements of the MUTCD.

- (d) Agency will do nothing and permit nothing to be done in the maintenance of the Lebanon Street roadway, which will interfere with or endanger facilities of BNSF.
- (e) It is expressly understood by Agency and BNSF that any right to install utilities will be governed by a separate permit or license agreement between the parties hereto.
- (f) BNSF will, at its sole cost and expense, operate and maintain the Crossing Signal Equipment, Crossing Signal Control House, and the new crossing surfaces, from end-of-tie to end-of-tie, in proper condition, and the new crossing surfaces, from end-of-tie to end-of-tie.
- (g) Notwithstanding the preceding provision, if any regulations, ordinances, acts, rules or other laws subsequently passed or amended by the Agency or any other governmental or legislative authority increase the Agency's portion of maintenance cost under this Agreement, BNSF will receive the benefit of any such regulations, ordinances, acts, rules or other laws and the Agency's increased portion of maintenance costs will be incorporated into and made a part of this Agreement.
- (h) If a railway or highway improvement project necessitates rearrangement, relocation, or alteration of the Crossing Signal Equipment, Crossing Signal House, or the new crossing surface or the new crossing surface installed hereunder, the costs for such rearrangement, relocation or alteration will be the responsibility of the party requesting such changes.
- If any of the Crossing Signal Equipment is partially or wholly destroyed, then such repair and/or replacement costs must be distributed among the parties as follows:
 - a) In the event the BNSF's sole negligence destroys or damages the Crossing Signal Equipment and/or the Crossing Signal House, BNSF must, at its sole cost and expense, replace or repair such Crossing Signal Equipment and/or Crossing Signal House.
 - b) In the event the Crossing Signal Equipment is damaged or destroyed by any other cause, Agency must reimburse BNSF for the costs to replace or repair such Crossing Signal Equipment and/or Crossing Signal House.
- (j) If the Crossing Signal Equipment and/or Crossing Signal House installed hereunder cannot, through age, be maintained, or by virtue of its obsolescence, requires replacement, the cost of installation of the new crossing signal equipment and/or new crossing signal house will be negotiated by the parties hereto on the basis of the current Federal Aid

Railroad Signal Program participation and applicable Agency at the time of such replacement is warranted.

10. Agency must notify and obtain prior authorization from BNSF's Manager of Public Projects before entering BNSF's right-of-way for **Inspection and Maintenance** purposes and the BNSF Manager of Public Projects will determine if flagging is required. If the construction work hereunder is contracted, Agency must require its prime contractor(s) to comply with the obligations set forth in <u>Exhibit C</u> and <u>Exhibit C-1</u>, as the same may be revised from time to time. Agency will be responsible for its contractor(s) compliance with such obligations.

11. Any books, papers, records and accounts of the parties hereto relating to the work hereunder or the costs or expenses for labor and material connected with the construction will at all reasonable times be open to inspection and audit by the agents and authorized representatives of the parties hereto, as well as the State of WA and the Federal Highway Administration, for a period of three (3) years from the date of final BNSF invoice under this Agreement.

12. The covenants and provisions of this Agreement are binding upon and inure to the benefit of the successors and assigns of the parties hereto. Notwithstanding the preceding sentence, neither party hereto may assign any of its rights or obligations hereunder without the prior written consent of the other party.

13. In the event construction of the Project does not commence within 2 years of the Effective Date, this Agreement will become null and void.

14. Neither termination nor expiration of this Agreement will release either party from any liability or obligation under this Agreement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration.

15. To the maximum extent possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law. If any provision of this Agreement is prohibited by, or held to be invalid under, applicable law, such provision will be ineffective solely to the extent of such prohibition or invalidity and the remainder of the provision will be enforceable.

16. This Agreement (including exhibits and other documents, manuals, etc. incorporated herein) is the full and complete agreement between BNSF and Agency with respect to the subject matter herein and supersedes any and all other prior agreements between the parties hereto.

17. The major quantities of steel and iron construction material that is permanently incorporated into the project shall consist of American-made materials only. Buy America does not apply to temporary steel items, e.g., temporary sheet piling, temporary bridges, steel scaffolding and falsework.

Minor amounts of foreign steel and iron may be utilized in this project provided the cost of the foreign material used does not exceed one-tenth of one percent of the total contract cost or \$2,500.00, whichever is greater.

American-made material is defined as material having all manufacturing processes occurring domestically. To further define the coverage, a domestic product is a manufactured steel material that was produced in one of the 50 States, the District of Columbia, Puerto Rico, or in the territories and possessions of the United States.

If domestically produced steel billets or iron ingots are exported outside of the area of coverage, as defined above, for any manufacturing process then the resulting product does not conform to the Buy America requirements. Additionally, products manufactured domestically from foreign source steel billets or iron ingots do not conform to the Buy America requirements because the initial melting and mixing of alloys to create the material occurred in a foreign country.

Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process. The processes include rolling, extruding, machining, bending, grinding, drilling, welding, and coating. The action of applying a coating to steel or iron is deemed a manufacturing process. Coating includes epoxy coating, galvanizing, aluminizing, painting, and any other coating that protects or enhances the value of steel or iron. Any process from the original reduction from ore to the finished product constitutes a manufacturing process for iron.

Due to a nationwide waiver, Buy America does not apply to raw materials (iron ore and alloys), scrap (recycled steel or iron), and pig iron or processed, pelletized, and reduced iron ore.

The following are considered to be steel manufacturing processes:

1. Production of steel by any of the following processes:

a. Open hearth furnace.

b. Basic oxygen.

c. Electric furnace.

d. Direct reduction.

2. Rolling, heat treating, and any other similar processing.

3. Fabrication of the products.

18. Any notice provided for herein or concerning this Agreement must be in writing and will be deemed sufficiently given when sent by certified mail, return receipt requested, to the parties at the following addresses:

BNSF Railway Company:

BNSF's Manager Public Projects 2454 Occidental Ave S #2-D Seattle, WA 98134 Agency:

City of Arlington Eric Scott 238 North Olympic Ave Arlington, WA 98223 IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and attested by its duly qualified and authorized officials as of the day and year first above written.

BNSF RAILWAY COMPANY

By: Printed Name: Migan T. Melstyre

WITNESS:

City of Arlington

WITNESS:

Joll By:

Printed Name: BARBARA DUBERT

Title: MAM

Exhibit A-1

[Insert cross-hatched drawing of the Temporary Construction License and Structure]

[BARTLETT AND WEST TO PREPARE EXHIBIT A]





EXHIBIT "B"

EASEMENT AGREEMENT

FOR ____

(Overpass Agreement)

THIS EASEMENT AGREEMENT FOR _______ ("Easement Agreement") is made and entered into as of the ______ day of ______ 20____ ("Effective Date"), by and between BNSF RAILWAY COMPANY, a Delaware corporation ("Grantor"), and ______, a ______, a ______

A. Grantor owns or controls certain real property situated at or near the vicinity of ______, County of ______, State of ______, at Mile Post ______, [Project # _____], as described or depicted on Exhibit "A-1" attached hereto and made a part hereof (the "Premises").

B. Grantor and Grantee have entered into that certain Overpass Agreement dated as of _______ concerning improvements on or near the Premises (the "Overpass Agreement").

C. Grantee has requested that Grantor grant to Grantee an easement over the Premises for the Easement Purpose (as defined below).

D. Grantor has agreed to grant Grantee such easement, subject to the terms and conditions set forth in this Easement Agreement.

NOW, THEREFORE, for and in consideration of the foregoing recitals which are incorporated herein, the mutual promises contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Section 1 Granting of Easement.

1.1 <u>Easement Purpose</u>. The "**Easement Purpose**" shall be for the purposes set forth in the OVERPASS Agreement. Any improvements to be constructed in connection with the Easement Purpose are referred to herein as "**Improvements**" and shall be constructed, located, configured and maintained by Grantee in strict accordance with the terms of this Easement Agreement and the OVERPASS Agreement.

1.2 <u>Grant</u>. Grantor does hereby grant unto Grantee a non-exclusive easement ("**Easement**") over the Premises for the Easement Purpose and for no other purpose. The Easement is granted subject to any and all restrictions, covenants, easements, licenses, permits, leases and other encumbrances of whatsoever nature whether or not of record, if any, relating to the Premises and subject to all with all applicable federal, state and local laws, regulations, ordinances, restrictions, covenants and court or administrative decisions and orders, including Environmental Laws (defined below) and zoning laws (collectively, "**Laws**"). Grantor may not make any alterations or improvements or perform any maintenance or repair activities within the Premises except in accordance with the terms and conditions of the OVERPASS Agreement.

- 1.3 <u>Reservations by Grantor</u>. Grantor excepts and reserves the right, to be exercised by Grantor and any other parties who may obtain written permission or authority from Grantor:
 - to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any existing pipe, power, communication, cable, or utility lines and appurtenances and other facilities or structures of like character (collectively, "Lines") upon, over, under or across the Premises;
 - (b) to install, construct, maintain, renew, repair, replace, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; and
 - (c) to use the Premises in any manner as the Grantor in its sole discretion deems appropriate, provided Grantor uses all

commercially reasonable efforts to avoid material interference with the use of the Premises by Grantee for the Easement Purpose.

No Warranty of Any Conditions of the Premises. Section 3 Grantee acknowledges that Grantor has made no representation whatsoever to Grantee concerning the state or condition of the Premises, or any personal property located thereon, or the nature or extent of Grantor's ownership interest in the Premises. Grantee has not relied on any statement or declaration of Grantor, oral or in writing, as an inducement to entering into this Easement Agreement, other than as set forth herein. GRANTOR HEREBY DISCLAIMS ANY REPRESENTATION OR WARRANTY. WHETHER EXPRESS OR IMPLIED, AS TO THE DESIGN OR CONDITION OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES. ITS MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. THE QUALITY OF THE MATERIAL OR WORKMANSHIP OF ANY SUCH PROPERTY. OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTOR SHALL NOT BE RESPONSIBLE TO GRANTEE OR ANY OF GRANTEE'S CONTRACTORS FOR ANY DAMAGES RELATING TO THE DESIGN, CONDITION, QUALITY, SAFETY, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY PROPERTY PRESENT ON OR CONSTITUTING THE PREMISES, OR THE CONFORMITY OF ANY SUCH PROPERTY TO ITS INTENDED USES. GRANTEE ACCEPTS ALL RIGHTS GRANTED UNDER THIS EASEMENT AGREEMENT IN THE PREMISES IN AN "AS IS, WHERE IS" AND "WITH ALL FAULTS" CONDITION, AND SUBJECT TO ALL LIMITATIONS ON GRANTOR'S RIGHTS, INTERESTS AND TITLE TO THE PREMISES. Grantee has inspected or will inspect the Premises, and enters upon Grantor's rail corridor and property with knowledge of its physical condition and the danger inherent in Grantor's rail operations on or near the Premises. Grantee acknowledges that this Easement Agreement does not contain any implied warranties that Grantee or Grantee's Contractors (as hereinafter defined) can successfully construct or operate the improvements.

Section 4 <u>Nature of Grantor's Interest in the Premises.</u> GRANTOR DOES NOT WARRANT ITS TITLE TO THE PREMISES NOR UNDERTAKE TO DEFEND GRANTEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE. In case of the eviction of Grantee by anyone owning or claiming title to or any interest in the Premises, or by the abandonment by Grantor of the affected rail corridor, Grantor shall not be liable to refund Grantee any compensation paid hereunder.

Grantee shall take, in a timely manner, all actions Section 5 Improvements. necessary and proper to the lawful establishment, construction, operation, and maintenance of the Improvements, including such actions as may be necessary to obtain any required permits, approvals or authorizations from applicable governmental authorities. Any and all cuts and fills, excavations or embankments necessary in the construction, maintenance, or future alteration of the Improvements shall be made and maintained in such manner, form and extent as will provide adequate drainage of and from the adjoining lands and premises of the Grantor; and wherever any such fill or embankment shall or may obstruct the natural and pre-existing drainage from such lands and premises of the Grantor, the Grantee shall construct and maintain such culverts or drains as may be requisite to preserve such natural and pre-existing drainage, and shall also wherever necessary, construct extensions of existing drains, culverts or ditches through or along the premises of the Grantor, such extensions to be of adequate sectional dimensions to preserve the present flowage of drainage or other waters, and of materials and workmanship equally as good as those now existing. In the event any construction, repair, maintenance, work or other use of the Premises by Grantee will affect any Lines, fences, buildings, improvements or other facilities (collectively, "Other Improvements"), Grantee will be responsible at Grantee's sole risk to locate and make any adjustments necessary to such Other Improvements. Grantee must contact the owner(s) of the Other Improvements notifying them of any work that may damage these Other Improvements and/or interfere with their service and obtain the owner's written approval prior to so affecting the Other Improvements. Grantee must mark all Other Improvements on the Plans and Specifications and mark such Other Improvements in the field in order to verify their locations. Grantee must also use all reasonable methods when working on or near Grantor property to determine if any Other Improvements (fiber optic, cable, communication or otherwise) may exist. The Grantee agrees to keep the above-described premises free and clear from combustible materials and to cut and remove or cause to be cut and removed at its sole expense all weeds and vegetation on said premises, said work of cutting and removal to be done at such times and with such frequency as to comply with Grantee and local laws and regulations and abate any and all hazard of fire.

Section 6 <u>Taxes and Recording Fees</u>. Grantee shall pay when due any taxes, assessments or other charges (collectively, "Taxes") levied or assessed upon the Improvements by any governmental or quasi-governmental body or any Taxes levied or assessed against Grantor or the Premises that are attributable to the Improvements. Grantee agrees to purchase, affix and cancel any and all documentary stamps in the amount prescribed by statute, and to pay any and all required transfer taxes, excise taxes and any and all fees incidental to recordation of the Memorandum of Easement. In the event of Grantee's failure to do so, if Grantor shall become obligated to do so, Grantee shall be liable for all costs, expenses and judgments to or against Grantor, including all of Grantor's legal fees and expenses.

Section 7 <u>Environmental</u>.

7.1 <u>Compliance with Environmental Laws</u>. Grantee shall strictly comply with all federal, state and local environmental Laws in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Toxic Substances Control Act (collectively referred to as the "Environmental Laws"). Grantee shall not maintain a "treatment," "storage," "transfer" or "disposal" facility, or "underground storage tank," as those terms are defined by Environmental Laws, on the Premises. Grantee shall not handle, transport, release or suffer the release of "hazardous waste" or "hazardous substances", as "hazardous waste" and "hazardous substances" may now or in the future be defined by any Environmental Laws.

7.2 <u>Notice of Release</u>. Grantee shall give Grantor immediate notice to Grantor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Grantee's use of the Premises. Grantee shall use its best efforts to promptly respond to any release on or from the Premises. Grantee also shall give Grantor immediate notice of all measures undertaken on behalf of Grantee to investigate, remediate, respond to or otherwise cure such release or violation.

7.3 <u>Remediation of Release</u>. In the event that Grantor has notice from Grantee or otherwise of a release or violation of Environmental Laws which occurred or may occur during the term of this Easement Agreement, Grantor may require Grantee, at Grantee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises. If during the construction or subsequent maintenance of the Improvements, soils or other materials considered to be environmentally contaminated are exposed, Grantee will remove and safely dispose of said contaminated soils. Determination of soils contamination and applicable disposal procedures thereof, will be made only by an agency having the capacity and authority to make such a determination.

7.4 <u>Preventative Measures</u>. Grantee shall promptly report to Grantor in writing any conditions or activities upon the Premises known to Grantee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Grantee's reporting to Grantor shall not relieve Grantee of any obligation whatsoever imposed on it by this Easement Agreement. Grantee shall promptly respond to Grantor's request for information regarding said conditions or activities.

7.5 <u>Evidence of Compliance</u>. Grantee agrees periodically to furnish Grantor with proof satisfactory to Grantor that Grantee is in compliance with this **Section 7**. Should Grantee not comply fully with the above-stated obligations of this **Section 7**, notwithstanding anything contained in any other provision hereof, Grantor may, at its

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option, terminate this Easement Agreement by serving five (5) days' notice of termination upon Grantee. Upon termination, Grantee shall remove the Improvements and restore the Premises as provided in **Section 9**.

Section 8 <u>Default and Termination</u>.

8.1 <u>Grantor's Performance Rights</u>. If at any time Grantee, or Grantee's Contractors, fails to properly perform its obligations under this Easement Agreement, Grantor, in its sole discretion, may: (i) seek specific performance of the unperformed obligations, or (ii) at Grantee's sole cost, may arrange for the performance of such work as Grantor deems necessary for the safety of its rail operations, activities and property, or to avoid or remove any interference with the activities or property of Grantor, or anyone or anything present on the rail corridor or property with the authority or permission of Grantor. Grantee shall promptly reimburse Grantor for all costs of work performed on Grantee's behalf upon receipt of an invoice for such costs. Grantor's failure to perform any obligations of Grantee or Grantee's Contractors shall not alter the liability allocation set forth in this Easement Agreement.

8.2 <u>Abandonment</u>. Grantor may, at its option, terminate this Easement Agreement by serving five (5) days' notice in writing upon Grantee if Grantee should abandon or cease to use the Premises for the Easement Purpose. Any waiver by Grantor of any default or defaults shall not constitute a waiver of the right to terminate this Easement Agreement for any subsequent default or defaults, nor shall any such waiver in any way affect Grantor's ability to enforce any section of this Easement Agreement.

8.3 <u>Effect of Termination or Expiration</u>. Neither termination nor expiration will release Grantee from any liability or obligation under this Easement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date the Premises are restored as required by **Section 9**.

8.4 <u>Non-exclusive Remedies</u>. The remedies set forth in this **Section 8** shall be in addition to, and not in limitation of, any other remedies that Grantor may have under the OVERPASS Agreement, at law or in equity.

Section 9 Surrender of Premises.

9.1 <u>Removal of Improvements and Restoration</u>. Upon termination of this Easement Agreement, whether by abandonment of the Easement or by the exercise of Grantor's termination rights hereunder, Grantee shall, at its sole cost and expense, immediately perform **the following**:

 (a) remove all or such portion of Grantee's Improvements and all appurtenances thereto from the Premises, as Grantor directs at Grantor's sole discretion;

- (b) repair and restore any damage to the Premises arising from, growing out of, or connected with Grantee's use of the Premises;
- (c) remedy any unsafe conditions on the Premises created or aggravated by Grantee; and
- (d) leave the Premises in the condition which existed as of the Effective Date.

9.2 <u>Limited License for Entry.</u> If this Easement Agreement is terminated, Grantor may direct Grantee to undertake one or more of the actions set forth above, at Grantee's sole cost, in which case Grantee shall have a limited license to enter upon the Premises to the extent necessary to undertake the actions directed by Grantor. The terms of this limited license include all of Grantee's obligations under this Easement Agreement. Termination will not release Grantee from any liability or obligation under this Easement Agreement, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination, or, if later, the date when Grantee's Improvements are removed and the Premises are restored to the condition that existed as of the Effective Date. If Grantee fails to surrender the Premises to Grantor upon any termination of the Easement, all liabilities and obligations of Grantee hereunder shall continue in effect until the Premises are surrendered.

Section 10 <u>Liens</u>. Grantee shall promptly pay and discharge any and all liens arising out of any construction, alterations or repairs done, suffered or permitted to be done by Grantee on the Premises or attributable to Taxes that are the responsibility of Grantee pursuant to **Section 6**. Grantor is hereby authorized to post any notices or take any other action upon or with respect to the Premises that is or may be permitted by Law to prevent the attachment of any such liens to any portion of the Premises; provided, however, that failure of Grantor to take any such action shall not relieve Grantee of any obligation or liability under this **Section 10** or any other section of this Easement Agreement.

Section 11 <u>Tax Exchange</u>. Grantor may assign its rights (but not its obligations) under this Easement Agreement to Goldfinch Exchange Company LLC, an exchange intermediary, in order for Grantor to effect an exchange under Section 1031 of the Internal Revenue Code. In such event, Grantor shall provide Grantee with a Notice of Assignment, attached as <u>Exhibit C</u>, and Grantee shall execute an acknowledgement of receipt of such notice.

Section 12 <u>Notices</u>. Any notice required or permitted to be given hereunder by one party to the other shall be delivered in the manner set forth in the OVERPASS Agreement. Notices to Grantor under this Easement shall be delivered to the following address: BNSF Railway Company, Real Estate Department, 2500 Lou Menk Drive, Ft.

Worth, TX 76131, Attn: Permits, or such other address as Grantor may from time to time direct by notice to Grantee.

Section 13 Recordation. It is understood and agreed that this Easement Agreement shall not be in recordable form and shall not be placed on public record and any such recording shall be a breach of this Easement Agreement. Grantor and Grantee shall execute a Memorandum of Easement in the form attached hereto as Exhibit "B-1" (the "Memorandum of Easement") subject to changes required, if any, to conform such form to local recording requirements. [IF LEGAL DESCRIPTION IS NOT AVAILABLE USE THE FOLLOWING IN PLACE OF THE PRIOR SENTENCE: As of the Effective Date, a legal description of the Premises is not available. Grantee and Grantor shall work together in good faith to establish the legal description for the Premises. Once Grantor and Grantee have approved the legal description, Grantor and Grantee shall execute a Memorandum of Easement in the form attached hereto as **Exhibit "B-1"** (the "**Memorandum of Easement**").] The Memorandum of Easement shall be recorded in the real estate records in the county where the Premises are located. If a Memorandum of Easement is not executed by the parties and recorded as described above within days of the Effective Date, Grantor shall have the right to terminate this Easement Agreement upon notice to Grantee.

Section 14 <u>Miscellaneous</u>.

14.1 All questions concerning the interpretation or application of provisions of this Easement Agreement shall be decided according to the substantive Laws of the State of **[Texas]** without regard to conflicts of law provisions.

14.2 In the event that Grantee consists of two or more parties, all the covenants and agreements of Grantee herein contained shall be the joint and several covenants and agreements of such parties. This instrument and all of the terms, covenants and provisions hereof shall inure to the benefit of and be binding upon each of the parties hereto and their respective legal representatives, successors and assigns and shall run with and be binding upon the Premises.

14.3 If any action at law or in equity is necessary to enforce or interpret the terms of this Easement Agreement, the prevailing party or parties shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which such party or parties may be entitled.

14.4 If any provision of this Easement Agreement is held to be illegal, invalid or unenforceable under present or future Laws, such provision will be fully severable and this Easement Agreement will be construed and enforced as if such illegal, invalid or unenforceable provision is not a part hereof, and the remaining provisions hereof will remain in full force and effect. In lieu of any illegal, invalid or unenforceable provision herein, there will be added automatically as a part of this Easement Agreement a provision as similar in its terms to such illegal, invalid or unenforceable provision as may be possible and be legal, valid and enforceable.

14.5 This Easement Agreement is the full and complete agreement between Grantor and Grantee with respect to all matters relating to Grantee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Grantee's use of the Premises as described herein. However, nothing herein is intended to terminate any surviving obligation of Grantee or Grantee's obligation to defend and hold Grantor harmless in any prior written agreement between the parties.

14.6 Time is of the essence for the performance of this Easement Agreement.

14.7 The terms of the OVERPASS Agreement are incorporated herein as if fully set forth in this instrument which terms shall be in full force and effect for purposes of this Easement even if the OVERPASS Agreement is, for whatever reason, no longer in effect.

ADMINISTRATIVE FEE

15. Grantee acknowledges that a material consideration for this agreement, without which it would not be made, is the agreement between Grantee and Grantor, that the Grantee shall pay upon return of this Agreement signed by Grantee to Grantor's Broker a processing fee in the amount of 2,000.00 over and above the agreed upon Acquisition Price. Said fee shall be made payable to BNSF Railway Company by a separate check.

[Signature page follows]

Witness the execution of this Easement Agreement as of the date first set forth above.

GRANTOR:

BNSF RAILWAY COMPANY, a Delaware corporation

By:	
Name:	
Title:	

GRANTEE:

~		
M		
and the second s		

By:		
Name:	2	
Title:		

EXHIBIT "C" CONTRACTOR REQUIREMENTS

1.01 General

- 1.01.01 The Contractor must cooperate with BNSF RAILWAY COMPANY, hereinafter referred to as "Railway" where work is over or under on or adjacent to Railway property and/or right-of-way, hereafter referred to as "Railway Property", during the construction of the Lebanon Street crossing.
- **1.01.02** The Contractor must execute and deliver to the Railway duplicate copies of the Exhibit "C-1" Agreement, in the form attached hereto, obligating the Contractor to provide and maintain in full force and effect the insurance called for under Section 3 of said Exhibit "C-1". Questions regarding procurement of the Railroad Protective Liability Insurance should be directed to Rosa Martinez at Marsh, USA, 214-303-8519.
- **1.01.03** The Contractor must plan, schedule and conduct all work activities so as not to interfere with the movement of any trains on Railway Property.
- 1.01.04 The Contractor's right to enter Railway's Property is subject to the absolute right of Railway to cause the Contractor's work on Railway's Property to cease if, in the opinion of Railway, Contractor's activities create a hazard to Railway's Property, employees, and/or operations. Railway will have the right to stop construction work on the Project if any of the following events take place: (i) Contractor (or any of its subcontractors) performs the Project work in a manner contrary to the plans and specifications approved by Railway; (ii) Contractor (or any of its subcontractors), in Railway's opinion, prosecutes the Project work in a manner which is hazardous to Railway property, facilities or the safe and expeditious movement of railroad traffic; (iii) the insurance described in the attached Exhibit C-1 is canceled during the course of the Project; or (iv) Contractor fails to pay Railway for the Temporary Construction License or the Easement. The work stoppage will continue until all necessary actions are taken by Contractor or its subcontractor to rectify the situation to the satisfaction of Railway's Division Engineer or until additional insurance has been delivered to and accepted by Railway. In the event of a breach of (i) this Agreement, (ii) the Temporary Construction License, or (iii) the Easement, Railway may immediately terminate the Temporary Construction License or the Easement. Any such work stoppage under this provision will not give rise to any liability on the part of Railway. Railway's right to stop the work is in addition to any other rights Railway may have including, but not limited to, actions or suits for damages or lost profits. In the event that Railway desires to stop construction work on the Project, Railway agrees to immediately notify the following individual in writing:

Eric Scott, City of Arlington 238 N Olympic Ave Arlington, WA 98223

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360-403-3421 escott@arlingtonwa.gov

- 1.01.05 The Contractor is responsible for determining and complying with all Federal, State and Local Governmental laws and regulations, including, but not limited to environmental laws and regulations (including but not limited to the Resource Conservation and Recovery Act, as amended; the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA), and health and safety laws and regulations. The Contractor hereby indemnifies, defends and holds harmless Railway for, from and against all fines or penalties imposed or assessed by Federal, State and Local Governmental Agencies against the Railway which arise out of Contractor's work under this Agreement.
- **1.01.06** The Contractor must notify the City of Arlington at 360-403-3421 and Railway's Manager Public Projects, telephone number 206-625-6413 at least thirty (30) calendar days before commencing any work on Railway Property. Contractors notification to Railway, must refer to Railroad's file # 092097B.
- 1.01.07 For any bridge demolition and/or falsework above any tracks or any excavations located with any part of the excavations located within, whichever is greater, twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 2 horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor must furnish the Railway five sets of working drawings showing details of construction affecting Railway Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and two sets of structural calculations of any falsework, shoring or cribbing. For all excavation and shoring submittal plans, the current "BNSF-UPRR Guidelines for Temporary Shoring" must be used for determining the design loading conditions to be used in shoring design, and all calculations and submittals must be in accordance with the current "BNSF-UPRR Guidelines for Temporary Shoring". All submittal drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. All calculations must take into consideration railway surcharge loading and must be designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association) Coopers E-80 live loading standard. All drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. The Contractor must not begin work until notified by the Railway that plans have been approved. The Contractor will be required to use lifting devices such as, cranes and/or winches to place or to remove any falsework over Railway's tracks. In no case will the Contractor be relieved of responsibility for results obtained by the implementation of said approved plans.
- 1.01.08 Subject to the movement of Railway's trains, Railway will cooperate with the Contractor such that the work may be handled and performed in an efficient manner. The Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event his work is delayed by the Railway.

1.02 Contractor Safety Orientation

• 1.02.01 No employee of the Contractor, its subcontractors, agents or invitees may enter Railway Property without first having completed Railway's Engineering Contractor Safety Orientation, found on the web site <u>www.contractororientation.com</u>. The Contractor must ensure that each of its employees, subcontractors, agents or invitees completes Railway's Engineering Contractor Safety Orientation through internet sessions before any work is performed on the Project. Additionally, the Contractor must ensure that each and every one of its employees, subcontractors, agents or invitees possesses a card certifying completion of the Railway Contractor Safety Orientation before entering Railway Property. The Contractor is responsible for the cost of the Railway Contractor Safety Orientation. The Contractor must renew the Railway Contractor Safety Orientation annually. Further clarification can be found on the web site or from the Railway's Representative.

1.03 Railway Requirements

- **1.03.01** The Contractor must take protective measures as are necessary to keep railway facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from his operations. Any damage to railway facilities resulting from Contractor's operations will be repaired or replaced by Railway and the cost of such repairs or replacement must be paid for by the Agency.
- **1.03.02** The Contractor must notify the Railway's Division Engineer and provide blasting plans to the Railway for review seven (7) calendar days prior to conducting any blasting operations adjacent to or on Railway's Property.
- **1.03.03** The Contractor must abide by the following temporary clearances during construction:
 - 15' Horizontally from centerline of nearest track
 - 21'-6" Vertically above top of rail
 - 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts
 - 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
 - 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
 - 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts
- **1.03.04** Upon completion of construction, the following clearances shall be maintained:
 - 25' Horizontally from centerline of nearest track
 - 23'-3 ½" Vertically above top of rail
- **1.03.05** Any infringement within State statutory clearances due to the Contractor's operations must be submitted to the Railway and to the City of Arlington and must not be undertaken until approved in writing by the Railway, and until the City of Arlington has obtained any necessary authorization from the State Regulatory Authority for the

infringement. No extra compensation will be allowed in the event the Contractor's work is delayed pending Railway approval, and/or the State Regulatory Authority's approval.

- **1.03.06** In the case of impaired vertical clearance above top of rail, Railway will have the option of installing tell-tales or other protective devices Railway deems necessary for protection of Railway operations. The cost of tell-tales or protective devices will be borne by the Agency.
- 1.03.07 The details of construction affecting the Railway's Property and tracks not included in the contract plans must be submitted to the Railway by the City of Arlington for approval before work is undertaken and this work must not be undertaken until approved by the Railway.
- **1.03.08** At other than public road crossings, the Contractor must not move any equipment or materials across Railway's tracks until permission has been obtained from the Railway. The Contractor must obtain a "Temporary Construction Crossing Agreement" from the Railway prior to moving his equipment or materials across the Railways tracks. The temporary crossing must be gated and locked at all times when not required for use by the Contractor. The temporary crossing for use of the Contractor will be constructed and, at the completion of the project, removed at the expense of the Contractor.
- 1.03.09 Discharge, release or spill on the Railway Property of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited and Contractor must immediately notify the Railway's Resource Operations Center at 1(800) 832-5452, of any discharge, release or spills in excess of a reportable quantity. Contractor must not allow Railway Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.
- 1.03.10 The Contractor upon completion of the work covered by this contract, must promptly remove from the Railway's Property all of Contractor's tools, equipment, implements and other materials, whether brought upon said property by said Contractor or any Subcontractor, employee or agent of Contractor or of any Subcontractor, and must cause Railway's Property to be left in a condition acceptable to the Railway's representative.

1.04 Contractor Roadway Worker on Track Safety Program and Safety Action Plan

- I.04.01 Each Contractor that will perform work within 25 feet of the centerline of a track must develop and implement a Roadway Worker Protection/On Track Safety Program and work with Railway Project Representative to develop an on track safety strategy as described in the guidelines listed in the on track safety portion of the Safety Orientation. This Program must provide Roadway Worker protection/on track training for all employees of the Contractor, its subcontractors, agents or invitees. This training is reinforced at the job site through job safety briefings. Additionally, each Contractor must develop and implement the Safety Action Plan, as provided for on the web site <u>www.contractororientation.com</u>, which will be made available to Railway prior to commencement of any work on Railway Property. During the performance of work, the Contractor must audit its work activities. The Contractor must designate an on-site Project Supervisor who will serve as the contact person for the Railway and who will maintain a copy of the Safety Action Plan, safety audits, and Material Safety Datasheets (MSDS), at the job site.
- Contractor shall have a background investigation performed on all of its employees, subcontractors and agents who will be performing any services on railroad property under this Agreement.

The background screening shall at a minimum meet the criteria defined by the e-

RAILSAFE program outlined at <u>http://www.e-railsafe.com</u> in addition to any other applicable regulatory requirements. The e-RAILSAFE program uses rail industry background screening standards.

Contractor shall obtain consent from all employees screened in compliance with the e-RAILSAFE program criteria to release completed background information to BNSF. Contractor shall be subject to periodic audit to ensure compliance.

Contractor shall not permit any of its employees, subcontractors or agents to perform services on property hereunder who are not approved under e-RAILSAFE program standards. Railroad shall have the right to deny entry onto its premises to any of Contractor's employees, subcontractors or agents who do not display the authorized identification badge issued by a background screening service meeting the standards set forth for the e-RAILSAFE program or who pose a threat, in Railroad's reasonable opinion, to the safety or security of Railroad's operations.

Contractors shall ensure its employees, subcontractors and agents are United States citizens or legally working in this country under a work VISA.

1.05 Railway Flagger Services:

- **1.05.01** The Contractor must give Railway's Roadmaster (telephone 509-531-6305) a minimum of thirty (30) calendar days advance notice when flagging services will be required so that the Roadmaster can make appropriate arrangements (i.e., bulletin the flagger's position). If flagging services are scheduled in advance by the Contractor and it is subsequently determined by the parties hereto that such services are no longer necessary, the Contractor must give the Roadmaster five (5) working days advance notice so that appropriate arrangements can be made to abolish the position pursuant to union requirements.
- **1.05.02** Unless determined otherwise by Railway's Project Representative, Railway flagger will be required and furnished when Contractor's work activities are located over, under and/or within twenty-five (25) feet measured horizontally from centerline of the nearest track and when cranes or similar equipment positioned beyond 25-feet from the track centerline could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto for the following conditions:
- 1.05.02a When, upon inspection by Railway's Representative, other conditions warrant.
- **1.05.02b** When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's representative, track or other Railway facilities may be subject to movement or settlement.
- 1.05.02c When work in any way interferes with the safe operation of trains at timetable speeds.
- **1.05.02d** When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.
- **1.05.02e** Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.
- 1.05.03 Flagging services will be performed by qualified Railway flaggers.
- **1.05.03a** Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railway Property and operations, if deemed necessary by the Railways Representative.
- 1.05.03b Each time a flagger is called, the minimum period for billing will be the eight (8) hour basic day.
- 1.05.03c The cost of flagger services provided by the Railway will be borne by the (Agency). The estimated cost for one (1) flagger is approximately between \$800.00-\$1,600.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, vehicle, transportation, meals, lodging, radio, equipment, supervision and other costs incidental to performing flagging services. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. THE FLAGGING RATE IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL BE USED TO CALCULATE THE ACTUAL COSTS OF FLAGGING PURSUANT TO THIS PARAGRAPH.
- 1.05.03d The average train traffic on this route is 2 freight trains per 24-hour period at a timetable speed 25 MPH.

1.06 Contractor General Safety Requirements

- 1.06.01 Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by contractors within 25 feet of any track must be in compliance with FRA Roadway Worker Protection Regulations.
- 1.06.02 Before beginning any task on Railway Property, a thorough job safety briefing must be conducted with all personnel involved with the task and repeated when the personnel or task changes. If the task is within 25 feet of any track, the job briefing <u>must</u> include the Railway's flagger, as applicable, and include the procedures the Contractor will use to protect its employees, subcontractors, agents or invitees from moving any equipment adjacent to or across any Railway track(s).
- 1.06.03 Workers must not work within 25 feet of the centerline of any track without an on track safety strategy approved by the Railway's Project Representative. When authority is provided, every contractor employee must know: (1) who the Railway flagger is, and how to contact the flagger, (2) limits of the authority, (3) the method of communication to stop and resume work, and (4) location of the designated places of safety. Persons or equipment entering flag/work limits that were not previously job briefed, must notify the flagger immediately, and be given a job briefing when working within 25 feet of the center line of track.
- 1.06.04 When Contractor employees are required to work on the Railway Property after normal working hours or on weekends, the Railroad's representative in charge of the project must be notified. A minimum of two employees must be present at all times.
- **1.06.05** Any employees, agents or invitees of Contractor or its subcontractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the Railway's Property and subsequently released to the custody of a representative of Contractor management. Future access to the Railway's Property by that employee will be denied.
- 1.06.06 Any damage to Railway Property, or any hazard noticed on passing trains must be reported immediately to the Railway's representative in charge of the project. Any vehicle or machine which may come in contact with track, signal equipment, or structure (bridge) and could result in a train derailment must be reported immediately to the Railway representative in charge of the project and to the Railway's Resource Operations Center at 1(800) 832-5452. Local emergency numbers are to be obtained from the Railway representative in charge of the project at the job site.

- 1.06.07 For safety reasons, all persons are prohibited from having pocket knives, firearms or other deadly weapons in their possession while working on Railway's Property.
- 1.06.08 All personnel protective equipment (PPE) used on Railway Property must meet applicable OSHA and ANSI specifications. Current Railway personnel protective equipment requirements are listed on the web site, <u>www.contractororientation.com</u>, however, a partial list of the requirements include: a) safety glasses with permanently affixed side shields (no yellow lenses); b) hard hats c) safety shoe with: hardened toes, above-the-ankle lace-up and a defined heel; and d) high visibility retro-reflective work wear. The Railroad's representative in charge of the project is to be contacted regarding local specifications for meeting requirements relating to hi-visability work wear. Hearing protection, fall protection, gloves, and respirators must be worn as required by State and Federal regulations. (NOTE Should there be a discrepancy between the information contained on the web site and the information in this paragraph, the web site will govern.)
- 1.06.09 THE CONTRACTOR MUST NOT PILE OR STORE ANY MATERIALS, MACHINERY OR EQUIPMENT CLOSER THAN 25'-0" TO THE CENTER LINE OF THE NEAREST RAILWAY TRACK. MATERIALS, MACHINERY OR EQUIPMENT MUST NOT BE STORED OR LEFT WITHIN 250 FEET OF ANY HIGHWAY/RAIL AT-GRADE CROSSINGS OR TEMPORARY CONSTRUCTION CROSSING, WHERE STORAGE OF THE SAME WILL OBSTRUCT THE VIEW OF A TRAIN APPROACHING THE CROSSING. PRIOR TO BEGINNING WORK, THE CONTRACTOR MUST ESTABLISH A STORAGE AREA WITH CONCURRENCE OF THE RAILROAD'S REPRESENTATIVE.
- 1.06.10 Machines or vehicles must not be left unattended with the engine running. Parked machines or equipment must be in gear with brakes set and if equipped with blade, pan or bucket, they must be lowered to the ground. All machinery and equipment left unattended on Railway's Property must be left inoperable and secured against movement. (See internet Engineering Contractor Safety Orientation program for more detailed specifications)
- 1.06.11 Workers must not create and leave any conditions at the work site that would interfere with water drainage. Any work performed over water must meet all Federal, State and Local regulations.
- 1.06.12 All power line wires must be considered dangerous and of high voltage unless informed to the contrary by proper authority. For all power lines the minimum clearance between the lines and any part of the equipment or load must be; 200 KV or below 15 feet; 200 to 350 KV 20 feet; 350 to 500 KV 25 feet; 500 to 750 KV 35 feet; and 750 to 1000 KV 45 feet. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

1.07 Excavation

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- 1.07.01 Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems are present and located within the Project work area. The Contractor must determine whether excavation on Railway's Property could cause damage to buried cables resulting in delay to Railway traffic and disruption of service to users. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits. Before commencing excavation, the Contractor must contact BNSF's Field Engineering Representative (David Johnson 206-625-6189). All underground and overhead wircs will be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.
- 1.07.02 The Contractor must cease all work and notify the Railway immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and

the owner of the utility can be identified, then the Contractor must also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work must be performed until the exact location has been determined. There will be no exceptions to these instructions.

- 1.07.03 All excavations must be conducted in compliance with applicable OSHA regulations and, regardless of depth, must be shored where there is any danger to tracks, structures or personnel.
- 1.07.04 Any excavations, holes or trenches on the Railway's Property must be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that Railway employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be back filled as soon as possible.

1.08 Hazardous Waste, Substances and Material Reporting

1.08.01 If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway's Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at 1(800) 832-5452, of such discovery: (b) take safeguards necessary to protect its employees, subcontractors, agents and/or third parties: and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

1.09 Personal Injury Reporting

• 1.09.01 The Railway is required to report certain injuries as a part of compliance with Federal Railroad Administration (FRA) reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor or Contractor's invitees while on the Railway's Property must be reported immediately (by phone mail if unable to contact in person) to the Railway's representative in charge of the project. The Non-Employee Personal Injury Data Collection Form contained herein is to be completed and sent by Fax to the Railway at 1(817) 352-7595 and to the Railway's Project Representative no later than the close of shift on the date of the injury.

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

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INFORMATION REQUIRED TO BE COLLECTED PURSUANT TO FEDERAL REGULATION. IT SHOULD BE USED FOR COMPLIANCE WITH FEDERAL REGULATIONS ONLY AND IS NOT INTENDED TO PRESUME ACCEPTANCE OF RESPONSIBILITY OR LIABILITY.

1. Accident City/St	2. Date:	Time:
County:	3. Temperature:	4. Weather
(if non-Railway location)	52	
5. Social Security #		
6. Name (last, first, mi)		
7. Address: Street:	City:	St Zip:
8. Date of Birth:	and/or Age Gender: (if available)	
9. (a) Injury: (i.e. (a) Laceration (b) Hand)	(b) Body Part:	
11. Description of Accident (To include location	on, action, result, etc.):	
12. Treatment:	2	
? First Aid Only		
? Required Medical Treatment		
? Other Medical Treatment		
13. Dr. Name	30. Date:	
14. Dr. Address:		
Street:	City:	St: Zip:
	u	
15. Hospital Name:		
16. Hospital Address:		
Street:	City:	St: Zip:
17. Diagnosis:		
ΓΑΧ ΤΟ		
RAILWAY AT (817) 352-7595		
AND COPY TO DAIL WAY DOADMASTED FAY		
MAILMAT NUADWASTEN FAA		

EXHIBIT "C-1"

Agreement Between BNSF RAILWAY COMPANY and the CONTRACTOR

BNSF RAILWAY COMPANY Attention: Manager Public Projects

Railway File: 092097B Agency Project:

Gentlemen:

The undersigned (hereinafter called, the "Contractor"), has entered into a contract (the "Contract") dated ______, 20__, with for the performance of certain work in connection with the following project: City of Arlington Lebanon Street crossing. Performance of such work will necessarily require contractor to enter BNSF RAILWAY COMPANY ("Railway") right of way and property ("Railway Property"). The Contract provides that no work will be commenced within Railway Property until the Contractor employed in connection with said work for the City of Arlington (i) executes and delivers to Railway an Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the Owner, General Partner, President or Vice President of Contractor, Contractor must furnish evidence to Railway certifying that the signatory is empowered to execute this Agreement on behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Contract, has agreed and does hereby agree with Railway as follows:

Section 1. RELEASE OF LIABILITY AND INDEMNITY

Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, arising in any manner from Contractor's or any of Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way. This obligation shall not include such claims, costs, damages, or expenses which may be caused by the sole negligence of Railway or its contractors, agents or employees; Provided, that if the claims or damages are caused by or result from the concurrent negligence or other acts or omissions of (a) Railway, its contractors, agents or employees and (b) Contractor, its subcontractors, agents or employees, this provision shall

be valid and enforceable only to the extent of the negligence of the Contractor, its subcontractors, agents or employees.

It is mutually negotiated between the parties that the indemnification obligation shall include all claims brought by Contractor's employees against Railway, its agents, servants, employees or otherwise, and Contractor expressly waives its immunity under the industrial insurance act (RCW Title 51) and assumes potential liability for all actions brought by its employees.

THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR INCLUDES ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILWAY UNDER THE FEDERAL EMPLOYEE'S LIABILITY ACT, INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE LOCOMOTIVE INSPECTION ACT, WHENEVER SO CLAIMED.

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.

In addition to any other provision of this Agreement, in the event that all or any portion of this Article shall be deemed to be inapplicable for any reason, including without limitation as a result of a decision of an applicable court, legislative enactment or regulatory order, the parties agree that this Article shall be interpreted as requiring Contractor to indemnify Railroad to the fullest extent permitted by applicable law.

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

Section 2. TERM

This Agreement is effective from the date of the Contract until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

Section 3. INSURANCE

Contractor shall, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

- A. Commercial General Liability insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of \$2,000,000 each occurrence and an aggregate limit of at least \$4,000,000 but in no event less than the amount otherwise carried by the Contractor. Coverage must be purchased on a post 2004 ISO occurrence form or equivalent and include coverage for, but not limit to the following:
 - Bodily Injury and Property Damage
 - Personal Injury and Advertising Injury
 - Fire legal liability
 - Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Waiver of subrogation in favor of and acceptable to *Railway*.
- Additional insured endorsement in favor of and acceptable to *Railway*.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by *Railway*.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to *Raihway* employees.

No other endorsements limiting coverage as respects to obligations under this Agreement may be included on the policy with regard to the work being performed.

B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least \$1,000,000 and include coverage for, but not limited to the following:

- Bodily injury and property damage
- Any and all vehicles owned, used or hired

The policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to *Railway*.
- Additional insured endorsement in favor or and acceptable to *Railway*.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by *Railway*.

C. Workers Compensation and Employers Liability insurance covering all employees performing work hereunder including coverage for, but not limited to:

- Contractor's statutory liability under the worker's compensation laws of the state(s) in which the services are to be performed. If optional under State law, the insurance must cover all employees anyway.
- Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to *Railway*.
- D. Railroad Protective Liability insurance naming only the *Railway* as the Insured with coverage of at least
 \$2,000,000 per occurrence and \$6,000,000 in the aggregate. The policy Shall be issued on a standard ISO form CG 00 35 12 04 and include the following:

- Endorsed to include the Pollution Exclusion Amendment
- Endorsed to include the Limited Seepage and Pollution Endorsement.
- Endorsed to remove any exclusion for punitive damages.
- No other endorsements restricting coverage may be added.
- The original policy must be provided to the *Railway* prior to performing any work or services under this Agreement
- Definition of "Physical Damage to Property" shall be endorsed to read: "means direct and accidental loss of or damage to all property owned by any named insured and all property in any named insured' care, custody, and control arising out of the acts or omissions of the contractor named on the Declarations.

In lieu of providing a Railroad Protective Liability policy, Contractor may participate (if available) in *Railway's* Blanket Railroad Protective Liability insurance policy.

Other Requirements:

Where allowable by law, all policies (applying to coverage listed above) shall contain no exclusion for punitive damages.

Contractor agrees to waive its right of recovery against *Railway* for all claims and suits against *Railway*. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against *Railway* for all claims and suits. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against *Railway* for loss of its owned or leased property or property under Contractor's care, custody or control.

Allocated Loss Expense shall be in addition to all policy limits for coverages referenced above.

Contractor is not allowed to self-insure without the prior written consent of *Railway*. If granted by *Railway*, any self-insured retention or other financial responsibility for claims shall be covered directly by Contractor in licu of insurance. Any and all *Railway* liabilities that would otherwise, in accordance with the provisions of this

Agreement, be covered by Contractor's insurance will be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing services, Contractor shall furnish to *Railway* an acceptable certificate(s) of insurance from an authorized representative evidencing the required coverage(s), endorsements, and amendments. The certificate should be directed to the following address:

BNSF Railway Company

c/o CertFocus P.O. Box 140528 Kansas City, MO 64114 <u>Toll Free:</u> 877-576-2378 <u>Fax number:</u> 817-840-7487 <u>Email: BNSF@certfocus.com</u> <u>www.certfocus.com</u>

Contractor shall notify *Railway* in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration.

Any insurance policy shall be written by a reputable insurance company acceptable to *Railway* or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.

If coverage is purchased on a "claims made" basis, Contractor hereby agrees to maintain coverage in force for a minimum of three years after expiration, cancellation or termination of this contract. Annually Contractor agrees to provide evidence of such coverage as required hereunder.

Contractor represents that this Agreement has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by this Agreement.

Not more frequently than once every five years, *Railway* may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by Contractor, Contractor shall require that the subcontractor shall provide and maintain insurance coverage(s) as set forth herein, naming *Railway* as an additional insured, and shall require that the subcontractor shall release, defend and indemnify *Railway* to the same extent and under the same terms and conditions as Contractor is required to release, defend and indemnify *Railway* herein.

Failure to provide evidence as required by this section shall entitle, but not require, *Railway* to terminate this Agreement immediately. Acceptance of a certificate that does not comply with this section shall not operate as a waiver of Contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor shall not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by *Railway* shall not be limited by the amount of the required insurance coverage.

In the event of a claim or lawsuit involving *Railway* arising out of this agreement, Contractor will make available any required policy covering such claim or lawsuit.

These insurance provisions are intended to be a separate and distinct obligation on the part of the Contractor. Therefore, these provisions shall be enforceable and Contractor shall be bound thereby regardless of whether or not indemnity provisions are determined to be enforceable in the jurisdiction in which the work covered hereunder is performed.

For purposes of this section, *Railway* shall mean "Burlington Northern Santa Fe LLC", "BNSF Railway Company" and the subsidiaries, successors, assigns and affiliates of each.

Section 4. EXHIBIT "C" CONTRACTOR REQUIREMENTS

The Contractor must observe and comply with all provisions, obligations, requirements and limitations contained in the Contract, and the Contractor Requirements set forth on Exhibit "C" attached to the Contract and this Agreement, , including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site.

Section 5. TRAIN DELAY

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor

will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.

For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. Damages for train delay are currently \$382.20 per hour per incident. THE RATE THEN IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL BE USED TO CALCULATE THE ACTUAL COSTS OF TRAIN DELAY PURSUANT TO THIS AGREEMENT.

Contractor and its subcontractors must give Railway's representative six weeks advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

Kindly acknowledge receipt of this letter by signing and returning to the Railway two original copies of this letter, which, upon execution by Railway, will constitute an Agreement between us.

Contractor

BNSF Railway Company

By:_____

By:_____

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Printed Name:	Name:		
Title:	Manager Public Projects		
Contact Person:	Accepted and effective this day of 20		
Address:			
City:			
State: Zip:			
I ⁻ ax:			
Phone:			
E-mail:			



***** MAINTAIN PROPRIETARY CONFIDENTIALITY *****

BNSF RAILWAY COMPANY FHPM ESTIMATE FOR CITY OF ARLINGTON WA

LOCATION ARLINGTON DETAILS OF ESTIMATE PLAN ITEM : PTR092097B10 VERSION : J PURPOSE, JUSTIFICATION AND DESCRIPTION

PIP FLAGGING NWN DIV BELLINGHAM SUB LS 406 MP 6.754 DOT# 0920978 - LEBANAN ST, ARLINGTON, WA

DESCRIPTION OF PROJECT AS PROVIDED BY PROJECT ENGINEER: FLAGGING FOR CROSSING AND ADJACENT ROAD CONSTRUCTION

BILLING FOR THIS PROJECT SHOULD BE DIRECTED TO: 100% TO CITY OF ARLINGTON, WA

RFA REQUESTED BY: DAVE JOHNSON 4/9/12 AFE REQUESTED BY:

MAINTAIN PROPRIETARY CONFIDENTIALITY

THE PHYSICAL LIMITS OF THIS PROJECT ARE DESCRIBED BY LINE SEGMENT, MILE POST RANGES, AND IN SOME CASES TRACK NUMBER. THIS IS THE PRIMARY AREA FOR THE PROJECT, THERE WILL BE CASES WHERE WORK MAY OCCUR BEYOND THE DEFINED LIMITS, PROJECTS THAT INCLUDE SIGNAL, ELECTRICAL, OR TELECOMMUNICATION EQUIPMENT MAY REQUIRE ACTIVITY BEYOND THESE DEFINED TRACK LIMITS. ALL OR PORTIONS OF SOME PROJECTS MAY OCCUR IN AREAS WHERE NO MILEPOST SIGNS EXIST SUCH AS YARDS.

THIS ESTIMATE IS GOOD FOR 90 DAYS, THEREAFTER THE ESTIMATE IS SUBJECT TO CHANGE IN COST FOR LABOR, MATERIAL, AND OVERHEAD.

DESCRIPTION	QUANTITY U/M	COST	TOTAL 5

LABOR *********			
FLAGGING - OTHER R.O.W CAP PAYROLL ASSOCIATED COSTS DA OVERHEADS EQUIPMENT EXPENSES INSURANCE EXPENSES	300,0 MH	7,046 4,263 6,788 2,330 1,109	
TOTAL LABOR COST		21,536	21,536
************ MAJERIAL			
TOTAL MATERIAL COST		0	ō
********** O'I'II:R *********			
TOTAL OTHER ITEMS COST		0	0
PROJECT SUBTOTAL CONTINGENCIES BILL PREPARATION FEE	×		21,536 2,153 237
GROSS PROJECT COST LESS COST PAID BY BNSF			23,926 0
TOTAL BILLABLE COST	8	1	23,926

***** MAINTAIN PROPRIETARY CONFIDENTIALITY *****

BNSF RAILWAY COMPANY FHPM ESTIMATE FOR CITY OF ARLINGTON

LOCATION ARLINGTON	DETAILS OF ESTIMATE	PLAN ITEM: PTR092097B2	VERSION: 1
		and the second se	

PURPOSE, JUSTIFICATION AND DESCRIPTION

BUY AMERICA PIP XING REHAB NWN DIV ARLINGTON SUB LS 406 MP 6.754 - LEBANON TRAIL XING 092097B - 100% BILLABLE TO CITY OF ARLINGTON

BILLING FOR THIS PROJECT SHOULD BE DIRECTED TO: CITY OF ARLINGTON, ERIC SCOTT, 238 N OLYMPIC AVE, ARLINGTON, WA 98223, 360-403-3512

RFA REQUESTED BY: BEN STEINKAMP ON 10/18/11. AFE REQUESTED BY:

MAINTAIN PROPRIETARY CONFIDENTIALITY

THE PHYSICAL LIMITS OF THIS PROJECT ARE DESCRIBED BY LINE SEGMENT, MILE POST RANGES, AND IN SOME CASES TRACK NUMBER. THIS IS THE PRIMARY AREA FOR THE PROJECT. THERE WILL BE CASES WHERE WORK MAY OCCUR BEYOND THE DEFINED LIMITS. PROJECTS THAT INCLUDE SIGNAL, FLECTRICAL, OR TELECOMMUNICATION EQUIPMENT MAY REQUIRE ACTIVITY BEYOND THESE DEFINED TRACK LIMITS. ALL OR PORTIONS OF SOME PROJECTS MAY OCCUR IN AREAS WHERE NO MILEPOST SIGNS EXIST SUCH AS YARDS. THIS ESTIMATE IS GOOD FOR 90 DAYS. THEREAFTER THE ESTIMATE IS SUBJECT TO CHANGE IN COST FOR LABOR, MATERIAL, AND OVERHEAD.

DESCRIPTION	QUANTITY U/M	COST	TOTAL \$

LABOR			

PLACE FIELD WELDS - CAP	128.0 MH	3,070	
REPLACE PUBLIC CROSSING - TOTAL REHAB	160.0 MH	3,416	
SIGNAL FIELD LABOR - CAP	16.0 MH	421	
SURFACE TRACK - REPLACEMENT - CAP	24.0 MH	582	
UNLOAD BALLAST - REPLACEMENT - CAP	8.0 MH	182	
UNLOAD CROSSING MATERIAL - PUBLIC - CAP	40.0 MH	854	
WORK TRAIN - BALLAST - REPLACEMENT - CAP	36.0 MH	1,750	
PAYROLL ASSOCIATED COSTS		7,228	
DA OVERHEADS		9,779	
EQUIPMENT EXPENSES		5,013	
INSURANCE EXPENSES		1,614	
TOTAL LABOR COST		33,909	33,909
MATERIAL			
BALLAST-SPRAGUE	140.0 NT **	770	
TRACK PANEL, 136 STANDARD RAIL, 40 FT- 10 FT TIES-	3.0 EA **	17,151	
RAIL, TRANSN, L11, 25 FT, 136-1/4 WORN 115	2,0 EA	2,546	
RAIL, TRANSN, LH, 25 FT, 136-1/4 WORN 115	2,0 EA	2,546	
SPIKE, TBR SCREW 3/4"X13", F/ROAD XING	280.0 EA	630	
WELDKIT, GENERIC FOR ALL RAIL WEIGHTS	16.0 KT	1,112	
CONC 136 08-SEC WITH FILLER FOR 10' WOOD TIES **	80.0 FT	13,280	
CONCRETE XING RAMP AND PANEL RESTRAINT,	1.0 ST	257	
115/110 COMPROMISE JOINTS	4.0 EA	1,332	
SIGNAL MATERIAL	2.0 DAY	350	
MATERIAL HANDLING		1,994	
ONLINE TRANSPORTATION		2,170	
USE TAX		3,690	
OFFLINE TRANSPORTATION		491	
TOTAL MATERIAL COST		48,319	48,319

OTHER			

LEASED EQUIPMENT W/OUT OPERATOR	3.0 DAY	4,500	
TOTAL OTHER ITEMS COST		4,500	4,500

PROJECT SUBTOTAL CONTINGENCIES BILL PREPARATION FEE

GROSS PROJECT COST LESS COST PAID BY BNSF

TOTAL BILLABLE COST

86,728 8,503 953 96,184 0 96,184

***** MAINTAIN PROPRIETARY CONFIDENTIALITY *****

BNSF RAILWAY COMPANY FHPM ESTIMATE FOR CITY OF ARLINGTON

LOCATION ARLINGTON DETAILS OF ESTIMATE PLAN ITEM : PTR092097B3 VERSION : 1

PURPOSE, JUSTIFICATION AND DESCRIPTION

BUY AMERICA PIP XING REHAB NWN DIV ARLINGTON SUB LS 406 MP 6.754 - LEBANON TRAIL XING 092097B - 100% BILLABLE TO CITY OF ARLINGTON

BILLING FOR THIS PROJECT SHOULD BE DIRECTED TO: CITY OF ARLINGTON, ERIC SCOTT, 238 N OLYMPIC AVE, ARLINGTON, WA 98223, 360-403-3512

RFA REQUESTED BY: BEN STEINKAMP ON 10/18/11. AFE REQUESTED BY:

MAINTAIN PROPRIETARY CONFIDENTIALITY

THE PHYSICAL LIMITS OF THIS PROJECT ARE DESCRIBED BY LINE SEGMENT, MILE POST RANGES, AND IN SOME CASES TRACK NUMBER. THIS IS THE PRIMARY AREA FOR THE PROJECT. THERE WILL BE CASES WHERE WORK MAY OCCUR BEYOND THE DEFINED LIMITS. PROJECTS THAT INCLUDE SIGNAL, ELECTRICAL, OR TELECOMMUNICATION EQUIPMENT MAY REQUIRE ACTIVITY BEYOND THESE DEFINED TRACK LIMITS. ALL OR PORTIONS OF SOME PROJECTS MAY OCCUR IN AREAS WHERE NO MILEPOST SIGNS EXIST SUCH AS YARDS. THIS ESTIMATE IS GOOD FOR 90 DAYS, THEREAFTER THE ESTIMATE IS SUBJECT TO CHANGE IN COST FOR LABOR, MATERIAL, AND OVERHEAD.

DESCRIPTION	QUANTITY	U/M	 COST	TOTAL S

LABOR				

PLACE FIELD WELDS - CAP	128,0	MH	3,070	
REPLACE PUBLIC CROSSING - TOTAL REHAB	160.0	MH	3,416	
SIGNAL FIELD LABOR - CAP	16.0	MH	421	
SURFACE TRACK - REPLACEMENT - CAP	24.0	MH	582	
UNLOAD BALLAST - REPLACEMENT - CAP	8.0	MH	182	
UNLOAD CROSSING MATERIAL - PUBLIC - CAP	40.0	MH	854	
WORK TRAIN - BALLAST - REPLACEMENT - CAP	36.0	MB	1,750	
PAYROLL ASSOCIATED COSTS			7,228	
DA OVERHEADS			9,779	
FOLIPMENT EXPENSES			5,013	
INSURANCE EXPENSES			1,614	
			 33.909	33,909
TOTAL LABOR COST			551767	,

MATERIAL				

BALLAST-SPRAGUE	140_0	NT **	770	
TRACK PANEL, 136 STANDARD RAIL, 40 FT- 10 FT TIES-	3.0	EA **	17,151	
RAIL, TRANSN, LH, 25 FT, 136-1/4 WORN 115	2.0	EA	2,546	
RAIL, TRANSN,L11,25 FT, 136-1/4 WORN 115	2,0	EA	2,546	
SPIKE, TBR SCREW 3/4"X13", F/ROAD XING	280.0	EA	630	
WELDKIT, GENERIC FOR ALL RAIL WEIGHTS	16.0	KΤ	1,112	
CONC 136 08-SEC WITH FILLER FOR 10' WOOD TIES **	80.0	FT	13,280	
CONCRETE XING RAMP AND PANEL RESTRAINT,	1.0	ST	257	
115/110 COMPROMISE JOINTS	4.0	ΒĂ	1,332	
SIGNAL MATERIAL	2.0	DAY	350	
MATERIAL HANDLING			1,994	
ONLINE TRANSPORTATION			2,170	
USE TAX			3,690	
OFFLINE TRANSPORTATION			 491	
TOTAL MATERIAL COST			48,319	48,319
OTUP				
UTTER				
LEASED EQUIPMENT W/OUT OPERATOR	3.0	DAY	 4,500	
TOTAL OTHER ITEMS COST			4,500	4,500

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PRO SUBTOTAL		86,728
CONTINGENCIES		8,503
BILL PREPARATION FEE		953
GROSS PROJECT COST		96,184
LESS COST PAID BY BNSF		0
TOTAL BILLABLE COST	а С	96,184

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APPENDIX I

DETOUR PLAN

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