

RESOLUTION NO. 18-1279

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, KING COUNTY, WASHINGTON AUTHORIZING THE MAYOR TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH PARAMETRIX ENGINEERING, INC. FOR SURVEYING AND STRUCTURAL ENGINEERING TO SUPPORT RH2'S SPRINGS RECONSTRUCTION DESIGN.

WHEREAS, the city is contracting with RH2 for the primary engineering and design effort for the springs reconstruction project; and

WHEREAS, the City uses Parametrix for surveying services; and

WHEREAS, the City has selected Parametrix for civil engineering services

WHEREAS, RH2 Engineering, Inc. does not have the bridge structural staff needed for the Green River Bridge component of the springs project and Parametrix has staff that is well suited for this type of structural engineering; and

WHEREAS, The project has been budgeted for and is financed by Palmer Coking Coal and Oak Pointe through the Water Supply and Facilities Funding Agreement; and

WHEREAS, City staff recommends authorizing a professional services agreement with Parametrix Engineering, Inc. for this project;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, WASHINGTON, DOES RESOLVE AS FOLLOWS:

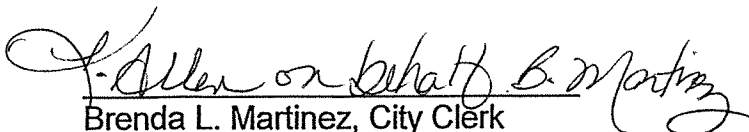
Section 1. The Mayor is hereby authorized to execute a professional services agreement with Parametrix Engineering, Inc. for surveying and structural engineering support for RH2 for the springs project.

PASSED BY THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, WASHINGTON, AT A REGULAR MEETING THEREOF, THIS 1st DAY OF NOVEMBER 2018.

CITY OF BLACK DIAMOND:

  
\_\_\_\_\_  
Carol Benson, Mayor

Attest:

  
Brenda L. Martinez, City Clerk

October 22, 2018  
File No. P-5636

Mr. Austin Fisher, P.E.  
**Parametrix**  
1019 39<sup>th</sup> Avenue SE, Suite 100  
Puyallup, WA, 98374

Subject:       Proposal for Geotechnical Study  
                  Cable Bridge for Pipe Crossing and Transmission Main Replacement  
                  Black Diamond, Washington

Dear Mr. Fisher:

Attached please find our proposal to provide geotechnical support services for the propose water line upgrades in Black Diamond. The project will include constructing a new cable bridge to carry a 12-inch diameter water line across the Green River, and to replace approximately 9,000 lineal feet of transmission main.

To aid in our preparation of this proposal for the cable bridge, we reviewed the technical memorandum prepared by Parametrix dated June 25, 2018, met and toured the site with City personnel, and reviewed published geology maps and previous hydrogeological reports prepared for the area. For the transmission main replacement, we reviewed the scope of work prepared by RH2, which outlines the scope of work for geotechnical input.

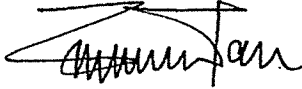
Our proposed scope of work and fee are summarized in Exhibits I and II, respectively. We estimate that a budget of \$21,160 will be needed to complete the geotechnical study. The estimated budget includes \$16,160 for the cable bridge, and \$5,000 for the transmission main replacement.

Please call should you have any questions regarding this proposal.

Proposal for Geotechnical Study  
Cable Bridge for Pipe Crossing at Green River and Transmission Main Replacement  
Black Diamond, WA  
October 22, 2018

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Sincerely,

A handwritten signature in black ink, appearing to read "Siew L. Tan". The signature is written in a cursive style with a horizontal line above the name.

Siew L. Tan, P.E.  
Principal Geotechnical Engineer

**Enclosures:**

Exhibit I: Scope of Work (Task 100 Cable Bridge and Task 200 Transmission Main Replacement)

Exhibit II: Cost Estimate (Task 100 Cable Bridge and Task 200 Transmission Main Replacement)

## EXHIBIT A- SCOPE OF WORK

### City of Black Diamond Pipe Suspension Bridge Preliminary Engineering

#### BACKGROUND

An existing City of Black Diamond (City) suspension bridge supports two 6-inch water lines across the Green River. To increase capacity the City intends to replace the 6-inch water lines with a 12-inch pipe. The City requested Parametrix to evaluate the structural capacity of the existing bridge and develop rehabilitation scenarios and costs. The report identified several of the challenges and risks associated with rehabilitation. The City also requested Parametrix to conduct an alternatives analysis for replacement. The analysis reviewed several suspension structure alternatives to support the 12-inch water line, and developed conceptual-level engineering and costs. Based on the report, the City decided to proceed with a replacement suspension structure.

#### OBJECTIVE

The purpose of this Scope of Work is to provide geotechnical information, survey, preliminary engineering, and a preliminary cost estimate for a replacement pipe suspension structure. The preliminary information will be used to support permitting for construction. This initial phase will also lay the foundation for a potential future phase to develop PS&E level documents for construction.

#### SCHEDULE

This scope of services is anticipated to be completed within four (4) months of receipt of the notice to proceed.

#### PHASE 1 – PRELIMINARY ENGINEERING

Task 1 – Project Management and QA/QC

##### Approach

Parametrix will provide the tools for continuous tracking of the project schedule and budget, project QA/QC, and status of deliverables to ensure that the project is executed as expected by the City.

##### Assumptions

- A 4-month project schedule is assumed.

##### Deliverables

- Miscellaneous correspondence to document project management issues.
- Monthly progress reports and invoices.

## Task 2 – Topographic Survey / Easement Support

### Approach

#### *Topographic Survey*

Parametrix will perform surveying work associated with topographic mapping of approximately 8,500 lineal feet as shown on attached image entitled “BD Water Main,” being a route from the existing Pump House northwesterly to the In City Forest Water Main. Limits of mapping will generally follow a corridor covering the existing water line, being an existing gravel road/railroad grade at the east end of the route and a treed side slope at the west end, with the general swath of coverage intended to cover an existing road prism and/or cut/fill bank suitable for design along the route.

This task will include the following:

- Detailed planimetric survey will include, but not be limited to, location of roadway surfaces, trails, culverts, structures, break lines, visible surface utility features, and underground utility marks. Parametrix will hire a private underground utility locator to provide utility locates on conductible utilities at each end of the route, as well as utilize GPR (ground penetrating radar) to identify the existing water main for the entire route. If existing utility structures are encountered, such as storm and sanitary sewer, accessible invert elevation data will be measured. In addition, significant trees with a diameter of 8” and above in the immediate vicinity of the route will be mapped and incorporated into base mapping.
- Supplemental mapping identified by RH2 Engineering, Inc. includes additional topography along both sides of the river at the bridge crossing, to be merged with previous base map.
- Supplemental mapping identified by the City includes 200’-300’ of an existing maintenance road centerline, to be merged with previous base map.
- Topographic survey will be performed to create a digital terrain model (DTM) with an accuracy required to produce a one (1) foot contour interval map with additional spot elevations collected as needed to assist in design support. The field data will be collected and processed in a Civil 3D CAD base map.

#### *Easement Support*

In addition to the topographic mapping, easement document support will be necessary in order to provide an accurate depiction of the existing road lying within Washington State Parks property, being at the east end of the route identified under the topographic survey task. This task will include the following:

- Tie location and width of existing road lying within Washington State Parks property, along with monuments necessary to tie location to Section Line/s for description take-off.
- Provide legal description and exhibit with accurate depiction of existing road.

#### *Assumptions*

- Survey will be developed using Parametrix’ symbols, layers and linetype standards
- Parametrix survey crews will have unrestricted access to make measurements
- Datums will be NAD 83/11 Horizontal, and NAVD 88 Vertical
- Boundary determination for parcel lines will not be performed along the route, except in the immediate vicinity of the Washington State Parks land where accurate depiction of easement is necessary for legal description and exhibit map

## SCOPE OF WORK (continued)

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- Setting of property corners and/or a Record of Survey is not included
- City staff will be available for assistance in showing GPR crew locations of known water valves, etc. along the route

### Deliverables

- Survey topographic base map provided in Civil 3D format
- Exhibit and Legal Description of existing road lying within Washington State Parks property

### Task 3 – Geotechnical Exploration - PanGEO

See attached proposal letter from PanGEO dated October 22, 2018.

### Task 4 – Preliminary Engineering

### Approach

The replacement suspension structure to be advanced for preliminary engineering will be based on the preferred alternative outlined in the Technical Memorandum produced by Parametrix, dated June 25, 2018 (Attachment 1). The bridge spans from the southern ridge above the Green River to the northern bank near the tower of the existing utility bridge. The estimated tower height for the structure is 40 feet on the south ridge and 20 feet on the north bank. The horizontal length between towers is approximately 375 feet, and the vertical elevation difference between towers is approximately 160 feet.

Preliminary engineering will include the following:

- Review conceptual-level analysis and coordinate with the City on any changes.
- Coordination with geotechnical engineer.
- Coordination with survey.
- Advance design of the preferred suspension bridge alternative to the preliminary engineering level. Preliminary engineering will be focused on supporting permitting and developing an opinion of probable cost. At a minimum preliminary engineering will include:
  - Preliminary suspension cable design
  - Preliminary tower design
  - Preliminary suspension anchorage design
- Suspension anchorage design will be gravity-based and include two (alternatives) to minimize cost and disturbance of shallow soft soils on the south ridge.
- Evaluate feasibility of construction.
- Estimate location and number of trees to be removed for construction.
- Evaluate future repair methods for damages to the installed pipe.
- Design Opinion of Probable Cost (electronic files, PDF only).

### Assumptions

- Preliminary engineering will be based on the preferred alternative developed in Parametrix Technical Memorandum dated June 25, 2018.
- Tower foundation design and anchorage will be based on preliminary survey and geotechnical information.

## SCOPE OF WORK (continued)

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- One site visit will be required.

### Deliverables

- Draft Technical Memorandum for review in electronic (PDF) format
- Final Technical Memorandum in electronic (PDF) format
- Preliminary Opinion of Probable Cost
- Preliminary suspension bridge drawings
- Calculations

### Task 5 – Pipe Size and Type Coordination

#### Approach

Parametrix will coordinate with RH2 to update the design of the structure for the selected pipe type, size and configuration (encased or not).

#### Assumptions

- Loading for the cable bridge will be based on the final pipe type, size and configuration as provided by RH2/City.
- The budget for this task is limited to the hours shown in the attached budget estimate. Additional time for coordination with RH2 and/or the City will require a supplement.

#### Deliverables

- Meeting notes as applicable.

## EXHIBIT I - SCOPE OF WORK

The scope of work for the proposed cable bridge is outlined in Task 100, and the scope of work for the transmission main is outlined in Task 200.

### TASK 100 – CABLE BRIDGE

- 1.1 **Site Reconnaissance/Geologic Review** – Perform a site reconnaissance to observe surface features. We will also collect and review published geologic information, including geologic maps, previous geological data, historical aerial photos, and LiDAR images.
- 1.2 **Test Boring** – Drill one test boring at/near the south abutment. It is our understanding that the load demand at the north end of the cable bridge is significantly less and likely can be handled with the existing concrete block. As such, no test boring is planned at the north abutment.

Based on our site observations, we anticipate very dense glacial till to be present near the existing ground surface at the south abutment. Based on our review of the published geological data, the glacial till may be relatively thin and is underlain by a layer sand and then bedrock. The vertical exposed face of glacial till near the proposed south abutment suggests that the sand layer may have been compromised and resulted in the slumping of the glacial till overlying the sand. One primary objective of the proposed test boring is to look for signs of potential disturbance in the sand layer below the till, based on SPT (standard penetration test) blow-counts. Low blowcounts would indicate potential disturbance.

The test boring will be drilled to a maximum depth of about 60 feet below grade, using hollow stem augers and potentially rock coring. Actual boring depth will depend on the subsurface conditions encountered. The boring may be terminated at shallower depth if drilling refusal is encountered. Soil samples from the test borings will be obtained using Standard Penetration Tests (SPT), which will be conducted at 2½- and 5-foot depth intervals. The test data provides an empirical assessment of the soil density and its engineering properties.



The boring will be located in a Washington State Park. We assume that the right-of-entry/permit to drill the test boring in the park will be provided by others at no cost to PanGEO. If needed, PanGEO can assist in furnishing necessary information (i.e., personnel, equipment, etc) to obtain the permission from the parks department.

**1.3 Laboratory Testing** – Select representative soil samples for geotechnical testing. We anticipate the tests may include moisture content and grain size analyses.

**1.4 Geotechnical Report** – Prepare a report describing the results of our study and recommendations. The content of the report will generally consist of the following:

- *Site Description* - Description of surface and subsurface conditions (soil and groundwater) at the site, including a site map showing the locations of the test borings, summary boring logs, and anticipated soil behavior;
- *Critical Area Considerations* – The south abutment area is mapped by King County as an environmentally sensitive area due to steep slopes, landslide hazards, erosion hazards, and coal mine hazards. We anticipate that these geologic hazards will need to be addressed during permitting. Our report will address these issues, based on review of published data (aerial photos, LiDAR images, geology maps, etc), our site reconnaissance, and the results of our test boring. Provide potential options to mitigate the risks if needed.
- *Seismic Design Parameters* – Seismic site class and site coefficients based on AASHTO design standards;
- *Recommendations* – Selection of foundation types and geotechnical design parameters.

**1.5 Post-Report Consultation** – Provide post-report consultation services to assist with the design and preparation of plans and specifications on an as-needed basis.

## **TASK 200 – TRANSMISSION MAIN REPLACEMENT**

**2.1. Site Reconnaissance/Geologic Review** – Perform a site reconnaissance to observe surface features and evaluate potential geologic hazards. Collect and review published geologic information, including geologic maps, and previous geological data, if available. During the site reconnaissance, test pit locations will be marked in the field for utility locates and general planning purposes.

- 2.2. Test Pits** – Observe the excavation of 4 test pits along the alignment. The test pits will be excavated by a backhoe and operator provided by the City at no cost to PanGEO.
- 2.3. Soil Corrosivity** – Conduct laboratory tests to determine the pH and resistivity of representative soil samples collected from the test pits. We understand that, based on the review of the scope of work prepared by RH2, the City will make direct payment for the lab tests. As such, we do not include the cost of the laboratory tests in our budget. However, PanGEO will coordinate this effort, including selecting soil samples for the tests, and delivering the soil samples to the laboratory. The test results will be used to evaluate the corrosivity of the site soils.
- 2.4 Report** – Prepare a report identifying the geologic conditions and recommendations for design and construction of the transmission main, evaluate the subsurface conditions for directional drilling or other trenchless options, and open cut trenching.

Proposal for Geotechnical Study  
 Cable Bridge for Pipe Crossing at Green River and Transmission Main Replacement  
 Black Diamond, Washington  
 October 22, 2018

**EXHIBIT II - COST ESTIMATE**

Cost estimate for the proposed cable bridge is outlined in Task 100, and the cost for the transmission main is outlined in Task 200.

**TASK 100 – CABLE BRIDGE**

**ESTIMATED LABOR:**

WORK TASK DESCRIPTION	PanGEO Labor Hours & Hourly Rates						
	S. Tan \$155.00	M. Xue \$130.00	Sr Geologist \$130.00	Engr/Geologist \$110.00			
Coordinate Field Work			4				\$520
Monitor Test Boring			4	12			\$1,840
Prepare Log/Evaluate Lab Tests				2			\$220
Engineering/Report Preparation	8		24	12			\$5,680
Meeting	3						\$465
Post Report Consultation	4						\$620
<b>TOTAL DSC :</b>	<b>15</b>	<b>0</b>	<b>32</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>\$9,345</b>

**LABORATORY TEST SUMMARY**

Test	Est. No. Tests	Unit Cost	Total Cost
Moisture Content	4	\$20	\$80
Grain Size Analysis	4	\$110	\$440
Cation Exchange Capacity	0	\$100	\$0
<b>TOTAL LABORATORY TESTING:</b>			<b>\$520</b>

**ESTIMATED DIRECT EXPENSES:**

Mileage:	\$150
Aerial Photos:	\$600
Field Supplies:	\$20
<b>TOTAL DIRECT EXPENSES:</b>	<b>\$770</b>

**ESTIMATED DRILLING COSTS:**

Drill Rig Mobilization:	\$550
Ferry:	\$0
DOE Fee:	\$25
Drilling - \$4350/day, 8 hours or less	\$4,350
Remove Cutting	\$600
Traffic Control Signs:	\$0
<b>TOTAL SUB. COSTS:</b>	<b>\$5,525</b>

**PROJECT TOTALS AND SUMMARY:**

Total Labor Cost	\$9,345
Direct Expenses	\$770
Subcontractor Lab Tests	\$520
Subcontractor Drilling	\$5,525
<b>TOTAL:</b>	<b>\$16,160</b>

Proposal for Geotechnical Study  
 Cable Bridge for Pipe Crossing at Green River and Transmission Main Replacement  
 Black Diamond, Washington  
 October 22, 2018

**TASK 200 – TRANSMISSION MAIN REPLACEMENT**

**ESTIMATED LABOR:**

WORK TASK DESCRIPTION	PanGEO Labor Hours & Hourly Rates						
	S. Tan	M. Xue	Sr Geologist	Engr/Geologist			
	\$155.00	\$130.00	\$130.00	\$110.00			
Site Recon / Coordinate Field Works			4				\$520
Monitor Test Pit Excavation				8			\$880
Prepare Log/Evaluate Lab Tests				1.5			\$165
Engineering/Report Preparation	4		12	10			\$3,280
							\$0
<b>TOTAL DSC :</b>	<b>4</b>	<b>0</b>	<b>16</b>	<b>19.5</b>	<b>0</b>	<b>0</b>	<b>\$4,845</b>

**LABORATORY TEST SUMMARY**

Test	Est. No. Tests	Unit Cost	Total Cost
Moisture Content	0	\$20	\$0
Grain Size Analysis	0	\$110	\$0
Cation Exchange Capacity	0	\$100	\$0
<b>TOTAL LABORATORY TESTING:</b>			<b>\$0</b>

**ESTIMATED DIRECT EXPENSES:**

Mileage:	\$150
Field Supplies:	\$5
<b>TOTAL DIRECT EXPENSES:</b>	<b>\$155</b>

**PROJECT TOTALS AND SUMMARY:**

Total Labor Cost	\$4,845
Direct Expenses	\$155
Subcontractor Lab Tests	\$0
<b>TOTAL:</b>	<b>\$5,000</b>

**EXHIBIT B**

**Fee Schedule**

See Parametrix Budget Estimate (Exhibit B) on the following pages.

Client: City of Black Diamond  
 Project: Pipe Suspension Bridge Preliminary

**Exhibit B**  
**Pipe Suspension Bridge**  
**Budget Estimate**

		Burdened Rates:													
		\$170.00	\$120.00	\$235.00	\$150.00	\$105.00	\$130.00	\$170.00	\$215.00	\$130.00	\$105.00	\$105.00			
		Sr Project Accountant/Sharel Morgan	Surveyor III Scott D. Speers	Sr Consultant Austin Fisher	Designer IV Abin R. Valenda	Sr Project Coordinator Lauretha L. Ruffin	Technical Lead Steven M. Sharpe	Survey Supervisor Jared M. Kemnitz	Sr Engineer Joseph R. Menth	Engineer III Benjamin J. Schack	Surveyor II Joshua M. Kelly	Sr Project Coordinator Lauren M. Jones			
Task	SubTask	Description	Labor Dollars	Lbr Hrs											
01		Preliminary Engineering	\$92,010.00	666	12	122	8	68	4	70	18	80	170	102	12
	01	Project Management and QA/QC	\$8,300.00	44			8					24			12
	02	Topographic Survey / Easement Support	\$39,370.00	328	12	122			4	70	18			102	
	02A	Survey - Utility Locate	(see below)						4						
	03	Geotechnical Exploration - PanGEO	(see below)												
	04	Preliminary Engineering	\$40,380.00	270			60				48	162			
	05	Pipe Size and Type Coordination	\$3,960.00	24			8				8	8			
<b>Labor Totals:</b>			<b>\$92,010.00</b>	<b>666</b>	<b>12</b>	<b>122</b>	<b>8</b>	<b>68</b>	<b>4</b>	<b>70</b>	<b>18</b>	<b>80</b>	<b>170</b>	<b>102</b>	<b>12</b>
<b>Totals:</b>			<b>\$92,010.00</b>												

<b>Subconsultants</b>	
Applied Professional Services Inc	\$4,020.00
PanGEO Inc	\$21,160.00
<b>Subconsultants Total:</b>	<b>\$25,180.00</b>

<b>Other Direct Expenses</b>	
Mileage (at \$0.545 per mile)	\$545.00
Survey Equipment (\$140/Use)	\$1,680.00
<b>Other Direct Expenses Total:</b>	<b>\$2,225.00</b>

**Project Total** **\$119,415.00**

## EXHIBIT C

### Billing Rates and Reimbursable Expenses

See Parametrix Billing Rates and Reimbursable Expenses on the following page. (Note: Reimbursable Expenses are shown on the Budget Estimate under Exhibit B.)

## Parametrix Puget Sound Billing Rates - October 1, 2017 through September 30, 2018

Classification	Grade	Rate for Billing	Classification	Grade	Rate for Billing
CADD Operator I	8	\$90	Jr. Planner	8	\$85
CADD Operator II	9	\$100	Planner I	10	\$95
CADD Operator III	11	\$115	Planner II	11	\$110
CADD Supervisor/Technical Lead	12	\$130	Planner III	12	\$125
CADD Services Manager	14	\$140	Planner III	13	\$130
			Planner IV	14	\$145
Jr. Designer	8	\$90	Sr. Planner	15	\$160
Designer I	10	\$105	Sr. Planner	16	\$190
Designer II	11	\$120	Sr. Planner	17	\$205
Designer III	12	\$130			
Designer III	13	\$145	Jr. Scientist/Biologist	8	\$90
Designer IV	14	\$150	Scientist/Biologist I	10	\$100
Sr. Designer	15	\$170	Scientist/Biologist II	11	\$115
Sr. Designer	16	\$185	Scientist/Biologist III	12	\$125
Sr. Designer	17	\$200	Scientist/Biologist III	13	\$135
			Scientist/Biologist IV	14	\$150
Jr. Engineer	8	\$90	Sr. Scientist/Biologist	15	\$175
Engineer I	10	\$110	Sr. Scientist/Biologist	16	\$190
Engineer II	11	\$120	Sr. Scientist/Biologist	17	\$200
Engineer III	12	\$130			
Engineer III	13	\$140	Environmental Technician I	7-8	\$95
Engineer IV	14	\$160	Environmental Technician II	9	\$100
Sr. Engineer	15	\$170	Environmental Technician III	10	\$105
Sr. Engineer	16	\$190			
Sr. Engineer	17	\$215	Jr. Hydrogeologist	8	\$90
Sr. Consultant	18	\$225	Hydrogeologist I	10	\$105
Sr. Consultant	19	\$235	Hydrogeologist II	11	\$110
			Hydrogeologist III	12-13	\$130
Electrical Designer I	11	\$115	Hydrogeologist IV	14	\$145
Electrical Designer II	12	\$130	Sr. Hydrogeologist	15	\$170
Electrical Designer III	13	\$145	Sr. Hydrogeologist	16	\$185
Electrical Designer IV	14-15	\$150	Sr. Hydrogeologist	17	\$195
Sr. Electrical Designer	16-17	\$180			
Sr. Electrical Designer	18	\$185	GIS Technician	9	\$100
Electrical Engineer I	11	\$115	GIS Analyst	10	\$105
Electrical Engineer II	12	\$130	Sr. GIS Analyst	11	\$115
Electrical Engineer III	13	\$145			
Electrical Engineer IV	14-15	\$160	Graphic Designer	10-11	\$115
Sr. Electrical Engineer	16-17	\$190	Sr. Graphic Designer	12-13	\$130
Sr. Electrical Engineer	18	\$225			
Jr. Surveyor	8	\$90	Publications Specialist I	8	\$100
Surveyor I	9	\$100	Publications Specialist II	9-10	\$105
Surveyor II	10	\$105	Sr. Publications Specialist	10-11	\$115
Surveyor III	11	\$120	Publications Supervisor	12-13	\$130
Sr. Surveyor	12	\$130	Technical Editor	10-11	\$120
Sr. Surveyor	13	\$160	Sr. Technical Editor	12-13	\$130
Survey Supervisor	14-16	\$170			
Sr Surveyor of Operations	17	\$185	Technical Aide	7	\$80
Survey Prevailing Wage*			Sr. Technical Aide	8	\$90
			Project Coordinator	9	\$100
Jr. Inspector	8	\$90	Sr. Project Coordinator	10	\$105
Construction Inspector	10-11	\$110	Project Controls Specialist	11	\$115
Sr. Construction Inspector	12-13	\$130	Sr. Project Controls Specialist	12-13	\$130
Resident Engineer	13	\$140			
Resident Engineer	14	\$150	Project Accountant	9	\$100
Construction Manager I	12-14	\$145	Sr. Project Accountant	10-11	\$120
Construction Manager II	15-17	\$160	Accounting Specialist	9	\$100
Sr. Construction Manager	15	\$170	Sr. Accounting Specialist	10-11	\$105
Sr. Construction Manager	16-17	\$190			
Owner's Representative	19	\$215	Admin Assistant	7	\$80
			Sr. Admin Assistant	8	\$90
Division Manager	16-17	\$205	Office Administrator	10-11	\$110
Division Manager	18-19	\$225	Sr. Office Administrator	12-13	\$135
Operations Manager	16-17	\$205	Office Administrative Manager	14-15	\$155
Operations Manager	18-19	\$240	Business Manager	15-16	\$160
Program Manager	19-20	\$245	Sr. Contract Administrator	11	\$130
Principal Consultant	19	\$240	Director of Risk Management	20	\$260
Principal Consultant	20	\$260			
Vice President/Sr. Vice President	19-20	\$260	UAV Pilot		\$155
			Expert Witness		\$350

\* Prevailing Wage Rates apply to construction surveying on all Washington Public Works Projects.