

Snohomish County Standard Consultant Agreement Supplement		Consultant/Address/Telephone WSP USA, Inc. 33301 Ninth Avenue South, Suite 300 Federal Way, WA 98003	
Supplement Number Supplement No.15	Contact Name / E-Mail Address Robert L. Fernandes / bob.fernandes@wsp.com		
Agreement Number CCF07-13	Telephone 206-431-2333	Fax 206-431-2250	Completion Date <i>June 30, 2021</i>
Execution Date <i>August 8, 2013</i>	New Maximum Amount Payable \$2,981,821.00		
Project Title Structural Engineering, Geotechnical Design, Survey and Mapping Services for the Index Galena Road (MP 6.4 – 6.9) Flood Repair Project			
Description of Work <i>Provide Structural Engineering, Geotechnical Design, Survey and Mapping Services for the Index Galena Road (MP 6.4 – 6.9) Flood Repair Project. The Index-Galena Road is located along the Skykomish River in the Mount Baker – Snoqualmie National Forest in southeast Snohomish County. During Fall 2006 it was severely damaged by flooding and was washed out between mile posts 6.4 and 6.9.</i>			

WHEREAS, Snohomish County desires to supplement the Agreement entered into with **WSP USA, Inc.** and executed on the 8th day of August, 2013, as amended by Supplement No.1 on the 13th day of May, 2014, Supplement No.2 on the 24th day of February, 2015, Supplement No.3 on the 21st day of October, 2015, Supplement No.4 on the 17th day of December, 2015, Supplement No.5 on the 28th day of April, 2016, Supplement No.6 on the 27th day of July, 2016, Supplement No.7 on the 2nd day of November, 2016, and Supplement No.8 on the 26th day of September, 2017, Supplement No.9 on the 20th day of June 2018, Supplement No.10 on the 20th day of March 2019, Supplement No. 11 on the 21st day of May 2019, Supplement No. 12 on September 17, 2019, Supplement No. 13 on December 5, 2010, Supplement No. 14 on May 27, 2020, and identified as Agreement No. **CCF07-13**. All provision of the basic agreement remain in effect except as expressly modified by this supplement.

All provisions in the basic agreement remain in effect except as expressly modified by this supplement.

The changes to the Agreement are described as follows:

1. The "Total Amount Authorized" amount on the Agreement title page is amended as follows:

Total Amount Authorized (~~(\$2,762,026.00)~~) **\$2,981,821.00**

2. Section **II Scope of Work**, is hereby amended to read:

The Scope of Work and projected level of effort required for this PROJECT is detailed in Exhibit "A" comprised of Exhibit A-1, Exhibit A-1a, Exhibit A-1b, Exhibit A-1c, Exhibit A-1d, Exhibit A-1e, Exhibit A-1f, Exhibit A-1g and Exhibit A-1h attached hereto and by this reference made a part of the AGREEMENT.

3. **EXHIBIT A-1i Supplemental Scope of Work** attached hereto is added to and incorporated into the Agreement.
4. **EXHIBIT E-1i Supplemental Consultant Fee Determination – Budget**, attached hereto is added to and incorporated into the Agreement.
5. **EXHIBIT Gf Supplemental Subcontracted Work** attached hereto is added to and incorporated into the Agreement.
6. **EXHIBIT G-1f Supplemental Subconsultant Fee Determination – Budget**, attached hereto is added to and incorporated into the Agreement.

IN WITNESS WHEREOF, the parties hereto have executed this Supplement No.15 on the date set forth under their signatures below, and effective as of the date of the last party to sign.

SNOHOMISH COUNTY

WSP USA, INC.

Signature

Signature

County Executive

Title

Title

CONTRACT TEMPLATE ONLY

REVIEWED AND APPROVED:

Rebecca J. Guadamud
Deputy Prosecuting Attorney
Date: 11/26/14

CONTRACT TEMPLATE ONLY

REVIEWED AND APPROVED:

Keith Mitchell
County Risk Manager
Date: 12/5/14

EXHIBIT A-1i

Supplemental Scope of Work

PROJECT DESCRIPTION

CONSULTANT, along with subconsultant firms of Shannon & Wilson and Sitts & Hill, shall provide the following supplemental services to the original contract and previous contract supplements.

The design phase of the project has recently been extended again from delay of the proposed construction advertisement date due to the Shoreline Permit appeal process. The time delay resulted in an additional review cycle of contract documents being prepared for the project with new comments from the COUNTY and WSDOT to be addressed and incorporated. Contract documents also require review and update to the newly released 2020 WSDOT Standard Specifications. Additional site topographic survey services will also be performed to provide final design field data to support the delayed project bidding. CONSULTANT assistance during project bidding and award is also included.

SCHEDULE AND ASSUMPTIONS

Our understanding is that the current target for advertisement for bidding is now expected in October 2020 to allow construction to begin in early spring of 2021. The project schedule is dependent on completion of the PS&E and environmental permit approvals, and milestones for deliverables of this scope will be developed in consultation with the COUNTY.

This scope of work assumes that the project design to date will be finalized during this extended phase of engineering services without any major changes to the project design and associated construction documents that would appreciably change the current completion direction and/or schedule.

ESTIMATED LEVEL OF EFFORT

The estimated level of effort associated with providing these services is shown in Exhibits E-1 and G-1 and is based upon the scope of work, assumptions, and task descriptions provided below. Efforts to complete these tasks can vary from the effort assumed. The COUNTY and the CONSULTANT will monitor task budgets as described below and may reallocate time and budget between tasks, as needed, and as approved by the COUNTY in writing (including email,) to accomplish the overall goals of the project.

EXTENDED ENGINEERING SERVICES SCOPE OF WORK

The proposed scope of services for Supplement No. 15 is based on discussions with the COUNTY and understanding of additional items of work as described in the following.

This supplemental scope of work includes the following new tasks:

- Task 40 - Project Management
- Task 41 – Site Survey to Support Bidding (Sitts & Hill)
- Task 42 – PS&E Submittals
- Task 43 - Quality Assurance / Quality Control
- Task 44 – Support During Bidding & Award
- Task 45 – Geotechnical and Hydraulic Engineering Support Services (Shannon & Wilson)

TASK 40 PROJECT MANAGEMENT

CONSULTANT will provide additional project administration, management and coordination associated the extended timeframe for completion of the project design and bidding phases.

SUBTASK 40.1 PROJECT COORDINATION

The CONSULTANT will provide project management and communications between the CONSULTANT team and the COUNTY. Coordinating with the COUNTY, the CONSULTANT shall follow a project communication plan that establishes protocol for contact, distribution of information, written documentation, and other communication procedures previously developed.

The CONSULTANT will perform project administration and management tasks as follows.

- Prepare and submit monthly invoices.
- Prepare monthly progress reports summarizing the status of the budget, highlights, details, issues, approved changes, plans for next period.
- Prepare subconsultant agreements and perform ongoing subconsultant coordination.
- Maintain all contract-required documentation.

SUBTASK 40.2 PROGRESS MEETINGS

The CONSULTANT will attend meetings and participate in phone conferences with the COUNTY to coordinate the design completion efforts; two face-to-face meetings are assumed (in addition to meetings under Subtask 42), as well as a monthly conference call through the PS&E completion phase of the project (up to 8 months).

SUBTASK 40.3 MANAGEMENT OF SUBCONSULTANTS

CONSULTANT will manage the subconsultant firms of Shannon & Wilson, Sitts & Hill, and any other subconsultants, that may be added during the duration of this scope. Louis Berger Group, being now part of WSP, is no longer considered to be a subconsultant.

SUBTASK 40.4 PROJECT CLOSEOUT

The CONSULTANT will perform services necessary to document and closeout the project file. Survey data shall be provided to the COUNTY in an electronic format with no loss of coordinate accuracy, point and string identifiers, feature codes, and point and string types.

All CADD data will be provided to the COUNTY in a format that can be used directly by AutoCAD® Civil 3D® and LandXML format with no translation and/or loss of COUNTY standard levels, symbologies, colors, weights, and base map/sheet file organization.

Assumption(s)

- Time duration will be eight months for progress reports and invoices.

Deliverable(s)

- Monthly progress reports and invoices (one copy per month)
- Updated contract forms and certifications
- Contract-required documentation

TASK 41 SITE SURVEY TO SUPPORT BIDDING (Sitts & Hill)

Sitts & Hill, (SUBCONSULTANT) under a subconsultant agreement with CONSULTANT, will perform a one-time roadway design centerline and field staking to provide final project cut and fills limits to support the bidding process. As part of this effort, the SUBCONSULTANT will perform the

required field layout based upon the final plan set. The cut/fill slope stakes (coincident with the 100% clearing limits) will be verified and refreshed or reset on both sides of the proposed centerline alignment (also to be verified and refreshed or reset), to show the full extents of the proposed roadway's cut/fill per the final plans allowing a visual evidence of the tree removal required for this project in addition to the final cut/fills evidenced by the respective slope stakes. Stakes will be set at maximum 50' intervals on tangent and arc sections, and at all angle points and points of curvature.

The survey field work for Task 41 is expected to be performed during the early August to late September 2020 timeframe and be completed prior to the planned date for bid advertisement.

Deliverable(s)

A file, developed in AutoCAD® Civil 3D® latest version used by COUNTY including the information listed above, will be the deliverable for this task. An existing ground surface model in AutoCAD® Civil 3D® and LandXML v1.2 format will be provided as part of this deliverable.

TASK 42 PS&E SUBMITTALS

CONSULTANT will provide additional submittal completion effort to respond to COUNTY comments from the autumn 2019 PS&E submittal and provide associated revisions to plans, specifications, and estimates (PS&E) following discussion, clarification, and direction by the COUNTY.

As an initial step under this task, the CONSULTANT will review and assess the comments provided by the COUNTY (excel spreadsheet format) and sort by degree of importance related to potential risk and/or cost during construction. This assessment will be followed by an initial plan review for concurrence on required changes prior to initiating revisions to produce final PS&E documents.

Additional PS&E effort includes review and update of recently included annotation of the plans to incorporate project earthwork, grading and material quantities to provide further clarification for bidding and construction as directed by the COUNTY. Clarification annotation provided to the roadway cross sections sheets prepared for "Information Only" will be reviewed and updated to incorporate COUNTY comments on these sheets.

Current assumptions regarding the project grading and quantities of earth materials included in the PS&E documents will be reviewed and updated prior to finalization of the PS&E documents for bid advertisement. The results of this updated work will be summarized in a brief memorandum summarizing potential construction cost risk and will provide recommendations strategies to manage those risks.

The CONSULTANT will update the plans, specifications, and construction estimate to the new 2020 WSDOT Standard Specifications for Road, Bridge, and Municipal Construction. Current PS&E documents are based on the 2018 edition.

This task will also include a site visit by the design team to confirm the field staking for bidding support performed under Task 41.

Anticipated PS&E reviews include the following:

- **Initial Plan Review** – Meeting to be conducted at COUNTY offices for addressing review comments from the autumn 2019 submittal documents following COUNSULTANT assessment of comments and the associated response status provided.
- **WSDOT Review** – Expected to primarily focus on Division 1 of the specifications and assumed to require one phone conference for discussion with COUNTY staff.

- **Final PS&E Review** – Over the shoulder review meeting to be conducted at the COUNTY’s office for finalizing the PS&E for the Ad-Ready submittal.

Deliverable(s)

The CONSULTANT shall provide the following as latest file formats available for the final Ad-Ready PS&E submittal:

1. Plans – ACAD and .pdf files
2. Civil 3D Etransmit file – Electronic file
3. Engineer’s Cost Estimate – Excel and .pdf files
4. Memorandum Summarizing Recommendations for Cost Risk Management Strategy for Earth Material Quantities
5. General and Project Specific Special Provisions – MS Word document file
6. Summary of Quantities – Excel and PDF files
7. Response to previous submittal’s comments – Excel file
8. Roadway Cross-Section sheets (for “Information Only”)
9. Quantity Calculation Notebook

TASK 43 QUALITY ASSURANCE / QUALITY CONTROL

CONSULTANT will provide additional effort for Quality Assurance/Quality Control commensurate with the revisions to drawing sheets, specifications, and associated project quantity and cost items.

TASK 44 SUPPORT DURING BIDDING & AWARD

Under this task, CONSULTANT will provide the following services.

- Responding to bidders’ questions during the bid period (8 assumed)
- Preparation of addendum during the bid period (2 assumed)
- Attendance at the Pre-Bid meeting

TASK 45 GEOTECHNICAL & HYDRAULIC ENGINEERING SUPPORT SERVICES (Shannon & Wilson)

Shannon & Wilson, (SUBCONSULTANT) under a subconsultant agreement with CONSULTANT, will provide geotechnical and hydraulic engineering services to support the finalization of the project PS&E submittals and deliverables as described under Task 42. Geotechnical and hydraulic engineering support will also be provided during bidding and award as described under Task 44.

CONSTRUCTION PERIOD SERVICES

Services to be performed during the project construction are not included in this scope of services and will be provided as supplemental services when the project enters the construction phase as agreed upon with the COUNTY.

EXHIBIT E-1i
Supplemental Consultant Fee Determination – Budget

EXHIBIT E-1, PROJECT FEE DETERMINATION
WSP
SUPPLEMENT NO. 15 - EXTENDED SERVICES

Total Cost Summary
6/30/2020

Index-Galena Road MP 6.4 to 6.9 Realignment
Snohomish County - RC 1532 / UPI #06-0150

WSP PERSONNEL

<u>Project Function</u>	<u>Hours</u>		<u>Billing Rate</u>		<u>Cost</u>
1 Engineer VIII - Principal	138.0	X	\$ 218.32	= \$	30,128
2 Senior Construction Specialist	114.0	X	\$ 154.81	= \$	17,648
3 Engineer VII - Structural Manager	232.0	X	\$ 183.86	= \$	42,656
4 Engineer V - Structural / Civil	204.0	X	\$ 126.66	= \$	25,839
5 Engineer VI - Civil Project	38.0	X	\$ 137.32	= \$	5,218
6 Applications Programmer II, Jef Blake	12.0	X	\$ 165.54	= \$	1,986
7 Designer	142.0	X	\$ 124.32	= \$	17,653
8 Survey Director	0.0	X	\$ -	= \$	-
9 Coordinator / Administration	28.0	X	\$ 117.71	= \$	3,296
WSP Hours, TOTAL		908	Subtotal Personnel Costs = \$		144,425
			Salary Escalation = 0.00%		\$ -
			TOTAL PERSONNEL COSTS = \$		144,425

EXPENSES / DIRECT NONSALARY COSTS (DNSC)

Mileage	950	miles @	\$ 0.575	\$	546
Federal Express / Courier	1	each @	\$ 15.00	\$	15
		TOTAL REIMBURSABLE EXPENSES (DNSC) = \$			561

SUBTOTAL WSP COST = \$ 144,986

SUBCONSULTANTS

Sitts & Hill - Site Survey to Support Bidding (Task 41)	\$	39,624
Shannon & Wilson - Geotechnical & Hydraulic Engineering (Task 45)	\$	35,185
	\$	-
SUBTOTAL SUBCONSULTANT COSTS = \$		74,809

ESTIMATED TOTAL SUPPLEMENTAL COST = \$ 219,795

Prepared by: SKJ

Date: 30 June 2020

**EXHIBIT E-1: PROJECT FEE DETERMINATION
WSP
SUPPLEMENT NO. 15 - EXTENDED SERVICES**

6/30/2020

**Index-Galena Road MP 6.4 to 6.9 Realignment
Snohomish County - RC 1532 / UPI #06-0150**

WSP COST TOTALS by TASK

		<u>Total Hours</u>	<u>Expenses</u>	<u>Personnel Task Totals</u>
Task 40	Project Management	120.0	\$ -	\$ 22,061
Task 41	Site Survey to Support Bidding	0.0	\$ -	\$ -
Task 42	PS&E Submittals	502.0	\$ -	\$ 77,489
Task 43	Quality Assurance/ Quality Control	72.0	\$ -	\$ 13,600
Task 44	Support During Bidding & Award	214.0	\$ -	\$ 31,275
				\$ 144,425

Total WSP Hours	908.0
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Total WSP Expenses	\$ 561.25
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Subtotal Personnel Costs =	\$	144,425
Salary Escalation = 0.00%	\$	-
TOTAL PERSONNEL COSTS =	\$	144,425

DIRECT NONSALARY COSTS (DNSC)

TOTAL REIMBURSABLE EXPENSES (DNSC) = \$ 561

SUBTOTAL WSP COST = \$ 144,986

EXHIBIT E-1: PROJECT FEE DETERMINATION WSP

SUPPLEMENT NO. 15 - Extended Services		Task Number	Engineer VIII - Principal	Senior Construction Specialist	Engineer VII - Structural Manager	Engineer V - Structural / Civil	Engineer VI - Civil Project	Applications Programmer II / Jeff Blake	Designer	Survey Director	Coordinator / Administration	Totals
TASK DESCRIPTION		BILLING RATE ***	\$ 216.32	\$ 154.61	\$ 103.06	\$ 126.96	\$ 137.32	\$ 185.54	\$ 134.32	\$ -	\$ 117.71	
TASK 40 - PROJECT MANAGEMENT		40	52	8	34		4		12		10	120
	Project Coordination	40.1	12		4						4	20
	Progress Meetings (2) & Conference Calls (5)	40.2	20	8	16		4					48
	Management of Subconsultants	40.3	4		2						2	8
	Project Close-Out	40.4	16		12				12		4	44
TASK		40	\$11,263	\$1,238	\$6,251		\$649		\$1,492		\$1,177	\$ 22,061
TASK 41 - SITE SURVEY TO SUPPORT BIDDING		41	See Sits & Hill Hours									
TASK 42 - PS&E SUBMITTALS		42	46	66	134	144		12	90		10	502
	Assessment of Comments - Review, Filter & Sort		4	4	32	24						64
	Initial Plan Review Meeting - Response Concurrence		8	8	8	8						32
	Comment Revisions - Update Design Files and Plans				16	16		12	40			84
	Comment Revisions - Update Quantities & Unit Costs		2	4	8	8			8			30
	Review / Update Specs to 2020 WSDOT Standard Specs		2	4	4	16						26
	Site Visit by Design Team		8	8	8							24
	Construction Cost Risk - Memorandum		4		12	4			2		2	24
	Review and Respond to WSDOT & Final Comments		2	2	8	12			12			36
	Final Plans Preparation		2	8	4	8					4	26
	Final Specifications & Special Provisions		2	8	12	24					4	50
	Final Engineer's Cost Estimate		2	8	8	12						28
	Final PS&E Review - Over the Shoulder Meeting		6	8	8							18
	Final Revisions - Ad-Ready PS&E Documents		2	4	4	8			24			42
	Ad-Ready Submital		2	4	4	4			4			18
TASK		42	\$10,843	\$10,217	\$24,837	\$18,239		\$1,886	\$11,189		\$1,177	\$77,489
TASK 43 - QUALITY ASSURANCE / QUALITY CONTROL		43	24	16	32							72
		43	\$5,240	\$2,477	\$5,894							\$ 13,600
TASK 44 - SUPPORT DURING BIDDING & AWARD		44	16	24	32	80	34		46		8	214
	Prebid Meeting Attendance		6	6	6							18
	Response to Bidder Inquiries (9 assumed)		4	6	16	24	16		4			70
	Preparation of Bid Addenda (4 assumed)		4	8	8	32	16		32		8	108
	Supplemental Information for Bidders		2	4	2	4	2		4			18
TASK		44	\$3,693	\$3,716	\$5,894	\$7,600	\$4,669		\$4,973		\$942	\$ 31,275
TASK 45 - GEOTECHNICAL & HYDRAULIC ENGINEERING SUPPORT SERVICES		45	See Shannon & Wilson Hours									
WSP TOTAL HOURS =			138	114	232	204	38	12	142		28	908

DIRECT NONSALARY COSTS (DNOSC)

Task	Qty	Unit Cost	Per	Total	Task
Task 40 - Mileage for Meetings (2)	300	\$ 0.575	/ Mile	\$ 172.50	Task 40
Task 42 - Mileage for Meetings (2)	300	\$ 0.575	/ Mile	\$ 172.50	Task 42
Task 44 - Mileage for Meetings (1) & Site Visit (1)	350	\$ 0.575	/ Mile	\$ 201.25	Task 44

Notes:

1. See Sits & Hill Cost Sheet for S&H Survey Expenses.
2. See Shannon & Wilson Cost Sheet for S&W Expenses.

950 Miles \$ 546.25

EXHIBIT Gf
Supplemental Subcontracted Work

The County permits subcontracting for the following portions of the work of this AGREEMENT.

TASK 41 SITE SURVEY TO SUPPORT BIDDING (Sitts & Hill)

Sitts & Hill, (SUBCONSULTANT) under a subconsultant agreement with CONSULTANT, will perform a one-time roadway design centerline and field staking to provide final project cut and fills limits to support the bidding process. As part of this effort, the SUBCONSULTANT will perform the required field layout based upon the final plan set. The cut/fill slope stakes (coincident with the 100% clearing limits) will be verified and refreshed or reset on both sides of the proposed centerline alignment (also to be verified and refreshed or reset), to show the full extents of the proposed roadway's cut/fill per the final plans allowing a visual evidence of the tree removal required for this project in addition to the final cut/fills evidenced by the respective slope stakes. Stakes will be set at maximum 50' intervals on tangent and arc sections, and at all angle points and points of curvature.

The survey field work for Task 41 is expected to be performed during the early August to late September 2020 timeframe and be completed prior to the planned date for bid advertisement.

Deliverable(s)

A file, developed in AutoCAD® Civil 3D® latest version used by COUNTY including the information listed above, will be the deliverable for this task. An existing ground surface model in AutoCAD® Civil 3D® and LandXML v1.2 format will be provided as part of this deliverable.

TASK 45 GEOTECHNICAL & HYDRAULIC ENGINEERING SUPPORT SERVICES (Shannon & Wilson)

Shannon & Wilson, (SUBCONSULTANT) under a subconsultant agreement with CONSULTANT, will provide geotechnical and hydraulic engineering services to support the finalization of the project PS&E submittals and deliverables as described under Task 42. Geotechnical and hydraulic engineering support will also be provided during bidding and award as described under Task 44.

EXHIBIT G-1f
Supplemental Subconsultant Fee Determination – Budget

EXHIBIT G-1: SUBCONSULTANT FEE DETERMINATION
SITTS and HILL
SUPPLEMENT NO. 15

6/30/2020

Index-Galena Road MP 6.4 to 6.9 Realignment
Snohomish County - RC 1532 / UPI #06-0150

SURVEY AND BASE MAPPING
SITTS & HILL PERSONNEL

<u>Position Classification</u>	<u>Hours</u>	<u>Billing Rate</u>		<u>Cost</u>
Survey Principal	24	\$ 119.82	\$	2,876
Project Surveyor	56	\$ 93.03	\$	5,210
Survey Crew Chief	160	\$ 80.53	\$	12,885
Survey Crew Member	160	\$ 60.54	\$	9,686
Survey Technician	40	\$ 65.26	\$	2,610
Survey Admin	0	\$ -	\$	-
Sitts & Hill Survey Hours, TOTAL	440		Subtotal Personnel Costs = \$	33,267

TOTAL PERSONNEL COSTS = \$ 33,267

<u>DIRECT NONSALARY COSTS (DNSC)</u>	<u>Qty</u>	<u>Unit Cost</u>	<u>Per</u>		
Field Supplies (Lath)	200	\$ 0.55	/ lath	\$	110
Field Supplies (Hubs)	200	\$ 0.37	/ hub	\$	74
Field Supplies (Flagging)	8	\$ 1.33	/ roll	\$	11
Field Supplies (Paint)	8	\$ 3.33	/ can	\$	27
Field Supplies (Rebar)		\$ 1.79	/ rebar	\$	-
Lodging (WSDOT per Diem)	32	\$ 115.00	/ night	\$	3,680
Meals - B (WSDOT per Diem)	32	\$ 16.00	/ day	\$	512
Meals - L (WSDOT per Diem)	40	\$ 17.00	/ day	\$	680
Meals - D (WSDOT per Diem)	32	\$ 28.00	/ day	\$	896
Mileage (WSDOT)	640	\$ 0.575	/ mile	\$	368
TOTAL REIMBURSABLE EXPENSES (DNSC) = \$					6,357

TOTAL SITTS & HILL FEE = \$ 39,624

TASK 41 - SITE SURVEY TO SUPPORT BIDDING

SUPPLEMENT NO. 15	Survey Principal	Project Surveyor	Survey Crew Chief	Survey Crew Member	Survey Technician	Survey Admin	Total Hours per Task	Totals
	Fully Burdened Billing Rate ==>	\$119.82	\$93.03	\$80.53	\$60.54	\$65.26		
								\$ -
Task 41 - Field Staking for RFP / Bidding	24	56	160	160	40		440	\$ 33,267
								\$ -
Hour Totals	24	56	160	160	40		440	\$ 33,267
Percentage	5%	13%	36%	36%	9%			\$ 76/hr

**EXHIBIT G-1, SUBCONSULTANT FEE
SHANNON and WILSON
SUPPLEMENT NO. 15**

**S&W Costs
6/30/2020**

**Index-Galena Road MP 6.4 to 6.9 Realignment
Snohomish County - RC 1532 / UPI #06-0150**

GEOTECHNICAL AND HYDRAULIC ENGINEERING

SHANNON & WILSON PERSONNEL

<u>Position Classification</u>	<u>Hours</u>		<u>Billing Rate¹</u>		<u>Cost</u>
1 Officer	44.0	X	\$ 236.90	= \$	10,424
2 Associate	18.0	X	\$ 189.51	= \$	3,411
3 Senior Professional Staff	42.0	X	\$ 154.92	= \$	6,507
4 Professional Staff	88.0	X	\$ 126.62	= \$	11,143
5 Senior Drafter / Tech	18.0	X	\$ 113.56	= \$	2,044
6 Drafter / Tech	0.0	X	\$ 86.09	= \$	-
7 Senior Office Services	12.0	X	\$ 113.30	= \$	1,360
8 Office Services	0.0	X	\$ 88.52	= \$	-
Total Hours	222.0		TOTAL PERSONNEL COSTS = \$		34,888

DIRECT NONSALARY COSTS (DNSC)

Mileage	100	miles @	\$ 0.575	\$	58
B&W 8.5x11 Copies	200	copies @	\$ 0.10	\$	20
B&W 11x17 Copies	100	copies @	\$ 0.20	\$	20
Color 8.5x11 Copies	100	copies @	\$ 1.00	\$	100
Color 11x17 Copies	50	copies @	\$ 2.00	\$	100
TOTAL REIMBURSABLE EXPENSES (DNSC) = \$					298

TOTAL SHANNON & WILSON FEE = \$ 35,185

**EXHIBIT G-1, SUBCONSULTANT FEE
SHANNON and WILSON
SUPPLEMENT NO. 15**

**S&W Hours
6/30/2020**

TASK 45 - GEOTECHNICAL & HYDRAULIC ENGINEERING SUPPORT SERVICES	Shannon & Wilson Personnel							
	Officer	Associate	Senior Prof. Staff	Professional Staff	Sr. Drafter / Tech	Drafter / Tech	Senior Office Serv.	Office Services
Support for PS&E Submittals / Task 42	16	0	24	16	0	0	0	0
Geotechnical and Hydraulic Support for PS&E Submittals	8		16	16				
Site Visit by Design Team	8		8					
Support During Bidding & Award / Task 44	28	18	18	72	18	0	12	0
Invoicing & Progress Reports	4						4	
Prebid Meeting Attendance	6							
Response to Bidder Inquiries (8 assumed)	10	10	10	40	10		4	
Preparation of Bid Addendum (2 assumed)	8	8	8	32	8		4	
SUBTOTAL S&W HOURS	44	18	42	88	18	0	12	0