

COUNTY OF HUMBOLDT

AGENDA ITEM NO.

C-15

For the meeting of: February 23, 2016

Date:

January 26, 2016

To:

Board of Supervisors

From:

Thomas K. Matson, Director of Public Works

Subject:

SECOND AMENDMENT TO THE AGREEMENT FOR BRIDGE DESIGN SERVICES TO REPLACE BIG ROCK GULCH BRIDGE (4C-117) ON RED CAP

ROAD (8Q100) POST MILE 0.30; PROJECT NO.: BRLO-5904(113); CONTRACT

NO.: 594021

RECOMMENDATION(S):

That the Board of Supervisors:

- 1. Approves the Second Amendment to the Agreement for Bridge Design Services to replace Big Rock Gulch Bridge (4C-117) on Red Cap Road for the amount of \$69,029.
- 2. Directs the Clerk of the Board to return two executed originals of the Second Amendment to the Agreement to the Department of Public Works.

<u>SOURCE OF FUNDING</u>: Road Fund-Federal Highways Administration Highway Bridge Program (HBP) and the Toll Credit Bridge Replacement Fund

<u>DISCUSSION</u>: The Agreement for Bridge Design Services to replace Big Rock Gulch Bridge was entered into on November 13, 2012 between the County of Humboldt and Drake Haglan and Associates. The

Prepared by	Jeffrey A. Ball	CAO	Approval Any Vien
REVIEW:	<		
Auditor	County Counsel Om	Human Resources	Other
TYPE OF ITEM:			BOARD OF SUPERVISORS, COUNTY OF HUMBOLDT
X Consent			Upon motion of Supervisor Fennel Seconded by Supervisor Bass
Departm			
Public H	learing		Ayes Fennell, Lovelace, Bass
Other			Nays Abstain
PREVIOUS ACTIO	N/REFERRAL:		Absent Sundberg, Bohn
Board Order No	C-21		and carried by those members present, the Board hereby approves the recommended action contained in this Board report.
Meeting of:	August 19, 2014		
			Dated: Feb. 23, 2016 By: Kathy Hayes, Clerk of the Board

Second Amendment to the Agreement will extend the contract till December 31, 2018 and at the request of the County, will include construction support services. Construction support services includes: response to requests for information, review of shop drawings, geotechnical oversite during installation of bridge piles and soldier pile walls, survey staking data for construction, and develop record drawings at completion of work. The County intends to advertise and construct this project in 2016. The estimated cost of the amended scope of work will increase the total amount payable by \$69,029 for a total contract amount of \$383,136.

As discussed in the original letter to the Board at the time of contract award, this project is eligible for the use of "toll credit" funding. First established in Section 1044 of the Intermodal Surface Transportation Efficiency Act (ISTEA), "toll credit" funding permitted the use of certain *toll* revenue expenditures as a *credit* toward the non-Federal matching share of all programs authorized by ISTEA and Title 23, thus the term "Toll Credit". Section 1111(c) of TEA-21 incorporated into 23 United States Code (USC) 120(j), toll credit provisions initially set forth in ISTEA. This provision allows the federal obligation to be increased up to one hundred percent (100%) of project costs to the extent that credits are available.

<u>FINANCIAL IMPACT</u>: This project is one hundred percent (100%) funded through the through the Federal Highways Administration and the Toll Credit Fund. There are sufficient funds in the FY 2015-16 Budget to provide for these costs.

This project conforms to the Board of Supervisors' Core Role of providing for and maintaining infrastructure as identified in the Board's Strategic Framework.

OTHER AGENCY INVOLVEMENT: California Department of Transportation, Federal Highways Administration

<u>ALTERNATIVES TO STAFF RECOMMENDATIONS</u>: Board may choose to not authorize the contract amendment at this time. This action is not advised as construction support services are necessary to assist the Engineering Division in analyzing technical submittals during construction.

ATTACHMENTS:

2 copies of the original Second Amendment to the Agreement for Bridge Design Services to replace Big Rock Gulch Bridge (4C-117) on Red Cap Road

SECOND AMENDMENT TO AGREEMENT FOR PROFESSIONAL SERVICES FOR BRIDGE DESIGN SERVICES TO REPLACE BIG ROCK GULCH BRIDGE (04C-117) ON RED CAP ROAD Project Number: 594021

This Second Amendment to the Agreement for Professional Services entered into on November 13, 2012 by and between the COUNTY OF HUMBOLDT, a political subdivision of the State of California, hereinafter called "COUNTY," and Drake Haglan & Associates, a corporation hereinafter called CONSULTANT is entered into this <u>23rd</u>day of <u>February</u>, 2016.

WHEREAS, on November 13, 2012, COUNTY and CONSULTANT entered into an Agreement for bridge design services to replace Big Rock Gulch Bridge; and

WHEREAS, on August 19, 2014, COUNTY and CONSULTANT amended the original Agreement for increased costs due to unforeseen site conditions both topographical and subsurface for the amount not to exceed \$44,000; and

WHEREAS, the parties desire to amend the Agreement to include construction support services and compensation for such services not to exceed \$69,029 accordingly; and

WHEREAS, additional time is required to provide professional services during contract advertisement and for construction support services for the proposed project; and

WHEREAS, the parties desire to amend the Agreement to extend the term of the agreement accordingly;

NOW, THEREFORE, it is mutually agreed as follows:

- 1. The SCOPE OF SERVICES and COST PROPOSAL, is amended to include additional scope and cost items contained herein as **ATTACHMENT A**
- 2. It is mutually agreed between COUNTY and CONSULTANT that payments to CONSULTANT including the total amount of salaries and expenses shall not exceed \$383,136, inclusive of all agreements to date and as amended in ATTACHMENT "A" AMENDED SCOPE OF WORK.
- 3. ARTICLE IV (TIME OF COMPLETION), Subsection 4.03, of the Agreement is amended to show a completion date of December 31, 2018 for construction support services.
- 4. In all other respects the Agreement between the parties entered into on November 13, 2012 shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this Second Amendment to the Agreement dated November 13, 2012, on the date indicated above.

(signatures on page 2)

APPROVED AND EXECUTED:

TWO SIGNATURES ARE REQUIRED FOR CORPORATIONS: (1) CHAIRPERSON OF THE BOARD, PRESIDENT, OR VICE PRESIDENT; AND (2) SECRETARY, ASSISTANT SECRETARY, CHIEF FINANCIAL OFFICER OR ASSISTANT TREASURER.

County Of Humboldt

Monhanha
Chair, Board of Supervisors

DATE OF EXECUTION ("Effective Date"): 2-23-16

Consultant: Drake Haglan and Associates
By: Dill. Hele
Title: Dennis M. Haglan, President [Print Name and Title of Signer: If Corporate: Chairman, President or Vice President]
Date: 1/21/2016
By:
Title: <u>Kevin Ross, Senior Vice President</u> [Print Name and Title of Signer: If Corporate: Secretary, Assistant Secretary, CFO or Assistant Treasurer]
Date: 1/21/2016

APPROVED AS TO FORM: (STANDARD PRE-APPROVED FORM)

County Counsel

INSURANCE REQUIREMENTS: (PRE-APPROVED FORM)

Big Rock Gulch Bridge

Risk Manager

ATTACHMENT "A" AMENDED SCOPE OF WORK



January 11, 2016

Jeff Ball County of Humboldt Public Works Department 1106 Second Street Eureka, CA 95501

SUBJECT:

Red Cap Road over Big Rock Gulch Bridge Replacement Project

Construction Support

Dear Mr. Ball:

As discussed, attached is a contract amendment request for providing technical support during construction.

Phase 6 Construction Support

Since the scope of construction support is highly dependent on the contractor and unforeseen field conditions, DHA will provide construction support on a time and material basis not to exceed the amount of \$69,029.42. DHA will be the single point of contact for the County for RFI's requiring responses from the design team and shop drawing review. DHA's design team for construction includes Blackburn Consulting and Andregg Geomatics.

Task 6.1 Request for Information (RFI's)

DHA will respond to contractor's inquiries through County requests. DHA will prepare and review change order requested by the County. In addition, DHA will make up to 2 field visits to the construction site if requested by County.

Deliverables - Task 6.1

- Respond to RFI's submitted by contractor
- Review and comment of Contract Change Orders

Task 6.2 Review Shop Drawings/Submittals.

DHA will review the following shop drawings:

- Precast/Prestressed voided slab
- Assist with the temporary shoring submittals. DHA assumes the County will review and DHA will
 provide technical assistance. (DHA assumes 24 hours for technical assistance).

DHA assumes County will handle all other submittals including but not limited to the shop drawings for the temporary bridge, all concrete submittals, and all material submittals.

Deliverables - Task 6.2

- Review Precast/Prestressed Voided Slab shop drawings
- Provide technical support for reviewing temporary shoring submittals (Maximum of 24 hours)

Task 6.3 Geotechnical support during construction

Blackburn Consulting (BCI) will provide construction support services on a time and material basis. BCI will provide limited observation of abutment and soldier pile installation and will provide technical assistance to the County on time and material basis. BCI assumes a maximum of 3 site visits (as requested by the county) during construction will be required.

Deliverables - Task 6.3

Attend a maximum of 3 site visits if requested by the County

Task 6.4 Prepare As-Built Drawings

DHA will take the Resident Engineer's notes on the contract plans and change orders and prepare As-Builts in digital and hard copy format for the project to be submitted to the County.

Deliverables - Task 6.4

As-Built Drawings (Digital and Hard Copy)

Task 6.5 Prepare Staking Notes (Optional)

Andregg Geomatics will provide cut sheets for construction staking based on the plan set for Red Cap Road Bridge over Big Rock Gulch. Anticipated work following items:

Site Grading:

Provide station, offset, and elevation cutsheets for slopes at left of road and around stream bed along with a detailed plot of staking locations.

Valley Gutters and Drainage:

Provide cutsheets with station/offset and Cut/fill for valley gutter locations and elevations at back of retaining wall and v-ditch in rock slope protection areas at right of roadway.

Waterline:

Provide station/offset for temporary water bypass connections as well as location for new 6" waterline in new roadway construction.

Bridge Abutments, Wingwalls, Piles and Pile Caps:

Provide cutsheets with detailed plots of abutment locations with centerline bearing, pile locations, top of abutment footings and corners, and station/offsets to wing wall LOL along with cut/fill any associated grades.

Retaining Walls:

Provide cutsheets and plots with station/offsets and cut/fill to retaining wall #1, #2, #3 locations. Cutsheets will include information for individual pile locations and grades, along with grades to top of cap beam.

Roadway Alignment, HMA Dikes:

Provide cutsheets and plots for new roadway alignment and new profile grade at centerline and edge of pavement, along with location and grades for super elevation stationing. Provide additional station/offset cutsheets with cut/fill to top of dike for HMA Dikes along the right side of roadway.

Sincerely,

Kevin Ross, P.E. Project Manager

Drake Haglan & Associates



GEOTECHNICAL SCOPE OF SERVICES

Construction Services for Red Cap Road Bridge (04C-117) Over Big Rock Gulch Humboldt County, CA

PROJECT DESCRIPTION

The County will replace the existing bridge on Red Cap Road at Big Rock Gulch. BCI provided a Foundation Design Report for the project dated May 2014. This scope of services is for limited geotechnical field and office support during construction. We assume these services will be an amendment to our existing contract.

SCOPE OF SERVICES

BCI will provide construction support services on an on-call basis when requested by Drake Haglan and Associates. We provide for a maximum of 3 site visits (as requested) during construction and limited office consultation/analysis time (as indicated on the attached fee breakdown).

SCHEDULE AND FEE

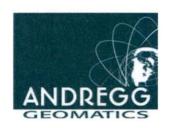
We expect the bridge replacement to occur in Spring/Summer 2016. BCI will respond to construction support requests as-needed. For site visits, we request a minimum of 48 hr notice.

Our fees will be billed on a time and materials basis in accordance with our 2016 fee schedule (attached). We estimate a fee of \$14,672 and attach an approximate breakdown of our fees. The total fee may be more or less depending on the services requested.

Attached:

Fee Estimate

2016 Fee Schedule



We take your position precisely.

1/15/16

Jose Silva, P.E. JSilva@drakehaglan.com Drake Haglan & Associates 11060White Rock Road, Suite 200 Rancho Cordova, CA

Phone: 916-822-3955

P16-0022

RE: Red Cap Road Bridge Replacement Office Construction Calculations Humboldt County, CA

Dear Jose,

As requested in your email of January 14, 2016, herewith is our proposed Scope of Work and cost proposal for office calculation construction support services on the Red Cap Road Bridge Replacement over Big Rock Gulch in Humboldt County. Our proposed scope of work and estimate of fees are based on the approved plan set dated 5/26/15 provided and are as follows:

Task 1: Site Grading:

Provide station, offset, elevation cutsheets for slopes at left of road and around stream bed along with a detailed plot of staking locations.

Task 2: Valley Gutters and Ditches:

Provide cutsheets with station/offset and Cut/fill for valley gutter locations and elevations at back of retaining wall and v-ditch in rock slope protection areas at right of roadway.

Task 3: Waterline:

Provide station/offset for temporary water bypass connections as well as location for new 6" waterline in new roadway construction.

Task 4: Bridge Abutments, Wing Walls, Piles, and Pile Caps:

Provide cutsheets with detailed plots of abutment locations with centerline bearing, pile locations, top of abutment footings and corners, and station/offsets to wing wall LOL along with cut/fill any associated grades.

Auburn | Sacramento | Oakland | Los Angeles | Truckee

Corporate

11661 Blocker Drive, Suite 200, Auburn, CA 95603 | 800.400.7072 | 530.885.5798 Fax

State of California Small Business Enterprise # 1024238 United States Federal Certified Small Business # P0135335

www.andregg.com



We take your position precisely.

Task 5: Retaining Walls:

Provide cutsheets and plots with station/offsets and cut/fill to retaining wall #1,#2,#3 locations. Cutsheets will include information for individual pile locations and grades, along with grades to top of cap beam.

Task 6: Roadway Alignment, HMA Dike:

Provide cutsheets and plots for new roadway alignment and new profile grade at centerline and edge of pavement, along with location and grades for super elevation stationing. Provide additional station/offset cutsheets with cut/fill to top of dike for HMA Dikes along the right side of roadway.

Total Base Bid......\$10,351.25

Notes:

- This scope does not include efforts to layout of saw cuts, signs, TCEs and roadway striping. If such services are requested, a change order can be submitted when the scope of work is determined.
- 2. Any plan changes or addendums will be considered extra work and will require signed authorization to proceed.

The above estimated fees shall not be exceeded without prior authorization from client and shall remain valid for 30 days. We will require an AutoCAD .dwg formatted drawing of the copy of the design prior to staking. Staking requests will require a **48hr notice** prior to staking needs. This schedule is subject to review when work is authorized.

Thank you for this opportunity. If you have any questions or need more information, please call.

Sincerely,

ANDREGG/GEOMATICS

Michael Farrauto, PLS Sr. Project Manager

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DRAKE HAGLAN & ASSOCIATES FEE PROPOSAL

Red Cap Road over Big Rock Gulch Bridge Replacment Project Construction Support Amendment

Project: Red Cap Road over Big Rock Gulch Humboldt County

								Labor	Totals		ub- ultants	Total Task Amount
Task #	Task	Project Classification	Principal Engineer	Senior Engineer, Range C	Engineer, Range B	Assistant Engineer	CAD Manager	Task Hours	Task Amount	BCI	Andregg	
6.1	Request for Information (RFI's)		20	60	100		16	196	\$ 30,224.13			\$ 30,224.13
6.2	Review Shop Drawings/Submittals				50			50	\$ 6,616.40			\$ 6,616.40
6.3	Geotechnical Support During Construction				8			8	\$ 1,058.62	\$ 14,672.00		\$ 15,730.62
6.4	Prepare As-Built Drawings			2	8	8	24	42	\$ 5,077.16			\$ 5,077.16
6.5	Prepare Staking Notes (Optional)			2				2	\$ 329.86		\$ 10,351.25	\$ 10,681.11
								298	\$ 43,306.17	\$ 14,672.00	\$ 10,351.25	\$ 25,023.25
		Total Hours:	20	64	166	8	40	298	Total Hours			

TOTAL DHA LABOR \$ 43,306.17

TOTAL SUBCONSULTANT EXPENSE \$ 25,023.25

OTHER DIRECT COSTS \$ 700.00

TOTAL PROJECT FEE \$ 69,029.42



11521 Blocker Drive, Suite 110 Auburn, CA 95603 530-887-1494 Fax 530-887-1495

Red Cap Road Bridge @ Big Rock Gulch

Fee Itemization - Construction Services

January 7, 2016

BCI File #2395.2p

Task	Item	Quantity	Rate	Unit	Mult.	It	tem cost	Task	Subtotal
Dlan De	eview and Site Visits Dur	ing Constru	ction (max	imum	of 3 as	eun	ned)		
i iaii ixe	Sr. Project Manager	6.	200.00		1.	\$	1,200.00		
	Sr. Project Manager Sr. Project Engineer	46.	158.00		1.	\$	7,268.00		
	Assistant	3.	96.00			\$	288.00		
	3.35.71.51.71.11	1800.		mile	1.	\$			
	Mileage						1,530.00		
	Prof Expenses	3.	180.00	-	1.	\$	540.00		
	Misc Laboratory Tests	1.	600.00	each	1.	\$	600.00		
								\$	11,426.00
Office (Consultation/Analysis								
	Principal	2.	219.00	hour	1.	\$	438.00		
	Sr. Project Manager	3.	200.00	hour	1.	\$	600.00		
	Sr. Project Engineer	12.	158.00		1.	\$	1,896.00		
	Drafting	1.	120.00		1.	\$	120.00		
	Assistant	2.	96.00		1.	\$	192.00		
	7 toolotant		00.00	11001	3.3	Ψ	102.00	\$	3,246.00
								Account of the control of the contro	
						TO	TAL FEE	\$	14,672.00
			~						

Auburn Main Office:

11521 Blocker Drive, Suite 110 Auburn, CA 95603 (530) 887-1494 Fax (530) 887-1495

West Sacramento Office:

2491 Boatman Avenue West Sacramento, CA 95691 (916) 375-8706 Fax (916) 375-8709



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Modesto Office:

1016 12th Street Modesto, CA 95354 (209) 522-6273

Fresno Office:

360 W. Bedford Avenue, Suite 101

Fresno, CA 93711

(559) 438-8411

2016 SCHEDULE OF FEES & SERVICES

Geotechnical • Geo-Environmental • Construction Services • Forensics

OFESSIONAL HOURLY RATES:						
Project Engineer/Geologist I	\$132	CAD/GIS	\$124			
Project Engineer/Geologist II	\$142	Lab Aide	\$77			
Senior Engineer/Geologist	\$158	Lab Manager	\$132			
Project Manager	\$178	Technician Manager	\$132			
Senior Project Manager	\$200	Clerical	\$73			
Principal	\$226	Project Assistant	\$96			
Senior Principal	\$252	Senior Administrative	\$132			
Expert Testimony & Deposition	\$420	A CANADA A SANCE OF THE SANCE O				
CIAL INSPECTION PERSONNEL HO	URLY RATES:					
		Non-Prevailing Wage	Prevailing Wage			
Group 1		\$129	\$156			
ASNT Level II-III, DSA Shotcrete,	Lead Inspector, NICE	T Level IV				
Group 2		\$129	\$150			
AWS-CWI, ICC Certified Structura	I Inspector, NICET Le	vel III, Shear Wall/Floor System Inspe	ector,			
Building/Construction Inspector						
Group 3		\$108	\$128			
Soils/Asphalt, Earthwork Grading,	Excavation and Backf	fill, NICET Level II				
Group 4		\$108	\$128			
ACI, ICC Fireproofing, NICET Leve	el I, Proofload Testing,	Torque Testing				
MUM BASIC CHARGES:						
Outside Equipment & Services	Co	ost plus 20%				
Vehicle Charge	\$8	3.00 per hour or \$0.85 per mile				
Per Diem	Lo	ocation specific, minimum \$125 per n	ight			
Technician Services	Ch	narge includes time from office and re	eturn to office,			
		inimum charge - 2 hours				
Overtime		ver 8 hours: 1.5 x Hourly Rate				
		Before 7:00am or after 4:00pm: 1.5 x Hourly Rate				
		ush Charge (less than 24 hours notice):				

Vehicle Charge \$8.00 per hour or \$0.85 per mile Per Diem Location specific, minimum \$125 per night Technician Services Charge includes time from office and return to office, minimum charge - 2 hours Overtime Over 8 hours: 1.5 x Hourly Rate Before 7:00am or after 4:00pm: 1.5 x Hourly Rate Rush Charge (less than 24 hours notice): 1.5 x Hourly Rate Rush Charge (less than 24 hours notice): 1.5 x Hourly Rate Saturday: 1.5 x Hourly Rate (minimum: 4 hr. increments) Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hr increments) Report Copies 4 Report copies provided Additional Report Copies \$100 for binding up to 50 pages, plus postage EQUIPMENT: (personnel not included)		
Technician Services Charge includes time from office and return to office, minimum charge - 2 hours Overtime Over 8 hours: 1.5 x Hourly Rate Before 7:00am or after 4:00pm: 1.5 x Hourly Rate Rush Charge (less than 24 hours notice): 1.5 x Hourly Rate Saturday: 1.5 x Hourly Rate (minimum: 4 hr. increments) Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hr increments) Report Copies 4 Report copies provided Additional Report Copies \$100 for binding up to 50 pages, plus postage	Vehicle Charge	\$8.00 per hour or \$0.85 per mile
Overtime Over 8 hours: 1.5 x Hourly Rate Before 7:00am or after 4:00pm: 1.5 x Hourly Rate Rush Charge (less than 24 hours notice): 1.5 x Hourly Rate Saturday: 1.5 x Hourly Rate (minimum: 4 hr. increments) Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hr increments) Report Copies 4 Report copies provided Additional Report Copies \$100 for binding up to 50 pages, plus postage	Per Diem	Location specific, minimum \$125 per night
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Before 7:00am or after 4:00pm: 1.5 x Hourly Rate Rush Charge (less than 24 hours notice): 1.5 x Hourly Rate Saturday: 1.5 x Hourly Rate (minimum: 4 hr. increments) Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hr increments) Report Copies 4 Report copies provided Additional Report Copies \$100 for binding up to 50 pages, plus postage		minimum charge - 2 hours
Rush Charge (less than 24 hours notice): 1.5 x Hourly Rate Saturday: 1.5 x Hourly Rate (minimum: 4 hr. increments) Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hr increments) Report Copies 4 Report copies provided Additional Report Copies \$100 for binding up to 50 pages, plus postage	Overtime	Over 8 hours: 1.5 x Hourly Rate
Saturday: 1.5 x Hourly Rate (minimum: 4 hr. increments) Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hr increments) Report Copies 4 Report copies provided Additional Report Copies \$100 for binding up to 50 pages, plus postage		Before 7:00am or after 4:00pm: 1.5 x Hourly Rate
Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hr increments) Report Copies 4 Report copies provided Additional Report Copies \$100 for binding up to 50 pages, plus postage		Rush Charge (less than 24 hours notice): 1.5 x Hourly Rate
Report Copies 4 Report copies provided Additional Report Copies \$100 for binding up to 50 pages, plus postage		Saturday: 1.5 x Hourly Rate (minimum: 4 hr. increments)
Additional Report Copies \$100 for binding up to 50 pages, plus postage		Sunday & Holiday: 2.0 x Hourly Rate (minimum: 4 hr increments)
	Report Copies	4 Report copies provided
	Additional Report Copies	\$100 for binding up to 50 pages, plus postage
	EQUIPMENT: (personnel not included)	

	Additional Report Copies	\$1	00 for binding up to 50 pages, plus postage	
EQUIPI	MENT: (personnel not included)			
	Hand Sampling Equipment	\$237 / Day	Double Ring Infiltrometer Equipment	\$278 / Day
	Nuclear Moisture/Density Testing	\$14 / Test	Liquid Level Equipment	\$232 / Day
	6" Sand Cone Testing	\$36 / Test	Pachometer	\$118 / Day
	12" Sand Cone Testing	\$180 / Test	Rock Point Load Test Equipment	\$118 / Day
	Coring Bit Charge	\$36 / Core	Roto Hammer	\$113 / Day
	Coring Machine	\$227 / Day	Schmidt Hammer	\$93 / Day
	Dynamic Cone Penetrometer	\$258 / Day	Torque Wrench	\$57 / Day
	Electrical Resistivity Equipment	\$227 / Day	Seismic Refraction:12 Channel	\$443 / Day
	Generator	\$57 / Day	Traffic Control/Safety	\$278 / Day
	Groundwater Level Indicator	\$57 / Day	Concrete Vapor Emission Test Kit	\$24 / Ea
	Inclinometer Survey Equipment	\$567 / Day	pH Test Strip Package	\$46 / Ea

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2016 LABORATORY FEE SCHEDULE

Geotechnical • Geo-Environmental • Construction Services • Forensics

Page 1 of 2

SOIL CLASSIFICATION		
#200 Sieve Wash	ASTM D1140	\$113
Sieve Analysis to #200	ASTM D6913, CAL 202	\$175
Standard Hydrometer with Sieve Analysis	ASTM D422	\$345
Plasticity Index	ASTM D4318	\$252
Specific Gravity - Soils	AASHTO T100	\$108
MOISTURE / DENSITY	AASITIC TICC	\$100
Moisture Content	ASTM D2216, CAL 226	\$41
Moisture/Density	NO IMPLETO, ONE 220	\$77
SOIL COMPACTION		
Standard Proctor (4" or 6" mold)	ASTM D698	\$314
Modified Proctor (4" or 6" mold)	ASTM D1557	\$314
California Impact	CAL 216	\$314
Check Point (Standard or Modified)		\$144
VOLUME CHANGE		
One-Dimensional Consolidation	ASTM D2435	\$494
(6 load increments, includes 2 time rate curves and 2 rebound deci	rements)	
Additional Load or Rebound Decrement	•	\$33/ea
Additional Time Rate Curves		\$108/ea
Expansion Index	ASTM D4829	\$258
Settlement Swell	ASTM D4546	\$155
STRENGTH		
Unconfined Compression	ASTM D2166	\$144
Compression, Rock Prep & Photos included	ASTM D7012	\$273
Rock Point Load (up to six points)	ASTM D5731	\$67
Compression Test of Cored Concrete Spec.		\$77
California Bearing Ratio (CBR), with curve	ASTM D1883	\$783
California Bearing Ratio (CBR), without curve	ASTM D1883	\$469
Resistance Value	CAL 301, ASTM D2844	\$340
Direct Shear: (per point)		
Undisturbed	ASTM D3080	\$196
Remolded	ASTM D3080	\$252
Triaxial Compression: (per point) Photos of failure upon red	<u>quest</u>	
Undrained, Unconsolidated w/out Pore Pressure	ASTM D2850	\$175
Consolidated, Undrained w/ Pore Pressure Measurements	ASTM D4767	\$515
Consolidated, Drained		\$742
Consolidated, Undrained, no Pore Pressure Measurements		\$288
Specimen Remolding		\$113

CORROSIVITY ANALYSIS		
Corrosion Analysis Package	CAL 643, 417, 422	\$319
Includes Soil Resistivity, Soil pH, Sulfates / Chlorides. Minimu	m size is 1,000 grams	
pH	CTM643	\$41
Resistivity	CTM643	\$134
PERMEABILITY		
Flex-wall Permeability	ASTM D5084	
Either Constant head or Falling Head / rising Tail Water. Meth	od depends on soil type	\$453
Each Additional Effective Stress		\$113
Specimen Remodeling	and the second second second second	\$113
TREATED SOIL TESTS		
% Lime for Stabilization - per point (%)	ASTM D6276	\$124
pH of Soil	CTM643	\$41
Modified Proctor	ASTM D1557	\$376
Unconfined Compression Test	ASTM D5102	\$211
One Dimensional Swell	ASTM D4546	\$211
AGGREGATES		
Bulk Specific Gravity - Course & Fine Aggregate	ASTM C127 & 128, CAL 206, 207	\$108
Coarse Durability	CAL 229	\$185
Fine Durability	CAL 229	\$185
Sand Equivalent	CAL 217, ASTM D2419	\$129
Cleanness Value	CAL 227	\$175
Moisture Content	CAL 226/370	\$98
Percent of Crushed Particles (per size fraction)	CAL 205	\$165
Fine Aggregate Angularity	AASHTO T304, Method A	\$165
Flat and Elongated Particles (per size)	AASHTO D 4791	\$165
Combined Grading 1" through no. 200	CAL 201/202	\$175
Bin Grading (First 2 Bins)	CAL 201/202	\$175
Each Bin Thereafter		\$67
LP-9 (RAP) Burn	LP-9, CT382	\$108
ASPHALT		
Bulk Specific Gravity - Compacted Hot Mix Asphalt	CAL 308	\$52
Theoretical Max Specific Gravity (Rice)	CAL 309	\$191
LTMD (Set of 5)	CAL 375	\$381
Binder Content		
Ignition Oven Correction Factor	CAL 382	\$324
Ignition Oven	CAL 382	\$191
Solvent	AASHTO T164	\$242
Stability (Set of 3)	CAL 366	\$340
Void Content		
With Stability and Rice	CAL 367	\$36
CONCRETE & MASONRY	THE RESERVE OF THE PARTY OF THE	
Concrete Compression Test 6" x 12" or 4" x 8"	ASTM C39	\$36
Masonry or Grout Compression		\$52

Other Tests Quoted Upon Request

P16-0022

PROJECT NAME:

Red Cap Rd. Bridge Replacement

AREA:

Humboldt County

2015 Construction Surveying Task/Cost Schedule

1	PERSONELL	HRS/UNITS	RATE	COST
L	TERSONELL	TIKS/CIVITS	KATE	C031
TASK 1 -Toe of Slope (LT) (Under Bridge a River)/	2 Person Crew	T	\$255.00	\$0.00
Slope Stakes	1 Person Crew	0	\$160.00	\$0.00
	Sr. Project Surveyor	0	\$145.00	\$0.00
ŀ	Project Surveyor	16	\$125.00	\$2,000.00
ŀ	CAD/Survey Tech	0	\$100.00	\$0.00
ŀ	Project Manager	ī	\$155.00	\$155.00
ŀ	Principal Land Surveyor	0.5	\$185.00	\$92.50
-	TASK 1 - SUB-TOTAL			\$2,247.50
			_	
TASK 2 - V-Ditches/V- Gutters	2 Person Crew	0	\$255.00	\$0.00
	1 Person Crew	0	\$160.00	\$0.00
Ī	Sr. Project Surveyor	0	\$145.00	\$0.00
Ī	Project Surveyor	8	\$125.00	\$1,000.00
Ţ	CAD/Survey Tech	0	\$100.00	\$0.00
Ī	Project Manager	1	\$155.00	\$155.00
Ī	Principal Land Surveyor	0	\$185.00	\$0.00
	TASK 2 - SUB-TOTAL			\$1,155.00
TASK 3 - WaterLine	2 Person Crew	0	\$255.00	\$0.00
	1 Person Crew	0	\$160.00	\$0.00
	Sr. Project Surveyor	0	\$145.00	\$0.00
L	Project Surveyor	2	\$125.00	\$250.00
L	CAD/Survey Tech	0	\$100.00	\$0.00
L	Project Manager	0.25	\$155.00	\$38.75
L	Principal Land Surveyor	0	\$185.00	\$0.00
	TASK 3 - SUB-TOTAL			\$288.75
			South Control of the	\$400.73
FASK 4 - Bridge Abutments/ Piles/Pile Can/	2 Parcon Craw		\$255.00	
	2 Person Crew	0	\$255.00	\$0.00
FASK 4 - Bridge Abutments/ Piles/Pile Cap/ Wing Wall	1 Person Crew	0	\$160.00	\$0.00 \$0.00
	1 Person Crew Sr. Project Surveyor	0	\$160.00 \$145.00	\$0.00 \$0.00 \$0.00
	1 Person Crew Sr. Project Surveyor Project Surveyor	0 0 16	\$160.00 \$145.00 \$125.00	\$0.00 \$0.00 \$0.00 \$2,000.00
	1 Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech	0 0 16 0	\$160.00 \$145.00 \$125.00 \$100.00	\$0.00 \$0.00 \$0.00 \$2,000.00 \$0.00
	1 Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager	0 0 16 0 2	\$160.00 \$145.00 \$125.00 \$100.00 \$155.00	\$0.00 \$0.00 \$0.00 \$2,000.00 \$0.00 \$310.00
Wing Wall	I Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager Principal Land Surveyor	0 0 16 0	\$160.00 \$145.00 \$125.00 \$100.00	\$0.00 \$0.00 \$0.00 \$2,000.00 \$0.00 \$310.00 \$185.00
Wing Wall	1 Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager	0 0 16 0 2	\$160.00 \$145.00 \$125.00 \$100.00 \$155.00	\$0.00 \$0.00 \$0.00 \$2,000.00 \$0.00 \$310.00 \$185.00
Wing Wall	I Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager Principal Land Surveyor	0 0 16 0 2	\$160.00 \$145.00 \$125.00 \$100.00 \$155.00	\$0.00 \$0.00 \$0.00 \$2,000.00 \$0.00 \$310.00 \$185.00 \$2,495.00
Wing Wall	I Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager Principal Land Surveyor FASK 4 - SUB-TOTAL	0 0 16 0 2 1	\$160.00 \$145.00 \$125.00 \$100.00 \$155.00 \$185.00	\$0.00
Wing Wall	I Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager Principal Land Surveyor FASK 4 - SUB-TOTAL 2 Person Crew 1 Person Crew	0 0 16 0 2 1	\$160.00 \$145.00 \$125.00 \$100.00 \$155.00 \$185.00 \$185.00 \$160.00	\$0.00 \$0.00 \$2,000.00 \$310.00 \$185.00 \$2,495.00
Wing Wall	I Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager Principal Land Surveyor FASK 4 - SUB-TOTAL 2 Person Crew 1 Person Crew Sr. Project Surveyor	0 0 16 0 2 1	\$160.00 \$145.00 \$125.00 \$100.00 \$155.00 \$185.00 \$255.00	\$0.00 \$0.00 \$0.00 \$2,000.00 \$310.00 \$185.00 \$2,495.00 \$0.00 \$0.00 \$0.00
Wing Wall	I Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager Principal Land Surveyor FASK 4 - SUB-TOTAL 2 Person Crew 1 Person Crew	0 0 16 0 2 1	\$160.00 \$145.00 \$125.00 \$100.00 \$155.00 \$185.00 \$185.00 \$160.00 \$145.00	\$0.00 \$0.00 \$0.00 \$2,000.00 \$310.00 \$185.00 \$2,495.00 \$0.00 \$1,000.00
Wing Wall	I Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager Principal Land Surveyor FASK 4 - SUB-TOTAL 2 Person Crew 1 Person Crew Sr. Project Surveyor Project Surveyor	0 0 16 0 2 1 1	\$160.00 \$145.00 \$125.00 \$100.00 \$155.00 \$185.00 \$185.00 \$160.00 \$145.00 \$125.00	\$0.00 \$0.00 \$0.00 \$2,000.00 \$0.00 \$310.00 \$185.00 \$2,495.00
	1 Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech Project Manager Principal Land Surveyor TASK 4 - SUB-TOTAL 2 Person Crew 1 Person Crew Sr. Project Surveyor Project Surveyor CAD/Survey Tech	0 0 16 0 2 1 1	\$160.00 \$145.00 \$125.00 \$100.00 \$155.00 \$185.00 \$160.00 \$145.00 \$125.00 \$100.00	\$0.00 \$0.00 \$0.00 \$2,000.00 \$310.00 \$185.00 \$2,495.00 \$0.00 \$0.00 \$1,000.00 \$0.00

TASK 6 - AlignmentRoadway / HMA Dike Super Elev. Stationing.

TASK 6 - SUB-TOTAL			\$2,902.50
Principal Land Surveyor	0.5	\$185.00	\$92.50
Project Manager	2	\$155.00	\$310.00
CAD/Survey Tech	0	\$100.00	\$0.00
Project Surveyor	20	\$125.00	\$2,500.00
Sr. Project Surveyor	0	\$145.00	\$0.00
1 Person Crew	0	\$160.00	\$0.00
2 Person Crew	0	\$255.00	\$0.00

TOTAL CONSTRUCTION SURVEY COSTS

\$10,351.25

Project Totals
2 Person Crew
1 Person Crew
Sr. Project Surveyor
Project Surveyor
CAD/Survey Tech
Project Manager
Principal Land Surveyor

Hours	Rates	Costs
0	\$255.00	\$0.00
0	\$160.00	\$0.00
0	\$145.00	\$0.00
70	\$125.00	\$8,750.00
0	\$100.00	\$0.00
6.75	\$155.00	\$1,046.25
3	\$185.00	\$555.00
79.75		\$10,351.25

Totals: 79.75



January 11, 2016

Jeff Ball County of Humboldt Public Works Department 1106 Second Street Eureka, CA 95501

SUBJECT:

Red Cap Road over Big Rock Gulch Bridge Replacement Project

Construction Extension Request

Dear Mr. Ball:

Given this project is not expected to be completed till late 2016, we are requesting that the contract be amended to extend the end of contract date to December 31st, 2018. The amended contract for construction service support shall not exceed \$69,029.42 and this fee was calculated using the 2015 audited overhead rate.

Sincerely,

Kevin Ross, P.E. Project Manager

Drake Haglan & Associates

APPROVED:

By: _____ Date:______