

## Contract Amendment 1.2

### Yamhill County

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### WHPacific, Inc.

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### Background

This scope of work is for final design including permitting for the Laughlin Road over Stag Hollow Creek Bridge replacement. It is understood that Yamhill County has assumed project management responsibility for this project with WHPacific providing assistance with project management, design and engineering services, permitting, and other tasks.

The work scope has been defined for the entire project through design completion and bid. This is in addition to and follows completion of work in contract Board Order No. 11-131, which primarily focused on the 2011 contract design and permitting activities. Tasks to be completed by WHPacific are set forth in this work scope, and they will be further defined during the initial stage of the project. They may be modified as work progresses.

The improvements for this section of Laughlin Road is targeting construction commencement in early 2019.

### Project Understanding

Yamhill County is moving forward with the final design and permitting for all required public roadway improvements to construct a replacement bridge on Laughlin Road over Stag Hollow Creek. This phase of the project will update the existing design and plans developed in 2011 by WHPacific, Inc.

This project is the continuation of a design initiated by WHPacific, Inc in 2011. This phase of the project will complete the final design of the project while updating the existing design to the current AASHTO and Oregon DOT design standards.

### Existing Conditions

**Stag Hollow Creek (Laughlin Road) Bridge** is structurally deficient and functionally obsolete. The existing bridge is a precast concrete slab supported by a number of steel and timber piles, pile caps, head walls and cross members. The existing bridge is approximately 20 feet long by 24 feet wide. There have been a variety of methods used to aid in the support of the bridge after the original timber members decayed.

Laughlin Road is a rural two lane county road that serves mostly agriculture and residential traffic. The bridge is in a horizontal curve with a right-of-way (ROW) width of 62 feet and the bridge and roadway are not centered.

**Proposed Improvements**

WHPacific will design the following roadway and bridge improvements:

The 2011 design intended to reuse existing 21 inch precast prestressed slabs that were initially designed in 1999 for the ODOT Spencer Creek Bridge detour structure in Lincoln County (US 101, MP 133.86). The slabs were designed per AAHSTO Standard Specification for Highway Bridge, 16<sup>th</sup> Ed, 1996 and all interim specification. The design live load was HS-25 with a 2 inch ACWS.

WHPacific, Inc. was initial under contract in 2011 to perform design on the project. The project was stopped near the design completion in 2011 due Yamhill County's loss of construction funding.

This amendment to the original contract will result in revising and finalizing bid documents based on the 2011 documents. This will also include reviewing environmental permit requirements and obtaining a new permit. The design will be completed per the AASHTO LRFD Bridge Design Specification, 8<sup>th</sup> Ed, 2017.

The new bridge will utilize 8 of the ODOT Spencer Creek Bridge detour structure 21in precast prestressed slabs. The new bridge will be 32 feet out-to-out width.

One objective will be to minimize the environmental impacts to Stag Hollow Creek. WHPacific will keep the same footprint of the previous design and confirm the final design meets the current design code and parameters.

The project will utilize ODOT standard plans and Special provisions. Yamhill County will complete the construction bid and award process.

***Project Assumptions***

1. All construction will occur within the existing ROW. No additional ROW is required.
2. This scope of services includes project management and team meetings, surveying, civil engineering, bridge design, permitting, and administration services through the bid period. We have assumed for budgeting purposes that the project design and bid phase duration will be completed in January 2019, assuming an NTP of December 20 2018. Expected bid date is early February 2019.
3. It is understood that WHPacific will contract directly with subconsultants for the Geotechnical/Pavement Engineering as required for this project.
4. A revised wetland delineation is included. Wetland permitting for impacts created by the bridge replacement is not included or anticipated to be needed.
5. No Hydraulic Studies are included or anticipated to be needed. It is expected that the existing Hydraulic Report dated Aug 23, 2011 by WHPacific, Inc will meet the "No-Rise" requirements.
6. No wetland quality treatment facility will be required as the expected impervious area is expected to be less than 1000SF
7. Geotechnical reports and recommendations will include earthwork, retaining walls, and the bridge replacement on Laughlin Road.

8. The scope of services does not include construction engineering, inspection, management and support. Construction engineering services will be considered in a future contract amendment.

**WORK BREAKDOWN STRUCTURE (WBS)**

Provide engineering design, storm drainage/detention and water quality design, geotechnical engineering, environmental studies and reports. This includes completion of work through the final design and bid phase. All work performed under this scope of work will be done so in accordance with all applicable federal, state, and local design standards. The deliverables are listed for each task.

The design services work scope outlined is as needed to complete final stamped and signed construction bid documents including plans, specifications, and estimate for all public roadway improvements described herein. The following tasks are amended and revised from the original agreement.

Task 1.0	Project Management and Quality Assurance
Task 2.0	Survey
Task 3.0	Hydraulic Studies (No Work)
Task 4.0	Environmental
Task 5.0	Design
Task 6.0	Bid Services
Task 7.0	Contingencies

**CONSULTANT RESPONSIBILITIES**

**TASK 1.0 Project Management and Quality Assurance – Update Required**

**1.1 Project Management and Coordination**

The duration of the project design through the bid period is assumed to be approximately from December 20, 2018 through February 2019. Construction is assumed to start in Spring 2019.

- Provide management, coordination and direction to the project team for completing the project on time and on budget. This includes coordination with the County’s representatives. Coordinate internal team activities, as well as coordinating project activities with other consultants.
- Track project costs and budgets on a project basis.
- Coordinate with government agencies as needed for design and permitting.

**Project Team Meetings**

Hold two project meetings with key team members and representatives from the County and other government agencies and/or others as needed to address and resolve project issues as they are encountered. Meetings below assume one hour each for the number of design staff defined below.

- County/Team Meeting – Organize and attend kickoff project meetings to coordinate the overall design of the project and to address project design issues. Assume 3 people to attend one meeting.
- Internal Design Team Meeting – Conduct additional project design team kickoff meeting to convey project details design requirements.

**Quality Control Management and Review**

Establish a Quality Control program that will document quality control reviews with identified review periods and reviewers established. Conduct quality control reviews of final submittal prior to review by the County. Established deliverable reviewers will review all deliverables using the Quality Control program review and sign-off process before submission to the County.

Additional work:

- Coordination between roadway design team and Yamhill County PM
- Coordination between roadway and environmental design team to confirm and mitigate wetland impacts.

**1.2 Project Invoices and Progress Reports**

Due to the short project timeline, WHPacific, Inc. shall not prepare a status report or update the schedule.

WHPacific, Inc. shall prepare monthly invoices in a format approved by Yamhill County.

Task 1 Deliverables:

*Summary Reports to be submitted with Final invoices, broken down to subtask level*

*Agency Kickoff Meeting Records*

*Final invoice*

**TASK 2.0      Survey – Update Required**

Consultant shall update the previous survey of the Project area as described herein of this SOW unless otherwise noted in specific tasks. Consultant shall adhere to the standards stipulated by the Oregon Revised Statute (“ORS”) 672.047, subsections (1) through (7). Consultant's Professional Land Surveyor, registered in the State of Oregon, shall review and stamp as “Approved” all survey related deliverables and shall be responsible for all land surveying Services including conformance to all state statutes pertaining to survey and land boundary laws under this SOW. These include, but are not limited to, the following state statutes: ORS Chapters 92, 93, 209 and 672.

**Limits of Consultant Survey**

Consultant shall provide surveying services for a portion of Stag Hollow Creek on Laughlin Road, approximately 1,100 feet northeast of the intersection of Yamhill Newberg Highway (OR 240) and Laughlin Road. Survey will include verification of topographic data (dtm, points, notes, etc.) previously obtained by WHPacific and based on survey control also set by WHPacific. Survey will also consist of preparing a Record of Survey, showing the new centerline alignment, control, and right-of-way monumentation.

**2.1 Survey Control**

The purpose of this Task is to provide the means by which a project can be located relative to horizontal and vertical datum, map projection, and coordinate systems.

**Horizontal Control**

Consultant shall verify and set horizontal control according to County standards, published datum held shall be Oregon State Plane – North Zone, EPOCH 2010.00

**Vertical Control**

Consultant shall verify and set Project vertical control based on current County standards or other datum as approved by County.

**2.2 Recovery and Retracement**

The purpose of this task is to identify the location of the existing Centerline(s), R/W lines, Property line(s) (Resolve), to perpetuate the location of the monuments found and to document the control used for this Project area. These tasks must address the requirements of ORS 209.150 and 209.155 and other survey related statutes.

**Research**

WHPacific shall perform data research as necessary to prepare for and support all Project activities, and to produce Project maps and reports as called for in subsequent tasks.

**Existing R/W & Boundary Resolution**

WHPacific shall resolve the R/W centerlines alignments and R/W lines along Laughlin Road up and down station from the bridge center as needed.

**2.3 Verify Topographic Data and Basemap**

The purpose of this Task is to verify the existing topographic features and basemap used to design this Project. This portion of the survey shall be limited to predetermined critical verification shots near the location of the proposed abutments and the thread of stream and ordinary high-water mark.

**2.4 Verify Digital Terrain Model ("DTM")**

WHPacific shall verify a three-dimensional digital terrain surface using verification topographical data collected within Task 2.3 of this SOW. WHPacific shall verify the DTM that meets County criteria for surface triangulation.

Task 2 Deliverables:

*Survey Control Plan to be used by County and Contractor*

*Topographic Survey of area (signed hard copy and digitally in AutoCAD 2016 or newer)*

*Digital Terrain Model to be produced in AutoCAD 2016 or newer*

*Right-of-way dedication descriptions and exhibits*

**TASK 3.0      Hydraulic Studies (No Work)**

No additional hydraulic analysis or study is anticipated for the completion of the finalization of design and bid phase. The existing hydraulic study and no-rise certificate will be utilized.

Task 3 Deliverables:

*None*

**TASK 4.0      Environmental – Update Required**

**4.1 Wetland Delineation**

Assess current wetland conditions along Stag Hollow Creek then document and delineate any changes to the wetlands and "other waters" on the property. Delineation will use the standard 1987 Corps of Engineers methodology and the Western Mountains, Valleys and Coast Regional Supplement. Collect submeter GPS data of all wetland boundaries and Ordinary High Water Lines (OHWL).

#### **4.2 Endangered Species Documentation**

Prepare an updated Wetland Delineation Report and map to Oregon Department of State Lands (DSL) standards, and DSL cover sheet. Submit for DSL concurrence. Cost estimate includes a \$437 cost for DSL report review.

We assume that no site review will be required for delineation concurrence from DSL. If a site review is requested, a separate cost estimate will be provided.

##### Additional work:

- Prepared new exhibits for Wetland Delineation Report based on updated wetland locations and project design

#### **4.3 Permitting**

WHPacific will coordinate with Oregon Department of State Lands (DSL) and US Army Corps of Engineers (USACE) staff to determine if a Section 404 permit or Fill/Removal permit will be necessary based on the updated delineation information. WHPacific will prepare and submit a memorandum to DSL and USACE describing substantiating that there will be no “regulated activities” within the wetlands and waters (USACE), or that the work is otherwise exempt from regulation under DSL rules (<50 cubic yards of fill or removal). The lack of impact with the 2011 Joint Permit Application and agency correspondence will be attached. This memorandum will request concurrence with the 2011 finding of “no permit needed”. The memorandum will include updated project maps and description.

##### Additional work:

- Prepared new exhibits for Joint Permit Application based on updated project design

#### **4.4 Cultural Resource Inventory – NEW TASK**

Work for this project will consist of four parts; site files search, permitting, fieldwork, and report completion. A site files search will identify previously recorded sites and cultural resources projects within a one-mile radius of the project. An application for an Archaeological Excavation Permit will be submitted to the State Historic Preservation Office (SHPO) as this work is being conducted on property owned by Yamhill County. Once the permit is issued, one WHPacific archaeologist will conduct an intensive pedestrian survey and subsurface sampling of the road shoulders to the extent of the project area. It is assumed that no more than one archaeological site will be recorded in addition to the roadway and no more than one isolated find will be encountered during this work. A report summarizing findings of the field work will be submitted to the State Historic Preservation Office within 40 business days of the completion of fieldwork.

#### **4.5 Fish Passage Plan – NEW TASK**

Work associated with this task will consist of the completion of the Oregon Department of Fish and Wildlife’s (ODFW) “Fish Passage Plan for a Road-Stream Crossing.” The application will include information on the project location as well as information on the existing and proposed crossing, proposed construction methods, and future maintenance. The application will also include plans that depict existing and proposed conditions, the stream profile at the crossing, stream channel cross sections, and details of proposed structures. The application will be submitted to ODFW for approval.

##### Task 4 Deliverables:

*Wetland Delineation Report*

*GPS Boundaries and OHWLs*

*Memorandum of no impact, or Joint Permit Application (USACE and DSL)*

*Archaeological Excavation Permit – New Deliverable*  
*Draft and Final Cultural Resource Inventory Report – New Deliverable*  
*Fish Passage Plan – New Deliverable*

**TASK 5.0      Design - Update**

**5.1 Preliminary Bridge and Roadway Design**

No update required

**5.2 Cost Estimate**

No update required

**5.3 Finalize Design**

WHPacific, Inc. will finalized the construction plans from the 2011 contract and update the design to the current design standards noted earlier in this SOW.

WHPacific, Inc. will provide 100% unstamped set of plans and construction cost estimate for review by the County before the final stamped set of documents to be used for construction and bidding.

**Anticipated Work Task:**

- Site Visit to inspect the Spenser Creek Girders
- Confirm Spencer Creek Girders design meets HL-93 Design Loading
- Update the foundation from a micropile design to a pipe pile design per the geotechnical engineers recommendation
- Update the bridge barrier design and detailing to meet current design standards.
- Update the roadway design as needed with any traffic and bridge barrier updates.
- Update the sheet pile retaining wall design.

**Additional work:**

- Redesigned the roadway to add superelevation and increase the design speed to 30mph
- Studied different roadway design options to maintain only one retaining wall
- Studied the existing construction staging, recognized a fatal flaw and requested a full closure
- Added two additional retaining walls to have zero wetland impacts
- Developed project construction specification
- Developed project construction cost estimate

**Task 5 Deliverables:**

*100% unstamped construction plan set, 11x17 size (1 paper copy, 1 electronic copy)*  
*100% unstamped construction specification and special provisions (1 paper copy, 1 electronic copy)*  
*100% unstamped engineer's estimate, letter sized (1 paper copy, 1 electronic copy)*  
*Final stamped construction plan set, 11x17 size (1 paper copy, 1 electronic copy)*  
*Final stamped construction specification and special provisions (1 paper copy, 1 electronic copy)*  
*Final engineer's estimate, letter sized (1 paper copy, 1 electronic copy)*

**TASK 6.0      Geotechnical Investigation - New**

**6.1 Subsurface Investigation**

The boring from Foundation Engineering, Inc's previous investigation was located along the east side of the proposed bridge in the southern one-third of the span. Foundation Engineering proposes to drill one exploratory boring near the planned north abutment to supplement the original boring. The boring will be advanced with a truck-mounted drill rig using mud-rotary drilling techniques. The anticipated boring depth is  $\pm 50$  feet, however, the actual depth may be adjusted in the field depending on the subsurface conditions encountered.

Sampling is planned at 2½-foot intervals to a depth of  $\pm 20$  feet and at 5-foot intervals thereafter. Disturbed soil samples will be taken with a split-spoon sampler as part of the Standard Penetration Test (SPT). Relatively undisturbed samples of the fine-grained soil may also be obtained by pushing thin-walled Shelby tubes. The samples will be retained for possible laboratory testing. Upon drilling completion, the borehole will be backfilled in accordance with Oregon Water Resources Department guidelines.

Drilling will be completed in the southbound travel lane to avoid conflicts with overhead utilities. A temporary lane closure will be required. Traffic control will be provided by a flagging subcontractor in accordance with the ODOT Temporary Traffic Control Handbook (2011). The traffic control will include two flaggers, signs, and cones. Foundation Engineering has assumed a County permit will not be required for drilling.

**6.2 Laboratory and Field Testing**

Laboratory testing may include moisture content, percent fines, and/or Atterberg limits tests on selected samples to classify the foundation soils and estimate their engineering properties. Field vane measurements will be completed on Shelby tube samples (if retrieved) to estimate the undrained shear strengths of fine-grained soils. Resistivity and pH testing will be completed to help evaluate the corrosivity of the foundation soils.

**6.3 Analysis and Engineering Report**

Foundation Engineering will complete analysis to provide seismic design parameters, evaluate the liquefaction hazard, and design pile foundations. Lateral earth pressure recommendations for abutment walls and sheet pile walls will also be provided. The County plans to use a standard pavement section for the approaches. Therefore, pavement design is not required.

The findings of the investigation will be summarized in a Foundation Report. The report will be completed in general accordance with the current ODOT Foundation Design and Report Writing Guidelines, but it is assumed no ODOT review is planned. The report will include the logs for the exploratory borings and a summary of the field and laboratory test results. Recommendations for foundation design and construction will be provided.

The report will address the following:

- Site Conditions
  - Surface and subsurface conditions
  - Ground water conditions
- Seismic Evaluation
  - AASHTO/ODOT response spectra
  - Summary of local faults
  - Liquefaction hazard evaluation

- Pile Foundation Recommendations
  - Recommended pile section and tip protection
  - LRFD factored and nominal axial resistances
  - Nominal uplift resistance
  - Minimum and estimated tip elevations and estimated lengths
  - Recommended pile hammer field energy range
- Bridge Abutment Walls
  - Lateral earth pressures
  - Backfill recommendations
- Sheet Pile Walls
  - Lateral earth pressures
  - Backfill recommendations

#### **6.4 Foundation Data Sheet**

Foundation Engineering will prepare a Foundation Data Sheet (FDS) summarizing the boring information. WHPacific will provide a base map for the FDS in AutoCAD LT2018 format.

#### **Task 6 Deliverables:**

*Foundation Report*

*Foundation Data Sheet*

#### **Task 7.0 Bid Support - New**

##### **7.1 Pre-Bid and Pre-construction Support**

- Provide engineering and design support during the bid phase.
- If there is a pre-bid meeting, attend and provide technical support throughout the bidding process.
- Provide interpretation of construction plans and specifications
- Provide addendum support, as required.
- Attend the Pre-Construction meeting and provide support throughout the preconstruction process

#### **Task 7 Deliverables:**

*Addendum documents*

#### **Task 8.0 Additional Services – Contingency – Remove Section**

Perform additional services which are not covered under the above tasks as directed in writing by the County's Project Manager. Contingency tasks for this project may include, but are not limited to:

##### **8.1 Survey**

- **Topographic Data and Basemap (CONTINGENCY TASK)**

The purpose of this task is to collect the existing topographic features and create a basemap of an area(s) outside the previously collected topographic area by WHPacific. This area(s) shall be defined and approved by design engineer and Yamhill County prior to commencement of this task.

- **Digital Terrain Model (“DTM”) (CONTINGENCY TASK)**

WHPacific shall create a three-dimensional digital terrain surface using the previously collected topographic features and collected topographic features as outlined in Task 2.3. The model shall be created to meet County criteria for surface triangulation.

- **R/W Descriptions and sketch Maps**

WHPacific shall use the R/W resolution completed in Task 2.2 and the Engineers design centerline to develop the descriptions and sketch maps for 2-4 parcel(s), according to ORS Chapter as stated above. This task shall include the review of a previously created dedication area and the preparation of additional dedications due to Yamhill County Engineering design standards for roadway widths.

## **8.2 Environmental Permitting (JPA)**

WHPacific will prepare a Wetland Permit Application. Application will include a project description, wetland description and functional assessment, purpose and need statement, volumes of fill/removal within wetlands, site plans and cross sections. Application will also include an alternatives analysis looking on-site alternative designs that would minimize wetland impacts, to support the proposed development alternative.

WHPacific will prepare a Wetland Permit Application, if an impact is identified, for submittal to DSL and USACE. Application will include a project description, wetland description and functional assessment, purpose and need statement, volumes of fill/removal within wetlands, site plans and cross sections. Application will also include an alternatives analysis looking at other potential sites for the project in the market area, and on-site alternative designs that would minimize wetland impacts, to support the proposed development alternative.

Compensatory wetland mitigation will be through purchase of mitigation credits from a local mitigation bank, if possible. If mitigation credits are not available, on-site wetland mitigation development services can be provided under a separate cost estimate.

### Task 8.2 Deliverables:

*Joint Permit Application (USACE and DSL)*

**Contingency tasks were not required – Reallocate funds back to Tasks 1.0 to 7.0, as needed.**

**Design Scope of Work  
Stag Hollow Creek (Laughlin Road) Bridge  
Yamhill County Board Order Project No. 11-131**

**Final bid document preparation**

The final design package will be prepared for the entire project limits. The work scope has been prepared assuming only one bid package will be prepared.

Return correspondence to:

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Accepted by Yamhill County  
Board of Commissioners on  
5/2/19 by Board Order  
# 19-135

Project Stag Hollow Creek (Laughlin Road) Bridge - Yamhill Co: Board Order Proj. No. 11-31 - Amendment  
 Date: April 18, 2019

Addendum Contract Fee Estimate

Task No.	Amendment Task Title	Total Labor Hours	Total Direct Labor Cost	Expenses	Total WHPacific Cost	Total Subconsultant Cost	Total Amendment Budget	Existing Budget	Total Budget
<b>1.0</b>	<b>Project Management and Quality Assurance</b>								
1.1	Project Management and Coordination	50	\$ 9,230	\$ -	\$ 9,230	\$ -	\$ 9,230	\$ 5,090	\$ 14,320
1.2	Project Invoices and Progress Reports	5	\$ 410	\$ -	\$ 410	\$ -	\$ 410	\$ 1,252	\$ 1,662
	<b>Task 1 Subtotal =</b>	<b>55</b>	<b>\$ 9,640</b>	<b>\$ -</b>	<b>\$ 9,640</b>	<b>\$ -</b>	<b>\$ 9,640</b>	<b>\$ 6,342</b>	<b>\$ 15,982</b>
<b>2.0</b>	<b>Survey</b>								
2.1	Survey Control		\$ -	\$ -	\$ -	\$ -	\$ (1,502)	\$ 2,456	\$ 954
2.2	Recovery & Retracement		\$ -	\$ -	\$ -	\$ -	\$ (3,897)	\$ 5,400	\$ 1,503
2.3	Verify Topo Data & Basemap		\$ -	\$ -	\$ -	\$ -	\$ (1,128)	\$ 3,000	\$ 1,872
2.4	Verify Digital Terrain Model		\$ -	\$ -	\$ -	\$ -	\$ (1,215)	\$ 2,304	\$ 1,089
	<b>Task 2 Subtotal =</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (7,742)</b>	<b>\$ 13,160</b>	<b>\$ 5,418</b>
<b>3.0</b>	<b>Hydraulic Studies (No Work)</b>								
<b>4.0</b>	<b>Environmental</b>								
4.1	Wetland Delineation		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,076	\$ 2,076
4.2	Wetland Documentation		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,782	\$ 3,782
4.3	Permitting		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,916	\$ 3,916
4.4	Cultural Resource Inventory	51	\$ 6,410	\$ 150	\$ 6,560	\$ -	\$ 6,560	\$ -	\$ 6,560
4.5	Fish Passage Plan	31	\$ 3,440	\$ 2	\$ 3,442	\$ -	\$ 3,442	\$ -	\$ 3,442
	<b>Task 4 Subtotal =</b>	<b>82</b>	<b>\$ 9,850</b>	<b>\$ 152</b>	<b>\$ 10,002</b>	<b>\$ -</b>	<b>\$ 10,002</b>	<b>\$ 9,774</b>	<b>\$ 19,776</b>
<b>5.0</b>	<b>Design</b>								
5.1	Preliminary Bridge and Roadway Design		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5.2	Cost Estimate		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5.3	Finalize Design	270	\$ 34,058	\$ -	\$ 34,058	\$ -	\$ 34,058	\$ 27,226	\$ 61,284
	<b>Task 5 Subtotal =</b>	<b>281</b>	<b>\$ 34,058</b>	<b>\$ -</b>	<b>\$ 34,058</b>	<b>\$ -</b>	<b>\$ 34,058</b>	<b>\$ 27,226</b>	<b>\$ 61,284</b>
<b>6.0</b>	<b>Geotechnical Investigation</b>								
6.1	Subsurface Investigation		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,854	\$ 7,854
6.2	Laboratory and Field Testing		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 565	\$ 565
6.3	Analysis and Engineering Report		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,595	\$ 9,595
	<b>Task 6 Subtotal =</b>	<b>13</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 18,014</b>	<b>\$ 18,014</b>
<b>7.0</b>	<b>Bid Support</b>								
7.1	Pre-Bid and Pre-construction Support		\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,914	\$ 2,914
	<b>Task 7 Subtotal =</b>	<b>22</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,914</b>	<b>\$ 2,914</b>
	<b>Total Labor Hours</b>	<b>398</b>							
	<b>Total Costs</b>		<b>\$ 53,548</b>	<b>\$ 152</b>	<b>\$ 53,700</b>	<b>\$ -</b>	<b>\$ 45,958</b>	<b>\$ 77,430</b>	<b>\$ 123,388</b>
<b>8.0</b>	<b>Additional Services - Contingency Items</b>								
8.1	Survey	8							
	Topographic Data & Basemap		\$ -	\$ -	\$ -	\$ -	\$ (3,792)	\$ 3,792	\$ -
	Digital Terrain Model		\$ -	\$ -	\$ -	\$ -	\$ (4,468)	\$ 4,468	\$ -
	R/W Descriptions & Sketch Maps		\$ -	\$ -	\$ -	\$ -	\$ (2,304)	\$ 2,304	\$ -
8.2	Environmental - Permitting (JPA)		\$ -	\$ -	\$ -	\$ -	\$ (7,400)	\$ 7,400	\$ -
	<b>Task 8 Subtotal =</b>	<b>0</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (17,964)</b>	<b>\$ 17,964</b>	<b>\$ -</b>
	<b>Total Labor Hours</b>	<b>398</b>							
	<b>Total Costs</b>		<b>\$ 53,548</b>	<b>\$ 152</b>	<b>\$ 53,700</b>	<b>\$ -</b>	<b>\$ 27,994</b>	<b>\$ 95,394</b>	<b>\$ 123,388</b>

B.O. 19-135  
 Exhibit "A"