

W. S. C. I

Memorandum Date: December 27, 2010

Order Date: January 12, 2011

TO: Lane County Board of Commissioners

DEPARTMENT: Public Works

PRESENTED BY: Bill Morgan, County Engineer

AGENDA ITEM TITLE: In the matter of approving a professional services contract with OBEC Consulting Engineers for the Sweet Creek Road Retaining Wall Construction Project in the not-to-exceed amount of \$450,000

I. MOTION

MOVE THAT THE BOARD ORDER BE APPROVED FOR LANE COUNTY TO ENTER INTO A PROFESSIONAL SERVICES CONTRACT WITH OBEC CONSULTING ENGINEERS FOR SWEET CREEK ROAD RETAINING WALL CONSTRUCTION PROJECT IN THE AMOUNT OF \$450,000; AND THAT THE COUNTY ADMINISTRATOR BE AUTHORIZED TO EXECUTE THE CONTRACT AND ANY RELATED AMENDMENTS.

II. DISCUSSION

A. Background / Analysis

On July 23, 2008, Board Order No. 08-7-23-2 was adopted authorizing an application for funding from the Western Federal Lands Highway Division-Federal Highway Administration (WFLHD-FHWA) under the 2008 Oregon Forest Highway Program (OFHP). County staff submitted an application for the Sweet Creek Road Retaining Wall Construction Project (hereinafter referred to as "Project") requesting \$2,500,000, but after further project scoping, WFLHD-FHWA approved funding for the Project in the amount of \$4,655,000. Project funding includes \$450,000 for preliminary engineering and environmental clearance, \$300,000 for construction engineering, and \$3,905,000 for construction.

On May 19, 2010, Board Order No. 10-5-12-1 (in the matter of the Public Works Five-Year Capital Improvement Program/CIP for FY 2010/2011 - FY 2014/2015) was adopted approving the Project, which involves removing the existing retaining wall and constructing a new retaining wall (approximately 1,050 feet).

On September 1, 2010, Board Order No. 10-9-1-11 was adopted approving a reimbursable agreement with WFLHD-FHWA for the Project in the amount of \$4,665,000.

Persuant to the reimbursable agreement, County staff will perform preliminary engineering and environmental clearance with the assistance of OBEC Consulting Engineers through a professional services contract in the not-to-exceed amount of \$450,000. These services provided by OBEC will include project management and coordination, environmental services, public outreach and education, geotechnical/geological services, hydraulics and hydrology services, traffic engineering, and pavement design. County staff will perform the majority of the construction engineering and will bid and administer the Project.

All expenses for the Project included within this professional services contract are reimbursable as they are incurred through the FHWA reimbursable agreement.

B. Recommendation

It is recommended by Public Works staff that the Board adopt the order and approve the motion.

III. ATTACHMENTS

Order
Professional Services Contract (DRAFT)

**IN THE BOARD OF COMMISSIONERS OF LANE COUNTY
STATE OF OREGON**

ORDER NO. (**In the matter of approving a professional
(services contract with OBEC Consulting
(Engineers for the Sweet Creek Road
(Retaining Wall Construction Project in the
(not-to-exceed amount of \$450,000**

WHEREAS, on July 23, 2008, Board Order No. 08-7-23-2 was adopted authorizing an application for funding from the Federal Lands Highway Division-Federal Highway Administration (WFLHD-FHWA) under the 2008 Oregon Forest Highway Program; and

WHEREAS, Lane County submitted the application for the project requesting \$2,500,000, but after further project scoping, WFLHD-FHWA approved funding for the project in the amount of \$4,665,000; and

WHEREAS, on May 19, 2010, Board Order No. 10-5-12-1 (in the matter of the Public Works Five-Year Capital Improvement Program/CIP for FY 2010/2011 - FY 2014/2015) was adopted approving the Sweet Creek Road Retaining Wall Project, which involves removing the existing retaining wall and constructing a new retaining wall (approximately 1,050 feet); and

WHEREAS, the total Project expense is estimated at \$4,665,000, which includes \$450,000 for preliminary engineering and environmental clearance, \$300,000 for construction engineering, and \$3,905,000 for construction; and

WHEREAS, on September 1, 2010, Board Order No. 10-9-1-11 was adopted approving a reimbursable agreement with WFLHD-FHWA for the Project in the amount of \$4,665,000; and

WHEREAS, Lane County and its consultant will perform preliminary engineering and environmental clearance, and Lane County will perform the majority of the construction engineering and will bid and administer the project; and

WHEREAS, in November 2010, after Lane County staff solicited and scored proposals per Lane Manual 21.118(6) from five prospective consultants, OBEC was recommended by the selection committee, the other four proposers were so notified, and the time for protest has passed; and

WHEREAS, Lane County desires to enter into a Professional Services Contract with OBEC Consulting Engineers in the not-to-exceed amount of \$450,000 for preliminary engineering services to include project management and coordination, environmental services, public outreach and education, geotechnical/geological services, hydraulics/hydrology services, traffic engineering, and pavement design; and

WHEREAS, all expenses for the project included within this professional services contract are reimbursable as they are incurred through the FHWA reimbursable agreement;
NOW THEREFORE, BE IT

ORDERED, that the Department of Public Works is authorized to enter into a Professional Services Contract with OBEC Consulting Engineers in the not-to-exceed amount of \$450,000; **AND, BE IT**

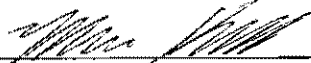
FURTHER ORDERED, that the County Administrator is authorized to execute the contract in substantially the form as Attachment A to this Order and also is authorized to execute any related amendments.

ENACTED this _____ day of January 2011.

Chair
Lane County Board of Commissioners

APPROVED AS TO FORM

Date 12-30-10 Lane County



OFFICE OF LEGAL COUNSEL

PROFESSIONAL SERVICES CONTRACT

THIS AGREEMENT is entered into by and between LANE COUNTY, OREGON, a political subdivision of the State of Oregon, hereinafter called COUNTY, and OBEC Consulting Engineers, hereinafter called CONTRACTOR.

Whereas, County has a need for the type of professional services possessed by CONTRACTOR;

Whereas, CONTRACTOR desires to provide those professional services;

NOW, THEREFORE, the parties agree:

1. CONTRACTOR shall perform professional engineering support services for County as stated in the "Sweet Creek Road Retaining Wall Replacement MP 1.90 to 2.20 Lane County" dated December 20, 2010, attached and incorporated by this reference as Exhibit A; and additional work requested by County at the hourly rate(s) listed on the 2011 Schedule of Fees attached and incorporated by this reference as Exhibit B.

2. CONTRACTOR shall comply with all terms and conditions of this agreement, including all terms and conditions of the attached exhibits.

3. In consideration for CONTRACTOR'S performance, County agrees to pay an amount not to exceed \$450,000.00, payable as follows:

4. Any payments by County to CONTRACTOR will customarily be made within thirty (30) days of receipt of an invoice from CONTRACTOR.

5. The contract period shall be from January 13, 2011 to December 31, 2012, with the option to extend contract up to two (2) years.

6. The performance of this contract is at CONTRACTOR'S sole risk. The service or services to be rendered under this contract are those of an independent CONTRACTOR who is not an officer, employee or agent of the COUNTY as those terms are used in ORS 30.265. Notwithstanding the Oregon Tort Claims Act or provisions of any other contract, CONTRACTOR is acting as and assumes liability of an independent contractor as to any claims between COUNTY and CONTRACTOR. CONTRACTOR is solely liable for any workers' compensation coverage; social security, unemployment insurance or retirement payments; and federal or state taxes due as a result of payments under this contract. Any subcontractor hired by the CONTRACTOR shall be similarly responsible.

7. CONTRACTOR will not be eligible for any Federal Social Security, State Workers' Compensation, unemployment insurance or Public Employees Retirement System benefits from this contract payment.

8. CONTRACTOR is not currently employed by COUNTY, and will not be under the direct control of COUNTY.

9. The CONTRACTOR, its subcontractors, if any, and all employers working under this contract are subject employers under the Oregon Worker's Compensation Law and shall comply with ORS 656.017, which requires them to provide Worker's Compensation coverage for all their

subject workers or be exempt under ORS 656.126.

10. COUNTY will report the total amount of all payments to CONTRACTOR, including any expenses, in accordance with Federal Internal Revenue and State of Oregon Department of Revenue regulations.

11. The applicable provisions of the Lane Manual setting forth standard provisions for public contracts (LM 21.130) are hereby incorporated by reference as if fully set forth herein; except for Section 16. This contract exempts contractors providing architectural, engineering and land surveying services or related services according to ORS 279C.100.

12.a. CLAIMS FOR OTHER THAN PROFESSIONAL LIABILITY. CONTRACTOR shall indemnify defend, save, and hold harmless Lane County, its commissioners, officers, agent and employees and Western Federal Lands Highway Division, FHWA, and its directors, officers, agents and employees from any and all claims, suits, actions, losses, liabilities, damages, costs and expenses, including attorney's fees, of whatsoever nature, resulting from or arising out of the acts or omissions of CONTRACTOR or its subcontractors, agents or employees under this professional services contract.

12.b. CLAIMS FOR PROFESSIONAL LIABILITY. CONTRACTOR shall indemnify, save, and hold harmless Lane County, its commissioners, officers, agents and employees and Western Federal Lands Highway Division, FHWA, and its directors, officers, agents and employees from any and all claims, suits, actions, losses, liabilities, damages, costs and expenses, including attorney's fees, arising out of the professionally negligent acts, errors or omissions of CONTRACTOR or its subcontractors, agents or employees in the performance of CONTRACTOR's professional services under the professional services contract.

13. CONTRACTOR shall provide all insurance called for on the page entitled "Insurance Coverage Required". As evidence of the insurance coverages required by this contract, the CONTRACTOR shall furnish a certificate of insurance to: Lane County Risk Management Division, 125 E. 8th Ave., Eugene, Oregon, 97401. The certificate will specify parties who are Additional Insured and must include a notice provision regarding cancellations. Insurance coverages required under this contract shall be obtained from insurance companies authorized to do business in the State of Oregon. If CONTRACTOR is self-insured under the laws of the State of Oregon, CONTRACTOR shall provide appropriate declarations of coverage.

14. CONTRACTOR shall not cancel, materially change, or not renew insurance coverages. CONTRACTOR shall notify Lane County Risk Manager, 125 E. 8th Ave., Eugene, Oregon, 97401, of any material reduction or exhaustion of aggregate limits. Should any policy be canceled before final payment by Lane County to CONTRACTOR and should CONTRACTOR fail to immediately procure other insurance as specified, COUNTY reserves the right to procure such insurance and to deduct the cost thereof from any sum due CONTRACTOR under this contract. Any insurance bearing any adequacy of performance shall be maintained after completion of the contract for the full guaranteed period, and should the CONTRACTOR fail to immediately procure such insurance as specified, COUNTY reserves the right to procure such insurance and to charge the cost thereof to CONTRACTOR.

15. Responsibility for payment of damages: Nothing contained in these insurance requirements is to be construed as limiting the extent of CONTRACTOR'S responsibility for payment of damages resulting from CONTRACTOR'S operation under this contract.

16. By execution of this contract, CONTRACTOR certifies under penalty of perjury that:

- a. To the best of CONTRACTOR'S knowledge, CONTRACTOR is not in violation of any tax laws described in ORS 305.380(4); and
- b. CONTRACTOR has not discriminated against minority, women or small business enterprises in obtaining any required subcontracts.

17. CONTRACTOR shall have all licenses and permits necessary to perform the contract.

18. COUNTY shall not be obligated to pay any amount greater than that stated above.

19. Modifications or amendments to this contract shall be effective only if in writing and executed by both parties.

20. Dispute Resolution. The parties shall exert every effort to cooperatively resolve any disagreements they may have under this Agreement. In the event that the parties alone are unable to resolve any conflict under this Agreement, they agree to present their disagreements to a mutually selected mediator. Each party shall bear its own costs for mediation and the parties shall share the cost of the mediator. This procedure shall be followed to its conclusion prior to either party seeking relief from a court, except in the case of an emergency.

If the dispute remains unresolved through mediation, the parties may agree in writing to submit the dispute to arbitration, using such arbitration process as they may choose at the time and which includes the following conditions:

- a. The location of the arbitration shall be in Eugene, Oregon;
- b. Each party shall bear its own costs (except arbitration filing costs), witness fees, and attorney fees;
- c. Arbitration filing costs and any arbitrator's fees will be divided equally between the parties; and
- d. Judgment upon award rendered by the Arbitrator may be entered in a court in Lane County, Oregon.

21. The parties may jointly agree to terminate this agreement and upon the terms of such termination. COUNTY may terminate this contract at any time for any reason or for no reason with no liability on its part, except to pay for services previously provided by giving CONTRACTOR thirty (30) days written notice.

22. Waiver. Failure of COUNTY to enforce any provision of the contract shall not constitute a waiver or relinquishment by COUNTY of the right to such performance in the future nor of the right to enforce that or any other provision of this contract.

23. Severability. If any provision of this contract is declared by a court to illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected; and the rights and obligations of the parties shall be construed and enforced as if the contract did not contain the particular provision held to be invalid.

SIGNATURE PAGE TO FOLLOW

LANE COUNTY, OREGON

DATE: _____

BY: _____
Liane Richardson
Interim County Administrator

OBEC Consulting Engineers
920 County Club Road, Suite 100B
Eugene, Oregon 97401

DATE: _____

BY: _____
Gayle D. Harley, PE
President and Chief Construction Engineer

Federal Tax ID No.: _____

APPROVED AS TO FORM

Date _____ Lane County

LANE COUNTY OFFICE OF LEGAL COUNSEL

INSURANCE COVERAGES REQUIRED

Contractor shall not commence any work until Contractor obtains, at Contractor's own expense, all required insurance as specified below. Such insurance must have the approval of Lane County as to limits, form and amount. The types of insurance Contractor is required to obtain or maintain for the full period of the contract will be:

 X **COMPREHENSIVE COMMERCIAL GENERAL LIABILITY** insurance including personal injury, bodily injury and property damage with limits as specified below. The insurance shall include:

<i>COVERAGES</i>	<i>LIMITS</i>
<u> X </u> Explosion & Collapse	<u> X </u> \$2 million per occurrence
<u> X </u> Underground Hazard	_____ Oregon Tort Claim limits currently at \$1 million combined single limit per accident or occurrence;
_____ Products/Completed Operations	_____ \$2 million all claimants per accident or occurrence (aggregate)
_____ Contractual Liability	_____ Other
<u> X </u> Broad Form Property Damage	
<u> X </u> Owners' & Contractors' Protective	

FORM All policies must be of the occurrence form with combined single limit for bodily injury and property damage. Any deviation from this must be reviewed by the Risk Manager. All claims-made forms must have tail coverage and the prior approval of Risk Manager. Submit a complete copy of claims-made policies and endorsements with the certificate of insurance.

 X **AUTOMOBILE LIABILITY** insurance comprehensive form with limits as specified below. The coverage shall include owned, hired and non-owned automobiles and include Lane County and its divisions, its commissioners, officers, agent, and employees as additional insureds.

LIMITS

<u> X </u>	\$2 million combined single limit per accident for bodily injury and property damage Not less than the Oregon Tort Claims limits
_____	\$1 million combined single limit per accident or occurrence
_____	\$2 million all claimants per accident or occurrence (aggregate)

 X **PROFESSIONAL LIABILITY** insurance – with limits not less than \$1 million per occurrence.

 X **POLLUTION LIABILITY INSURANCE** – with limits not less than \$1 million per occurrence.

 X **ADDITIONAL INSURED CLAUSE** The general and auto liability insurance coverage's required for performance of this contract shall be endorsed to name Lane County and its divisions, its commissioners, officers, agents and employees and Western Federal Lands Highway Division, FHWA, and its directors, officers, agents and employees as additional insureds on any insurance policies required herein with respect to Provider's activities being performed under the Contract. The additional insureds must be named as an additional insured by endorsement, and the policy must be endorsed to show cancellation notices to the Lane County department who originated the contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance.

 X **WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY** as statutorily required for persons performing work under this contract. Any subcontractor hired by Contractor shall also carry Workers' Compensation and Employers' Liability coverage.

EMPLOYER'S LIABILITY

 X Limits of \$500,000.

 X **BUILDER'S RISK** insurance special form. Limits to be the value of the contract or \$ _____

 X **FIDELITY BOND** covering the activities of any person, named or unnamed, responsible for collection and expenditures of funds. Limit \$ _____ per employee.

Any questions concerning insurance and indemnity should be directed to Lane County Risk Management at 541-682-4392. Revised 7/27/09

DRAFT

STATEMENT of WORK
for
SWEET CREEK ROAD RETAINING WALL REPLACEMENT
MP 1.90 TO 2.20
LANE COUNTY
DECEMBER 20, 2010

TASK 1 – PROJECT MANAGEMENT & COORDINATION

The major objectives of this task are to establish the lines of communication and set forth the priorities between Consultant and the County; coordinate and attend meetings between Consultant and the County as needed; and ensure all contract document preparation is submitted and approved in a timely manner.

Consultant shall coordinate preliminary and final engineering design tasks with the County, and the design team. Consultant shall schedule, prepare for, attend, and document each Project Team meeting and coordinate these activities. The minimum following meetings are anticipated: an initial kickoff meeting after Notice to Proceed; ongoing internal and County-attended Project Team meetings; and Plan-in-Hand Comment Review meetings with the County and WFLHD following submittal of the Preliminary (30%) Design Package, the Advance (70%) PS&E documents, and the Final (95%) PS&E documents.

Consultant shall prepare a detailed Project schedule showing all major tasks and subtasks, Project team meetings, and milestone dates. The Project schedule will be updated monthly or as needed for the duration of the contract.

Consultant shall prepare detailed monthly progress reports and progress billings. Progress reports and billing invoices shall be submitted to County on a monthly basis.

Task 1.1 Overall Project Management & Coordination

Consultant shall provide the following Project management and coordination services:

- Schedule, coordinate, and supervise Project work
- Maintain liaison and coordination with the County and WFLHD, and outside agencies
- Conduct monthly progress reviews
- Prepare invoices, progress reports, and supporting data
- Monitor Project budget
- Prepare, maintain, and update Project activity schedule

Task 1.2 Kickoff Meeting

Consultant shall schedule and prepare for the Project kickoff meeting. The kickoff meeting will be attended by as many consultant Team and WFLHD staff as deemed beneficial to the project by Consultant PM and County Engineering. Consultant shall provide meeting minutes. It is assumed the meetings will be held at the County offices.

Task 1.3 Ongoing Internal Design Team and County Coordination Meetings

Consultant shall schedule and prepare for internal team meetings throughout the Project design phase as needed to keep the project on schedule and within budget. Consultant shall schedule and prepare for County Coordination meetings throughout the Project design phase as needed up to keep the project on schedule. Consultant shall provide meeting minutes of County Coordination meetings. It is assumed the County Coordination meetings will be held at the County offices.

Deliverables/Schedule: Consultant shall provide:

- Monthly invoices, progress reports, and updated schedules due by the 20th of the month
- Project schedule due within 2 weeks following NTP

TASK 2 – SURVEYING AND MAPPING

County staff will perform this task.

TASK 3 – ENVIRONMENTAL SERVICES

This Project will receive funding from the Western Federal Lands Highway Division (WFLHD) of the Federal Highway Administration (FHWA), thereby creating a nexus for Project compliance with the National Environmental Policy Act (NEPA). WFLHD prepared a Project Identification Report (PIR) to assess the feasibility and cost of the project. The PIR indicates that the project could likely achieve Class II NEPA compliance and, therefore, be considered to not have significant environmental impacts and be Categorically Excluded (CE) from further NEPA requirements. Although this Project does not fall directly under the “C list” of Categorical Exclusions (23 CFR Part 771.117(c)), it can be permitted under NEPA with WFLHD approval as an un-listed Categorical Exclusion (23 CFR Part 771.117(d)). Therefore, for the purposes of this scope, we have included a task for the preparation of Categorical Exclusion documentation.

In addition to NEPA compliance documentation, this Project will require other environmental permits and documentation. The Siuslaw River provides habitat for coho salmon (Oregon Coast Evolutionarily Significant Unit [ESU]), which is listed as threatened under the Federal Endangered Species Act (ESA), and there could be habitat present within the Area of Potential Impact (API) for northern spotted owls and marbled murrelets, both of which are also listed as threatened under the ESA. Rare plants may also be present within the API. As such, the Project will need to demonstrate compliance with the ESA through either compliance with an existing programmatic agreement (e.g., Standard Local Operating Procedures for Endangered Species [SLOPES IV]) or through a Biological Opinion or Letter of Concurrence issued by the National Marine Fisheries Service (NMFS) and/or the United States Fish and Wildlife Service (USFWS). The presence of jurisdictional wetlands within the API is unknown at this time, but the Siuslaw River is considered a “waters of the United States” and “waters of the State” and, as such, any construction activity below the Ordinary High Water Mark (OHWM) of the river requires authorization from the Department of State Lands (DSL) and the US Army Corps of Engineers (ACOE) in accordance with Oregon’s Removal-Fill Law (ORS 196.800-990) and Sections 404 and 401 of the Clean Water Act, respectively.

The following subtasks outline the work effort required to receive approvals and permits from state and federal agencies for the environmental components of the Project. The environmental work includes:

- NEPA Cat Ex Documentation
- Wetland Determination and OHWM Fieldwork
- Wetland/Waters of the U.S. Delineation and Report - CONTINGENCY
- Joint Permit Application (JPA)
- ESA compliance documentation for listed fish species
- No Effect Memorandum for listed wildlife and botanical species
- Oregon Fish Passage Law Compliance

Task 3.1 NEPA Categorical Exclusion Documentation

Consultant shall prepare CE close out documentation following the most recent WFLHD Procedures to document that the project does not include significant environmental impacts and does not warrant further NEPA review. The CE Documentation serves a Federal purpose and therefore focuses primarily on compliance with Federal statutes, regulations, and policies. Based on the scope of the Project and existing site conditions, it is likely that the Project meets the criteria of 23 CFR 771.117(a) and (b), which authorizes the CE process.

Deliverables: Consultant shall prepare:

- Draft Categorical Exclusion (one [1] electronic copy, Word format, to County)

- Final Categorical Exclusion (one [1] electronic copy, PDF format, to County)

Assumptions:

- If project environmental impacts are considered to be significant and NEPA compliance must be provided by preparation of an Environmental Assessment (EA), preparation of an EA will be addressed through a consultant contract amendment.

Task 3.2 Wetland/Waters Delineation and Report

Likely jurisdictional wetlands were observed within the project area during preliminary project scoping. As such, Consultant shall visit the Project site to delineate jurisdictional wetland and water boundaries. The wetland boundaries within the Project API must be delineated in accordance with the criteria and methods described in the 1987 ACOE Delineation Manual (*Environmental Laboratory Technical Report Y-87-1*) and the Western Mountains, Valleys and Coast Region Supplement (ACOE 2008).

Consultant shall assess the Ordinary High Water Mark (OHWM) along Siuslaw River at the project site using field indicators (OAR 141-085-0010 (150) (a-f)). The 2-year flood event elevation (calculated) must be used in the absence of field indicators. Consultant shall place flags in the field to show the OHWM of all surface waters in the API.

Consultant shall place flags in the field to show wetland and upland plot locations and wetland boundaries. Flags must be appropriately labeled and numbered to identify their function. All flags must be surveyed by Consultant.

Consultant's wetland scientists shall prepare a draft and final Wetland/Waters of the State/U.S. Delineation Report (Wetland Delineation Report) for the API in accordance with the DSL technical requirements and standards (OAR 141-090-0030 through-0035). Consultant shall prepare appropriate graphics to accompany the Wetland Delineation Report as required pursuant to OAR 141-090-0035. The Wetland Delineation Report shall include all wetland field data sheets and shall provide a full description of the soils, vegetation, and hydrology within the delineated areas and adjacent uplands. The report shall include appropriate graphics, such as a survey map of the wetland and waters boundaries, site location map, National Wetland Inventory or Local Wetland Inventory map, soil survey map and representative photographs.

Consultant shall complete the appropriate DSL cover form for submitting the final Wetland Delineation Report to the DSL for review, approval, and concurrence. The report shall also be submitted to the ACOE for a jurisdictional determination.

Consultant shall answer questions from the DSL and ACOE via telephone calls or email regarding the Wetland Delineation Report. Consultant shall also be available for one on-site visit with representatives of the County, ACOE, and DSL as necessary to provide additional information, clarification, and/or documentation.

Deliverables/Schedule: Consultant shall prepare:

- Draft Wetland Delineation Report, (one [1] electronic copy, Word format, to County)
- Final Wetland Delineation Report, (two [2] hard copies to County (Applicant), one [1] hard copy to DSL with appropriate cover form and one [1] hard copy to ACOE, one [1] electronic copy, PDF format, to County)

Assumptions:

- Consultant wetland scientists shall confine the delineation of wetland and water boundaries to the API for the Project. The API will be confirmed by County prior to the start of field work. Delineation of additional areas outside the defined API or a larger area is not covered under this scope and cost estimate and would require a contract amendment.

- No hydrologic or groundwater monitoring is included in the cost estimate for determining wetland boundaries.

Task 3.3 Prepare Joint Permit Application

Consultant shall complete preparation of a draft and final JPA for an ACOE Section 404 Nationwide Permit and a DSL General Authorization Removal-Fill Permit to authorize work within wetlands and waters of the U.S. and State. Preparation of the JPA may include correspondence in the form of telephone calls, letters, and memorandums to document permit needs. Consultant shall also prepare brief narratives and descriptions on Project purpose and need, potential impacts, and Project alternatives using information provided by Client as necessary to complete the JPA.

Consultant shall provide pre-submittal coordination with representatives of the ACOE and DSL to confirm permitting requirements and application procedures. This coordination shall include pre-application correspondence. Consultant shall ensure that features and impacts are correctly identified for the permit applications. Consultant shall prepare all necessary drawings, maps, and photographs for inclusion in the permit applications. Consultant engineer will prepare engineering drawings, impact calculations, and Project description support for inclusion in the JPA, with assistance from Consultant environmental staff. During the development of the permit application, Consultant shall evaluate potential wetland impacts and methods for avoidance, minimization, or mitigation. If permanent wetland impacts are unavoidable, Consultant shall contact local representatives from the ACOE and DSL to discuss acceptable mitigation options.

Following the submission of the JPA, Consultant shall respond to questions or comments raised by the agencies during their review of the permit application. Consultant shall assist the agencies in developing appropriate responses to questions regarding the information submitted to the agencies on this Project. This task may include correspondence and clarification of the JPA and related tasks as necessary to clarify regulatory agency concerns and to facilitate the issuance of ACOE's and DSL's permits for this Project.

The JPA shall be prepared in accordance with requirements set forth in OAR 141-085-0025 (which is assumed to satisfy both DSL and ACOE permit application requirements). The preparation of the JPA application shall include the following:

- Description of the Proposed Action
- Information from wetland delineation report, if applicable
- Volume of material removed from or placed in waters of the State/US
- Area of temporary and permanent impacts proposed to waters of the State/US, including wetlands
- Linear feet of stream affected by Project by direct fill or removal activities
- Alternatives analysis stating other project design alternatives considered and reason for proposed design
- Methods used to minimize impact of Project to waters of the State/US, including design considerations and methods of construction
- Appropriate restoration plan needed for temporary impacts
- Stormwater management plan
- Statement regarding presence/absence of ESA species in Project API
- Appropriate documentation of effect to ESA listed species—if any are present—results of consultation (e.g., SLOPES IV Compliance Document or BA)
- Statement that no Special Areas of Concern are present in the Project API
- Statement regarding presence/absence of historic or cultural resources in Project API, with appropriate documentation attached, if necessary
- Additional information necessary for a complete application in accordance with state and federal regulations

- All figures necessary for a complete application must be in 8.5 x 11, black and white or in color; all figures must be legible and must copy legibly in black and white

Deliverables/Schedule: Consultant shall prepare:

- Draft Joint Permit Application, (one [1] electronic copy, Word format, to County)
- Final Joint Permit Application, (one [1] electronic copy to County)

Assumptions:

- Project-related impacts will be permitted under the existing Nationwide Permit Program (NWP) administered by the ACOE and General Authorizations (GA) administered by DSL. An Individual Wetland Fill Permit will not be required from either ACOE or DSL. This scope does not include the additional effort of preparing an Individual Wetland Fill permit application (if it is later determined that the Project cannot be permitted under a Nationwide Permit).
- ACOE permit and DSL permit will be applied for concurrently through a JPA.
- Permanent wetland and waters impacts from the proposed Project will not exceed 0.20 acre.
- No formal on-site wetland/waters mitigation will be required. The repair of the retaining wall will result in a permanent net reduction of fill within wetlands and/or waters (the Project will be designed as a self-mitigating action).
- Preparation of a formal compensatory wetland mitigation plan and locating offsite mitigation sites (except for local mitigation banks) for the Project is not covered under this SOW. Should the ACOE or DSL require direct mitigation and a formal compensatory wetland mitigation plan to mitigate for proposed wetland or waters impacts, an amendment to the SOW would be required.
- ACOE/DSL permit conditions will not change during the application phase.
- County shall review draft JPA and provide comments to Consultant within two (2) weeks of receipt of draft.
- DSL may require a permit fee, depending on the type of authorization required and the amount of fill or excavation to be performed in wetlands and/or waters. Permit fees will be the responsibility of the County.

Task 3.4 Conduct Site Reconnaissance and Prepare Noxious Plant Report

Consultant shall review preliminary Project plans and specifications for the determination of potential impacts from the Project. Consultant shall consult with USFWS, NMFS, and ODFW to obtain the most current information on the presence of proposed, threatened, and endangered species. Consultant shall obtain results of a search of the Oregon Natural Heritage Program Database.

Consultant shall conduct a field survey of the API for the presence of suitable habitat for protected and sensitive species, including botanicals. A single field visit shall be conducted. If the site visit is conducted outside the flowering times for listed rare plant species, the Consultant shall determine whether habitat is present that could support listed species. The Project API shall also be reviewed for the presence of invasive plants, in particular those listed as noxious weeds by the Oregon Department of Agriculture.

The Consultant shall prepare a Noxious Plant Survey Report summarizing findings from the noxious plant survey of the Project API. The report will list non-native species encountered within the study area, determine which species are considered noxious and in need of control, and if necessary, describe appropriate methods of control.

Deliverables/Schedule: Consultant shall prepare:

- Draft Noxious Plant Survey Report (one [1] electronic copy, Word format, to County)
- Final Noxious Plant Survey Report (one [1] electronic copy, PDF format, to County)

Assumptions:

- If protected species are found within the Project site, this information will be included in a Biological Assessment, to be completed under Contingency Task 3.7 or 3.8.

- If listed species or their habitat are not present within the Project API, the Consultant's findings will be included in a No Effect Determination to be prepared under Task 3.5

Task 3.5 Prepare No Effect Documentation

Preliminary Project scoping indicates that the Project will require documentation outlining how the Project will not result in any effects on fish, wildlife, and botanical species listed under the Federal and State ESA, other than OC coho salmon. Based on information gathered under Task 3.4, Consultant shall confirm that Federal or State listed species do not occur in or use the API via communication with local ODFW, NMFS and USFWS staff and through agency database searches. After information pertaining to the absence of listed wildlife and botanical species is gathered and analyzed, Consultant shall prepare a single "No Effect Memorandum."

The document must clearly describe the Project location, the proposed action, and other information required to complete a No Effect Memorandum. In addition, the document must also include any recommendations for timing of vegetation clearing or demolition activities to increase the probability of Project compliance with the Migratory Bird Treaty Act (MBTA).

Deliverables/Schedule: Consultant shall prepare:

- Draft No Effect Memorandum (one [1] electronic copy, Word format, to County)
- Final No Effect Memorandum (one [1] electronic copy, PDF format, to County)

Assumptions:

- The Project will not include effects on listed wildlife or botanical species.

Task 3.6 Prepare SLOPES IV documentation for Listed Fish Species

Applicability of existing programmatic ESA consultations such as the ACOE SLOPES IV Biological Opinion from the NMFS will be evaluated and applied, if feasible and available. Consultation under the Magnuson-Stevens Fishery Conservation and Management Act (MSA) for impacts to Pacific Salmon Essential Fish Habitat (EFH) will also be included in the SLOPES IV documentation.

If NMFS confirms SLOPES IV compliance is sufficient for the Project, Consultant shall prepare a draft SLOPES IV Compliance Document describing how the project complies with SLOPES IV terms and conditions.

When developing the SLOPES IV programmatic documentation, Consultant shall coordinate with Agency and NMFS to ensure that the Project is designed to minimize impacts to listed fish species, and to develop a mitigation plan or construction measures to avoid or minimize impacts. Consultant shall participate in one (1) conference call with County to discuss and approve the conservation measures presented in the BA. Consultant shall respond to questions or comments raised by NMFS during their review of the SLOPES IV programmatic documentation or BA.

Deliverables/Schedule: Consultant shall prepare:

- Draft SLOPES IV Compliance Document (one [1] electronic copy, Word format, to County)
- Final SLOPES IV Compliance Document (one [1] electronic copy, PDF format, to County)

Assumptions:

- If the Project is found to not comply with SLOPES IV terms and conditions, Consultant shall assume formal or informal consultation is required with NMFS and prepare a BA, to be completed under Task 3.8.

Task 3.7 Prepare Wildlife Biological Assessment (CONTINGENCY)

Consultant shall assess general habitat conditions for proposed and listed wildlife species in the Project API. Field reconnaissance associated with this task will be completed under Task 3.3.1. Consultant shall

coordinate with County staff to identify mitigation opportunities that would compensate for Project impacts to listed species and designated critical habitat. Consultant shall develop appropriate measures for minimization and avoidance of impacts to the designated critical habitat of listed species. Consultant shall complete a draft Biological Assessment (BA) documenting potential impacts to listed threatened and endangered wildlife species.

The BA must include the following major components:

- Project site description
- Description of the proposed action
- Baseline environmental conditions
- Presence of wildlife species in the Project API
- Description of wildlife species use and quality of habitat in the Project API
- Evaluation of potential impacts to proposed or listed species
- Evaluation of potential impacts to designated or proposed critical habitat
- Discussion of cumulative effects
- Discussion of interrelated and interdependent effects
- Avoidance, minimization, and conservation measures
- Determinations of effect(s)

When developing the BA, Consultant shall coordinate with County's Project development team and USFWS to verify that the Project is designed to minimize impacts to listed and proposed wildlife species and in developing a mitigation plan or construction measures to avoid or minimize impacts. Consultant shall coordinate with the County and regulatory agency staff to develop appropriate avoidance, minimization, and conservation measures.

Consultant shall review preliminary and advanced Project plans and specifications for consistency with BA requirements or other agreements with USFWS, providing written comments to County by the date(s) that comments are due. If discrepancies are found, Consultant shall notify County immediately and propose changes to maintain consistency with the BA or other agreements with USFWS. During development of the Project and BA, Consultant shall propose construction contract special provisions, as approved by County, which could avoid, minimize, or mitigate Project impacts.

Consultant shall participate in one (1) conference call or meeting with County staff to include the Project engineer, specification writer, and construction Project manager to discuss and approve the conservation measures presented in the BA.

Deliverables/Schedule: Consultant shall prepare:

- Draft BA documentation, (one [1] electronic copy, Word format, to County)
- Final BA documentation, (one [1] electronic copy, PDF format, to County), due fourteen (14) days from receipt of County review comments

Assumptions:

- Preparation of a BA to facilitate ESA consultation with USFWS will be required if proposed Project designs and/or construction actions trigger measurable effects on northern spotted owls and marbled murrelets.
- Project has the potential to affect northern spotted owls and marbled murrelets. No other listed wildlife species will be affected by the Project.

Task 3.8 Prepare Fisheries Biological Assessment (CONTINGENCY)

Consultant shall assess general habitat conditions for proposed and listed fish species in the Project API and the potential for impacts to designated critical habitat and EFH. Field reconnaissance associated with this task will be completed under Task 3.4. Consultant shall coordinate with County staff to identify

mitigation opportunities that would compensate for Project impacts to listed fish species, designated critical habitat, and EFH. Consultant shall develop appropriate measures for minimization and avoidance of impacts to the designated critical habitat of listed species and EFH. Consultant shall complete a draft BA documenting potential impacts to listed or proposed threatened and endangered species.

The BA must include the following major components:

- Project site description
- Description of the proposed action
- Baseline environmental conditions
- Presence of species in the Project API
- Description of species use and quality of habitat in the Project API
- Evaluation of potential impacts to proposed or listed species
- Evaluation of potential impacts to designated or proposed critical habitat (including evaluation of the NMFS matrix conditions for effects on baseline conditions)
- Discussion of cumulative effects
- Discussion of interrelated and interdependent effects
- Avoidance, minimization, and conservation measures
- Determinations of effect(s)
- EFH consultation

When developing the BA, Consultant shall coordinate with County's Project development team and NMFS to verify that the Project is designed to minimize impacts to listed and proposed fish species and in developing a mitigation plan or construction measures to avoid or minimize impacts. Specifically with respect to the proposed Project, the proximity of the pile driving associated with construction of the new retaining wall could result in construction-related hydroacoustic impacts to listed coho salmon. Consultant shall coordinate with the County and regulatory agency staff to determine the potential hydroacoustic impacts of the proposed work on listed coho salmon and to develop appropriate avoidance, minimization, and conservation measures.

Consultant shall review preliminary and advanced Project plans and specifications for consistency with BA requirements or other agreements with NMFS, providing written comments to County by the date(s) that comments are due. If discrepancies are found, Consultant shall notify County immediately and propose changes to maintain consistency with the BA or other agreements with NMFS. During development of the Project and BA, Consultant shall propose construction contract special provisions, as approved by County, which could avoid, minimize, or mitigate Project impacts.

Consultant shall participate in one (1) conference call or meeting with County staff to include the Project engineer, specification writer, and construction Project manager to discuss and approve the conservation measures presented in the BA.

Deliverables/Schedule: Consultant shall prepare:

- Draft BA documentation, (one [1] electronic copy, Word format, to County)
- Final BA documentation, (one [1] electronic copy, PDF format, to County), due fourteen (14) days from receipt of County review comments

Assumptions:

- Project has the potential to affect coho salmon of the OC ESU. No other listed fish species or ESUs will be affected by the Project.
- Preparation of a BA to facilitate ESA consultation with NMFS will be required if proposed Project designs and/or construction actions do not qualify for SLOPES IV programmatic ESA coverage.

Task 3.9 Prepare Fish Passage Plan (CONTINGENCY)

Preliminary Project scoping indicates that Oregon's fish passage law (Oregon Administrative Rules [OARs] 635-412-0005 to 625-412-0040) may be triggered by Project-related impacts to a culvert that conveys an apparent fish-bearing stream (Martin Creek) under Sweet Creek Road near the western extent of the Project API. Work under this task would include full hydraulic analysis of the stream, topographic survey obtaining cross sections and a profile of the stream, coordinating with project engineers regarding fish passage design requirements and preparing a fish passage plan documenting compliance with Oregon's fish passage laws. Design effort for the new structure would be accomplished under contingency Task 12, Fish Passage Culvert Design.

In order to comply with Oregon's fish passage law, Consultant shall prepare a fish passage plan in ODFW format, per Oregon's fish passage laws in place at time of Project. If site or design constraints prevent fish passage and the Project does not qualify for a fish passage exemption or exception, the Project will require a fish passage waiver and in-kind fish passage mitigation at an off-site location. If a fish passage waiver is determined to be needed, the work must be completed by County, or by Consultant under an amendment to this contract.

Consultant shall perform a site reconnaissance of the Project API to document current and anticipated post-Project fish passage conditions within the API. Consultant shall participate in one (1) fish passage coordination meeting with regulatory agency staff and the County to discuss fish passage issues and compliance with State fish passage laws. The final fish passage application/plan to will be submitted with the Project's DSL Removal/Fill permit application for forwarding to ODFW.

Deliverables/Schedule: Consultant shall prepare:

- Draft fish passage plan, (one [1] electronic copy, Word format, to County)
- Final fish passage plan, (one [1] electronic copy, PDF format, to County), due ten (10) days from receipt of Agency and County review comments

Assumptions:

- One (1) meeting will be required for completion of this task.
- One (1) site visit will be required for this task.
- County will provide review comments on draft application/plan within seven (7) days of receipt of the application from Consultant.

Task 3.10 Cultural/Historic Resources

The purpose of this task is to document archaeological and historical resources that may be affected by the project. Consultant shall research records at the Oregon State Historic Preservation Office (SHPO), the University of Oregon, and other records or archives for known prehistoric and historical resources and for project background information.

Consultant shall complete a pedestrian survey of the Area of Potential Effect (APE), systematically walking the project at intervals of 10 to 15 meters (33 to 50 feet) to look for archaeological evidence of prehistoric or historic use. The survey must include all areas to be affected by the proposed project, including any anticipated right-of-way, access roads, equipment staging areas and detour locations. Consultant shall record archaeological and historic sites, as well as isolated finds. Subsurface discovery measures will be implemented as part of Task 3.10 as appropriate.

In addition, Consultant shall identify potentially significant historic resources that could be affected by the project based on review of the SHPO Statewide Inventory and by conducting a site visit reconnaissance of the project area. Consultant shall compile a baseline study that is not intended to be a comprehensive technical document. The inventory results must be summarized in a table that must include photographs, a brief discussion of all historic resources that are 45 years or older with a map that identifies the location of each potential historic resource, and indicate potential eligibility of all

identified properties. The baseline report will be used for planning purposes to identify minimization and mitigation strategies for the project as appropriate. Initial assessment of potential effects of project alternatives in consultation with cultural resource staff will determine whether Determinations of Effect (DOE) and Findings of Effect (FOE) are required. DOE, FOE, Section 4(f), and Memorandum of Agreement (MOA) documentation if required would be implemented by addendum under a separate task.

Deliverables: Consultant shall provide:

- Archaeological survey report
- Historic resources baseline report, including a map of key visual resources

Task 3.11 Archaeology

Since the project area is located in a high potential area for archaeological resources, Consultant shall conduct subsurface discovery methods, including limited probing and monitoring of geotechnical borings for the project. A small portion of the project area is unpaved and accessible to hand auguring for discovery purposes. It is anticipated that up to twenty (20) probes may be excavated for discovery purposes. Due to development, much of the project area is inaccessible to standard archaeological methods of investigation, and archaeological monitoring of subsurface borings will be conducted in areas where project disturbances may occur below fill in order to identify potential buried archaeological deposits. Consultant archaeologists shall consult with project team geotechnical personnel to review boring locations and identify areas most appropriate for monitoring. In addition, Consultant shall conduct reviews of boring logs for those borings not monitored to check for potential buried archaeological deposits. Consultant shall prepare a separate report documenting the results of the discovery measures and monitoring, and recommendations for further discovery or evaluation may be made after review by an archaeologist.

Deliverables: Consultant shall provide:

- Archaeological Discovery Report

Task 3.12 Level I Hazardous Materials Corridor Assessment

(Cascade Earth Sciences will be performing this task.)

Consultant shall perform a Modified Level 1 Hazardous Materials Corridor Assessment (HMCA) according to American Association of State Highway and Transportation Officials (AASHTO) criteria for a Corridor Study. The assessment must generally conform to the scope and limitations of the American Society for Testing and Materials (ASTM) E 1527-05: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. Standard Practice E 1527-05 addresses the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and petroleum products.

Note(s): Performance of a Corridor Study is intended to reduce but not eliminate uncertainty regarding the existence of environmental conditions within the project area. The AASHTO practice is intended primarily as an approach to identifying potential sources of contamination that could impact a project. Based on the AASHTO guide, the Corridor Study constitutes appropriate inquiry into current and past uses of properties within the Project Corridor and is consistent with good commercial or customary practice.

▪ Site Reconnaissance

Consultant shall observe the Site and any structures located on the Site to the extent not obstructed by bodies of water, adjacent buildings, or other obstacles. The periphery of the Corridor, and all structures on the Site, must be observed on Site and from adjacent public thoroughfares. Consultant will not attempt to access the bridge structure due to safety concerns.

The Site must be inspected for obvious visual signs of contamination and environmental problems. Adjacent parcels must be viewed and existing uses must be reviewed for potential environmental impacts. Consultant shall document the condition of the Site at the time of the inspection in a narrative report with color photographs.

▪ **Historic Research**

Consultant shall identify the obvious uses of the Site from the present to, at least, 1940. Consultant shall review one (1) or more of the following standard historical sources, when the records are reasonably ascertainable: aerial photographs, fire insurance maps, property tax files, recorded land title records, United States Geologic Survey (USGS) topographic maps, County directories, building department records, zoning/land use records, or other historical sources.

Consultant shall review ascertainable recorded land title records and lien records filed under federal, state, local, or tribal law to identify environmental liens or activity use limitations (AULs) imposed by judicial authorities.

▪ **Records Review**

A regulatory search shall be conducted for the Site, which must include a review of publicly available environmental records obtained from the EPA and Oregon Department of Environment Quality (ODEQ). The following federal, state, and tribal lists must be reviewed: National Priorities List (NPL), Comprehensive Environmental Recovery, Compensation, and Liability Information System (CERCLIS), Resource Conservation and Recovery Act (RCRA) Transport, Storage, and Disposal (TSD), RCRA generators, Environmental Response Notification System (ERNS), Underground Storage Tank (UST), leaking UST, Hazardous Materials (HAZMAT), and landfill sites. Listed sites within the minimum search distances specified by E 1527-05 must be identified. Consultant shall review the records and make conclusions based on the data.

Consultant shall contact county assessor, environmental health, fire, building, and planning departments for pertinent environmental information pertaining to the Site.

▪ **Physical Setting Review**

Consultant shall obtain a current USGS topographic map and current aerial photograph of the Site. Consultant shall review published information regarding soils, geology, and hydrogeology of the Site and region.

▪ **Level I Hazardous Materials Corridor Study Report**

Consultant shall prepare a Level I Hazardous Materials Corridor Study report for the project area that summarizes the findings of the investigation. The report must include all supporting documentation used to develop conclusions, including analytical results and photographic documentation. Recommendations must be provided for further action, if deemed necessary by the data. The report must be signed by a professional, qualified according to AASHTO guidelines, and must be stamped by an Oregon Registered Geologist.

Deliverables/Schedule: Consultant shall prepare:

- Level I Hazardous Materials Corridor Study Report

Assumption:

- Agency will provide access to the Site and any necessary permits or other requirements. Consultant will make recommendations to collect samples as part of additional work if circumstances indicate additional investigation is needed. In addition, this Corridor Study will not include sampling of potential asbestos-containing material, treated wooden timbers, or paint on any structures within the Corridor.

Task 3.13 Floodplain Development Permit

(OBEC will be performing this task.)

Consultant will complete a Floodplain Development or a Floodplain Verification permit application based on findings of the Floodplain Impact Analysis (Task 7.2). If it is determined that the project does not fall within floodplain areas regulated by Lane County, a Floodplain Verification application will be submitted to document these findings. If the project does fall within regulated areas, Consultant shall submit a Floodplain Development permit application and all required supporting documentation. Consultant will demonstrate compliance with Lane County Floodplain Combining Zone requirements (Land Code 16.244), as required.

Deliverables/Schedule: Consultant shall provide:

- Floodplain Development or Floodplain Verification permit application forms, supporting technical reports, and site plans submitted within 45 days of Preliminary Design Package submittal

Task 3.14 Land Use Compatibility Statement (LUCS) Application

(OBEC will be performing this task.)

Consultant will work closely with the Lane County Planning Department early in project development to identify potential Land Use permitting needs and streamline the Lane County Land Use and Development Code permitting process as may be necessary. Consultant will submit a Land Use Compatibility Statement Application to verify local permitting requirements in writing and to obtain Planning Official approval.

Deliverables/Schedule: Consultant shall:

- Coordinate project with Lane County Planning Department and submit Land Use Compatibility Statement Application. Results to be included in Preliminary Design Package.

Assumptions:

- One (1) meeting with the Lane County Planning Department will be required for completion of this task.
- Lane County Land Use Permits will not be required for this project.

TASK 4 – PUBLIC OUTREACH AND EDUCATION**Task 4.1 Public Involvement Plan**

In coordination with the County and with the WFLHD interdisciplinary team, Consultant shall prepare a Public Involvement Plan that outlines the public outreach activities to be included in the Project. The Public Involvement Plan shall also identify key Project stakeholders.

Deliverables/Schedule: Consultant shall:

- Prepare a draft and final Project Public Involvement Plan
- Meet with client to review draft Public Involvement Plan

Task 4.2 Public Meeting

Consultant shall organize and facilitate up to one (1) public meeting to provide the community at large with an opportunity for Project review, comment and discussion. The meeting will be formatted as an open house to allow for dialogue between staff and members of the public. Consultant shall prepare Project informational materials for the open house including displays, maps, open house guide, and a fact sheet. Consultant shall design meeting advertisement and coordinate publication in local newspapers (*Siuslaw News, The Register Guard*). Consultant shall draft and revise a press release about the event for distribution to local media. Consultant shall also distribute press release and advertisement to Project area institutions and organizations, such as the Siuslaw Sail and Water

Conservation District, the Mapleton Branch of the Siuslaw Public Library, and the Mapleton Post Office, with a request to post meeting information online (where applicable) and on community bulletin boards.

Deliverables/Schedule: Consultant shall:

- Organize, manage logistics, and facilitate up to one (1) public meeting
- Draft and design up to one (1) public event advertisement and coordinate publication
- Draft and finalize press release
- Distribute press release and large-format advertisement to Project area institutions and organizations for posting
- Design a mailer, if necessary
- Produce and print open house displays, signage, open house guide, and maps
- Produce and print Project fact sheet, sign-in sheet, and comment form
- Arrange for refreshments
- Transcribe attendance list and public comments and produce public input summary for event within 5 days of event
- Coordinate with County to prepare responses to questions as needed within two weeks of event

Assumptions:

- County will distribute press release to media.
- If mailer is requested, County will print and mail.
- If paid advertisement is requested, County will pay newspaper fee.
- County will provide owner tax lot information to Consultant.
- Consultant and County will jointly coordinate, develop and maintain mailing list.

Task 4.3 Stakeholder Presentation - CONTINGENCY

Consultant shall coordinate with the Siuslaw Watershed Council to schedule a presentation on the project during a general membership meeting of the Siuslaw Watershed Council in Mapleton. Consultant shall prepare a PowerPoint presentation that addresses the retaining wall problem, the corrective actions, and the measures that will be taken during the project to prevent impacts to the Siuslaw River and other natural resources.

Deliverables/Schedule: Consultant shall:

- Coordinate with Siuslaw Watershed Council to make a presentation to Council membership
- Prepare a draft and final PowerPoint
- Make a presentation to the Siuslaw Watershed Council
- Produce public input summary for event within 5 days
- Coordinate with County to prepare responses to questions as needed

TASK 5 – UTILITY LOCATION AND COORDINATION

County staff will perform this task.

TASK 6 – GEOTECHNICAL/GEOLOGICAL SERVICES

Subconsultant (FEI) has completed a significant amount of analysis for both cantilevered and tied-back, soldier pile walls. The option of rock anchors will be evaluated and compared with results of the previous analysis. Computer files already available at FEI from the previous analysis will help streamline the new value-engineering effort.

Consultant shall perform additional drilling to better define the rock profile along the wall alignment. Additional drilling will represent a two-fold benefit to the project: 1) it will provide additional information for establishing soldier pile lengths and anchor capacities, and 2) improve the contractor's understanding of the subsurface conditions to reduce contingency costs in bids.

Task 6.1 Subsurface Exploration and Preliminary Report

Consultant shall drill eight (8) additional borings at four locations to supplement the previous drilling. The proposed locations are between Sta. 10+50 and Sta. 14+50 (stationing based on previous drilling work). Previous exploration suggests the rock at these locations is relatively deep along the wall face and/or the rock surface slopes steeply. The borings will be completed as pairs at each location. It is anticipated that the borings near the rock face will extend to a depth of ± 15 to 20 feet. The borings along the new wall face will extend to ± 35 feet (based on previous explorations). Dynamic Cone Penetrometer (DCP) tests will be run on the base aggregate, subbase (if present) and subgrade in the inner (EB) lane borings to estimate resilient moduli for pavement design (see Task 9).

Previous borings encountered embankment fill, fine-grained and granular alluvium over bedrock (sandstone). The borings will be completed using a truck-mounted drill rig with auger or mud-rotary drilling techniques and HQ-sized rock coring. Rock core will be obtained at all locations, retained for possible laboratory testing, and photographed. Interpreted subsurface profiles will be developed from the boring logs at each location.

Consultant shall prepare a preliminary memorandum describing the subsurface conditions, including the logs for previous and new borings, and results of available test data. The memorandum will be submitted to the County and design team for review.

Assumptions:

- Consultant will provide traffic control according to the ODOT Short-Term Traffic Control Handbook. One lane closure is planned for each set of borings (i.e., one closure of the inner (EB) and outer (WB) lanes). Traffic control will be required for five days. No utility conflicts are present and access is available for all the borings.
- A single drill rig mobilization will be required and drilling will be done during daylight hours with no limitation on length of work day.
- Subsurface conditions are anticipated to include a ± 5 to 20-foot thick mantle of overburden (fill or alluvium) followed by sandstone bedrock.
- Borings will be advanced without casing using hollow-stem auger or mud-rotary drilling and HQ wire-line coring techniques.
- Exploration will include a total of (8) borings. A total footage of 220 feet (60 feet of drilling and 120 feet of coring) is assumed. The actual depth of the borings will be based on budget, achievable field production and difficulty of drilling and/or coring. Drilling production is based on ± 45 feet per day (approximately 5 days).
- Collection of soil samples will be attempted at ± 5 -foot increments using a Standard Penetration Test, but poor or limited sample recovery is expected in gravels or soils with cobbles. If subsurface conditions warrant, relatively undisturbed (Shelby tube) samples will be collected in cohesive soils.
- No pH or resistivity testing required.
- Drilling cuttings will be drummed and hauled from the site.
- Loss of circulation is anticipated during drilling and coring. Consultant will provide a water truck and a support truck with a poly tank. The drill crew will include a third man to maintain an adequate water supply. It is assumed water is available within a ± 20 -mile radius of site.
- Consultant shall coordinate the drilling schedule with the County and provide at least one (1) week advance notice.
- A work plan will be submitted to the County to obtain a permit for the field exploration (if required), but any permit fees will be waived.

Task 6.2 Retaining Wall Design

Consultant will perform analyses using the field and laboratory data to develop geotechnical recommendations for design and construction of the new retaining wall. Retaining wall options will be discussed in the Preliminary Memorandum. After a preferred wall type is selected, wall and anchor

design will be completed. Evaluation of cantilevered, soldier piles with concrete panels and a tied-back soldier pile wall systems is anticipated. The tips of the soldier piles are expected to be grouted-in-place in rock sockets. Options of both vertical pile anchors and rock anchors will be considered.

Task 6.3 Laboratory Testing

Consultant will perform laboratory testing on retained soil and rock samples. The number and types of tests will be established based on the soil types and sample recovery. Laboratory testing on soil shall include up to 20 natural water contents and up to 4 Atterberg limits or percent fines (as appropriate) to classify the soils and estimate their basic index properties. Tests on rock cores will consist of up to 12 unconfined compression tests at varying depths, assuming suitable rock core samples are obtained. The tests will be used to develop strength data for the analysis and design of the soldier pile sockets, and anchor piles or rock anchors.

Task 6.4 Geotechnical Report and Foundation Data Sheets

Once the type of wall is selected and the retaining wall design completed, Consultant will prepare a draft Geotechnical Report. The report will include the information provided in the preliminary memorandum, results of laboratory tests, pavement design, results of geotechnical analysis, and design recommendations for the new wall and anchor system. The Geotechnical Report will be finalized following a review by the County and WFLHD and design team. Consultant will prepare Foundation Data Sheets (FDS) summarizing the subsurface conditions in the borings.

Deliverables: Consultant shall prepare:

- Three (3) copies of Preliminary Memorandum and draft and final Geotechnical Reports

Schedule:

- Complete Geotechnical field work and borings – four (4) weeks after NTP
- Complete Preliminary Memorandum – two (2) weeks after drilling
- Complete Final Foundation Report and Foundation Data Sheet – four (4) weeks prior to completion of 95% plans

Assumption:

- OBEC will prepare FDS base maps.

TASK 7 – HYDRAULICS/HYDROLOGY SERVICES

The proposed retaining wall along Sweet Creek Road is within the floodplain of the Siuslaw River. The retaining wall will be subjected to impacts from debris, scour, and shear stresses from high water velocities which could impact stability. This reach of the Siuslaw River is also tidally influenced, which could affect the walls stability. A hydraulic and scour analysis will need to be conducted, based on river cross sections obtained from Lane County, to address the hydraulic issues related to the placement of the retaining wall within the Siuslaw River Floodplain. The retaining wall will be constructed in a portion of the Siuslaw River that is within a Flood Insurance Study (FIS) conducted by the Federal Emergency Management Agency (FEMA) that established a regulatory floodway and base flood elevations. Construction of the retaining wall will need to comply with the floodplain management regulations adopted by Lane County in Lane Code Chapter 10 Section 271 as required by FEMA. A floodplain impact analysis will need to be conducted to assess impacts to the Siuslaw River Floodplain, establish water surface elevations for the design and base floods, and provide engineering certification that the project is in compliance with Lane Code.

Stormwater management is a major issue that will need to be addressed to satisfy permitting agency requirements. Stormwater treatment can be achieved by separating road runoff from the uncontaminated runoff from the hillside. Separating the runoff reduces the treatment volume, enabling a water quality facility to be constructed in the limited space within the project area. This task involves a drainage study

and the development of storm sewer plans for the project. The hydraulics/hydrologic related services shall include the work effort of the subtasks listed below.

Assumption:

- No new impervious area will be added, negating the need for water quantity management.

Task 7.1 Open Channel Hydraulics

Consultant shall conduct a hydraulic and scour analysis for the retaining wall site based on Siuslaw river cross sections to address the hydraulic issues related to the placement of the retaining wall within the Siuslaw River Floodplain. The retaining wall scour depths will require scour to be determined using the methods and procedures described in the FHWA Publications HEC-18 and HEC-23 followed by an evaluation using the USACE Coastal Engineering Manual. The FHWA publications cover scour determinations in a riverine environment while the USACE publications address tidal and wave action. The following may be involved in the open channel hydraulics subtask:

- Research and compile available local information
- Perform site inspection of hydraulic conditions
- Investigate local knowledge of past floods
- Perform hydrologic analysis
- Perform hydraulic analysis
- Perform a scour analysis using HEC-18/HEC-23
- Perform scour analysis using Coastal Engineering Manual
- Prepare hydraulic and scour analysis technical memorandum

Deliverables/Schedule: Consultant shall prepare:

- Hydraulic and Scour Analysis Technical Memorandum to be submitted with the Preliminary Design Package (Task 13)

Task 7.2 Floodplain Impact Analysis

Consultant shall provide a floodplain impact analysis for the proposed retaining wall located within the Siuslaw River Floodplain that complies with Lane Code requirements and the National Floodplain Insurance Program. The floodplain impact analysis will follow the FEMA Publication *Procedures for Compliance with Floodway Regulations*. Consultant shall summarize findings in a Floodplain Compliance Report to be used as supporting data for the floodplain permit. The following will be used to prepare the Floodplain Compliance Report as part of the floodplain impact analysis subtask:

- Research and compile current effective hydraulic model from FEMA Project Library
- Perform HEC-RAS hydraulic study and develop models for current effective, corrected effective, and proposed conditions
- Prepare "No-Rise" certificate
- Prepare Floodplain Compliance Report

Deliverables/Schedule: Consultant shall prepare:

- Floodplain Compliance Report to be submitted with Floodplain Application (Task 3.12)

Task 7.3 Stormwater Conveyance Design

Consultant shall design and detail storm sewer system consisting of a drainage curb and a lined ditch to convey runoff to an infiltration pond in conformance with County standards. Consultant shall prepare plans and specifications for the installation of the drainage related facilities. Consultant shall prepare Engineer's Estimate for the construction of the drainage related facilities.

Deliverables/Schedule: Consultant shall prepare:

- Stormwater plans, specifications, and estimate shall be submitted for review to WFLHD and County with the Preliminary Design Package (Task 13), and the Advance (70%) and Final (95%) PS&E deliverables (Task 16)

Task 7.4 Stormwater Management Report and Operation and Maintenance Manual

Consultant shall summarize findings and recommendations in a Stormwater Management Report. Consultant shall develop options for providing stormwater quality treatment to conform to DEQ requirements. The report must describe the design procedures and make recommendations on the type and size of the water quality facilities. Maps shall be included in the report that delineates the contributing drainage basins and runoff flow directions. Consultant shall identify right-of-way required for the construction of this facility. Water quality and quantity facilities must be designed in conformance with an approved Stormwater Management Program.

Consultant shall prepare operation and maintenance manuals that describe the location, operation, and maintenance of County stormwater quantity and quality facility installed as part of the Project.

Deliverables/Schedule: Consultant shall prepare:

- Stormwater Management Report
- Operation and Maintenance Manuals submitted to County with Final PS&E (Task 16)

Task 7.5 Independent Design Check (QA/QC Review)

Consultant shall perform an independent design check and senior QA/QC review of the storm sewer design and plan details.

Deliverables/Schedule: Consultant shall prepare:

- Stormwater Checklist due at Final PS&E

TASK 8 – TRAFFIC ENGINEERING AND MANAGEMENT

This task involves preparation for traffic control plans during construction, including signal design layout and relocation, and signing and striping design for the Project. The Consultant shall perform the work of this task that includes the following.

Task 8.1 Signal Design

County shall install movable temporary traffic control signals on Sweet Creek Road set approximately 500 feet apart each end of the existing failed roadway section. Consultant shall utilize the County design and relocate and layout the movable traffic control signals to be compatible with staging plans, lane shifts, lane and shoulder widths, lane closures and temporary road closures. Signal layout and relocation shall be included in the traffic control design and made part of the temporary traffic controls plans.

Deliverables/Schedule: Consultant shall provide:

- Preliminary (30%) Signal layout in conjunction with the Traffic Control Plans due as deliverables in Task 13, and signal layout and relocation in conjunction with the Advance (70%) and Final (95% and 100%) Traffic Control Plans due as deliverables in Task 16

Task 8.2 Sign Design

Consultant shall produce permanent signing plans that meet ODOT Sign Design Manual, Oregon Sign Policy & Guidelines, applicable Standard Drawings, and the Manual on Uniform Traffic Control Devices (MUTCD). Drafting of the signing plans shall meet ODOT Contract Plans Development Guide standards. Consultant shall prepare signing specifications in accordance with the most current version of the ODOT Specifications Procedure Manual and Guide to Writing Highway Construction Specifications. In addition the Consultant shall

- Conduct a site visit to inventory the existing signs and conditions and verify the survey
- Develop signing plan sheets
- Develop associated detail sheets for the signing plans

The following signing plan sheets are anticipated for this project;

- Signing Details (1 Sheet)
- Signing Plans (1 Sheet)
- Sign and Post Data Table (1 Sheet)

Deliverables/Schedule: Consultant shall provide:

- Advance (70%) and Final (95% & 100%) Signing Plans due as deliverables in Task 16

Task 8.3 Striping Design

Consultant shall produce permanent striping plans that meet ODOT Traffic Line Manual, Striping Design Guidelines Manual, applicable Standard Drawings, and the MUTCD. Drafting of the striping plans shall meet ODOT Contract Plans Development Guide standards. Consultant shall prepare striping specifications in accordance with the most current version of the ODOT Specifications Procedure Manual and Guide to Writing Highway Construction Specifications. In addition the Consultant shall:

- Conduct a site visit to inventory the existing striping conditions and verify the survey
- Develop striping plan sheets
- Develop associated detail sheets for the striping plans

The following striping plan sheets are anticipated for this project;

- Striping Details (1 Sheet)
- Striping Plans (1 Sheet)

Deliverables/Schedule: Consultant shall provide:

- Advance (70%) and Final (95% & 100%) Signing Plans due as deliverables in Task 16

Task 8.4 Traffic Control Plans

Consultant shall prepare traffic control plans and details in accordance with ODOT Traffic Control Plans Design Manual, applicable Standard Drawings, and the MUTCD. Plans include the following information but are not limited to: staging plan, lane shifts, lane and shoulder widths, lane closures, temporary road closures, temporary striping, temporary signing, cutting sections at critical areas with dimensions and other relevant information. Plans must primarily focus on key staged areas with cutting sections at critical areas. Consultant shall provide 3D traffic staging modeling for the area that encompasses the reconstructed retaining wall. The traffic control plans must meet ODOT Contract Plans Development Guide. Consultant shall prepare traffic control specifications in accordance with the most current version of the ODOT Specifications Procedure Manual and Guide to Writing Highway Construction Specifications. In addition the Consultant shall:

- Develop traffic control plans for all stages required to construct the project, and traffic control signing for construction of the roadway improvements
- Develop detail sheets for the traffic control plans

The following traffic control plan sheets are anticipated for this project;

- Traffic Control Details (2 Sheets)

- Traffic Control Signing Plan (1 Sheet)
- Traffic Control Plans (including cross-sections) (9 Sheets)

Deliverables/Schedule: Consultant shall provide:

- Preliminary (30%) Traffic Control Plans due as deliverables in Task 13, and Advance (70%) and Final (95% and 100%) Traffic Control Plans due as deliverables in Task 16

TASK 9 – PAVEMENT DESIGN

Task 9.1 Pavement Analysis & Design

Consultant shall perform pavement analysis and design based on design traffic data provided by County. The recommended pavement section and recommendations for subgrade preparation will be provided in the Geotechnical Report. Pavement design will be completed based on the results of the DCP testing on the EB travel lane subgrade and assumed properties for the wall backfill. Criteria for subbase (if any) and base materials (compatible with the design assumptions) will be specified as part of the retaining wall design. Therefore, no subgrade sampling and laboratory testing is currently planned for the pavement subgrade.

If a portion of the existing EB lane pavement can be salvaged, the pavement design will consider an overlay. Existing pavement sections will be assumed based on the conditions encountered in the borings.

Assumptions:

- No ODOT review is expected.
- No non-destructive testing is planned.

TASK 10 – ROADWAY DESIGN

Consultant shall develop and design geometric roadway design, typical sections, and prepare roadway plans, profiles and details of the roadway improvement. This task includes but is not limited to the following engineering services.

Task 10.1 Preliminary (30%) Roadway Analysis and Roadway Plans

Consultant shall:

- Perform preliminary roadway analysis and design including staging alternatives
- Prepare 30% preliminary roadway plan and profile drawings on 11"x17" sheets detailing alignment, typical sections, staging, traffic control, and erosion control for inclusion in the Preliminary Design Package (Task 13)

Task 10.2 Prepare Advance and Final (70%, 95% & 100%) Roadway Plans

Consultant shall design and prepare Advance (70%), and Final (95% and 100%) 11"x17" plan drawings including typical sections, grading plans, plan and profile, drainage details, erosion control plans, stormwater plans, standard details, and other related drawings for submittal to the County and WFLHD for review as deliverables under Task 16.

Task 10.3 Roadside Development/Design

Consultant shall design and prepare Advance (70%), and Final (95% and 100%) 11"x17" landscape planting drawings and plant lists for roadway landscaping, seeding, stormwater facilities, and floodplain mitigation areas for submittal to the County and WFLHD for review as deliverables in Task 16.

Task 10.4 Perform QA/QC Design Reviews on 30%, 70% & 95% Designs

Consultant shall perform independent design check and plan review of all drawings and related quantities.

Task 10.5 Prepare Advance and Final (70%, 95% & 100%) Cost Estimates

Consultant shall prepare Advance (70%), and Final (95% and 100%) estimates of roadway construction costs for submittal to the County and WFLHD for review as deliverables in Task 16.

Task 10.6 Corrections Following County and WFLHD 30%, 70% & 95% Reviews

Consultant shall respond to comments and make corrections as required following review by the County and WFLHD. Consultant shall document roadway comment responses in a Plan Review Comment Log.

TASK 11 – RETAINING WALL DESIGN

Consultant shall evaluate the environmental, design and staging constraints and opportunities, and present to the County and WFLHD in the Design Acceptance Package Report those alternatives that best provide cost-effective, readily constructible solutions for the new retaining wall. The analysis shall be in accordance with current AASHTO *LRFD Bridge Design Specifications* and the *ODOT Bridge Design and Detailing Manual*. This task includes but is not limited to the following engineering services:

Task 11.1 Preliminary (30%) Retaining Wall Analysis and Wall Plans

Consultant shall:

- Perform preliminary retaining wall evaluation, analysis and design including staging alternatives
- Prepare 30% preliminary retaining wall plan drawings on 11"x17" sheets detailing retaining wall alignments and indicating wall types and maximum heights for inclusion in the Preliminary Design Package (Task 13)

Task 11.2 Prepare Advance and Final (70%, 95% & 100%) Retaining Wall Plans

Consultant shall design and prepare Advance (70%), and Final (95% and 100%) 11"x17" plan drawings including plan and elevation, staging of retaining walls, details, construction sequence, standard details, and other related drawings for submittal to the County and WFLHD for review as deliverables in Task 16.

Task 11.3 Perform QA/QC Design Reviews on 30%, 70% & 95% Designs

Consultant shall perform independent design check and plan review of all drawings and related quantities.

Task 11.4 Prepare Advance and Final (70%, 95% & 100%) Cost Estimates

Consultant shall prepare Advance (70%), and Final (95% and 100%) estimates of retaining wall construction costs for submittal to the County and WFLHD for review as deliverables in Task 16.

Task 11.5 Corrections Following County and WFLHD 30%, 70% & 95% Reviews

Consultant shall respond to comments and make corrections as required following review by the County and WFLHD. Consultant shall document retaining wall comment responses in a Plan Review Comment Log.

TASK 12 – FISH PASSAGE CULVERT DESIGN (CONTINGENCY)

Replacement of the existing culvert just off the western extent of the Project at Mile Post (MP) 2.22 may be triggered by this project. This culvert has been identified as a fish-bearing stream (Martin Creek) under Sweet Creek Road. Work under this task would be in coordination and compliance with environmental specialists regarding fish passage requirements and the fish passage plan developed under contingency task 3.8, Prepare Fish Passage Plan. This task would include preparation and design of preliminary plans and Engineer's Cost Estimate (30%), and development, delivery and comment responses of Advance 70% and 95% Plans, Specifications and Engineer's Cost Estimate and Final Bid Package for a new fish passage culvert.

This task includes but is not limited to the following engineering services.

Task 12.1 Preliminary (30%) Fish Passage Design and Cost Estimate (Contingency)

Consultant shall:

- Perform preliminary fish passage evaluation, analysis and design including preparing an 11"x17" fish passage Plan and Elevation sheet for submittal as part of the Preliminary Design Package (task 13) to the County and WFLHD for review
- Provide preliminary cost estimate included with the 30% Preliminary Design Package (Task 13)
- Provide comment responses from the 30% PDP Plan-in-Hand Workshop

Task 12.2 Advance (70%) Fish Passage PS&E (Contingency)

Consultant shall:

- Prepare Advance (70%) fish passage culvert plans and Specifications included with the Advance PS&E deliverable (Task 16) to the County and WFLHD for review
- Provide Advance cost estimate included with the Advance PS&E deliverable (Task 16)
- Provide comment responses from the 70% Plan-in-Hand Workshop

Task 12.3 Final (95%) Fish Passage PS&E (Contingency)

Consultant shall:

- Prepare Final (95%) fish passage culvert plans and Specifications included with the Final PS&E deliverable (Task 16) to the County and WFLHD for review
- Provide Final (95%) cost estimate included with the Final PS&E deliverable (Task 16)
- Provide comment responses from the 95% Plan-in-Hand Workshop

Task 12.4 Final (100%) Fish Passage PS&E (Contingency)

Consultant shall:

- Prepare Final (100%) fish passage culvert plans and Specifications included with the Final (100%) PS&E deliverable (Task 16) to the County
- Provide Final (100%) cost estimate included with the Final PS&E deliverable (Task 16) to the County

TASK 13 – PRELIMINARY DESIGN PACKAGE (PDP)

This task includes preparation of Preliminary 30% Plans and Engineer's Cost Estimate, design narrative and development of a Preliminary Design Package (PDP) and holding a PDP Plans-in-Hand comments review meeting with identified County and WFLHD decision Team members. The Consultant Team will use (in subsequent tasks) the approved outcomes from the PDP Plans-in-Hand meeting to develop the Advance and Final Plans, Specifications, and Estimate (PS&E).

Task 13.1 Prepare Preliminary Design Package

The Preliminary Design Package must include design plans and a design narrative that address the following and any other elements of the design:

- | | |
|--|---|
| <ul style="list-style-type: none"> ▪ Description of the purpose, need, and design solution for the Project ▪ Summary of existing conditions, (i.e., Project location, highway classification, lanes, ADT, posted speed, roadside inventory, and other design standards pertinent to the Project) ▪ Outline of Project constraints such as topography, geology, hydrology, environmental, permits, R/W, utilities, and | <ul style="list-style-type: none"> ▪ Local permit needs ▪ Preliminary Project cost estimate ▪ Construction staging, and temporary protection and direction of traffic during construction ▪ Schedule to construction bid letting ▪ Wetland impacts technical memo ▪ Endangered Species Act compliance technical memo ▪ Geotechnical and Hazmat Reports |
|--|---|

- cost
- Environmental impacts and mitigation measures
- Environmental permitting requirements
- Utility conflicts
- Typical sections
- Signage and striping requirements
- Hydraulic structures and drainage features
- R/W needs
- Environmental permits and impacts technical memo
- Hydraulic and Stormwater Report
- Discussion of anticipated utilities and impacts
- Preliminary roadway analysis
- Preliminary retaining wall analysis
- Plan sheets as appropriate

Consultant shall summarize and reference in the PDP the reports, technical memoranda, and plans/drawings prepared. Consultant shall compile work products prepared by others into the PDP. Consultant shall prepare and submit plans/drawings as an appendix to the PDP. The Consultant will set a PDP Comment Review Meeting with the County and WFLHD within fifteen (15) calendar days of the submittal to County and WFLHD. Consultant shall compile and address County and WFLHD comments as they are received and communicate with County and WFLHD the disposition of proposed resolution to the comments.

Consultant shall compile the PDP for review by County and WFLHD. The PDP drawings shall include:

- Title Sheet and Vicinity Map
- Summary of Quantities
- Typical Sections
- Plan and Profile Sheets for preferred alternative (showing proposed construction limits, cut and fill slope catch lines, existing utilities, right-of-way boundaries (and respective ownerships), and all cultural ties and locations
- Plan and Elevation of Retaining Wall Structures
- Preliminary Traffic Control Plan
- Typical Roadway Section for Preferred Alternative
- Stormwater Facility Plans
- Preliminary Construction Cost Estimate
- *Fish Passage Culvert Plan and Elevation Sheet and Cost Estimate (Contingency task 12)*

Deliverables: Consultant shall provide:

- Hard copies and electronic copy (PDF) of the PDP to County and WFLHD for review and comment

Task 13.2 Preliminary Design Package Comment Review Meeting

Consultant shall coordinate and conduct a PDP Comment Review Meeting with County and WFLHD to review and address all comments from respective review Team members within 15 days following the PDP submittal.

TASK 14 – VALUE ENGINEERING (VE)

Task 14.1 Review of Existing Data

The project team will review all existing information and develop a thorough understanding of the original design concepts.

Task 14.2 Senior Management VE Review

The project team will present the original concept to a senior management group that consists of experienced design and construction personnel from both the County and WFLHD and the Consulting Engineering firm

Task 14.3 Investigate Alternatives

The Review Team will provide ideas and suggestions for improving the project. The entire VE Team will select specific elements for further study.

Task 14.4 Evaluate Alternatives

Those specific elements suggested by the VE Team will then receive further evaluation and an estimate of potential for success.

Task 14.5 Alternative Selection

The VE Team will then present to the design team the proposed changes to the original plan.

Deliverables/Schedule: Consultant shall provide:

- Draft Value Engineering Report for presentation to County and WFLHD
- Final Value Engineering Report documenting the findings and recommendations that are to be incorporated into the final design of the project

TASK 15 – RIGHT-OF-WAY

County staff will perform this task.

TASK 16 – FINAL PLANS, SPECIFICATIONS AND ESTIMATE (PS&E)

Consultant shall prepare Project specifications and Special Provisions utilizing the 2008 Oregon Standard Specifications for Construction and write Special Provisions conforming to the Project. The construction contract will be let by the County and Consultant shall incorporate County's "front end" Part 00100 General Conditions in the specifications. The following subtasks may be involved in Specifications and Special Provisions.

Task 16.1 Advance (70%) PS&E to County & WFLHD

- Prepare Advance Special Provisions
- Prepare Advance Engineer's Cost Estimate
- Develop and assemble Advance (70%) PS&E documents including half-size plans (11"x17") for submittal to County and WFLHD

Task 16.2 Advance (70%) PS&E Comment Review Meeting

Consultant shall coordinate and conduct an Advance PS&E Comment Review Meeting with County and WFLHD to review and address all comments from respective review Team members within 15 days following the Advance PS&E submittal. Consultant shall document comment responses in a Plan Review Comment Log.

Task 16.3 Final (95%) PS&E to County & WFLHD

- Prepare Final Special Provisions
- Prepare Final Engineer's Cost Estimate
- Develop and assemble Final (95%) PS&E documents including half-size plans (11"x17") for submittal to County and WFLHD

Task 16.4 Final (95%) PS&E Comment Review Meeting

Consultant shall coordinate and conduct a Final (95%) Plans Comment Review Meeting with County and WFLHD to review and address all comments from respective review Team members within 15 days following the Advance Plans submittal. Consultant shall document comment responses in a Plan Review Comment Log.

Task 16.5 Final (100%) PS&E Bid Document Package to County

- Prepare Final (100%) Special Provisions
- Prepare Final (100%) Engineer's Cost Estimate
- Assemble Final PS&E Bid Document Package for submittal to the County

Assumption:

Consultant estimates preparing and submitting the minimum following plan sheets by topics:

- Title Sheet
- Index Sheet
- Typical Sections
- Detail Sheets
- Traffic Control Plans and Details
- Erosion Control Plans and Details
- Roadway Plans and Profile
- Mitigation/Restoration Plans and Details
- Retaining Wall Plans and Elevations
- Foundation Data
- Striping Plans
- Permanent Signing Plans
- *Fish Passage Culvert Plans (Contingency task 12)*

Deliverables/Schedule: Consultant shall:

- Provide Advance (70%) PS&E plans hard copies submitted to County and WFLHD for review and comment
- Coordinate and facilitate the Advance (70%) PS&E Workshop with County and WFLHD within 15 days following the Advance PS&E submittal
- Provide Final (95%) PS&E plans hard copies submitted to County and WFLHD for review and comment
- Coordinate and facilitate the Final (95%) PS&E Workshop with County and WFLHD within 15 days following the Final PS&E submittal
- Provide Final (100%) PS&E Bid Documents submitted to County (Bid by County)

TASK 17 – BID ASSISTANCE

Consultant shall be available to answer questions during the advertising and bidding of the Project. The following subtasks may be involved in Bidding Assistance.

Task 17.1 Questions during Bidding

Consultant shall provide responses to Contractor pre-bid questions and document for the County.

Task 17.2 Addenda to Bid Documents

Consultant shall prepare plan and specification addenda as needed.

Task 17.3 Perform Evaluation of Bids

Consultant shall assist with bid opening and the evaluation of bids.

Deliverables/Schedule: Consultant shall provide:

- Contract addenda due within four (4) days of request by County
- Responses to bidder questions due to the County within seven (7) days of request

OBEC Consulting Engineers
DESIGN SERVICES
Summary of Estimate for Services
SWEET CREEK ROAD RETAINING WALL
EXHIBIT A

OBEC Direct Salary Costs

<u>Personnel</u>	<u>Hours</u>	<u>Rate of Pay</u>	<u>Estimated Cost</u>
Principal Engineer	26	\$ 167.00	\$ 4,342.00
Senior Project Manager	232	\$ 146.00	\$ 33,872.00
Sr. Specifications Engineer	97	\$ 135.00	\$ 13,095.00
Senior Project Engineer	674	\$ 135.00	\$ 90,990.00
Project Engineer 3	147	\$ 107.00	\$ 15,729.00
Senior Design Technician	492	\$ 95.00	\$ 46,740.00
CAD Manager	12	\$ 95.00	\$ 1,140.00
Senior CAD Tech	732	\$ 95.00	\$ 69,540.00
CAD Tech 2	0	\$ 71.00	\$ -
Construction Manager / Principal Engineer	87	\$ 167.00	\$ 14,529.00
Assistant Project Manager	0	\$ 121.00	\$ -
Senior Engineering Tech	0	\$ 107.00	\$ -
Field Engineer 3	0	\$ 107.00	\$ -
Field Engineer 2	0	\$ 95.00	\$ -
Contract Administrator	4	\$ 107.00	\$ 428.00
Administrative Assistant 3	35	\$ 71.00	\$ 2,485.00
	2,538	Subtotal Salary Costs	\$ 292,890

Other OBEC Direct Expenses & Outside Consultant Costs

a. <u>OBEC Expenses</u>	\$ 1,224	
b. <u>Outside Consultants</u>		
Mason, Bruce & Girard	\$ 58,782	
Foundation Engineering, Inc.	\$ 67,016	
Heritage Research Associates	\$ 18,590	
CES	\$ 5,240	
Dave Place	\$ 4,751	
		Other Costs: \$ 155,603
		TOTAL ESTIMATE: \$ 448,493

Project Total Not To Exceed =	\$ 448,493
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Contingency Tasks

OBEC	\$ 27,504	
MB&G	\$ 29,545	
		\$ 57,049

Project Total Not to Exceed w/Contingencies =	\$ 505,542
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OBEC CONSULTING ENGINEERS																		SUBTASK TOTAL	COST PER TASK
TASKS	Gr 22	GR 21	GR 20	GR 20	GR 18	GR 17	GR 17	GR 17	GR 14	GR 22	GR 18	GR 18	GR 18	GR 17	GR 18	GR 14			
Task 1 Project Management & Coordination																			
1.1 Overall Project Management & Coordination		80															4		
1.2 Kickoff Meeting		12			6	6											1		
1.3 Ongoing Internal Design Team & County Coordination Meetings		24			16	16											1		
Task Subtotal		116	0	22	22	0	0	0	0	22	0	0	0	0	4	1	196		
Task 2 Surveying and Mapping (by COUNTY)																			
Task 3 Environmental Services																			
3.1 NEPA Categorical Exclusion Documentation		1				2											3		
3.2 Wetland/Waters Delineation and Report						4											4		
3.3 Prepare Joint Permit Application						18											18		
3.4 Conduct Site Reconnaissance and Prepare Noxious Plant Report						3											3		
3.5 Prepare No Effect Documentation						3											3		
3.6 Prepare Slope IV Documentation for Listed Fish Species						8											8		
3.10 Cultural / Historic Resources						2											2		
3.11 Archaeology						3											3		
3.12 Level 1 Hazardous Materials Corridor Assessment						4											4		
3.13 Floodplain Development Permit						30		2								1	33		
3.14 Land Use Compatibility Statement (LUCS) Application						22		2								1	25		
Task Subtotal		1	0	0	0	99	0	4	0	0	0	0	0	0	0	2	108		
Task 4 Public Outreach and Education																			
4.1 Public Involvement Plan		1			1												2		
4.2 Public Meeting		8			6												12		
Task Subtotal		7	0	7	0	0	0	0	0	0	0	0	0	0	0	0	14		
Task 5 Utility Location and Coordination (by COUNTY)																			
Task 6 Geotechnical / Geological Services																			
6.1 Subsurface Exploration & Preliminary Report		1			1												2		
6.2 Retaining Wall Design	1	4			4												9		
6.3 Laboratory Testing																	0		
6.4 Geotechnical Report and Foundation Data Sheets																	0		
Task Subtotal	1	5	0	6	0	0	0	0	0	0	0	0	0	0	0	0	11		
Task 7 Hydraulics / Hydrology Services																			
7.1 Open Channel Hydraulics		2			40												42		
7.2 Floodplain Impact Analysis		3			80												83		
7.3 Stormwater Conveyance Design		3			60			40									103		
7.4 Stormwater Management Report and Operation & Maintenance Manual		2			24												26		
7.5 Independent Design Check (QA/QC Review)		6			16			8									30		
Task Subtotal	6	18	0	220	0	0	0	48	0	0	0	0	0	0	0	0	204		
Task 8 Traffic Engineering and Management																			
8.1 Signal Design		1			1												2		
8.2 Sign Design						19		23									42		
8.3 Striping Design						12		14									26		
8.4 Traffic Control Plans		1			2	121		131									255		
Task Subtotal	0	2	0	3	0	152	0	168	0	0	0	0	0	0	0	0	325		
Task 9 Pavement Design																			
9.1 Pavement Analysis & Design						1											1		
Task Subtotal	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1		
Task 10 Roadway Design																			
10.1 Preliminary (30%) Roadway Analysis and Roadway Plans		4				104		96									204		
10.2 Prepare Advance and Final (70%, 95% & 100%) Roadway Plans						88		96									184		
10.3 Roadside Development / Design						18		24									42		
10.4 Perform QA/QC Design Review on 30%, 70% & 95% Designs	6	8		12	96	8	12	24									164		
10.5 Prepare Advance & Final (70%, 95% & 100%) Cost Estimates																	0		
10.6 Corrections Following County and WFLHD 30%, 70% & 95% Reviews																	0		
Task Subtotal	6	14	0	12	96	218	12	240	0	0	0	0	0	0	0	0	588		
Task 11 Retaining Wall Design																			
11.1 Preliminary (30%) Retaining Wall Analysis and Wall Plans		6			124			112		6							248		
11.2 Prepare Advance and Final (70%, 95% & 100%) Retaining Wall Plans		6			180			150									345		
11.3 Perform QA/QC Design Review on 30%, 70% & 95% Designs	9	0		12						9							39		
11.4 Prepare Advance & Final (70%, 95% & 100%) Cost Estimates		3		9													24		
11.5 Corrections Following County and WFLHD 30%, 70% & 95% Reviews				8													16		
Task Subtotal	9	24	3	333	0	17	0	272	0	15	0	0	0	0	0	0	673		

TASKS	OBEC CONSULTING ENGINEERS																SUBTASK TOTAL	COST PER TASK	
	Grade	Principial Engineer	Senior Project Manager	Senior Specifications Engineer	Senior Project Engineer	Project Engineer 2	Senior Design Technician	CAD Manager	Senior CAD Tech	CAD Tech 2	Construction Manager / Principal Engineer	Assistant Project Manager	Senior Engineering Technician	Field Engineer 3	Field Engineer 2	Contract Administrator			Administrative Assistant 2
Task 13 Preliminary Design Package (POP)																			
13.1 Prepare Preliminary Design Package			4		24		8				4							38	\$ 9,067
13.2 Preliminary Design Package Comment Review Meeting			12		12	12					12							48	\$ 6,680
Task Subtotal		0	16	0	36	12	8	0	0	0	16	0	0	0	0	0	0	86	\$ 11,747
Task 14 Value Engineering																			
14.1 Review of Bidding Data											1							1	\$ 187
14.2 Senior Management VE Review		2									2							4	\$ 868
14.3 Investigate Alternatives			2		4						4							10	\$ 1,500
14.4 Evaluate Alternatives			2		4						4							10	\$ 1,900
14.5 Alternative Selection			1		2						2							5	\$ 750
Task Subtotal		2	5	0	10	0	0	0	0	0	13	0	0	0	0	0	0	30	\$ 4,595
Task 15 Right-of-Way (by COUNTY)																			
Task 16 Final Plans, Specifications and Estimate (PS&E)																			
16.1 Advance (70%) PS&E to County & WFLHD			2	32	2												4	40	\$ 5,186
16.2 Advance (70%) PS&E Comment Review Meeting			8	8	8	8					8							40	\$ 5,820
16.3 Final (85%) PS&E to County & WFLHD			2	24	2												4	34	\$ 4,420
16.4 Final (85%) PS&E Comment Review Meeting			8	8	8	8					8							44	\$ 5,904
16.5 Final (100%) PS&E Bidding Document Package to County			2	16														18	\$ 2,452
Task Subtotal		0	24	88	20	16	0	0	0	0	18	0	0	0	0	0	12	178	\$ 23,563
Task 17 Bidding Assistance																			
17.1 Questions During Bidding			2		4						2							10	\$ 1,438
17.2 Addenda to Bid Documents			1		1						1							7	\$ 858
17.3 Perform Evaluation of Bids			4		1													2	\$ 281
Task Subtotal		0	7	0	5	0	0	0	0	0	3	0	0	0	0	0	0	19	\$ 2,705
TOTAL HOURS		28	232	87	674	147	482	12	732	0	87	0	0	0	0	4	35	2,627	
TOTAL NON-CONTINGENCY COSTS		\$ 4,342	\$ 33,872	\$ 13,095	\$ 80,990	\$ 16,729	\$ 46,740	\$ 1,140	\$ 69,540	\$ -	\$ 14,528	\$ -	\$ -	\$ -	\$ -	\$ 428	\$ 2,485	\$ 282,890	
Average Hourly Rates		\$ 187.00	\$ 146.00	\$ 135.00	\$ 135.00	\$ 197.00	\$ 96.00	\$ 86.00	\$ 95.00	\$ 71.00	\$ 187.00	\$ 121.00	\$ 107.00	\$ 107.00	\$ 96.00	\$ 107.00	\$ 71.00		

- (1) See attached Mason, Bruce & Girard (MB&G) estimate
- (2) See attached Foundation Engineering Inc. (FEI) estimate
- (3) See attached Heritage Research Associates (HRA) estimate
- (4) See attached Cascade Earth Sciences (CES) estimate
- (5) See attached Dave Place (DPlace) estimate

OBEC Expense	Rate	No.
Mileage (1050 Miles)	\$0.60	\$ 630
11x17 Mylar Sheets	\$12.00	57 \$ 684
Total		\$ 1,224

OBEC EXPENSES	\$ 1,224
TOTAL OBEC - ESTIMATE	\$ 294,114
MB&G - ESTIMATE	\$ 58,782
FEI - ESTIMATE	\$ 67,016
HRA - ESTIMATE	\$ 18,580
CES - ESTIMATE	\$ 5,240
DPLACE - ESTIMATE	\$ 4,761
TOTAL NON-CONTINGENCY ESTIMATE	\$ 448,493

CONTINGENCY TASKS	OBEC CONSULTING ENGINEERS																SUBTASK TOTAL	COST PER TASK	
	Grade	Principial Engineer	Senior Project Manager	Senior Specifications Engineer	Senior Project Engineer	Project Engineer 2	Senior Design Technician	CAD Manager	Senior CAD Tech	CAD Tech 2	Construction Manager / Principal Engineer	Assistant Project Manager	Senior Engineering Technician	Field Engineer 3	Field Engineer 2	Contract Administrator			Administrative Assistant 2
Task 3 Environmental Documentation and Permits (CONTINGENCY)																			
3.7 Prepare Wildlife Biological Assessment (CONTINGENCY)																		6	\$ 570
3.8 Prepare Fisheries Biological Assessment (CONTINGENCY)																		6	\$ 678
3.9 Prepare Fish Passage Plan (CONTINGENCY)																		4	\$ 380
Task Subtotal		0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	16	\$ 1,628
Task 4 Public Outreach and Education (CONTINGENCY)																			
4.3 Stakeholder Presentation (CONTINGENCY)			8		8													12	\$ 1,886
Task Subtotal		0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	12	\$ 1,886
Task 12 Fish Passage Culvert Design (CONTINGENCY)																			
12.1 Preliminary (30%) Fish Passage Design and Cost Estimate (CONTINGENCY)			1		34					28								61	\$ 7,206
12.2 Advance (70%) Fish Passage PS&E (CONTINGENCY)			1		48					34								83	\$ 8,856
12.3 Final (85%) Fish Passage PS&E (CONTINGENCY)					24					18								40	\$ 4,760
12.4 Final (100%) Fish Passage PS&E (CONTINGENCY)					12					8								20	\$ 2,380
Task Subtotal		0	2	0	118	0	0	0	0	84	0	0	0	0	0	0	0	204	\$ 26,202
TOTAL HOURS		0	8	0	124	0	16	0	84	0	0	0	0	0	0	0	0	232	
TOTAL CONTINGENCY COSTS		\$ -	\$ 1,188	\$ -	\$ 18,740	\$ -	\$ 1,520	\$ -	\$ 7,980	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,408	
Average Hourly Rates		\$ 187.00	\$ 146.00	\$ 135.00	\$ 135.00	\$ 197.00	\$ 95.00	\$ 86.00	\$ 25.00	\$ 71.00	\$ 187.00	\$ 121.00	\$ 107.00	\$ 107.00	\$ 96.00	\$ 107.00	\$ 71.00		

- (1) See attached Mason, Bruce & Girard (MB&G) estimate

OBEC Expense	Rate	No.
Mileage	\$0.50	
11x17 Mylar Sheets	\$12.00	4 \$ 48
Total		\$ 48

OBEC CONTINGENCY EXPENSES	\$ 48
TOTAL OBEC CONTINGENCY - ESTIMATE	\$ 27,456
MB&G CONTINGENCY - ESTIMATE	\$ 29,845
TOTAL CONTINGENCY ESTIMATE	\$ 57,049

SWEET CREEK ROAD RETAINING WALL

December 13, 2010
EXHIBIT A

Mason, Erupe & Girard

TASKS	Level 5 Schedulers	Level 3 Schedulers	Level 2 Schedulers	OS Analysts	Admins				SUBTASK TOTAL	COST PER TASK
Task 1 Project Management & Administration										
1.1 Order Permit Management & Coordination	10				10				401.5	5,000
1.2 Assist Meeting	14	6							181.5	1,860
1.3 Ongoing Permit Design Team E-Grid Coordination Meetings	18								181.5	2,810
Task 2 Surveying and Mapping (by COUNTY)	58	8							741.5	6,570
Task 3 Preliminary Design										
3.1 NEPA Construction Emission Determination	6	28			2				381.5	4,000
3.2 Wetland/Water Pollution and Report	18	16	46	14	4				681.5	8,238
3.3 Prepare Joint Permit Application	6	48		16	4				741.5	7,370
3.4 Conduct Site Reconnaissance and Prepare Notices Final Review	38	6		6	2				501.5	5,890
3.5 Prepare No Effect Documentation	2	34			7				351.5	3,412
3.6 Prepare Slope IV Documentation to Land Use Specs	4	78		7	4				681.5	8,820
3.10 Cultural / Historic Resources									0.5	
3.15 Archaeology									0.5	
3.12 Level 1 Hazardous Materials Outdoor Assessment									0.5	
3.13 Floodplain Development Permit									0.5	
3.14 Land Use Compatibility, Subgrant (LUCC), Application									0.5	
Task 4 Public Outreach and Education	30	298	82	58	18				374.5	58,781
4.1 Public Involvement Plan	2	22			2				261.5	2,650
4.2 Public Meeting	10	86	16	16	8				841.5	4,450
	12	78	15	0	10				1101.5	11,970
Task 5 Utility Location and Coordination (by COUNTY)										
Task 6 Geotechnical / Geological Services										
6.1 Subsurface Exploration and Preliminary Report									0.5	
6.2 Retaining Wall Design									0.5	
6.3 Laboratory Testing									0.5	
6.4 Geotechnical Report and Foundation Design									0.5	
Task 7 Hydraulics / Hydrology Services										
7.1 Open Channel Hydraulics									0.5	
7.2 Retention Pond Analysis									0.5	
7.3 Stormwater Management									0.5	
7.4 Stormwater Management Manual and Operation & Maintenance Manual									0.5	
7.5 Inspection Daily Check (O&M Service)									0.5	
Task 8 Traffic Engineering and Management										
8.1 Signal Design									0.5	
8.2 Sign Design									0.5	
8.3 Signal Design									0.5	
8.4 Traffic Control Plans									0.5	
Task 9 Pavement Design										
9.1 Pavement Analysis & Design									0.5	
Task 10 Roadway Design										
10.1 Preliminary (25%) Roadway Analysis and Roadway Plans									0.5	
10.2 Prepare Advance and Final (75% & 95% & 100%) Roadway Plans									0.5	
10.3 Roadway Development Design									0.5	
10.4 Perform O&M Design Review at 70%, 70% & 85% Design									0.5	
10.5 Prepare Advance & Final (70%, 85% & 100%) Cost Estimates									0.5	
10.6 Coordinate Following County and WFOUG 30%, 70% & 85% Reviews									0.5	
Task 11 Retaining Wall Design										
11.1 Preliminary (50%) Retaining Wall Analysis and Wall Plans									0.5	
11.2 Prepare Advance and Final (70%, 85% & 100%) Retaining Wall Plans									0.5	
11.3 Perform O&M Design Review at 70%, 70% & 85% Design									0.5	
11.4 Prepare Advance & Final (70%, 85% & 100%) Cost Estimates									0.5	
11.5 Coordinate Following County and WFOUG 30%, 70% & 85% Reviews									0.5	
Task 13 Preliminary Design Package (PDP)										
13.1 Prepare Preliminary Design Package									0.5	
13.2 Preliminary Design Committee Review Meeting									0.5	
Task Subtotal									0.5	

SWEET CREEK ROAD RETAINING WALL

December 13, 2010

EXHIBIT A

Mason, Bruce & Girard

TASKS	Mason, Bruce & Girard																SUBTASK TOTAL	COST PER TASK	
	Level 5 Scientist	Level 3 Scientist	Level 2 Scientist	GIS Analyst 2	Admin 2														
Grade																			
Task 14 Value Engineering																			
14.1 Review of Existing Data																		0	\$ -
14.2 Senior Management VE Review																		0	\$ -
14.3 Investigate Alternatives																		0	\$ -
14.4 Evaluate Alternatives																		0	\$ -
14.5 Alternative Selection																		0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
Task 15 Right-of-Way (by COUNTY)																			
Task 16 Final Plans, Specifications and Estimate (PS&E)																			
16.1 Advance (70%) PS&E to County & WFLHD																		0	\$ -
16.2 Advance (70%) PS&E Comment Review Meeting																		0	\$ -
16.3 Final (98%) PS&E to County & WFLHD																		0	\$ -
16.4 Final (98%) PS&E Comment Review Meeting																		0	\$ -
16.5 Final (100%) PS&E Bid Document Package to County																		0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
Task 17 Bid Assistance																			
17.1 Questions During Bidding																		0	\$ -
17.2 Addenda to Bid Documents																		0	\$ -
17.3 Perform Evaluation of Bids																		0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
TOTAL HOURS	98	294	90	38	38	0	0	0	0	0	0	0	0	0	0	0	0	668	
TOTAL NON-CONTINGENCY COSTS	\$ 14,210	\$ 29,400	\$ 7,920	\$ 3,430	\$ 2,470	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 67,420	
Average Hourly Rates	\$ 145.00	\$ 100.00	\$ 88.00	\$ 90.79	\$ 65.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		

MB&G EXPENSES	\$ 1,362
TOTAL MB&G - ESTIMATE	\$ 58,782
TOTAL NON-CONTINGENCY ESTIMATE	\$ 58,782

MB&G Expenses	Rate	No.
Mileage (1224 Miles)	\$0.90	\$ 1102
Reproduction (Black and White)	\$0.10	1500 \$ 150
Reproduction (Color)	\$1.00	250 \$ 250
Telephone Charges	\$150.00	1 \$ 150
DINMIC Station Request	\$100.00	1 \$ 100
Refreshments for Public Meeting	\$100.00	1 \$ 100
Total		\$ 1,392

CONTINGENCY TASKS	Mason, Bruce & Girard																SUBTASK TOTAL	COST PER TASK	
	Level 5 Scientist	Level 3 Scientist	Level 2 Scientist	GIS Analyst 2	Admin 2														
Grade																			
Task 3 Environmental Documentation and Permits (CONTINGENCY)																			
3.1 Prepare Wildlife Biological Assessment (CONTINGENCY)	9	86		2	4													100	\$ 10,200
3.2 Prepare Fisheries Biological Assessment (CONTINGENCY)	6	86		2	4													100	\$ 10,200
3.3 Prepare Fish Passage Plan (CONTINGENCY)	6		40	4	4													50	\$ 4,600
Task Subtotal	21	172	40	4	12	0	0	0	0	0	0	0	0	0	0	0	0	250	\$ 25,000
Task 4 Public Outreach and Education (CONTINGENCY)																			
4.3 Stakeholder Presentation (CONTINGENCY)	10	20		2	4													32	\$ 3,360
Task Subtotal	10	20	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	32	\$ 3,360
Task 12 Fish Passage Culvert Design (CONTINGENCY)																			
12.1 Preliminary (30%) Fish Passage Design and Cost Estimate (CONTINGENCY)																		0	\$ -
12.2 Advance (70%) Fish Passage PS&E (CONTINGENCY)																		0	\$ -
12.3 Final (95%) Fish Passage PS&E (CONTINGENCY)																		0	\$ -
12.4 Final (100%) Fish Passage PS&E (CONTINGENCY)																		0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
TOTAL HOURS	32	192	40	4	14	0	0	0	0	0	0	0	0	0	0	0	0	282	
TOTAL CONTINGENCY COSTS	\$ 4,840	\$ 18,800	\$ 3,520	\$ 360	\$ 910	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,430	
Average Hourly Rates	\$ 151.25	\$ 98.00	\$ 88.00	\$ 90.00	\$ 65.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		

MB&G CONTINGENCY EXPENSES	\$ 915
TOTAL MB&G CONTINGENCY - ESTIMATE	\$ 29,545
TOTAL CONTINGENCY ESTIMATE	\$ 29,545

MB&G Expenses	Rate	No.
Mileage (330 Miles)	\$0.90	\$ 297
Reproduction (Black and White)	\$0.10	2000 \$ 200
Reproduction (Color)	\$1.00	200 \$ 200
Telephone Charges	\$150.00	1 \$ 150
Refreshments for Public Meeting	\$100.00	1 \$ 100
Total		\$ 847

SWEET CREEK ROAD RETAINING WALL

December 13, 2010

EXHIBIT A

TASKS	Foundation Engineering, Inc.														SUBTASK TOTAL	COST PER TASK		
	Principal Engineer	Senior Engineer	Project Engineer	Project Geologist	Staff Engineer	Clerical												
Grade																		
Task 1 Project Management & Coordination																		
1.1 Overall Project Management & Coordination																	0	\$ -
1.2 Kickoff Meeting			10														10	\$ 1,350
1.3 Ongoing Internal Design Team & County Coordination Meetings			12														12	\$ 1,620
Task Subtotal	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	\$ 2,970
Task 2 Surveying and Mapping (by COUNTY)																		
2.1 Subsurface Exploration and Preliminary Report	4	22		7	95	11											138	\$ 12,228
2.2 Retaining Wall Design	4	24	24														52	\$ 6,396
2.3 Laboratory Testing		1				1											2	\$ 222
2.4 Geotechnical Report and Foundation Data Sheets	8	38	16														70	\$ 8,554
Task Subtotal	16	85	40	7	95	19	0	0	0	0	0	0	0	0	0	0	0	\$ 28,400
Task 7 Hydraulics / Hydrology Services																		
7.1 Pavement Analysis & Design			1	4													5	\$ 551
Task Subtotal	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5	\$ 551
Task 10 Roadway Design																		
10.1 Prepare Preliminary Design Package																	0	\$ -
10.2 Preliminary Design Package Comment Review Meeting			10														10	\$ 1,350
Task Subtotal	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	\$ 1,350
Task 14 Value Engineering																		
14.1 Review of Existing Data																	0	\$ -
14.2 Senior Management VE Review																	0	\$ -
14.3 Investigate Alternatives																	0	\$ -
14.4 Evaluate Alternatives																	0	\$ -
14.5 Alternative Selection																	0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
Task 15 Right-of-Way (by COUNTY)																		
Task 16 Final Plans, Specifications and Estimate (PS&E)																		
16.1 Advance (70%) PS&E to County & WFLHD																	0	\$ -
16.2 Advance (70%) PS&E Comment Review Meeting			10														10	\$ 1,350
16.3 Final (95%) PS&E to County & WFLHD																	0	\$ -
16.4 Final (95%) PS&E Comment Review Meeting			10														10	\$ 1,350
16.5 Final (100%) PS&E Bid Document Package to County																	0	\$ -
Task Subtotal	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	\$ 2,700
Task 17 Bid Assistance																		
17.1 Questions During Bidding																	0	\$ -
17.2 Addenda to Bid Documents																	0	\$ -
17.3 Perform Evaluation of Bids																	0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
TOTAL HOURS	16	138	44	7	95	19	0	0	0	0	0	0	0	0	0	0	57	
TOTAL NON-CONTINGENCY COSTS	\$ 2,640	\$ 18,630	\$ 4,676	\$ 728	\$ 8,352	\$ 1,045	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,971
Average Hourly Rates	\$ 165.00	\$ 135.00	\$ 104.00	\$ 104.00	\$ 87.00	\$ 55.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

FEI Expenses	Rate	No.	
Mileage	\$0.50	\$1,140.00	\$ 570
Water Level Indicator	\$20.00	1	\$ 20
DCP Equipment	\$30.00	4	\$ 120
Flaggers	\$5,305.00	1	\$ 5,305
Drilling	\$21,740.00	1	\$ 21,740
Overnight Per Diem	\$110.00	4	\$ 440
Full Day Per Diem	\$30.00	1	\$ 30
Copies	\$0.30	300	\$ 90
Binding	\$10.00	5	\$ 50
Lab Tests	\$2,660.00	1	\$ 2,660
Total			\$ 31,045

FEI EXPENSES	\$ 31,045
TOTAL FEI - ESTIMATE	\$ 67,018
TOTAL NON-CONTINGENCY ESTIMATE	\$ 67,016

Heritage Research Associates

TASKS	Heritage Research Associates																SUBTASK TOTAL	COST PER TASK
	CR Project Manager	Project Archaeologist	Arch/Tech Specialist	Historic Pres Specialist	Arch Field Crew	Graphics												
Grade																		
Task 1 Project Management & Coordination																		
1.1 Overall Project Management & Coordination																	0	\$ -
1.2 Kickoff Meeting																	0	\$ -
1.3 Ongoing Internal Design Team & County Coordination Meetings																	0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
Task 2 Surveying and Mapping (by COUNTY)																		
Task 3 Environmental Services																		
3.1 NEPA Categorical Exclusion Documentation																	0	\$ -
3.2 Wetland/Waters Delineation and Report																	0	\$ -
3.3 Prepare Joint Permit Application																	0	\$ -
3.4 Conduct Site Reconnaissance and Prepare Noxious Plant Report																	0	\$ -
3.5 Prepare No Effect Documentation																	0	\$ -
3.6 Prepare Biopa IV Documentation for Listed Fish Species																	0	\$ -
3.10 Cultural / Historic Resources	4	40		40		8											80	\$ 8,800
3.11 Archaeology	4	72	40		24	8											148	\$ 11,300
3.12 Level 1 Hazardous Materials Corridor Assessment																	0	\$ -
3.13 Floodplain Development Permit																	0	\$ -
3.14 Land Use Compatibility Statement (LUCS) Application																	0	\$ -
Task Subtotal	8	112	40	40	24	14	0	0	0	0	0	0	0	0	0	0	238	\$ 18,200
Task 4 Public Outreach and Education																		
TOTAL HOURS	8	112	40	40	24	14	0	0	0	0	0	0	0	0	0	0	238	
TOTAL NON-CONTINGENCY COSTS	\$ 920	\$ 10,080	\$ 2,800	\$ 2,800	\$ 1,320	\$ 770	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,290
Average Hourly Rates	\$ 115.00	\$ 90.00	\$ 65.00	\$ 65.00	\$ 55.00	\$ 55.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

HRA Expenses	Rate	No.	
Mileage	\$0.90	300	\$ 300
Reproduction (Black and White)	\$0.10	0	\$ -
Reproduction (Color)	\$1.00	0	\$ -
	\$0.00	0	\$ -
	\$0.00	0	\$ -
Total			\$ 300

HRA EXPENSES	\$ 360
TOTAL HRA - ESTIMATE	\$ 18,650
TOTAL NON-CONTINGENCY ESTIMATE	\$ 18,590

TASKS	Cascade Earth Sciences																SUBTASK TOTAL	COST PER TASK
	Principal	Senior Geologist II	Project Scientist	Drafters	Administrative Coordinator													
Grade																		
Task 1 Project Management & Coordination																		
1.1 Overall Project Management & Coordination																	0	\$ -
1.2 Kickoff Meeting																	0	\$ -
1.3 Ongoing Internal Design Team & County Coordination Meetings																	0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
Task 2 Surveying and Mapping (by COUNTY)																		
Task 3 Environmental Services																		
3.1 NEPA Categorical Exclusion Documentation																	0	\$ -
3.2 Wetland/Waters Delineation and Report																	0	\$ -
3.3 Prepare Joint Permit Application																	0	\$ -
3.4 Conduct Site Reconnaissance and Prepare Noxious Plant Report																	0	\$ -
3.5 Prepare No Effect Documentation																	0	\$ -
3.6 Prepare Slope IV Documentation for Listed Fish Species																	0	\$ -
3.10 Cultural / Historic Resources																	0	\$ -
3.11 Archaeology																	0	\$ -
3.12 Level 1 Hazardous Materials Corridor Assessment	3	3	28	4	11												49	\$ 4,839
3.13 Floodplain Development Permit																	0	\$ -
3.14 Land Use Compatibility Statement (LUCS) Application																	0	\$ -
Task Subtotal	3	3	28	4	11	0	0	0	0	0	0	0	0	0	0	0	49	\$ 4,838
Task 4 Public Outreach and Education																		
TOTAL HOURS	3	3	28	4	11	0	0	0	0	0	0	0	0	0	0	0	49	
TOTAL NON-CONTINGENCY COSTS	\$ 513	\$ 372	\$ 2,772	\$ 288	\$ 693	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,638
Average Hourly Rates	\$ 171.00	\$ 124.00	\$ 99.00	\$ 72.00	\$ 63.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		

CEB Expenses	Rate	No.	
Mileage	\$0.65	215	\$ 139
EDR Report	\$258.00	1	\$ 258
Acetals	\$144.00	1	\$ 144
Digital Camera	\$10.00	1	\$ 10
Copies	\$0.16	750	\$ 120
Postage	\$6.00	1	\$ 6
Total			\$ 602

CEB EXPENSES	\$ 602
TOTAL CEB - ESTIMATE	\$ 5,240
TOTAL NON-CONTINGENCY ESTIMATE	\$ 5,240

SWEET CREEK ROAD RETAINING WALL

December 13, 2010
EXHIBIT A

TASKS	Dave Place																	SUBTASK TOTAL	COST PER TASK
	Principal																		
Grade																			
Task 1 Project Management & Coordination																			
1.1 Overall Project Management & Coordination																		0	\$ -
1.2 Kickoff Meeting																		0	\$ -
1.3 Ongoing Internal Design Team & County Coordination Meetings																		0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
Task 2 Surveying and Mapping (by COUNTY)																			
2.1 Subsurface Exploration and Preliminary Report																		0	\$ -
2.2 Retaining Wall Design	4																	4	\$ 600
2.3 Laboratory Testing																		0	\$ -
2.4 Geotechnical Report and Foundation Data Sheets																		0	\$ -
Task Subtotal	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	\$ 600
Task 7 Hydraulics / Hydrology Services																			
11.1 Preliminary (30%) Retaining Wall Analysis and Wall Plans	4																	4	\$ 600
11.2 Prepare Advance and Final (70%, 95% & 100%) Retaining Wall Plans																		0	\$ -
11.3 Perform QA/QC Design Reviews on 30%, 70% & 95% Designs	4																	4	\$ 800
11.4 Prepare Advance & Final (70%, 95% & 100%) Cost Estimates																		0	\$ -
11.5 Corrections Following County and WFLHD 30% 70% & 95% Reviews																		0	\$ -
Task Subtotal	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	\$ 1,200
Task 13 Preliminary Design Package (PDP)																			
13.1 Prepare Preliminary Design Package																		0	\$ -
13.2 Preliminary Design Package Comment Review Meeting																		0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
Task 14 Value Engineering																			
14.1 Review of Existing Data	4																	4	\$ 800
14.2 Senior Management VE Review																		0	\$ -
14.3 Investigate Alternatives	8																	8	\$ 1,200
14.4 Evaluate Alternatives																		0	\$ -
14.5 Alternative Selection																		0	\$ -
Task Subtotal	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	\$ 1,800
Task 15 Right-of-Way (by COUNTY)																			
Task 16 Final Plans, Specifications and Estimate (PS&E)																			
16.1 Advance (70%) PS&E to County & WFLHD																		0	\$ -
16.2 Advance (70%) PS&E Comment Review Meeting	4																	4	\$ 600
16.3 Final (95%) PS&E to County & WFLHD																		0	\$ -
16.4 Final (95%) PS&E Comment Review Meeting																		0	\$ -
16.5 Final (100%) PS&E Bld Document Package to County																		0	\$ -
Task Subtotal	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	\$ 600
Task 17 Bld Assistance																			
17.1 Questions During Bidding																		0	\$ -
17.2 Addenda to Bid Documents																		0	\$ -
17.3 Perform Evaluation of Bids																		0	\$ -
Task Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -
TOTAL HOURS	28																	24	
TOTAL NON-CONTINGENCY COSTS	\$ 4,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,200	
Average Hourly Rates	\$ 150.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		

Dave Place Expenses	Rate	No.	
Mileage	\$0.51	1080	\$ 651
Reproduction (Black and White)	\$0.10	0	\$ -
Reproduction (Color)	\$1.00	0	\$ -
	\$0.00	0	\$ -
	\$0.00	0	\$ -
Total			\$ 551

Dave Place EXPENSES	\$ 551
TOTAL Dave Place - ESTIMATE	\$ 4,751
TOTAL NON-CONTINGENCY ESTIMATE	\$ 4,751



EXHIBIT B

2011 Salary Grade & Hourly Rates

Salary Grade	Personnel Classification	Salary	Salary Grade	Personnel Classification	Salary
23	Principal	\$175			
	<u>Design</u>			<u>Construction</u>	
22	Sr. Project Manager/Principal Engineer	\$167	23	Chief Construction Engineer	\$175
21	Sr. Project Manager/Group Manager 5	\$146	22	Construction Manager / Principal Engineer	\$167
20	Project Manager/Group Manager 4	\$135	21	Construction Group/Project Manager 5	\$146
20	Sr. Specifications Engineer	\$135	20	Construction Group/Project Manager 4	\$135
20	Sr. Project Engineer	\$135	19	Assistant Project Manager	\$121
19	Project Engineer 4	\$121	18	Sr. Engineering Technician	\$107
19	Specifications Engineer 4	\$121	18	Field Engineer 3	\$107
18	Project Engineer 3	\$107	17	Engineering Technician 3	\$95
18	Specifications Engineer 3	\$107	17	Field Engineer 2	\$95
17	Specifications Engineer 2	\$95	16	Engineering Technician 2	\$86
17	Design Engineer 2	\$95	14	Engineering Technician 1	\$71
17	CAD Manager	\$95		<u>Administration</u>	
17	Sr. Design Technician	\$95	21	Director Financial Operations	\$146
16	Environmental Specialist	\$86	17	IS Manager	\$95
16	Design Engineer 1	\$86	15	Sr. IS Specialist 3/Staff Accountant	\$78
16	Graphics Manager	\$86	13	IS Specialist 2	\$63
16	Sr. CAD Technician	\$86	18	Contract Administrator	\$107
14	CAD Technician 2	\$71	14	Administrative Assistant 3	\$71
12	CAD Technician 1	\$60	13	Branch Office Administrator	\$63
12	Engineering Intern	\$60	13	Accounting Specialist 3	\$63
	<u>Surveying</u>		12	Accounting Specialist 2	\$60
22	Principal Surveyor	\$167	12	Secretary 2	\$60
19	Survey Group Manager	\$121	11	Receptionist 1	\$51
18	Sr. Project Surveyor	\$107			
17	Project Surveyor	\$95			
16	Survey Technician 3	\$86			
14	Survey Technician 2	\$71			
12	Survey Technician 1	\$60			
11	Survey/Field Intern	\$51			

Travel/Reimbursable Expenses:

Mileage: ODOT Current Rate
 Reimbursable job costs will be invoiced at cost.

Equipment Charges:

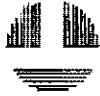
Special equipment @ direct rental cost

<p>EUGENE – Corporate Office 541.683.6098 FAX: 541.683.6578 920 Country Club Road, Suite 100B Eugene, Oregon 97401-6089 www.obec.com</p>	<p>PORTLAND AREA 503.629.6103 FAX: 503.629.8416 6005 SW Meadows Road, Suite 120 Lake Oswego, Oregon 97035- 4288</p>	<p>SALEM 503.589.4100 FAX: 503.589.4141 2235 Mission Street SE, Suite 100 Salem, Oregon 97302-1298</p>	<p>MEDFORD 541.774.5590 FAX: 541.774.5591 831 O'Hare Parkway Medford, Oregon 97504-4005</p>
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Mason, Bruce & Girard, Inc.

EXHIBIT B

Job Grade/Classification	2011 Standard Billing Rate
Principal	\$185
Level 5 Environmental Scientist	\$170
Level 4 Environmental Scientist	\$145
Level 3 Environmental Scientist	\$100
Level 2 Environmental Scientist	\$88
Level 1 Environmental Scientist	\$75
GIS Analyst 3	\$95
Admin Assistant 2	\$68



Billing Rates and General Information
January 2010

Hourly Rates:

Principal Engineer ¹	\$165
Senior Engineer	\$135
Project Manager	\$122
Senior Project Engineer	\$122
Project Engineer/Geologist	\$104
Staff Engineer/Geologist	\$87
Technician	\$74
Clerical	\$55

Reimbursable Expenses:

Mileage ²	\$0.50/mile
Copies/Fax	\$0.30/page
Report Binding	\$10/report
Other Expenses	Cost plus 15%

Per Diem:

Half Day	\$10
Full Day	\$30
Overnight	\$110

Field Charges³:

Misc. Project Supplies	Cost plus 15%
Traffic Control Signs/Cones	\$50/day
Photoionization Detector (PID)	\$210/weekly
Inclinometer	\$75/half day \$150/full day
Methane Meter	\$190/weekly
pH Meter	\$10/day
Resistivity Meter	\$25/day
Water Level Indicator	\$20/project
Dynamic Cone Penetrometer	\$25/day
Disposable tips	\$5/each
Mini-troll	\$50/monthly
Dataloggers	\$50/monthly
Shelby Tubes	\$25 each
Sample Storage	\$150/per year

Notes:

¹Legal and expert witness consultation by Principal Engineer billed at hourly rate of \$195.

²Mileage billed at current ODOT approved rates and may differ than the rates listed above.

³Charges subject to change depending upon type and length of project.

Subcontractors (drillers, backhoe, flaggers, concrete cutters, etc.) billed at direct cost plus 15%.

Federal ID #: 93-1124584

Oregon Registry #: 366331-88

Rev. 10/11/10

Escalated Salary Rate Schedule

Firm Name:	Heritage Research Associates, Inc.	EXHIBIT B			
Data as of date:	12/31/2010				
Classification		2010 Rate	2011 Rate	2010 Rate	2011 Rate
Project Manager		\$ 46.67	\$ 48.77	\$ 113.56	\$ 118.67
Project Archaeologist		\$ 35.94	\$ 37.55	\$ 87.44	\$ 91.38
Arch/Tech Specialist, MA		\$ 25.08	\$ 27.00	\$ 61.02	\$ 65.70
Historic Pres Specialist		\$ 25.08	\$ 27.00	\$ 61.02	\$ 65.70
Senior Historian		\$ 46.67	\$ 48.77	\$ 113.56	\$ 118.67
Senior Archaeologist		\$ 42.01	\$ 43.90	\$ 102.22	\$ 106.82
Asst Field/Lab Director		\$ 22.76	\$ 23.78	\$ 55.38	\$ 57.87
Arch Field Crew		\$ 21.01	\$ 23.16	\$ 51.13	\$ 56.35
Lab Technician		\$ 21.01	\$ 21.96	\$ 51.13	\$ 53.43
Graphics		\$ 22.16	\$ 23.16	\$ 53.93	\$ 56.36



Cascade Earth Sciences

A valmont COMPANY

Exhibit B

SCHEDULE OF FEE

Professional Services*

• Principal	\$171/hour
• Managing II / Senior III	\$142/hour
• Managing / Senior II / Contract Manager	\$124/hour
• Senior	\$116/hour
• Project	\$99/hour
• Staff / Environmental Technician II	\$88/hour
• Environmental Scientist / Environmental Technician / Engineering Designer	\$80/hour
• Field Technician / Drafter / Engineering Technician / Data Technician / Technical Editor	\$72/hour
• Administrative Coordinator	\$63/hour
• Administrative Support	\$55/hour

- Expert testimony @ 150% of the above rates

*Professional staff including soil scientists, hydrologists, geologists, engineers, biologists, and contract administrators

Reimbursables

Actual out-of-pocket expenses associated with the performance of services, including but not limited to:

- Rental of CES-owned equipment
- Copying @ \$0.10/page
- Meals and lodging @ cost plus 15% or as quoted
- Mileage @ \$0.60/mile (\$0.70 for ½-ton vehicle or larger)
- Custom software charge @ \$25/hour
- Project materials @ cost plus 15% or as quoted

Outside Services

Subcontracted services and equipment rental @ cost plus 15% or as quoted.

Taxes

Sales and other applicable taxes will be charged when necessary to meet state tax requirements.

Payment

Invoices are to be paid within 30 days from date of invoice.
Interest on late payments @ 18% per annum.

EXHIBIT B

BILLING RATES
David Place Construction Consultant

Effective 5/18/2010

DIRECT LABOR COSTS

Project Role	Hourly Rate	Billing Rate
Costs, Schedules and Constructability Reviews	\$	150.00

Certified by: David Place Title: Sole Proprietor