

**AGREEMENT FOR CONSULTING ENGINEERING SERVICES
(Yamhill County and David Evans & Associates, Inc.)**

THIS AGREEMENT (“Agreement”) is made effective the last date set forth adjacent to the signatures of the parties below between **Yamhill County**, a political subdivision of the State of Oregon, acting through its Department of Public Works (referred to as County in this Agreement) and David Evans & Associates, Inc.(Contractor), an Oregon Corporation (referred to as Contractor in this Agreement) for the consulting engineering services for which proposals responsive to County’sRFP were opened **Thursday, November 18, 2021** (referred to in this Agreement as the “Project”).

STATEMENT OF PURPOSE AND IDENTIFICATION OF CONTRACT DOCUMENTS

A. County has budgeted funds to perform the Project. County conducted a competitive selection process to select the best qualified proposer to complete the Project. Contractor was the deemed the best qualified proposer. This Agreement is made to specify the mutual obligations of County and Contractor for completion of the Project.

B. This Agreement includes by reference the following Contract Documents that are part of the Project:

- (A) Request for Proposals
- (B) Addenda (if any)
- (C) Responsive Proposal
- (D) This Agreement
- (E) Agreement Amendments (if any)
- (F) Insurance Certificates
- (G) Notice to Proceed
- (H) Change Orders (if any)
- (I) Project Acceptance
- (J) Exhibit A – Scope of work

AGREEMENT: In consideration of the mutual covenants contained below, County and Contractor hereby agree as follows:

1. **Scope of work.** The Contractor will commence and complete the Project in accordance with the Contract Documents identified above consistent with the degree of care and skill ordinarily exercised by members of Contractor's profession currently practicing under similar circumstances and in the same locality. The Contractor acknowledges receipt of all Contract Documents in existence at the date it executed this Agreement.

2. **Agreement performed at Contractor's expense as Independent Contractor.** The Contractor will furnish all of the materials, supplies, tools, equipment, labor, and other services necessary for the construction and completion of the Project as described in the Contract Documents. The Contractor is an Independent Contractor under this Agreement.
3. **Commencement and completion date.** The Contractor will commence the work required by the Contract Documents within 7 calendar days after the County's approval of this Agreement and will complete the same no later than **Friday October 28, 2022**, unless the Contract Period is extended or otherwise modified by written notice or executed Change Order.
4. **Termination.** County may terminate this Agreement if the Contractor fails to comply with a material term of this Agreement. If this Agreement is terminated, the County will pay for all work accepted by the Project Supervisor prior to termination.
5. **Compensation.** The Contractor agrees to perform all of the Work described in the Contract Documents and comply with the terms therein at the hourly rates set forth in Contractor's responsive proposal; provided, however, that the maximum amount due Contractor for completion of the scope of work is **\$588,968.00** unless the Contract Price is modified by executed Change Order. Payment shall be made by County either in a single payment following final acceptance of the project by the Yamhill County Surveyor, or at Contractor's option, in monthly progress payments for work accepted by the Project Supervisor.
6. **Incorporation of statutory provisions required for public contracts.** The Contractor certifies it shall comply with all applicable Public Contract Laws to including, but not limited to, ORS 279B.200 through 279B.240 and ORS 279C.500 through 279C.530. ORS 279B.200 through 279B.240 and ORS 279C.500 through 279C.530 are incorporated into this Agreement by reference.
7. **Workers' compensation.** The Contractor, its subcontractors, if any, and all employers working under this Agreement or contract are subject employers under the Oregon Workers' Compensation Law and shall comply with ORS 656.017, which requires them to provide workers' compensation coverage for all their subject workers.
8. **Certification of compliance with tax laws.** The Contractor certifies, under penalty of perjury, that the Contractor's Company is not in violation of any Oregon tax laws and that Contractor has complied with the tax laws of the state of Oregon or a political subdivision of the state of Oregon, including ORS 305.620, 305.380(4) and ORS Chapters 316, 317 and 318.
9. **Certification of reading and understanding of documents.** The Contractor certifies it has read and fully understands all Contract Documents including Solicitation Documents and terms and conditions. The Contractor understands and acknowledges that in signing this Agreement the Contractor waives all rights to plead any misunderstandings regarding the same.

10. **Status of the Project Supervisor.** Greg Haffner, Engineering Manager, is the Project Supervisor (the "Supervisor"). The Supervisor or their designee shall perform technical inspections of work and shall have authority to stop the work whenever such stoppage shall be necessary to insure proper execution of the contract. The Supervisor or his designee may reject all work and materials that do not conform to the standard of care and shall decide questions that arise in the execution of the work. The Supervisor has authority to reject or accept the work, subject to the standard of care.

11. **Prohibition of Discrimination.** In hiring employees for performance of work under this contract, no contractor, subcontractor or any person acting on their behalf shall by reason of race, religion, age, color, creed, physical handicap, sex or sexual orientation discriminate against a person who is qualified and available to perform work to which employment relates.

12. **Risk of Loss.** The risk of loss or damage to the subject matter of this contract arising from any cause whatsoever, including acts of God, shall be upon the Contractor until such time as the County has accepted the work as provided in this Agreement.

13. **Indemnification.**

13.1 **Claims for other than Professional Liability.** The Contractor shall indemnify and hold harmless County from and against any suits, actions, legal or administrative proceedings, demands, claims, liabilities, fines, penalties, losses, injuries, damages, expenses or costs, including reasonable attorney fees, in any way connected with any injury to any person or damage to any property to the extent caused by Contractor's or Contractor's subcontractors' prosecution of work under this agreement.

13.2 **Claims for Professional Liability.** The Contractor shall indemnify and hold harmless County from and against any suits, actions, legal or administrative proceedings, demands, claims, liabilities, fines, penalties, losses, injuries, damages, expenses or costs, including reasonable attorney fees, in any way connected with any injury to any person or damage to any property to the extent caused by Contractor's or Contractor's subcontractors' negligent acts, errors or omissions in prosecution of work under this agreement.

14. **Nonwaiver.** No waiver of any breach of this Agreement shall be held to be a waiver of any other or subsequent breach. All remedies afforded in this Agreement shall be taken and construed as cumulative, that is, in addition to every other remedy provided therein or by law. The failure of County or Contractor to enforce at any time any of the terms of this Agreement, or to exercise any option which is provided, or to require at any time performance by Contractor or County of any of the provisions, shall in no way be construed to be a waiver of such provisions, nor in any way to affect the validity of any part of this Agreement, or the right of County or Contractor to thereafter enforce each and every provision.

15. **Contractor's Representation.** Contractor, by entering into this Agreement, represents that its proposal for this project is made without connection with any person, firm or corporation making or refraining from making a proposal for the same or similar project and was in all respects fair and without collusion or fraud.

16. **Severability.** Should any clause or section of this Agreement be declared by court to be
Deer Creek Park Bridge

void or voidable, the remainder of this Agreement shall remain in full force and effect.

17. **Dispute resolution through mediation and arbitration.** Any dispute between the parties to this Agreement shall be resolved according to the following process:

(a) The parties first shall submit to mediation of the dispute to be conducted by a mutually acceptable mediator. If the parties cannot agree on a mediator, they shall request a mediator to be appointed by the U.S. Mediation and Arbitration service or a similar mediation and arbitration service located in Portland, Oregon. The mediator's charges and expenses shall be borne equally by the parties. All other expenses, including attorney fees and costs, shall be borne exclusively by the party requiring the service or for which payment is to be made.

(b) If the dispute is not resolved in mediation, the parties shall then submit the dispute to binding arbitration. Arbitration shall be conducted by and in accordance with the Construction Industry rules of the American Arbitration Association. The decision of the arbitrator shall be final and binding on the parties. The party that does not substantially prevail, as determined by the arbitrator, shall pay the arbitrator's fees and expenses in arbitration. All other expenses, including attorney fees and costs, shall be borne exclusively by the party requiring the service or for which payment is to be made.

18. **Attorney fees and costs.** In the event that either party to this Agreement shall take any action, judicial or otherwise, to enforce or interpret any of the terms of this contract, each party shall be wholly responsible for its own expenses which it may incur in taking such action, including costs and attorney fees, whether incurred in a suit or action or appeal from a judgment or decree therein or in connection with any nonjudicial action.

19. **Applicable laws.** This Agreement is executed in the State of Oregon and is subject to Oregon law and jurisdiction in Yamhill County.

20. **Subcontractors.** The Contractor may not engage any subcontractor(s) to perform work under this Agreement without the express written consent of the County. If the County does grant consent, the Contractor covenants and agrees to bind any and all Subcontractor(s) for performance of work under this Agreement. Any reference to Contractor shall include any and all Subcontractor(s) ad infinitum.

21. **Written changes required.** The rights and duties under this Contract shall not be modified, delegated, transferred, or assigned, except upon written signed consent of both parties.

22. **Successors bound.** This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

23. **Insurance requirements.** At a minimum, the resulting agreement with the Consultant will require the following insurance in connection with the Project:

INSURANCE DESCRIPTION	Minimum Required Coverage
1. Workers Compensation	Statutory
2. General Liability aggregate	\$1,000,000 per occurrence/\$3,000,000
3. Professional Liability/E&O	\$1,000,000 per claim/aggregate
4. Automobile Liability/Property Damage	\$1,000,000 Combined Limit

23.1.1 Evidence; Changes. Evidence of such insurance shall be furnished to the County before commencing the work at the Project site. The County shall receive thirty (30) days prior written notice of any material change or reduction that does not meet the requirements of this Agreement. The Consultant shall procure substitute insurance (to the extent reasonably available) so as to assure the County that the minimum limits of coverage are maintained continuously throughout the period of the resulting agreement.

23.1.2 County as Named-Insured. The general liability/property damage and automobile/property damage insurance policy required shall name the County, and its officers, agents and employees as additional insured for the insurance and shall contain a waiver of subrogation against the County.

THIS AGREEMENT AND THE CONTRACT DOCUMENTS CONSTITUTE THE ENTIRE AGREEMENT BETWEEN THE PARTIES. NO WAIVER, CONSENT, MODIFICATION OR CHANGE IN TERMS OF THIS CONTRACT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY BOTH PARTIES. SUCH WAIVER, CONSENT, MODIFICATION OR CHANGE, IF MADE, SHALL BE EFFECTIVE ONLY FOR THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS OR REPRESENTATIONS, ORAL OR WRITTEN NOTICE SPECIFIED HEREIN REGARDING THIS CONTRACT. THE CONTRACTOR, BY SIGNATURE OF ITS AUTHORIZED REPRESENTATIVE, HEREBY ACKNOWLEDGES THAT HE/SHE HAS READ THIS CONTRACT, UNDERSTANDS IT, AND AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed on the date indicated by their duly authorized officials, this Agreement in duplicate, each of which shall be deemed an original on the date executed by all parties.

[Name of contractor]

YAMHILL COUNTY, OREGON

By: *Amanda Blankenship*
(Signature)

Mary Starrett
Mary Starrett, Chair

Date: 12/16/2021

Date: 12/23/21

Amanda Blankenship
(Printed name)

Ken Huffer
KEN HUFFER
County Administrator

Title: Associate

Date: 12/23/21

Fed. Tax I.D. No: 93-0661195

APPROVED AS TO FORM

Contractor
Registration No: na

By: *Christian Boenisch*
CHRISTIAN BOENISCH,
Yamhill County Legal Counsel

By: _____
(Signature)

Date: 12/16/2021

Lwin Hwee
(Printed name)

Lwin Hwee

12.16.21

Title: Vice President

Accepted by Yamhill County
Board of Commissioners on
12/23/21 by Board Order
21-499

Deer Creek Park Bridge

Exhibit A

STATEMENT of WORK

for

Engineering & Construction Services for Bridge Replacement Deer Creek Park

Name:	County's Project Manager ("CPM") Greg Haffner	Name:	Consultant's Project Manager ("PM") Amanda Blankenship
Address:	Yamhill County Public Works 2060 NE Lafayette Ave McMinnville, OR 97128	Address:	David Evans and Associates, Inc. 530 Center Street NE, Suite 605 Salem OR, 97301
Phone:	503-434-7515	Phone:	503-480-1322
Email:	Haffnerg@co.yamhill.or.us	Email:	amst@deainc.com

A. PROJECT DESCRIPTION and OVERVIEW of SERVICES

Yamhill County ("County") is contracting with Consultant for Services in connection with the following project (the "Project").

Background

The selected consulting firm will provide design, assist with permitting, develop full engineering plans, contract specifications and construction schedule, and provide construction management and administration for a project to construct improvements for the Bridge Replacement Deer Creek Park Bridge, in Yamhill County, Oregon. Improvements will include the removal and replacement of existing bridge and roadway design.

Project Description

Project scope includes preliminary and final design for the replacement of existing 1962 steel and timber bridge. Scope includes Right of Way (ROW) verification, legal descriptions for any temporary construction easements, topographic survey, environmental permits, including DSL, ODWF, and Army Corps, scour analysis, bidding support, and construction management and inspection services.

The existing bridge has two spans with timber piles, salvaged steel girders, and timber deck. The current sufficiency rating is 29.7. The current load rating restricted the bridge to 17 tons for legal trucks and 15 tons for special haul trucks. The existing bridge is narrow, but give the low traffic levels, serves the needs of the traveling public quite well.

With limited houses beyond the bridge, a road closure is planned for bridge construction. Pedestrian access across the creek to the park will be provided with a County provided 6' x 65' steel pedestrian bridge.

Project Limits

The project limits are defined as within the existing road Right-of-Way, extending 200-feet to the east to the edge of the park, and to the west limits of the park entrance.

County Responsibilities

County will:

- Provide existing relevant Project data
- Provide internal County communication and Project coordination

- Coordinate with County Parks Department regarding temporary impacts to the park and other issues
- Obtain County Planner signature for Joint Permit Application (if required)
- Review, sign and submit Project permits to permitting agencies (if required)
- Acquire County Floodplain Permit (if required)
- Participate in Project meetings and work sessions
- Review Consultant's progress reports and process invoices
- Review, comment and provide concurrence Design Criteria discussion
- Review, comment and provide concurrence 90% Advance PS&E and Signed Final PS&E submittals
- Provide review comments to Consultant within five (5) business days of receipt of review documents
- Consolidate all review comments from County staff and provide one (1) set of review comments per deliverable to the Consultant
- Address conflicting review comments made by County staff prior to providing comments to Consultant
- Provide access to private property
- Provide R/W conveyance documents (if required)
- Provide road closure notification for geotechnical subsurface investigation
- Provide 'Section 100's' Special Provisions for bid documents
- Print and distribute bid documents
- Advertise the Project for bids
- Distribute bid documents to bidders and maintain plan holders list
- Evaluate bids, audits, and awards

Summary of Tasks Provided by Consultant

Consultant shall provide the following Services for this Project:

- Project management of Consultant's services
- Provide required pavement section
- Complete the County Floodplain Permit
- Obtain and review existing relevant Project data provided by County
- Schedule, facilitate and attend Project meetings
- Provide Environmental Compliance documentation and completion of:
 - Wetland/Waters Delineation and Technical Memorandum
 - Wetland Delineation Report (if required)
 - Stormwater Management Plan
 - Joint USACE/DSL/DEQ permit applications
 - Fish Passage Plan
- Coordinate and negotiate with state and federal agencies for environmental compliance and clearances, including Section 7 informal or formal consultation under the Endangered Species Act
- Pay DSL and DEQ permit review fees if applicable, and request reimbursement from County
- Complete an archaeological pedestrian survey, baseline report, and recommend whether additional clearance work is warranted
- Complete Historic baseline report
- Complete utility identification, contact and coordination
- Perform field surveys and develop Project base mapping and DTM

- Complete Survey Reference Monuments
- Complete R/W acquisition (if required)
- Complete geotechnical field explorations and material analysis
- Provide geotechnical bridge foundation information
- Perform surface hydraulic assessment and stormwater quality design
- Develop erosion control plans
- Develop traffic control staging
- Develop roadway approach design and drawings
- Develop bridge design and provide bridge drawings
- Prepare technical special provisions to County standards using 2021 Oregon Standard Specifications for Construction
- Perform value engineering review and constructability review
- Resolve County review comments, maintain comment log and provide written comment resolution
- Prepare engineer's construction cost estimate and schedule
- Provide assistance during bidding
- Prepare up to one (1) bid addendum
- Provide Construction Administration and Management
- Provide Consultation During Construction
- Review Construction Submittals
- Perform Construction Inspection
- Prepare Stamped Load Rating
- Prepare Record Drawings of the As-Built project
- Construction Surveying

B. STANDARDS and GENERAL REQUIREMENTS

The following shall apply to this WOC:

1. Software Requirements

Consultant shall perform services using AutoCAD Civil 3D 2019 design software, and provide deliverables in a form suitable to these programs. Special provisions must be submitted in Microsoft Office compatible format.

2. Design Criteria and Project Assumptions/Conditions

County will designate the basic premises and criteria for the design of County roads. All specifications for the Project must be in compliance with the 2021 Oregon Standard Specifications for Construction and modified by the special provisions, as necessary.

Procedures for development of construction plans and specifications must be consistent with the provisions of the current editions of the various manuals pertaining to design, which are published or endorsed by the County. Consultant shall make such minor changes, modifications, or revisions in the details of the work as may be requested by the County consistent with the progression of the development of the work as defined in the detailed Project schedule submitted by Consultant. When alternatives are considered, County will jointly have the right of selections.

The County reserves the right to initiate conferences within this scope of services with Consultant to review the work in progress.

The County will assign a Project Leader to provide coordination with Consultant and to monitor the work in progress. Consultant work will be reviewed and concurrence provided by the County for conformance with County office practices, standards, and related report formats during the preliminary engineering and design phases of the Project.

Consultant shall perform all work in compliance with the design standards, guidelines, requirements, and methodologies as set forth above and the editions of the design documents listed in this section that are current at the initiation of this WOC. The list is not intended to be exhaustive.

General and Administrative

- Oregon Standard Specifications for Highway Construction, ODOT current version
- Oregon Standard Drawings

Environmental

- Environmental Guide Book, U.S. Department of Transportation, Federal Highway Administration, current version
- Wetland Delineation Manual, USACE/EPA current version
- Oregon Fish Passage Law

Hydraulic

- Hydraulics Manual, ODOT current version
- Local drainage master plan

Roadway

- AASHTO A Policy on Geometric Design of Streets and Highways, current version
- Highway Design Manual, ODOT current version, English
- Contract Plans Development Guide, ODOT
- AASHTO Roadside Design Guide

Structures

- AASHTO LRFD Bridge Design Specifications, current version
- ODOT Bridge Design Manual, current version
- ODOT Geotechnical Design Manual, current version

Traffic

- MUTCD Manual on Traffic Control Devices
- Traffic Line Manual

The following items are excluded from Consultant's SOW:

- Work to address Section 4(f) or 6(f) issues is not required.
- Programmatic Section 4(f) Evaluations are not required.
- Project is eligible for SLOPES programmatic BO. An individual Biological Assessment is not required.
- Noise and air analysis and assessments are not required.
- Level 1 HAZMAT Environmental Site Assessment and Report and hazardous material sampling and testing

- County Conditional Use Permit is not required.
- Permanent Signal designs are not required.
- Roadside and curbside landscaping, besides that required for restoration work, is not required.
- A Roadside inventory form is not required.
- A highway access form is not required.

C. REVIEW, COMMENT and SCHEDULE OVERVIEW

- Consultant shall coordinate with County staff as necessary and shall revise draft deliverables to incorporate County draft review comments.
- Consultant shall incorporate comments within ten (10) business days from receipt by County and return the Final to County staff, unless a different timeframe is specified for specific tasks or otherwise agreed to in writing by County.

D. FORMAT REQUIREMENTS

- Consultant shall submit draft deliverables in electronic format via email (and hard copy if requested).
- Consultant shall also submit all graphic files accompanying reports separately in .jpg or .tif formats unless specified differently by County.
- Each draft and final text-based or spreadsheet-based deliverable shall be provided in MS Office file formats (i.e., MS Word, Excel, etc.) and must be fully compatible with version used by County.
- Additional format requirements may be listed with specific tasks/deliverables in the SOW.

E. TASKS, DELIVERABLES and SCHEDULE

Unless the WOC is terminated or suspended, Consultant shall complete all tasks and provide all deliverables (collectively, the “Services”) included in this WOC and in accordance with the performance requirements and delivery schedules included in this WOC. For purposes of standardization, the task numbering in this SOW may be non-sequential. The delivery schedule is consolidated in a table at the end of Section E.

TASK 1 PROJECT MANAGEMENT DURING DESIGN

For the purposes of defining the scope of this project management and administration task, the duration of work prior to construction is assumed to be six (6) months, from January 2022 through June 2022.

Task 1.1 Project Management

Consultant shall provide Project management throughout the duration of the Project. This includes the work necessary to guide and direct Consultant's overall processes and Consultant's Project team. Consultant shall manage the Consultant’s production efforts including administering the contract, monitoring progress, and directing Consultant's quality control activities.

Production Management

Consultant shall provide leadership, direction, and control of the Consultant's production efforts. Consultant shall:

- Program, coordinate, and supervise Consultant's Project work.
- Direct Consultant's Project Team with regard to overall Project activities and team meetings.

- Maintain liaison and coordination between Consultant and County staff.

Contract Administration

Consultant shall provide day-to-day administration of Consultant's Project contract. Consultant shall:

- Develop and manage sub-consultant contracts.
- Monitor Consultant's Project budgets and costs.
- Prepare invoices and backup data.

It is assumed that 6 invoices will be prepared.

Progress Monitoring

Consultant shall provide scheduling, monitoring, controlling, and reporting progress on Consultant's Project activities. Consultant shall:

- Prepare, maintain and update Project activity schedule at design milestone submittals.
- Prepare and submit monthly progress reports.

Quality Management

Consultant shall provide a formalized mechanism for internal review of Consultant's work activities and products before delivery of final products. Consultant shall:

- Develop and maintain a quality management plan, designating responsibility for review of Consultant's technical work and deliverable products.
- Respond to the County review comments in writing.

Task 1.1 Consultant Deliverables

- Monthly invoice and back up data
- Project activity schedule
- Monthly progress report

TASK 2 PUBLIC INVOLVEMENT

County will perform Public Involvement. It is assumed that Consultant shall spend up to 12 hours for public involvement related tasks such as consultation and exhibit development. It is assumed that the Consultant will not attend any meetings.

Task 2 Consultant Deliverables

- Up to 2 exhibits to support County Public Involvement activities

TASK 3 PROJECT MEETINGS

Task 3.1 Project Meetings

Weekly Coordination Meetings – During the design phase, the consultant shall schedule, prepare for, attend and facilitate weekly Coordination Meetings to be held over Zoom. It is assumed 12 meetings will be held. The Consultant Project Manager will attend each meeting and on three different occasions, another project staff may attend a meeting.

Design Criteria Meeting

and Site Visit - Consultant shall schedule, prepare for, attend and facilitate a 1 hour Design Criteria Meeting to be held in the County office and on the same day, a project site visit. The Consultant Project

Manager, Environmental Permit Specialist, Geotechnical Engineer, Hydraulic Engineer, Roadway Engineer, Bridge Engineer, and Construction Project Manager will attend each meeting and site visit.

30% Schematic Review Meeting - Consultant shall schedule, prepare for, attend and facilitate a 1 hour 30% Schematic Review Meeting to be held over Zoom. The Consultant Project Manager, Environmental Permit Specialist, Geotechnical Engineer, Hydraulic Engineer, Roadway Engineer, Bridge Engineer, and Construction Project Manager will attend meeting.

Advance 90% PS&E Review Meeting - Consultant shall schedule, prepare for, attend and facilitate a 1 hour Design Criteria Meeting to be held over Zoom. The Consultant Project Manager, Environmental Permit Specialist, Geotechnical Engineer, Hydraulic Engineer, Roadway Engineer, Bridge Engineer, and Construction Project Manager will attend meeting.

Task 3.1 Consultant Deliverables

- Meeting agendas and minutes as requested

TASK 4 ENVIRONMENTAL COMPLIANCE/PERMITTING

Consultant shall complete the appropriate environmental compliance documentation based on plans prepared 3 weeks after NTP. Consultant shall coordinate with County and regulatory staff as needed to facilitate permitting needs and environmental compliance certification. This Project falls under the Class II Categorical Exclusion. The specific components of this task are described below.

Task 4.1 Wetland/Waters Technical Memorandum

Consultant's wetland biologist shall review the Project area to identify potential jurisdictional wetland areas and waters as defined by the 1987 U.S. Army Corps of Engineers ("USACE") Wetlands Delineation Manual (the "Manual") and the 2010 Regional Supplement to that document ("Supplement"). Published information including county soil surveys, national and local wetlands inventories, and any available site-specific documents must be reviewed for relevant information. Consultant shall perform a site investigation to check for field indicators of wetland vegetation, soils, hydrology, and regulatory criteria for roadside ditches. Consultant shall collect sample plot data to document any wetland boundaries and shall prepare formal data forms under Task 4.2, if authorized. Consultant shall delineate and flag the OHWM of Waters of the State and U.S., including ditches, streams and wetlands found within the study areas as part of this task. Consultant shall recover the locations of flags under Task 5.4 and display the OHWM and wetlands on the Project plans.

If wetland impacts will be avoided, Consultant shall summarize site conditions and the wetland and OHWM delineation field work performed in a draft and final Wetlands/Waters Technical Memorandum. Consultant shall submit draft to County for review. Consultant shall address the County comments in the final submittal to the County. The memorandum must state whether wetlands are present or not present within the study area and describe all jurisdictional waters identified. Using an aerial photograph, Consultant shall produce a sketch map to show the approximate location and extent of designated waters of the State and U.S and wetlands for inclusion in the memorandum. If wetland impacts cannot be avoided, a Wetland Delineation Report (Contingency Task) will be prepared in lieu of a technical memorandum. The water and wetland boundaries will be used to plan avoidance and minimization impacts to jurisdictional features and calculate areas of impacts, if any.

Task 4.1 Consultant Deliverables, if wetland impacts will be avoided:

- Draft Wetland/Waters Technical Memo

- Final Wetland/Waters Technical Memo

Task C4.2 Wetland Delineation Report (CONTINGENCY)

This task identifies specific deliverables that County, at its discretion, may elect to authorize Consultant to produce. Consultant shall only complete this task and the identified deliverables pursuant to written (email acceptable) NTP issued to Consultant by CPM. A separate NTP is required to authorize this task. If jurisdictional wetlands within the Project area will be impacted, Consultant shall prepare a draft and final Wetland Delineation Report in accordance with Oregon Administrative Rules Chapter 141 Division 090, and shall submit it to DSL for review and concurrence. Consultant shall provide the draft Wetland Delineation Report to the County for review prior to submittal to DSL. Consultant shall resolve DSL and County comments and incorporate necessary revisions into the final report. A site visit with DSL is not anticipated and is excluded from this task. This task will only be implemented if wetlands are located in the study area and will be impacted. Consultant shall pay wetland delineation report fee to DSL and seek reimbursement from County.

Task C4.2 Consultant Deliverables:

- Draft Wetland Delineation Report
- Final Wetland Delineation Report

Task 4.3 Stream Functional Assessment Method (CONTINGENCY)

Consultant shall complete a Stream Functional Assessment if impacts to non-wetland waters are unavoidable. The assessment shall be function-based per the current DSL requirements outlined in OAR 141-085-0765(3). This will include an assessment of the current hydrologic, geomorphic, biological, and chemical and nutrient functions and values provided by all on-site non-wetland waters that will be impacted. The assessment should be subjective and qualitative, and should include a discussion of the anticipated changes in stream function and value post-construction to determine if a net gain, net loss, or no net change in the assessed functions and values will occur as a result of the Project. The results of the assessment should be included in the Joint Permit Application document prepared under Task 4.6. Field work for this task will be completed under Task 4.1.

Task C4.3 Consultant Deliverables:

- Stream Functional Assessment results included in Task 4.6 deliverables

Task 4.4 Fish Passage Plan

Consultant shall prepare draft and final Fish Passage Plan for Oregon Department of Fish and Wildlife (“ODFW”) approval. The Fish Passage Plan must document Project compliance with Oregon’s fish passage law (OAR 635-412-0035). Consultant shall prepare the Fish Passage Plan using the ODFW Stream Crossing form for submittal to ODFW. Consultant shall provide hydraulic or streambed simulation information as necessary to demonstrate compliance with the fish passage law. Consultant shall incorporate all features and conditions established in the approved Fish Passage Plan into the Advance and Final PS&E.

Task 4.4 Consultant Deliverables

- Draft Fish Passage Form
- Final Fish Passage Form

Task 4.5 SLOPES Compliance

Consultant shall review the Standard Local Operating Procedures for Endangered Species (SLOPES) Biological Opinion (“BO”) to determine Project eligibility. Consultant shall offer to conduct a site visit

with the U.S. Army Corps of Engineer and/or National Marine Fisheries Service (“NMFS”) prior to completion of the Concept Plans (Task 10). The purpose of the meeting is to discuss salient aspects of the Project and to establish a mutually agreed upon preliminary eligibility determination and identify potential mitigation requirements with NMFS. Consultant’s biologist shall coordinate and review proposed design with SLOPES design criteria, including stormwater management and treatment, bridge removal, bridge design, and construction means and methods. Consultant shall prepare and submit the SLOPES Compliance documentation as a component of the Joint Permit Application (Task 4.6).

Consultant shall coordinate with the Project team at preliminary and final design milestones for document compliance with SLOPES BO.

Task 4.5 Consultant Deliverables

- Documentation to be incorporated into JPA (Task 4.6)

Task 4.6 Joint Permit Applications (U.S. Army Corps of Engineers/Department of State Lands)

Consultant shall prepare a draft Joint Permit Application (“JPA”) following confirmation of the preferred design configuration by the County. Consultant shall coordinate an on-site meeting with USACE, DSL, and ODFW during the SLOPES site visit with NMFS. During the on-site meeting, Consultant shall facilitate resolution of County and regulatory agency concerns and identify the special conditions, conservation and avoidance measures, compensatory mitigation plans, and permitting requirements that will need to be implemented into the JPA for expedited approval.

Consultant shall prepare the final JPA for a USACE Section 404 Nationwide Permit (“NWP”) and a DSL State General Permit (“GP”) or General Authorization (“GA”) to authorize work within the jurisdictional waters, including wetlands (if required). Consultant shall check that features and impacts are correctly identified for the permit application. Consultant shall prepare all necessary Project narratives, alternatives analysis, drawings, maps, and photographic documentation required for inclusion in the JPA.

Wetland impacts are expected to be less than 0.2 acre. Compensatory wetland mitigation, if necessary, is anticipated to be provided through the purchase of credits from DSL’s In-Lieu Fee Program or by one of the mitigation banks with service areas that incorporate the Project site. Stream Functional Assessment documentation completed under Task 4.3 shall be submitted along with the JPA, if Task 4.3 is activated.

The federal Section 404 permit requires compliance with the federal Endangered Species Act. Federally listed fish in Deer Creek will be addressed using the SLOPES V BO. This scope of work assumes No Effect to federally listed Kincaid’s Lupine and Fender’s blue butterfly. Staging will occur in areas where vegetation is actively managed, and where the listed plant and butterfly are not known to be present. The appropriate staff from Yamhill County, Oregon Department of Agriculture, or the U.S. Fish and Wildlife Service will be consulted to determine the appropriate boundaries for staging areas to avoid listed species. A No Effect determination will be provided in the JPA. If impacts to federally listed fish or butterfly are unavoidable, Consultant shall provide a scope amendment to prepare a Biological Assessment.

Consultant shall submit the Stormwater Management and Treatment Plan completed under Task 8.2 with the JPA.

Consultant shall submit the draft JPA for the County review and signature prior to submittal to regulatory agencies. Consultant shall respond to questions or comments raised by USACE, DSL, DEQ and other resource agencies during review of the permit application. Consultant shall develop appropriate responses to questions regarding the information submitted to the agencies. Consultant shall correspond and clarify

the JPA in the form of telephone calls, letters, and e-mails, as needed, to facilitate the issuance of the USACE, DSL, and DEQ permit for this Project.

County will obtain the County Planning Department affidavit information and signatures as required in the JPA.

Consultant shall pay Removal-Fill application review fee to DSL, and 401 WQC review fee to DEQ, and seek reimbursement from the County.

Task 4.6 Consultant Deliverables

- Draft Joint Permit Application
- Final Joint Permit Application

Task 4.7 Erosion and Sediment Control Plan

Consultant shall develop Project-wide, permit-level draft and final Erosion and Sediment Control Plan (“ESCP”), establishing the requirements to be followed during construction. Consultant shall submit draft to the County for review. Consultant shall address the County comments in the final submittal to the County. Consultant shall develop plans, details and narrative for inclusion as an appendix to the Joint Permit Application (Task 4.6). Consultant shall incorporate all features established in the ESCP into the Advance and Final PS&E.

Task 4.8 Cultural Resource Study

The purpose of this task is to perform a baseline cultural resource study needed for the Project. The study must satisfy Section 106 of the National Historic Preservation Act ORS 358, and in accordance with State Historic Preservation Office (“SHPO”) guidelines. Consultant will not need to collect information specific to satisfying Section 6(f) of the LWCF Act. The cultural resources study must be done by Consultant staff meeting the Professional Qualifications Standards of the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation.

The study area will include the existing and proposed right-of-way extending westward from SW Gopher Valley Road to approximately 140 meters (460 ft) west of Deer Creek Bridge, entirely within road right-of-way except for temporary staging, parking, and pedestrian access areas within Deer Creek Park.. This area will be the Project’s Area of Potential Effect (“APE”).

Tribal consultation will be conducted by the USACE, or by the County for areas not under USACE jurisdiction.

Historic Resources Survey

Consultant shall conduct a field survey of the Project area to identify resources greater than forty-five (45) years of age that may be historically significant.

Consultant shall inventory historic resources within the project APE and shall include recommendations for eligibility on the historic resources identified in the Project vicinity. Up to two historic resources are assumed to be in the project APE. Using the information provided in the Cultural Resources Report, SHPO will determine if the resources identified are eligible for listing in the National Register of Historic Places. The resources are assumed to be not eligible for listing in the National Register of Historic Places, and no Determination of Eligibility or Finding of Effect is assumed to be needed. The results of the survey will be included in the Cultural Resource Survey report for the project.

Literature Review

Consultant shall conduct record searches and literature review for the APE provided by County and a one (1) mile radius, prior to any fieldwork. Consultant shall examine the following databases and documents:

- the SHPO database in Salem, OR;
- appropriate Tribal Historic Preservation Office (“THPO”) database if APE is within a recognized reservation boundary;
- General Land Office maps;
- historic topographic maps;
- Sanborn Fire Insurance Maps; and
- other published or non-published records and records archives for known prehistoric and historic archaeological resources within a one (1) mile radius of APE.

Archaeological Pedestrian Surveys

Consultant shall conduct pedestrian field surveys within the APE.

Pedestrian survey methods must be consistent with the following SHPO guidelines:

(http://www.oregon.gov/OPRD/HCD/ARCH/docs/draft_field_guidelines.pdf). The maximum spacing of transects must be thirty (30) meters apart; the minimum spacing of transects must be ten (10) meters; depending on terrain features and/or ground visibility. Consultant shall determine transect spacing based on professional judgment to maximize discovery of site locations within the study area. All cultural resources observable on the surface and in exposed subsurface profiles during the inventory must be identified and recorded. Up to one archaeological resource would be identified and recorded.

Cultural Resources Technical Report

The archaeological and historic resource survey results will be reported in a single combined cultural resources survey report. Consultant shall provide a draft (in WORD format) and final Cultural Resources Technical Report. Consultant shall submit draft to the County for review. Consultant shall address the County comments in the final submittal to the County. The report must include:

- A purpose statement and full Project description including:
 - Location and legal description.
 - General environmental description.
 - Historic context.
 - Proposed construction activities.
 - Defined APE and APE map.
 - Total acreage of impact.
 - Anticipated direct, indirect and cumulative impacts.
- Results of SHPO/THPO data base searches including:
 - Brief summary of previous archaeological research completed within one (1) mile of APE.
 - Brief summary of recorded archaeological features within one (1) mile of APE.
 - Results of GLO and Sanborn map review including:
 - Brief summary of features (trails, buildings, etc.) depicted on maps and within APE.
 - Discussion of ethno-historic information and historic context of APE and surrounding environment.
 - Description of historic resources inventory methods, including date(s) of survey and names and duties of personnel conducting the survey
 - Description of pedestrian survey methods including date(s) of survey, types of transects used, and names and duties of personnel conducting the survey.

- Results of pedestrian survey including ground conditions (percent visibility) and difficulties encountered, if any; descriptions of any archaeological artifacts encountered and other pertinent information.
- A summary with recommendations that must include a discussion of the site(s) and historic resource(s) identified and whether or not they meet National Register of Historic Places (NRHP) criteria and maintain integrity.
- List of references cited.
- Location map at 1:24,000 scale; aerial image (Google map acceptable) showing APE; and representative digital images of current conditions within APE.
- Site forms and isolate forms (hard copies) for newly discovered archaeological sites and isolates. Consultant shall also complete the SHPO Online Site Form.
- Site update forms for previously identified archaeological sites.
- SHPO forms for up to two historic resources

Task 4.8 Consultant Deliverables

- Draft Cultural Resources Report
- Final Cultural Resources Report

TASK 5 FIELD SURVEYING

Consultant shall perform a field survey and develop base maps in International Survey Feet. Consultant shall tie existing monumentation and perform a right-of-way retracement survey within the Project limits in the survey. Consultant shall collect topographic data within the Project limits and create a topographic base map.

Task 5.1 Survey Research

Consultant shall perform records research to support Project activities as called for in subsequent tasks.

Existing Vesting Deeds and Property Ownerships

Consultant shall obtain a "Trio listing kit" (typically provided by a title company) for any properties where new R/W or easements are required. Consultant shall identify property ownership within and adjacent to the Project site by investigating property deeds and county tax records, where R/W or easements are required. Consultant shall include all called deeds referenced in the Property Vesting Deeds if needed to resolve property boundary, where R/W or easements are required (up to six R/W or easements).

Existing County Records

Consultant shall research and obtain available copies of surveys, subdivision plats, and land partition plats filed in the county surveyor's office related to the properties impacted by the Project. Consultant shall use this information to find monuments that impact the Project and to establish property lines for area calculations when new R/W is acquired.

Consultant shall research and obtain available copies of county assessor maps, General Land Office plats, and county road records related to the properties potentially impacted by the Project.

Consultant shall research and obtain available data about Government Public Lands Survey Corners and their references in the Project area.

Existing Horizontal/Vertical Datum

Consultant shall perform the survey using the Oregon Coordinate Reference System, Salem Zone and NAVD88 as the horizontal and vertical datums for the project.

Existing Utility Records

Consultant shall research and obtain available facility maps and as-built construction plan data pertaining to all utilities in or near the Project area from One-Call Service, County, or other governmental agencies and utility companies.

Task 5.1 Consultant Deliverables:

- “Trio listing kit” with Property Vesting Deeds in electronic, where new R/W or easements are required, up to six.
- All County Assessor Maps in “.pdf” and hard copy format.
- All General Land Office Plats in hard copy and “.pdf” format.
- All County Road establishment records in hard copy and electronic format.
- All County Road vacation records in hard copy and electronic format.
- All Subdivision and Land Partition Plats in hard copy and electronic format.
- All County Surveys of record in hard copy and electronic format.
- All Maps and Data related to Government Public Lands – Survey Corners and any references.
- All vesting and reference deeds.
- All maps and data pertaining to utilities in hard copy and electronic format.

Task 5.2 Survey Control

The purpose of this task is to provide the means by which a Project can be located relative to horizontal and vertical datum, map projection, and coordinate systems. Consultant shall establish a horizontal and vertical control network for the Project using the Oregon Coordinate Reference System, Salem Zone and NAVD88 as the horizontal and vertical datums, respectively.

Horizontal Control

Consultant shall establish horizontal control according to County standards using Terrestrial (Theodolite and EDM), GPS (Static, Rapid Static and Real time Kinematics (“RTK”)) or a combination of both. Consultant shall set and adjust monuments in conformance with County guidelines.

Vertical Control

Consultant shall establish Vertical Control using differential leveling methods. Consultant shall establish vertical control for horizontal control points needed for dimensional terrain mapping as described in this SOW.

Task 5.3 Monument Recovery

The purpose of this task is to address the requirements of ORS 209.150 and 209.155, and other survey related statutes.

Field Survey of Recovered Monuments

Consultant shall survey for the following: Government corners, geodetic control stations, benchmarks, R/W monuments, property boundary markers, and roadway alignment markers. Consultant shall complete the monument recovery necessary to resolve the Right-of-Way for the entire Project area as described in this SOW.

Consultant shall take measurements (survey) to the monuments recovered and tied (surveyed) from the control network. Consultant shall double tie the found monuments with conventional total station or GPS RTK methods. RTK methods must include tying recovered monuments the second time separated by a minimum ninety (90) minutes or by using a second base running at the same time to produce closing vector to each point.

Consultant shall locate, measure and document the location of all survey markers and monuments of record for property boundaries and R/W needed within the areas described above. Prepare and file with Yamhill County Survey, a Pre-Construction Record of Survey in compliance with ORS as noted above.

Task 5.3 Consultant Deliverables:

- Monument recovery documents, including:
 - One (1) scanned copy of the original field notes in “.pdf” format
 - ASCII file containing the following information, in this order: Point number, Northing, Easting, Elevation, Alpha Feature Code
 - An AutoCAD file in “.dwg” format, containing all the tied monuments
 - Pre-Construction Record of Survey filed with Yamhill County

Task 5.4 Topographic Data

Consultant shall collect existing topographic data of manmade and natural features using a variety of methods to create a base map. These methods include but are not limited to: Collecting the data using terrestrial (Theodolite and EDM), GPS (“RTK”), High Definition Scanning (“HDS”), and aerial mapping.

Topographic Data Collection

Consultant shall collect topographic features, manmade or natural, which must be tied within the limits of the Project described above and which must have three-dimensional (“3d”) coordinates associated with each feature. Consultant shall collect these tied features using accepted collection methods. Trees over 6” DBH within the topographic survey limits will be located and identified by either “conifer” or “deciduous”.

Topographic survey will include cross sections of Deer Creek upstream and downstream at the bridge location plus a cross section approximately 400 feet upstream and two cross sections 150 feet and 350 feet downstream of the bridge location. Trees will not be included in cross section data.

Consultant shall collect wetland and waterway boundaries and data points flagged by Consultant biologists.

Basemap

Consultant shall take applicable topographic data collected in tasks above and create a base map file. Basemap must have all features drafted to County standards.

Digital Terrain Model (“DTM”)

Consultant shall create a 3d Digital Terrain Model surface using all of the topographical data collected within the areas described above.

Consultant shall collect the topographical data to create points and break lines in adequate quantity and in proper placement, to accurately represent the surface of the ground. Consultant shall create a DTM that meets County’s criteria for surface triangulation. Consultant shall collect confidence points in the field and generate a confidence point report. Consultant shall generate one (1) foot minor contours and five (5)

foot major contours throughout the DTM. DTM shots must not exceed a fifty (50) foot spacing to show the terrain. Consultant shall gather topographic data for this Project through techniques consistent with the construction of a DTM. Consultant shall use a combination of survey data at break lines, features, and spot locations to develop the DTM that will be for design. Consultant shall not use utility structure ties as part of the modeling.

Task 5.4 Consultant Deliverables:

- PDF copy of field notes taken in the field
- ASCII file containing the following information in this order, Point number, Northing, Easting, Elevation, alpha feature code.
- A DTM containing all the tied topographic features
- A basemap containing all the tied utility and topographic features.

Task 5.5 Utilities Features

Consultant shall utilize the Oregon One Call system to locate utilities within the Project area. The purpose of this task is to map utilities marked by third parties from the Oregon One Call system, to provide surface evidence of above and any identified underground features for inclusion in the topographic basemap or other mapping. Utility features will be included in Task 5.4.

Task C5.6 Easement and Right of Way Acquisitions (Contingency)

DEA will provide up to two (2) legal descriptions and exhibits for proposed easements or right-of-way acquisitions. Documents will be prepared to Oregon Department of Transportation Standards unless otherwise specified by County. DEA will respond to one (1) round of comments or edits by the client. Any additional revisions requested beyond this first round will be deemed additional services.

Right-of-way consultant will provide a current title report for each proposed acquisition to be used in the preparation of the legal description and exhibits.

The two (2) proposed easements or right-of-way acquisitions will be staked by the Consultant in the proposed locations at major angle points and not more than 100 foot intervals using wooden lath, on one occasion for appraisal purposes.

TASK 6 RIGHT-OF-WAY (CONTINGENCY)

Task 6.1 Programming Cost Estimate/General Information Notices (Contingency)

Consultant shall prepare and submit a Programming Cost Estimate spreadsheet and memo outlining detailed acquisition costs for each property impacted by the Project. Upon receipt of authorization to proceed with ROW Acquisition, Consultant shall setup ROW parcel files and deliver a General Information Notice (“GIN”), acquisition and relocation brochures, and a copy of the applicable portion of the ROW Acquisition map (marked Preliminary and showing the parcel(s) to be purchased) to all owners and occupants of affected properties. The GIN must be on County letterhead. The Consultant shall hand-deliver or mail the GIN packet via certified mail and shall document it in the diary of contact report, noting all attachments to the GIN.

Consultant shall deliver or mail GINs to up to two landowners. GINs shall be mailed certified mail with return receipt requested.

Task 6.1 Consultant Deliverables (Contingency)

- Programming Estimate
- General Information Notices

Task 6.2 Title Reports and Document Requests (Contingency)

Consultant shall assemble information needed in accordance with the ODOT Right of way & Rail/Utility Contractor Services Guide, Section V. Title. Paragraph B. Consultant shall order and pay for up to two preliminary title reports. Preliminary title reports may be needed for development of the legal descriptions and may need to be ordered prior to the preparation of legal descriptions.

Task 6.2 Consultant Deliverables (Contingency)

- Up to two Preliminary Title Reports

Task 6.3 Appraisals and Appraisal Reviews Coordination (Contingency)

Consultant shall provide up to two taking and damages Real Estate Appraisals conforming to standards contained in the Uniform Standards of Appraisal Practice (“USPAP”) and ODOT Right of Way Manual. All appraisals must be prepared using Agency approved forms or formats. All appraisals must be conducted by Appraisers experienced in Eminent Domain and included on ODOT’s list of qualified appraisers (“QAL”). Consultant shall provide no fewer than fifteen (15) calendar day’s written notice to owners of a planned appraisal inspection. Consultant shall provide the property owner and designated representative, if any, an invitation to accompany the appraiser on any inspection of the property for appraisal purposes. The 15-day appraisal notice and right to accompany shall be hand delivered or mailed certified and documented in the diary of contact report. The appraisals must be Value Finding or Taking and Damage reports in a summary format for up to two properties with impacts to the properties which result in minimal to no damages.

Consultant shall perform an appraisal review for each appraisal conducted by an appraiser on ODOT’s list of qualified appraisers and forward both appraisal and review to Agency and County for final approval.

The same appraisal firm must not perform both the appraisals and appraisal reviews.

County Responsibilities

County will establish just compensation and notify the Consultant.

The number of properties will be adjusted if any of the properties are donated.

Task 6.3 Consultant Deliverables (Contingency)

- Up to two Taking and Damage Appraisals
- Up to two Appraisal Reviews

Task 6.4 Negotiation and Final Offer (Contingency)

Consultant shall conduct negotiations for acquisitions of real property on up to two files based on Appraisal Review and in accordance with all applicable state and federal laws in place at time of Project. Consultant shall provide all property owners a complete copy of Appraisal and all essential documents at the initiation of negotiations, to include: Project information letters, acquisition and relocation brochures, summary statements, offer-benefit letters on County letterhead, and instrument of conveyance. The Consultant shall hand deliver or mail Offer Packet to property owner via certified mail and document it in the diary of contact report, noting all attachments.

Consultant shall make every reasonable effort to acquire ROW expeditiously by negotiation. Consultant shall give property owners reasonable opportunity to consider the offer (statutorily forty (40) calendar days) and to present information the owner believes is relevant to determining the value of the property.

- IF the OFFER is ACCEPTED, Consultant shall present a Final Report Packet covering the acquisition of ROW to County for final approval, payment, conveyance of title and recording.
- IF a COUNTER OFFER is received, Consultant shall submit the proposed COUNTER OFFER (exceeding the estimate of just compensation) with a justification letter and owner supplied supporting documentation to County for approval. If accepted, see above.
- IF an acceptable agreement is not reached after three substantive negotiation attempts, Consultant shall prepare and submit a Recommendation for Condemnation and return the file to the County.

For property owners considering donation, Consultant shall inform property owners, in writing, of their right to just compensation; such property owners may elect to donate by signing a waiver of their rights.

Consultant shall maintain written diaries of contact with property owners and tenants to record all events such as efforts to achieve amicable settlements, owner's suggestions for changes in plans, and responses to owner's counter proposals. The delivery of GIN packet, fifteen (15) day appraisal inspection letter and Offer Packet must be included in the diary of contact report.

Task 6.4 Consultant Deliverables (Contingency)

- Offer Benefit Packets Counter Offers with Justification, and Owner Supplied Supporting Documentation
- Final Reports
- Recommendation for Condemnations, if needed

Assumptions

- The County will provide Conveyance Documents to Consultant.
- The County will record documents and make payment to property owners.
- Number of parcels is up to two
- There are two parcels identified, and it is assumed that there are no larger parcels.
- The County will draft and approve a Resolution of Necessity prior to the initiation of negotiations.
- Rights of Entry are not needed for this project.
- Relocation services are not needed for this project.
- The appraisals will be Taking and Damages reports. If it is determined that a Before and After appraisals are necessary, appraisal and review fees will be adjusted accordingly.

TASK 7 GEOTECHNICAL INVESTIGATIONS/ANALYSIS/DESIGN

Consultant geotechnical services at bridge site shall be completed in accordance with the most recent version of the ODOT Geotechnical Design Manual.

Consultant shall perform geotechnical field explorations, field and laboratory testing and engineering analysis, and provide recommendations for bridge foundations and approach embankments. The findings will be summarized in a Geotechnical Report and Foundation Data Sheet.

Task 7.1 Site Reconnaissance and Field Explorations

Consultant shall conduct a geologic reconnaissance to identify the geologic conditions, any geologic hazards present and their impacts to the proposed Project elements. Consultant shall locate proposed boring locations in the field during the reconnaissance.

The site reconnaissance must include the following work:

- Observe surface conditions indicative of subsurface conditions as well as past or ongoing geologic processes (e.g., areas of seeps or springs, erosion, unstable slopes, shallow groundwater, roadway settlement, offsets and depressions, existing earthwork performance, and exposed soil and bedrock units).
- Identify site constraints and staging concerns (for exploration and construction).
- Observe and identify existing pavement conditions.
- Identify potential exploration locations.

The site reconnaissance must facilitate an understanding of the site constraints for field explorations, construction, and traffic staging. Consultant shall stake or paint proposed boring locations on the ground.

Field Exploration Work Plan

Consultant shall prepare a Field Exploration Work Plan showing the proposed drilling locations, outlining the drilling and sampling procedures and the traffic control plan prior to beginning the work. No fieldwork is to be performed, other than the site reconnaissance, before the Field Exploration Work Plan is reviewed and approved by County. The Field Exploration Work Plan must describe the borehole locations and geotechnical activities to be conducted, including site access, subsurface exploration means and methods, site restoration, traffic control, and health and safety of workers on site.

Consultant shall develop a Field Safety Plan (FSP) for fieldwork and a Traffic Control Plan (TCP) for submittal to County prior to the start of investigation work. The TCP must address a minor road encroachment as well as a single lane closure for activities associated with drilling exploratory borings from the roadway surface and pavement restoration. Consultant shall provide traffic control as necessary for explorations within the existing County right-of-way. Single lane closures are required for all borings. Traffic control will be required for up to two days.

Field Exploration

Consultant shall perform geotechnical field explorations to determine subsurface conditions and develop foundation design recommendations. The explorations for bridge site must include:

- Two borings drilled at the proposed two bridge abutments. Each boring will be advanced to an approximate depth of 50 to 60 feet. These borings will be used to characterize subsurface soil and bedrock conditions for the bridge foundations, abutment walls and approach embankments.

Disturbed soil samples must be collected in the borings at 2.5- to 5-foot increments using a split-spoon sampler in conjunction with Standard Penetration Testing. Recovery of up to four (4), relatively undisturbed Shelby tube samples may also be attempted if fine-grained soil is encountered. Rock coring must be accomplished using HQ-sized equipment. Up to 15 feet of rock coring will be performed in each boring. All field work must be observed and recorded by qualified geotechnical staff. Upon completion of drilling, the boreholes must be abandoned and backfilled according to Oregon Water Resources Department regulations.

Field exploration must include a surface reconnaissance of the stream beds and approaches to observe the location of any rock outcrops. Borings must be advanced using mud-rotary drilling or hollow stem auger drilling and HQ wire-line coring techniques. Consultant shall provide a support truck with a poly tank to provide water for drilling and coring. Drill cuttings must be drummed and removed from the site.

Consultant shall obtain up to three bucket samples of the stream bed material for the purpose of determining the D₅₀ grain size for scour analysis. The samples will include the 3-inch minus fraction of the bed material.

Assumptions:

- All borings will be drilled during daylight hours and will be located within the existing roadway and the public R/W. A single lane closure and traffic control will be required for the drill rig.
- Traffic control will consist of signs and cones around the work zone. No flagging will be required.
- Site will be explored utilizing a truck drilling rig.
- Any required permit fees will be waived.
- Any right-of-entry permits will be provided by the County.
- No soil or groundwater contamination is present on or near the Bridge site.

A summary of the planned borings is provided in the following table.

STRUCTURE	EXPLORATION	ESTIMATED BORING DEPTH
Deer Creek Park Bridge	2 Borings	Each boring to 50-60 feet with up to 15 feet of rock core each

Field exploration results shall be submitted under Task 7.5.

Task 7.2 Laboratory Testing

Consultant shall perform laboratory tests on soil samples and rock core obtained from the explorations to characterize the soils and rock to develop parameters for the design of Bridge foundations. The laboratory testing program shall be performed in accordance with standard ASTM and Agency practices to include the following:

- Moisture content (up to 20);
- Atterberg limits (up to 4);
- Gradation test on stream bed sample (for establishing a D₅₀ particle size for scour calculations);
- Gradation (up to 6 minus No. 200 sieve wash);
- Unconfined compression tests on rock core samples (up to 4), if suitable rock core specimens are obtained.

Up to one (1) corrosivity test suite (pH, resistivity, chloride, and sulfate content) shall be completed on a selected soil sample for the evaluation of corrosion potential. Test results must be submitted under Task 7.5.

Task 7.3 Geotechnical Analysis and Design

Consultant shall complete a geotechnical study and provide design parameters and construction recommendations for the Project. The engineering evaluation and analyses must be performed in accordance with the most recent ODOT Geotechnical Design Manual and the most current AASHTO LRFD Bridge Design Specifications. Consultant shall:

- Provide recommendations for earthwork including site preparation, excavation, cut and fill slopes, structural fill material, fill placement and compaction, and wet weather construction.
- Perform a seismic hazard evaluation including the peak horizontal acceleration on rock for the “Operational” and “Life Safety” seismic design criteria ground motions according to the ODOT BDM and hazard at the bridge and retaining walls due to potential liquefaction and lateral spreading.
- Provide recommendations for the new Bridge foundations including:
 - Evaluating the bridge supported on sheet piles or driven piles.
 - Providing design recommendations for one (1) selected foundation options including: strength limit and service limit state axial resistance of deep foundations, soil lateral resistance parameters for deep foundations, strength limit and service limit state nominal bearing resistance and sliding coefficients for shallow foundations and resistance factors for all proposed foundation types.
 - Evaluating constructability of the bridge foundations.
- Provide recommendations for abutment walls and embankments including:
 - Lateral earth pressures for abutment walls, wing walls, or sheet pile cut-off walls as needed.
 - Appropriate cut and fill slopes, global stability, and estimated settlement for embankments.
 - Geotechnical related construction considerations for shoring and staging.
- Perform a streambed material analysis according to the ODOT Hydraulics Manual, Appendix A, using samples taken just upstream from the existing bridges. The analysis will be used to determine the particle size (D_{50}) of the stream’s bed material. Results will be provided on a grain-size distribution (GSD) curve. Data will be used in Task 8.1 for scour analysis.

Geotechnical evaluation and design recommendations must be submitted under Task 7.5.

Task 7.4 Geotechnical Report and Foundation Data Sheets

Consultant shall prepare a draft and final Geotechnical Report for the bridge site according to the ODOT Geotechnical Design Manual. The report must:

- Summarize design and construction recommendations.
- Summarize field and laboratory test results.
- Summarize the results of the geotechnical engineering evaluation and design.
- Identify general specification criteria for the construction document and provide recommendations for special provisions (if required).
- Provide design and construction recommendations for the preferred bridge foundation system, embankments, and cut or fill slopes.

Consultant shall incorporate County review comments into the final Geotechnical Design Report. Consultant shall submit the final report with Signed Final PS&E.

Consultant shall prepare one (1) Foundation Data Sheet (“FDS”) based on the base map developed for the project site. Draft Foundation Data Sheet must be submitted for review with the draft Geotechnical

Report. The FDS must be finalized following review by the County and design team. The FDS must be submitted under Task 10.

Task 7.5 Review of Geotechnical Related Plans and Specifications

Consultant shall review the geotechnical related plans and special provisions at the Advance and Final PS&E review stages for consistency with the geotechnical recommendations provided in the final Geotechnical Design Report. Deliverable must be included in Task 10.

TASK 8 BRIDGE HYDRAULICS, STORMWATER/SURFACE WATER PLAN AND REPORT

Task 8.1 Bridge Hydraulic Study

Consultant shall develop and perform a hydraulic analysis, calculate bridge backwater and scour depths, design abutment scour protection, and prepare documentation to meet the needs and requirements of the Project.

Data Review

Consultant shall review available information from County personnel data files prior to conducting hydraulics work.

Site Reconnaissance

Consultant shall conduct a site reconnaissance and perform the following field observations and activities:

- Note lateral channel stability; document any signs of stream migration that could affect stability for piers, bents or abutments. Note degradation (headcutting) or aggradation (deposits) in the channel, document conditions with color photographs.
- Provide a “No Rise” certificate.
- Estimate Manning’s “n” value for the main channel and overbank areas, document with color photographs.
- Determine size of existing riprap at abutments and piers, note any riprap failure.
- Determine bed material size by visual inspection as required for values for variables in scour prediction.
- Note evidence of scour.
- Note existing abutment/pier alignment; note skew or normal to flow.
- Note hydraulic controls from channel constrictions, dams, etc.
- Note apparent or observed highwater marks.
- Note evidence of debris.
- Have conversations with local residents if available, and County Maintenance personnel about flooding.

Hydrology

Consultant shall develop site hydrology and use appropriate information to develop the 2-year through 500-year flows for the hydraulic model and scour evaluation. The County shall provide any stage or discharge data that may be available for all locations. If no data is available, then USGS regression equations will be used to determine base hydrology.

The Consultant shall contact the County to obtain information (studies, hydrologic and hydraulic models, and monitoring information) for flows on the Deer Creek. If there is no information available, the Consultant shall use engineering judgment to determine flow with the County’s approval.

Hydraulic Analyses

Consultant shall develop hydraulic models, using the Hydrologic Engineering Center – River Analysis System (HEC-RAS) computer model and the survey data, for existing and proposed bridges. Consultant's work shall include:

- Modeling the “natural conditions” with no bridge or roadway, modeling the existing bridge condition, and modeling the proposed bridge condition.
- Calculating backwater against “natural conditions” for the existing and proposed bridges for the 2-year through 500-year flood required by the bridge design.
- Determine the roadway overtopping flood and frequency at sites where the water overtops the roadway/bridge before the 500-year flood peak.

Bridge Scour Analysis

Consultant shall calculate bridge scour using procedures described in ODOT’s Scour Guidelines and HEC-18 and compare any historical surveys to determine changes in the channel geometry.

Reports

Consultant shall prepare a draft and final Hydraulic Report, in accordance with guidelines described in 2014 ODOT Hydraulics Manual.

Support for Permits

Consultant shall provide support and documentation necessary to obtain County floodplain permits (prepared by County) and the DSL permit. Consultant shall respond to comments received relative to the hydraulic design during the permit process. Consultant shall provide a “no-rise” certification.

Task 8.1 Consultant Deliverables

- Draft Bridge Hydraulic Report
- Final Bridge Hydraulic Report

Task 8.2 Stormwater/ Management Plan and Report

Consultant shall perform a surface water hydraulic analysis and develop stormwater treatment plans in order to comply with SLOPES programmatic design standards and DEQ water quality certification requirements. Consultant shall develop a draft and final Stormwater Quality Management Report in accordance with County and SLOPES guidelines. Consultant shall submit draft to the County for review. Consultant shall address County comments in the final submittal to the County.

Surface Water Hydraulic Analysis and Stormwater Quality Management Report

Consultant shall perform a field investigation to document existing drainage patterns and to attempt to locate historic drainage problems. Consultant shall compile complaint logs, maintenance logs, and available as-built plans and record drawings. County will supply Consultant with as-built plans of existing drainage systems, if available. Consultant shall investigate options for providing water quality and quantity control, as required, for roadway runoff based on environmental compliance agreements. Consultant shall pay particular attention to providing water quality and quantity control prior to the runoff entering the receiving waters. The hydrologic analysis must focus on the specific areas of improvement and must not include basin-wide master planning or analysis. Stormwater quality and quantity control facilities needed to meet County, State and Federal standards and will be accommodated within the proposed R/W. Consultant shall document the hydraulic and hydrologic investigation, analysis and design in a draft and final Stormwater Management Report.

Stormwater Drainage and Treatment Plans

Consultant shall develop preliminary, advance and final stormwater drainage plans. Drainage analysis and design must comply with federal and state environmental requirements.

Consultant shall develop up to two (2) advance and final Stormwater Drainage and Treatment Plan sheets illustrating and describing the required elements of the stormwater collection and treatment plan for submittal with Tasks 10, 11, and 12. Consultant shall prepare and submit plan sheets for review at each subsequent completion level stage. The Plans must include plans, profiles, and site grading plans for water quality and quantity control facilities and stormwater conveyance facilities, an Operations and Maintenance Manual to serve the new bridges and roadways, hydraulic control structures for water quality facilities (if necessary), and details for providing treatment of runoff prior to entering the receiving waters to meet NOAA Fisheries guidelines unless otherwise recommended by the Project biologist.

Task 8.2 Consultant Deliverables

- Draft Stormwater Quality Management Plan and Report
- Final Stormwater Quality Management Plan and Report

TASK 9 RESERVED

TASK 10 DESIGN

Consultant shall recommend the preferred bridge during the Design Criteria Meeting. The preferred bridge design developed with no alternative analysis.

Design Criteria Meeting

Consultant shall prepare for and attend the Task 1 Design Criteria Meeting and Site Visit. A list of the project design criteria will be presented at this meeting and confirmed during the meeting with the County.

30% Schematic

Prior to the complete of the basemap, the Consultant shall use available Google Earth and GIS data to provide labor, equipment and materials as needed to develop:

- 30% Role Plot of Project showing:
 - Roadway estimated project limits
 - Bridge and sheet pile estimated location
 - Temporary pedestrian bridge estimated location
 - Staging and parking areas estimated location
 - Utility conflicts
 - Work isolation estimated location
- Project Exhibits based on the Role Plot for the environmental permits

Consultant bridge layout will be based on one recommended bridge type. It is anticipated that the replacement bridge will be a single-span bridge. Consultant shall confirm the length based on grade profile, minimum horizontal and vertical clearances, SLOPES requirements and hydraulic constraints to produce a “No Rise” condition.

Prior to delivering the 30% Schematic Plans, consultant shall have a bridge engineer not directly involved in this project provide a value engineering review of the entire project with an estimated effort of 4 hours.

90% Advance Design

Consultant shall provide labor, equipment and materials as needed to develop 90% PS&E and Construction schedule. Comments from the 30% Schematic Review Meeting will be incorporated into the 90% Advance deliverables. Draft Geotechnical and Draft Hydraulic report recommendations will be incorporated into the 90% Advance deliverables.

Consultant shall evaluate location of roadway and bridge within the existing ROW and identify required temporary and permanent easement needs and road legalization needs.

Prior to delivering the 90% Advance Plans, consultant shall have an engineer experienced with construction, not directly involved in this project, provide a constructability review of the entire project with an estimated effort of 4 hours.

Consultant shall:

- Prepare a plan and profile sheet with Erosion Control callouts and a separate construction note sheet with quantities.
- Define and show limits of the Project, catch points, and construction limits.
- Develop final alignment plans.
- Develop R/W requirements, and easement requirements for permanent and temporary easements (if needed)
- Prepare Staging Area Plans
- Prepare Project title sheet and index of sheets.
- Prepare roadway typical section and details sheets.
- Prepare traffic control sheets.
- Prepare bridge drawings. Assumed sheets includes:
 1. Plan and Elevation
 2. Typical Section & General Notes
 3. Geotechnical Data Sheet
 4. Foundation Plan and Work Isolation Plan
 5. Abutment Plan, Elevation, and Section
 6. Girder Schedule
 7. Sheet Pile Plan, Elevation, and Typical Section
 8. Miscellaneous Details
 9. Temporary Pedestrian Bridge Foundation Details
- Prepare Site Restoration Plans
- Prepare draft Special Provisions to the Standard Specifications.
- Calculate quantities and prepare an engineer's estimate of construction costs.
- Prepare Construction schedule

Final (100%) PS&E

Consultant shall provide labor, equipment and materials as needed to develop Final 100% PS&E and Construction schedule. Comments from the 90% Advance Review Meeting will be incorporated into the Final 100% deliverables. Final Geotechnical and Final Hydraulic report recommendations will be incorporated into the Final (100%) PS&E deliverables.

Consultant shall:

- Prepare final Special Provisions to the Oregon Standard Specifications.

- Update the bid tab list of construction items anticipated for the Project
- Submit Final PS&E Package and construction schedule to County including electronic pdf plans, final specifications, Engineer's cost estimate, certifications, and forms required to advance the Project to bid advertisement.

Bridge Load Rating

Consultant shall prepare load rating calculations and check of calculations for the new bridge. The load rating package will be finalized during the design phase with the as-built drawings. If requested an electronic copy of the load rating and supporting files will be delivered to the County.

Task 10 Consultant Deliverables:

All deliverables will be provided in electronic format only be email or posting to a file sharing site.

- Project Design Criteria
- 30% Schematic Plans
- 90% PS&E and Construction Schedule
- Final (100%) PS&E and Construction Schedule
- Bridge Load Rating and Supporting Files (if requested)

TASK 13 UTILITY COORDINATION

Task 13.1 Utility Coordination

Consultant shall initiate contacts with utilities and coordinate relocation plans needed for construction of the Project. If any utility is nonresponsive or uncooperative, Consultant shall notify County, and County will communicate with the utility to affect a solution.

Consultant shall:

- Determine possible construction conflicts with known utilities.
- Prepare and send preliminary Project plans and a "Utility Conflict Letter and List" to each affected utility.
- Prepare and send "Utility Timing Requirements Letter" to each affected utility.
- Prepare and submit a "Utility Certification Report".

Note: This SOW is not intended to modify the statutory duties associated with underground utilities and construction Projects. Development of extensive electronic mapping or potholing of existing utilities is not included in this SOW. Design of or environmental compliance for relocation of utilities is not included in this SOW.

Task 13.1 Consultant Deliverables

- Utility Conflict Letter and List
- Utility Timing and Requirements Letter
- Utility Certification Report

TASK 14 BID SUPPORT

Consultant shall respond to questions from construction contractors and suppliers about the plans and specifications, during the Project construction bidding process (and fully document those questions and answers for the County's reference). Consultant shall prepare a plan for responding to these questions during the bidding phase. Consultant shall prepare up to one bid addendum to provide clarification to the

bid documents. Consultant shall submit the addendum to County for distribution to construction contractors.

TASK 15 PROJECT MANAGEMENT OF CA/CEI SERVICES

This activity is continuous throughout the duration of these CA/CEI Services. Consultant shall guide and direct the CA/CEI Services and Consultant's team in conformance with all applicable requirements of the CA/CEI Services and the Project's goals and objectives. Consultant shall monitor progress of the Project and CA/CEI Services

Task 15.1 Coordination

Consultant shall provide leadership, direction and control of these CA/CEI Services.

Consultant shall:

- Direct Consultant's team with regard to overall CA/CEI activities and team meetings.
- Maintain liaison, communication and coordination between Consultant's staff, APM, CC and Agency staff to facilitate timely, efficient operations for all involved.

Deliverables and Schedule:

- On-going coordination and communication as needed to appropriately manage the CA/CEI Services (no tangible deliverables for this task).

Task 15.2 Status Reports and Invoices

Consultant shall prepare up to 4 Monthly Status Reports throughout the duration of the CA/CEI Services. See Project Schedule.

The Monthly Status Report must:

- Describe the previous month's Consultant activities.
- Describe the planned activities for the next month.
- Identify any issues or concerns that may affect the CA/CEI Services and budget or the Project schedule and Project budget.

If the construction Project schedule milestones are significantly revised, Consultant shall attach the updated Project schedule and submit with Monthly Status Report. Consultant shall submit the Monthly Status Reports to APM with the monthly Consultant invoice.

Task 15.2 Consultant Deliverables

- Monthly Status Report – Submitted to APM with the monthly invoice no later than the 25th calendar day of the month following the reporting month.

TASK 16 CONSTRUCTION ADMINISTRATION/ENGINEERING and INSPECTION (CA/CEI)

Consultant shall support the Project's needs by providing CA/CEI Services required for the Consultant to certify, at Second Notification and Third Notification that the Project was completed according to the Plans and Specifications for the Project. Consultant shall engage the Professional of Record ("POR") as required to provide engineering Services required to administer design changes that may become necessary during the construction phase of the work.

Task 16.1 Pre-Construction Conference

Consultant shall prepare for and lead the Pre-Construction Conference as referenced in the Specifications in 00180.42, and the ODOT Construction Manual, Chapter 11 – Before On-Site Work Begins. Attendees will include the Construction Contractor (CC), Agency Project Manager (APM), permitting agencies, local officials and others as may be appropriate to discuss the construction schedule, utility involvement, permit concerns, required documentation submittals, materials, and other items relevant to the construction of the Project.

Consultant shall:

- Schedule the Pre-Construction Conference in cooperation with CC and APM.
- Prepare and distribute the Pre-Construction Conference agenda and minutes.
- Attend, lead, facilitate and participate in Pre-Construction Conference.

Task 16.1 Consultant Deliverables

- Pre-Construction Conference Agenda – 1 copy to each conference attendee and the APM prior to the scheduled conference
- Pre-Construction Conference Minutes – 1 copy to each conference attendee and the APM within 1 week after the conference

Task 16.2 Construction Contract Administration

Consultant shall provide day-to-day administration of the construction contract. Consultant shall complete contract administration tasks as outlined in the ODOT Construction Manual, the Manual of Field Test Procedures, the Non-Field-Tested Materials Accepted Guide, the ODOT Inspector’s Manual, QCCS Handbook, Qualified Products List (“QPL”), the Contract Plans and Specifications, and this CA/CEI SOW.

In addition to any other requirements identified in the reference standards identified above, Consultant shall:

- Issue First Notification when on-site construction work begins.
- Monitor overall budget and costs included in the Project Construction Authorization as outlined in the ODOT Construction Manual, Chapter 5 – Construction Authorization.
- Monitor and evaluate the construction schedule and determine whether the CC is proceeding in a manner that will result in timely Project completion in conformance with the construction contract documents. If the CC is not proceeding in this manner, document the delay and determine and pursue the appropriate action as outlined in the ODOT Construction Manual, Chapter 13 – Contract Time.
- Review Contractor’s Request for Subcontract Consent (form 734-1964), prepare the PM’s Report on Contractor’s Request for Subcontract Consent as outlined in the ODOT Construction Manual, Chapter 14 – Subcontracts, and review and approve CC’s request for rental of operated equipment as outlined in Chapter 14 – Subcontracts.
- Perform Labor Compliance monitoring as required by the construction contract and the ODOT Construction Manual – Chapter 19 Labor Compliance. Tasks include, but are not limited to:
 - Develop tracking documents to verify and confirm receipt of all certified payroll reports for weeks worked from CC and all subcontractors throughout construction of the Project.
 - Receive and review weekly certified payroll reports, including the signed Statement of Compliance/Certification page, from the CC and all subcontractors.
 - Perform owner-operator checks.
 - Request revised or corrected certified payroll reports and proof of wage payments as needed.
 - Conduct interviews of CC’s and subcontractors’ employees at least once every six months.
 - Prepare Employee Interview Report (form 734-3478).

- Prepare and sign the Project Manager's Labor Compliance Certification (form 734-1734) listing CC and all subcontractors, number of payroll reports received, and number of employees interviewed.
- Prepare, submit and coordinate processing of contract change orders (CCOs) and, extra work orders (EWOs) as outlined in the ODOT Construction Manual, Chapter 15 – Change Orders, Force Account, and Chapter 12G – Extra Work Performed on a Force Account Basis. Change Orders may include, but are not limited to, modification to the plans, specifications, and contract time. Only the Agency has the authority to approve and authorize changes to the construction contract including CCOs and EWOs.
- Prepare, track and submit to Agency Force Account billings from CC.

Task 16.2 Consultant Deliverables

- First Notification – Issue when on-site construction work begins. Distribute original and copies per distribution list on Agency's First Notification Form.
- Contractor's Request for Subcontract Consent – Review and prepare a Project Manager's Report on Contractor's Request for Subcontract Consent form within 14 calendar days after receipt from CC. Distribute original and copies per distribution list on form (there is no deliverable associated with review and approval of CC's request for rental of operated equipment).
- CC submitted certified payroll reports, including the signed Statement of Certification/Compliance page, Employee Interview Reports (form 734-3478) and any wage and hour related correspondence – Maintain in Consultant's files for the Project. Submit originals with final Project documentation.
- Draft CCO and EWO documents with supporting documents (cost estimate and justification) – Submit to APM by date agreed to when work was requested.

Task 16.3 Monthly Preliminary Progress Estimates

Consultant shall prepare monthly preliminary progress estimates for the project as follows.

- Consultant shall prepare all source documents as “paynotes” for the monthly preliminary progress estimate.
- Consultant shall generate the Preliminary Progress Payment Report and review it with the CC for concurrence on quantities being paid for the previous month's work.
- No later than the 8th of the month, Consultant shall notify the APM via e-mail that the progress estimate is ready for payment. Following a review, the APM will process the estimate for payment.

Task 16.3 Consultant Deliverables

- Monthly Preliminary Progress Estimate – Completed and ready for APM review by the 8th of the month following each month in which CC's work was performed.

Task 16.4 Project Progress Meetings

Consultant shall conduct periodic Project Progress Meetings with the CC and others as needed, including but not limited to, APM, permitting agencies, local officials. The Project Progress Meetings are intended to promote Project progress, proper communication, effective working relationships and timely issue resolution.

Consultant shall conduct additional activity-specific technical kick-off meetings for various activities required by the construction contract. These activities may include, but are not limited to:

- Drilled Shafts
- Asphalt Concrete Pavement

Consultant shall:

- Schedule Project Progress Meetings as needed, or as agreed to by APM.
- Prepare Project Progress Meeting agendas and inform attendees.
- Attend, lead, and participate in Project Progress Meetings.
- Record and distribute Project Progress Meeting minutes.

ASSUMPTIONS FOR BUDGETING PURPOSES: Project Progress Meetings are assumed to be bi-weekly (during active construction) with no more than 3 Consultant staff attending 6 meetings.

Task 16.4 Consultant Deliverables

- Project Progress Meeting agendas – Submit via email, 1 copy to each attendee and 1 copy to APM prior to scheduled meeting.
- Project Progress Meeting minutes – Submit via email, 1 copy to each attendee and 1 copy to APM within 5 business days after the meeting.

Task 16.5 Shop Drawing and Submittal Review

Consultant shall review construction shop drawings and working drawings submitted either electronically by the CC. Consultant shall log in the submittal when it arrives, track the submittal to facilitate a timely response, and log out the reviewed submittal when it is returned to the CC. Consultant shall conduct submittal review in accordance with the Specifications in 00150.35 and the ODOT Construction Manual, Chapter 16 – Working Drawings.

Consultant shall:

- Maintain 1 of the as-submitted copies in the Project files
- Conduct review and prepare mark-up/comment copies of the shop drawing. Stamped Drawings must be signed and dated by the POR and marked per the Specifications in 00150.35 and the ODOT Construction Manual, Chapter 16 – Working Drawings.
- Include construction contract number on all shop drawings.

Consultant shall review the following submittals as required using the guidelines in ODOT's Construction Manual, Chapter 16 – Working Drawings, the ODOT Guide to Electronic Shop Drawing Submittal, and the Specifications in 00150.35:

- Traffic control plans
- Erosion control plans
- Pollution control plans
- Quality control plan and personnel
- Construction schedules (baseline and monthly updates)
- Drainage structures shop drawings
- Work containment plans and systems
- Bridge removal plans
- Shoring and falsework calculations and drawings (if required)

- Reinforcing steel shop drawings
- Prefabricated concrete shop drawings
- Pile and Sheet Pile section and driving equipment submittal
- Bridge rail shop drawings
- Temporary Pedestrian Bridge Foundation shop drawings
- Others as required by construction contract specifications

Consultant shall prepare shop drawings for non-standard permanent signs in accordance with the Specifications in 00940.03, and for steel sign supports in accordance with the Specifications in 00930.02. Based on field survey information, Consultant shall review and verify all new sign post lengths.

Task 16.5 Consultant Deliverables

- Return electronic-copy submittals and shop drawings with comments:
 - One (1) copy to APM
 - One (1) copy maintained in Project Files
- POR-provided shop drawings for non-standard signs and steel sign supports (due within 5 business days of request):
 - 1 copy to APM

Task 16.6 Consultation During Construction

Consultant shall provide consultation and technical Services regarding design issues raised during construction of the Project. Consultant shall clarify construction contract documents and provide written responses to Requests for Information (“RFIs”). The design consultation will occur only as required and may be ongoing throughout the CA/CEI Services and the Project.

Upon request of the CC or Agency during construction, Consultant shall:

- Clarify construction contract documents.
- Respond to field inquiries.
- Engage the services of the POR on all matters involving design changes.
- It is assumed the bridge EOR will make one (1) site visit to help resolve an issue in the field.

NOTE: Design requests must be initiated by either Agency or Consultant using a Change Request Form or a RFI. A response to a RFI may also initiate a Change Request or a formal contract amendment for Consultant or CC. No work shall be conducted on a Change Request until the APM approves the request and the appropriate change order document is approved. The Change Request must clearly outline Consultant’s cost, the estimated construction cost, and the cause of the change.

ASSUMPTIONS FOR BUDGETING PURPOSES: This task assumes up to 10 RFIs, each requiring up to 4 hours of staff time for preparation and documentation of the response.

- **Task 16.1 Consultant Deliverables**
- Written documentation of responses to CC or Agency inquiries. Submit 1 copy to APM within 2 business days of inquiry, unless other delivery date is agreed to by APM.

Task C16.7 Design Modifications (Contingency)

If Consultant or CC determines that design modifications may be necessary, Consultant shall discuss potential changes with APM and POR prior to verbally agreeing on changes with CC or preparing the appropriate Change Order documents, depending upon the type of work (changed work, extra work, or force account work). Upon request of the APM, Consultant shall work with the POR to prepare detailed engineering design revisions necessitated by conditions encountered during construction. These design revisions must be accompanied by the necessary Change Order documents (CCO or EWO) to make them a part of the construction contract.

Task C16.7 Consultant Deliverables

- Design details for modifications (prepared or approved by the POR for appropriate changes to Project design) – Submit to APM at date agreed to when work was requested.
- Draft CCO and EWO documents with supporting documents (cost estimate and justification) – Submit to APM at date agreed to when work was requested.

TASK 17 CONSTRUCTION ENVIRONMENTAL COMPLIANCE AND WORK ZONE MONITORING AND INSPECTION

Consultant shall provide on-site monitoring and inspection of construction for conformance with, and shall enforce compliance with, construction contract documents. Consultant shall coordinate and conduct on-site monitoring and inspections so they do not cause unnecessary adverse impacts to the construction schedule. On-site monitoring and inspections must occur at critical times during the construction process based on Consultant's evaluation of the CC's schedule, construction contract documents and as outlined in the ODOT Construction Manual, the Manual of Field Test Procedures and the ODOT Inspectors Manual.

Consultant shall have certified Inspector(s) on site during all critical times during the construction process. Consultant shall monitor the CC's quality control process for compliance with the construction contract requirements.

Consultant shall perform work zone monitoring as required by the ODOT Construction Manual, ODOT Inspectors Manual and the construction contract documents. Accordingly, Consultant shall monitor and enforce the following for compliance to construction contract requirements:

- Permit compliance during construction
- Temporary Traffic Control measures
- Erosion Control installation and maintenance
- Turbidity Monitoring (if required)

Consultant shall monitor the CC to verify the following deliverables are completed and submitted (to the extent the deliverables are required by the construction contract documents). If the documents are not submitted to the Consultant, then the Consultant shall take appropriate action to require compliance by the CC:

- Temporary Protection and Direction of Traffic Reports
- Erosion Control Monitoring Reports
- Turbidity Monitoring Reports

Task 17.1 Environmental Compliance and Mitigation Monitoring

This task involves conducting environmental inspection site visits during the construction phase of the Project, typically to document compliance with the environmental permits, including effectiveness of best management practices, avoidance and minimization measures, challenges encountered and corrective actions.

Consultant shall:

- Perform compliance and mitigation monitoring related to environmental conservation measures agreed upon with State and Federal regulatory agencies through permit conditions and as included in the construction contract.
- Conduct site environmental inspections site visits to assist CC and Agency in maintaining compliance with issued regulatory permits and the special provisions.
- Provide documentation of the construction process relative to this environmental compliance.
- Coordinate and schedule monitoring visits coincident with activities that have significant environmental components.
- Evaluate onsite conditions and construction techniques during environmental inspections site visits to assess compliance with Project permits, the Pollution Control Plan, the Erosion and Sediment Control Plan, proposed site rehabilitation measures, and general environmental conservation measures.
- Identify deficiencies and potential permit compliance issues and provide guidance to Agency and CC to aid in avoiding potential regulatory agency involvement or violations.
- Provide input and clarifications during construction activities to facilitate biological functioning as outlined in Project permits, based on the Project's significant site rehabilitation measures (to offset Project impacts)

In the event that deficiencies are noted, Consultant's Environmental Specialist shall immediately bring the deficiency to the attention of the CC and APM and recommend a corrective course of action to comply with environmental regulations, performance standards, and permit conditions.

Consultant shall review the CC's following submittals (as applicable) for compliance with the construction contract and permits:

- Temporary Water Management Plan ("TWMP"),
- Work Containment Plan and System ("WCP/WCS"),
- Erosion and Sediment Control Plan ("ESCP"),
- Pollution Control Plan ("PCP"), and
- Weed Control Work Plan ("WCWP").

Consultant's biologist shall conduct up to 4 environmental inspection site visits. Consultant shall prepare brief construction environmental inspection report or monitoring memorandums summarizing site conditions and providing recommended measures to facilitate permit compliance and correct deficiencies.

Deliverables and Schedule:

- Completed Consultant construction monitoring memorandums– If compliance issues are noted, document the deficiencies, recommendations and corrective action taken to correct deficiencies.

Submit 1 copy to CC, APM (and LAPM on LPA projects), within 5 business days after the monitoring site visit.

- Project Photography / Photo Logs – Submit with reports (when applicable) and final Project documentation.

Task 17.1.1 Project Completion Report and Permit Compliance Documentation.

Consultant shall prepare a Project Completion Report to document project completion and site restoration as required by environmental permits. Consultant's Project Completion Report must address environmental compliance during construction and effectiveness of onsite restoration for the Project. Prior to preparation of the report, Consultant shall conduct 1 site visit within 30 days of restoration construction completion to determine if restoration measures were constructed according to Project permits. The Project Completion Report must include a narrative summary describing Project construction and restoration as well as maps, as-built drawings, and representative photographs with descriptions. The Project Completion Report may be required by USACE within 60 days of completion of in-water work.

Consultant shall visit the site to collect data regarding restoration conditions, planting survival, and to evaluate if corrective measures are necessary. As part of this work, Consultant shall conduct the quarterly plant establishment site visits (in accordance with Section 01040 of the Standard Specifications) during the spring, summer and fall the first year after Acceptance of initial planting and seeding (unless otherwise specified in the construction contract). During the site visits, Consultant shall record general site conditions, hydrology, plant cover, plant communities, erosion, and related aspects of the restoration. Consultant shall conduct inspections that document plant stress and planting survival. Consultant shall provide recommendations for replacement plantings and invasive species controls (if necessary). Consultant shall establish photo point locations and shall take photographs to document annual site conditions.

Consultant shall provide up to 3 years of monitoring and reporting for site stabilization and restoration as may be required by USACE and DSL permits. The level of effort provided by the Consultant for the annual monitoring report shall be commensurate with the years of monitoring required in the environmental permits. Consultant shall monitor and document soil stability, plant and grass seed establishment and survival, encroachment by invasive plant species, and fish passage (if applicable). Consultant shall prepare a brief tech memo with photographs documenting site conditions. Consultant will document site failures and recommend corrective actions for permit compliance. The report will be submitted to the County for review. Consultant shall submit the annual report to USACE and/or DSL by the time specified in the permits.

Task 17.1.1 Consultant Deliverables

- Project Completion Report – Submit 1 electronic (PDF copy) each to APM, within 30 calendar days of conducting the site visit.
- Plant Establishment Memo
- Annual Monitoring Report

Task C17.1.2 Fish Salvage (CONTINGENCY)

Consultant shall obtain a Scientific Take Permit from ODFW to perform fish capture and removal. Consultant shall provide fish capture and removal as necessary according to ODFW and National Marine Fisheries Service (NMFS) standard practices. Assume two (2) fish salvages will be required. The CC shall notify Consultant at least one week in advance of enclosing isolated work

areas. Consultant shall monitor and remove aquatic species from the isolated work area while CC draws down water.

Task C17.1.2 Consultant Deliverables

- Completed ODFW and US Army Corps of Engineers (USACE) fish capture/removal forms for each capture/removal effort.
- Consultant shall report results at the end of the year to ODFW online.

Task 17.2 Construction Activity Monitoring

Consultant shall monitor construction activities and the fabrication of the bridge beams during construction of the Project utilizing Agency-certified Inspectors and require compliance with the construction contract documents. Consultant shall provide inspection concurrently with the CC's operation. Consultant shall coordinate closely with CC so on-site inspections are coordinated with the construction schedule. Consultant shall perform inspections as detailed in the ODOT Construction Manual and the ODOT Inspectors Manual. Consultant shall prepare General Daily Progress Reports of construction for days Consultant is on site. Consultant shall take photos of the various construction activities and keep a current digital photo-log of critical construction activities. The photo-log must be kept up to date throughout construction and available for review by Agency.

- Consultant shall be on-site during sheet pile and pile driving operations and shall prepare pile driving records.

Consultant shall determine and document all pay quantities for work and materials incorporated into the Project. As required by the ODOT Construction Manual, Chapter 12D – Quantities, Consultant shall prepare source documents (“Paynotes”) for all pay items and include supporting documentation to support each payment. Consultant shall keep quantity documentation current at all times and available for Agency review upon request.

Task 17.2 Consultant Deliverables

- General Daily Progress Reports – Complete each day Consultant is on-site. Make available for review at Consultant's field office or home office. Originals submitted to Agency with final Project documentation submittal
- Current Digital Photo-log of construction activities – Make available for Agency review at Consultant's field office or home office as needed. Submit photo logs with the final Project documentation
- Source Documents “Paynotes” – Field notes, calculations, receipts, invoices, reports used to determine Project pay quantities, installation sheets, and other supporting documentation – Complete as work is performed. Make available for Agency review as needed and submit with final Project documentation
- Inspection reports for bridge beam fabrication – Complete each day Consultant is on site at beam fabrication facility. Maintained with Project files throughout the Project and available for Agency review as needed. Originals submitted to Agency with final Project documentation submittal
- Pile driving records. Make available for Agency review as needed and submit with final Project documentation
- Review CC-submitted Erosion Control Monitoring Reports (Form 734-2361) for compliance no later than 14 calendar days after each inspection site visit. Maintain in the Project files and submit with final Project documentation.

Task 17.3 Quality Control Monitoring (Non-Field Tested and Field-Tested Materials)

Consultant shall document the work and Non-Field-tested materials incorporated into the Project by completing Field Inspection Reports (FIRs) as required by the ODOT Construction Manual, Chapter 12C – Quality and the Non-Field-Tested Materials Acceptance Guide. Consultant shall log the FIRs and other supporting quality documentation into the applicable Test Summary and keep up to date and available for review by Agency. Consultant shall maintain the Non-Field-Tested Materials Test Summary (Test Summary “A”) as detailed in the ODOT Construction Manual.

No quality assurance (QA) or independent assurance (IA) testing will be performed on this project.

Consultant shall monitor the CC’s Quality Control (“QC”) program for conformance with requirements of the ODOT Manual of Field Test Procedures and the construction contract documents.

Consultant shall monitor the CC’s QC Program. One or more Consultant staff shall perform the QCCS functions as defined in the QCCS Handbook and the Agency’s Quality Assurance Program, which is in Section 2 of the ODOT Manual of Field Test Procedures.

Consultant shall:

- Review and monitor the CC’s documentation for the quality of all materials incorporated into the Project.
- Verify that all materials furnished and placed on the Project comply with the approved specifications.
- Certify that the documentation confirms that all materials comply with construction contract requirements.
- Maintain the Test Summary for Non-Field Tested Materials and Field-Tested Materials (Test Summary “A”, “B” and “B-QA”) as detailed in the ODOT Construction Manual, Chapter 12B Quality.
- Identify and monitor CC’s quality control technicians and require proper and current certification(s) and require that proper testing frequencies and procedures are being followed. Monitoring must be done by Consultant staff experienced in all areas of field testing and documentation and certified by ODOT’s Technician Certification Program for the specific tests being monitored.
- Take appropriate action if CC’s quality contract technicians do not have proper or current certifications or if proper testing frequencies and procedures are not being followed.
- Obtain, review and compile all required Project quality documentation in accordance with the ODOT Construction Manual and the construction contract documents.
- Prepare quality price adjustments as necessary for materials.

Task 17.3 Consultant Deliverables

- Field Inspection Reports (“FIRs”) and Non-Field-Test Summaries – Maintained with Project files throughout the Project and available for Agency review as needed. Submit originals to Agency with final Project documentation.
- Field-Test Summaries and other Project field-tested materials quality documentation – Make available for Agency review throughout the Project. Submit originals to Agency with final Project documentation.

Task C17.4 CONSTRUCTION QA SURVEY (CONTINGENCY)

Consultant shall provide QA survey as needed. Assume up to 4 days.

Task C17.4 Consultant Deliverables

- Memo summarizing the results of any QA survey performed and calling out any discrepancies between CC survey and QA survey.

TASK 18 PROJECT CLOSE-OUT

Consultant shall complete interim and final on-site inspections and submit all Project records required for final payment and Project Acceptance.

Task 18.1 Final Inspection(s) and Submittals

Consultant shall issue Second Notification when all on-site bid item and CCO, EWO and SFO work is completed per the Specifications, in 00150.90(a) and 00180.50(g) (Refer to the ODOT Construction Manual, Chapter 13 – Contract Time.)

Consultant shall:

- Schedule a review of the Project at a time close to completion of on-site work.
- Schedule and lead a Project Final Inspection with CC and Agency within 15 days after receiving notice from the CC that all punch list items, final trimming and cleanup according to the Specifications in 00140.90 have been completed.
- Prepare a punch-list of items to be corrected by the CC.
- Once the punch-list items have been corrected, meet at Project site with Agency (and LPA if applicable) for a follow-up to the Final Inspection.
- Prepare and send the Recommendation of Project Acceptance (form 734-1384) to APM, once CC has satisfactorily completed all construction contract work and fulfilled its obligations concerning Project documentation. (Refer to the ODOT Construction Manual, Chapter 36 – Acceptance of Project.)
- Complete the Project Managers Narrative (form 734-2756) after issuance of Second Notification and receipt of Contractor Construction Process Feedback form, but prior to issuance of Third Notification, and distribute electronically. (Refer to the ODOT Construction Manual, Chapter 37 – Submittal of Final Project Documentation.)
- Issue Third Notification to CC after all construction contract work and inspections are complete, and all required documentation is submitted per Oregon Standard Specifications for Construction, according to the Specifications in 00150.90. (Refer to the ODOT Construction Manual, Chapter 40 – Third Notification.)

Task 18.1 Consultant Deliverables

- Second Notification – due within 2 business days of completion of on-site work. Submit 1 electronic copy to APM and EDMS. Also submit via email, 1 copy to ODOT District Manager, ODOT Region Survey Manager, and ODOT Region Right of Way Manager.
- Recommendation of Project Acceptance (form 734-1384) – Submit electronic copy to APM and EDMS upon completion of final inspection per Construction Manual Chapter 36.
- Project Manager’s Narrative (form 734-2756). Submit electronic copy to APM and EDMS. Due after claims expiration date, but prior to Third Notification.

- Third Notification – due within 2 business days of completion of all construction contract work. Submit 1 electronic copy to APM and EDMS. Also submit via email, 1 copy to ODOT District Manager, ODOT Region Survey Manager, and ODOT Region Right of Way Manager.

Task 18.2 As-Constructed Plans

Consultant shall prepare as-constructed plans in conformance with the following reference documents as applicable to the Project:

1. **Bridge Plans**, ODOT Bridge CAD Manual (“BCM”)
2. **Roadway Plans**, All plans with a V-number must conform to the ODOT Contract Plans Manual at <https://www.oregon.gov/ODOT/Engineering/Pages/Drafting.aspx>

The following clarifications or exceptions or both to the above reference documents apply to Consultant-prepared as-constructed plans:

- As-constructed plans must be reviewed and approved by the POR prior to submittal to ODOT.
- The submittal and distribution requirements are specified in the “Deliverables” section of this task.

Task 18.2 Consultant Deliverables

In addition to the deliverables listed below, Consultant shall submit paper format of as-constructed mark-ups to APM (if requested).

1. Bridge Plans:

Consultant shall submit as-constructed plans within 90 calendar days of issuance of Second Notification as follows:

- Revise as constructed plans according to current procedures in the ODOT Bridge CAD Manual (BCM).
- Electronic CAD files (AutoDesk .dwg format) revised according to the ODOT BCM.
 - Submit all required electronic files to ODOT according to their preferred current procedures. This may include PDF and .tif files, etc.
 - Submit AutoDesk .dwg files and 11x17 PDFs to the Agency.

2. Roadway Plans

Consultant shall submit electronic AutoCad format as-constructed plans within 30 calendar days of issuance of Third Notification. Consultant shall also submit a scanned PDF copy of any red lined changes to the roadway plans during construction.

Task 18.3 Stamped Structure Load Rating

ODOT Bridge Section has implemented the Load and Resistance Factor Rating (“LRFR”) method, based on the AASHTO Manual for Bridge Evaluation (“MBE”) with interim revisions. All bridges in Oregon (regardless of the owner) will be rated following the ODOT LRFR Load Rating Procedures. ODOT owned bridges will use the Oregon Specific Live Load Factors and all other bridges will use the re-calibrated National Live Load Factors.

Consultant shall perform load ratings in conformance with the LRFR procedures and software specified in the ODOT LRFR Manual (current edition at time load rating work is performed), including all reference standards incorporated into the manual in section 1.3.1.

The ODOT LRFR Manual and all resources and templates that must be used for LRFR load rating procedures, as described in the ODOT LRFR Manual, are available on line at the following link: <ftp://ftp.odot.state.or.us/Bridge/LoadRating/LRFR>.

For structure types that are not covered in the ODOT LRFR Manual - as stated in Section 23.2 of the ODOT LRFR Manual; it is expected that the methodology and workflow be as consistent as possible with the other structure types already covered in the manual. All load ratings in LRFR follow the same Load and Resistance Factor methodology.

Consultant shall base load rating on the final construction contract plans and modified to reflect as-constructed conditions. Consultant shall develop load rating reports for the bridge completed for the Project based on the ODOT load rating format.

Task 18.3 Consultant Deliverables

Submit within 90 calendar days after Second Notification -

- For local agency owned bridges:
 - Provide a PE Stamped load rating calculation book with a CD containing all electronic files to Agency.
 - Provide a second copy of the bound and PE stamped load rating calculation book and CD to ODOT Bridge Section (4040 Fairview Industrial Drive SE MS#4; Salem, OR 97302-1142).

Task 18.4 Submittal of Final Project Documentation

Consultant shall:

- Organize and submit the final Project quality, quantity and labor compliance documentation as detailed in the ODOT Construction Manual, Chapter 37 – Submittal of Final Project Documentation.
- Perform a final review and submit the final labor compliance documentation to the APM for Acceptance.
- Submit all quality, quantity and labor compliance documentation to the Agency (County) for review, Final Acceptance and archiving of the Construction Contract documentation.

Task 18.4 Consultant Deliverables

- All final Project quality, quantity and labor compliance documentation, excluding documentation related to plant establishment work. The original documents must be submitted to the Agency within 60 calendar days after Third Notification.

ANTICIPATED SCHEDULE

Notice to Proceed	January 3, 2022
Design Criteria Meeting	1 week from NTP
30% Schematic	4 weeks after NTP
Advance (90%) PS&E Submittal	7 weeks after NTP, 2 weeks after receipt of County Comments on 30% Schematic
Final (100%) PS&E Submittal	12 weeks after NTP, 4 weeks after receipt of County Comments on 90%

Bid Opening	May 2, 2021
Construction Road Closure	September 5 through October 28, 2022
As-Constructed Drawings & Load Rating	October 28, 2022

DELIVERABLES

The following table lists deliverables and deadlines for this Project. The table lists both non-Contingency and Contingency tasks. The numbers of copies and submittal dates are only an estimate, and must be confirmed or revised by Consultant in coordination with County.

Documents prepared by Consultant pursuant to this WOC will be property of County. Consultant may retain copies for its records. Reuse of work product created by Consultant for a purpose not originally intended by parties shall be at the sole risk of such user.

TASK	DELIVERABLE	DUE DATE
1.1	Monthly invoice and back up data	20 th of each month
1.1	Project activity schedule	By the Design Criteria Meeting
1.1	Monthly progress report	20 th of each month
1.1	Project Communication Directory	By the Design Criteria Meeting
3.1	Meeting Agendas and Minutes	Within 1 week of meeting
4.1	Draft Wetland/Waters Technical Memo	3 weeks after NTP
4.1	Final Wetland/Waters Technical Memo	2 weeks after comment resolution
C4.2	Draft Wetland Delineation Report (CONTINGENCY)	Within 6 weeks of activating contingency task
C4.2	Final Wetland Delineation Report (CONTINGENCY)	2 weeks after comment resolution
4.3	Stream Functional Assessment	3 weeks after NTP
4.4	Draft Fish Passage Form	3 weeks after NTP
4.4	Final Fish Passage Form	2 weeks after comment resolution
4.5	Final SLOPES Compliance Documentation (submit with JPA)	4 weeks after comment resolution
4.6	Draft Joint Permit Application	3 weeks after NTP
4.6	Final Joint Permit Application	4 weeks after comment resolution
4.8	Draft Archaeological Baseline Report	With 30% Plans
4.8	Final Archaeological Baseline Report	2 weeks after comment resolution
4.8	Draft Phase I Archaeological Exploratory Probing Technical Report	With 30% Plans
4.8	Final Phase I Archaeological Exploratory Probing Technical Report	2 weeks after comment resolution
4.9	Draft Historical Resources Baseline Report	With 30% Plans
4.9	Final Historical Resources Baseline Report	2 weeks after comment resolution

5.1	Field Surveying Recordings including: <ul style="list-style-type: none"> • Trio Listing Kit with Property Vesting Deeds • All County Assessor Maps • All General Land Office Plats • All County Road establishment records • All County Road vacation records • All Subdivision and Land Partition Plats • All County Surveys of record • All Maps and Data related to Government Public Lands – Survey Corners and any references. • All vesting and reference deeds. • All maps and data pertaining to utilities 	Within 6 weeks from NTP
5.3	Monument recovery documents including: <ul style="list-style-type: none"> • Original field notes and one (1) scanned copy of the original field notes in “.pdf” format. • ASCII file containing the following information in this order: Point number, Northing, Easting, Elevation, Alpha Feature Code. • An AutoCAD file in “.dwg” format, containing all the tied monuments. 	Within 6 weeks from NTP
5.4	Topographic Data collection documents, including: <ul style="list-style-type: none"> • Field notes taken in the field • ASCII file containing the following information in this order, Point number, Northing, Easting, Elevation, alpha feature code. • A DTM containing all the tied topographic features • A basemap containing all the tied utility features. 	Within 6 weeks from NTP
6.1	Programming Cost Estimate / General Information Notices (CONTIGENCY)	6 weeks after 30% Plans approval
6.2	Title Reports and Document Requests (CONTIGENCY)	2 weeks after programming estimate
6.3	Appraisals and Appraisal Reviews (CONTIGENCY)	16 weeks after ROW phase NTP
6.4	Offer Letter Packets/ Final Reports/ Recommendation for Condemnation, if needed (CONTIGENCY)	Within 1 week of receiving just compensation approval from County
6.5	Right-of-Way Engineering (Mapping & Descriptions) (CONTIGENCY)	4 weeks after 30% Plans approval
6.6	Right-of-Way Staking(CONTIGENCY)	As requested
7.5	Draft Foundation Data Sheets	With 90% Plans
7.5	Final Foundation Data Sheets	With Final Plans
8.1	Draft Bridge Hydraulic Analysis and Report	With 90% Plans
8.1	Final Bridge Hydraulic Analysis and Report	With 100% Plans
8.2	Draft Stormwater Quality Management Plan and Report	With 30% Plans
8.2	Final Stormwater Quality Management Plan and Report	With 90% Plans
10	30% Schematic to include: role plot of site	4 weeks after NTP

11	Advance (90%) Complete PS&E, to include: roadway, traffic control, site restoration, work isolation, erosion control, and bridge plans, specifications, and bid tabulation list	7 weeks after NTP
12	Final (100%) 11" x 17" PS&E – Stamped and Signed by Engineer of Record, to include: roadway, traffic control, site restoration, work isolation, erosion control, and bridge plans.	12 weeks after NTP
12	Final (100%) Contract Special Provisions to the Standard Specifications – Stamped and Signed by the Professional of Record	12 weeks after NTP
12	Final (100%) Contract Engineer’s Itemized Construction Estimate and Schedule	12 weeks after NTP
12	Certifications and forms required for bid advertisement	8 weeks prior to bid date
13.1	Utility Conflict Letter and List	With 30% Schematic Plans
13.1	Utility Timing and Requirements Letter	With 30% Schematic Plans
13.1	Utility Certification Report	With Final Plans
14	Bidding Question and Answer documentation	As needed
14	Up to one (1) bid addendum to provide clarification to the bid documents	As requested
15.1	Monthly invoice and back up data	20 th of each month
15.1	Monthly progress report	20 th of each month
15.1	Project Communication Directory	By the Kick-Off Meeting
15.3	Meeting Agendas and Minutes	Within 1 week of meeting
16	Written response to RFI	As Needed

F. CONTINGENCY TASKS

The table above includes a summary of contingency tasks that County, at its discretion, may authorize Consultant to perform. Details of the contingency tasks and associated deliverables are stated in the Task section of the SOW. Consultant shall complete only the specific contingency task(s) identified and authorized via written (email acceptable) Notice-to-Proceed (“NTP”) issued by County's CPM. If requested by County, Consultant shall submit a detailed cost estimate for the agreed-to contingency Services (within the NTE amount(s) in the Contingency Task Summary Table) within the scope of the contingency task.

If County chooses to authorize some or all of these tasks, Consultant shall complete the authorized tasks and deliverables per the schedule identified for each task. The NTP will include the contingency task name and number, agreed-to due date for completion and NTE for the authorized contingency task.

Each contingency task is only billable (up to the NTE amount identified for the task) if specifically authorized per NTP. In the table below, the “NTE for Each” amount for a contingency task includes all labor, overhead, profit, and expenses for the task. The funds budgeted for contingency tasks may not be applied to non-contingency tasks without an amendment to the WOC. Each authorized contingency task must be billed as a separate line item on Consultant’s invoice.

G. COMPENSATION

The method(s) of compensation and payment option(s) selected below (and as specified for any Contingency Tasks in the table in Section F).

G.1 Non-Contingency Tasks

The method(s) of compensation for non-contingency tasks in this WOC is:

Time and Materials with Not-To-Exceed ("T&M")

G. 2 Payment Options - RESERVED

G.3 Fixed Fee (for CPFF)- RESERVED

G.4 Total WOC T&M NTE Amount – See separate document.

G.5 Invoices

Invoices must be in conformance with the County Invoice Requirements Guide and any other Contract requirements.

Consultant shall submit invoices electronically via email to County.

WOC ATTACHMENTS

ATTACHMENT A – ACRONYMS & DEFINITIONS

AASHTO – American Association of State Highway and Transportation Officials	LPA – Local Public Agency
ADT – Average Daily Traffic	LRFD – Load Resistance Factor Design
Agency – Oregon Dept. of Transportation	MWESB – Minority, Women & Emerging Small Businesses
APE – Area of Potential Effect	NTE – Not to Exceed
APM – Agency’s Project Manager	NTP – Notice to Proceed
ASTM – American Society for Testing and Materials	ODEQ – Oregon Department of Environmental Quality
BDDM – ODOT Bridge Design/Drafting Manual	ODFW – Oregon Department of Fish and Wildlife
BOC – Breakdown of Costs	ODOT – Oregon Department of Transportation
CE – Construction Engineering	ORS – Oregon Revised Statute
County – Columbia County	PA – Price Agreement
USACE – U.S. Army Corps of Engineers	PE – Preliminary Engineering
Consultant – David Evans and Associates, Inc.	PM – Consultant’s Project Manager
CPFF – Cost Plus Fixed Fee	PS&E – Plans, Specifications & Estimate
CPM – County Project Manager	QC – Quality Control
DBE – Disadvantaged Business Enterprise	R/W – Right of Way
DLC – Donation Land Claim	SHPO – State Historic Preservation Office
DSL – Oregon Department of State Lands	SOW – Statement of Work
DTM – Digital Terrain Model	T&M – Time and Materials
ESA – Environmental Site Assessment	TM – Technical Memorandum
FHWA – Federal Highway Administration	TP&DT – Temporary Protection and Direction of Traffic
FOE – Finding of Effect	TS&L – Type, Size, and Location
FP – Fixed Price	USGS – United States Geologic Survey
HAZMAT – Hazardous Materials	USPAP – Uniform Standards of Professional Appraisal Practice
LDD – Land Development Desktop	WOC – Work Order Contract

ATTACHMENT B - BREAKDOWN OF COSTS FOR SERVICES

The Breakdown of Costs (BOC) dated **2/28/2021** is not physically attached but incorporated into this WOC by this reference with the same force and effect as though fully set forth herein. A copy of the final BOC has been provided to Consultant prior to WOC execution.