

**AGREEMENT FOR CONSULTING ENGINEERING SERVICES  
(Yamhill County and OBEC Consulting Engineers)**

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 county engineer and Board of Commissioners (referred to as County in this Agreement) and OBEC Consulting Engineers, Inc. (Contractor), an Oregon corporation, for the consulting engineering services for which proposals responsive to County's RFP were opened Friday December 28, 2018 (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) Project Change Request (if any)
- (I) Project Acceptance
- (J) Work Plan
- (K) Fee Schedule

**AGREEMENT:** In consideration of the mutual covenants contained below, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, County and Contractor hereby agree as follows:

1. **Scope of work.** The Contractor will commence and complete the Project in strict accordance with the Contract Documents identified above and with the Scope of Work and Fee Schedule attached hereto as Exhibit A, which is incorporated herein by this reference. 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 March 1, 2020 unless the completion date 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. **RESERVED**

6. **Compensation.** The Contractor agrees to perform all of the Work described in the Contract Documents and comply with the terms therein as set forth in Contractor's responsive proposal; provided, however, that the maximum amount due Contractor for completion of the scope of work is \$534,695.00 unless the compensation 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 Supervisor, or at Contractor's option, in monthly progress payments for work accepted by the Project Supervisor subject to a 5% retainage.

7. **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.

8. **Workers' compensation.** The Contractor, its subcontractors, if any, and all employers working under this Agreement 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.

9. **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. In addition, Contractor agrees that it has complied with the tax laws of the state of Oregon or a political subdivision of the state of Oregon, including ORS 305.620 and ORS Chapters 316, 317 and 318.

10. **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.

11. **Status of the Project Supervisor.** Ken Huffer, County Administrator, is the Project Supervisor (the "Supervisor"). The Supervisor or his 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 Project and this Agreement. The Supervisor or his designee may reject all work and materials that do not conform to the Project and this Agreement and shall decide questions that arise in the execution of the work. The Supervisor has authority to reject or accept the work.

12. **Prohibition of Discrimination.** In hiring employees for performance of work under this Agreement, 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.

13. **Risk of Loss.** The risk of loss or damage to the subject matter of this Agreement 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.

14. **Indemnification.** The Contractor shall indemnify, defend, save and hold harmless County and State of Oregon, Oregon Transportation Commission and its members, Oregon Department of Transportation and its officers, employees and agents (collectively the "State") from and against any suits, actions, legal or administrative proceedings, demands, claims, liabilities, fines, penalties, losses, injuries, damages, expenses or costs, including interest and reasonable attorney fees, in any way connected with any injury to any person or damage to any property arising out of or related to the prosecution of work under this Agreement, but only to the extent cause, or alleged to be caused by any negligent or willful act or omission of Contractor or Contractor's subcontractors.

Neither Contractor nor its subcontractor nor any attorney engaged by Contractor or its subcontractor shall defend any claim in the name of the State of Oregon or any agency of the State of Oregon, nor purport to act as legal representative of the State of Oregon or any of its agencies, without the prior written consent of the Oregon Attorney General. The State of Oregon may, at any time at its election assume its own defense and settlement if it determines that Contractor is prohibited from defending the State of Oregon, or that Contractor is not adequately defending the State of Oregon's interests, or that an important governmental principle is at issue or that it is in the best interests of the State of Oregon to do so. The State of Oregon reserves all rights to pursue claims it may have against Contractor if the State of Oregon elects to assume its own defense.

15. **Insurance.** Contractor, at its expense, shall obtain the following insurance coverage and keep them in effect during the entire term of this Agreement:

1. Workers Compensation Insurance in compliance with statutory requirements;
2. Comprehensive General Liability Insurance (including contractual liability and completed operations coverage) on an occurrence basis, with not less than \$2,000,000 per occurrence for bodily injury and property damage liability, with an annual aggregate limit of \$3,000,000;
3. Professional Liability Insurance, including Errors and Omissions coverage, with a per occurrence and aggregate limit of not less than \$1,000,000, to protect against all loss suffered by County or third parties, including financial and consequential loss, caused by error, omission, or negligent acts related to the Project work or services provided under the Agreement.
4. Commercial Automobile Liability Insurance, with a combined single limit, or the equivalent of not less than \$1,000,000 per occurrence, for bodily injury and property damage with respect to Contractor's vehicles, whether owned, hired, or non-owned, assigned to, or used by Contractor in connection with the services provided under the Agreement;

The required insurance coverages shall be (i) with insurance companies admitted to do business in the state of Oregon and rated A or better by Best's Insurance Rating, and (ii) acceptable to County. Evidence of such insurance will be furnished to County before commencing Project work or services. The certificates of insurance shall indicate (a) the types of insurance coverage, (b) the identity of all persons or entities covered, (c) the amounts of insurance coverage, and (d) the period of insurance coverage. Any required insurance coverage shall provide that it may not be canceled except after at least 30 days written notice to County.

The Commercial General Liability and Commercial Automobile Liability shall (i) name County, its directors, officers, and employees, as additional insureds, (ii) provide that it is primary insurance with respect to the interests of County and that any insurance maintained by County is excess and not contributory, and (iii) include a cross-liability and severability of interest clause and a waiver of subrogation clause.

16. **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 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 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 to thereafter enforce each and every provision.

17. **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.

18. **Severability.** Should any clause or section of this Agreement be declared by court to be void or voidable, the remainder of this Agreement shall remain in full force and effect.

19. **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 substantially 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 in accordance with the rules set forth in the Oregon International Commercial Arbitration and Conciliation Act, ORS 36.450 to 36.558, 2007 replacement part. The decision of the arbitrator shall be final and binding on the parties. The party that does not 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.

20. **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 Agreement, 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.

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

22. **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.

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

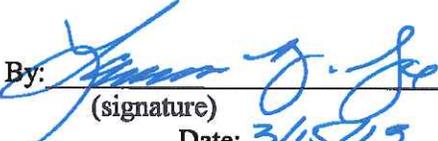
24. **Successors bound.** This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

THIS AGREEMENT AND THE CONTRACT DOCUMENTS CONSTITUTE THE ENTIRE AGREEMENT BETWEEN THE PARTIES. NO WAIVER, CONSENT, MODIFICATION OR CHANGE IN TERMS OF THIS AGREEMENT OR THE CONTRACT DOCUMENTS 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. THE CONTRACTOR, BY SIGNATURE OF ITS AUTHORIZED REPRESENTATIVE, HEREBY ACKNOWLEDGES THAT HE/SHE HAS READ THIS AGREEMENT, 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.

**OBEC Consulting Engineers**

**YAMHILL COUNTY, OREGON**

By:   
(signature)  
Date: 3/15/19

  
RICK OLSON, Chair  
Date: 3-18-19

LAURENCE H. FOX  
(printed name)

  
KEN HUBER  
County Administrator

Title: CHIEF CREATIVE OFFICER

Date: 3-18-19

Fed. Tax I.D. No: 93-0552628

APPROVED AS TO FORM

Contractor  
Registration No: 077184-14

By:   
CHRISTIAN BOENISCH,  
Yamhill County Legal Counsel

Accepted by Yamhill County  
Board of Commissioners on  
3-14-19 by Board Order  
# 19-79

**Exhibit A**

**Scope of Work/Fee Schedule**

*B.O. 19-79  
Exhibit "A"  
pg. 1 of*



A DOWL LLC Company

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SALEM, OR  
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February 22, 2019

Carrie Martin  
Grants and Special Projects Manager  
Yamhill County  
2060 Lafayette Avenue  
McMinnville, Oregon 97128

RE: Yamhelas Westsider Trail: Final Bridge Design and Stag Hollow Bridge Construction  
Scope of Work and Fee Estimate  
OBEC Job No. 0117-0028

Dear Ms. Martin:

OBEC Consulting Engineers, a DOWL LLC Company (OBEC, Consultant) appreciates the opportunity to assist Yamhill County (County, Client) with the required preliminary engineering and construction management services required for your Yamhelas Westsider Trail: Final Bridge Design and Stag Hollow Bridge Construction Project (project). This letter contains OBEC's proposed scope of work and estimated fee to complete the final design for the three bridges and the construction management and construction inspection for the Stag Hollow Bridge.

**PROJECT DESCRIPTION, BACKGROUND, AND UNDERSTANDING**

The purpose of this project is to:

- 1) Develop final, signed and stamped, plans, specs, and estimates for the Stag Hollow bridge, Tributary 1 bridge, and Tributary 2 bridge;
- 2) Secure all environmental clearances and permits needed to construct the three bridges;
- 3) Provide bid support for the construction bid advertisement for the Stag Hollow bridge;
- 4) Provide construction administration and construction engineering/inspection (CA/CEI) for the Stag Hollow Bridge construction phase.

We understand ODOT is not directly involved in this phase of the project and will not be reviewing/approving the design. However, because the railroad right-of-way acquisition used federal funds, all environmental compliance and permitting must meet NEPA requirements, and follow FHWA and ODOT environmental policies. ODOT will review the environmental documentation for the project.

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Exhibit "A"  
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During the previous right of way acquisition phase, OBEC developed concept level plans for the entire nine-mile long corridor. For this phase of the project, OBEC will complete final design building on the existing concept level bridge designs. Although the intent of this project is to design only the three bridges and construct the Stag Hollow Bridge, approximately 50-feet of the trail approaches leading up to each bridge must be included in the design (and construction for Stag Hollow Bridge). This is required to verify the bridges are constructed on the appropriate horizontal and vertical alignment and meet ADA requirements.

OBEC will:

- Complete final, stamped and signed, plans, specs, and estimates for the Stag Hollow bridge, the Tributary 1 bridge, and the Tributary 2 bridge;
- Provide the topographic survey necessary to complete design of the three bridges and construction of the Stag Hollow bridge;
- Complete the required hydraulic and geotechnical analysis and reporting needed to design the three bridges;
- Complete all environmental clearances and permits ODOT needs for NEPA compliance as well as any permits needed to construct all three bridges;
- Support the County during the construction bidding and contracting phase; and,
- Provide CA/CEI for Stag Hollow Bridge construction

The County will advertise and receive bids for the Stag Hollow Bridge, award the construction contract, and the selected contractor will contract directly with the County, and OBEC will provide technical support for the County through this process. County will clear vegetation up to the location of the Stag Hollow Bridge from the bus barn property and up to the southernmost tributary bridge location (tributary 1) prior to survey and geotech tasks begin. It is the County's goal to have all design and construction complete by April 20, 2020. OBEC will design the Stag Hollow Bridge first to streamline bid let so this bridge can be constructed by April 2020.

Our proposed scope of work and estimated fee are detailed below. Contingency tasks are included to account for potential unknowns and/or to be used at the County's discretion if during project development it is determined that additional design or construction elements are necessary.

Schedule:

Begin Design Tasks on Stag Hollow Bridge	2 weeks following NTP
Stag Hollow Final PS&E Submitted	September 1, 2019
Stag Hollow Construction Bid Let	September 15, 2019
Award Construction Contract	October 15, 2019
Stag Hollow Bridge Construction Begins	November 1, 2019
Stag Hollow Bridge Construction Complete	March 15, 2020
Begin Design on Tributary 1 and 2 Bridges	September 1, 2019
Tributary 1 and 2 Bridges Final PS&E Submitted	February 1, 2020

## **SCOPE OF WORK**

### **TASK 1 – PROJECT MANAGEMENT**

Consultant shall provide management and coordination of Services under this scope of work (SOW) for delivery of Tasks and Deliverables according to the agreed upon delivery schedule.

#### **1.1 Overall Project Management and Design Contract Administration**

Consultant shall:

- Provide management, coordination and direction to the project team for completing the project on time and on budget,
- Provide assistance in the day-to-day management and decision making for the project,
- Coordinate with the County, ODOT, project stakeholders,
- Maintain communication and coordination with the County,
- Prepare, submit, and update a milestone project schedule,
- Track and monitor project scope, schedule, and budget
- Prepare, maintain, and implement a Project Quality Plan
- Update project resourcing plan monthly
- Prepare and submit monthly progress reports and invoices,

*Assumptions:*

- Project will not exceed 24 months and up to 24 invoices and progress reports will be necessary
- Coordination and communication with the County, ODOT and stakeholders will not exceed, on average, 2 hours per week
- Milestone schedule will only require one update after the initial schedule is developed and approved

***Deliverables and Schedule:***

Consultant shall provide:

- Up to 24 progress reports and invoices submitted to County in the normal billing cycle.
- Milestone project schedule within 1 week following receipt of notice to proceed (NTP).
- Brief bi-weekly project status phone calls or emails

#### **1.2 Project Meetings**

Consultant shall:

- Organize, prepare for, develop agenda, attend, and provide meeting minutes for one project kickoff meeting. Kickoff meeting will be held at County offices in McMinnville, will be attended by up to two Consultant staff, and will not exceed 3 hours (excluding travel time).
- Organize, prepare for, develop agenda, attend, and provide meeting minutes for one Project Development Team (PDT) Meetings at the County offices in McMinnville. Up to two Consultant personnel will attend each meeting. PDT meetings will not exceed 2 hours (excluding travel time).

- Organize, prepare for, develop agenda, attend, and provide meeting minutes for one PDT conference/video remote meetings. Up to two Consultant personnel will attend each meeting. Each meeting will not exceed 2 hours.
- Organize, prepare for, and attend four brief internal team meetings to discuss project progress and solutions to project challenges. Each meeting will be attended by up to three Consultant staff and will not exceed 0.5-hour each.

***Deliverables and Schedule:***

For each meeting, Consultant shall provide:

- Meeting agenda 3 days prior to meetings as determined in the project schedule developed under Task 1.1
- Meeting notes within 4 days following each meeting as determined in the project schedule developed under Task 1.1.

**TASK 2 – SURVEY**

Initial surveying of these sites was performed by aerial photogrammetry and limited conventional surveying. This task shall provide detailed conventional surveying to design the three creek crossings.

**2.1 Location Survey, Base Map, and Digital Terrain Model (DTM)**

Consultant shall:

- Perform additional topographic surveying for the three projects area identified above.
- Survey 150 75 feet in both northerly and southerly of the centerline of the three creek crossings and within the right-of-way.
- Survey existing surface features, including: water features, fences, utilities, ditches, driveways, structures, culverts, trees, ordinary high water (OHW), wetland flags and signs within areas selected for topographic surveys.
- Gather the field data necessary to show utility locations in the base mapping for the design of this project.
- Request underground utilities to be marked in the field (known as "field locates") within the project limits that fall within the three project areas.
- Use the statewide "One-call" utility notification system and submit a "pre-survey" locate request.
- Measure vertically the lowest wires that cross street intersections, and will calculate a true elevation of those wires. OBEC will show the elevation in the base map.
- Record all visible utility identifications in the field notes to provide the utility operator enough information to understand what facility may be in conflict with the project.
- In addition to collecting stream cross sections, we will use NOAA LiDAR data to provide the data for hydraulic analysis outside the existing right-of-way.
- Create an InRoads DTM and MicroStation CAD drawing.
- Gather topographic data by techniques consistent with preparing a DTM and National Mapping Standards Accuracies.
- Use a combination of survey data at break lines, features, and spot locations to develop the DTM model.

- Perform the topographic survey to establish the configuration of the ground and the location of natural and man-made objects.

*Assumptions:*

- Agency will provide brush clearing to the sites prior to starting the fieldwork.

***Deliverables and Schedule:***

Consultant shall provide within 6 weeks of NTP

- Copy of any survey field notes
- Electronic field files (\*.dc, or \*.dat, Confidence Point Analysis Report)
- Revised project base mapping in MicroStation V8i file (\*.dgn) for Surface Features and InRoads V8i file (\*.dtm).

**C2.2 Supplemental Topographic Data and Basemap – [CONTINGENCY]**

*Consultant shall collect additional topographic data outside of the limits described in Task 2.1 above. The additional data locations will be determined as the design is advanced.*

*Assumptions:*

- For budgeting purposes 3 additional field days is assumed.

***Deliverables and Schedule:***

Consultant shall provide within 4 weeks of contingency NTP

- Updated base map in MicroStation design file (.dgn) and InRoads DTM (.dtm) containing all the tied topographic features

**TASK 3 – ENVIRONMENTAL DOCUMENTATION, COORDINATION AND PERMITS**

Several environmental clearances have already been obtained for this project including: FAHP approval for NMFS trust species, a USFWS Biological Opinion for the streaked horned lark, an approved No Effect Memorandum to cover all other USFWS trust species, and a Phase 1 Programmatic Agreement Memo for archaeological resources. Additional environmental effort will be necessary to authorize construction of the three bridges, and to ensure project compliance with existing permits and clearances.

**3.1 Coordination, Accumulation, and Review of Information**

Consultant shall:

- Review existing FAHP documentation to determine if updates for design elements are needed, and to ensure project compliance with existing FAHP requirements.
- Review the existing No Effect Memorandum and Biological Opinion to determine if updates for design elements are needed.
- Coordinate and communicate with ODOT and regulatory agency personnel to determine documentation and permit requirements.
- Coordinate and communicate with the project design team and the County to facilitate approval of required environmental permits and clearances.
- Develop and maintain an environmental and permit record that identifies all communication and coordination with regulatory agencies and ODOT, summarized

topics of discussion, action items, requirements, timeline for submittals, and decisions/agreements made with the agencies.

*Assumptions:*

- All coordination efforts under this task will be completed via phone and/or email communication. No in-person or onsite meetings will be necessary.

***Deliverables and Schedule:***

Consultant shall provide:

- Coordination emails and Environmental/Permitting spreadsheet record upon request following completion of final design.

**3.2 Fieldwork and Wetland Memorandum**

Consultant shall:

- Complete a wetland field delineation and ordinary high water (OHW) mark demarcation for the three project areas of impact (APIs).
- Use available data (including but not limited to: soil surveys, aerial photos, National/Local Wetland Inventory maps) as well as data gathered in the field to document the presence or absence of wetlands and waters.
- Determine wetland boundaries within the APIs in accordance with the criteria and methods described in the *1987 Corps of Engineers Wetland Delineation Manual (Environmental Laboratory Technical Report Y-87-1)* and appropriate Regional Supplements.
- Place flags in the field to show wetland and upland sample plot locations, and the wetland boundaries. Label and number the flags to identify their function.
- Collect and record wetland delineation data on approved wetland determination data sheets.
- Assess the OHWM boundary and elevation(s) using resource agency accepted field indicators. Place flags in the field to demarcate the OHW elevation.
- Verify that field methods used and data collected meet the DSL technical requirements for wetland delineations and ordinary high water demarcations.
- Collect and document the information necessary to determine active channel width(s) per ODFW and NMFS requirements.
- Coordinate with ODFW and NMFS to verify and receive approval of the average active channel width(s) to be used for fish passage design criteria.
- Prepare a Wetland Determination Technical Memo. The memo must include:
  - Description of the APIs;
  - Summary of existing available information, noting the standard information that is not available;
  - Field reconnaissance methods;
  - Results of field reconnaissance;
  - Wetland Determination Data Sheets, if required; and
  - Wetland Determination Maps depicting the location of wetlands and waterways within the APIs.

*Assumptions:*

- Wetlands are present within the APIs but will not be impacted by the project.
- No formal Wetland Delineation Report will need to be prepared.

***Deliverables and Schedule:***

Consultant shall provide:

- An electronic copy (Word) of the draft Wetland Determination Memorandum within eight (8) weeks following NTP.
- An electronic (PDF) copy of the final Wetland Determination Memorandum within two (2) weeks of receiving County draft comments.

**3.3 Update Existing Environmental Clearance Documents**

Consultant shall:

- Coordinate and communicate with ODOT and regulatory agencies to verify project updates are correctly identified in the environmental documents, and to confirm that all documents meet ODOT and regulatory agency requirements.
- Submit updated documents for review, address all review comments, and submit final documents to ODOT and regulatory agencies for final approval.

*Assumptions:*

- Final bridge design elements will not require modifications to the previous Biological Assessment, and informal consultation with USFWS will not need to be reinitiated.

***Deliverables and Schedule:***

Consultant shall provide:

- Updated/revised final environmental documents 6 months following NTP

**3.4 Local Land Use Permits**

Consultant shall:

- Attend one (1) pre-application meeting with Yamhill County planning staff to confirm permitting requirements for this project.
- Prepare a Yamhill County Land Use Application, including a narrative discussing code compliance and all supplemental materials.
- Prepare a Building Permit Application for the Stag Hollow Creek Bridge, including the required plot plan.

*Assumptions:*

- The County will submit the permit documents and will be responsible for all permit application fees.
- Additional Land Use Applications and Building Permits may be required to cover future construction activities for the trail project.

***Deliverables and Schedule:***

Consultant shall provide:

- Electronic (Word) copy of the draft Land Use Application package and Building Permit Application to County for review 8 months following NTP.
- Electronic (PDF) copy of the final Land Use Application and Building Permit submittal packages to the County two (2) weeks following receipt of draft review comments.

### **3.5 Historic Finding of Effect (FOE)**

Only one historic resource—the Mid-Columbia Bus Company (Resource 44 in the historic baseline report)—will be potentially affected by the proposed work. A formal Finding of Effect (FOE) Report will be prepared to assess the project effects on the historic resource including: physical destruction or damage; alteration or rehabilitation; removal; change of setting; introduction of visual, atmospheric or audible elements; neglect of a property; or transfer or sale of ownership. One FOE will be prepared under this task. Eligibility documentation has been previously prepared for this resource but if SHPO has not yet reviewed the documentation, it will be provided along with the FOE Report.

#### **Assumptions:**

- Only one FOE will be required.
- The finding will be No Adverse effect (an Adverse finding will require additional consultation with SHPO beyond the scope of this task)
- Existing DOE documentation will be acceptable to SHPO

#### ***Deliverables and Schedule:***

Consultant shall provide:

- Coordination with ODOT and SHPO, when requested, regarding avoidance or minimization of adverse effects.
- Coordination with ODOT and FHWA for concurrence.
- One Section 106 FOE Report and Project Submittal Letter to Agency
- FOE within 2 months following NTP

### **3.6 Site Restoration Plans**

Consultant shall develop site restoration plans, cost estimate, and specifications for construction. Construction of the proposed project will require restoration of all areas temporarily and permanently disturbed by project activities. Anticipated areas of disturbance include the riparian corridors at all three bridge locations. Final plans shall be stamped by a Landscape Architect registered in Oregon. Restoration plans shall be designed consistent with all permit requirements. Final Site Restoration Plans shall include the following:

- Table providing proposed species, size, and estimated quantities of plant materials required for appropriate re-vegetation within all areas proposed for restoration.
- Drawings and details that identify the type, location, and density of proposed plantings within all areas proposed for restoration.
- Construction notes and details depicting appropriate installation of restoration materials.
- Develop Special Provisions and construction cost estimate for restoration plans.

#### **Deliverables and Schedule:**

Consultant shall provide:

- 95% and 100% restoration plans, specifications, and construction estimate

**C3.7 Joint Permit Application and DEQ 401 Certification – [CONTINGENCY]**

*Consultant shall prepare a complete JPA submittal package meeting all the applicable requirements of the most recent version of the DSL Removal-Fill Guide and USACE permit application standards, and coordinate with Oregon Department of Environmental Quality (“DEQ”) to receive 401 Certification approval.*

Consultant shall:

- *Prepare JPA for a USACE Section 404 Nationwide Permit and a DSL General Permit, to authorize work within the jurisdictional waters and any wetlands found in the Project area.*
- *Provide pre-submittal coordination with DEQ to inform them of the Project and verify requirements and documentation necessary to apply for Section 401 Water Quality Certification.*
- *Provide pre-submittal coordination with representatives of the USACE and DSL to confirm permitting requirements and application procedures. Pre-submittal coordination shall be conducted by phone and email, no pre-submittal site visit will be required.*
- *Verify that features and impacts are correctly identified for the permit application.*
- *Prepare all JPA required drawings, maps, photographs, site descriptions, and any additional information required by DSL or the USACE for inclusion in the JPA.*
- *Prepare narratives and descriptions on Project purpose and need and Project alternatives using Project development information provided by the County as necessary to complete the JPA.*
- *Submit the complete JPA package to the DSL and USACE on behalf of the County.*
- *Respond to questions or comments raised by the USACE and DSL following the submission of the JPA. This task may include correspondence and clarification of the JPA in the form of telephone calls, letters, or e-mails, to clarify regulatory agency concerns and to facilitate the issuance of the USACE and DSL permits for this Project. Consultant will also complete up to one (1) onsite meeting with the regulatory agencies.*
- *Submit to DEQ a copy of the complete JPA and final Stormwater Management Plan to DEQ requesting Section 401 Water Quality Certification for the Project.*

*All required wetland mitigation will be satisfied with Payment in-Lieu or through the purchase of mitigation bank credits. Onsite or offsite compensatory wetland mitigation coordination and planning will not be required. Impacts to onsite jurisdictional waters are expected to be covered by the proposed FAHP restoration plantings.*

*Due to the varied nature of post-submittal coordination, it is expected that the Consultant shall not expend more than eight hours for office review and coordination time for post-submittal coordination with DSL, USACE, and DEQ. Consultant will be responsible for obtaining Land Use Planning Signature on the JPA. The County will be responsible for payment of any associated fees for DSL and DEQ to review and approve the submittals.*

**Assumptions:**

- All three bridges can be bundled into one permit application
- The USACE will permit this project under a Nationwide permit
- Wetland or waters impacts can be mitigated through mitigation bank credits purchase or through payment in lieu.

**Deliverables and Schedule:**

**Consultant shall provide:**

- Electronic (Word) copy of the draft JPA submittal package to County for review within two months following release of this contingency task.
- Electronic (PDF) copy of the final JPA submittal package to the County two (2) weeks following receipt of draft review comments.
- Paper and/or electronic (PDF) copy of the final JPA Submittal Package to both the DSL and USACE four (4) weeks following submittal of the final JPA to the County.
- Electronic (PDF) copy of the final JPA and final Stormwater Management Plan to DEQ 2 weeks following receipt of final approval on the DEQ submittal documents.

**C3.8 Wetland Delineation Report and Functional Assessment – [CONTINGENCY]**

Consultant shall coordinate and document compliance with the federal ESA for NMFS trust species and USFWS trust species using the FAHP Programmatic for all proposed geotechnical drilling activities within jurisdictional waters. ESA documentation must be completed by a qualified biologist. All documentation for geotechnical drilling must follow procedures contained in the most recent version of the ODOT FAHP Programmatic User's Guide available on the ODOT Biology ESA website: ([www.oregon.gov/ODOT/GeoEnvironmental/Pages/ESA.aspx](http://www.oregon.gov/ODOT/GeoEnvironmental/Pages/ESA.aspx)).

**Consultant shall:**

- Facilitate early coordination with NMFS and/or USFWS according to Section 2.3 of the FAHP Programmatic User's Guide.
- Coordinate with the ODOT biologist to complete the FAHP Project Stakeholder list as shown in Table 4 of the FAHP Programmatic User's Guide.
- Contact the ODOT biologist via phone or email for site-specific information on ESA species including but not limited to background reports and ORBIC special status species lists.
- Contact via phone or email ODFW, NMFS and/or USFWS for additional site-specific information on ESA species.
- Facilitate and attend 1 site visit with ODOT and USFWS and/or NMFS to discuss geotechnical drilling impacts, geotechnical drilling applicable standards, and possible modifications relative to geotechnical drilling.
- Utilizing the latest template available on the FAHP Programmatic website, prepare and submit the Project Initiation Form to the ODOT Regional Environmental Coordinator ("REC") for the Project.
- Prepare and submit the FAHP Notification Form to the ODOT REC for the Project, utilizing the latest templates available on the ODOT ESA website.

**Deliverables/Schedule:** Consultant shall provide:

- *Electronic (PDF) copy of the FAHP Project Stakeholder List and FAHP Initiation Memorandum to ODOT two (2) weeks following the site visit with NMFS and/or USFWS.*
- *Electronic (PDF) copy of the draft FAHP Notification Form four (4) weeks following submittal of the FAHP Initiation Memorandum.*
- *Electronic (PDF) copy of the final FAHP Notification Form to ODOT and the County within two (2) weeks of receipt of comments on the draft form.*

#### **TASK 4 – GEOTECHNICAL DESIGN**

Geotechnical services will be completed by OBEC's subconsultant, Foundation Engineering, Inc. Foundation Engineering will perform geotechnical field explorations, laboratory testing, engineering analysis, and provide recommendations for bridge foundations.

##### **4.1 Site Reconnaissance and Field Explorations and Testing Plan**

Consultant shall:

- Conduct a geologic reconnaissance of the site, identify the geologic conditions, any geologic hazards present, and their impacts to the proposed project elements.
- Locate proposed boring locations in the field during the reconnaissance.
- Prepare a Field Exploration and Testing Work Plan (FETWP) summarizing the planned subsurface explorations and laboratory testing.

*Assumptions:*

- County will provide site access and right-of-entry for the reconnaissance.

##### ***Deliverables and Schedule:***

Consultant shall provide:

- Draft FETWP 2 weeks prior to beginning the field work
- Final FETWP 3 days prior to beginning the field work

##### **4.2 Field Explorations and Laboratory Testing**

Consultant shall:

- Perform geotechnical field explorations to determine subsurface conditions and develop foundation design recommendations.
- Complete two borings with one near the north abutment of the Stag Hollow Creek bridge and one near the south abutment of the southern-most bridge.
- Collect soil and rock samples in the borings at 2.5- to 5-foot increments using a split-spoon sampler in conjunction with Standard Penetration Testing.
- Up to four relatively undisturbed Shelby tube samples may also be collected, if fine-grained soil is encountered.
- Abandon and backfill boreholes according to Oregon Water Resources Department regulations.
- Conduct pH and resistivity testing to evaluate the corrosion potential of the soils.
- Perform laboratory tests on soil samples obtained from the explorations to characterize the soil and to develop parameters for the design of bridge foundations.

*Assumptions:*

- County will provide site access and right-of-entry for a track-mounted drill.
- Drill cuttings will be drummed and disposed off site.
- Resistivity testing will be conducted at two locations.

***Deliverables and Schedule:***

Consultant shall provide:

- Deliverables for this task are detailed in the deliverables for Task 4.4.

**4.3 Geotechnical Analysis and Evaluations**

Consultant shall:

- Complete geotechnical analysis and provide design parameters and construction recommendations for the project in accordance with the ODOT Geotechnical Design Manual (GDM) (March 2018) and the most current AASHTO LRFD Bridge Design Specifications. Geotechnical analysis and evaluations will be performed to address the following geotechnical components:
  - Evaluate seismic hazards at the proposed bridge locations and provide seismic response spectra in accordance with the ODOT GDM and the ODOT Bridge Design and Drafting Manual (BDDM) (May 2018).
  - Provide recommendations for pile foundations including; pile type, size, and material properties, nominal and factored axial resistances, minimum and estimated pile tip elevations, estimated pile lengths, and hammer field energy range.
  - Provide sheet pile recommendations for abutment scour protection including active and passive earth pressures and driving considerations.
  - Provide lateral earth pressure recommendations for abutment wall design.
  - Provide recommendations for approach embankment construction.

*Assumptions:*

- Subsurface conditions for the middle bridge will be estimated based on interpreted conditions in borings for the northern and southern bridges and local well logs.
- Design loads for the bridges will be provided for the foundation analysis.
- Pavement design for approaches is not required.

***Deliverables and Schedule:***

Consultant shall provide:

- Deliverables for this task are detailed in the deliverables for Task 4.4.

**4.4 Geotechnical Report and Foundation Data Sheets (FDS)**

Consultant shall:

- Prepare draft and final Geotechnical Reports summarizing the information and design recommendations from Tasks 4.2 and 4.3.
- Provide support to develop the FDS's for the bridges.
- Provide geotechnical design recommendations and construction considerations.

*Assumptions:*

- Foundation recommendations for all three bridges will be provided in one report.
- Two FDS's will be prepared.

***Deliverables and Schedule:***

Consultant shall provide:

- Draft Geotechnical Report submitted 4 weeks following field investigation.
- Final Geotechnical Report and FDS's submitted with the Deliverables listed under Task 6

**4.5 Review of Geotechnical Related Plans and Specifications**

Consultant shall:

- Review geotechnical-related design plans and specifications to confirm that all design elements are consistent with the recommendations presented in the geotechnical report.

***Deliverables and Schedule:***

Consultant shall provide:

- Submitted with the Deliverables under Task 6.4

**TASK 5 – HYDRAULIC ANALYSIS**

Consultant shall provide hydraulic related design services for the three bridge sites for delivery of Tasks and Deliverables according to the agreed upon delivery schedule.

**5.1 Review Existing Data & Site Inspection**

Consultant shall:

- Obtain the Flood Insurance Study report and the Flood Insurance Rate Map(s) using the Federal Emergency Management Agency ("FEMA") web site.
- Review local floodplain ordinances to determine requirements for bridge locations.
- Research and compile available local information and visit and inspect the three bridge sites and perform the following field observations and activities during the field reconnaissance:
  - 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; and document conditions with color photographs.
  - Estimate Manning's "n" value for the main channel and overbank areas; document with color photographs.
  - Determine bed material size by visual inspection as required for values for variables in scour prediction.
  - Note evidence of scour.
  - Note hydraulic controls from channel constrictions, dams, etc.
  - Note apparent or observed highwater marks.
  - Note evidence of debris.
  - Research historic flooding.

***Deliverables and Schedule:***

Consultant shall provide:

- Site reconnaissance shall be documented with color photographs and shall be submitted with the Deliverables under Task 5.5

**5.2 Site Hydrology**

Consultant shall:

- Develop site hydrology and determine contributing drainage area.
- Use appropriate information and methods to develop the two-year, 10-year, 25-year, 50-year, 100-year, and 500-year recurrence interval flows for hydraulic model and scour analyses
- Determine temporary water management discharge estimates to be used in the temporary water management design recommendations.

***Deliverables and Schedule:***

Consultant shall provide:

- Hydrologic analysis shall be included with the Deliverables under Task 5.5

**5.3 Hydraulic Analysis**

Consultant shall:

- OBEC will develop a hydraulic model for all three bridge locations utilizing site hydrology, surveyed cross sections and LiDAR data.
- For all three bridge locations, model three conveyance alternatives in HEC-RAS: (1) the "natural" channel, (2) the proposed structure, (3) culverts (at tributary 1 and 2 only)
- For all three bridge locations, calculate backwater against "natural conditions" for the proposed structure for the two-year through 500-year flood required by the structure design.

***Deliverables and Schedule:***

Consultant shall provide:

- Hydraulic calculations shall be included with the Deliverables under Task 5.5

**5.4 Scour Analysis and Abutment Protection**

Consultant shall:

- Perform scour analyses for the various hydraulic conditions resulting from the design of all three bridges using the current HEC-18 Evaluating Scour at Bridges edition.
- Assess multiple combinations of scour types to determine what scour potential exists.
- Use HEC-18 and HEC-23 criteria to determine the best method for protecting the bridge abutments and roadway approaches from scour and, as necessary, perform any sizing calculations.
- Make recommendations for abutment protection.
- Include protection measures in the final design.

***Deliverables and Schedule:***

Consultant shall provide:

- Scour analysis and abutment protection designs shall be included with the Deliverables under Task 5.5

**5.5 Hydraulic Report**

Consultant shall:

- Summarize findings and recommendations from Tasks 5.1 through 5.4 in a Draft Hydraulic Memorandum, including:
  - A description of the impacts of the recommended structure openings on hydrology and hydraulics.
  - Site hydrology, flood history (if known from Project information), flood flows, velocities and water surface elevations, and summary and output from the HEC-RAS hydraulic analysis.
  - Determine the proposed hydraulics and flood plain elevations at the bridge sites.
  - Summarize design flood characteristics.

***Deliverables and Schedule:***

Consultant shall provide:

- Draft Hydraulic Memorandum to be submitted with the 95% Design deliverables under Task 6
- Final Hydraulic Memorandum to be submitted with the Final Design deliverables under Task 6.

**TASK 6 – DESIGN**

**6.1 Progress Plans & Design Verification Meeting**

Consultant shall:

- Review geotechnical and hydraulic information, as well and environmental concerns and construction cost to determine if culverts are appropriate structures for tributary 1 and 2.
- Develop the existing, relevant trail approach design and relevant civil plans and estimate to approximately 30% for review and to be referenced during the design verification meeting
- Develop the bridge design and estimate to 30% for review and to be referenced during the design verification meeting. Revise the P&E plans from the existing concept plans to reflect any changes.
- Organize, prepare for, develop agenda, attend, and provide meeting minutes for one design verification meeting. Design verification meeting will be held at County offices in McMinnville, will be attended by up to two Consultant staff, and will not exceed 3 hours (excluding travel time).
- Document relevant design review comments/suggested edits and proposed results/decisions associated with the design review comments and suggested edits.
- Verify design review comments and suggested edits are incorporated into final design.

*Assumptions:*

- *Design will be based off of the existing conceptual plans developed during the previous project phase*
- *Review comments and suggested edits will not result in more design sheets than identified under Tasks 6.2 and 6.3.*
- *If it is determined that culverts are a viable and cost effective option for tributary 1 and 2, Consultant will pursue culvert designs for these two crossings upon direction from County.*

***Deliverables and Schedule:***

Consultant shall provide:

- 30% design plans and estimate due two weeks prior to the Design Verification Meeting per the schedule developed under Task 1.1.
- Meeting agenda due three days prior to the design verification meeting.
- Meeting notes due four days following the design verification meeting.
- Include review resolution of comments into the 95% design.

**6.2 Final Trail Bridge Approaches and Civil Design**

Consultant shall:

- Prepare the following 95% and final plan sheets for all three bridge project areas:
  - Bridge approach plan, profile and notes(3 Sheets)
  - Erosion control plan and details (3 Sheets)
  - Construction access and staging (3 Sheets)
  - Title sheet (2 Sheets)
  - Bridge approach typical sections (2 Sheets)
  - Miscellaneous trail approach details (3 Sheets)
- Develop 95% and Final civil design specifications for each bridge project area
- Develop 95% and Final civil design construction cost estimate and construction time estimate for each bridge project area
- Provide independent design check/review for 95% and Final plans, specs, and estimate
- Respond to external review comments and incorporate the necessary review changes into the final plans, specs, and estimate
- Stamp and sign final plans, specs, and estimate

*Assumptions:*

- *Trail design for each bridge approach will extend approximately 50 feet from each abutment location.*
- *Stormwater treatment will not be required.*
- *Restoration planting plans will not be required.*
- *Traffic control will plans will not be required.*

***Deliverables and Schedule:***

Consultant shall provide:

- 95% and final trail/civil plans, specifications, and estimate due with the deliverables under Task 6.4

### **6.3 Final Structure Design**

Consultant will develop detailed plans of the three new bridges based on the approved 30% design. The design will incorporate County comments on the 30% design. The design will consist of all calculations and plan sheets required to bid and construct the new bridges.

Bridge design shall be in accordance with the AASHTO *LRFD Bridge Design Specifications*, 7<sup>th</sup> Edition, as modified by the ODOT Bridge Design and Drafting Manual.

OBEC will assemble 95% plans, specifications, and estimates (PS&E) for County review. OBEC will respond to County review comments and incorporate appropriate revisions into the design documents. OBEC will prepare and submit final PS&E documents for bidding and construction.

OBEC will develop necessary plan drawings for the bridge. The following list of sheets is assumed for budgeting purposes:

#### Stag Hollow Creek Bridge (9 sheets)

- Plan and Elevation with General Notes
- Foundation Data Sheet
- Footing Plan
- Deck Plan and Typical Section
- Prestressed Box Schedule (2 sheets)
- Bent 1 and 2 Plan and Elevation
- Bent 1 and 2 Details with Wingwall Details
- Railing details

#### Tributary 1 Bridge (9 sheets)

- Plan and Elevation with General Notes
- Foundation Data Sheet
- Footing Plan
- Deck Plan and Typical Section
- Prestressed Box Schedule (2 sheets)
- Bent 1 and 2 Plan and Elevation
- Bent 1 and 2 Details with Wingwall Details
- Railing details

#### Tributary 2 Bridge (9 sheets)

- Plan and Elevation with General Notes
- Foundation Data Sheet
- Footing Plan
- Deck Plan and Typical Section
- Prestressed Box Schedule (2 sheets)

- Bent 1 and 2 Plan and Elevation
- Bent 1 and 2 Details with Wingwall Details
- Railing details

**Assumptions:**

- All bridges are simple spans
- Foundations will be driven piles
- If, under Task 6.1 it is determined that tributary 1 and 2 structures will be culverts, then the deliverables prepared under this task will be consistent with the plans, specs, and estimate necessary to construct culverts instead of bridges.

**Deliverables and Schedule:**

Consultant shall provide:

- 95% and final bridge plans, specifications, and estimate due with the deliverables under Task 6.4

**6.4 Final Plans, Specifications, & Estimate**

Consultant shall:

- Prepare technical specifications for the plan sheets and bid items included in Task 6.2 and 6.3.
- Prepare project special provisions utilizing the Oregon Standard Specifications for Construction (OSSC), 2018 edition and ODOT boilerplate special provisions templates.
- Review the County's boilerplate general conditions (Part 00100 specifications) and bid documents and provide project-specific edits, as necessary.
- Provide Professional of Record certifications for all technical special provisions stamped and signed by Engineers licensed to practice in the State of Oregon.
- Prepare detailed quantity calculations, and assemble an estimate that includes bid item quantities for all of OBEC's design work.
- Confirm consistency between the plans, specifications, and estimate/bid items.
- Prepare and submit final, signed and stamped plans, specifications and estimate/bid items sufficient for publicly bid bridge construction projects.

**Assumptions:**

- The County will provide the current County template for bidding documents and boilerplate special provisions for the Part 00100 General Conditions (applicable to the 2018 OSSC), similar to the documents used on the Palmer Creek Bridge Project.

**Deliverables and Schedule:**

Consultant shall provide:

- 95% and final (stamped and signed) construction ready plans, specifications, and estimate (PS&E) for all three bridges. 95% Stag Hollow PS&E due 7 months following NTP. Final Stag Hollow PS&E due two weeks after 95% review comments are received. Final PS&E for the Tributary 1 and Tributary 2 bridges due by March 20, 2020.

## **6.5 Quality Assurance**

Consultant shall:

- Prepare a Project Quality Plan that assigns project specific review responsibilities.
- Perform the following quality control activities in accordance with OBEC's Quality Management Program:
  - Independent design check of all design documents. This includes technical reports, calculations, plan sheets, specifications, and cost estimate.
  - Quality assurance review of plans, specifications, estimate, and constructability review by a senior engineer.
  - Review of overall project PS&E for consistency.
  - Review of all environmental documents and subconsultant submittals.
  - Document and respond to all external 95% review comments and verify applicable review comments are included in final PS&E submittal.

*Assumptions:*

- *There will be only one review-comment-response round following 95% submittal.*

### ***Deliverables and Schedule:***

Consultant shall provide:

- Quality control and quality assurance documentation available upon request 1 week following submittal of the final PS&E.

## **TASK 7 – CONSTRUCTION BIDDING**

### **7.1 Bidding Assistance**

Consultant shall:

- Prepare and submit bid advertisement for the Stag Hollow bridge construction
- Produce electronic bid documents for the County's use in producing bidding document sets for registered bidders
- Respond to bidder requests for information and respond to bidder questions
- Prepare plans and specification addenda and distribute electronic files to the contacts on the plan holders list
- Assist County with bid opening and the evaluation of bids
- Assist County with preparing the construction contract, using the County standard construction contract template, and issuing construction notice-to-proceed.

*Assumptions:*

- *The County will provide a template or past project example for the project bid advertisement.*
- *The County will administer the publication of the project bid advertisement.*
- *The County will administer the reproduction and distribution of bidding documents and maintain a plan holders list for purposes of distributing addenda and bid process updates.*
- *The County will receive and open the bids and award the contract.*

***Deliverables and Schedule:***

Consultant shall provide the following per the schedule developed under Task 1.1:

- Bid advertisement
- Bid documents, including addenda to plan holders
- Responses to questions and information requests from bidders
- Attendance at public bid opening
- Evaluate bids and make a recommendation to award to lowest responsive and responsible bidder.

**TASK 8 – CONSTRUCTION CONTRACT ADMINISTRATION/CONSTRUCTION ENGINEERING AND INSPECTION (CA/CEI)**

Consultant shall provide CA/CEI services necessary to meet County standards. Consultant shall monitor the work of the Construction Contractor (CC) to document the work and compile the results of the CC's Quality Control program in accordance with approved plans and specifications.

CA/CEI work tasks typically include supporting the team lead in project/team management, contract management, construction review of CC submittals, construction inspection, quality and quantity assurance documentation, and record drawings necessary for completion of the project.

**8.1 Construction Project Management, Coordination & Meetings**

The major objective of this task is to establish and maintain the lines of communication and set forth the priorities between the County, Agencies, and Construction Contractor (CC). As the work progresses, the objective will be to coordinate OBEC staff, keep the County informed of work progress, and perform day-to-day management tasks.

Following the award of the construction contract, and as specified in Standard Specification 00180.42, a preconstruction conference will be held with County and CC to discuss the construction schedule, utility involvement, permit concerns, required documentation submittals, materials, and other items relevant to the construction of the project. The project coordination task will be ongoing throughout the project.

It is also assumed that bi-weekly Project Progress Meetings will be held. Consultant management team will either attend in-person or via conference call. It is assumed 8 Progress Meetings will be held.

Consultant shall:

- 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 recommend to the County the appropriate action

*Assumptions:*

- Construction Phase of the Project will not exceed 4 months
- Management, Coordination and Meetings with the County and CC will not exceed, on average, 12 hours per week

*Deliverables:*

Consultant shall provide:

- Develop agenda, attend and lead preconstruction conference with CC and County staff.
  - Schedule: Within 30 days of notice to proceed to CC.
- Provide minutes of preconstruction conference and progress meetings.
  - Schedule: Three (3) days after each meeting.

**8.2 Contract Administration and Construction Inspection**

Consultant shall perform CEI services on this project as required to document conformance of the construction with the approved plans and specifications for the project.

The general order and nature of the inspection will be as follows:

- Inspect erosion and sediment control measures.
- Inspect removal of structures and obstructions
- Inspect excavation and foundations
- Inspect installation of precast sections & bridge rail
- Inspect embankment and roadway
- Inspect aggregate base and MHMAC materials and placement.
- Inspect general site improvements
- Document quantity and quality as required confirming CC compliance to the contract.

Consultant shall coordinate and schedule one environmental compliance monitoring visit to coincide with activities that have significant environmental components, and prepare a brief monitoring memorandum after the visit summarizing site conditions. Consultant shall review onsite conditions and construction techniques during the site inspection to assess compliance with the Pollution Control Plan, the Erosion and Sediment Control Plan, and general environmental conservation measures.

Consultant shall perform construction documentation tasks required to document CC activities during the project. Consultant shall prepare all documentation on forms and reports approved by the County. It is anticipated that the forms and documentation methods used will follow ODOT standards for Federal-aid projects.

General documentation includes general daily progress reports, quantity and quality documentation, monthly estimates for payment, subcontract review, payroll review and labor compliance monitoring, and notification of commencement and completion for CC work on site. These tasks will be on-going throughout the project.

Acceptance of CC's Quality Control for field-tested materials will be based on the ODOT Quality Assurance (QA) Program as described in the ODOT Manual of Field Test Procedures.

Verification testing will be coordinated by the Consultant through the use of an ODOT certified independent testing laboratory as deemed necessary by the Engineer. Costs for any outside materials testing required will be billed as a direct expense. Acceptance of non-field tested materials will be according to ODOT's Non-field Tested Materials Acceptance Guide. Documentation for all QA purposes will be compiled and submitted to the County at the end of the project.

**Consultant shall:**

- Prepare general daily progress reports for days on-site and submit to County.
  - Schedule: Submit to County with final documentation upon completion of project.
- Prepare quantity and quality documentation necessary for payment and submit to County.
  - Schedule: Submit to County with final documentation upon completion of project.
- Prepare and submit Notifications for commencement and completion of construction, and Notification of project completion.
  - Schedule: Submit to County within 3 days of each milestone.
- Prepare monthly progress pay estimate with the quantities of work performed by the CC and submit to County for payment to the CC.
  - Schedule: Submit to County by the first Wednesday of each month.
- Monitor receipt of and review weekly certified payrolls from all applicable contractors to ensure payment of prevailing wages and overtime in accordance with state law.
  - Schedule: Send certified payrolls to County upon completion of review.
- Submit one (1) Construction Monitoring Report to document the environmental site visit  
Schedule: submit to the CC and County staff within five (5) business days after making the monitoring site visit.
- *Prepare and execute up to two Contract Change Orders as changes arise during construction. This may include minor modifications to the contract plans, specifications, contract time, etc. Contract Change Orders require approval of the County prior to making the change.*

**Assumptions:**

- Duration of construction will be no more than 90 working days or 3 months.
- Budget includes  $\frac{3}{4}$  time onsite construction inspection for primary inspector during a 3 month period.
- No more than two contract change orders will be requested

**Deliverables:**

Consultant shall provide:

- Daily Progress reports
- Quantity and Quality documentation
- Pay estimates and quantities
- One environmental construction monitoring report
- Up to two construction contract change orders

### **8.3 Review of Construction Submittals**

Consultant shall perform review of submittals including schedules, pollution control and erosion control, work containment system, and all technical submittals related to the items constructed under the construction contract. Consultant shall review submittal drawings in a timely manner to avoid delay of the CC's operations.

Consultant shall provide project schedule review and analysis throughout the duration of the project. The goal is to assist the CC in maintaining and adhere to an accurate schedule, and also alleviate and/or reduce issues and delays.

Consultant shall review and provide comments to County Staff on CC's project schedule at the preconstruction meeting. Review shall check for logic and duration of activities along with completeness of the schedule.

#### ***Deliverables:***

Consultant shall:

- Provide submittal review and approval.
- Schedule: Review and process within the 21-day period. The goal of all submittal reviews is to be returned to the CC within 3 to 5 days.
- Submit written comments on baseline schedule to the CC.
- Schedule: Within ten (10) working days after receiving schedule from CC.

#### ***Assumptions:***

- Up to sixteen (16) submittals are anticipated and include four (4) hours aggregate time each for review.

### **8.4 Design 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, respond to field inquiries (RFI's), and monitor design assumptions.

In conjunction with the above, Consultant shall provide written responses to RFI's as well as prepare design modifications and issue plan changes as required to assure conformance of the final product with the intent of the design. The design consultation will occur only as required and may be ongoing throughout the contract.

#### ***Deliverables:***

Consultant shall:

- Responses to RFI's.
- Schedule: Complete and submit within three (3) business days of request.
- Design modifications and plan changes.
- Schedule: As required to eliminate or minimize impacts to CC's schedule, but no later than ten (10) business days after it is determined that a plan change is required.

*Assumptions for Budgeting:*

- It is assumed that three (3) RFIs will be reviewed and responded to, and one design modification revising one (1) plan sheet and/or the specifications will be submitted to the CC by the Consultant.

**8.5 Construction Surveying Quality Assurance**

Consultant shall:

- Perform QA review of Construction Contractor's survey data such as, but not limited to, office calculations and stake-out information. Provide memo indicating dates and times grade calculation checks were performed and the results of the calculation checks along with copy of notification to Construction Contractor on items not in compliance from calculation checks and when/what corrections were made.
- Perform QA review of Construction Contractor's field survey work. Provide memo indicating dates and times, the survey field checks of Construction Contractor's survey work were performed and the results of the field checks along with copy of notification to Construction Contractor on items not in compliance with approved construction plans and when/what corrections were made.

*Assumptions:*

- This task assumes no more than three (3) 1-day site visit(s) by a one-man survey crew for QA surveying.

***Deliverables:***

Consultant shall provide:

- Quality Assurance Staking reports (field notes, cut sheets, and survey drawings) for the specific items laid out - Submit electronically within 24 hours after quality assurance of the specific element is complete

**8.6 Final Inspection and Documentation**

Consultant shall coordinate, lead and document a Final Inspection with the County and CC. This inspection shall follow Second Notification to confirm all work was completed in close conformance with the construction contract and that all of the County's project goals have been met. Consultant shall note any deficiencies and submit a written punchlist to the CC for completion of on-site work.

Consultant shall copy all project documentation relevant to project closeout. Project documentation will be compiled and submitted to the County for their files.

Consultant shall make corrections to existing plans and prepare final "As-Constructed" contract drawings for final records.

***Deliverables:***

Consultant shall provide:

- Recommendation of Project Acceptance.



- Schedule: Within three (3) days after punchlist completion and receipt of documentation from CC.
- General daily progress reports, quantity and quality documentation, and certified payrolls.
- Schedule: Within thirty (30) days after Project Acceptance.
- Two (2) copies of complete "As-Constructed" contract drawings on 11x17 (half-size) paper, and one electronic PDF file emailed to the County.

Schedule: Within 90 days after all contract related work is complete (Second Notification).

**C8.7 Construction Claim Support** – [CONTINGENCY]

*If authorized by County, Consultant shall provide support to the County to review and respond to any and all claims submitted by the Construction Contractor relating to the construction of the Stag Hollow Bridge. Consultant tasks for claim(s) support may include but are not limited to:*

- *Prepare memoranda and supporting documentation (photo logs, inspection reports, memos, drawings, etc) related to claims.*
- *Provide consultation related to claims (in person, via telephone or email).*
- *Attend claim resolution meetings.*
- *Prepare a claim decision.*

**Assumptions:**

- *No more than 80 hours for claim support. Assume one claim requiring two staff to do one day of preparation and attend up to three half day meetings for the claim, plus travel time, Principal and PM reviews and clerical assistance.*

**Deliverables:**

*The deliverables for claim(s) support may include but are not limited to:*

- *Memoranda and supporting documentation (photo logs, inspection reports, memos, drawings, etc) related to claims*
- *Consultation related to claims (in person, via telephone or email)*
- *Attendance at claim resolution meetings*
- *Claim decision*

**ESTIMATED FEE**

OBEC proposes to perform this scope of services on a Time and Material basis for a not to exceed fee of \$534,695.00 for the Base Tasks and \$38,660.00 for Contingency Tasks as shown in the attached Cost Estimate & Fee Schedule spreadsheet.

Please do not hesitate to call me if you have questions or need additional information. We look forward to working with you on this project.

Sincerely,

Carrie Martin  
February 22, 2019  
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Austin Bloom  
Project & Division Manager

ARB:sc  
Enclosure





**2019 Salary Grade & Hourly Rates**

<u>Personnel Classification</u>		<u>Personnel Classification</u>	
Principal/President	\$297	Principal/Vice President	\$273
<b><u>Design</u></b>		<b><u>Construction</u></b>	
Division Manager 3	\$237	Division Manager 3	\$237
Division Manager 2	\$226	Division Manager 2	\$226
Project Manager 3	\$226	Construction Project Manager 3	\$226
Engineer 8	\$226	Division Manager 1	\$192
Division Manager 1	\$192	Construction Project Manager 2	\$192
Project Manager 2	\$192	Construction Project Manager 1	\$169
Engineer 7	\$192	Assistant Project Manager 1	\$143
Project Manager 1	\$169	Construction Engineer 5	\$143
Engineer 6	\$169	Construction Engineer 4	\$132
Utility Coordinator 3	\$143	Construction Engineer 3	\$119
Transportation Planner	\$143	Construction Engineer 2	\$99
Engineer 5	\$143	Engineering Tech 4	\$132
Designer 4	\$132	Engineering Tech 3	\$99
Engineer 4	\$132	Engineering Tech 2	\$84
Sr. Environmental Specialist	\$132	Engineering Tech 1	\$73
Utility Coordinator 2	\$132	CECOP	\$62
Utility Coordinator 1	\$119		
Designer 3	\$119	<b><u>Administration</u></b>	
Engineer 3	\$119	IT Manager/HR Manager/Marketing Manager	\$192
Environmental Specialist 3	\$119	Proposal Manager	\$132
Designer 2	\$99	Contract Administrator	\$132
Engineer 2	\$99	Database Controller	\$119
Environmental Specialist 2	\$99	Sr. Proposal Coordinator	\$119
Designer 1	\$88	Project Accountant / Project Controller	\$119
Engineer 1	\$88	Proposal Coordinator / Sr. Graphic Artist	\$99
Environmental Specialist 1	\$88	Network Administrator 1	\$99
Drafting Supervisor	\$143	Administrative Assistant 4 / Sr. Billing Clerk	\$88
Sr. CAD Drafter	\$119	Marketing Coordinator 1 / Graphic Artists	\$88
CAD Drafter 4	\$99	Administrative Assistant 3 / Sr. Accounting Clerk	\$84
CAD Drafter 3	\$88	Administrative Assistant 2 / Accounting Clerk 2	\$73
CAD Drafter 2	\$84	HS Interns / File Clerks	\$47
CAD Drafter 1	\$62		

**Surveying**

B.O. 19-29  
 ~ Exhibit A ~  
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