

RESOLUTION NO. 5345-17

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN AMENDMENT OF A PROFESSIONAL SERVICES CONTRACT WITH OBEC CONSULTING ENGINEERS FOR ADDITIONAL SERVICES.

WHEREAS, the City signed an agreement with OBEC Consulting Engineers for engineering design services for the Myslony Bridge project in December of 2015; and

WHEREAS, the City and OBEC Consulting Engineers signed amendments to that agreement in March and August of 2016; and

WHEREAS, the Parties wish to enter into an amendment to the agreement to include additional design and services during construction which total more than 10% of the original agreement price; and

WHEREAS, funds are available for this project in the Road Operating and Water Operating Funds;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF TUALATIN, OREGON, that:

**Section 1.** The City Manager is authorized to execute an amendment (Amendment 3) to the existing agreement with OBEC Consulting Engineers in the amount of \$179,254.90.


**Section 2.** The City Manager or designee is authorized to execute Change Orders totaling up to 10% of the amended agreement price.

**Section 3.** This resolution is effective upon adoption.

Adopted by the City Council this 13th day of November, 2017.

CITY OF TUALATIN OREGON

BY

  
\_\_\_\_\_  
Mayor

APPROVED AS TO FORM

BY

  
\_\_\_\_\_  
City Attorney

ATTEST

BY

  
\_\_\_\_\_  
City Recorder

**AMENDMENT 03 TO THE PROFESSIONAL SERVICES AGREEMENT BETWEEN  
THE CITY OF TUALATIN AND OBEC CONSULTING ENGINEERS**

This Amendment 03 to the Professional Services Agreement (Amendment 03) is entered into by and between the City of Tualatin, Oregon ("City") and OBEC Consulting Engineers ("Provider"), and are collectively referred to as the "Parties."

- A. On or about December 14, 2015, the Parties entered into a Professional Services Agreement.
- B. The Parties wish to enter into this Amendment 03 to amend the Professional Services Agreement to expand the scope of work.

NOW THEREFORE, the Parties agree as follows:

**Section 1.** The Professional Services Agreement is amended to provide an additional scope of work as set forth in the Scope of Professional Services and Payment Schedule, both of which are set forth in Exhibit A, which is incorporated herein.

**Section 2.** Except to the extent modified by this Amendment 03, the Professional Services Agreement, remains in full force and effect. To the extent that any provision of the Professional Services Agreement conflicts with a term of this Amendment 03, this Amendment 03 controls.

**Section 3.** This Amendment 03 is effective upon the date of the last signature below.

City of Tualatin, Oregon:

OBEC Consulting Engineers:

By: \_\_\_\_\_ Date: \_\_\_\_\_ By: \_\_\_\_\_ Date: \_\_\_\_\_

## **EXHIBIT A**

### **SCOPE OF PROFESSIONAL SERVICES**

**For**

**AMENDMENT 3 – ADDITIONAL ENGINEERING SERVICES – Myslony Bridge: West of 112<sup>th</sup> Ave**

The purpose of Amendment 3 is for additional engineering services completed during design and to provide Construction Contract Administration and Construction Engineering & Inspection (CA/CEI) Services including construction survey during the construction of the Myslony Bridge project.

#### **TASK 1 PROJECT MANAGEMENT**

##### **Task 1.1 Overall Project Management**

Provide additional project management and design oversight for the consultant team. Keep the city apprised of work progress, project issues, resolutions and changes affecting the design, schedule or project budget by providing a monthly progress report with each monthly invoice. Submit project invoices monthly, including a breakdown of hours spent by each individual on each task. Maintain a comprehensive project file, which must include engineering computations, assumptions, meeting agendas and minutes, working drawings, correspondence and memoranda.

##### *Assumptions*

- Project Management tasks are assumed to be **22 months (14 additional months)** in duration to match the overall design schedule.

##### *Deliverables*

- Invoices and progress reports (monthly)

##### *Schedule*

Task shall be continuous throughout project design phase duration.

##### **Task 1.2 Project Meetings**

Two additional one hour (1) meetings for up to one (1) OBEC employee for coordination related to design changes and project schedules.

#### **TASK 7 HYDRAULIC AND STORMWATER STUDIES**

##### **Task 7.2 Stormwater Alternatives Analysis and Design**

Revise stormwater analysis for runoff at the bridge replacement site for the redesign efforts associated with narrowing the overall cross section to avoid the Greenway Tract on the North Side of the project.

***Deliverables:***

- A summary of the Stormwater Analysis and Design results shall be provided in the deliverables for Task 7.3

**Task 7.3 - Stormwater Management Report**

Revise the draft “Preliminary Stormwater Management Report” for the redesign efforts associated with narrowing the overall cross section to avoid the Greenway Tract on the North Side of the project.

**Deliverables:**

- One (1) electronic copy in PDF format of Draft Stormwater Management Report to be delivered as part of the preliminary design report as described in Task 13.1.

**TASK 8 UTILITY DESIGN**

**Task 8.2 Prepare 30% Water Line PS&E**

Revise the 30% water line plans and estimate as a result of a change in waterline from 12” to 16” diameter. The additional effort included revision of three plan sheets.

***Deliverables***

- Changes to be incorporated into 95% waterline design documents

**TASK 9 ROADWAY DESIGN**

**Subtask 9.2 Prepare 30% Roadway PS&E**

Revise the 30% Roadway plans to account for avoiding the Greenway Tract at the north of the project. Design includes two additional design iteration submittals. Iterations included modeling of the horizontal and vertical roadway alignments to optimize the location of the road relative to right-of-way and greenway impacts. Additional redesign for ADA ramps and new driveway apron.

***Deliverables***

- Two (2) 11" x 17" electronic copies of roadway alternative plan drawings.

**TASK 10 BRIDGE DESIGN**

**Task 10.2 Prepare 30% Bridge PS&E**

Revise the 30% Bridge plans to account for avoiding the Greenway Tract at the north of the project. The changes resulted in modifications to the retaining wall and bridge abutment drawings and calculations for a narrower structure and additional retaining walls along the north

side of the bridge. Additional redesign for pipeline hangers as a result of the change in pipeline diameter.

***Deliverables***

- Changes to be incorporated into 95% bridge design documents

**TASK 11 LANDSCAPE DESIGN (Removed From Scope)**

**TASK 16 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 Contract 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 16.1 Coordination**

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, and City staff to facilitate timely, efficient operations for all involved.

**Deliverables:**

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

**Task 16.2 Status Reports and Invoices**

Prepare up to 12 Monthly Status Reports throughout the duration of the CA/CEI Services. See Section E.1, 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...

**Deliverables**

Monthly Status Report - Submitted to City with the monthly invoice no later than the 10th calendar day of the month following the reporting month.

## **TASK 17 CONSTRUCTION CONTRACT ADMINISTRATION/CONSTRUCTION ENGINEERING and INSPECTION**

Support the Project's needs by providing CA/CEI Services to assist the City to ensure the Project is constructed according to the Plans and Specifications. 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 17.1 Pre-Construction Conference**

Attend the Pre-Construction Conference before On-Site Work Begins. Attendees will include the CC, permitting agencies, City officials and others as may be appropriate to discuss the construction schedule, utility involvement, permit concerns, required documentation submittals, materials, construction surveying and other items relevant to the construction of the Project.

#### **Consultant shall:**

- Attend and participate in Pre-Construction Conference.

### **Task 17.2 Project Progress Meetings**

Attend periodic Project Progress Meetings with the CC and others as needed, including but not limited to, permitting agencies and City officials. The Project Progress Meetings are intended to promote Project progress, proper communications, effective working relationships and timely issue resolution.

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

- Concrete Deck Placement
- Pile Driving
- HMAC Paving

#### **Consultant shall:**

- Attend Project Progress & activity-specific Meetings as needed, or as agreed to by the City.

**ASSUMPTIONS FOR BUDGETING PURPOSES:** Project Progress Meetings are assumed to be weekly (during active construction) with no more than 2 Consultant staff attending and up to 16 total meetings are assumed.

### **Task 17.3 Shop Drawing and Submittal Review**

Review construction shop drawings and working drawings submitted either electronically or in paper form by the CC. Log in the submittal when it arrives, track the submittal to ensure timely response, and log out the reviewed submittal when it is returned to the CC.

Review the following submittals:

- Traffic control plans
- Erosion control plans
- Pollution control plans
- Machine control survey submittals
- Drainage structures (manholes and inlets) shop drawings
- Work containment plans and systems
- Shoring and falsework calculations and drawings
- Reinforcing steel shop drawings
- Prefabricated concrete shop drawings
- Pile and driving equipment submittal
- Structural concrete mix designs
- Bridge rail and protective fencing shop drawings
- Lighting pole and traffic signal pole submittals
- Electrical equipment and materials

**Deliverables:**

- Return approved shop drawings with comments:
  - 1 Electronic copy to the City.

**Task 17.4 Consultation during Construction**

Provide consultation and technical Services regarding design issues raised during construction of the Project. 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 the City during construction, Consultant shall:

- Clarify construction contract documents.
- Respond to field inquiries.
- Engage the services of the POR on all matters involving design changes.

**NOTE: Design requests must be initiated by either the City or Consultant using a Change Request Form or a RFI. A response to an 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 City 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.**

**Deliverable:**

- Written documentation of responses to CC or City inquiries – Submit 1 copy to the City within 2 business days of inquiry, unless other delivery date is agreed to by the City.

**Task C17.5 Design Modifications [CONTINGENCY TASK, see Sec. F]**

If Consultant or CC determines that design modifications may be necessary, Consultant shall discuss potential changes with the City and POR prior to verbally agreeing on changes with CC or preparing the appropriate contract change order documents, depending upon the type of work (changed work, extra work, or force account work). Upon request of the City, 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 contract change order documents (CCO, EWO or SFO) to make them a part of the construction contract.

**Deliverables:**

- Design details for modifications (prepared or approved by the POR for appropriate changes to Project design) - Submit to the City at a date agreed to when work was requested.

**Task C17.6 Claim(s) Support [CONTINGENCY TASK, see Sec. F]**

If authorized by the City, provide support to the City to review and respond to any and all claims submitted by the CC. Consultant tasks for claim(s) support may include:

- 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 FOR BUDGETING PURPOSES:** This task assumes no more than 76 hours for claim(s) support. Assume up to 1 claim, each requiring 2 staff to do 2 days of preparation and attend up to 2 all day meetings for each claim, plus 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

**TASK 18 CONSTRUCTION, ENVIRONMENTAL COMPLIANCE AND WORK ZONE MONITORING AND INSPECTION**

Provide on-site monitoring and inspection of construction for conformance with, and shall enforce compliance with, construction contract documents. 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 the CC schedule.



### **Task 18.1 Environmental Compliance and Mitigation Monitoring**

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. 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.

Conduct site environmental inspections site visits to assist CC and the City in maintaining compliance with issued regulatory permits and the special provisions.

Provide documentation of the construction process relative to this environmental compliance. Review the CC's submittals 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

Evaluate onsite conditions and construction techniques during environmental inspections site visits to assess compliance with Project permits, the PCP, the ESCP, proposed site rehabilitation measures, and general environmental conservation measures. Identify deficiencies and potential permit compliance issues and provide guidance to the City, LPA and CC to aid in avoiding potential regulatory agency involvement or violations.

Based on the Project's significant site rehabilitation measures (to offset Project impacts), provide input and clarifications during construction activities to facilitate biological functioning as outlined in Project permits.

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

Conduct environmental inspection site visits weekly during the wet season and bi-weekly during the dry season; a brief construction environmental inspection report or monitoring memorandums will be prepared summarizing site conditions and providing recommended measures to facilitate permit compliance and correct deficiencies.

**ASSUMPTIONS FOR BUDGETING PURPOSES:** This task assumes up to 20 site visits for Environmental Compliance & Mitigation Monitoring.

### **Task 18.1 Deliverables:**

- Reviewed Contractor submitted Erosion Control Monitoring Reports (Form 734-2361) for compliance no later than 2 weeks after each inspection site visit. Maintain in the Project files and submit with final Project documentation as defined in Task 5.4.
- 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, and the City within 5 business days after the monitoring site visit.
- General Daily Progress Reports / Project Diary – Complete daily when performing onsite visits. Maintain in Project files and submit originals with final Project documentation as defined in task 5.4
- Project Photography / Photo Logs – Submit with reports (when applicable) and final Project documentation as defined in task 5.4.

### **Task 18.2 Construction Activity Monitoring**

Provide inspection concurrently with the CC's operation. Coordinate closely with CC to ensure on-site inspections are coordinated with the construction schedule. Prepare General Daily Progress Reports of construction for days Consultant is on site. Take photos of the various construction activities and include them with the General Daily Progress Report.

**ASSUMPTIONS FOR BUDGETING PURPOSES:** This task assumes construction activity monitoring for the duration of retaining wall/bridge construction and as requested for other work onsite. Specific activities during bridge construction that will be monitored include, but are not limited to, the list below:

- Foundation Excavations
- Stone embankment installation
- Sheet pile wall installation
- Pile driving
- Reinforcement installation
- Structural concrete pours
- Setting precast girders
- Bridge joint installation
- Water line installation on the bridge

**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 the City with final Project documentation submittal.
- Pile Driving PDA testing results. The PDA testing will occur in the field during pile driving and a final PDA testing report will be submitted to the City with final Project documentation submittal.

**Task 18.3 Precast Beam Inspection**

Perform inspection of precast, pre-stressed concrete bridge members at the fabrication plant as required to ensure Project conformance with the plans and specifications.

**Consultant shall:**

- Inspect pre-stressing strand materials and placement
- Inspect reinforcing steel materials and placement
- Inspect structural concrete materials and placement
- Inspect placement of voids, blockouts and inserts

**ASSUMPTIONS FOR BUDGETING PURPOSES:** The Project will require fabrication of 15 precast beams. It is anticipated that 3 beams will be cast per day for a total of 5, 8-hour days of fabrication. Consultant inspection staff will be present at the precast facility for a preparation day, during fabrication and will perform a final inspection, resulting in a total anticipated effort of 52 hours.

**Deliverables:**

- General Daily Progress Reports – Complete each day Consultant is on-site at fabrication plant. Make available for review at Consultant’s field office or home office. Originals submitted to the City with final Project documentation submittal.
  - QA/QC documentation and quantity documentation - Make available for the City review throughout the Project. Submit originals to the City with final Project documentation.

## **TASK 19      CONSTRUCTION SURVEYING**

Consultant's licensed Land Surveyor shall provide land surveying Services and deliverables that conform to all state statutes pertaining to survey and land boundary laws. These include, but are not limited to, the following Oregon Revised Statutes (ORS):

- ORS Chapter 92 - Subdivisions and Partitions
- ORS Chapter 93 - Conveyancing and Recording
- ORS Chapter 209 - County Surveyors
- ORS Chapter 672 - Professional Engineers; Land Surveyors; Photogrammetrists; Geologists

Consultant shall provide qualified personnel to verify the Project is constructed to the lines and grades as shown, specified, or established.

### **Task 19.1      Construction Survey and Staking**

Consultant shall provide all construction surveying for control of the Project as required to establish the position, orientation and elevation of the work from control stations, including furnishing and setting construction stakes and marks, reference marks, and additional control stations.

#### **Consultant shall:**

- Coordinate with the City and CC to discuss and agree upon the extent of construction survey needs in order for the Project to be successfully constructed in the correct location and in accordance with the approved plans and specifications for the work.
- Verify all initial horizontal and vertical control stations in the proximity of the Project.
- Establish additional control stations as necessary to control the Project.
- Make supporting calculations as required to establish the position of all elements of the Project. Make calculations in accordance with established City policies and procedures. Calculations must be sufficient to establish the correct position, orientation, and elevation of the work within required tolerances from control stations.
- Prepare horizontal and vertical alignment construction grade data from the construction contract plans. Provide calculations, field notes, and survey drawings for the layout and control of the work as are required to construct the Project.
- Perform staking of the Project clearing limits.
- Set stakes to define the temporary signs for each stage of construction.
- Perform staking for approximate ROW and easements.
- Perform staking to delineate existing wetlands and other regulated work areas.
- Perform staking for retaining walls including foundations and copings.
- Provide staking necessary for construction of all roadways and sidewalks as follows:

- Slope stakes for construction of earthwork, including intersections and match lines
- Grade hubs for subgrade
- Grade hubs for top of rock
- Staking for finish grades
- Permanent drainage, including manholes, inlets and pipes
- Permanent striping
- Provide staking for permanent signs.
- Provide staking for illumination.
- Provide staking for temporary & permanent water treatment facilities.
- Provide staking for guardrail and barriers.
- Provide staking necessary for construction of the bridge, as follows:
  - Substructure Elements:
    - Piling
    - End bents and wingwalls
    - Beam seats and bearing pads
  - Superstructure Elements:
    - Horizontal alignment and deck edges
    - Bridge end panels
    - Hot mix asphalt concrete buildup for finish grade on precast deck elements.

**ASSUMPTIONS FOR BUDGETING PURPOSES:** This task assumes no more than   16   1-day site visit(s) by a two-man survey crew for construction surveying.

**Deliverables**

- Submit the deliverables below to CC and the City.
- Submit the deliverables below to CC and the City. Provide via email a copy of transmittal letter to the City.

- Calculations, survey drawings and grade reports for layout and control of the work - Submit electronically at least 2 business days prior to staking a specific element. Keep copies in the Project file. If required by the City, hard copies shall be provided.
- Staking reports (field notes, cut sheets, and survey drawings) for the specific items laid out - Submit electronically within 24 hours after staking of the specific element is complete. If required by the City, hard copies shall be provided.

**Task 19.2 Right of Way Monumentation**

Document the location of the ROW lines at the completion of the Project construction. Perpetuate the location of the monuments found prior to construction and shall document the ROW lines for all property acquired for the Project.

Unless otherwise approved by the City, Consultant shall monument the new ROW using the Boundary Method in conformance with the Washington County Surveyor. Consultant may be assigned the method of monumentation, which could be the Network Method, Boundary Method, or a combination of both methods.

Set control and/or ROW monuments within 45 days of the completion of construction.

Deliverables:

Submit the deliverables below to the City

- Bentley MicroStation.dgn file displaying the control and/or monuments – Submit within 2 weeks after recording of the SFM with the appropriate County Surveyor's office.
- Bentley Inroads.alg(s) file with centerline(s), control and monument data, and report of alignment(s) showing coordinates, bearing, stations, etc., per Bentley Inroads standard reports – Submit within 2 weeks after recording of the SFM with the appropriate County Surveyor's office.
- Final report of monument station and offset relationship to the alignment(s) – Submit within 2 weeks after recording of the SFM with the appropriate County Surveyor's office.
- City ROW files and copies of all deeds, court judgments, etc., from the appropriate County – Submit within 2 weeks after recording of the SFM with the appropriate County Surveyor's office.
- Original field notes and 1 copy in .pdf format – Submit within 2 weeks after recording of the SFM with the appropriate County Surveyor's office.
- Final ASCII file of all control and monument points set – Submit within 2 weeks after recording of the SFM with the appropriate County Surveyor's office.

### **Task 19.3 Monumentation Survey Filing Map (SFM)**

Create SFM in accordance with Agency Survey Filing Map Standards, County and ORS 209 requirements.

Submit the survey to the appropriate county for filing on archival Mylar or acceptable media per county requirements.

#### **Deliverables**

- SFM File at the appropriate County Surveyor's office within 45 days after setting monuments.
- Final recorded SFM and narrative regarding methodologies used – Submit within 2 weeks after recording of the SFM with the appropriate County Surveyor's office.

### **TASK 20 PROJECT CLOSE-OUT**

Complete interim and final on-site inspections and submit all Project records required for final payment and Project acceptance.

**Task 20.1 Final Inspection(s) and Submittals**

Attend a Project Final Inspection with CC and City within 15 days after receiving notice from the CC that all punch list items, final trimming and cleanup. Once the punch-list items have been corrected, Consultant shall meet at Project site with the City for a follow-up to the Final Inspection.

**Task 20.2 As-Constructed Plans**

Following the completion of construction activities, prepare as-constructed plans based on plan markups and redlines kept during construction by the contractor.

**Deliverables & Schedule**

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

**Task 20.3 Structure Load Rating**

Consultant will 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.

Load rating will be based 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.

**Deliverables:**

Submit within 90 calendar days after Second Notification -

- Provide 2 copies of a PE Stamped load rating calculation book with a CD containing all electronic files one to the City and one to ODOT Bridge Section.