



## RESOLUTION 2015-032

### **AUTHORIZING THE CITY MANAGER TO ENTER INTO A CONTRACT WITH AKS ENGINEERING AND FORESTRY TO PROVIDE PROFESSIONAL ENGINEERING SERVICES FOR THE COLUMBIA STREET REGIONAL STORMWATER QUALITY FACILITY PIPE BORE MITIGATION DESIGN AND PERMITTING PROJECT**

**WHEREAS**, the Columbia Street Regional Stormwater Quality Facility is identified in the City's Stormwater Master Plan (project number CC-3); and

**WHEREAS**, AKS Engineering and Forestry was contracted with under Resolution 2013-064 to provide professional engineering services in the design and permitting of the Columbia Street Regional Stormwater Quality Facility project; and

**WHEREAS**, during the permitting process Oregon Department of Fish and Wildlife (ODFW) placed a condition on the project permit approval requiring replacement of a downstream culvert crossing of Pacific & Western Railroad right-of-way; and

**WHEREAS**, the replacement of the downstream culvert is deemed necessary by ODFW for fish passage; and

**WHEREAS**, the downstream culvert replacement was not included in the original scope of work for the regional stormwater quality facility project; and

**WHEREAS**, ORS 279C.115 states, "A local contracting agency may enter into an architectural, engineering or land surveying services contract directly with a consultant if the project described in the contract consists of work that has been substantially described, planned or otherwise previously studied or rendered in an earlier contract with the consultant that was awarded under rules adopted under ORS 279A.065 and the new contract is a continuation of that project."; and

**WHEREAS**, the work identified in the contract is deemed a continuation of the original Columbia Street Regional Stormwater Quality Facility project.


### **NOW, THEREFORE, THE CITY OF SHERWOOD RESOLVES AS FOLLOWS:**

**Section 1.** The City Manager is authorized to enter into a contract for professional services with AKS Engineering and Forestry for the project scope and fee described in the attached Exhibit A and Exhibit B, in the amount of \$24,915.

**Section 2.** The City Manager is authorized to amend the contract by up to \$1,245 (5%) for unanticipated issues, for a total not-to-exceed budget amount of \$26,160.

**Section 3.** This Resolution shall be effective upon its approval and adoption.

Duly passed by the City Council this 17<sup>th</sup> day of March 2015.

  
Krisanna Clark, Mayor

Attest:

  
Sylvia Murphy, MMC, City Recorder

## EXHIBIT A

### SCOPE OF WORK

#### TASK 13 FISH PASSAGE MITIGATION SERVICES

As part of the Columbia Street Regional Stormwater Facility project, a horizontal bore beneath the Southern Pacific Railroad right-of-way is proposed to provide a secondary culvert outflow and reduce the backwater surface water elevation for the project. Due to the fact that the secondary culvert cannot meet Oregon Department of Fish and Wildlife (ODFW) fish passage requirements, an offsite fish passage project is proposed to mitigate these impacts.

ODFW has approved replacing an existing culvert on a tributary to Cedar Creek as suitable fish passage mitigation to off-set the impacts associated with the new culvert placement at the City's Columbia Street Water Quality Facility. The proposed mitigation includes replacing an existing 36-inch diameter culvert with a natural stream bottom culvert to "open" a minimum of 440 linear feet of fish habitat from nearby Cedar Creek.

Work below the ordinary high water mark (OHWM) of the tributary to Cedar Creek requires authorization from the Oregon Department of State Lands (DSL) and the Portland District Army Corps of Engineers (Corps).

#### Task 13.1 – Topographic Surveying Services:

AKS will perform the following services:

- The Oregon Utility Notification Center (locate services) will be contacted to ensure any underground utilities in the area of the proposed driveway approach will be located and the surface markings can be field tied.
- Perform a field topographic survey of the existing culvert and the unnamed tributary of Cedar Creek (as identified by the Limits of Surveying boundary on the Mitigation Area exhibit provided by the City).
- Based on the field topographic survey, prepare an existing conditions plan showing: one foot contours, delineated wetland boundaries, ordinary high water marks, existing access roads/paths, forested areas, and approximate property boundaries for the westerly boundary of the site. This plan will be utilized to prepare engineering plans for the proposed culvert mitigation project and will be utilized for construction staking.

#### Deliverables:

The project deliverables will include:

- Existing Conditions Plan (incorporated into plan sheets for culvert design)

### **Task 13.2 Natural Resource Services:**

AKS will provide the following scope of work with respect to Natural Resource services:

- According to Oregon Administrative Rule (OAR) 141-089-0740, replacement of culverts for fish passage can be authorized under a General Permit from DSL. This task includes preparing the General Authorization Eligibility Form for submittal to DSL.
- The project also qualifies for approval under Nationwide Permit #3 Maintenance Activities. This task includes preparing a Pre-Construction Notification for submittal to the Corps to receive federal authorization for the culvert replacement. The culvert replacement is not expected to require compensatory waters mitigation.
- If necessary, prepare a Simplified Assessment for submittal to CWS to receive a Service Provider Letter for temporary construction impacts within the associated vegetated corridor.
- AKS will coordinate with the project team to facilitate the submittal and reviews of the DSL/Corps and CWS permits. This task includes coordination with the project team to ensure the design of the new culvert meets ODFW fish passage requirements at road/stream crossings.

#### **Deliverables:**

The project deliverables will include:

- General Authorization Permit for City signatures and submittal to DSL
- Pre-Construction Notice Form for City signature & submittal to Corps
- Simplified Site Assessment report for proposed culvert replacement
- Sensitive Areas Certification Form for City signature & submittal to CWS (if needed)

### **Task 13.3 – Fish Passage Culvert Design Services:**

AKS will perform the following services:

- Prepare final civil engineering construction plans, details, and specifications for the proposed culvert replacement which complies with Oregon's fish passage rules. These plans will include the following sheets:
  - Cover Sheet
  - Existing Conditions Plan
  - General Construction Notes
  - Erosion Control Plan and Details (assumes a disturbed area of less than 1 acre)
  - Grading Plan
  - Replacement Culvert Plan, Profile & Cross-Section
  - Construction Details for the replacement stream crossing structure (assumed to consist of a partially buried large diameter culvert)
- Site drainage analysis for culvert capacity
- Hydraulic analysis of proposed culvert to meet ODFW fish passage design and CWS requirements
- In conjunction with the natural resource permitting and civil design services, AKS will perform the following landscape architecture services (as needed):
  - Vegetated Corridor Enhancement Plan



- Vegetated Corridor Mitigation Plan
  - Streambank Revegetation Plan
  - Landscaping Legend, Details, and Notes
- In addition to preparing the above plans, the AKS team will prepare the following documents:
    - Bid sheet
    - Project special provisions
    - Engineer's construction cost estimate
  - AKS will submit these civil engineering and landscape plans to the City for review and comment, then make any necessary revisions.

**Deliverables:**

The project deliverables will include:

- Civil engineering construction plans, details, and specifications
- Hydraulics report
- Landscape plan (as needed)
- Bid sheet
- Project special provisions
- Engineer's construction cost estimate

**Task 13.4 – Construction Surveying Services:**

AKS will provide one set of construction stakes for the following item:

- Clearing limits and erosion control
- Tree fencing stakes (angle points and inter-visible)
- Storm drainage structure offset stakes for the stream crossing

Construction staking provides the necessary information for the contractor to construct the improvements in accordance with the plans.

**Deliverables:**

The project deliverables will include:

- Cut Sheets

**Task 13.5 - Construction Administration & Support Services:**

- AKS will attend the pre-construction meeting scheduled by the City of Sherwood.
- Respond to contractor Requests for Information (RFI's) and issue clarifications to design requirements.
- Review contractor submittal documents (assume 2 total).

**Deliverables:**

The project deliverables will include:



- Pre-construction meeting notes
- Submittal reviews
- RFI clarifications

**Task 13.6 - Project Close-Out Services:**

- AKS will perform a walk-through following substantial project completion and create a project punch list.

**Deliverables:**

The project deliverables will include:

- Punch list

**Task 13.7 – Surveyed As-Builts**

AKS will provide as-built engineering plans of the culvert to include the following:

- Survey elevations and location of the new culvert

**Deliverables**

The project deliverables will include:

- As-built culvert plan

**Assumptions/Exclusions:**

- The proposed culvert replacement does not require compensatory waters mitigation.
- Pedestrian path/trail design between Wyndham Ridge subdivision and Meinecke Parkway roundabout is not included.
- The City of Sherwood will be responsible for all primary construction phase inspection and coordination services.
- A land use application is not required for the proposed culvert replacement project or associated improvements.
- The City will be responsible for submitting plans, application forms, etc., to CWS for permitting.
- The City will be responsible for preparing the bidding and project contract documents. (The AKS team will prepare the plans, reports, bid sheet, and special provisions.)
- If a pipe arch or open bottomed culvert is required, a geotechnical engineering report will be provided by the Client to address footing design and include bearing capacities.
- Geotechnical Engineering services are not included within this scope of work.
- Construction time will be no more than 90 days during a single construction season.
- Corps/DSL monitoring is excluded from this scope of work.





**PROJECT COSTS**

**EXHIBIT B**

ESTIMATED PERSONNEL TASK HOURS												TOTAL TASK HOURS	TOTAL COST
AKS ENGINEERING & FORESTRY, LLC.													
PROJECT TASK AND SUBTASK ELEMENTS	Project Principal Engineer/ Surveyor	Design Engineer/ Arbiter	Exp. Tech	Medial Science	S. Landscape Estimator	Landscape Architect	Project Surveyor	Survey Tech	Survey/ GPS (Field Process)	Classical			
	\$115.00	\$100.00	\$85.00	\$100.00	\$105.00	\$75.00	\$100.00	\$85.00	\$140.00	\$45.00			
<b>TASK 13 - FISH PASSAGE MITIGATION SERVICES</b>													
13.1 Topographic Surveying Services	4						3	8	10	2	27	\$2,830	
13.2 Natural Resource Services	2	2	10	40						2	56	\$5,370	
13.3 Fish Passage Culvert Design Services	8	40	60		8	12				2	130	\$11,850	
13.4 Construction Surveying Services	1	1	1				1	4	8	2	18	\$1,950	
13.5 Construction Administration & Support Services	2	6									8	\$830	
13.6 Project Close-Out Services	1	3				3					7	\$640	
13.7 Surveyed As-Builts	1	1					1	2	4		9	\$1,045	
<b>PERSONNEL TASK HOURS SUBTOTAL</b>	<b>19</b>	<b>53</b>	<b>71</b>	<b>40</b>	<b>8</b>	<b>15</b>	<b>5</b>	<b>14</b>	<b>22</b>	<b>8</b>	<b>255</b>		
<b>PERSONNEL COST SUBTOTAL</b>	<b>\$2,185</b>	<b>\$5,300</b>	<b>\$6,035</b>	<b>\$4,000</b>	<b>\$840</b>	<b>\$1,125</b>	<b>\$500</b>	<b>\$1,190</b>	<b>\$3,080</b>	<b>\$360</b>		<b>\$24,615</b>	
<b>TOTAL REIMBURSABLE EXPENSES (AT COST)</b> (INCLUDING MILEAGE, COPIES, ETC)									\$150.00	\$150.00		\$300	
<b>TOTAL NOT TO EXCEED COST:</b>												<b>\$24,915</b>	

Services will be invoiced to the City of Sherwood on an hourly basis (once a month) at the rates listed above, not to exceed the total above for deliverables listed. Application fees, file reports, recording fees, bid package copies, etc. to be paid by City of Sherwood.