

# Council Business Meeting

April 7, 2020

<b>Agenda Item</b>	Approval of Personal Services Contract for Wastewater Treatment Plant Disinfection System Upgrade	
<b>From</b>	Paula Brown, P.E. Chance Metcalf	Public Works Director Engineering Project Manager
<b>Contact</b>	<a href="mailto:paula.brown@ashland.or.us">paula.brown@ashland.or.us</a> ; (541) 552-2411 <a href="mailto:chance.metcalf@ashland.or.us">chance.metcalf@ashland.or.us</a> ; (541) 552-2448	

## **SUMMARY**

Before Council is a personal services contract for professional engineering services for Phase One of the Waste Water Treatment Plant (WWTP) Disinfection System Upgrade with Carollo Engineers. This project was publicly advertised with a formal Request for Qualifications Based Proposal (RFQ). Carollo was selected as the most qualified among three proposers. This project includes validating the need for the UV system upgrades outlined in the recent Wastewater Treatment Plant (WWTP) Facilities Assessment, evaluating alternatives, making a recommendation and completing design of a new UV system to fit within the footprint of the current system. Phase Two, which includes construction and installation of new UV system, programming to SCADA, testing of equipment and a final operation and maintenance plan, will be presented to Council upon completion of Phase One.

## **POLICIES, PLANS & GOALS SUPPORTED**

City Council Goals (supported by this project):

- Maintain Essential Services – Wastewater Treatment
- Continue to leverage resources to develop and/or enhance Value Services
  - Emergency Preparedness
  - Address Climate Change

CEAP Goals:

1. Reduce Ashland’s contribution to global carbon pollution by reducing greenhouse gas emissions associated with City, residential, commercial, and industrial activities.
2. Prepare the city’s communities, systems, and resources to be more resilient to climate change impacts.

Strategic Initiatives:

- Maximize conservation of water and energy.
- Support climate-friendly land use and management.

Department Goals:

- Maintain existing infrastructure to meet regulatory requirements and minimize life-cycle costs
- Deliver timely life cycle capital improvement projects
- Maintain and improve infrastructure that enhances the economic vitality of the community
- Evaluate all city infrastructure regarding planning management and financial resources

## **BACKGROUND AND ADDITIONAL INFORMATION**

Staff advertised the WWTP Disinfection System Upgrade RFQ on November 19, 2019, on the Oregon Procurement Information Network (ORPIN) site, in the Medford Mail Tribune/Daily Journal of Commerce, and on the City’s website. Three proposals were received on December 17, 2019. Six City staff members independently graded each proposal with the criteria developed for the RFQ. Carollo Engineers was the highest

ranked proposer. Staff subsequently sent a letter of intent to negotiate with Carollo on January 7, 2020. Carollo and staff have worked together to finalize a formal scope of work and cost proposal for the project. A final scope and fee proposal were submitted by Carollo on March 11, 2020, which was subsequently reviewed and approved by staff. Staff provided an email notice of intent to award to Carollo on March 17, 2020, conditioned on Council approval at the April 7, 2020 business meeting. If approved, staff expects the project to begin in April of 2020 and be complete within twelve months after notice to proceed.

The goal of this project is to upgrade the UV disinfection process to meet future demands while decreasing energy costs and maintenance needs.

**PHASE 1: Validate, Evaluate, Recommend, and Design New UV System**

1. Review reference documents and existing system.
2. Validate the need for UV system upgrades.
3. Evaluate and provide alternatives to UV system upgrades and provide preliminary cost analysis. Alternatives analysis shall incorporate the following at a minimum:
  - a. Develop design criteria vetted through City’s project team;
  - b. Ability to meet DEQ requirements and potential future requirements;
  - c. Capacity to meet future design flows;
  - d. Use of existing UV space and facility;
  - e. Discuss dosage rates, hydraulics, short circuiting and dead zones within each alternative system;
  - f. Ease of operation and maintenance;
  - g. Flow rate (and variations to include the City’s use of tertiary membranes);
  - h. Efficiencies and UV radiation intensity and contact time;
  - i. Number of bulbs and energy consumption;
  - j. Cleaning requirements and frequency (and costs); and
  - k. Effective lamp life and replacement bulb frequency (and costs).
5. Recommend preferred alternative:
  - a. Recommendation shall be from reliable validated source.
  - b. Recommendation should include the pros and cons for water reuse.
  - c. Recommendation should include preliminary costs for purchase, installation and annual operation (energy, maintenance and bulb replacement).
6. Complete final design including engineers estimate:
  - a. Include and obtain any permit required for construction/installation.
  - b. Final design will include DEQ review and incorporation of comments.
  - c. Final design will require City Council approval

**PHASE 2: Construction, Programming Services, System Testing and O & M Plan (Coming Back Upon Phase One Completion)**

1. Provide technical assistance during bidding, construction installation, programming and testing.
2. Provide inspection services for all phases of construction, installation, programming and testing.
3. Provide Operations and Maintenance Plan upon completion of project. O&M Plan must meet DEQ requirements.

**FISCAL IMPACTS**

There are adequate funds within the Wastewater Collections and Wastewater Systems Development Charges fund in this 2019-21 biennium budget. Revenues for this project come directly from wastewater rates and fees as

well as wastewater collections system development charges for new construction to match capacity needs with the growth within the City.

**STAFF RECOMMENDATION**

Staff recommends Council approve of the personal services contract for professional engineering services for Phase One of the Wastewater Treatment Plant Disinfection System Upgrade Project for a cost not to exceed \$145,662. Phase Two will be presented to the Council upon completion of Phase One.

**ACTIONS, OPTIONS & POTENTIAL MOTIONS**

Council has the option to approve this contract or refer staff back for a new request for proposals. Potential motions include:

1. I move approval of a contract for professional engineering services with Carollo Engineers in the amount of \$145,662 for Phase One of the Wastewater Treatment Plant Disinfection System Upgrade.
2. I move to direct staff to reconsider a new solicitation for the Wastewater Treatment Plant Disinfection System Upgrade Project.
3. I move to direct staff to forgo the Wastewater Treatment Plant Disinfection System Upgrade.

**REFERENCES & ATTACHMENTS**

Attachment 1: Personal Services Contract between the City and Carollo Engineers.

**PERSONAL SERVICES AGREEMENT (GREATER THAN \$25,000.00)**

<p style="text-align: center;"><b>CITY OF ASHLAND</b></p> <p style="text-align: center;">20 East Main Street Ashland, Oregon 97520 Telephone: 541/488-5587 Fax: 541/488-4006</p>	<p>CONSULTANT: Carollo Engineers, Inc.</p> <p>CONSULTANT’S CONTACT: Dan Laffitte</p> <p>ADDRESS: 707 SW Washington Street, Suite 500 Portland, Oregon 97205</p> <p>TELEPHONE: 503-227-1885</p>
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This Personal Services Agreement (hereinafter “Agreement”) is entered into by and between the City of Ashland, an Oregon municipal corporation (hereinafter "City") and Carollo Engineers, Inc., a foreign business corporation ("hereinafter “Consultant”), for WWTP Disinfection System Upgrade Project.

**NOW THEREFORE**, in consideration of the mutual covenants contained herein, the City and Consultant hereby agree as follows:

- 1. Effective Date and Duration:** This Agreement shall become effective on the date of execution on behalf of the City, as set forth below (the “Effective Date”), and unless sooner terminated as specifically provided herein, shall terminate upon the City's affirmative acceptance of Consultant's Work as complete and Consultant's acceptance of the City's final payment therefore, but not later than May 31, 2021.
- 2. Scope of Work:** Consultant will provide WWTP Disinfection System Upgrade Project as more fully set forth in the Consultant’s Scope of Work dated March 09, 2020, which is attached hereto as “Exhibit A” and incorporated herein by this reference. Consultant’s services are collectively referred to in this Agreement as the “Work.”
- 3. Supporting Documents/Conflicting Provisions:** This Agreement and any exhibits or other supporting documents shall be construed to be mutually complementary and supplementary wherever possible. In the event of a conflict which cannot be so resolved, the provisions of this Agreement itself shall control over any conflicting provisions in any of the exhibits or supporting documents.
- 4. All Costs Borne by Consultant:** Consultant shall, at its own risk, perform the Work described above and, unless otherwise specified in this Agreement, furnish all labor, equipment, and materials required for the proper performance of such Work.

5. **Qualified Work:** Consultant has represented, and by entering into this Agreement now represents, that all personnel assigned to the Work to be performed under this Agreement are fully qualified to perform the service to which they will be assigned in a skilled and worker-like manner and, if required to be registered, licensed or bonded by the State of Oregon, are so registered, licensed and bonded.
6. **Compensation:** City shall pay Consultant at the hourly rates and for the amounts actually incurred for any subcontracting or other activities as set forth in Consultant's fee schedule entitled "City of Ashland, Oregon, UV Improvement Project Level of Effort" dated March 9, 2020, which is attached hereto as "Exhibit "D" and incorporated herein by this reference, as full compensation for Consultant's performance of all Work under this Agreement. In no event shall Consultant's total of all compensation and reimbursement under this Agreement exceed the sum of **\$145,662.00 (one hundred forty-five thousand six hundred sixty-two U. S. dollars)** without the express, written approval from the City official whose signature appears below, or such official's successor in office. Payments shall be made within 30 days of the date of receipt by the City of Consultant's invoice. Should this Agreement be terminated prior to completion of all Work, payments will be made for any phase of the Work completed and accepted as of the date of termination.
7. **Ownership of Work/Documents:** All Work, work product, or other documents produced in furtherance of this Agreement belong to the City, and any copyright, patent, trademark proprietary or any other protected intellectual property right shall vest in and is hereby assigned to the City.
8. **Statutory Requirements:** The following laws of the State of Oregon are hereby incorporated by reference into this Agreement: ORS 279B.220, 279B.230 and 279B.235.
9. **Living Wage Requirements:** If the amount of this Agreement is \$21,507.75 or more, Consultant is required to comply with Chapter 3.12 of the Ashland Municipal Code by paying a living wage, as defined in that chapter, to all employees performing Work under this Agreement and to any Subcontractor who performs 50% or more of the Work under this Agreement. Consultant is also required to post the notice attached hereto as "Exhibit B" predominantly in areas where it will be seen by all employees.
10. **Indemnification:** Consultant hereby agrees to defend, indemnify, save, and hold City, its officers, employees, and agents harmless from any and all losses, claims, actions, costs, expenses, judgments, or other damages resulting from injury to any person (including injury resulting in death), or damage (including loss or destruction) to property, of whatsoever nature arising out of or incident to the performance of this Agreement by Consultant (including but not limited to, Consultant's employees, agents, and others designated by Consultant to perform Work or services attendant to this Agreement). However, Consultant shall not be held responsible for any losses, expenses, claims, subrogations, actions, costs, judgments, or other damages, caused solely by the negligence of City.
11. **Termination:**

- less than thirty (30) days' prior written notice delivered by certified mail or in person.
- c. For Cause. City may terminate or modify this Agreement, in whole or in part, effective upon delivery of written notice to Consultant, or at such later date as may be established by City under any of the following conditions:
- i. If City funding from federal, state, county or other sources is not obtained and continued at levels sufficient to allow for the purchase of the indicated quantity of services;
  - ii. If federal or state regulations or guidelines are modified, changed, or interpreted in such a way that the services are no longer allowable or appropriate for purchase under this Agreement or are no longer eligible for the funding proposed for payments authorized by this Agreement; or
  - iii. If any license or certificate required by law or regulation to be held by Consultant to provide the services required by this Agreement is for any reason denied, revoked, suspended, or not renewed.
- d. For Default or Breach.
- i. Either City or Consultant may terminate this Agreement in the event of a breach of the Agreement by the other. Prior to such termination the party seeking termination shall give to the other party written notice of the breach and its intent to terminate. If the party committing the breach has not entirely cured the breach within fifteen (15) days of the date of the notice, or within such other period as the party giving the notice may authorize in writing, then the Agreement may be terminated at any time thereafter by a written notice of termination by the party giving notice.
  - ii. Time is of the essence for Consultant's performance of each and every obligation and duty under this Agreement. City, by written notice to Consultant of default or breach, may at any time terminate the whole or any part of this Agreement if Consultant fails to provide the Work called for by this Agreement within the time specified herein or within any extension thereof.
  - iii. The rights and remedies of City provided in this subsection (d) are not exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.
- e. Obligation/Liability of Parties. Termination or modification of this Agreement pursuant to subsections a, b, or c above shall be without prejudice to any obligations or liabilities of either party already accrued prior to such termination or modification. However, upon receiving a notice of termination (regardless whether such notice is given pursuant to Subsection a, b, c, or d of this section, Consultant shall immediately cease all activities under this Agreement, unless expressly directed otherwise by City in the notice of termination. Further, upon termination, Consultant shall deliver to City all documents, information, works-in-progress and other property that are or would be deliverables had the Agreement been completed. City shall pay Consultant for Work performed prior to the termination date if such Work was performed in accordance with this Agreement.

- 12. Independent Contractor Status:** Consultant is an independent contractor and not an employee of the City for any purpose. Consultant shall have the complete responsibility for the performance of this Agreement. Consultant shall provide workers' compensation coverage as required in ORS Chapter 656 for all persons employed to perform Work pursuant to this Agreement. Consultant is a subject employer that will comply with ORS 656.017.
- 13. Assignment:** Consultant shall not assign this Agreement or subcontract any portion of the Work without the written consent of City. Any attempted assignment or subcontract without written consent of City shall be void. Consultant shall be fully responsible for the acts or omissions of any assigns or subcontractors and of all persons employed by them, and the approval by City of any assignment or subcontract of the Work shall not create any contractual relation between the assignee or subcontractor and City.
- 14. Default.** The Consultant shall be in default of this Agreement if Consultant: commits any material breach or default of any covenant, warranty, certification, or obligation under the Agreement; institutes an action for relief in bankruptcy or has instituted against it an action for insolvency; makes a general assignment for the benefit of creditors; or ceases doing business on a regular basis of the type identified in its obligations under the Agreement; or attempts to assign rights in, or delegate duties under, this Agreement.
- 15. Insurance.** Consultant shall, at its own expense, maintain the following insurance:
- a. Worker's Compensation insurance in compliance with ORS 656.017, which requires subject employers to provide Oregon workers' compensation coverage for all their subject workers
  - b. Professional Liability insurance with a combined single limit, or the equivalent, of not less than \$2,000,000 (two million dollars) per occurrence. This is to cover any damages caused by error, omission or negligent acts related to the Work to be provided under this Agreement.
  - c. General Liability insurance with a combined single limit, or the equivalent, of not less than \$2,000,000 (two million dollars) per occurrence for Bodily Injury, Death, and Property Damage.
  - d. Automobile Liability insurance with a combined single limit, or the equivalent, of not less than \$1,000,000 (one million dollars) for each accident for Bodily Injury and Property Damage, including coverage for owned, hired or non-owned vehicles, as applicable.
  - e. Notice of cancellation or change. There shall be no cancellation, material change, reduction of limits or intent not to renew the insurance coverage(s) without thirty (30) days' prior written notice from the Consultant or its insurer(s) to the City.
  - f. Additional Insured/Certificates of Insurance. Consultant shall name the City of Ashland, Oregon, and its elected officials, officers and employees as Additional Insureds on any insurance policies, excluding Professional Liability and Workers' Compensation, required herein, but only with respect to Consultant's services to be provided under this Agreement. The consultant's insurance is primary and non-contributory. As evidence of the insurance coverages required by this Agreement, the Consultant shall furnish acceptable insurance certificates prior to commencing the Work under this Agreement. The certificate will specify all of the parties

who are Additional Insureds. Insuring companies or entities are subject to the City's acceptance. If requested, complete copies of insurance policies; trust agreements, etc. shall be provided to the City. The Consultant shall be financially responsible for all pertinent deductibles, self-insured retentions, and/or self-insurance.

- 16. Nondiscrimination:** Consultant agrees that no person shall, on the grounds of race, color, religion, creed, sex, marital status, familial status or domestic partnership, national origin, age, mental or physical disability, sexual orientation, gender identity or source of income, suffer discrimination in the performance of any Work under this Agreement when employed by Consultant. Consultant agrees to comply with all applicable requirements of federal and state civil rights and rehabilitation statutes, rules and regulations. Further, Consultant agrees not to discriminate against a disadvantaged business enterprise, minority-owned business, woman-owned business, a business that a service-disabled veteran owns or an emerging small business enterprise certified under ORS 200.055, in awarding subcontracts as required by ORS 279A.110.

**17. Consultant's Compliance With Tax Laws:**

17.1 Consultant represents and warrants to the City that:

17.1.1 Consultant shall, throughout the term of this Agreement, including any extensions hereof, comply with:

- (i) All tax laws of the State of Oregon, including but not limited to ORS 305.620 and ORS Chapters 316, 317, and 318;
- (ii) Any tax provisions imposed by a political subdivision of the State of Oregon applicable to Consultant; and
- (iii) Any rules, regulations, charter provisions, or ordinances that implement or enforce any of the foregoing tax laws or provisions.

17.1.2 Consultant, for a period of no fewer than six (6) calendar years preceding the Effective Date of this Agreement, has faithfully complied with:

- (i) All tax laws of the State of Oregon, including but not limited to ORS 305.620 and ORS Chapters 316, 317, and 318;
- (ii) Any tax provisions imposed by a political subdivision of the State of Oregon applicable to Consultant; and
- (iii) Any rules, regulations, charter provisions, or ordinances that implement or enforce any of the foregoing tax laws or provisions.

- 18. Notice.** Whenever notice is required or permitted to be given under this Agreement, such notice shall be given in writing to the other party by personal delivery, by sending via a reputable commercial overnight courier, by mailing using registered or certified United States mail, return receipt requested, postage prepaid, or by electronically confirmed at the address or facsimile number set forth below:

**If to the City:**

Public Works Department  
Attn: Contract Administrator  
20 East Main Street  
Ashland, Oregon 97520

**With a copy to:**

City of Ashland – Legal Department  
20 E. Main Street  
Ashland, Oregon 97520  
Phone: (541) 488-5350

**If to Consultant:**

Carollo Engineers, Inc.  
Dan Laffitte  
707 SW Washington Street, Suite 500  
Portland, Oregon 97205

19. **Governing Law.** This Agreement shall be governed by the laws of the State of Oregon without regard to conflict of laws principles. Exclusive venue for litigation of any action arising under this Agreement shall be in the Circuit Court of the State of Oregon for Jackson County unless exclusive jurisdiction is in federal court, in which case exclusive venue shall be in the federal district court for the district of Oregon. Each party expressly waives any and all rights to maintain an action under this Agreement in any other venue, and expressly consents that, upon motion of the other party, any case may be dismissed or its venue transferred, as appropriate, so as to effectuate this choice of venue.
20. **Amendments.** This Agreement may be amended only by written instrument executed by both parties with the same formalities as this Agreement.
21. **Nonappropriations Clause.** Funds Available and Authorized: City has sufficient funds currently available and authorized for expenditure to finance the costs of this Agreement within the City's fiscal year budget. Consultant understands and agrees that City's payment of amounts under this Agreement attributable to Work performed after the last day of the current fiscal year is contingent on City appropriations, or other expenditure authority sufficient to allow City in the exercise of its reasonable administrative discretion, to continue to make payments under this Agreement. In the event City has insufficient appropriations, limitations or other expenditure authority, City may terminate this Agreement without penalty or liability to City, effective upon the delivery of written notice to Consultant, with no further liability to Consultant.
22. **THIS AGREEMENT AND THE ATTACHED EXHIBITS CONSTITUTE THE ENTIRE UNDERSTANDING AND AGREEMENT BETWEEN THE PARTIES. NO WAIVER, CONSENT, MODIFICATION OR CHANGE OF TERMS OF THIS AGREEMENT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY BOTH PARTIES. SUCH WAIVER, CONSENT, MODIFICATION OR CHANGE, IF MADE, SHALL BE EFFECTIVE**

ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS AGREEMENT. CONSULTANT, 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.

23. **Certification.** Consultant shall sign the certification attached hereto as "Exhibit C" and incorporated herein by this reference.

**CITY OF ASHLAND:**

**CAROLLO ENGINEERS, INC. (CONSULTANT):**

By: \_\_\_\_\_  
City Administrator

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

Purchase Order No. \_\_\_\_\_

(**W-9** is to be submitted with this signed Agreement)

**APPROVED AS TO FORM:**

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

  
\_\_\_\_\_  
Date

**CITY OF ASHLAND WASTEWATER TREATMENT PLANT  
UV DISINFECTION SYSTEM UPGRADE PROJECT  
SCOPE OF WORK**

**INTRODUCTION**

The City of Ashland (City) wastewater treatment plant’s existing ultraviolet (UV) disinfection process is dated and difficult to operate and maintain. The purpose of this project is to replace the existing UV equipment with new equipment that meets treatment capacity needs and current and potential future regulatory requirements. Under this project Carollo Engineers, Inc. (Consultant) will evaluate UV equipment vendors (Vendor) whose equipment can fit within the existing building envelope and meet existing hydraulic and mechanical piping conditions, develop bid documents, including drawing and technical specifications, to install a new UV disinfection system. Oregon Department of Environmental Quality Clean Water State Revolving Funds (SRF) will not be used for funding this project.

Consultant will identify design criteria for the new UV disinfection system, assist the City in selecting a preferred Vendor based on equipment proposal evaluations, prepare bid-ready documents for securing bids from Contractors, and provide bidding services. The work will be performed under four primary tasks as follow:

<b>Task 1</b>	<b><i>UV Technology Evaluation and Basis of Design Summary</i></b>
<b>Task 2</b>	<b><i>Final Design Services</i></b>
<b>Task 3</b>	<b><i>Bidding Support Services</i></b>
<b>Task 4</b>	<b><i>Project Management Services</i></b>

The City will select a preferred Vendor during preliminary design efforts that will be used as a basis for development of the bidding documents. Alternatives to the base bid system will be named in the UV specification with no other alternatives allowed. The bid form will require a lump sum amount based on the preferred Vendor’s system with a deducted or added amount to be included by bidders for other named systems. The City may select an alternative Vendor if deemed advantageous. Bidders will also be required to identify changes required to the design, drawings, and specifications to implement any system other than the base bid.

Consultant will coordinate with local Bonneville Power Administration’s Energy Smart incentive funding program representatives to allow for auditor to evaluate incentive potential based on capital and long-term operation and maintenance cost.

Consultant will prepare written project documents and technical specifications in Microsoft Word and drawings in Bentley MicroStation with 22-inch by 34-inch full-size drawing format. Consultant will provide PDF copies of all as deliverables for City review and comment. For each review submittal, City will provide written responses in form to be provided by the Consultant.

At the request of the City, the Consultant could also provide the following additional services:

- Computational Fluid Dynamic (CFD) hydraulic modeling of the new UV disinfection system if required by DEQ for approval/acceptance. This is not anticipated and typically, UV disinfection system Vendors have performed this level of analysis already when validating equipment performance.
- Daily or full-time field inspection services in addition to those described in the Scope of Work below.
- Arc-flash shock hazard analysis and/or a power distribution study of existing or new electrical equipment as is warranted by the National Electric Code (See NFPA 70E-2012 130.4) adopted by the City and/or as directed by the City.

- Integrating the new UV disinfection system provided by the Vendor with the City's existing Supervisory Control and Data Acquisition (SCADA) network. The Consultant can program the City's SCADA network to include new UV disinfection system alarms, controls and control strategies. It is anticipated that this work will be completed by the installing Contractor or the City will contract this work separately, outside of this contract with Consultant.

The Consultant will provide the following professional services listed in the detailed scope of work included below.

## SCOPE OF WORK

### TASK 1 UV TECHNOLOGY EVALUATIONS AND BASIS OF DESIGN SUMMARY

Under this task the Consultant will perform the following activities:

1. Contact and solicit input from DEQ on future disinfection permit requirements through up to two conference calls. Prepare brief meeting summary for each.
2. Develop protocol for City coordinated collimated beam tests and additional UVT Sampling. Consultant shall provide a sampling and laboratory testing protocol for the City to reference and help the City evaluate laboratory test results.
3. Review operational data from the City including:
  - a. Three-years of most recent operational data, including final effluent water quality, flowrates (seasonal and diurnal at 10 min intervals), chemical cleaning, any outages and/or alarms and maintenance/replacement schedules;
  - b. Facility PLC/SCADA standards and any related alarms/indication and control strategies;
  - c. As-built drawings of the existing disinfection facility
4. Based on regulatory outreach and information review, prepare for and facilitate a conference call with the City to discuss and develop consensus on system UV design dose and unit process redundancy requirements. Prepare brief meeting summary.
5. Based on selected design dose and review of existing system information, Consultant will contact vendors and ask for updated reactor recommendations. Electrical and standard control packages will also be requested from the Vendors for consideration by Consultant and City staff.
6. Basis of Design & Preferred Vendor WebEx. Prepare for preferred Vendor selection and basis of design WebEx and develop presentation summarizing the following:
  - a. Collimated beam test.
  - b. UVT data.
  - c. Regulatory requirements.
  - d. Vendor systems including access, operations, cleaning requirements, number of lamps, capital costs, operating costs, and overall life cycle costs. This information will be discussed and referenced in determine a Preferred Vendor.
  - e. Unit reactor hydraulic and facility hydraulic requirements
  - f. Facilitate up to 2-hour WebEx to allow for:
    - i. Review of vendor proposals.
    - ii. Selection of preferred vendor.
    - iii. Prepare draft meeting minutes, decision log, action log and updated presentation to serve as basis of design.
    - iv. Address any City comments on basis of design documents and finalize.
7. Facilitate conference call with BPA Energy Smart incentive contact and allow for their evaluation of potential for energy efficiency funding. Prepare information in format required for the BPA Energy Smart incentive contact to perform an incentive funding evaluation.

### **Task 1 Assumptions:**

1. City staff to coordinate, collect, and ship collimated beam test samples to qualified testing laboratory per Consultant protocol recommendations
2. City staff to participate in regulatory conference calls with DEQ.
3. City to provide water quality data for last three years, including total suspended solids (TSS), UV dose, turbidity, pH, water temperature and final effluent *E. coli* counts.
4. City to provide all as-built and supporting documents for the existing UV disinfection system, including any modifications since the initial installation, required plant process data, electrical power and staffing rates for life cycle cost analysis.
5. Anticipated scope of work will include design of mechanical process and necessary supports, electrical and control/SCADA modifications to accommodate new UV disinfection system. Discipline design for the following is not anticipated:
  - a. Building (i.e., Architectural and HVAC/Plumbing).
  - b. Electrical duct banks or civil work other than that required for the cleaning system storage tank.
  - c. Structural improvements including new building penetrations and monorail.
6. City to have operations, maintenance and electrical staff available to participate in full duration of Basis of Design & Preferred Vendor WebEx.
7. Vendor standard controls will be provided for interface with City's SCADA system.
8. New UV disinfection system will be designed for Max Month Dry Weather Flow of 3.3 MGD with one of two reactor trains out of service and a peak hour wet weather flow of 11.4 MGD with both reactor trains in service as stated in August 2019 WWTP Facilities Assessment and Major Process.
9. Local Bonneville Power Administration's Energy Smart incentive funding program representative to determine available incentive funding based on Consultant provided equipment cost, energy requirements and life cycle analysis.
10. The UV system will fit within the existing hydraulic profile and hydraulic modeling will be limited to max upstream and downstream water surface elevations indicated in the 1998 hydraulic profile.
11. The approved final meeting minutes, decision log, action log and presentation will serve as the basis of design report.

### **Task 1 Deliverables:**

1. Collimated beam test and UVT testing protocols.
2. Regulatory outreach emails and meeting minutes.
3. Vendor outreach proposals.
4. Draft and final meeting minutes, decision log, action log and updated presentation to serve as basis of design.

## **TASK 2 FINAL DESIGN SERVICES**

Under this task the Consultant will prepare specifications and drawings for bidding and construction of the UV disinfection system upgrades.

1. 80% deliverable design activities include:
  - a. Prepare for and facilitate full day site visit and workshop. UV, Electrical/Instrumentation discipline leads and Consultant project manager will attend the workshop to allow for site investigations. Topics for review and discussion will include construction phasing and sequencing, contractor access and laydown areas, mechanical and electrical equipment preferences. During the site visit,

a conference call with the City's preferred SCADA system integrator will be facilitated to collect necessary information to allow for SCADA control strategy design and necessary integration programming.

- b. Prepare meeting minutes documenting decisions and City preferences.
  - c. Complete deliverable design drawings and certain technical specifications.
  - d. Perform internal QA/QC review and provide comments on 80% complete final design deliverable.
  - e. For City budgetary purposes, prepare an opinion of probable construction cost.
  - f. Address internal QA/QC comments and deliver to City.
  - g. Prepare for and facilitate review conference call.
  - h. Update decision and action item logs.
2. 99% deliverable activities include:
    - a. Address City review comments and prepare 99% deliverable drawings and specifications.
    - b. Perform internal QA/QC of 99% deliverable.
    - c. Address internal QA/QC review comments and deliver to City, DEQ and City Building Department.
    - d. For City budgeting purposes, prepare an opinion of probable construction cost.
    - e. Prepare for and facilitate review conference call.
  3. Consultant will prepare Building Department permit application and facilitate up to two conference calls with Building Department officials.
  4. Consultant will facilitate one conference call with Oregon DEQ to review contract documents.
  5. Bidding Documents activities include:
    - a. Address City, DEQ and City Building Department review comments and produce bid documents
    - b. Issue to the City for distribution to bidding Contractors.

**Task 2 Assumptions:**

1. Consultant standard bidding and contract forms (i.e., "front end" as Divisions 0 and 1) and technical specifications will be used.
2. City will provide access to preferred SCADA system integrator for up to a 2-hour phone call for SCADA design and programming design requirements.
3. Design documents will require Contractor to perform short-circuit, coordination, and Arc-Flash hazard evaluation and submit for Consultant review. Contractor to provide necessary arc-flash labeling language for the City to apply.
4. Drawings will be developed using Consultant CAD, abbreviations, legends and symbols.
5. City to provide written comments in excel based format in form to be provided by the Consultant.
6. The 99% complete final design deliverable will be stamped by Professional Engineers licensed in the State of Oregon for building department and DEQ reviews.
7. The final bidding documents will include digital Professional Engineer's seals and signatures for licensed professional engineers in the State of Oregon. The City will reproduce documents as necessary and distribute to City staff and interested Contractors.
8. City project manager and required support staff, Consultant structural discipline lead and project manager to attend building department conference calls.
9. The 99% complete final design deliverable will be used by City staff to secure City Council approval. Consultant time to participate in this meeting is not included.
10. City will distribute electronic PDF copies of bid documents to bidding Contractors or will distribute hard copies. Consultant will deliver one set of original bid documents and an electronic PDF copy to the City.

11. Seismic evaluation of existing building and improvements will not be required.
12. Geotechnical investigations are not required.

**Task 2 Deliverables:**

The following deliverables will be prepared by the Consultant and submitted to the City for review and comment:

1. Design Workshop and Site Visit Meeting Summary documenting decisions and City preferences.
2. 80% drawings and specifications and opinion of probable cost.
3. 99% drawings and specifications and opinion of probable construction cost.
4. Complete set of bid documents.
5. Building Department building permit application.

### **TASK 3 BIDDING SUPPORT SERVICES**

The City will advertise the project, print and distribute bid documents, manage communications with prospective bidders, conduct the pre-bid conference, issue addenda, receive and evaluate bids and award the construction contract. The Consultant will perform the following tasks as requested by the City:

1. Attend the pre-bid conference.
2. Provide responses to bidder's questions.
3. Prepare addenda to clarify and or modify the project bidding documents.
4. The City will award the contract, issue notice of award and notice to proceed to Contractor.

**Task 3 Assumptions:**

1. Conformed documents, including addenda items, will not be provided.
2. An allowance of 18 hours is included for addressing bidder questions and preparing addenda.

**Task 3 Deliverables:**

1. Responses to bidder's questions.
2. Comments to draft addendums.
3. Letter of recommendation to award.

### **TASK 4 PROJECT MANAGEMENT SERVICES**

Under this task the Consultant will plan and execute the work in accordance with the schedule and budget expectations that are established in this Scope of Work. Task 4 Activities:

1. Project Management Plan. Prepare, update and maintain a work plan and project instructions with the following key items:
  - a. Scope of Work, Project Milestones, and Budgets.
  - b. Project Team Directory and Communication Protocol.
  - c. Project Document Criteria.
  - d. Decision Log.
2. Quality Control. The Consultant will monitor the quality of deliverables throughout the project using senior staff, technical lead experts and design discipline leads. Internal quality control reviews will take place before deliverables are submitted to the City.

3. Internal and External Team Management. Conduct regular project team meetings to review project status and coordinate project work and details. Document meeting decisions and action items, assign work activities to team members, and follow up with team members to ensure timely performance of work.
4. Progress Monitoring, Reporting, and Invoicing:
  - a. Attend or hold teleconferences on a monthly basis, or as required by the City's project manager, to review project status.
  - b. Monitor project progress including work completed, work remaining, budget expended, schedule, estimated cost of work remaining, and estimated cost at completion.
  - c. Monitor project activities for potential changes, anticipate changes whenever possible, and with City's approval, modify project tasks, task budgets, and approach to keep the overall project within budget and on schedule.
  - d. Prepare monthly invoices to be accompanied by a progress report that provides a narrative status report, project expenditure cost table by task, and summary of project schedule status.

**Task 4 Deliverables:**

1. Monthly Invoices and Progress Reports.

**EXHIBIT B**

**CITY OF ASHLAND, OREGON**

**City of Ashland**  
**LIVING**  
**WAGE**

ALL employers described below must comply with City of Ashland laws regulating payment of a living wage.



**\$15.39** per hour, effective **June 30, 2019.**

**The Living Wage is adjusted annually every June 30 by the Consumer Price Index.**

**Employees must be paid a living wage:**

- For all hours worked under a service contract between their employer and the City of Ashland if the contract exceeds **\$21,507.75** or more.
- For all hours worked in a month if the employee spends 50% or more of the employee's time in that month working on a project or

portion of business of their employer, if the employer has ten or more employees, and has received financial assistance for the project or business from the City of Ashland in excess of **\$21,507.75.**

- If their employer is the City of Ashland, including the Parks and Recreation Department.
- In calculating the living wage, employers may add the value of health care, retirement,

401K and IRS eligible cafeteria plans (including childcare) benefits to the amount of wages received by the employee.

- **Note:** For temporary and part-time employees, the Living Wage does **not** apply to the first 1040 hours worked in any calendar year. For more details, please see Ashland Municipal Code Section 3.12.020.

**For additional information:**

Call the Ashland City Administrator's office at 541-488-6002 or write to the City Administrator, City Hall, 20 East Main Street, Ashland, OR 97520, or visit the City's website at [www.ashland.or.us](http://www.ashland.or.us).

**Notice to Employers:** This notice must be posted predominantly in areas where it can be seen by all employees.

**CITY OF**  
**ASHLAND**

**EXHIBIT C**

**CERTIFICATIONS/REPRESENTATIONS:** Consultant, by and through its authorized representative, under penalty of perjury, certifies that (a) the number shown on the attached W-9 form is its correct taxpayer ID (or is waiting for the number to be issued to it and (b) Consultant is not subject to backup withholding because: (i) it is exempt from backup withholding, or (ii) it has not been notified by the Internal Revenue Service (IRS) that it is subject to backup withholding as a result of a failure to report all interest or dividends, or (iii) the IRS has notified it that it is no longer subject to backup withholding. Consultant further represents and warrants to City that: (a) it has the power and authority to enter into this Agreement and perform the Work, (b) the Agreement, when executed and delivered, shall be a valid and binding obligation of Consultant enforceable in accordance with its terms, (c) the work under the Agreement shall be performed in accordance with the highest professional standards, and (d) Consultant is qualified, professionally competent, and duly licensed (if applicable) to perform the Work. Consultant also certifies under penalty of perjury that its business is not in violation of any Oregon tax laws, it is an independent contractor as defined in the Agreement, it is authorized to do business in the State of Oregon, and Consultant has checked four or more of the following criteria that apply to its business.

- \_\_\_\_\_ (1) Consultant carries out the work or services at a location separate from a private residence or is in a specific portion of a private residence, set aside as the location of the business.
- \_\_\_\_\_ (2) Commercial advertising or business cards or a trade association membership are purchased for the business.
- \_\_\_\_\_ (3) Telephone listing is used for the business separate from the personal residence listing.
- \_\_\_\_\_ (4) Labor or services are performed only pursuant to written contracts.
- \_\_\_\_\_ (5) Labor or services are performed for two or more different persons within a period of one year.
- \_\_\_\_\_ (6) Consultant assumes financial responsibility for defective workmanship or for service not provided as evidenced by the ownership of performance bonds, warranties, errors and omission (professional liability) insurance or liability insurance relating to the Work or services to be provided.

\_\_\_\_\_  
Consultant's signature

\_\_\_\_\_  
Date

**City of Ashland, Oregon**  
**UV Improvement Project**  
**Level of Effort**  
**3/9/2020**

Name	D. Laffitte	B. Sotirakos	B. Eimstad / A. Salvesson	J. Doering	C. Carvalo	Jason Rozgony	Varies	D. Chein, others	Varies	Hooge						
Level	Princ. Eng.	Princ. Eng.	Princ. Eng.	Princ. Eng.	Princ. Eng.	Princ. Eng.	Lead Eng.	Professional	Tech	Tech						
Role	PM	UV	REG	STR	EIC	Sr. Prof/ Estimating			Drafting	WP/ Clerical	Total Labor Hours	Total Labor Cost	PECE / hour	Subs & ODCs	Estimated Total Cost Per Task	
Hourly Rate	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00	\$225.00	\$190.00	\$170.00	\$135.00	\$100.00			\$11.70			
<b>Task 1 - UV Technology Evaluation &amp; Basis of Design</b>																
Regulatory Outreach	3	2	2								7	\$1,575.00	\$82	\$0	\$1,657	
Regulatory meeting summary	2									1	3	\$550.00	\$35	\$0	\$585	
Collimated Beam Test Protocols	1	2								1	4	\$775.00	\$47	\$0	\$822	
Plant Data Review	1	2						4			7	\$1,355.00	\$82	\$0	\$1,437	
Design dose and redundancy conference call	2	2						1			5	\$1,070.00	\$59	\$0	\$1,129	
Design dose and redundancy meeting summary		1						1		1	3	\$495.00	\$35	\$0	\$530	
Vendor Outreach		1						4			5	\$905.00	\$59	\$0	\$964	
Prepare for Basis of Design & Preferred Vendor WebEx	2	4						8			14	\$2,710.00	\$164	\$0	\$2,874	
WebEx Meeting	2	2						2			6	\$1,240.00	\$70	\$0	\$1,310	
WebEx Meeting Minutes	1	1						2		1	5	\$890.00	\$59	\$0	\$949	
Incentive Outreach	3							4			7	\$1,355.00	\$82	\$0	\$1,437	
Prepare info for BPA	1	1						3			5	\$960.00	\$59	\$0	\$1,019	
<b>TASK TOTALS</b>	<b>18</b>	<b>18</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>29</b>	<b>0</b>	<b>4</b>	<b>71</b>	<b>\$13,880.00</b>	<b>\$831</b>	<b>\$0</b>	<b>\$14,711</b>	
<b>Task 2 - Final Design Phase Services</b>																
Discipline Design Effort																
Mechanical	14	12						64	94		184	\$29,420.00	\$2,153	\$0	\$31,573	
Structural				10			8	34	52		104	\$16,570.00	\$1,217	\$0	\$17,787	
EIC					20		16	40	88		164	\$26,220.00	\$1,919	\$0	\$28,139	
Specifications	2									10	12	\$1,450.00	\$140	\$0	\$1,590	
Internal Coordination Meetings	4	3		2	3			4			16	\$3,380.00	\$187	\$0	\$3,567	
80% Deliverable Sub Tasks								4			9	\$1,805.00	\$105	\$0	\$1,910	
Prepare for Site Visit and Design Workshop	2	1			2						32	\$7,200.00	\$374	\$2,500	\$10,074	
Site Visit and Design Workshop	8	12			12						5	\$1,000.00	\$59	\$0	\$1,059	
Site Visit and Design Workshop Summary	2	1			1					1	6	\$1,350.00	\$70	\$0	\$1,420	
QA/QC			6								13	\$2,535.00	\$152	\$0	\$2,687	
Cost Estimate	1					2	8	2			7	\$1,410.00	\$82	\$0	\$1,492	
Prep for and review conf call	2	1			1			3			1	\$170.00	\$12	\$0	\$182	
Update decision and action item logs								1			2	\$450.00	\$23	\$0	\$473	
99% Deliverable Sub Tasks			2								11	\$2,155.00	\$129	\$0	\$2,284	
QA/QC	1					2	6	2			9	\$1,805.00	\$105	\$0	\$1,910	
Cost Estimate	3	1			1			4			5	\$1,125.00	\$59	\$0	\$1,184	
Prep for and review conf call	3										10	\$2,250.00	\$117	\$0	\$2,367	
Bldg. Dept Conf Calls				2							4	\$900.00	\$47	\$0	\$947	
Building Department Conference Calls	2			8							4	\$900.00	\$47	\$0	\$947	
Prepare Building Permit Applicator	2										4	\$900.00	\$47	\$0	\$947	
DEQ Conference Call	2	2									4	\$900.00	\$47	\$0	\$947	
<b>TASK TOTALS</b>	<b>46</b>	<b>33</b>	<b>8</b>	<b>22</b>	<b>40</b>	<b>4</b>	<b>38</b>	<b>158</b>	<b>234</b>	<b>11</b>	<b>594</b>	<b>\$101,195.00</b>	<b>\$6,949.80</b>	<b>\$2,500.00</b>	<b>\$110,644.80</b>	
<b>Task 3 - Bidding Support Services</b>																
Provide bidding support services - allowance	2	4			2		2	8			18	\$3,540.00	\$211	\$0	\$3,751	
Attend Pre-Bid Mtg	8										8	\$1,800.00	\$94	\$500	\$2,394	
<b>TASK TOTALS</b>	<b>10</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>\$5,340.00</b>	<b>\$304.20</b>	<b>\$500.00</b>	<b>\$6,144.20</b>	
<b>Task 4 - Project Management Services</b>																
Subtask 601																
Design Services PM	40							16		16	72	\$13,320.00	\$842	\$0	\$14,162	
<b>TASK TOTALS</b>	<b>40</b>	<b>0</b>	<b></b>	<b></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>16</b>	<b>72</b>	<b>\$13,320.00</b>	<b>\$842</b>	<b>\$0</b>	<b>\$14,162</b>	
<b>PROJECT TOTALS</b>	<b>114</b>	<b>55</b>	<b>10</b>	<b>22</b>	<b>42</b>	<b>4</b>	<b>40</b>	<b>211</b>	<b>234</b>	<b>31</b>	<b>763</b>	<b>\$133,735</b>	<b>\$8,927</b>	<b>\$3,000</b>	<b>\$145,662</b>	