



MONDAY, APRIL 6, 2020

**CITY COUNCIL MEETING AGENDA**

**Regular meeting 7:00 p.m.  
Scappoose Council Chambers  
33568 East Columbia Avenue**

**ITEM AGENDA TOPIC**

**Action**

**Call to Order**

**Pledge of Allegiance**

**Roll Call**

**Approval of the Agenda**

**Public Comments ~ Please note: Due to COVID19 the City of Scappoose will only be accepting public comments by email. Please email City Recorder Susan Reeves at [sreeves@cityofscappoose.org](mailto:sreeves@cityofscappoose.org). We appreciate your understanding with this matter. Thank you!**

**1. Consent Agenda ~ March 13, 2020 Special City Council meeting minutes and March 16, 2020 City Council meeting minutes**

**New Business**

**2. Resolution No. 20-06: A Resolution Approving the Purchase of Real Property      Approval**  
Staff: City Manager Michael Sykes

**3. Wastewater Treatment Plant Phase I Project ~ Engineering Agreement      Approval**  
Staff: Public Works Director Dave Sukau and Assistant City Manager Alexandra Rains

**Announcements ~ information only**

**4. Calendar**

**City Manager, Councilors, and Mayor**

**Adjournment**

**\*\*PLEASE NOTE: IF YOU WOULD LIKE TO SPEAK WITH CITY STAFF ABOUT A PARTICULAR AGENDA ITEM, PLEASE CALL CITY RECORDER SUSAN REEVES 503-543-7146, EXT. 224, NO LATER THAN 5:00 P.M. ON MONDAY, APRIL 6, 2020\*\***

This meeting will be conducted in a handicap accessible room. If special accommodations are needed, please contact City Recorder, Susan Reeves at (503) 543-7146, ext. 224 in advance.

TTY 1-503-378-5938

## **SPECIAL CITY COUNCIL MEETING**

**Friday, March 13, 2020, 2:30 p.m.**

**Scappoose Council Chambers**

**33568 East Columbia Avenue**

### **Call to Order**

Mayor Burge called the Special City Council meeting to order at 2:30 p.m.

### **Roll Call**

**Present:** Mayor Scott Burge, Council President Patrick Kessi, Councilor Megan Greisen, Councilor Brandon Lesowske, Councilor Pete McHugh, City Manager Michael Sykes, Police Chief Norm Miller, Finance Administrator Jill Herr, City Recorder Susan Reeves, City Planner Laurie Oliver, Utility Supervisor Doug Nassimbene and Jeff Weiss with the Scappoose Library.

**Present via the Phone:** Councilor Joel Haugen and Councilor Josh Poling.

### **Resolution No. 20-05: A Resolution Declaring an Emergency**

City Manager Sykes explained before Council is Resolution No. 20-05 declaring a State of Emergency primarily because of the impacts of the COVID-19 virus. He explained it is clear to us that the sooner we act the more likely we will be able to combat this epidemic. He explained by passing this we wouldn't be open to the public and it would allow us to take precautions to help us minimize the impact of the virus on our community and also on our staff.

### **Mayor Burge read over Resolution No. 20-05:**

#### **NOW, THEREFORE, BE IT RESOLVED:**

1. The City Council of the City of Scappoose declares an emergency related to transmission of the COVID-19 virus.
2. The City suspends the City's public contracting rules as they relate to preventing, preparing for, minimizing, responding to or recovering from the COVID-19 virus.
3. The City authorizes the City Manager or his designee to enter into contracts, incur obligations, and take all other steps necessary to mitigate, prepare for, respond to or recover from the COVID-19 emergency.
4. This State of Emergency shall last so long as the COVID-19 virus poses a threat to our City, or three months, whichever is less.

5. All City of Scappoose government buildings and offices will be closed to the general public. This includes City Hall, Community Development Center, Public Works and Police Department lobby. The Mayor and management team will evaluate continued office closures on a weekly basis.
6. Scappoose police officers and public works crews will continue to respond to calls. Contact non-emergency dispatch at 503-397-1521. In the event of an emergency, call 9-1-1.
7. Until further notice, water services will not be disconnected for non-payment of a City of Scappoose utility bill, in addition late fees will also not be assessed.
8. Scappoose Municipal Court will be limited to previously scheduled court appearances. Court staff will directly contact anyone if a court appearance date is rescheduled. If you are sick, please call to reschedule your court appearance. If you have any Municipal Court questions, you can call staff directly at 503-543-7146, option 2 or email the court at [ccarpenter@cityofscappoose.org](mailto:ccarpenter@cityofscappoose.org).
9. Scappoose citizens are encouraged to use the City's website payment portal option for making utility billing payments. Payments may also be made over the phone by calling Point & Pay 1-866-890-5764 or Xpress Bill Pay 1-800-720-6847. Please contact staff at 503-543-7146 option 1. You can also visit our website at [www.ci.scappoose.or.us](http://www.ci.scappoose.or.us) then click on "online payments".
10. City staff will continue to work while offices remain closed to the public. If you have a question for a staff member, City staff are available through email and telephone. A staff directory can be found on the City's website at <https://www.ci.scappoose.or.us/contact>.
11. Essential in-person meetings with City staff may be arranged by appointment. Please call or email the department that you need to meet with to arrange an appointment time.
12. The City is evaluating moving all previously scheduled City Council meetings to a virtual meeting platform. Details will be released at a later date regarding how those meetings will be held and how the public can virtually comment before or during the meeting(s). All other City boards and commission meetings scheduled over the next four weeks have been canceled. This includes Planning Commission, Parks & Recreation Committee and Economic Development Committee.
13. This resolution shall take effect immediately upon adoption.

Councilor Haugen stated he is in favor of this resolution. He is hoping that staff is using gloves to open the mail.

Councilor McHugh asked where the guidelines came from?

Mayor Burge explained Legal Counsel Peter Watts wrote the resolution and then we had him add in the more specific items that the City is going to do during this time.

City Manager Sykes explained staff along with Mayor Burge was on a phone conference with the League of Oregon Cities, the Oregon Health Authority and other State agencies to help guide cities with guidelines.

Councilor Lesowske stated he is curious to know what coordination we have with the Fire Department and also first responders just so we can share that information with folks that may approach them.

Chief Miller explained the Fire Department has their own protocols and the Police Department is now starting to do their own protocols, and he is suspending ride-a-long's, tours, items like that for now. He explained any updates he gets from the State or County he is passing along to staff.

Councilor Lesowske asked Chief Miller if he feels comfortable with the amount of personal protective equipment (PPE) that staff has in order to respond to a situation?

Chief Miller replied he does.

Council President Kessi asked with the City offices being closed to the public do we have items in place for people to do things without coming to us, are we missing anything?

City Manager Sykes explained we will have a drop box in the front lobby at City Hall where people can make payments, drop of items for City Hall or other City offices. He explained if there is a critical meeting, we may choose to meet with them or we can do a conference call, which is what we are going to try to do as much as possible.

City Planner Laurie Oliver explained the approach that the Community Development Center plans to take.

City Manager Sykes explained we agree that it is critical to make sure that we are as available as possible to the public, given the circumstances, and at the same time keeping our employees and the public as safe as possible.

Councilor Lesowske asked about non-essential staff being able to work remotely to reduce any interactions even within staff, is that something that has been thought about?

City Manager Sykes replied yes.

Council President Kessi stated this could get worse and he thinks as a community we should look at possibly talking to the Scappoose OHSU center about if this does get worse and how we can start putting an action plan in place to start treating people if it does come to that. He stated as long as we are being proactive and working with State, Federal and County authorities. He stated if we are all working together to put a plan together and we can deal with it and we are not reacting that is the position he would like us to be in.

Chief Miller explained there are protocols for that, and he explained the process that will take place.

Council and staff had discussion on how the City/staff will continue to operate during this time.

Councilor Greisen moved and Councilor Lesowske seconded the motion that Council approve Resolution No. 20-05: A Resolution Declaring an Emergency. Motion passed (7-0). Mayor Burge, aye; Council President Kessi, aye; Councilor Greisen, aye; Councilor Haugen, aye; Councilor Poling, aye; Councilor Lesowske, aye and Councilor McHugh, aye.

### **Adjournment**

Mayor Burge adjourned the special meeting at 2:56 p.m.

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Mayor Scott Burge

Attest:

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City Recorder Susan M. Reeves, MMC

**MONDAY, MARCH 16, 2020  
CITY COUNCIL MEETING  
Regular meeting 7:00 p.m.  
Scappoose Council Chambers  
33568 East Columbia Avenue**

**Call to Order**

Mayor Burge called the City Council meeting to order at 7:00 p.m.

**Pledge of Allegiance**

**Roll Call**

Scott Burge	Mayor	Michael Sykes	City Manager
Megan Greisen	Councilor	Susan M. Reeves	City Recorder
Joel Haugen	Councilor	Dave Sukau	Public Works Director
Josh Poling	Councilor		
Brandon Lesowske	Councilor		
Pete McHugh	Councilor		

Remote (on the phone): Council President Patrick Kessi

Peter Watts                      Legal Counsel

**Approval of the Agenda**

Councilor Greisen moved, and Councilor Poling seconded the motion to approve the agenda. Motion passed (7-0). Mayor Burge, aye; Council President Kessi, aye; Councilor Greisen, aye; Councilor Haugen, aye; Councilor Poling, aye; Councilor Lesowske, aye and Councilor McHugh, aye.

**Public Comments**

There were no public comments.

**Consent Agenda ~ February 29, 2020 Council Retreat minutes, March 2, 2020 City Council meeting minutes and appointment of Annette Pixley to the Budget Committee**

Councilor Poling moved, and Councilor Haugen seconded the motion to approve the Consent Agenda ~ February 29, 2020 Council Retreat minutes, March 2, 2020 City Council meeting minutes and appointment of Annette Pixley to the Budget Committee. Motion passed (7-0). Mayor Burge, aye; Council President Kessi, aye; Councilor Greisen, aye; Councilor Haugen, aye; Councilor Poling, aye; Councilor Lesowske, aye and Councilor McHugh, aye.

**Old Business**

**Ordinance No. 888 ~ Adoption of Water Master Plan**

Mayor Burge stated this item is on second reading, there is a motion and a second on the floor.

Mayor Burge read the title for the second time ~ Ordinance No. 888 ~ Adoption of Water Master Plan.

Motion passed (7-0). Mayor Burge, aye; Council President Kessi, aye; Councilor Greisen, aye; Councilor Haugen, aye; Councilor Poling, aye; Councilor Lesowske, aye and Councilor McHugh, aye.

### **Ordinance No. 889 ~ Adoption of Water Management and Conservation Plan**

Mayor Burge stated this item is on second reading, there is a motion and a second on the floor.

Mayor Burge read the title for the second time ~ Ordinance No. 889 ~ Adoption of Water Management and Conservation Plan.

Motion passed (7-0). Mayor Burge, aye; Council President Kessi, aye; Councilor Greisen, aye; Councilor Haugen, aye; Councilor Poling, aye; Councilor Lesowske, aye and Councilor McHugh, aye.

### **New Business**

#### **2020-2021 City Council Goals**

City Manager Sykes went over the proposed goals for the City of Scappoose for 2020-2021. He explained some of proposed goals are the same goals that we've had in addition to the goals listed at the Council retreat. He explained we consolidated the list.

Mayor Burge would like to add to Goal 4 ~ within a 10-minute walk from all neighborhoods.

City Manager Sykes talked about the goal of the gravel tax.

Mayor Burge stated he doesn't know where we would go with it. He stated he thinks it would be better if it was to support County efforts to improve roads.

Councilor Lesowske stated he would think the county road determination would be definitely more of a talking point rather than gravel tax.

City Manager Sykes asked is that County roads just in the City, or in general?

Mayor Burge replied that can be in general, but we will focus on the City.

Councilor Greisen asked by having this go on the list are we saying that we are going to actively go to the County and try to get them to improve their roads in the City?

City Manager Sykes explained what staff will do is put together an action plan and then probably go to the County and ask them to let us know how we can help.

Councilor Haugen moved, and Councilor Poling seconded the motion that City Council approve the 2020-2021 City Council Goals as amended. Motion passed (7-0). Mayor Burge, aye; Council

President Kessi, aye; Councilor Greisen, aye; Councilor Haugen, aye; Councilor Poling, aye; Councilor Lesowske, aye and Councilor McHugh, aye.

**Announcements ~ information only**

**Calendar** ~ Mayor Burge went over the calendar.

**City Manager, Police Chief, Councilors, and Mayor**

City Manager Sykes explained this Coronavirus is really throwing us for a loop, like we've never seen before. He explained the Earth Day event has been cancelled. He explained we are trying to keep the meetings as minimal as possible to try to keep people from any potential exposure. He explained one of the things we are considering is the possibility of going after a resource grant for about a million dollars to drill a four hundred and fifty foot well out by Miller Park. He stated we are in pretty decent shape, but that is really important to future water supply.

Councilor Poling stated with everything that is going on it is kind of new to everybody and it is a little crazy and scary. He thinks everyone here has done a good job of keeping things moving forward and he appreciates all the work.

Council President Kessi thanked Public Works Director Dave Sukau for putting up an extra light by the play structure at Heritage Park.

Councilor Lesowske reminded everyone if they have an elderly neighbor or family member to check on them and make sure they are doing alright and try to bring some positivity in these difficult times. He said a gesture of kindness can go a long way.

Councilor Haugen stated by April 6 we will have a pretty good idea of where we are, so that is encouraging, the unknown isn't going to go on forever, so that is positive. He encouraged everyone to support the World Health Organizations COVID-19 fund. He said they are doing a lot of work on this.

Mayor Burge stated there is a really good article from the League of Oregon Cities. Berry Elsner & Hammond on legal guidance for cities on COVID-19. He stated stay healthy, wash your hands, take extra vitamins and try to avoid groups ~ social distancing.

**Adjournment** ~ Mayor Burge adjourned the Council meeting at 7:19 p.m.

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Mayor Scott Burge

Attest:

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City Recorder Susan M. Reeves, MMC



**RESOLUTION NO. 20-06**

**RESOLUTION OF THE CITY OF SCAPPOOSE APPROVING THE PURCHASE  
OF REAL PROPERTY**

**WHEREAS**, the City of Scappoose ("City") desires to purchase the real property and improvements described in **Exhibit A** attached hereto and incorporated herein (the "Property"), from Bart J. Grabhorn ("Grabhorn"), subject to certain terms and conditions; and

**WHEREAS**, Grabhorn desires to sell the Property to the City; and

**WHEREAS**, the Scappoose City Council finds it in the public interest of the City to purchase the Property from Grabhorn; and

**WHEREAS**, the City and Grabhorn have entered into an agreement to purchase the Property and agreed that the purchase price for the Property shall be \$730,000.00; and

**WHEREAS**, the Scappoose City Council desires to authorize the City Manager or his designee to undertake all tasks necessary to close the purchase of the Property, including executing all agreements and documents necessary to carry out the intent of this Resolution.

**NOW THEREFORE, THE SCAPPOOSE CITY COUNCIL RESOLVES AS  
FOLLOWS:**

1. The purchase of the real property and improvements described in Exhibit A is approved; and
2. The City Manager is authorized to undertake all tasks and execute any and all documents necessary to close the purchase of the Property.

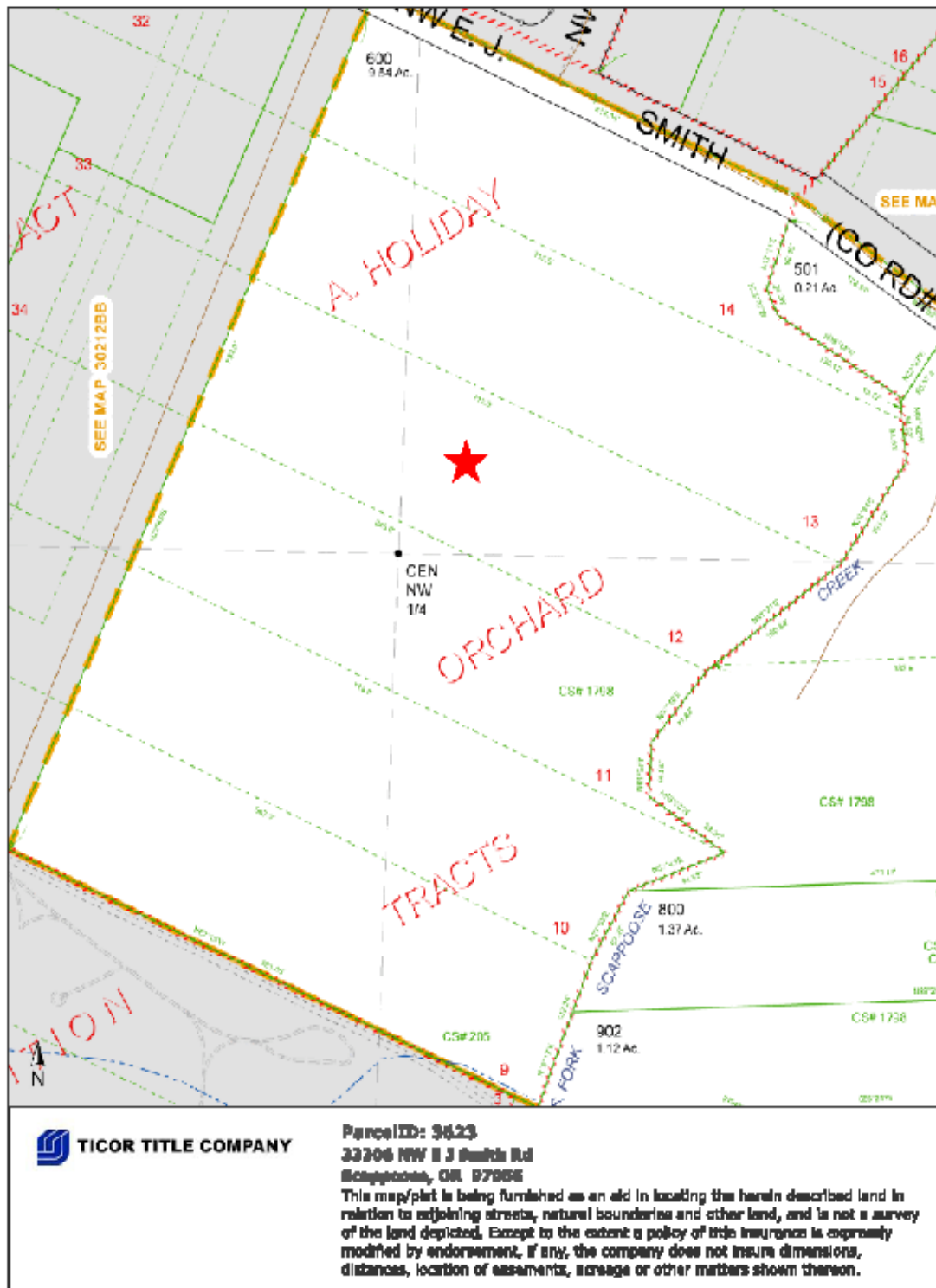
**PASSED AND ADOPTED** by the Scappoose City Council and signed by me, and the City Recorder, in authentication of its passage this \_\_\_\_day of April, 2020.

**CITY OF SCAPPOOSE, OREGON**

\_\_\_\_\_  
Scott Burge, Mayor

Attest: \_\_\_\_\_  
Susan M. Reeves, CMC  
City Recorder

# EXHIBIT A



<b>CITY OF SCAPPOOSE</b>
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## **Council Action & Status Report**

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**Date Submitted:** April 1, 2020

**Agenda Date Requested:** April 6, 2020

**To:** Scappoose City Council

**From:** Dave Sukau, Public Works Director and  
Alexandra Rains, Assistant City Manager

**Subject:** Wastewater Treatment Plant Phase 1 Project –  
Engineering Agreement Approval

**TYPE OF ACTION REQUESTED:**

☐ Resolution

☐ Ordinance

☒ Formal Action

☐ Report Only

**ANALYSIS:** In order to begin the first phase of needed improvements to the City's Wastewater Treatment Plant, staff issued a Request for Proposal (RFP) on November 22, 2019 to solicit proposals from engineering consultants. Responses to the RFP were received on December 19, 2019. The City received proposals from the following consulting firms:

- 1) Murraysmith
- 2) Black & Veatch
- 3) Tetra Tek

The Selection Committee made a final recommendation to enter into contract negotiations with Murraysmith, based on the evaluation criteria set forth in the RFP, on January 8, 2020.

**FISCAL IMPACT:** The City's agreement with Murraysmith to complete the engineering for the project totals is \$1,061,396.00. The City's SRF loan through DEQ will cover the cost of these services.

**Request for Council Action**

**RECOMMENDATION:** Staff recommends Council authorize the City Manager to execute the agreement with Murraysmith to complete engineering for Phase 1 of the improvements to the Wastewater Treatment Plant.

**SUGGESTED MOTION:** I move Council authorize the City Manager to approve the agreement with Murraysmith to complete engineering for Phase 1 of the improvements to the Wastewater Treatment Plant.



March 20, 2020

Mr. Dave Sukau  
Public Works Director  
City of Scappoose  
34485 E. Columbia Ave.  
Scappoose, Oregon 97056

Re: Revised Proposal for Engineering Services – Scappoose WWTP Phase 1 Improvements Project

Dear Mr. Sukau:

MurraySmith is pleased to present our revised proposal to provide engineering services for final design and bidding services on the City's Phase 1 WWTP Improvements Project. We revised our proposal to include design of a new Aeration Basin, Headworks, and Electrical Building; plus, upgrades to the Influent Pump Station, UV System, and Effluent Pump Station. Based on preliminary opinions of cost for these improvements, this results in an estimated Phase 1 project cost of approximately \$6.4M.

Our revised proposal includes the following attachments:

Exhibit A	Scope of Work
Exhibit B	Proposed Budget
Exhibit C	Preliminary Project Schedule
Exhibit D	Preliminary Project Plan
Exhibit E	Preliminary Final Design Drawing Index
Exhibit F	Current (2020) MurraySmith Rate Schedule

### Scope of Work and Budget

The Proposed Scope of Work and Budget for final design and bidding services are included as Exhibits A and B, respectively. The proposed budget is **\$1,061,396** and includes the following major tasks:

Task 1	Project Management
Task 2	Initial Evaluations and Facility Plan Amendment
Task 3	Preliminary Design
Task 4	60% WWTP Final Design
Task 5	90% WWTP Final Design
Task 6	Final Contract Documents
Task 7	Bid Period Services

We have added a subtask at the end of Preliminary Design to review our remaining Scope of Work and Fee Estimate to ensure the assumptions we have made in developing this Scope of Work align with the project as it advances into the final design phase. Since the project will be well defined at this stage, we plan to complete scoping for Services During Construction (SDC) during this period as we will have a better understanding of the full scope of Phase 1 WWTP upgrades. For a project of this size, we recommend a budget for SDC in the \$250,000 to \$300,000 range.

### **Preliminary Project Schedule and Phasing Plan**

A Preliminary Project Schedule is included as **Exhibit C** showing the logical execution of tasks for all phases of the Scope of Work as summarized in the Preliminary Project Plan included as **Exhibit D**. The schedule shows the following preliminary timelines:

Anticipated Project Start Date	April 6, 2020
Facility Plan Amendment Completion	May 29, 2020
Preliminary Design Completion	October 2020
Final Design Completion	May 2021
Bidding	June – July 2021
Contracts	August 2021
Start Construction	August 2021

### **Current Rate Schedule**

Murraysmith's current 2020 rate schedule used in preparing the budget is included as **Exhibit F**. Murraysmith proposes our current rates will be utilized for completion of all tasks included in the Exhibit A Scope of Work.

### **Contractual Terms and Conditions**

Murraysmith has reviewed the City's Engineering Services Agreement and we take no exceptions to any of the City's terms and conditions. We are ready to execute the agreement and begin the project as soon as negotiations are complete related to the Scope of Work, Budget and Schedule.

Please contact me at your convenience if you would like to discuss our proposal.

Sincerely,



MURRAYSMITH  
Austin Rambin, PE  
Project Manager

**Enclosures:** Exhibits A-F, as referenced

## **EXHIBIT A**

### **SCOPE OF WORK WWTP PHASE 1 IMPROVEMENTS DESIGN AND BIDDING SERVICES (2<sup>ND</sup> REVISION) CITY OF SCAPPOOSE, OREGON**

#### **Task 1 – Project Management**

The objective of the Project Management task is to assure the project team stays on track to deliver the project on time, on budget and at the highest level of quality. As part of this task, Murraysmith will conduct the Project Kickoff Meeting, prepare Monthly Project Status Reports, conduct regular check-ins with City of Scappoose (City) staff to keep all team members apprised of progress, and coordinate with internal team members as required throughout the project.

##### **Task 1.1 – Project Kick-Off Meeting**

A Project Kick-off Meeting will be held at the Waste Water Treatment Plant (WWTP) to introduce key members of the project team not already known to City staff, establish project objectives, review communication protocols, discuss the project scope and schedule, and tour the facility to review the initial field investigations in greater detail with plant operations staff. The Project Kick-off Meeting will be attended by Murraysmith's Project Manager, Project Engineer and staff engineer.

##### **Task 1.2 – Project Management Plan**

Prepare a Project Management Plan (PMP) to guide the overall execution of the project for the City and Murraysmith team. The PMP will include: purpose of the PMP, project overview and key understandings; project organization chart summarizing roles and responsibilities for all team members; Project Scope of Work with summary table of key deliverables by sub-task; Project Schedule with summary of key milestone dates; Project budget summary broken down by sub-task; and, Quality Management Plan (QMP) summarizing QA/QC procedures for all deliverables.

##### **Task 1.3 – Monthly Project Status Reports**

Included in this subtask are monthly invoicing, budget and schedule review, updates, and general administrative tasks. The project will be managed to maintain the scope, schedule, and budget. A monthly project status report will be prepared providing updates on current completion status, outstanding issues, out-of-scope work items, and other issues to be addressed.

## Task 1.4 – Monthly Project Check-in Conference Calls

Conduct monthly project check-in conference calls with City staff and Murraysmith's Project Manager and Project Engineer to review project status, discuss key issues to be addressed, review upcoming schedule milestones, review upcoming workshop agendas, and related discussion items. With workshops scheduled approximately monthly, the conference calls will be set up in between planned workshops to provide for City check-ins approximately every two weeks throughout the project duration.

## Task 1.5 – Internal Team Coordination

Murraysmith's Project Manager will coordinate efforts of the multi-disciplinary team of staff and sub-consultants to monitor project progress, coordinate project team activities to keep the project on schedule, identify external coordination items with City staff or regulatory agencies and identify potential budget challenges as early as possible. Internal team coordination will include 1 hour bi-monthly team conference calls with discipline leads and other key design team members.

### *Task 1 Deliverables*

- 1) One electronic (PDF) copy of the Project Kick-off Meeting agenda and minutes.
- 2) One electronic (PDF) copy of the Project Management Plan.
- 3) One electronic (PDF) copy of Monthly Project Status Reports with invoices.
- 4) One electronic (Email) copy of agendas and minutes from Monthly Project Check-in Conference Calls.

### *Task 1 Assumptions*

- a) Project duration is assumed to be 10 months; therefore 10 Monthly Progress Reports are included in the Scope of Work.
- b) The Scope of Work for Phase 1 WWTP Upgrades assumes design of the project elements summarized in the Exhibit D Preliminary Project Plan.
- c) No environmental permitting, wetlands delineation, agency consultation or other permitting activities are included in Murraysmith's Scope of Work for the Phase 1 WWTP Upgrades.

## Task 2 – Initial Evaluations and Facility Plan Amendment

As part of Task 2, Murraysmith will collect background information, complete initial evaluations and investigations and prepare a Facility Plan Amendment to summarize the changes



recommended in construction phasing and update flow and load projections for a 20-year planning horizon from the date of completion of Phase 1 construction.

## Task 2.1 – Background Data Collection and Review

Prepare a list of required background data for completion of Schematic Design to be provided by City and WWTP staff. Relevant data anticipated to be required for the project may include:

- Copy of the City's current NPDES Permit and Permit Evaluation Report;
- WWTP Discharge Monitoring Reports for the past 5 years (electronic format, if possible);
- Electronic copy of most recent Mixing Zone Study Report for the Scappoose WWTP discharge to the Multnomah Channel and, if possible, mixing zone modeling files from the consultant performing the work;
- Copies of invoices for the past 2 years from NW Natural (natural gas) and Portland General Electric (PGE) for natural gas and electricity, respectively;
- Copies of invoices for chemicals used in the facility and the processes for which they are used (e.g., polymer for dewatering);
- If completed, SB 737 lab sampling data or other data on metals and toxics in the WWTP discharge;
- Plant record drawings including AutoCAD files (if available) for the original plant construction and subsequent upgrades, including the recent filter, UV Disinfection and Intermediate Pump Station Upgrades;
- Copies (electronic if possible) of any wastewater collection system studies and efforts to reduce Inflow and Infiltration (I/I) in the City's system;
- Full GIS geodatabase for all existing GIS datasets available. These will include sanitary sewer collection and treatment system, city limits, urban growth boundary, land use, rights-of-way, tax lots, environmentally sensitive areas, wetlands, etc.
- Current population and growth projections, median household income and commercial/industrial development planning in the community over the next 20 to 50 years.

## Task 2.2 – WWTP Flow and Load Projections Update

Review the collection system flow projections from work provided by Keller Associates and update the load projections included in the Facility Plan for a 20-year planning horizon from the date of anticipated completion of Phase 1 construction. The projections are currently through 2035 but should be extended to approximately 2043. Flow projections will be based on the evaluation

prepared by Keller Associates and load projections will be based on the City's wastewater master plan and WWTP DMRs.

## Task 2.3 – WWTP Wastewater Characterization

Provide a Wastewater Characterization Sampling and Testing Program Plan for implementation by plant staff to characterize wastewater influent, mixed liquor and final effluent. The wastewater characterization will be conducted over a 6-month period from approximately May through November. Murraysmith will coordinate sampling and testing between the City and third-party WQ laboratory. City staff will be responsible for sample collection and delivery to the third-party WQ laboratory. It is assumed laboratory testing for outsourced samples will be coordinated by Murraysmith and paid directly by the City. A technical memorandum summarizing the wastewater sampling and testing data will be provided for utilization in the biological process modeling to be completed during preliminary design.

## Task 2.4 – Geotechnical Investigation and Recommendations Report

Conduct geotechnical field investigations and prepare a Geotechnical Data Report (GDR) for use in bidding the project and a Geotechnical Engineering Report (GER) to support existing facility seismic vulnerability and final design. A geotechnical kick-off meeting will be conducted to flag drilling locations prior to utility locates being completed.

Geotechnical Investigations will consist of six (6) soil borings to a depth of up to 30 feet. One soil boring for the new influent pump station will be to a depth of 50' and will be outfitted with a piezometer to monitor groundwater levels throughout design. The following will be included in the field investigations:

- Soil boring logs will be developed at each of the exploration locations;
- Laboratory testing will be provided for select soil samples and will include tests for moisture content, sieve analysis, Atterberg limits, and rock strength.

The GDR and GER Reports will include the following elements:

- Assessment of soil seismic profile (site classification) and parameters in accordance with the 2014 Oregon Structure Specialty Code (OSSC) to support structural design. If the site is potentially liquefiable, the soil seismic profile will be only for the facilities with seismic periods less than 0.5 seconds;
- Evaluation of the liquefaction potential, and liquefaction induced effects such as seismic-induced settlements, lateral spreading, and potential reduction in soil bearing capacity;
- Evaluation of static and seismic soil bearing capacity, subgrade modulus, and total and differential settlements for the proposed foundations and facilities;

- Provide recommendations and design criteria for the preferred foundations;
- Provide static and seismic lateral earth pressure recommendations for the embedded walls of the proposed structures;
- Provide lateral load resistance recommendations, including passive earth pressure and coefficient of friction;
- Provide recommendations for shoring and dewatering of the deep excavations;
- Provide recommendations for site preparation, grading, drainage, and wet-weather earthwork procedures; and
- Provide engineered fill recommendations for the foundations including compaction criteria.

## Task 2.5 – Topographic Survey and Base Maps

Conduct a field topographic survey of the WWTP site and develop AutoCAD base maps for use throughout design and construction. Preliminary Title Reports will be obtained for WWTP site as part of the survey background research, but no boundary survey will be completed as part of the field survey. The following survey data will be collected and included in the base maps for the project:

- Buildings (exterior dimensions, finished floor elevations, concrete footings and pipes penetrating the floor in the sludge pump building and dewatering structure);
- All WWTP unit processes and hydraulic features including influent pump station, headworks, aeration basin, secondary clarifiers, tertiary filter, UV disinfection, intermediate pump station, effluent pump station, aerobic digester, sludge storage basins and solids dewatering facility;
- Hardscape features (curb, pavement, sidewalk, etc.);
- Significant vegetation (trees with DBH>6");
- East Columbia Avenue in front of WWTP (including field location of public right-of-way);
- Above ground evidence of all existing underground utilities located on the parcels;
- Power poles, light poles, fences, walls (permanent and noteworthy features);
- Open space topography;
- Plottable easements of record revealed by title reports, including along the outfall alignment; and

- Survey control points will be set throughout the WWTP for ongoing use during design and construction.

Collected survey data will be used to develop an existing WWTP facility base map that will be used throughout design and construction of the WWTP upgrades.

## Task 2.6 – Exist. Facility Code Review and Condition Assessment

Structural and mechanical condition assessments and evaluations will be completed on existing WWTP facilities to identify rehabilitation requirements to be included in the WWTP upgrades design. Concrete structures targeted for rehabilitation and reuse as part of the WWTP upgrades include:

- Influent pump station and Headworks Building;
- Secondary clarifiers (2);
- RAS/WAS Pump Building;
- Tertiary Filter;
- Intermediate Pump Station;
- UV Disinfection;
- Effluent Pump Station;
- Sludge storage lagoons; and
- Solids Dewatering.

Condition assessments will document condition and potential rehabilitation requirements for architectural, HVAC, structural, mechanical and electrical components at the existing WWTP.

As part of the evaluations, a preliminary code review for the existing WWTP will be completed to document potential concerns related to compliance with the City codes and ordinances, International Building Code (IBC) and Oregon Structural Specialty Code (OSSC), National Electrical Code (NEC), National Fire Protection Association (NFPA) 820: Standard for Fire Protection in Wastewater Treatment and Collection Facilities, and other related codes. The code review will include a list of codes to be used as the basis for the final design of WWTP upgrades.

## Task 2.7 – Reference WWTP Site Visits

Visits to other wastewater treatment facilities will be conducted with City and plant staff to investigate unit processes and equipment to potentially be included in the WWTP upgrades. Equipment and unit processes to be targeted for site visits may include, but not be limited to:

- Influent pumps for facilities pumping raw wastewater;
- Headworks multi-rake and fine screens;
- Aeration basins designed for biological nutrient removal;
- Secondary Clarifiers;
- UV disinfection; and
- Lagoon-style aeration equipment (e.g. Biolac-type aeration systems).

Preference will be given to conducting site visits to local (Oregon and SW Washington) wastewater treatment plants. There are potential vendors for some equipment that may want to offer trips so City and plant staff can tour facilities in other geographies that have equipment being proposed for the WWTP upgrades. Murraysmith will provide scheduling and coordination for all WWTP site visits. For budgetary purposes, 2 days of WWTP site visits are assumed.

## Task 2.8 – WWTP Facility Plan Amendment

Consolidate preliminary investigations and prepare a Scappoose WWTP Facility Plan Amendment to adjust the current Facility Plan Recommended Plan as follows:

- Update WWTP flow and load projections through a planning year of 2043.
- Identify potential code conflicts at the existing WWTP to be addressed as part of the WWTP upgrades (e.g. NFPA 820 compliance);
- Update the Recommended Plan scope, phasing and schedule to show 2 phases completed in approximately 6 years and to include the proposed aeration basin improvements as part of Phase 1;
- Update the Capital Improvement Program (CIP) budget to be reflective of the Recommended Plan modifications.

## Task 2.9 – Facility Plan Amendment Review Workshop

Conduct a workshop with City staff to review the WWTP Facility Plan Amendment, including updated flow and load projections, wastewater characterization and Recommended Phasing Plan modifications. City comments on the Facility Plan Amendment will be incorporated into the Amendment and it will then be submitted to Oregon DEQ for review.

### *Task 2 Deliverables*

- 1) One electronic (PDF) copy of the WWTP Influent Characterization Sampling and Testing Program Plan for implementation by City staff with support from Murraysmith.
- 2) One electronic (PDF) copy of the Draft and Final Wastewater Characterization Summary Technical Memorandum.
- 3) Two (2) hard copies and one (1) electronic (PDF) copy Final Geotechnical Data Report (GDR) and Geotechnical Engineering Report (GER).
- 4) One (1) 24x36-inch hard copy and 1 electronic (PDF and AutoCAD) copy of the WWTP base maps to be used throughout the project.

- 5) Two (2) hard copies and 1 electronic (PDF) copy of the Final Existing Facility Structural and Mechanical Condition Assessment Report.
- 6) One electronic (PDF) copy of the Draft and Final Preliminary Code Review.
- 7) Three (3) hard copies and 1 electronic (PDF) copy of the Draft and Final Scappoose WWTP Facility Plan Amendment.
- 8) Three (3) hard copies and 1 electronic (PDF) copy of the Final Scappoose WWTP Facility Plan Amendment.

## *Task 2 Assumptions*

- a) City staff to provide as much of the background information requested and coordinate with previous sub-consultants as required.
- b) City and plant staff to assist in locating existing buried pipelines and conduits prior to conducting geotechnical drilling operations and before completion of survey field data collection.
- c) City to provide updated collection system flow projections prepared by Keller Associates.
- d) Geotechnical Assumptions:
  - Site access for geotechnical investigations to be coordinated by City and drilling spoils will be disposed on the WWTP site.
  - Geotechnical consultant shall call in utility locates, but this is not anticipated to locate all buried pipelines on the site.
  - If liquefiable soils are determined to be present at the WWTP site, additional geotechnical investigations may be required to support the structural design of new structures.
  - City staff will provide ongoing groundwater well monitoring for piezometers installed onsite as part of the geotechnical investigations.
- e) Survey Assumptions:
  - No planning applications or third-party fees associated with boundary line adjustments/consolidations, re-setting of survey monuments or private utility locating services are included.
  - City staff will assist with locating underground utilities inside the WWTP.

- Survey control points that are disturbed prior to or during construction will not be reestablished.
- f) Condition Assessment Assumptions:
- Structural assessments will be limited to what can be visually observed and accessed for inspection.
  - Structural assessments may lead to a recommendation for additional destructive or non-destructive testing.
- g) City will pay for its costs associated with reference WWTP site visits.

## Task 3 – Preliminary Design

Preliminary Design will develop the design of Phase 1 WWTP to approximately 30% completion. Preliminary Design will be completed moving through each of the WWTP unit processes. These unit process evaluations will be summarized in a Technical Memorandum (TM) developed as presented below and will be compiled to create the Preliminary Design Report. All Preliminary Design TMs will include the following standard elements:

- Introduction and Background
- Design Criteria
- Alternatives Development and Discussion, including:
  - Preliminary Layouts and Process Schematic Diagram
  - Equipment cut sheets
  - Process and Hydraulic Evaluations
  - Potential impact on other WWTP Unit Processes
- Alternative Evaluation, including capital and 20-year lifecycle costs;
- Energy Efficiency Incentive funding opportunities;
- Non-economic factors and considerations; and
- Recommended Unit Process Upgrades.

### Task 3.1 – WWTP Hydraulic Profile and Outfall Evaluation (TM-3.1)

Establish the baseline plant hydraulic capacity through the existing treatment processes to be used as the baseline for establishing required upgrades to treat and discharge the WWTP peak flow developed in Task 2.2. Plant hydraulics will be evaluated using Visual Hydraulics®. The hydraulic model will be utilized during Preliminary Design to develop and evaluate WWTP hydraulic

upgrades for all unit processes. As part of this task, an evaluation of the existing WWTP outfall will be completed to assess potential rehabilitation or replacement options and costs. Murraysmith anticipates some of the existing outfall inside the WWTP fenceline will be replaced during Phase 1 construction and that a section of the existing outfall will be removed for destructive testing to determine useful service life and potential rehabilitation options. TM-3.1 will include a summary of the plant hydraulic profile for current and post-Phase 1 hydraulic conditions.

### **Task 3.2 – Influent Pump Station Preliminary Design (TM-3.2)**

Prepare Preliminary Design for influent pump station improvements assuming new pumps will be installed in the existing pump station's dry pit. The pump station will likely have 4 pumps to provide firm pump station capacity with the largest pump out of service and duty pumps that operate near their best efficiency point. The pumps will be sized based on a new headworks constructed next to the proposed aeration basin and gravity flow through the secondary clarifiers. Also, the pumps will be selected so that they can potentially be moved to the new influent pump station proposed in Phase 2. Preliminary design for replacement of the influent gravity sewer is also included in this Task.

### **Task 3.3 – Headworks Preliminary Design (TM-3.3)**

Prepare Preliminary Design for the new headworks to be located near the proposed aeration basin. The new headworks will include one new screen with 0.25" aperture and a bypass channel with manual bar rack. No odor control or grit removal are anticipated to be included in the headworks design.

### **Task 3.4 – Plant Hydraulics, IPS, Headworks and Outfall Preliminary Design Review Workshop**

Conduct a workshop with City staff to review the WWTP hydraulic profile, initial outfall evaluation, influent pump station and headworks preliminary design. Drafts of TM-3.1, TM-3.2 and TM-3.3 will be provided a minimum of 2 weeks prior to the workshop date to provide time for City review.

### **Task 3.5 – Aeration Basin Treatment Process Preliminary Design (TM-3.4)**

Complete Preliminary Design for the new aeration basin. The preliminary design will be used to inform the final design of other project elements included in Phase 1 construction, including the UV disinfection improvements, effluent pump station, and electrical building. It is anticipated that the aeration basin blowers will be housed in the effluent pump station building or in the proposed electrical building. The new aeration basin preliminary design will be based on a Modified Ludzeig-Etinger (MLE) treatment process to target Ammonia-Nitrogen removal to approximately 5 mg/L.



### Task 3.6 – UV and EPS Preliminary Design (TM-3.5)

Complete Preliminary Design for the middle area of the existing WWTP, including UV Disinfection upgrades and effluent pump station (EPS). UV improvements include replacement of in-channel equipment and considerations for a second channel to accommodate Phase 2 upgrades. EPS options will consider an expansion to use the existing EPS building or potentially installing a new submersible pump station in an alternate location (e.g. old chlorine contact chamber) to free up space for the aeration basin blowers.

### Task 3.7 – Aeration Basin, UV and EPS Preliminary Design Workshop

Conduct a workshop with City staff to review the aeration basin, UV and EPS preliminary design. Drafts of TM-3.4 and TM-3.5 will be provided a minimum of 2 weeks prior to the workshop date to provide time for City review.

### Task 3.8 – Electrical, Instrumentation, and Controls Preliminary Design (TM-3.6)

Prepare preliminary design for electrical, instrumentation, and controls (EI&C) upgrades, including power supply to existing and new equipment, improved automation throughout the facility and Supervisory Control and Data Acquisition (SCADA) upgrades to improve operator efficiency and plant performance.

EI&C alternatives to be considered will include:

- Upgrades to the main plant power service, upsizing the standby generator, review of the existing electrical switch gear and installation of an automatic transfer switch meeting EPA reliability requirements.
- Instrumentation and automation upgrades throughout the plant and potential conversion of a portion of the existing Administration Building to a plant control room with electrical motor control centers (MCCs) for the influent pump station and associated equipment, and a main plant control panel.
- Power distribution plan throughout the WWTP site. The existing electrical service and motor control equipment in the RAS/WAS area will not be updated or replaced in Phase 1.
- Automation and SCADA upgrades to improve plant controls and reduce the number of processes operated manually.

### Task 3.9 – Site Design, Yard Piping, Security and Landscaping Preliminary Design (TM-3.7)

Prepare Preliminary Design for overall civil and site design, combining all recommended unit process upgrades prepared throughout preliminary design into an overall WWTP expansion plan. The overall WWTP site design will consider potential modifications to access throughout the site for trucks and traffic, plant utility water system, landscaping improvements and other associated WWTP upgrades not captured in previous technical memos.

### Task 3.10 – EI&C, Site and Yard Piping Preliminary Design Workshop

Conduct a workshop with City staff to review the preliminary electrical and controls design, civil site design and yard piping design. Drafts of TM-3.6 and TM-3.7 will be provided a minimum of 2 weeks prior to the workshop date to provide time for City review.

### Task 3.11 – Prepare Phase 1 Upgrades Preliminary Design Report

Prepare an Executive Summary and consolidate all Preliminary Design technical memos into the Scappoose WWTP Preliminary Design Report. An Engineer's Opinion of Probable Construction Cost (OPCC) and updated project schedule will be included in the Preliminary Design Report.

### Task 3.12 – Phase 1 Preliminary Design Review Meeting

Prepare an overview presentation and conduct a review meeting with Oregon DEQ to present the WWTP Preliminary Design. The meeting is anticipated to be 2 hours in duration and will be attended by Murraysmith's Principal-in-Charge, Project Manager and Project Engineer.

### Task 3.13 – Phase 1 Scope of Work and Fee Estimate Review

Review Murraysmith's Scope of Work and Fee Estimate for project elements moving forward as determined during Preliminary Design. Also included in this Task is preparation of the Scope of Work and Fee Estimate for Services During Construction.

### *Task 3 Deliverables*

- 1) One electronic (PDF) copy of meeting and workshop agendas and minutes for three (3) preliminary design review workshops.
- 2) One electronic (PDF) copy of all Draft and Final Preliminary Design Technical Memoranda 3.1 through 3.7.
- 3) Three hard copies and one electronic (PDF) copy of the Draft and Final Scappoose WWTP Preliminary Design Report.

- 4) One electronic copy of the AutoCAD base map used for preliminary design.
- 5) One electronic (PDF) copy of agenda, presentation and minutes from the Phase 1 Upgrades Preliminary Design Review Meeting.
- 6) One electronic (PDF) copy of the Services During Construction Scope of Work and Fee Estimate for City review.

### **Task 3 Assumptions**

- a) Preliminary design will be completed based on the Preliminary Project Plan developed by Murraysmith and included as Exhibit D.
- b) Biological process designs will target Ammonia-Nitrogen for nutrient removal and will not consider biological phosphorus removal.
- c) Updating the WWTP outfall mixing zone study is not anticipated to be required as part of the Project.
- d) DEQ Preliminary Design Review meeting to be held in the DEQ Northwest Region office in Portland, Oregon. DEQ Preliminary Design comments will be incorporated as part of Task 4.

## **Task 4 – 60% Final Design**

The 60% Final Design task will develop the design to approximately 60% completion. Approximately 80 of 134 construction drawings will be provided in the 60% Design Submittal for the General, Civil, Architectural, Structural, Mechanical, Process and Instrumentation Diagrams (P&IDs), Electrical and Instrumentation and Controls (I&C) design disciplines. The 60% Design Submittal will include construction drawings, critical equipment specifications, 60% Engineer's OPCC and updated project schedule.

### **Task 4.1 – Prepare 60% Design Drawings and Specifications**

Develop the WWTP final design to 60% completion by preparing approximately 80 construction drawings and Draft Technical Specifications for Divisions 40 through 46.

### **Task 4.2 – Prepare 60% Design OPCC, Schedule and Sequencing Plan**

Prepare the 60% Design Engineer's Opinion of Probable Construction Cost (OPCC) based on the 60% drawings and specifications. Update the project schedule based on the 60% design, incorporating equipment lead times and other vendor information. A preliminary construction sequencing plan for the Phase 1 WWTP Upgrades will also be prepared.

### Task 4.3 – 60% Design WWTP Meetings & Site Visits

Murraysmith will travel to the City of Scappoose three (3) times during the course of 60% Design to conduct meetings with City staff, verify existing conditions, review design concepts and other miscellaneous items requiring onsite coordination.

### Task 4.4 – 60% Design Constructability and Operations Reviews

Murraysmith will obtain two (2) third-party reviews of the 60% Design by a General Contractor and Operations Consultant. A site visit will be conducted prior to initiating the reviews and representatives will be invited to attend the 60% Design Review Workshop to present their findings and recommendations to City and Murraysmith staff.

- **General Contractor Third Party 60% Design Review** - The General Contractor review will include an overall design review, as well as review of planned construction sequencing activities, cost estimate and construction schedule. Detailed design review will include an evaluation of the overall design and suggestions to reduce cost, speed of construction or simplify the design without sacrificing quality or useful service life.
- **Operations Consultant Third Party 60% Design Review** – The third-party operations review will consider the 60% Design from the Operator’s perspective, looking at the functionality of the design, process management, sampling and testing, process monitoring and instrumentation and the overall plan for the plantwide SCADA system.

### Task 4.5 – 60% Design Review Workshop

Meet with City staff to review the 60% Design Submittal and Constructability and Operations reviews. The workshop will be budgeted for 4 hours duration and will be attended by Murraysmith’s Principal-in-Charge, Project Manager, Project Engineer, and one staff engineer.

### Task 4 Deliverables

- 1) One electronic (PDF) copy of agendas and minutes from meetings with City staff.
- 2) Three (3) hard copies and one (1) electronic (PDF) copy of 60% Design Submittal including 60% construction drawings, major systems and equipment specifications, 60% OPCC and updated project schedule.
- 3) One electronic (PDF) copy of Draft and Final General Contractor Third Party 60% Design Review Technical Memorandum.
- 4) One electronic (PDF) copy of Draft and Final Operations Consultant Third Party 60% Design Review Technical Memorandum.

- 5) One electronic (PDF) copy of agenda, presentation and minutes from the 60% Design Review Workshop.

#### **Task 4 Assumptions**

- a) No Environmental Review documentation, permitting or cross-cutters agency reviews are included in Murraysmith's Scope of Work.
- b) Land Use Permitting will be led by City.
- c) The 60% Design Submittal consisting of the 60% Drawings and Specifications, 60% OPCC and updated project schedule will be submitted to the City and DEQ for review.
- d) General Contractor and Operations reviews will be conducted over a 2-week period following delivery of the 60% Design Submittal to the City.
- e) The 60% Design Review Workshop will be conducted in Murraysmith's Portland office and will be scheduled approximately 2 weeks following delivery of the 60% General Contractor and Operations reviews to the City.

### **Task 5 – 90% Final Design**

The 90% Final Design task will develop the design to include all drawings and the Project Manual with specifications for all divisions. All 134 construction drawings will be provided in the 90% Design Submittal for the General, Civil, Architectural, Structural, Mechanical, Process and Instrumentation Diagrams (P&IDs), Electrical and Instrumentation and Controls (EI&C) design disciplines. The 90% Final Design Submittal will also include construction drawings, critical equipment specifications, 90% Engineer's OPCC and updated project schedule.

#### **Task 5.1 – Prepare 90% Design Drawings and Specifications**

Develop the WWTP final design to 90% completion by preparing approximately 134 construction drawings and all technical specifications, including "front-end" Division 0 and 1 that will be provided prior to the design submittal for City attorney review.

#### **Task 5.2 – Prepare 90% Design OPCC, Schedule and Sequencing Plan**

Prepare the 90% Design Engineer's Opinion of Probable Construction Cost (OPCC) based on the 90% drawings and specifications. Update the project schedule based on the 90% design, incorporating equipment lead times and other vendor information. A Draft construction sequencing specification for the Phase 1 WWTP Upgrades will also be prepared.

### Task 5.3 – 90% Design WWTP Meetings & Site Visits

Murraysmith will travel to the City of Scappoose three (3) times during the course of 90% Design to conduct meetings with City staff, verify existing conditions, review design concepts and other miscellaneous items requiring onsite coordination.

### Task 5.4 – 90% Design Review Workshop

Meet with City staff to review the 90% Design Submittal. The workshop will be budgeted for 4 hours duration and will be attended by Murraysmith's Principal-in-Charge, Project Manager, Project Engineer, and one staff engineer.

### Task 5.5 – DEQ 90% Design Review Meeting

Prepare an overview presentation and conduct a review meeting with Oregon DEQ to present the 90% Design Submittal for review. The meeting is anticipated to be 2 hours in duration and will be attended by Murraysmith's Project Manager and Project Engineer.

### Task 5 Deliverables

- 1) One electronic (PDF) copy of agendas and minutes from meetings with City staff.
- 2) Three (3) hard copies and one (1) electronic (PDF) copy of 90% Design Submittal including 90% construction drawings, major systems and equipment specifications, 90% OPCC and updated project schedule.
- 3) One electronic (PDF) copy of agenda, presentation and minutes from the 90% Design Review Workshop.
- 4) One electronic (PDF) copy of agenda, presentation and minutes from the DEQ 90% Design Review Meeting.

### Task 5 Assumptions

- a) No Environmental Review documentation, permitting or cross-cutters agency reviews are included in Murraysmith's Scope of Work.
- b) The 90% Design Submittal consisting of the 90% Drawings and Specifications, 90% OPCC and updated project schedule will be submitted to the City and DEQ for review.
- c) The 90% Design Review Workshop will be conducted in Murraysmith's Portland office and will be scheduled approximately 2 weeks following delivery of the 90% Design Submittal to the City.

- d) DEQ 90% Design Review meeting to be held in the DEQ Northwest Region office in Portland, Oregon.

## **Task 6 – Final Contract Documents (CDs)**

Murraysmith will complete Final Design by preparing the final Contract Documents (CDs) for bidding based on all 90% Design reviews. The Final CDs will be utilized for bidding following approvals from funding and other outside agencies.

### **Task 6.1 – Prepare Draft Final Contract Documents (Draft Final CDs)**

Incorporate comments from the 90% Design Submittal Reviews and prepare draft Final CDs, including Project Manual with all specification sections, final construction drawings, final Engineer's Opinion of Probable Construction Cost (OPCC) and construction schedule.

### **Task 6.2 – Stamped Structural Calculations**

Prepare final stamped structural and seismic calculations for all facilities to be provided to the Building Official as part of the building permit submittal package.

### **Task 6.3 – Building Official Review Coordination**

Submit Draft Final CDs to the City's Building Official for informal review, identify deferred submittals (e.g. seismic anchorage calculations) and obtain feedback on the final design to smooth the process for the General Contractor to obtain building permits during construction. Attend meeting with City Building official to review submittal.

### **Task 6.4 – Prepare Final Contract Documents (Final CDs)**

Incorporate comments from final design reviews by the City, Building Official and clarifications by other reviewers following the Draft Final CDs submittal and prepare Final CDs, including Project Manual with all specification sections, final construction drawings, final Engineer's Opinion of Probable Construction Cost (OPCC) and construction schedule.

### **Task 6 Deliverables**

- 1) Three (3) hard copies and one electronic (PDF) copy of the Draft Final Contract Documents to be used for review, including Project Manual, construction drawings, OPCC and construction schedule.
- 2) Three (3) wet stamped hard copies, including Project Manual and full size (22x34) construction drawings for submittal to the Building Official.

- 3) Two (2) original hard copies of the wet-stamped structural calculations will be provided for Building Official submittal.
- 4) Three (3) hard copies and one electronic (PDF) copy of the Final Contract Documents, including Project Manual, construction drawings, OPCC and construction schedule.

### **Task 6 Assumptions**

- a) Drawings included in Final CDs will be 11x17. No full-size drawings will be provided.
- b) Stamped structural calculations will be stamped by an Oregon licensed Professional Engineer.
- c) One (1) hard copy of the final, sealed Contract Documents will be maintained in Murraysmith's Portland office.
- d) Building permits will be obtained and paid for by the General Contractor selected to construct the WWTP Phase 1 Upgrades.

## **Task 7 – Bid Period Services (BPS)**

Provide support to City staff during bidding to select the lowest responsive and responsible Bidder, assuming the City will lead the bidding process including advertisements for bids and distribution of documents, with technical support provided by Murraysmith.

### **Task 7.1 – Mandatory Pre-Bid Meeting**

Prepare a meeting agenda and attend the Mandatory Pre-Bid Meeting with City staff, Contractors and other parties interested in the project. Provide sign-in sheets for the meeting and document questions and informal responses during the meeting, with formal responses issued as part of Addendum #1.

#### **Task 7.1 Deliverables**

- 1) One electronic (PDF) copy of the Pre-Bid Meeting agenda and minutes.
- 2) One hard copy of blank Mandatory Pre-Bid Meeting sign-in sheet to be used in verifying attendance by Bidders.
- 3) One hard copy and one electronic (PDF) copy of the Mandatory Pre-Bid Meeting Questions and official responses.
- 4) On electronic (PDF) copy of the scanned sign-in sheet(s) from the Mandatory Pre-Bid.



### **Task 7.1 Assumptions**

- a) The bidding process will be led by the City with support from Murraysmith as required for responding to Bidder inquiries, preparing addenda, etc.
- b) Final CDs will be provided to local print shops for distribution of documents to General Contractors during bidding. Contractors will be required to purchase Final CDs through the local print shops.
- c) Pre-Bid Meeting will be attended by Murraysmith's Project Manager and Project Engineer.
- d) The Pre-Bid Meeting will be conducted at the Scappoose WWTP.
- e) Contractor questions during the Mandatory Pre-Bid Meeting will be documented and official responses issued as part of Addendum #1.
- f) The Pre-Bid Meeting will be mandatory, and the sign-in sheet will be issued as part of Addendum #1.

### **Task 7.2 – Responses to Bidder Inquiries**

Assist the City with responses to Bidder inquiries and questions. Questions and inquiries that require clarification to all Bidders will be issued via Addenda along with responses to Bidder questions and inquiries during bidding.

#### **Task 7.2 Deliverables**

- 1) One electronic (PDF or email) copy of responses to inquiries and questions from Contractors during Bidding.
- 2) One electronic (PDF) copy of each Addendum.

#### **Task 7.2 Assumptions**

- a) No responses to Bidder inquiries and questions within one week of the Bid Opening date will be provided unless the Bid Opening Date and Time are adjusted.
- b) Responses to Bidder inquiries will be documented in Addenda issued during the Bidding process for full disclosure and maintaining a fair bidding process.

### **Task 7.3 – Addenda**

Assist the City with responses to Bidder inquiries and questions. Questions and inquiries that require clarification to all Bidders will be issued via Addenda along with responses to Bidder questions and inquiries during bidding.

### *Task 7.3 Deliverables*

- 1) One electronic (PDF or email) copy of responses to inquiries and questions from Contractors during Bidding.
- 2) One electronic (PDF) copy of each Addendum.

### *Task 7.3 Assumptions*

- a) For budgetary purposes, 3 Addenda are estimated.

## **Task 7.4 – Bid Evaluation Support**

Following the Bid Opening, conduct an evaluation of all bids and prepare a Bid Tabulation spreadsheet, including review of named manufacturers and potential additive or deductive bid alternates. Conduct a review of qualifications for the three lowest bidders to determine if they are considered responsible bidders by reviewing Oregon Construction Contractors Board (CCB) history and contacting references provided on Bid forms. Summarize the evaluation of bid alternates and Bidder evaluation of the 3 lowest Bidders and prepare an Engineer's Recommendation of Award for consideration by the City.

### *Task 7.4 Deliverables*

- 1) One electronic (PDF) copy of the Bid Tabulation.
- 2) One hard copy and one electronic (PDF) copy of the Engineer's Recommendation of Award, including recommendations related to Bid Alternates and summary of the evaluation of the 3 lowest Bidders.

### *Task 7.4 Assumptions*

- a) This task is anticipated to involve limited investigation of bidders based on the minimum qualifications established for the project and reference checks.
- b) Support services for a Bidder protest or higher-level evaluation of Bidder qualifications is not included in this task.

## **Task 7.5 – Conformed Contract Documents**

Following bidding and prior to the start of construction, prepare Conformed Contract Documents (CDs) incorporating design changes and additional information provided in Addenda during the bidding process. The conformed CDs will be utilized for construction of the WWTP upgrades.

### *Task 7.5 Deliverables*

- 1) Five (5) hard copies and one electronic (PDF) copy the Conformed Contract Documents, including Project Manual and 11x17 construction drawings.
- 2) Five (5) hard copies of full size (22x34) construction drawings for use during construction.
- 3) One electronic copy for the plans, AutoCAD or similar format.

### *Task 7.5 Assumptions*

- a) Conformed contract documents will not be wet stamped.
- b) Electronic copies, AutoCAD or similar format, will be provided to the General Contractor for reference only and to use at their own risk.

Exhibit B  
WWTP Phase 1 Improvements Design and Bidding Services (2ND REVISION)  
City of Scappoose  
PROPOSED FEE ESTIMATE

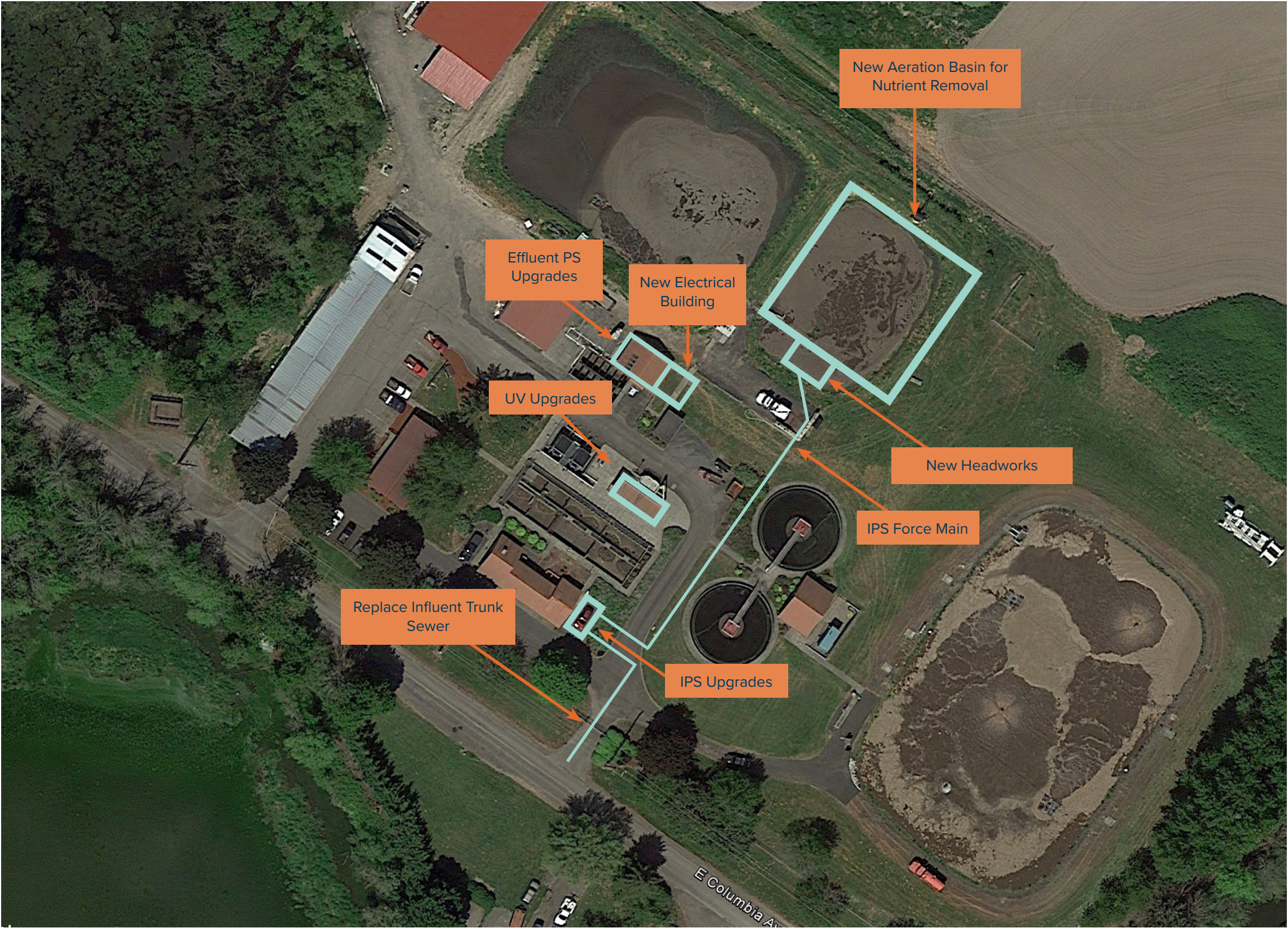
	LABOR CLASSIFICATION (HOURS)																	Hours	Labor	Subconsultants							Subconsultant Total with Markup	Expenses	CADD Units \$18/hr	Total
	PIC Principal Engineer IV	PM Professional Engineer VIII	PE Professional Engineer IV	Staff Engineering Designer II	Process Professional Engineer IX	Structural Principal Engineer VI	Structural Professional Engineer III	Structural CAD Engineering Designer VI	CAD Technician II	CAD Technician IV	Admin Admin. II	Specs Professional Engineer IX	Outfall Professional Engineer VI	Outfall Principal Engineer I	QA/QC Principal Engineer III															
	\$250 Perry	\$202 Rambin	\$161 Moman	\$143 Davis, P.	\$212 Flowers	\$270 Kotey, T.	\$157 Kotey, R.	\$175 Polglase	\$120 McFaddin	\$155 Estep	\$101 Steinberg	\$212 Gallagher	\$182 Luce	\$222 O'Sullivan	\$239 Zhang															
																	McMillen- Jacobs	DI&A (Survey)	Waterdude (Operations)	Industrial Systems	Strongwork (Architect)	Interface (HVAC)	GC (Contractor)							
Task 1 - Project Management																														
Task 1.1 - Project Kickoff Meeting	6	6	8								4					24	\$ 4,404								\$ -	\$ 100	\$ -	\$ 4,504		
Task 1.2 - Project Management Plan (PMP)	4	8	16	8							8				2	46	\$ 7,622								\$ -	\$ 50	\$ -	\$ 7,672		
Task 1.3 - Monthly Project Status Reports (10)	4	10	10								8					32	\$ 5,438								\$ -	\$ 100	\$ -	\$ 5,538		
Task 1.4 - Monthly Project Check-in Conference Calls (10)	10	12	12	12												46	\$ 8,572								\$ -	\$ -	\$ -	\$ 8,572		
Task 1.5 - Internal Team Coordination	14	32	32													78	\$ 15,116								\$ -	\$ -	\$ -	\$ 15,116		
Task 1 Subtotal	38	68	78	20	0	0	0	0	0	0	20	0	0	0	2	226	\$ 41,152	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250	\$ -	\$ 41,402	
Task 2 - Initial Evaluations and Facility Plan Amendment																														
Task 2.1 - Background Data Collection and Review	2	2	12	4						8	2					30	\$ 4,850			\$ 250					\$ 275	\$ 250	\$ 144	\$ 5,519		
Task 2.2 - WWTP Flow and Load Projections Update	2	2	12	16							4					36	\$ 5,528								\$ -	\$ -	\$ -	\$ 5,528		
Task 2.3 - WWTP Wastewater Characterization	2	4	8	28	16						8					70	\$ 11,756								\$ -	\$ -	\$ -	\$ 11,756		
Task 2.4 - Geotechnical Investigation and Recommendations Report		2	6								2			2		12	\$ 2,050	\$ 36,246							\$ 39,871	\$ 50	\$ -	\$ 41,971		
Task 2.5 - Topographic Survey and Base Maps			4													28	\$ 4,388								\$ 27,720	\$ 150	\$ 360	\$ 32,618		
Task 2.6 - Exist. Facility Code Review and Condition Assessment		2	4							20	2					8	\$ 1,250		\$ 25,200	\$ 5,500		\$ 1,500			\$ 7,700	\$ -	\$ -	\$ 8,950		
Task 2.7 - Reference WWTP Facility Site Visits		8	16	8												32	\$ 5,336			\$ 5,500					\$ -	\$ -	\$ -	\$ 6,536		
Task 2.8 - WWTP Facility Plan Amendment	6	18	30	44	10						24	8			4	144	\$ 23,862			\$ 12,360					\$ 13,596	\$ 95	\$ 432	\$ 37,985		
Task 2.9 - Facility Plan Amendment Review Workshop	6	6	8	8							4	6				38	\$ 6,370								\$ -	\$ 100	\$ 72	\$ 6,542		
Task 2 Subtotal	18	44	104	108	26	0	0	0	0	56	32	0	0	0	10	398	\$ 65,390	\$ 36,246	\$ 25,200	\$ 5,500	\$ 12,610	\$ -	\$ 1,500	\$ -	\$ 89,162	\$ 1,845	\$ 1,008	\$ 157,405		
Task 3 - Preliminary Design																														
Task 3.1 - WWTP Hydraulic Profile and Outfall Evaluation (TM-3.1)	2	4	8	32					12	2	2		30	10	2	104	\$ 17,282		\$ 3,500						\$ 3,850	\$ 25	\$ 36	\$ 21,193		
Task 3.2 - Influent Pump Station Pre-Design (TM-3.2)	2	4	8	24		8	16	8	24	2	2				4	102	\$ 16,448								\$ -	\$ 25	\$ 36	\$ 16,509		
Task 3.3 - Headworks Pre-Design (TM-3.3)	2	4	8	32		8	16	12	24	2	2				4	114	\$ 18,292	\$ 500				\$ 1,200			\$ 1,870	\$ 25	\$ 36	\$ 20,223		
Task 3.4 - Workshop: Hydraulics, Outfall, IPS, Headworks	4	4	8	8					4		2					30	\$ 4,922								\$ -	\$ 100	\$ -	\$ 5,022		
Task 3.5 - Aeration Basin Pre-Design (TM-3.4)	2	8	16	36	40			12	24	2	2				4	146	\$ 24,768	\$ 500							\$ 550	\$ 25	\$ 36	\$ 25,379		
Task 3.6 - UV and EPS Pre-Design (TM-3.5)	2	8	8	24		8	16	16	24	2	2				4	114	\$ 18,656					\$ 1,200			\$ 1,320	\$ 25	\$ 36	\$ 20,037		
Task 3.7 - Workshop: Aeration Basin, Filters, UV, EPS	4	4	8	8				4	4	2	2					30	\$ 4,922								\$ -	\$ 100	\$ -	\$ 5,022		
Task 3.8 - E&C Pre-Design (TM-3.6)	2	4	4	4				6	4		2	4			2	24	\$ 3,924			\$ 18,500					\$ 20,350	\$ 25	\$ -	\$ 24,299		
Task 3.9 - Site, Yard Piping, Security, Landscaping Pre-Design (TM-3.7)	2	8	4	16				8	24	2	2				2	72	\$ 11,226					\$ 1,200			\$ 1,320	\$ 25	\$ 36	\$ 12,607		
Task 3.10 - Workshop: E&C, Site, Yard Piping	4	8	4	4				4	4		2					34	\$ 5,994								\$ -	\$ 100	\$ -	\$ 6,094		
Task 3.11 - Prepare Phase 1 WWTP Upgrades PreDesign Report	2	16	40	40		8	16	4	40	4	2	8			4	184	\$ 29,538								\$ -	\$ 250	\$ 72	\$ 29,860		
Task 3.12 - Phase 1 PreDesign Review Meeting	4	8	4	4					4		2					30	\$ 5,470								\$ -	\$ 102	\$ -	\$ 5,572		
Task 3.13 - Phase 1 Scope of Work and Fee Estimate Review	2	6	4						8		2					14	\$ 2,558								\$ -	\$ -	\$ -	\$ 2,558		
Task 3 Subtotal	34	86	124	236	40	32	64	60	194	16	26	8	30	10	30	998	\$ 164,000	\$ 1,000	\$ 3,500	\$ -	\$ 18,500	\$ -	\$ 3,600	\$ -	\$ 27,940	\$ 350	\$ 180	\$ 194,375		
Task 4 - 60% Final Design																														
Task 4.1 - 60% Design Drawings and Specifications	10	33	124	133	16	41	61	86	217	17	16	21			16	791	\$ 125,805	\$ 2,000		\$ 23,000	\$ 10,000	\$ 4,750			\$ 43,725	\$ 250	\$ 306	\$ 170,086		
Task 4.2 - 60% OPCC, Schedule and Sequencing Plan	4	16	12	12		4	8				2				2	60	\$ 10,896	\$ 1,000	\$ 600	\$ 2,800	\$ 750	\$ 1,250			\$ 7,040	\$ -	\$ -	\$ 17,936		
Task 4.3 - 60% Design Meetings and Site Visits (3)	8	24	24	24							6					86	\$ 14,750	\$ 600		\$ 2,400	\$ 1,200	\$ 750			\$ 5,445	\$ 450	\$ -	\$ 20,645		
Task 4.4 - 60% Design Constructability and Ops Reviews	6	12	18	18		4	4	4	4		2				4	76	\$ 13,442		\$ 7,500				\$ 5,000	\$ 13,750	\$ -	\$ -	\$ 27,192			
Task 4.5 - 60% Design Review Workshop	6	6	12	6					8		2					40	\$ 6,664			\$ 1,200	\$ 800	\$ 600			\$ 2,860	\$ 100	\$ -	\$ 9,624		
Task 4 Subtotal	34	91	190	193	16	49	73	90	229	17	28	21	0	0	22	1053	\$ 171,557	\$ 3,600	\$ -	\$ 8,100	\$ 29,400	\$ 12,750	\$ 7,350	\$ 5,000	\$ 72,820	\$ 800	\$ 306	\$ 245,483		
Task 5 - 90% Final Design																														
Task 5.1 - 90% Design Drawings and Specifications	10	34	124	133	8	41	61	86	217	17	16	21			16	784	\$ 124,311	\$ 2,500		\$ 56,500	\$ 10,000	\$ 4,750			\$ 81,125	\$ 250	\$ 306	\$ 205,992		
Task 5.2 - 90% OPCC, Schedule and Sequencing Plan	4	16	12	12		4	8				2				2	60	\$ 10,896	\$ 1,500	\$ 600	\$ 2,500	\$ 750	\$ 1,250			\$ 7,260	\$ -	\$ -	\$ 18,156		
Task 5.3 - 90% Design Meetings and Site Visits (3)	8	24	24	24							6					86	\$ 14,750	\$ 600		\$ 2,400	\$ 1,200	\$ 750			\$ 5,445	\$ 450	\$ -	\$ 20,645		
Task 5.4 - 90% Design Review Workshop	6	6	12	6		4		8	4		4					46	\$ 7,494			\$ 1,200	\$ 800	\$ 600			\$ 2,860	\$ -	\$ -	\$ 10,354		
Task 5.5 - DEQ 90% Design Review Workshop	4	8	2	2				4	4		4					20	\$ 3,628								\$ -	\$ 100	\$ -	\$ 3,728		
Task 5 Subtotal	32	88	174	177	8	45																								

## SCAPPOOSE WWTP PHASE 1 UPGRADES

March 2020 \\ad.msa-ep.com\Portland\PD\BDClients\Scappoose\Phase 1 WWTP Improvements 12-19\Scoping\03_Revised_Proposal_17Mar20\Schedule\Schedule_ScappooseWWTP_20Mar20.mpp	Murraysmith	Scappoose WWTP Phase 1 Final Design and Bidding Services City of Scappoose, Oregon
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Exhibit D: Scappoose Wastewater Plant Improvements Preliminary Project Plan



Phase 1 Preliminary Budget

Item	Cost
Replace Influent Trunk Sewer	\$220,000
IPS Upgrades	\$500,000
IPS Force Main	\$133,000
New Headworks	\$1,500,000
New Aeration Basin	\$2,582,000
UV Upgrades	\$450,000
Effluent PS Upgrades	\$540,000
New Electrical Building	\$200,000
Total	\$6,125,000



# Exhibit E

## Preliminary Final Design Drawing Index

			Design Phases			
			30%	60%	90%	100%
<b>GENERAL</b>						
1	G- 000	COVER SHEET	X	X	X	X
2	G- 001	INDEX OF DRAWINGS	X	X	X	X
3	G- 002	GENERAL LEGENDS, SYMBOLS AND ABBREVIATIONS	X	X	X	X
4	G- 003	GENERAL NOTES	X	X	X	X
5	G- 004	BASIS OF DESIGN	X	X	X	X
6	G- 005	PROCESS FLOW SCHEMATIC	X	X	X	X
7	G- 006	HYDRAULIC PROFILE	X	X	X	X
<b>CIVIL</b>						
8	C- 001	LAYOUT KEY MAP	X	X	X	X
9	C- 002	CIVIL LEGENDS, SYMBOLS AND ABBREVIATIONS	X	X	X	X
10	C- 003	CIVIL STANDARD DETAILS 1	X	X	X	X
11	C- 004	CIVIL STANDARD DETAILS 2		X	X	X
12	C- 005	EROSION CONTROL NOTES AND DETAILS		X	X	X
13	C- 006	GENERAL SITE PLAN AND EROSION CONTROL PLAN		X	X	X
14	C- 007	OVERALL SITE PLAN AND AREA INDEX	X	X	X	X
15	C- 008	OVERALL SITE YARD PIPING PLAN	X	X	X	X
16	C- 009	OVERALL SITE GRADING AND PAVING PLAN		X	X	X
17	C- 101	INFLUENT SEWER PLAN AND PROFILE		X	X	X
18	C- 102	IPS DEMOLITION PLAN		X	X	X
19	C- 103	IPS SITE AND YARD PIPING PLAN	X		X	X
20	C- 201	HEADWORKS SITE AND YARD PIPING PLAN	X	X	X	X
21	C- 202	HEADWORKS GRADING PLAN		X	X	X
22	C- 301	AERATION BASIN AREA DEMOLITION PLAN			X	X
23	C- 302	AERATION BASIN AREA SITE AND YARD PIPING PLAN	X	X	X	X
24	C- 303	AERATION BASIN AREA GRADING PLAN		X	X	X
25	C- 401	UV DISINFECTION DEMOLITION PLAN			X	X
26	C- 402	UV DISINFECTION SITE AND YARD PIPING PLAN	X	X	X	X
27	C- 501	EFFLUENT PUMP STATION AND OUTFALL DEMOLITION PLAN		X	X	X
28	C- 502	EFFLUENT PUMP STATION AND OUTFALL SITE AND YARD PIPING PLAN	X	X	X	X
29	C- 503	EFFLUENT PUMP STATION AND OUTFALL GRADING AND PAVING PLAN		X	X	X
30	C- 551	ELECTRICAL BUILDING SITE AND GRADING PLAN	X	X	X	X
<b>ARCHITECTURAL</b>						
31	A- 001	ARCHITECTURAL CODE COMPLIANCE/SYMBOLS AND LEGENDS		X	X	X
32	A- 002	GENERAL ARCHITECTURAL DETAILS - SCHEDULES - WINDOW, DOOR, FINISH			X	X
33	A- 003	GENERAL ARCHITECTURAL DETAILS - VERTICAL AND HORIZONTAL ASSEMBLIES			X	X
34	A- 004	GENERAL ARCHITECTURAL DETAILS - DOOR DETAILS			X	X
35	A- 005	GENERAL ARCHITECTURAL DETAILS - WINDOW DETAILS			X	X
36	A- 006	GENERAL ARCHITECTURAL DETAILS - MISC BUILDING DETAILS			X	X
37	A- 201	HEADWORKS BUILDING ARCHITECTURAL PLAN		X	X	X
38	A- 202	HEADWORKS BUILDING ARCHITECTURAL ELEVATIONS/SECTIONS			X	X
39	A- 501	EFFLUENT PUMP STATION ARCHITECTURAL PLAN		X	X	X
40	A- 502	EFFLUENT PUMP STATION ARCHITECTURAL ELEVATIONS/SECTIONS			X	X
41	A- 550	ELECTRICAL BUILDING ARCHITECTURAL PLAN, ELEVATIONS/SECTIONS		X	X	X
<b>STRUCTURAL</b>						
42	S- 001	STRUCTURAL LEGENDS, SYMBOLS AND ABBREVIATIONS		X	X	X
43	S- 002	SPECIAL INSPECTIONS, TESTING SCHEDULE, AND CODE REQUIREMENTS		X	X	X
44	S- 003	STANDARD STRUCTURAL DETAILS - REINFORCED CONCRETE 1		X	X	X
45	S- 004	STANDARD STRUCTURAL DETAILS - REINFORCED CONCRETE 2		X	X	X
46	S- 005	STANDARD STRUCTURAL DETAILS - REINFORCED CMU AND NOTES		X	X	X
47	S- 006	STANDARD STRUCTURAL DETAILS - MISCELLANEOUS		X	X	X
48	S- 101	IPS STRUCTURAL PLAN, SECTIONS, AND DETAILS		X	X	X
49	S- 201	HEADWORKS BUILDING FOUNDATION PLAN		X	X	X
50	S- 202	HEADWORKS BUILDING ROOF FRAMING PLAN			X	X
51	S- 203	HEADWORKS BUILDING SECTIONS & DETAILS		X	X	X
52	S- 301	AERATION BASIN STRUCTURAL TOP PLAN		X	X	X

# Exhibit E

## Preliminary Final Design Drawing Index

			Design Phases			
			30%	60%	90%	100%
53	S- 302	AERATION BASIN STRUCTURAL BOTTOM PLAN			X	X
54	S- 303	AERATION BASIN SECTIONS AND DETAILS		X	X	X
55	S- 401	UV DISINFECTION STRUCTURAL TOP & BOTTOM PLAN			X	X
56	S- 403	UV DISINFECTION STRUCTURAL SECTIONS & DETAILS		X	X	X
57	S- 501	EPS STRUCTURAL TOP & BOTTOM PLAN			X	X
58	S- 503	EPS SECTIONS AND DETAILS		X	X	X
59	S- 550	ELECTRICAL BUILDING FOUNDATION AND ROOF FRAMING PLAN		X	X	X
60	S- 551	ELECTRICAL BUILDING SECTIONS AND DETAILS			X	X
<b>MECHANICAL</b>						
61	M- 001	MECHANICAL LEGENDS, SYMBOLS AND ABBREVIATIONS	X	X	X	X
62	M- 002	MECHANICAL PIPE AND VALVE SCHEDULES, GATE SCHEDULE			X	X
63	M- 003	STANDARD MECHANICAL DETAILS - PIPE PENETRATIONS & SUPPORTS			X	X
64	M- 005	STANDARD MECHANICAL DETAILS - HVAC			X	X
65	M- 006	STANDARD MECHANICAL DETAILS - PLUMBING			X	X
66	M- 100	IPS MECHANICAL DEMOLITION PLAN			X	X
67	M- 101	IPS MECHANICAL PLAN, SECTIONS, AND DETAILS	X	X	X	X
68	M- 201	HEADWORKS BUILDING MECHANICAL PLAN AND SECTIONS	X	X	X	X
69	M- 202	HEADWORKS BUILDING MECHANICAL DETAILS		X	X	X
70	M- 203	HEADWORKS BUILDING HVAC & PLUMBING PLAN, SCHEMATICS AND DETAILS			X	X
71	M- 301	AERATION BASIN MECHANICAL TOP PLAN	X	X	X	X
72	M- 302	AERATION BASIN MECHANICAL BOTTOM PLAN			X	X
73	M- 303	AERATION BASIN SECTIONS AND DETAILS	X		X	X
74	M- 401	EXIST. UV DISINFECTION SYSTEM DEMOLITION PLAN AND DETAILS			X	X
75	M- 402	UV DISINFECTION MECHANICAL PLAN	X	X	X	X
76	M- 403	UV DISINFECTION SECTIONS AND DETAILS		X	X	X
77	M- 501	EFFLUENT PUMP STATION DEMOLITION PLAN AND DETAILS		X	X	X
78	M- 502	EFFLUENT PUMP STATION PLAN AND SECTIONS	X	X	X	X
79	M- 503	EFFLUENT PUMP STATION DETAILS		X	X	X
80	M- 504	EFFLUENT PUMP STATION HVAC PLAN			X	X
81	M- 550	ELECTRICAL BUILDING HVAC PLAN			X	X
<b>PROCESS AND INSTRUMENTATION DIAGRAMS</b>						
82	P- 001	P&ID LEGENDS, SYMBOLS AND ABBREVIATIONS	X	X	X	X
83	P- 100	IPS P&ID	X	X	X	X
84	P- 200	HEADWORKS P&ID	X	X	X	X
85	P- 300	AERATION BASIN P&ID	X	X	X	X
86	P- 400	UV DISINFECTION P&ID	X	X	X	X
87	P- 500	EPS P&ID	X	X	X	X
<b>ELECTRICAL</b>						
88	E- 001	ELECTRICAL LEGENDS, SYMBOLS AND ABBREVIATIONS 1	X	X	X	X
89	E- 002	ELECTRICAL LEGENDS, SYMBOLS AND ABBREVIATIONS 2	X	X	X	X
90	E- 003	ELECTRICAL STANDARD DETAILS 1	X	X	X	X
91	E- 004	ELECTRICAL STANDARD DETAILS 2		X	X	X
92	E- 006	ELECTRICAL SCHEMATICS AND WIRING DIAGRAMS 1			X	X
93	E- 007	ELECTRICAL SCHEMATICS AND WIRING DIAGRAMS 2			X	X
94	E- 009	PANELBOARD SCHEDULE 1			X	X
95	E- 010	PANELBOARD SCHEDULE 2			X	X
96	E- 011	LIGHTING FIXTURE SCHEDULE			X	X
97	E- 012	ONE-LINE DIAGRAM	X	X	X	X
98	E- 013	MCC ELEVATIONS		X	X	X
99	E- 014	CONDUIT AND WIRE SCHEDULE			X	X
100	E- 015	ELECTRICAL SITE AND GROUNDING PLAN	X	X	X	X
101	E- 101	IPS POWER, SIGNAL AND DATA PLAN		X	X	X
102	E- 201	HEADWORKS POWER, SIGNAL, DATA AND LIGHTING PLAN		X	X	X
103	E- 202	HEADWORKS LIGHTING, RECEPTACLE AND GROUNDING PLAN			X	X
104	E- 300	AERATION BASIN POWER, SIGNAL, AND DATA PLAN		X	X	X
105	E- 401	UV DISINFECTION POWER, SIGNAL, DATA AND LIGHTING PLAN			X	X



**Exhibit E**  
**Preliminary Final Design Drawing Index**

			Design Phases			
			30%	60%	90%	100%
106	E- 501	EFFLUENT PUMP STATION POWER, SIGNAL, AND DATA PLAN			X	X
107	E- 502	EFFLUENT PUMP STATION LIGHTING, RECEPTACLE, AND GROUNDING PLAN		X	X	X
108	E- 550	ELECTRICAL BUILDING POWER, SIGNAL AND DATA PLAN		X	X	X
109	E- 551	ELECTRICAL BUILDING LIGHTING, RECEPTACLE, AND GROUNDING PLAN		X	X	X
<b>INSTRUMENTATION AND CONTROL</b>						
110	I- 001	INSTRUMENTATION AND CONTROL LEGENDS, SYMBOLS AND ABBREVIATIONS	X	X	X	X
111	I- 002	INSTRUMENT INSTALLATION STANDARD DETAILS 1		X	X	X
112	I- 003	INSTRUMENT INSTALLATION STANDARD DETAILS 2		X	X	X
113	I- 004	CONTROL AND REMOTE I/O PANEL DETAILS 1			X	X
114	I- 005	CONTROL AND REMOTE I/O PANEL DETAILS 2			X	X
115	I- 007	SCADA NETWORK DIAGRAM	X	X	X	X
116	I- 008	LOOP DIAGRAM (TYPICAL) - BUILDING DOOR ENTRY ALARM			X	X
117	I- 009	LOOP DIAGRAM (TYPICAL) - LEL ALARM			X	X
118	I- 010	LOOP DIAGRAM (TYPICAL) - MAGNETIC FLOW METER			X	X
119	I- 011	LOOP DIAGRAM (TYPICAL) - ULTRASONIC LEVEL TRANSMITTER			X	X
120	I- 012	LOOP DIAGRAM (TYPICAL) - LEVEL SWITCH AND PRESSURE TRANSMITTER			X	X
121	I- 200	ELECTRICAL BUILDING CONTROL PANEL - ELEVATION AND BILL OF MATERIALS		X	X	X
122	I- 201	ELECTRICAL BUILDING CONTROL PANEL - POWER SCHEMATIC			X	X
123	I- 202	ELECTRICAL BUILDING CONTROL PANEL - ANALOG INPUTS			X	X
124	I- 203	ELECTRICAL BUILDING CONTROL PANEL - ANALOG OUTPUTS			X	X
125	I- 204	ELECTRICAL BUILDING CONTROL PANEL - 24 VDC DIGITAL INPUTS			X	X
126	I- 205	ELECTRICAL BUILDING CONTROL PANEL - 120 VAC DIGITAL INPUTS			X	X
127	I- 206	ELECTRICAL BUILDING CONTROL PANEL - DIGITAL OUTPUTS			X	X
128	I- 600	UV/EPS AREA REMOTE I/O PANEL - ELEVATION AND BILL OF MATERIALS		X	X	X
129	I- 602	UV/EPS AREA REMOTE I/O PANEL - POWER SCHEMATIC			X	X
130	I- 602	UV/EPS AREA REMOTE I/O PANEL - ANALOG INPUTS			X	X
131	I- 603	UV/EPS AREA REMOTE I/O PANEL - ANALOG OUTPUTS			X	X
132	I- 604	UV/EPS AREA REMOTE I/O PANEL - 24 VDC DIGITAL INPUTS			X	X
133	I- 605	UV/EPS AREA REMOTE I/O PANEL - 120 VAC DIGITAL INPUTS			X	X
134	I- 606	UV/EPS AREA REMOTE I/O PANEL - DIGITAL OUTPUTS			X	X



## 2020 SCHEDULE OF CHARGES

### Personnel:

Labor will be invoiced by staff classification at the following hourly rates, which are valid from January 1, 2020 through December 31, 2020. After this period, the rates are subject to adjustment.

<u>Billing Classifications</u>	<u>2020 Rates</u>	<u>Billing Classifications</u>	
Principal Engineer VI	\$270	Construction Manager VIII	\$227
Principal Engineer V	\$260	Construction Manager VII	\$219
Principal Engineer IV	\$250	Construction Manager VI	\$203
Principal Engineer III	\$239	Construction Manager V	\$188
Principal Engineer II	\$230	Construction Manager IV	\$178
Principal Engineer I	\$222	Construction Manager III	\$162
Professional Engineer IX	\$212	Construction Manager II	\$150
Engineering Designer IX	\$204	Construction Manager I	\$133
Professional Engineer VIII	\$202	Inspector VII	\$188
Engineering Designer VIII	\$193	Inspector VI	\$172
Professional Engineer VII	\$191	Inspector V	\$156
Engineering Designer VII	\$184	Inspector IV	\$145
Professional Engineer VI	\$182	Inspector III	\$129
Engineering Designer VI	\$175	Inspector II	\$117
Professional Engineer V	\$171	Inspector I	\$100
Engineering Designer V	\$164	Technician IV	\$155
Professional Engineer IV	\$161	Technician III	\$139
Engineering Designer IV	\$161	Technician II	\$120
Professional Engineer III	\$157	Technician I	\$101
Engineering Designer III	\$157	Administrative III	\$110
Engineering Designer II	\$143	Administrative II	\$101
Engineering Designer I	\$132	Administrative I	\$89

### Project Expenses:

Expenses incurred that are directly attributable to the project will be invoiced at actual cost. These expenses include the following:

CADD Hardware/Software	\$18.00/hour
Modeling and GIS Hardware/Software	\$10.00/hour
Mileage	Then-current IRS Rate
Postage and Delivery Services	At Cost
Printing and Reproduction	At Cost
Travel, Lodging, and Subsistence	At Cost

### Outside Services:

Outside technical, professional, and other services will be invoiced at actual cost-plus 10 percent to cover administration and overhead.

# CITY OF SCAPPOOSE

## April 2020

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6 City Council 7pm	7	8	9	10	11
12	13	14	15	16 EDC ~ noon Park & Rec Committee 6pm <i>Cancelled</i>	17	18 Earth Day Heritage Park 12-3 <i>Cancelled</i>
19	20 Work Session, 6pm ? City Council 7pm	21	22	23 Planning Commission 7pm <i>Cancelled</i>	24	25
26	27	28	29	30		

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