

RESOLUTION NO. 2952

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, PIERCE COUNTY, WASHINGTON, AUTHORIZING A PROFESSIONAL SERVICES AGREEMENT WITH RH2 FOR THE DESIGN EFFORT OF THE MASTER TELEMETRY UNIT PANEL RELOCATION PROJECT.

WHEREAS, Public Services staff has listed the projects for the SCADA System Upgrades in the 2021-2022 Biennium Budget; and

WHEREAS, the City received a quote from RH2 to provide design services for the Master Telemetry Unit Panel Relocation Project in the amount of \$61,373.00;

WHEREAS, this agreement will authorize RH2 to provide design services;

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Bonney Lake does hereby authorize the Mayor to sign the attached contract with RH2 in the amount of \$61,373.00.

Passed by the City Council this 27th day of July, 2021.

DocuSigned by:
Neil Johnson, Jr.

Neil Johnson, Jr., Mayor

AUTHENTICATED:

DocuSigned by:
Harwood T. Edvalson

Harwood T. Edvalson, City Clerk

City of Bonney Lake, Washington
City Council Agenda Bill (AB)

Department/Staff Contact: PS / Doug Budzynski	Meeting/Workshop Date: 27 July 2021	Agenda Bill Number: AB21-86
Agenda Item Type: Resolution	Ordinance/Resolution Number: 2952	Sponsor:

Agenda Subject: Award A Professional Services Agreement to RH2 for design effort of the master telemetry unit panel relocation project.

Full Title/Motion: A Resolution Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Awarding A Professional Services Agreement To Rh2 For Design Effort Of The Master Telemetry Unit Panel Relocation Project .

Administrative Recommendation: Approve

Background Summary: This design is for the last phase of the SCADA Upgrades. This design will address moving the Master Telemetry Unit panel and the radio panel from the its current location at the existing PW yard to the new Public Services building. Included in this design is to incorporate in the bid package the upgrade for LS-7 and add a level transmitter into the wet well at LS-21. LS-7 is the last lift station that will need an upgrade and the design had been completed in January 2021. Construction for this phase is planned for 2022 upon approval. RH2 presented the City a scope of work to complete this effort including construction services for the project in the amount of \$61,373.00.

Attachments: Resolution 2952, Contract, Map

BUDGET INFORMATION

Budget Amount	Current Balance	Required Expenditure	Budget Balance	Fund Source
Sewer \$320,000.00	\$84,515.17	\$32,646.00	\$51,869.17	<input type="checkbox"/> General
Water: \$50,000.00	\$50,000.00	\$28,727.00	\$21,273.00	<input checked="" type="checkbox"/> Utilities
				<input type="checkbox"/> Other

Budget Explanation:

Water: Eden-401.018.034.594.34.65.01; Water Comprehensive Plan, F-01 SCADA Telemetry Upgrade.
 Sewer: Eden-402.018.035.594.35.65.01; Sewer Comprehensive Plan, SCADA Telemetry Upgrade.
 Revenue Source: Water SDCs, Sewer SDCs

COMMITTEE, BOARD & COMMISSION REVIEW

Council Committee Review: Community Development *Approvals:* Yes No
 Date: July 20, 2021

Chair/Councilmember	Dan Swatman	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Councilmember	Tom Watson	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Councilmember	Kelly McClimans	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Forward to: **Consent Agenda:** Yes No

Commission/Board Review:

Hearing Examiner Review:

COUNCIL ACTION

Workshop Date(s):	Public Hearing Date(s):
Meeting Date(s):	Tabled to Date:

APPROVALS

Director: <i>Ryan Johnstone</i>	Mayor: <i>Neil Johnson Jr.</i>	Date Reviewed by City Attorney: (if applicable)
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PROFESSIONAL SERVICES AGREEMENT
(Project Name: Master Telemetry Unit Panel Relocation)

THIS PROFESSIONAL SERVICES AGREEMENT ("Agreement") is made and entered into this 27th day of July, 2021, by and between the City of Bonney Lake ("City") and RH2 Engineering, Inc. ("Consultant").

The parties hereby agree as follows:

1. **Scope of Work.** The Consultant shall perform all work and provide all materials described in the Scope of Work set out in Exhibit A attached hereto and incorporated herein by this reference. Such work shall be performed using facilities, equipment and staff provided by Consultant, and shall be performed in accordance with all applicable federal, state and local laws, ordinances and regulations. The Consultant shall exercise reasonable care and judgment in the performance of work pursuant to this Agreement. The Consultant shall make minor changes, amendments or revisions in the detail of the work as may be required by the City, such work not to constitute Extra Work under this Agreement.
2. **Ownership of Work Product.** Documents, presentations and any other work product produced by the Consultant in performance of work under this Agreement shall be tendered to the City upon completion of the work, and all such product shall become and remain the property of the City and may be used by the City without restriction; provided, that any such use by the City not directly related to the particular purposes for which the work product was produced shall be without any liability whatsoever to the Consultant.
3. **Payment.** The Consultant shall be paid by the City for completed work and services rendered under this Agreement pursuant to the rates and charges set out in Exhibit B, attached hereto and incorporated herein by this reference. Such payment shall be full compensation for work performed or services rendered and for all labor, materials, supplies, equipment, and incidentals necessary to complete the work. All billings for compensation for work performed under this Agreement shall list actual time and dates during which the work was performed and the compensation shall be figured using the rates set out in Exhibit B; provided, that payment for work within the Scope of Work (Exhibit A) shall not exceed the fee/hour estimate set out in Exhibit A without written amendment to this Agreement, agreed to and signed by both parties.

Acceptance of final payment by the Consultant shall constitute a release of all claims, related to payment under this Agreement, which the Consultant may have against the City unless such claims are specifically reserved in writing and transmitted to the City by the Consultant prior to acceptance of final payment. Final payment shall not, however, be a bar to any claims that the City may have against the Consultant or to any remedies the City may pursue with respect to such claims.

The Consultant and its sub consultants shall keep available for inspection, by the City, for a period of three years after final payment, the cost records and accounts pertaining to this Agreement and

all items related to, or bearing upon, such records. If any litigation, claim or audit is started before the expiration of the three-year retention period, the records shall be retained until all litigation, claims or audit findings involving the records have been resolved. The three-year retention period shall commence when the Consultant receives final payment.

4. Changes in Work. The Consultant shall make all revisions and changes in the work completed under this Agreement as are necessary to correct errors, when required to do so by the City, without additional compensation.

5. Extra Work. The City may desire to have the Consultant perform work or render services in addition to or other than work provided for by the expressed intent of the Scope of Work. Such work will be considered Extra Work and will be specified in a written supplement which will set forth the nature and scope thereof. Work under a supplement shall not proceed until authorized in writing by the City. Any dispute as to whether work is Extra Work or work already covered by this Agreement shall be resolved before the work is undertaken. Performance of the work by the Consultant prior to resolution of any such dispute shall waive any claim by the Consultant for compensation as Extra Work.

6. Employment. Any and all employees of Consultant, while engaged in the performance of any work or services required by the Consultant under this Agreement, shall be considered employees of the Consultant only and not of the City, and any and all claims that may or might arise under the Workman's Compensation Act on behalf of said employees, while so engaged; any and all taxes arising out of Consultant's or Consultant's employees' work under this Agreement; and any and all claims made by a third party as a consequence of any acts, errors, or omissions on the part of the Consultant's employees, while so engaged, shall be the sole obligation and responsibility of the Consultant, except as provided in Section 12 of this agreement. The Consultant's relation to the City shall at all times be as an independent contractor.

7. Nondiscrimination and Legal Compliance. Consultant agrees not to discriminate against any client, employee or applicant for employment or for services because of race, creed, color, national origin, marital status, gender, age or handicap except for a bona fide occupational qualification with regard to, but not limited to, the following: employment upgrading; demotion or transfer; recruitment or any recruitment advertising; layoff or termination; rates of pay or other forms of compensation; selection for training; and rendition of services. The consultant represents and warrants that it is in compliance with and agrees that it will remain in compliance with the provisions of the Immigration Reform and Control Act of 1986, including but not limited to the provisions of the Act prohibiting the hiring and continued employment of unauthorized aliens and requiring verification and record keeping with respect to the status of each of its employees' eligibility for employment. The consultant shall include a provision substantially the same as this section in any and all contracts with sub consultants performing work required of the contractor under this contract. The consultant agrees to indemnify and hold the City harmless from any and all liability, including liability for interest and penalties, the City may incur as a result of the consultant failing to comply with any provisions of the Immigration Reform and Control Act of 1986. Consultant understands and agrees that if it violates this section, this Agreement may be

terminated by the City, and that Consultant shall be barred from performing any services for the City in the future unless and until a showing is made satisfactory to the City that discriminatory practices have terminated and that recurrence of such action is unlikely.

8. Term. This Agreement shall become effective upon the day of its execution by both parties, and shall terminate upon completion of the work and delivery of all materials described in Exhibit A.

9. Termination by City. The City may terminate this Agreement at any time upon not less than ten (10) days written notice to Consultant, subject to the City's obligation to pay Consultant in accordance with subsections A and B below.

A. In the event this Agreement is terminated by the City other than for fault on the part of the Consultant, a final payment shall be made to the Consultant for actual cost of work complete at the time of termination of the Agreement. In addition, the Consultant shall be paid on the same basis as above for any authorized Extra Work completed. No payment shall be made for any work completed after ten (10) days following receipt by the Consultant of the termination notice. If the accumulated payment(s) made to the Consultant prior to the termination notice exceeds the total amount that would be due as set forth in this subsection, then no final payment shall be due and the Consultant shall immediately reimburse the City for any excess paid.

B. In the event the services of the Consultant are terminated by the City for fault on the part of the Consultant, subsection A of this section shall not apply. In such event the amount to be paid shall be determined by the City with consideration given to the actual costs incurred by the Consultant in performing the work to the date of termination, the amount of work originally required which was satisfactorily completed to date of termination, whether that work is in a form or of a type which is usable by the City at the time of termination, the cost to the City of employing another person or firm to complete the work required and the time which may be required to do so, and other factors which affect the value to the City of the work performed at the time of termination. Under no circumstances shall payment made under this subsection exceed the amount which would have been made if subsection A of this section applied.

C. In the event this Agreement is terminated prior to completion of the work, the original copies of all work products prepared by the Consultant prior to termination shall become the property of the City for its use without restriction; provided, that any such use by the City not directly related to the particular purposes for which the work product was produced shall be without any liability whatsoever to the Consultant.

10. Termination by Consultant. Consultant may terminate this Agreement only in response to material breach of this Agreement by the City, or upon completion of the work set out in the Scope of Work and any Extra Work agreed upon by the parties.

11. **Applicable Law; Venue.** The law of the State of Washington shall apply in interpreting this Agreement. Venue for any lawsuit arising out of this Agreement shall be in the Superior Court of the State of Washington, in and for Pierce County.

12. **Indemnification / Hold Harmless**

Consultant shall defend, indemnify and hold the City, its officers, officials, employees and volunteers harmless from any and all claims, injuries, damages, losses or suits including attorney fees arising out of or resulting from the negligent acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City. In the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties. The provisions of this section shall survive the expiration or termination of this Agreement.

Insurance

The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

A. Minimum Scope of Insurance

Consultant shall obtain insurance of the types described below:

1. Automobile Liability insurance covering all owned non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
2. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent contractors and personal injury and advertising injury. The City shall be named as an insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City.
3. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.

4. Professional Liability insurance appropriate to the Consultant's profession.

B. Minimum Amounts of Insurance

Consultant shall maintain the following insurance limits:

1. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.

2. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.

3. Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.

C. Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions for Automobile Liability, Professional Liability and Commercial General Liability insurance:

1. The Consultant's insurance coverage shall be primary insurance as respect the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

2. The Consultant's insurance shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City.

D. Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.

E. Verification of Coverage

Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the work.

13. **Subletting or Assigning.** The Consultant shall not sublet or assign any of the work covered by this Agreement without the express written consent of the City.

14. **Entire Agreement.** This Agreement represents the entire Agreement between the parties. No change, termination or attempted waiver of any of the provisions of the Agreement shall be binding on any party unless executed in writing by authorized representatives of each

party. The agreement shall not be modified, supplemented or otherwise affected by the course of dealing between the parties.

15. **Waiver.** Failure by any party to this Agreement to enforce any provision of this Agreement or to declare a breach shall not constitute a waiver thereof, nor shall it impair any party's right to demand strict performance of that or any other provision of this Agreement any time thereafter.

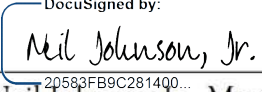
16. **Severability.** If any provision of this Agreement or its application is held invalid, the remainder of the Agreement or the application of the remainder of the Agreement shall not be affected.

17. **Execution and Acceptance.** This Agreement may be executed in several counterparts, each of which shall be deemed to be an original having identical legal effect. The Consultant hereby ratifies and adopts all statements, representations, warranties, covenants, and agreements contained in the supporting materials submitted by the Consultant, and does hereby accept the Agreement and agrees to all of the terms and conditions thereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

CITY OF BONNEY LAKE

RH2 ENGINEERING, INC.

By: 
Neil Johnson Jr., Mayor

By: 
Geoffrey G. Dillard, Director

Attachments:

Exhibit A: Scope of Work/Deliverables/Fee

Exhibit B: Rates

EXHIBIT A: SCOPE OF WORK

The Consultant shall perform the following services as directed by the City:

EXHIBIT A
Scope of Work
City of Bonney Lake
Master Telemetry Unit Panel Relocation
June 2021

Background

The City of Bonney Lake's (City) supervisory control and data acquisition (SCADA) system consists of the instrumentation, controllers, computers, software, and communication components required to monitor and control the City's water and wastewater infrastructure. The existing Master Telemetry Unit (MTU) and radio communications panel is located at the City's existing Public Works Facility. The City is in the process of constructing a new Public Works Facility, and the existing facility will be used for other purposes. The City desires to construct a proposed MTU and radio system at its new Public Works Facility to replace the existing. The existing equipment will temporarily remain at the current facility while communications to the City's water and wastewater facilities are moved from the existing system to the proposed system. In addition, RH2 Engineering, Inc., (RH2) completed bid-ready design plans and technical specifications in December 2020, for the replacement of the City's Sewage Lift Station No. 7 Remote Telemetry Unit (RTU). The City is requesting that the Lift Station No. 7 RTU replacement design plans and technical specifications be incorporated into the bid documents for this project. Finally, the City also desires to have a submersible level transmitter installed in the wet well at Sewage Lift Station No. 21.

The City has requested the services of RH2 to prepare bid-ready electrical installation plans and specifications, and provide services during bidding (SDB) and services during construction (SDC) tasks for this project, as well as provide the control software development for Lift Station Nos. 7 and 21. This Scope of Work details the design, SDB, SDC, and control software development tasks that will be performed by RH2.

DEFINITIONS

HMI – Human machine interface. The Microsoft Windows-based graphical computer interface used by City staff for monitoring the entire SCADA system.

MTU – Master telemetry unit. This refers to the central City headquarters SCADA equipment.

PLC – Programmable logic controller. This is an industrial monitoring and control computer used for controlling and monitoring of the reservoirs.

O&M – Operations and maintenance.

OI – Operator interface. This refers to a graphical touch screen provided at remote facilities for operator monitoring and control of a facility while onsite.

QA/QC – Quality assurance and quality control.

RTU – Remote Telemetry Unit

SCADA – Supervisory control and data acquisition. This is a distributed computer control system used for monitoring and controlling remote City water and wastewater facilities.

Task 1 – Project Administration

Objective: Administer project records and coordinate with the project team.

Approach:

- 1.1 Manage the RH2 project team to track work elements accomplished, work items planned for the next phase, man hours, scope changes, time, and budget needed to complete the work. Submit a monthly invoice summarizing costs and remaining budget.

RH2 Deliverables:

- Monthly invoices in electronic format (PDF).

Task 2 – MTU Panel and Electrical Design

Objective: Prepare bid-ready design plans and specifications for the proposed electrical and control system work at the City's new Public Works Building and Lift Station No. 21 for fabrication and installation of a proposed MTU panel, radio communications panel, and radio system antenna and cable at Public Works and for installation of a submersible level transmitter at Lift Station No. 21. Incorporate the previously prepared Lift Station No. 7 plans and technical specifications into the bid-ready design plans and specifications.

Approach:

- 2.1 Prepare Public Works MTU Panel and Radio Equipment Electrical Plans – Prepare electrical plans for the installation of the proposed panels at the new Public Works Building.
- 2.2 Incorporate Lift Station No. 7 Plans and Technical Specifications – Incorporate the previously prepared Lift Station No. 7 RTU replacement plans and technical specifications into the design.
- 2.3 Prepare Lift Station No. 21 Electrical Plans – Prepare electrical plans for installation of a submersible level transmitter at Lift Station No. 21.
- 2.4 Prepare Technical Specifications – Prepare technical specifications using RH2's modified Construction Specification Institute (CSI) format. Update the City's standard specifications and general conditions as warranted.
- 2.5 Submit 90-Percent Documents for City Review and Edit Plans – Design progress submittals shall be made at the 90-percent design stage and will include specifications and drawings. The 90-percent documents will be submitted to the City, and after a review period, RH2 will attend one (1) review meeting with the City. Upon completion of addressing the 90-percent comments, RH2 will submit a revised set of 90-percent documents to the City for final comment(s).
- 2.6 Perform QA/QC – Provide QA/QC services as part of this Scope of Work. Services will include a formal internal QA/QC process, which provides review of RH2's design and final deliverables.

- 2.7 Prepare Construction Cost Estimates – Prepare 90-percent and final construction cost estimates.
- 2.8 Prepare Final Bid Documents – Coordinate with the City in providing final bid documents to bidders. It is assumed that five (5) hard copy sets of bid documents with half-sized (11-inch by 17-inch) plans will be produced, with three (3) sets being for City staff, and two (2) sets for RH2. Bidders will receive electronic PDF versions only. Provide PDF versions of the plans and specifications to the City.

Assumptions:

- Refer to the attached Fee Estimate (Exhibit A) for an estimate of staff hours required for design tasks. Revisions due to changes in design criteria after those elements have been designed will require a Scope of Work and Fee Estimate amendment.

Provided by City:

- Standard specifications and general conditions.
- 90-percent design review comments and attendance at review meeting.

RH2 Deliverables:

- 90-percent design plan and specifications for City reviews in electronic format (PDF).
- In-house QA/QC reviews.
- Attendance at 90-percent design review meeting.
- One (1) 90-percent and final construction cost estimate in electronic format (PDF).
- Five (5) hard copy sets of bid documents with half-size (11-inch by 17-inch) plans. Two (2) sets shall be for RH2 use and file.
- One (1) set of bid-ready plans and specifications in electronic format (PDF) for the City's use in producing bid sets for electronic distribution.

Task 3 – Services During Bidding

Objective: Provide technical assistance to the City during project bidding.

Approach:

- 3.1 Respond to Bidder Questions – Respond to bidders' technical questions, as needed, during the bidding process. It is assumed that the City will respond to procedural questions. RH2 will not coordinate directly with bidders; RH2 will receive bidder questions from the City and respond via the City.
- 3.2 Prepare Project Bid Addendum – Prepare up to one (1) addendum in electronic format for the City to distribute to the plan holders.

Assumptions:

- The City will publish the advertisement in the required newspapers.
- The City will receive all bidder questions and record them for forwarding to RH2 at the City's discretion.
- The City will conduct the bid opening, and it is assumed that RH2 will not attend.
- The City will review all other elements of the bid proposals, as they deem appropriate.
- The City will be responsible for bid award and construction contract execution.

Provided by City:

- Advertisement for bid.
- Receive and record questions from bidders.
- Bid opening.
- Submit bids for bid tabulation.

RH2 Deliverables:

- Responses to bidder questions transmitted by the City to RH2.
- Up to one (1) addendum in electronic format (PDF).

Task 4 – Services During Construction

Objective: Provide technical services during construction, as requested by the City, for the MTU and radio system installation work, Lift Station No. 7 RTU replacement work, and Lift Station No. 21 submersible level transmitter installation work, including pre-construction meeting attendance, submittal review, on-site observation, and other services to the level as described in this Task and provided for in the Fee Estimate (Exhibit A). Should additional support be required, RH2 can prepare a contract amendment to this Scope of Work for additional services.

Approach:

- 4.1 Attend Pre-Construction Meeting – Attend the pre-construction meeting with the City and contractor to discuss technical sections of the project documents and project requirements. Contractor documents requiring review by RH2 will be submitted at the meeting for review and comments.
- 4.2 Review Submittals/Shop Drawings – Review shop drawings and catalog submittals of those items requested in the technical specifications. Provide a written response to the construction contractor and the City accepting or rejecting each shop drawing and catalog submittal reviewed.
- 4.3 Provide Design Clarification and Respond to Requests for Information – Provide technical support by responding to contractor's questions and requests for information (RFIs).

- 4.4 Provide Periodic On-Site Observation – Provide periodic on-site construction observation regarding the electrical and control construction work on an as-needed basis, as requested by the City. Construction observation is assumed to include no more than two (2) site visits from an RH2 project manager and/or staff engineer per site.
- 4.5 Review Change Orders – Review contractor pricing of change orders and provide a written recommendation to the City regarding the reasonableness of the cost. Upon City approval of the change, significant drawing and/or specification revisions required for change orders shall meet the same criteria required for design, including submittal in electronic format, unless otherwise directed by the City. Coordinate change orders with the City.
- 4.6 Attend Startup and Testing – Attend and witness factory testing of the MTU and Lift Station No. 7 RTU at the Control System Integrator’s facility. Attend and witness field testing and startup of the MTU, radio system, Lift Station No. 7 RTU, and Lift Station No. 21 submersible level transmitter. Prepare startup and testing checklist for both factory and field testing and startup.
- 4.7 Prepare Project Punch List – Prepare final punch list for electrical and SCADA improvements. The list will identify corrections required of the contractor before a final completion date is established.
- 4.8 Prepare Construction Record Drawings – Review field records and revise project drawings to prepare construction record drawings.

Assumptions:

- The construction phase services defined above are variable in nature and depend, in part, on the contractor awarded the project. The estimate is based upon an experienced and reasonable contractor being awarded the construction contract with the City. RH2 recommends the City budget the amount shown in the Fee Estimate (Exhibit A), plus a contingency amount. The contingency could cover additional services if a more intensive level of observation and technical support is deemed necessary by the City.
- RH2 is not responsible for site safety or for directing the contractor’s work.
- Submittals, RFIs, and change order documentation related to the electrical and control design will be sent directly to the City.
- If additional hours are needed to accomplish Task 4 due to events beyond RH2’s control, such as delays caused by others, RH2 will notify the City in advance of such additional hours needed, and a contract modification shall be mutually negotiated.
- MTU and HMI software development will be provided by the City’s HMI System Integrator, Parametrix, Inc., as part of a separate contract with the City. The Lift Station No. 7 RTU software development and Lift Station No. 21 RTU software modifications will be provided by RH2.

RH2 Deliverables:

- Written responses for shop drawings and submittals, RFIs, and change orders in electronic format (PDF).
- On-site observation reports in electronic format (PDF).
- One (1) copy of the completed startup and testing checklist in electronic format (PDF).
- One (1) copy of final project punch list in electronic format (PDF).
- One (1) set of construction record drawings in electronic format (PDF).

Task 5 – Software Development, Startup, and Testing

Objective: Provide control software development services for the proposed OI and PLC equipment at Lift Station No. 7 and control software modifications for the proposed OI and PLC equipment at Lift Station No. 21. Attend field testing, startup, and commissioning services.

Approach:

- 5.1 Develop SCADA Control Strategy – Develop a control strategy that will be used to develop the PLC and SCADA programming.
- 5.2 Develop PLC Software – Provide PLC ladder logic software development, as required, for monitoring and controlling the equipment at the lift stations.
- 5.3 Develop OI Software – Provide OI software development for the lift stations.
- 5.4 Coordinate with MTU and HMI Computer Systems Integrator – Coordinate with the City's MTU and HMI computer integrator, Parametrix, Inc., to integrate the proposed lift station control equipment into the existing SCADA system.
- 5.5 Attend Control Panel Factory Testing – Attend control panel factory testing at the control system integrator's panel shop. Witness hardware testing of the control panels by the control system integrator. Load PLC and OI software onto the proposed PLC and OI and test software functionality.
- 5.6 Attend Field Testing, Startup, and Commissioning – Attend field tests for PLC, OI, and communications equipment for end-to-end data transmission integrity and accuracy. Attend field tests for OI screens for connectivity, detail, and accuracy of information displayed. Attend field tests for SCADA alarm, navigation, and intrusion security configurations and functions. Attend startup and commissioning. Develop associated reporting.
- 5.7 Develop SCADA system O&M material.
- 5.8 Provide SCADA System Training – Provide one (1) four (4) hour day of on-site training on manual, programming, communications, and software operation aspects of the system utilizing the O&M manual as a training aid.

Assumptions:

- Software development, data points, and graphical displays will be defined and approved by RH2 and the City.
- Pump control will be defined and approved by RH2 and the City.
- RH2's Fee Estimate (Exhibit A) for Task 5 assumes a certain level of cooperation and timeliness from the contractor and any third parties required for testing. If additional hours are needed to accomplish Task 5 due to events beyond RH2's control, RH2 will notify the City in advance of such additional hours needed, and a contract modification shall be mutually negotiated.
- RH2 will provide four (4) hours of training to City staff. If the City requires assistance above and beyond the fee amount associated for subtask 5.8, the City and RH2 will mutually agree upon an additional fee amount for continued training.

RH2 Deliverables:

- Control strategy developed during subtask 5.1.
- PLC software and OI screen designs developed in subtasks 5.2 and 5.3.
- Attendance at factory and field testing, startup, and commissioning.
- Final startup and commissioning reports completed during subtask 5.6.
- One (1) electronic copy of PLC and OI software.
- One (1) electronic copy of the following items.
 - Project spreadsheet file that includes information about the software configuration, addressing, data point names, alarms, control loops, and descriptions.
 - O&M material for SCADA system software.

EXHIBIT A

Fee Estimate
 City of Bonney Lake
 Master Telemetry Unit Panel Relocation
 Jun-21

Task	Description Classification	Project Manager		Principal		Project Engineer		Staff Engineer		Staff Engineer		Control System Project Engineer		Project Accounting		Administrative Support		Total Hours	Total Labor	Total Expense	Total Cost									
		Professional VII	Professional VIII	Professional IV	Professional I	Professional II	Professional III	Professional VI	Administrative II	Administrative IV	Administrative I	Administrative III																		
Task 1	Project Administration	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	\$ 1,104	\$ 46	\$ 1,150									
1.1	Manage the RFP project team	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6	\$ 1,104	\$ 46	\$ 1,150									
Task 2	MTU Panel and Electrical Design	38	4	4	64	4	36	2	12	2	8	2	2	2	2	2	2	118	\$ 20,838	\$ 2,785	\$ 23,623									
2.1	Prepare Public Works MTU Panel and Radio Equipment Electrical Plans	12	-	4	36	4	2	2	12	2	8	2	2	2	2	2	2	52	\$ 8,776	\$ 1,289	\$ 10,065									
2.2	Incorporate IFT Station No. 2 Plans and Technical Specifications	2	-	4	12	-	2	-	12	-	8	-	-	-	-	-	-	16	\$ 756	\$ 74	\$ 830									
2.3	Prepare IFT Station No. 2 Electrical Plans	4	-	-	12	-	2	-	12	-	8	-	-	-	-	-	-	16	\$ 2,672	\$ 417	\$ 3,089									
2.4	Prepare Technical Specifications	6	-	-	6	-	2	-	6	-	4	-	-	-	-	-	-	12	\$ 1,882	\$ 65	\$ 1,947									
2.5	Submit 90-Percent Documents for City Review and Edit Plans	6	-	-	6	-	2	-	6	-	4	-	-	-	-	-	-	12	\$ 2,268	\$ 278	\$ 2,546									
2.6	Perform QA/QC	4	-	4	4	-	2	-	4	-	2	-	-	-	-	-	-	8	\$ 1,908	\$ 88	\$ 1,996									
2.7	Prepare Construction Cost Estimates	2	-	-	4	-	2	-	4	-	2	-	-	-	-	-	-	6	\$ 1,046	\$ 136	\$ 1,182									
2.8	Prepare Final Bid Documents	2	-	-	4	-	2	-	4	-	2	-	-	-	-	-	-	10	\$ 1,530	\$ 438	\$ 1,968									
Task 3	Services During Bidding	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8	\$ 1,864	\$ 47	\$ 1,911									
3.1	Respond to Bidder Questions	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	\$ 932	\$ 23	\$ 955									
3.2	Prepare Project Bid Addendum	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	\$ 932	\$ 23	\$ 955									
Task 4	Services During Construction	38	-	-	74	-	12	2	12	2	8	2	2	2	2	2	2	112	\$ 19,584	\$ 3,680	\$ 23,264									
4.1	Attend Pre-construction Meeting	6	-	-	12	-	2	-	12	-	8	-	-	-	-	-	-	18	\$ 3,398	\$ 41	\$ 3,439									
4.2	Review Submittals/Shop Drawings	6	-	-	12	-	2	-	12	-	8	-	-	-	-	-	-	18	\$ 3,134	\$ 48	\$ 3,182									
4.3	Provide Design Clarification and respond to RFIs	6	-	-	12	-	2	-	12	-	8	-	-	-	-	-	-	18	\$ 3,074	\$ 50	\$ 3,124									
4.4	Provide Periodic On-site Observation	2	-	-	2	-	2	-	2	-	2	-	-	-	-	-	-	4	\$ 752	\$ 71	\$ 823									
4.5	Provide Change and Escalation	6	-	-	12	-	2	-	12	-	8	-	-	-	-	-	-	18	\$ 3,620	\$ 71	\$ 3,691									
4.6	Attend Start-up and Testing	6	-	-	12	-	2	-	12	-	8	-	-	-	-	-	-	18	\$ 5,924	\$ 1,084	\$ 7,008									
4.7	Prepare Project Punch List	2	-	-	4	-	2	-	4	-	2	-	-	-	-	-	-	6	\$ 1,046	\$ 136	\$ 1,182									
4.8	Prepare Construction Record Drawings	2	-	-	4	-	2	-	4	-	2	-	-	-	-	-	-	10	\$ 1,626	\$ 341	\$ 1,967									
Task 5	Software Development, Start-up, and Testing	-	-	-	8	-	2	2	2	2	2	2	2	2	2	2	2	68	\$ 11,300	\$ 715	\$ 12,015									
5.1	Develop SCADA Control Strategy	-	-	-	8	-	2	2	2	2	2	2	2	2	2	2	2	2	\$ 434	\$ 11	\$ 445									
5.2	Develop PLC Software	-	-	-	8	-	2	2	2	2	2	2	2	2	2	2	2	10	\$ 1,722	\$ 43	\$ 1,765									
5.3	Develop OI Software	-	-	-	4	-	2	2	2	2	2	2	2	2	2	2	2	6	\$ 1,078	\$ 27	\$ 1,105									
5.4	Coordinate with MTU and HMI Computer Systems Integrator	-	-	-	2	-	2	2	2	2	2	2	2	2	2	2	2	2	\$ 322	\$ 8	\$ 330									
5.5	Attend Control Panel Factory Testing	-	-	-	8	-	2	2	2	2	2	2	2	2	2	2	2	16	\$ 2,448	\$ 326	\$ 2,774									
5.6	Attend Field Testing, Start-up, and Commissioning	-	-	-	20	-	2	2	2	2	2	2	2	2	2	2	2	20	\$ 3,220	\$ 193	\$ 3,413									
5.7	Develop SCADA System O&M Material	-	-	-	2	-	2	2	2	2	2	2	2	2	2	2	2	8	\$ 1,432	\$ 36	\$ 1,468									
5.8	Provide SCADA System Training	-	-	-	4	-	2	2	2	2	2	2	2	2	2	2	2	4	\$ 644	\$ 72	\$ 716									
PROJECT TOTAL																			88	4	4	146	48	10	2	10	312	\$ 54,690	\$ 6,683	\$ 61,373

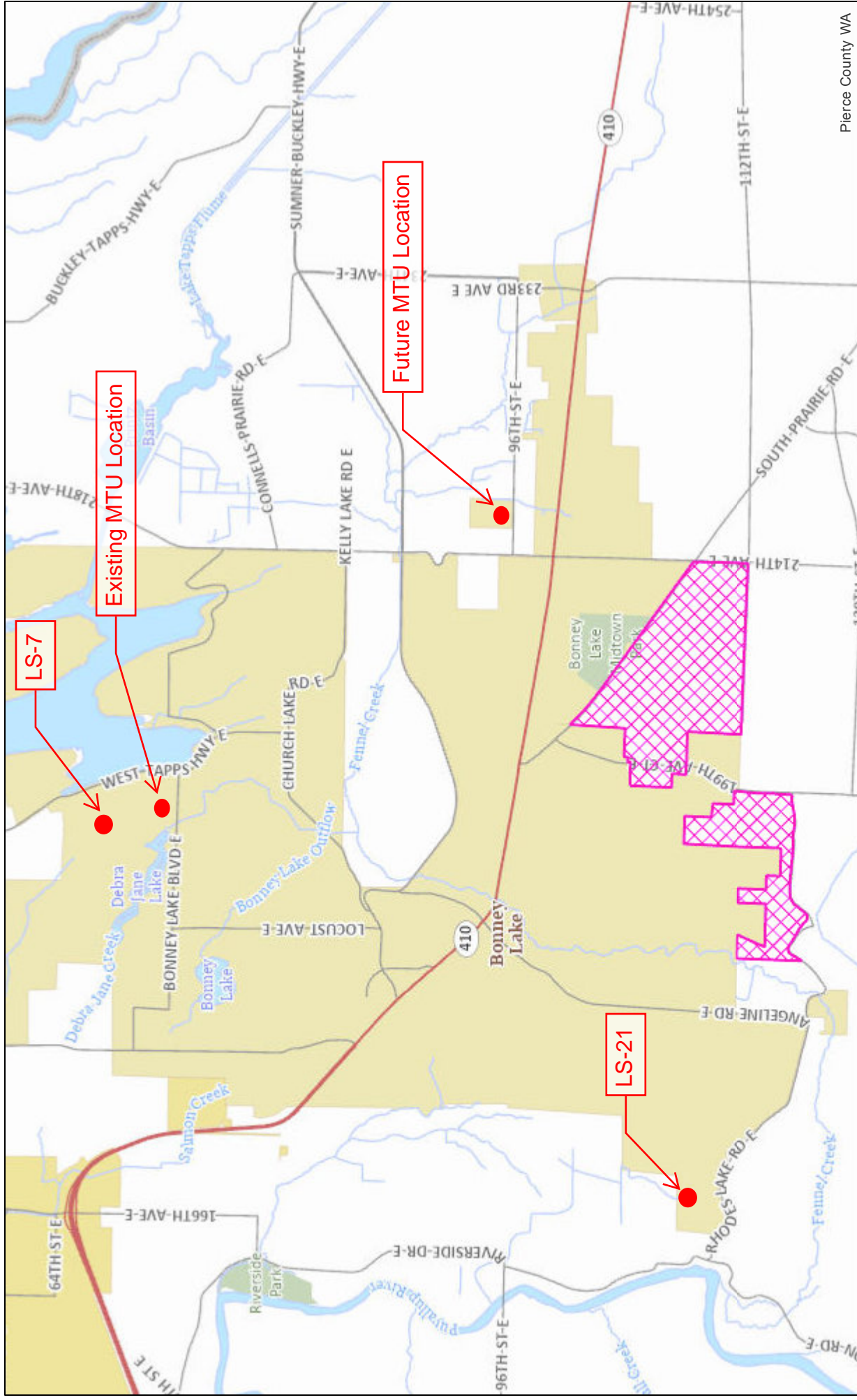
EXHIBIT B
RH2 ENGINEERING, INC.
2021 SCHEDULE OF RATES AND CHARGES

RATE LIST	RATE	UNIT
Professional I	\$145	\$/hr
Professional II	\$161	\$/hr
Professional III	\$174	\$/hr
Professional IV	\$190	\$/hr
Professional V	\$205	\$/hr
Professional VI	\$217	\$/hr
Professional VII	\$233	\$/hr
Professional VIII	\$244	\$/hr
Professional IX	\$244	\$/hr
Control Specialist I	\$133	\$/hr
Control Specialist II	\$145	\$/hr
Control Specialist III	\$159	\$/hr
Control Specialist IV	\$172	\$/hr
Control Specialist V	\$184	\$/hr
Control Specialist VI	\$198	\$/hr
Control Specialist VII	\$211	\$/hr
Control Specialist VIII	\$221	\$/hr
Technician I	\$111	\$/hr
Technician II	\$121	\$/hr
Technician III	\$138	\$/hr
Technician IV	\$148	\$/hr
Technician V	\$162	\$/hr
Technician VI	\$178	\$/hr
Technician VII	\$193	\$/hr
Technician VIII	\$203	\$/hr
Administrative I	\$72	\$/hr
Administrative II	\$86	\$/hr
Administrative III	\$102	\$/hr
Administrative IV	\$121	\$/hr
Administrative V	\$139	\$/hr
CAD/GIS System	\$27.50	\$/hr
CAD Plots - Half Size	\$2.50	price per plot
CAD Plots - Full Size	\$10.00	price per plot
CAD Plots - Large	\$25.00	price per plot
Copies (bw) 8.5" X 11"	\$0.09	price per copy
Copies (bw) 8.5" X 14"	\$0.14	price per copy
Copies (bw) 11" X 17"	\$0.20	price per copy
Copies (color) 8.5" X 11"	\$0.90	price per copy
Copies (color) 8.5" X 14"	\$1.20	price per copy
Copies (color) 11" X 17"	\$2.00	price per copy
Technology Charge	2.50%	% of Direct Labor
Mileage	\$0.560	price per mile (or Current IRS Rate)
Subconsultants	15%	Cost +
Outside Services	at cost	


Rates listed are adjusted annually.



Final SCADA Upgrades

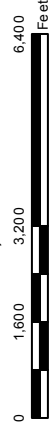


Pierce County WA

Urban Growth Area  Proposed

 Official

1:38,400



Date: 6/28/2021