

RESOLUTION NO. 3197

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, PIERCE COUNTY, WASHINGTON, AUTHORIZING THE AWARD OF A PROFESSIONAL SERVICES CONTRACT TO RH2 FOR CONSTRUCTION MANAGEMENT SERVICES TO SUPPORT THE GRAINGER SPRINGS PUMP STATION UPGRADE PROJECT

WHEREAS, the City opened three bids on January 17, 2024 and the low bidder was determined to be McClure and Sons, Inc. in the amount of \$2,556,787 which includes sales tax; and

WHEREAS, RESOLUTION 3196 awarded the construction contract to McClure and Sons, Inc.; and

WHEREAS, replacing a water pump station requires construction management services with a firm familiar with this specialized type of work; and

WHEREAS, RH2 is the design engineer of record and is a construction management firm that has provided construction management services for similar type work and has provided a scope and fee for \$297,934; and

WHEREAS, Krazan and Associates, Inc has provided a scope and fee in the amount of \$6750 to provide materials testing services; and

WHEREAS, the City has budgeted \$2,050,000 in 2023 and 2024 for the Cedar View Water Main Replacement Project and the design of this project to the 2025/2026 budget and these water utility funds can be used allocated to support the Grainger Springs Pump Station Replacement project; and

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, WASHINGTON DOES HEREBY RESOLVE AS FOLLOWS:

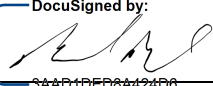
Section 1. Authorization of Contract. The Mayor is authorized to sign the attached professional services contract with RH2 Engineering Inc. for construction management services to support staff with the Grainger Springs Pump Station project in the amount of \$297,934.

Section 2. Contingency Authorized. Ten percent (10%) of the scope and budget is authorized for construction management contingency (\$29,793). A portion (\$6,750) of the construction management contingency will be used to fund materials testing services provided by Krazan and Associates. The sum amount of the professional services contract and construction management contingency is the total project construction budget (\$327,727).

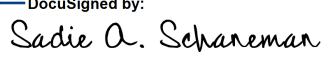
Section 3. Implementation Authorized. The Mayor is authorized to take the actions necessary to implement this contract.

Section 4. Transfer of Funds Authorized. The Mayor is authorized to direct City staff to transfer \$327,727 from the Cedar View Water Main project to this project.

PASSED by the City Council this 13th day of February 2024.

DocuSigned by:

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Michael McCullough, Mayor

AUTHENTICATED:

DocuSigned by:

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Sadie A. Schaneman, CMC, City Clerk

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

Department/Staff Contact: Public Services / Ken Gill	Meeting/Workshop Date: February 13, 2024	Agenda Bill Number: AB24-13
Agenda Item Type: Resolution	Ordinance/Resolution/Motion Number: 3197	Sponsor:

Agenda Subject: Grainger Springs Pump Station Upgrade Project.

Full Title/Motion: A Resolution Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Authorizing The Award Of A Professional Services Contract To RH2 For Construction Management Services To Support The Grainger Springs Pump Station Upgrade Project.

Administrative Recommendation: Award Professional Services Contract To RH2.

Background Summary: Grainger Springs Pump House (constructed in 1974) is at the end of its design life. The Grainger Springs Pump House Replacement project consists of the construction of a new pump facility including a below grade concrete clear well, concrete masonry unit building, vertical turbine pumps, mechanical piping and plumbing, heating, ventilation and air conditioning, electrical equipment, and site utilities. The project includes relocation of existing electrical and automatic control equipment and a existing vertical turbine pump. The project also includes the demolition of the existing pump house and site restoration. All of these tasks require inspection, pay estimate preparation and review of submittals. RH2 provided the design for the project and has prepared the attached scope for construction management services. Clayton Posey is the project manager. Clayton began working as a intern for City; he is now a professional engineer supporting us to maintain our water and sewer systems.

Attachments: Resolution 3197, PSA Contract, Scope of Work.

BUDGET INFORMATION

Budget Amount	Current Balance	Required Expenditure	Budget Balance	Fund Source
\$2,290,104	(\$394,522)	\$327,727	(\$722,250)	<input type="checkbox"/> General
				<input checked="" type="checkbox"/> Utilities
				<input type="checkbox"/> Other

Budget Explanation: BARS #401.102.034.594.34.62.04 To fully fund the project, staff propose to use the funding (\$327,727) budgeted in 2024 for the Cedar View Water Main Replacement Project.

COMMITTEE, BOARD & COMMISSION REVIEW

Council Committee Review:	CDC	Approvals:	Yes	No
	Date: 6 February 2024	Chair/Councilmember	Dan Swatman	<input type="checkbox"/> <input type="checkbox"/>
		Councilmember	Gwendolyn Fullerton	<input type="checkbox"/> <input type="checkbox"/>
		Councilmember	J.Kelly McClimans	<input type="checkbox"/> <input type="checkbox"/>
	Forward to: CDC Items	Consent Agenda:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Commission/Board Review:

Hearing Examiner Review:

COUNCIL ACTION

Workshop Date(s):	Public Hearing Date(s):
Meeting Date(s): 2/13/24	Tabled to Date:

APPROVALS

Director:
Jason Sullivan

Mayor:
Michael McCullough

**Date Reviewed
by City Attorney:**
(if applicable)

**PROFESSIONAL SERVICES AGREEMENT BETWEEN
THE CITY OF BONNEY LAKE AND RH2 ENGINEERING INC**

THIS PROFESSIONAL SERVICES AGREEMENT is entered into by and between the City of Bonney Lake, Washington, a municipal corporation (“**City**”) and RH2 Engineering, Inc, organized under the laws of the State of Washington, located and doing business at 1201 Pacific Avenue, Suite 1750, Tacoma, Washington 98402 (hereinafter the “**Consultant**”).

RECITALS:

WHEREAS, the City desires to have Construction Contract Administration Services performed; and

WHEREAS, the City has selected the Consultant to perform such services pursuant to certain terms and conditions; and

NOW, THEREFORE, in consideration of the mutual benefits and conditions set forth below, the Parties agree as follows:

AGREEMENT:

1. Scope of Services to be Performed by Consultant.

The Consultant shall perform those services described on Exhibit “A,” which is attached hereto and incorporated herein by this reference as if set forth in full. In performing such services, the Consultant shall at all times comply with all federal, state, and local statutes, rules and ordinances applicable to the performance of such services and the handling of any funds used in connection therewith. The Consultant shall perform the services diligently and completely and in accordance with professional standards of conduct and performance. The Consultant shall request and obtain prior written approval from the City if the scope or schedule is to be modified in any way.

2. Compensation and Method of Payment.

The City shall pay the Consultant for services rendered a sum not to exceed Two Hundred Ninety-Seven Thousand Nine Hundred Thirty-Four Dollars (\$297,934) for the work set forth in Exhibit “A”. The City shall pay the Consultant withing a reasonable amount of time once an invoice is provided, provided that the Consultant is making steady progress on the work and meeting its deadlines. Such installments shall be paid on the first and/or third Thursday of the month with the final installment being paid after delivery of record drawings. The City further reserves the right to direct the Consultant's compensated services before reaching the maximum amount.

3. Duration of Agreement. This Agreement shall be in full force and effect for a period commencing on the date the last Party executes this Agreement and ending upon completion unless sooner terminated under the provisions of this Agreement or extended by mutual agreement of the Parties. Time is of the essence of this Agreement in each and all of its provisions in which

performance is required.

4. Ownership and Use of Documents.

A. *Ownership.* Any records, files, documents, drawings, specifications, data, or information, regardless of form or format, and all other materials produced by the Consultant in connection with the services provided to the City, shall be the property of the City whether the project for which they were created is executed or not. Reuse of materials produced by the Consultant other than as contemplated by this Agreement shall be without liability to the Consultant.

B. *Records preservation.* Consultant understands that this Agreement is with a government agency and thus all records created or used in the course of Consultant's work for the City are considered "public records" and may be subject to disclosure by the City under the Public Records Act, Chapter 42.56 RCW ("the Act"). Consultant agrees to safeguard and preserve records in accordance with the Act. The City may be required, upon request, to disclose the Agreement, and the documents and records submitted to the City by Consultant, unless an exemption under the Public Records Act applies. If the City receives a public records request and asks Consultant to search its files for responsive records, Consultant agrees to make a prompt and thorough search through its files for responsive records and to promptly turn over any responsive records to the City's public records officer at no cost to the City.

5. Independent Consultant. The Parties intend that an independent contractor-client relationship will be created by this Agreement. As the Consultant is customarily engaged in an independently established trade which encompasses the specific service provided to the City hereunder, no agent, employee, representative or sub-consultant of the Consultant shall be or shall be deemed to be the employee, agent, representative or sub-consultant of the City. In the performance of the work, the Consultant is an independent contractor with the ability to control and direct the performance and details of the work, the City being interested only in the results obtained under this Agreement. None of the benefits provided by the City to its employees, including, but not limited to, compensation, insurance, and unemployment insurance are available from the City to the employees, agents, representatives, or sub-consultants of the Consultant. The City shall not be responsible for withholding or otherwise deducting federal income tax or social security or contributing to the State Industrial Insurance Program, or otherwise assuming the duties of an employer with respect to the Consultant, or any employee of the Consultant. The Consultant will be solely and entirely responsible for its acts and for the acts of its agents, employees, representatives, and sub-consultants during the performance of this Agreement. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work that the Consultant performs hereunder.

6. Indemnification. Consultant shall defend, indemnify, and hold the City, its officers, officials, employees, agents, and volunteers harmless from any and all claims, injuries, damages, losses or suits including reasonable attorneys' fees, to the extent 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.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, 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.

7. 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:

- i. 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.
- ii. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent Consultants 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.
- iii. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
- iv. Professional Liability insurance appropriate to the Consultant's profession.

B. *Minimum Amounts of Insurance.* Consultant shall maintain the following insurance limits:

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

- ii. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
- iii. 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 Provision.* The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain, that they 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.

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.* The 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.

F. *Notice of Cancellation.* The Consultant shall provide the City with written notice of any policy cancellation, within two business days of their receipt of such notice.

G. *Failure to Maintain Insurance.* Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five business days' notice to the Consultant to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.

H. *No Limitation.* Consultant's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

8. Record Keeping and Reporting.

A. The Consultant shall maintain accounts and records, including personnel, property, financial, and programmatic records, which sufficiently and properly reflect all direct and indirect costs of any nature expended and services performed pursuant to this Agreement. The Consultant shall also maintain such other records as may be deemed necessary by the City to ensure proper accounting of all funds contributed by the City to the performance of this Agreement.

B. The foregoing records shall be maintained for a period of seven (7) years after termination of this Agreement unless permission to destroy them is granted by the Office of the Archivist in accordance with Chapter 40.14 RCW and by the City.

9. City's Right of Inspection and Audit.

A. Even though the Consultant is an independent contractor with the authority to control and direct the performance and details of the work authorized under this Agreement, the work must meet the approval of the City and shall be subject to the City's general right of inspection to secure the satisfactory completion thereof. The Consultant agrees to comply with all federal, state, and municipal laws, rules, and regulations that are now effective or become applicable within the terms of this Agreement to the Consultant's business, equipment, and personnel engaged in operations covered by this Agreement or accruing out of the performance of such operations.

B. The records and documents with respect to all matters covered by this Agreement shall be subject at all times to inspection, review or audit by the City during the performance of this Agreement. All work products, data, studies, worksheets, models, reports, and other materials in support of the performance of the service, work products, or outcomes fulfilling the contractual obligations are the products of the City.

10. Consultant to Maintain Records to Support Independent Contractor Status. On the effective date of this Agreement (or shortly thereafter), the Consultant shall comply with all federal and state laws applicable to independent contractors including, but not limited to the maintenance of a separate set of books and records that reflect all items of income and expenses of the Consultant's business, pursuant to the Revised Code of Washington (RCW) Section 51.08.195, as required to show that the services performed by the Consultant under this Agreement shall not give rise to an employer-employee relationship between the Parties which is subject to RCW Title 51, Industrial Insurance.

11. Work Performed at the Consultant's Risk. The Consultant shall take all precautions necessary and shall be responsible for the safety of its employees, agents, and sub-consultants in the performance of the work hereunder and shall utilize all protection reasonably necessary for that purpose. All work shall be done at the Consultant's own risk, and the Consultant shall be responsible for any loss of or damage to materials, tools, or other articles used or held by the Consultant for use in connection with the work.

12. Termination.

A. The City reserves the right to terminate or suspend this Agreement at any time, with or without cause, upon seven (7) days' prior written notice. In the event of

termination or suspension, all finished or unfinished documents, data, studies, worksheets, models, reports, or other materials prepared by the Consultant pursuant to this Agreement shall promptly be submitted to the City.

B. In the event this Agreement is terminated or suspended, the Consultant shall be entitled to payment for all services performed and reimbursable expenses incurred to the date of termination.

C. This Agreement may be canceled immediately if the Consultant's insurance coverage is canceled for any reason, or if the Consultant is unable to perform the services called for by this Agreement.

D. The Consultant reserves the right to terminate this Agreement with not less than fourteen (14) days written notice, or in the event that outstanding invoices are not paid within sixty (60) days.

E. This provision shall not prevent the City from seeking any legal remedies it may otherwise have for the violation or nonperformance of any provisions of this Agreement.

13. Force Majeure. Notwithstanding anything to the contrary in this Agreement, any prevention, delay or stoppage due to strikes, lockouts, labor disputes, acts of God, acts of war, terrorist acts, inability to obtain services, labor, or materials or reasonable substitutes therefor, governmental actions, governmental laws, regulations or restrictions, civil commotions, Casualty, actual or threatened public health emergency (including, without limitation, epidemic, pandemic, famine, disease, plague, quarantine, and other significant public health risk), governmental edicts, actions, declarations or quarantines by a governmental entity or health organization, breaches in cybersecurity, and other causes beyond the reasonable control of the Party obligated to perform, regardless of whether such other causes are (i) foreseeable or unforeseeable or (ii) related to the specifically enumerated events in this paragraph (collectively, a "**Force Majeure**"), shall excuse the performance of such Party for a period equal to any such prevention, delay or stoppage. To the extent this Agreement specifies a time period for performance of an obligation of either Party, that time period shall be extended by the period of any delay in such Party's performance caused by a Force Majeure. Provided however, that the current COVID-19 pandemic shall not be considered a Force Majeure unless constraints on a Party's performance that result from the pandemic become substantially more onerous after the effective date of this Agreement. In order to claim Force Majeure, the Party claiming must provide notice to the other Party within fourteen (14) days of the event which constitutes Force Majeure or such claim shall be waived for any period in which notice was due.

14. Discrimination Prohibited. The Consultant shall not discriminate against any employee, applicant for employment, or any person seeking the services of the Consultant under this Agreement, on the basis of race, color, religion, creed, sex, sexual orientation, age, national origin, marital status, presence of any sensory, mental or physical disability, or other circumstance prohibited by federal, State or local law or ordinance, except for a bona fide occupational

qualification.

15. Assignment and Subcontract. The Consultant shall not assign or subcontract any portion of the services contemplated by this Agreement without the prior written consent of the City. Any assignment made without the prior approval of the City is void.

16. Conflict of Interest. The Consultant represents to the City that it has no conflict of interest in performing any of the services set forth in Exhibit "A." In the event that the Consultant is asked to perform services for a project with which it may have a conflict, Consultant will immediately disclose such conflict to the City.

17. Confidentiality. All information regarding the City obtained by the Consultant in performance of this Agreement shall be considered confidential. Consultant shall not disclose any such information to any third parties without (1) the prior written consent of the City or (2) legal process requiring disclosure, provided advance notice is provided to the City. Breach of confidentiality by the Consultant shall be grounds for immediate termination.

18. Non-Appropriation of Funds. If sufficient funds are not appropriated or allocated for payment under this Agreement for any future fiscal period, the City will so notify the Consultant and shall not be obligated to make payments for services or amounts incurred after the end of the current fiscal period. This Agreement will terminate upon the completion of all remaining services for which funds are allocated. No penalty or expense shall accrue to the City in the event that the terms of the provision are effectuated.

19. Employment of State Retirees. The City is a "DRS-covered employer" which is an organization that employs one or more members of any retirement system administered by the Washington State Department of Retirement Systems (DRS). Pursuant to RCW 41.50.139(1) and WAC 415-02-325(1), the City is required to elicit on a written form if any of the Consultant's employees providing services to the City retired using the 2008 Early Retirement Factors (ERFs), or if the Consultant is owned by an individual who retired using the 2008 ERFs, and whether the nature of the service and compensation would result in a retirement benefit being suspended. Failure to make this determination exposes the City to significant liability for pension overpayments. As a result, before commencing work under this Agreement, Consultant shall determine whether any of its employees providing services to the City or any of the Consultant's owners retired using the 2008 ERFs, and shall immediately notify the City and shall promptly complete the form provided by the City after this notification is made. This notification to DRS could impact the payment of retirement benefits to employees and owners of Consultant. Consultant shall indemnify, defend, and hold harmless the City from any and all claims, damages, or other liability, including attorneys' fees and costs, relating to a claim by DRS of a pension overpayment caused by or resulting from Consultant's failure to comply with the terms of this provision. This provision shall survive termination of this Agreement.

20. Entire Agreement. This Agreement contains the entire agreement between the Parties, and no other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or bind either of the Parties. If there is a conflict between the terms and

conditions of this Agreement and the attached exhibit, then the terms and conditions of this Agreement shall prevail over the exhibit. Either Party may request changes to the Agreement. Changes which are mutually agreed upon shall be incorporated by written amendments to this Agreement.

21. Notices. All notices or other communications required or permitted under this Agreement shall be in writing and shall be (a) personally delivered, in which case the notice or communication shall be deemed given on the date of receipt at the office of the addressee; (b) sent by registered or certified mail, postage prepaid, return receipt requested, in which case the notice or communication shall be deemed given three (3) business days after the date of deposit in the United States mail; or (c) sent by overnight delivery using a nationally recognized overnight courier service, in which case the notice or communication shall be deemed given one business day after the date of deposit with such courier. In addition, all notices shall also be emailed, however, email does not substitute for an official notice. Notices shall be sent to the following addresses:

Notices to the City of Bonney Lake shall be sent to the following address:

City Clerk
City of Bonney Lake
9002 Main Street E.
Bonney Lake WA 98391

Notices to the Consultant shall be sent to the following address:

Geoffrey Dillard, Director
1201 Pacific Ave Ste1750
Tacoma WA 98402
gdillard@rh2.com

22. Applicable Law; Venue; Attorneys' Fees. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. In the event any suit, arbitration or other proceeding is instituted to enforce any term of this Agreement, the Parties specifically understand and agree that venue shall be exclusively in Pierce County, Washington. The prevailing party in any such action shall be entitled to its reasonable attorneys' fees and costs of suit, which shall be fixed by the judge hearing the case and such fee shall be included in the judgment.


23. Compliance with Laws. The Consultant agrees to comply with all federal, state, and municipal laws, rules, and regulations that are now effective or in the future become applicable to Consultant's business, equipment, and personnel engaged in operations covered by this Agreement or accruing out of the performance of those operations.

24. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall constitute an original, and all of which will together constitute this one Agreement.

25. Severability. Any provision or part of this Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken and all remaining provisions shall continue to be valid and binding upon the City and the Consultant, who agree that the Agreement shall be reformed to replace such stricken provision or part with a valid and enforceable provision that comes as close as reasonably possible to expressing the intent of the stricken provision.

IN WITNESS WHEREOF, the City and the Consultant have executed this Agreement as of the dates listed below.

CITY OF BONNEY LAKE


DocuSigned by:

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Name: Michael McCullough

Title: Mayor

Date: 2/13/2024

CONSULTANT




Name: Geoffrey G. Dillard

Title: Director

Date: February 2, 2024

ATTEST

DocuSigned by:

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Sadie A. Schaneman, CMC, City Clerk

APPROVED AS TO FORM

DocuSigned by:

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Jennifer S. Robertson, City Attorney

EXHIBIT A

Scope of Services to be Provided by Consultant. The Scope of Services is described in the attached Proposal dated January 2024 which is attached hereto and incorporated herein.

EXHIBIT A
Scope of Work
City of Bonney Lake
Grainger Springs Pump House Replacement
Services During Construction
January 2024

Background

The City of Bonney Lake (City) retained RH2 Engineering, Inc., (RH2) to perform design of the proposed Grainger Springs Pump House Replacement project. The final design documents prepared by RH2 were submitted to the City and the Washington State Department of Health and have been approved for construction. Competitive bids for construction will be opened on January 10, 2024, and a contractor will be selected.

This Scope of Work provides tasks for RH2 to assist the City with services during construction.

Task 1 – Project Management

Objective: Manage RH2’s project team and maintain regular client communications, including phone calls, emails, and progress meetings. Prepare monthly invoices and budget status summaries.

Approach:

- 1.1 Provide direction, coordination, and oversight to the RH2 project team.
- 1.2 Prepare monthly invoices and budget status summaries.

RH2 Deliverables:

- Invoices submitted each month in electronic format (PDF).

Task 2 – Construction Contract Management Assistance

Objective: Assist the City with construction contract administration by attending weekly construction meetings, keeping meeting minutes, and preparing requests for payment, statement of working days, change order proposals, and closeout punch lists. Receive, disseminate, and log submittals and requests for information (RFI).

Approach:

- 2.1 Attend pre-construction meeting.
- 2.2 Attend weekly construction meetings, document and prepare meeting minutes, and distribute meeting minutes to relevant parties.
- 2.3 Review contractor’s monthly schedule of values and prepare monthly pay estimates and statement of working days.
- 2.4 Review contractor’s change order proposals and prepare change order approval documentation.

2.5 Receive contractor submittals and RFIs, disseminate submittals and RFIs to the appropriate reviewer, send responses to relevant parties, and maintain submittal and RFI logs.

Assumptions:

- *Weekly construction meetings will be held on site.*
- *Weekly construction meetings will be paired with periodic construction observation (subtask 4.1). The fee for travel and mileage associated with weekly construction meetings is included in subtask 4.1. The fee shown in **Exhibit B** for subtask 2.1 is associated with preparing meeting agendas and minutes and coordination with meeting attendees.*

RH2 Deliverables:

- Weekly construction meeting minutes, pay estimates, statement of working days, change order forms, submittal log, RFI log, and project close out punch lists in electronic format (PDF).

Task 3 – Document Reviews

Objective: Review submittals/ shop drawings, and RFIs. Prepare plan revisions resulting from RFIs as requested by the City.

Approach:

- 3.1 Review submittals, shop drawings, and RFIs. Review and accept or reject shop drawings, equipment submittals, specifications, schedules, and construction sequence for conformance to the project documents.
- 3.2 Prepare plan revisions resulting from document review if requested by the City.

Assumptions:

- *The City and RH2 will simultaneously receive all construction documents. RH2 will take the lead on reviewing documents. The City will be included in communications and RH2 will request for the City's input where necessary.*

RH2 Deliverables:

- Submittals, shop drawings, and RFI responses in electronic format (PDF).
- Plan revisions in electronic format (PDF).

Task 4 – On-Site Construction Observation and Special Inspections

Objective: Perform periodic construction observations and special inspections.

Approach:

- 4.1 Perform periodic construction observations to document construction conditions and confirm work observed is in accordance with the plans and specifications. Prepare a site observation report for each site visit.

4.2 Perform special inspections as required by the International Building Code (IBC) and other project requirements including structural subgrade inspections, and structural steel and concrete inspections. Prepare a site observation report for each special inspection.

Assumptions:

- *The City will provide a materials testing inspector for specific specialized activities. This will include testing of compaction of backfill and hot mix asphalt, and compressive strength testing of concrete and concrete masonry units.*
- *These services shall be performed up to the level included in the attached Fee Estimate, which is estimated as four (4) hours per site visit including a site observation report. If additional effort is needed or requested, RH2 and the City will mutually determine that extra work. The Fee Estimate (**Exhibit B**) reflects a total of two (2) on-site observations by an RH2 engineer each week for the duration of the three hundred (300) working day contract, and ten (10) special inspections as required by the IBC and specifications.*
- *RH2 is not responsible for site safety or for determining means and methods or directing the contractor or any subcontractors in their work.*

RH2 Deliverables:

- Construction observation reports in electronic format (PDF).

Task 5 – Software Development, Startup, and Testing

Objective: Provide control software development services for the operator interface (OI) and programmable logic controller (PLC) equipment. Coordinate with the City's integrator, Parametrix, Inc. Attend field testing, startup, and commissioning services.

Approach:

- 5.1 Develop a data tag point spreadsheet for the development of a human machine interface (HMI) by Parametrix. This information will identify data to be transmitted and received from the pump station controller.
- 5.2 Provide PLC ladder logic software development, as required, for monitoring and controlling the equipment at the Grainger Springs facility.
- 5.3 Provide OI software development for the Grainger Springs facility.
- 5.4 Coordinate with Parametrix to integrate the facility controls into the existing SCADA system.
- 5.5 Attend factory witness testing of the variable frequency drive (VFD) control panels at the VFD manufacturer's testing facility. 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 supervisory control and data acquisition (SCADA) alarm, navigation, and intrusion security configurations and functions.
- 5.6 Attend startup and commissioning and develop associated reporting.

5.7 Develop SCADA system operations and maintenance (O&M) material updates.

5.8 Provide eight (8) hours 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:

- *Startup and testing is assumed to take place over three (3) days and will be attended by an electrical engineer, civil/mechanical engineer, and a control specialist.*
- *Software development, data points, and graphical displays will be defined and approved by RH2 and the City.*
- *RH2's Fee Estimate (**Exhibit B**) 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 eight (8) 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:

- Data tag point spreadsheet.
- PLC software and OI screen designs developed in subtasks 5.2 and 5.3.
- 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.

Task 6 – Record Drawings

Objective: Prepare record drawings after project completion.

Approach:

6.1 Prepare record drawings at the end of the project. The City will collect construction records from the contractor and provide them to RH2.

Assumptions:

- *RH2 will rely on the accuracy and completeness of the contractors construction records/plan markups.*

Provided by the City:

- Construction records from the contractor in electronic format (PDF).

RH2 Deliverables:

- Project record drawings in electronic format (PDF).

Task 7 – Supplemental Services

Objective: Provide additional services as requested by the City.

Approach:

- 7.1 Provide additional services for the project as requested and authorized by the City. RH2 shall submit a budget estimate for supplemental services upon City's request. The City shall provide written authorization to proceed with the supplemental services prior to commencing work.

RH2 Deliverables:

- Budget estimate for additional services.
- Other deliverables as requested by the City under an authorization for additional services.

Anticipated Project Schedule:

February 2024 – July 2025

EXHIBIT B
Rates of Service

EXHIBIT B**Fee Estimate****City of Bonney Lake****Grainger Springs Pump House Replacement - SDC****Dec-23**

Description		Total Hours	Total Labor	Total Expense	Total Cost
Task 1	Project Management	44	\$ 10,306	\$ 347	\$ 10,653
1.1	Provide direction, coordination, and oversight to the RH2 project team	30	\$ 7,350	\$ 208	\$ 7,558
1.2	Prepare monthly invoices and budget status summaries	14	\$ 2,956	\$ 138	\$ 3,094
Task 2	Construction Contract Management Assistance	186	\$ 45,658	\$ 1,522	\$ 47,180
2.1	Attend pre-construction meeting	14	\$ 3,416	\$ 288	\$ 3,704
2.2	Attend weekly construction meetings and distribute meeting minutes	60	\$ 14,700	\$ 412	\$ 15,112
2.3	Review monthly schedule of values, prepare pay estimates and statement of working days	30	\$ 7,350	\$ 228	\$ 7,578
2.4	Review change orders and prepare approval documentation	22	\$ 5,492	\$ 182	\$ 5,674
2.5	Receive and respond to contractor's submittals and RFIs	60	\$ 14,700	\$ 412	\$ 15,112
Task 3	Document Reviews	186	\$ 39,740	\$ 1,335	\$ 41,075
3.1	Review submittals, shop drawings and RFIs	166	\$ 35,288	\$ 1,152	\$ 36,440
3.2	Prepare plan revisions resulting from document review	20	\$ 4,452	\$ 183	\$ 4,635
Task 4	On-Site Construction Observation and Special Inspections	542	\$ 117,920	\$ 7,016	\$ 124,936
4.1	Perform periodic construction observations to document construction conditions	482	\$ 104,076	\$ 6,311	\$ 110,387
4.2	Perform special inspections as required by IBC and other project requirements	60	\$ 13,844	\$ 705	\$ 14,549
Task 5	Software Development, Startup, and Testing	224	\$ 51,580	\$ 3,518	\$ 55,098
5.1	Develop a data tag point spreadsheet for Parametrix's HMI development	10	\$ 2,524	\$ 105	\$ 2,629
5.2	Provide PLC ladder logic software development	32	\$ 7,372	\$ 226	\$ 7,598
5.3	Provide OI software development	14	\$ 3,504	\$ 129	\$ 3,633
5.4	Coordinate with Parametrix	4	\$ 980	\$ 66	\$ 1,046
5.5	Attend factory witness testing of the VFD's and field testing	64	\$ 15,028	\$ 1,957	\$ 16,985
5.6	Attend startup and commissioning and develop associated reporting	76	\$ 16,920	\$ 820	\$ 17,740
5.7	Develop SCADA system O&M material updates	12	\$ 2,312	\$ 100	\$ 2,412
5.8	Provide eight (8) hours of on-site training of the control system	12	\$ 2,940	\$ 115	\$ 3,055
Task 6	Record Drawings	42	\$ 8,424	\$ 567	\$ 8,991
6.1	Prepare record drawings at the end of the project	42	\$ 8,424	\$ 567	\$ 8,991
Task 7	Supplemental Services	-	\$ -	\$ 10,000	\$ 10,000
7.1	Provide additional services for the project as authorized by the City	-	\$ -	\$ 10,000	\$ 10,000
PROJECT TOTAL		1224	\$ 273,628	\$ 24,306	\$ 297,934

EXHIBIT B RH2 ENGINEERING, INC. 2024 SCHEDULE OF RATES AND CHARGES		
RATE LIST	RATE	UNIT
Professional I	\$168	\$/hr
Professional II	\$186	\$/hr
Professional III	\$207	\$/hr
Professional IV	\$227	\$/hr
Professional V	\$245	\$/hr
Professional VI	\$259	\$/hr
Professional VII	\$282	\$/hr
Professional VIII	\$296	\$/hr
Professional IX	\$314	\$/hr
Technician I	\$132	\$/hr
Technician II	\$144	\$/hr
Technician III	\$162	\$/hr
Technician IV	\$177	\$/hr
Technician V	\$193	\$/hr
Technician VI	\$213	\$/hr
Technician VII	\$231	\$/hr
Technician VIII	\$243	\$/hr
Administrative I	\$88	\$/hr
Administrative II	\$103	\$/hr
Administrative III	\$123	\$/hr
Administrative IV	\$144	\$/hr
Administrative V	\$166	\$/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
Night Work	10.00%	% of Direct Labor
Mileage	\$0.6550	price per mile (or Current IRS Rate)
Subconsultants	15%	Cost +
Outside Services	at cost	

Rates listed are adjusted annually.

City of Bonney Lake
Grainger Springs Pump House Replacement
Bid Tabulation
Bid Opening January 17th 2024 @ 10AM -Cedarview Room

Bid Item	Schedule A	Material	Quantity	Engineers Estimate		McClure & Sons, Inc.		Serpanok Construction		Kassel&Associates, Inc	
		Units		Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
1	Mobilization, Demobilization, Site Preparation, and Clean-up	LS	1		\$209,000		\$100,000		\$240,000		\$648,811
2	Temporary Erosion and Sedimentation Control	LS	1		\$20,000		\$15,000		\$8,000		\$15,000
3	Excavation Safety and Shoring	LS	1		\$23,000		\$17,000		\$5,000		\$13,500
4	Demolition	LS	1		\$41,000		\$40,000		\$50,000		\$35,000
5	Site Work	LS	1		\$140,000		\$170,000		\$200,000		\$56,583
6	Dewatering	LS	1		\$15,000		\$18,000		\$5,000		\$10,000
7	Site Utilities	LS	1		\$402,000		\$500,000		\$350,000		\$298,500
8	Excavation	LS	1		\$80,000		\$25,000		\$250,000		\$118,000
9	Imported Structural Backfill	TN	630	\$62	\$39,000	\$65	\$40,950	\$25	\$15,750	\$34	\$21,420
10	Topsoil	CY	115	\$139	\$16,000	\$75	\$8,625	\$30	\$3,450	\$25	\$2,875
11	Structural	LS	1		\$350,000		\$369,390		\$240,000		\$324,022
12	New Pump and Motor (Pump No. 1)	LS	1		\$95,000		\$100,000		\$150,000		\$154,560
13	Refurbish and Relocate Existing Pump and New Motor (Pump #2)	LS	1		\$80,000		\$55,000		\$150,000		\$154,560
14	Mechanical	LS	1		\$181,000		\$180,000		\$200,000		\$369,996
15	Electrical	LS	1		\$406,000		\$280,000		\$260,000		\$240,500
16	Telemetry and Automatic Control	LS	1		\$119,000		\$185,000		\$85,000		\$165,000
17	Construction Records and O&M Manuals	LS	1		\$10,000		\$5,000		\$5,000		\$11,100
18	Testing, Startup, and Training	LS	1		\$15,000		\$17,000		\$2,000		\$8,150
19	Minor Change	LS	1		\$50,000		\$50,000		\$50,000		\$50,000
	Subtotal Construction Costs				\$2,291,000		\$2,175,965		\$2,269,200		\$2,697,577
	Subtotal Construction Costs				\$2,291,000		\$2,175,965		\$2,269,200		\$2,697,577
	Sales Tax (Bonney Lake, WA)	9.5%			\$217,645		\$206,717		\$215,574		\$256,270
	Total Estimated Schedule A Construction Cost				\$2,509,000		\$2,382,682		\$2,484,774		\$2,953,847

Schedule B											
1	Caustic Soda Treatment System Improvements	LS	1	\$160,000	\$160,000	\$159,000	\$159,000	\$160,000	\$90,000	\$160,000	\$114,790
	Subtotal Construction Costs incl. OH&P				\$160,000		\$159,000		\$90,000		\$114,790
	Sales Tax (Bonney Lake, WA)	9.5%			\$15,200		\$15,105		\$8,550		\$10,905
	Total Estimated Schedule B Construction Cost				\$176,000		\$174,105		\$98,550		\$125,695

	Total Estimated Schedule A + Schedule B Construction Cost				\$2,685,000		\$2,556,787		\$2,583,324		\$3,079,542
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Apparent Low Bidder
Corrected Bid amount due to math errors

STREET CIP

Program	2023	2024
Sidewalk	250,000	250,000
Safe Routes to School 190 th Ave E Phase 1 Sidewalk	600,000	2,000,000*
Street reconstruction	100,000	400,000
Chip seal	275,000	280,000
Roadway overlay maintenance	451,000	136,000
Church Lake Guardrail (decision card)	14,000	
Mobility Plan Update	160,000	
S. Prairie C Curb	200,000	
Angeline Dr & Veteran's Memorial Intersection	250,000	250,000
Church Lake Rd at West Tapps		250,000
ADA improvements	250,000	250,000

*Safe Route grant

PARK CIP

Program	2023	2024
AYP Improvements	280,000	
Master Plan (Parks, Trails & Open Space)	450,000	

*Decision cards for Field 4 and Midtown/Victor Falls

GENERAL GOVT CIP

Program	2023	2024
PSB Chiller (ARPA funding)	175,000	

*Decision cards for duct cleaning, painting, roof repair, demo and elevator door replacement

WATER CIP

Program	2023	2024
Lakeridge 810 Zone Reservoir	425,000	7,200,000
SCADA improvements	50,000	59,808
Tacoma Point removal	200,000	
Cedar View Water Main replacement	300,000	1,750,000
Grainger Springs pumphouse upgrades	1,920,000	
Hydroxide Tanks-Grainger Springs		455,000
Victor Falls Metering Improvements		131,577
Unilateral Flushing Program		59,808

*Decision cards for laptops, control valve program, confined space supplies, cross connection database, meter replacement, SCADA fixes, modular move, plotter

SEWER CIP

Program	2023	2024
Sewer Plan update	250,000	
Cedarview Dry Line install	300,000	1,750,000
Upgrade Sewer Trunk Line at SR410	200,000	750,000
WWTP Biosolids upgrade	55,000	330,000
WWTP upgrades	140,000	146,000
LS17	580,000	3,560,000
LS 17 Bubbler System		100,000
I/II Reduction	300,000	2,164,811
LS20 Wetwell Restoration	340,000	
SCADA Upgrade Contract	172,000	
Force Main design for Mountain Crk		200,000

*Decision cards for portable generator; bioxide; bubbler assessment

STORMWATER CIP

Program	2023	2024
NPDES	25,000	25,000
Swale retrofit program	300,000	338,400
Conveyance improvements at 211 th	73,080	
Lake Tapps Sub-basin retrofit	145,040	
200 th Ave Ct E Culvert	97,440	
Kelly Lake Rd and 214 th		67,200
Inlet Island		254,475
Fennel Crk Stream Gauge		23,690

*Decision cards for NPDES Action Plan; Ptarmigan Ridge overflow

ER&R Fund

<u>Asset #</u>	<u>Dept</u>	<u>Item</u>	<u>2023</u>	<u>2024</u>
RS213	Water	F250 4x4, Supercab, Cab Guard, Toolbox, Go Light	33,923	
EQ146	Stormwater	Olympic Tilt Trailer 12K	21,285	
RS646	Stormwater	Commercial Super Slope Mower, mower with battery, rops and seat belt, canopy, light kit, rotary beacon	80,157	
EQ399	Street/Storm	72" Skid Steer Brush Cutter	17,460	
RS693	Streets	John Deere 6110M 2022 Mower 4WD Cab	131, 805	
EQ393	Streets	22' Foot Rear Cradle Boom	36,406	
EQ397	Streets	50" HD Boom Flail	14,377	
EQ398	Streets	Rear Cradle Boom Mower	7,354	
EQ527	Multiple	Electric Forklift	79,518	
EQ395	Multiple	Material Handling Arm – Loader	10,593	
PD1201	Police	Ford Interceptor Hybrid, AWD, Pursuit Rated, SUV	77,644	
PD1203	Police	Ford Interceptor Hybrid, AWD, Pursuit Rated, SUV	77,644	
PD1303	Police	Ford F150 AWD Police Responder\	81,760	
PD1407	Police	Ford Interceptor Hybrid, AWD, Pursuit Rated, SUV	77,644	
PD1703	Police	Ford F150 AWD Police Responder	81,760	
PD1004	Police	Boat Trailer	12,000	
EQ329	Streets	Pavement Grinder/Cold Planer		41,738
RS573	Multiple	Compactor/Drum Roller		81,943
PD1305	Police	Ford F150 AWD Police Responder		85,180
PD1514	Police	Ford F150 AWD Police Resp.		85,180
PD1601	Police	Ford Interceptor Hybrid, AWD, Pursuit Rated, SUV		81,526
PD1701	Police	Ford F150 AWD Police Responder		85,180

*Please note that replacement vehicles have some money set aside in ER&R Fund. Not all are covered at 100% however which causes the individual fund to pick up the balance.

Rollover from 2021-2022 Budget to 2023–2024 Budget. These items were not available for purchase at the original time of request due to Covid 19. They have also increased in price since the original budget of 2022.

<u>Asset #</u>	<u>Dept</u>	<u>Item</u>		<u>2022</u>
RS218	Sewer	Ford F550, 4WD, C&C, Ext Cab, Traction Tires, Snowplow Prep Package, LiteReader Message Board		118,759
RS216	Street/Storm	F600, Ext Cab, 4x4, dump, pull tarp, lighting		100,140
EQ616	Street/Storm	SnowDogg V-Plow		13,875
EQ617	Street/Storm	Sander / Salt Spreader		12,288
RS388	Multiple	T880 Chassis dump body, hydraulic package, chipper canopy, camera system		361,876
EQ688	Multiple	Plow, hitch & stationary		38,988
EQ689	Multiple	Sander, Auger, Sander Stand & Prewet System		66,931

CHAPTER 2

Victor Falls Springs

The Victor Falls Springs pump station is located at 11700 Rhodes Lake Road (or on Bissan-Scannel Road east of its intersection with Angeline Road). Flow from this source varies from 540 gallons per minute (gpm) to 1,700 gpm or 0.78 million gallons per day (MGD) to 2.45 MGD. The low flow of 540 gpm (0.78 MGD) was recorded in 1985, and was 80 percent of the previous recorded low flow.

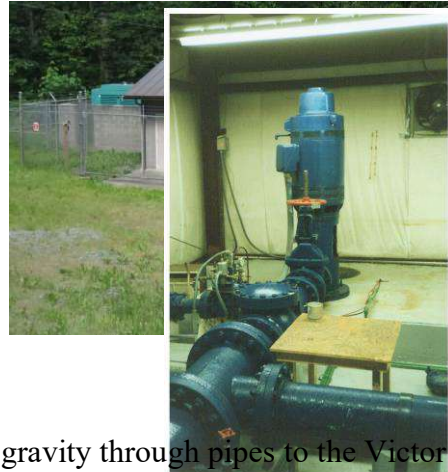
The average low flow in the summer months is approximately 1,010 gpm (1.45 MGD).

Water is collected at three separate spring boxes and flows by gravity through pipes to the Victor Falls pump station's wet well. The water is pumped into the distribution system by one 125 horsepower (hp) pump and one 150 hp pump with 1,000 gpm (1.44 MGD) and 1,200 gpm (1.73 MGD) capacities, respectively. The pumps are throttled so that their combined capacity is not greater than the flow from the springs. Both pumps are short-coupled, vertical turbine pumps that are driven by vertical hollow shaft, part wound, 1,800 revolutions per minute (rpm) motors. The pumps are controlled by the water reservoir levels of the Ponderosa Reservoir, as recorded by the telemetry systems. The pump station has a chlorine disinfection facility, which is located in a separate room with outside access, and a 250 kilowatt (kW) emergency power generator. In 2003, disinfection improvements were made to achieve a chlorine contact time (CT) of 6 at this source. In 2005, the gas chlorination system was replaced with an on-site sodium hypochlorite generation system. In 2012, variable frequency drives (VFDs) were added to the 125 hp pump and 150 hp pump to assist the City in matching flow rates and improve power efficiencies.

In 1995, the City utilized Victor Falls Springs as its major source, with over 56 percent of the City's total annual production, or approximately 1,424 acre-feet per year (afy) (1.27 MGD). This was primarily due to the excellent water quality of this source and its proximity to the system's high demand areas. Over the last 15 years, substantial growth has occurred in the north end of the system and the City has relied on the Tacoma Point Wellfield more often throughout the years. By 2018, Victor Falls Springs was no longer the City's highest utilized source and used only 1,301 afy (1.16 MGD), or 33 percent of the City's total production.

Grainger Springs

The Grainger Springs' facilities are located southwest of the summit of State Route 410 (18100 State Route 410). Flow from this source varies between 650 gpm and 1,300 gpm (0.94 MGD and 1.87 MGD). Like Victor Falls Springs, the minimum flow of this source occurred in 1985. The average low flow in the summer months is approximately 900 gpm (1.30 MGD).



Grainger Springs Treatment Facility

Grainger Springs' water is collected at perforated pipes and manholes along the toe of the hill and flows by gravity through pipes to the Grainger Springs pump station's wet well. The water is

pumped into the distribution system by one 75 hp pump and one 150 hp pump with capacities of 500 gpm (0.72 MGD) and 1,000 gpm (1.44 MGD), respectively, and are of the same design as the pumps at Victor Falls Springs. These pumps are also controlled by the water reservoir levels of the Ponderosa Reservoir, as recorded by the telemetry systems. This source includes a complete chlorine disinfection facility and a 150 kW emergency power generator, which are both located up the hill from the pump house in a separate structure. In 2003, chlorine contact time improvements were made to achieve a CT of 6 at this source. In 2005, the gas chlorination system was replaced with an on-site sodium hypochlorite generation system and pH adjustment for corrosion control. In 2012, a VFD was added to the 150 hp pump to assist the City in matching flow rates and improving power efficiencies.

In 1995, the City utilized Grainger Springs as its second largest source, with 24 percent of its annual production, or approximately 602 afy (0.54 MGD). In 2014, although 21 percent of the City's annual production was still from this source, it was the third largest source and production had grown to 854 afy (0.76 MGD). Grainger Springs is still utilized as much as possible by the City due to the excellent water quality and its centralized location in the City's system.

Tacoma Point Wells

Tacoma Point Well Nos. 2, 4, and 6 are located at 1110 182nd Avenue East. Each well has its own pump house. All three wells share a common chlorine disinfection facility and pH control facility. Well Nos. 2 and 4 have a diesel engine driven, 250 kW generator for backup power that is located in the Tacoma Point Well No. 2 pump house. Tacoma Point Well No. 6 does not have a permanent backup power source. The treatment facility located in the Tacoma Point Well No. 6 building, has a 35 kW generator for backup power to heat the building and run the treatment process in the event of a power failure, and the pump can be powered off of a temporary mobile power generator set. All three wells are controlled by the telemetry systems that measure the levels of the Ponderosa 748 Zone Reservoir. For most of the year, only one of these wells is in use at a time. However, in the summer months during high demand periods, it is sometimes necessary to operate both Tacoma Point Well Nos. 2 and 4 simultaneously; in peak periods Tacoma Point Wells Nos. 2 and 6 are run to reach a maximum production capacity of 2,300 gpm (3.31 MGD).



Tacoma Point Well No. 2 Building



Tacoma Point Well No. 4 Building

Tacoma Point Well No. 2 was drilled during the winter of 1985 and 1986. In the spring of 1988, the City constructed the pump house and put the well into service. The first pump for Tacoma Point Well No. 2 was driven by a vertical hollow shaft, part wound, 1,800 rpm motor. Due to a bend in the well casing, the first pump was replaced by a submersible pump in 1991. This pump was recently replaced in 2019 and this 125 hp pump is currently the only submersible pump in the City's water system. The capacity of the submersible pump is approximately 750 gpm (1.08 MGD). The static water level is approximately 246 feet below ground surface.