PARKS & PUBLIC WORKS COMMITTEE & COMMITTEE OF THE WHOLE MEETING AGENDA

Tuesday, April 08, 2025, at 5:00 PM

Snoqualmie City Hall, 38624 SE River Street & Zoom

COMMITTEE MEMBERS
Chair: Ethan Benson
Councilmembers: Bryan Holloway and Catherine Cotton

This meeting will be conducted in person at Snoqualmie City Hall and remotely using by Zoom.

Join by Telephone: To listen to the meeting via telephone, please call **253.215.8782** and enter Webinar ID **867 8554 3964** and Password **1700050121** if prompted.
Press *9 to raise your hand to speak. Raising your hand signals the meeting moderator that you have a comment.
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4) Please confirm that your audio works prior to participating.

CALL TO ORDER & ROLL CALL

AGENDA APPROVAL

PUBLIC COMMENTS (online public comments will not be taken).

MINUTES

1. Approval of minutes dated March 18, 2025.

AGENDA BILLS

2. **AB25-048**: Awarding the Reclaimed Water Distribution System Improvements
3. **AB25-049**: On-Call Water & Sewer Design Services
4. **AB25-050**: Amendment for Water Reclamation Facility Phase 3 Services During Construction

DISCUSSION

5. Parks & Events Commission Presentation and Update

ADJOURNMENT

PARKS & PUBLIC WORKS COMMITTEE & COMMITTEE OF THE WHOLE MEETING MINUTES MARCH 18, 2025

This meeting was conducted in person at Snoqualmie City Hall and remotely using Zoom.

CALL TO ORDER – Chair Benson called the meeting to order at 5:03 pm.

Committee Members: Councilmembers Ethan Benson, Bryan Holloway, and Catherine Cotton were present.

City Staff:
Mike Chambless, City Administrator (remote); Dena Burke, City Attorney (remote); Jeff Hamlin, Parks & Public Works Director; Mona Davis, Interim Community Development Director; Drew Bouta, Finance Director; Jen Hughes, Deputy Finance Director; Janna Walker, Budget Manager; Dylan Gamble, CIP Manager; Tom Holmes, Wastewater Superintendent; Phil Bennett, Deputy Parks & Public Works Director; Jason Battles, Urban Forestry/Stormwater Supervisor; Don Harris, Fleet and Facilities Supervisor; Matt Hedger, Water Division Superintendent; Deana Dean, City Clerk; and Jimmie Betts, IT Support.

AGENDA APPROVAL - The agenda was approved as amended, adding Resolution Designating Applicant Agent for FEMA Grant Funding to item #2.

PUBLIC COMMENTS – There were no public comments.

MINUTES

1. The minutes from March 4, 2025, were approved as presented.

ADD ON AGENDA BILL

1. **AB25-xxx:** Resolution Designating Applicant Agent for FEMA Grant Funding. This item was introduced by Interim Community Development Director Mona Davis. Committee questions and comments followed with Mayor Ross, Parks & Public Works Director Hamlin, and City Attorney Burke providing additional information. This item is approved to move forward at the March 24, 2025, City Council meeting on the consent agenda.

AGENDA BILLS

2. **AB25-003:** Amending Utility Rates for Years 2025-2030. This item was introduced by CIP Manager Dylan Gamble who reviewed the proposed ordinance. Committee questions and comments followed. Staff will modify the agenda bill prior to Monday's meeting. This item is approved to move forward at the March 24, 2025, City Council meeting for public hearing and first reading of the ordinance.

DISCUSSION

3. Parks & Public Works Division Update. Presentation provided by Parks & Public Works Deputy Director Phil Bennett. Topics included overview of staff, staff training, completion of deferred maintenance, division overview, 2024 accomplishments, and 2025 work plan for each of the water, urban forestry/stormwater, parks/streets, fleet/facilities, and wastewater divisions.

Additional topics covered included the Winery Booster Pump replacement, PVC main break on Reinig Road, new training initiatives on valve turning machine and leak detector equipment, urban forestry/stormwater spill response, wastewater biosolids, and goal of grease cleanup in pipes and wetwells. Committee questions followed.

4. Director Reports provide by PPW Director Hamlin included upcoming staff recruitments for admin and wastewater operator and a brief project update.

ADJOURNMENT

The meeting was adjourned at 5:59 pm.

Minutes taken by Deana Dean, City Clerk.
Recorded meeting audio is available on the City website after the meeting.
Minutes approved at the _____, 2025, Parks & Public Works Committee Meeting.

Council Agenda Bill

AB Number

AB25-048

Agenda Bill Information

Title*

Awarding the Reclaimed Water Distribution System Improvements

Action*

Motion

Council Agenda Section

Committee Report

Council Meeting Date*

04/14/2025

Staff Member

Andrew Vining

Department*

Public Works

Committee

Parks and Public Works

Committee Date

04/08/2025

Exhibits

Packet Attachments - if any

x1 (Resolution).docx	14.57KB
x2 (Exhibit A Agreement).pdf	98KB
x3 (Bid Tab).pdf	597.45KB
x4 (Letter Recommending Award).pdf	2.08MB
x5 (Irrigation Pump Station Tech Memo).pdf	2.68MB

Summary

Introduction*

Brief summary.

This agenda bill seeks to adopt resolution XXXX awarding the Reclaimed Water Distribution System Improvements construction contract to Prospect Construction, Inc. This project is funded through a low-interest loan received from the Department of Ecology Clean Water State Revolving Fund. The improvements will upgrade the aging reclaimed water distribution system and bring it into compliance with current state standards.

Proposed Motion

Move to approve Resolution XXXX awarding the Reclaimed Water Distribution System Improvements to Prospect Construction, Inc. and authorize the Mayor to sign.

Background/Overview *

What was done (legislative history, previous actions, ability to hyperlink)

LEGISLATIVE HISTORY

State Legislation

The state legislature approved the Reclaimed Water Use Act in 1992 codified as RCW 90.46. This act encouraged using reclaimed water for land application, industrial, and commercial uses. In 1997 the Water Reclamation and Reuse Standards were developed to support this act. Most recently in 2006 this act was amended to expand uses of reclaimed water and directed state agencies to develop framework for safe and beneficial use of reclaimed water – this amendment is the origin of the reclaimed water rule.

Following the 2006 legislative direction state agencies (Department of Health and Department of Ecology) jointly began developing the framework over a 12-year period based on stakeholder feedback. In 2018 the Reclaimed Water Rule (WAC 173-219) was adopted to encourage the use of reclaimed water to help meet the growing need for clean water across the state by establishing regulatory framework for the generation, distribution, and the use of reclaimed water for beneficial use. Concurrently agencies published the Reclaimed Water Facilities Manual or "Purple Book" which provides more in-depth guidance for utilities that produce reclaimed water.

City Legislation

Following the state adoption of Reclaimed Water Rule in 2018 the City began evaluating options to ensure compliance with updated state standards. On February 25, 2019 under **AB19-022** City Council authorized RH2 Engineering (RH2) to prepare a Reclaimed Water Irrigation System Analysis Feasibility Study to provide agency coordination and evaluate potential solutions to meet the Reclaimed Water Rule standards. During this period the City also renewed it's Water Reclamation Facility NPDES Permit WA0022403 (Permit) which authorizes the production and distribution of up to 1.56 million gallons of Class A Reclaimed Water daily. The City provided comment to the City's draft permit on February 24, 2020 and received responses from Ecology documented in the permit. The final Permit outlines necessary improvements to the City's reclaimed water distribution system and an associated compliance schedule. The following related agenda bills were presented to Council to facilitate these

improvements and continue production of Class A water. On November 28, 2022 City Council approved **AB22-146** Resolution No. 1632 authorizing a contract with RH2 to complete a Reclaimed Water Distribution System Engineering Report. This contract was amended on October 3rd, 2023 under **AB23-110** which authorized RH2 to complete design of the reclaimed water reservoir improvements. On October 28th, 2024 under **AB24-116** Administration provided a project update to Council and solicited public comments. On March 10th, 2025 City Council approved **Resolution No. 1709** accepting a $8.651M low (1.6 percent) interest loan from the Department of Ecology Clean Water State Revolving Fund (CWSRF) to apply towards project design and construction costs.

BACKGROUND

To meet the compliance schedule the Reclaimed Water Distribution System Improvements were advertised to bidders on February 20th, 2025. Three bids were received, and the lowest bid was from Prospect Construction, Inc. for $7,178,870 including tax. City staff and consultants determined Prospect Construction, Inc. to be the lowest responsive and responsible bidder. Early bidding and award of these improvements allows for the contractor to procure equipment with long lead times and phase construction appropriately. Construction is expected to begin late spring 2025 such that the new reservoir and pump station are completed prior to summer 2026. To meet the NPDES Permit requirements the improvements must be completed prior to June 30th, 2026.

Analysis *

These improvements will bring the Class A water distribution system to current standards to ensure safe and reliable delivery of reclaimed water and preservation of potable water resources. The lowest bid received was $7,178,870 which is 3 percent below the engineers estimate of $7,401,000. Evaluation of the bids shows that bidding was competitive between contractors and that the lowest bidder provided lower pricing across multiple bid items. City Staff and RH2 Engineering have reviewed the bids and recommended awarding the Reclaimed Water Distribution System Improvements to Prospect Construction, Inc.

Budgetary Status *

This is an extra-budget expenditure.

Fiscal Impact

Amount of Expenditure	Amount Budgeted	Appropriation Requested
$7,178,870.00	$8,651,047.00	$529,006.00

Budget Summary

Administration recommends approving the contract with Prospect Construction in the amount of $7,178,870 for Eagle Lake Water Reclamation Basin Improvements Project. This project was incorporated in the 2025-26 Biennial Budget (Ord. 1296) as a part of the continuing appropriations for capital projects within the Utility Capital Fund (#417). Over the life of this project, $937,938 has been spent, with $464,577 encumbered for previously approved contracts, and $496,860 encumbered for estimated City employee labor during the biennium. With the addition of the Prospect Construction contract of $7,178,870, the project has a life-of-project budget shortfall of $427,198.

The City will also be seeking a construction management contract for the project. This additional contract is expected to increase the project shortfall. Administration anticipates bringing an amendment forward to increase the life-of-project budget to include the current shortfall and the additional construction management contract. This shortfall will be somewhat mitigated by an $8,651,000 Department of Ecology loan, of which $1,785,000 was not included within the original 2025-2026 budget or the rates currently proposed within the utility rate study. Additionally, the city is currently requesting an increase to this loan. At the stated loan rate of 1.6%, a $1 million increase in loan value would cost the city approximately $42 thousand annually over 30 years.

Fiscal Impact Screenshot

Eagle Lake Water Reclamation Basin Improvements

	Life-of-Project Budget *(Multiple Bienniums)*
Beginning Budget	**$ 8,651,047**
Expenditures	**$ (937,938)**
Outstanding Contract Value *(Previously Approved)*	**$ (464,577)**
Estimated Labor Value for Remainder of Biennium *(City Employees)*	**$ (496,860)**
Current Available Budget	**$ 6,751,672**
Value of this Contract *(AB25-048)*	**$ (7,178,870)**
Available Budget / (Shortfall) after AB25-048	**$ (427,198)**

RESOLUTION NO. XXXX

A RESOLUTION OF THE CITY COUNCIL OF CITY OF SNOQUALMIE, WASHINGTON DETERMINING THE LOWEST RESPONSIBLE, RESPONSIVE BIDDER, AWARDING A PUBLIC WORKS CONTRACT TO AND AUTHORIZING EXECUTION OF A PUBLIC WORKS CONTRACT WITH PROSPECT CONSTRUCTION, INC. FOR THE RECLAIMED WATER DISTRIBUTION SYSTEM IMPROVEMENTS.

WHEREAS, pursuant to Ordinance No. 448 as codified in Snoqualmie Municipal Code Section 1.08.010, the City of Snoqualmie has adopted the classification of non-charter code city, retaining the mayor-council plan of government as provided for in Chapter 35A.12 RCW; and

WHEREAS, pursuant to RCW 35A.40.210, procedures for any public work or improvement for code cities shall be governed by RCW 35.23.352; and

WHEREAS, on February 20th, 2025, the City advertised the Reclaimed Water Distribution System Improvements Project ("the Project") for bid, three responsive bids were received, and the lowest responsive bid, was from Prospect Construction, Inc. for $7,178,870 including tax; and

WHEREAS, the City's consultant team has checked references and otherwise determined that Prospect Construction, Inc. meets the mandatory bidder responsibility criteria established under RCW 39.04.350 and 39.06.020, and the supplemental bidder responsibility criteria in Section 00 04 00 of the contract documents; and

WHEREAS, the City's consulting engineer, RH2 Engineering Inc., and the Parks and Public Works Director recommend award of this contract to Prospect Construction, Inc. as the lowest responsive, responsible bidder;

NOW, THEREFORE, BE IT HEREBY RESOLVED BY THE CITY COUNCIL OF THE CITY OF SNOQUALMIE AS FOLLOWS:

Section 1. Determination of Lowest Responsive, Responsible Bidder. Based on the foregoing recitals, which are hereby incorporated as findings of fact, Prospect Construction, Inc. is the lowest, responsive, responsible bidder for the Project.

Section 2. Award of Public Works Contract. The contract for the Project is hereby awarded to Prospect Construction, Inc. in accordance with its bid proposal.

Section 3. Authorization for Contract Execution. The Mayor is authorized to execute a contract with Prospect Construction, Inc. in substantially the form attached hereto as Exhibit A.

PASSED by the City Council of the City of Snoqualmie, Washington, this 14th day of April 2025.

_____
Katherine Ross, Mayor

Attest:

_____
Deana Dean, City Clerk

Approved as to form:

_____
Dena Burke, City Attorney

Section 00 05 00 AGREEMENT

RECLAIMED WATER DISTRIBUTION SYSTEM IMPROVEMENTS

THIS AGREEMENT is made on this _____, 2025 between the City of Snoqualmie ("City"), a municipal corporation located in the State of Washington and_____, ("Contractor").

In consideration of the terms and conditions contained in this Contract and the requirements attached to it, the parties agree as follows:

1. The Contractor shall do all of the work and furnish all of the labor, materials, tools and equipment for the construction of the improvements and shall perform any changes in the work (the "Work"), all in full compliance with the Contract Documents, which include the following documents entitled: "Reclaimed Water Distribution System Improvements Project: Bid Proposal, Contract Documents and Specifications, Vol. I of II", and including Appendices A-D to Vol. I, this Agreement (Section 00 05 00), Contractor's executed Bid Schedule (Section 00 03 00), executed Performance and Payment Bond (Section 00 04 20), executed Retainage Forms (Section 00 05 10), Technical Provisions, including those portions of the Washington State Department of Transportation (WSDOT) *Standard Specifications for Road, Bridge and Municipal Construction*, 2023 edition specifically referenced therein, and the documents entitled "Reclaimed Water Distribution System Improvements Project: Plans, Vol. II of II". All of the foregoing are collectively incorporated by this reference and made a part of the Contract Documents.
2. The City hereby promises and agrees with the Contractor to employ, and does employ the Contractor to furnish the labor, materials, tools and equipment, and to do and cause to be done the above-described Work, and to complete and finish the same in accordance with the said contract documents and the terms and conditions herein contained, and hereby contracts to pay for the same, according to the said documents, including the schedule of estimated quantities, and unit and lump sum prices in the Form of Bid, the sum of $ ***7,178,870.24***, subject to the actual quantity of Work performed, at the time and in the manner and upon the conditions provided for in this contract.
3. The Contractor hereby promises and agrees to diligently prosecute and obtain the following Contract Milestones for completion of the project (the "Contract Time") accounting for all requirements and restriction within Technical Specification Division 1.70 Execution and Closeout.

   i. Substantial Completion of all work by June 15, 2026.

   ii. Physical Completion and Final Acceptance of all project work shall be completed with 90 working days of the Substantial Completion date.

   The pump motor control center electrical equipment are long lead items. To meet schedule, it is recommended to prioritize submittals of this equipment so they can be released for manufacturing as soon as possible after notice to proceed.

   The Contractor shall assume that no cultural or environmental issues exist to impede construction activities. If any cultural or environmental issues arise during construction, the City, Contractor, Engineer, and Washington State Department of Ecology will negotiate impacts to project schedule and construction activities at that time.

The Contractor agrees that Liquidated Damages shall be assessed in the amount of $10,000 per day for any failure to complete the Work within the Contract Time, for any failure to meet a Contract Milestone, and for any failure to achieve Physical Completion and Final Acceptance within the time and as required in the Contract Documents.

4. The Contractor for himself, and for his agents, successors, assigns, subcontractors and/or employees, does hereby agree to the full performance of all the covenants herein contained upon the part of the Contractor.

5. The City hereby appoints and the Contractor hereby accepts the Parks & Public Works Director, as the City's representative for the purpose of administering the provisions of this Contract, including the City's right to receive and act on all reports and documents related to this Contract, to request and receive additional information from the Contractor.

6. This Contract contains terms and conditions agreed upon by the parties. The parties agree that there are no other understandings, oral or otherwise, regarding the subject matter of this Contract.

7. The Contractor agrees to comply with all applicable Federal, State, City or municipal standards for the licensing, certification, operation of facilities and programs, and accreditation and licensing of individuals.

8. The Contractor shall not assign or subcontract any portion of the work provided for under the terms of this Contract without obtaining prior written approval of the City. All terms and conditions of this Contract shall apply to any approved subcontract or assignment related to this Contract.

9. The parties intend that an independent Contractor-City relationship will be created by this Contract. The City is interested only in the results to be achieved, and the implementation of the work will lie solely with the Contractor. No agent, employee, servant, or representative of the Contractor shall be deemed to be an employee, agent, servant, or representative of the City for any purpose. Employees of the Contractor are not entitled to any of the benefits the City provides for City employees. The Contractor will be solely and entirely responsible for its acts and for the acts of its agents, employees, servants, subcontractors, or otherwise during the performance of this Contract. In the performance of the work herein contemplated, the Contractor is an independent Contractor with regard to the performance of the details of the work; however, the components of and the results of the work contemplated herein must meet the approval of the City and shall be subject to the general rights of inspection and review to secure the satisfactory completion thereof.

10. **Third-Party Beneficiary:** All parties agree that the State of Washington shall be, and is hereby, named as an express third-party beneficiary of this contract, with full rights as such.

11. The Contractor agrees and covenants to indemnify, defend, and save harmless, the City and those persons who were, now are, or shall be duly elected or appointed officials or employees thereof, hereinafter referred to as the "City" against and from any loss, damage, costs, charge, expense, liability, claims, demands or judgments, of whatsoever kind or nature, whether to persons or to property, arising wholly or partially out of any act, action, neglect, omission, or default on the part of the Contractor, his agents, successors, assignees, subcontractors and/or employees, except only such injury or damage as shall have been caused by or resulted from the sole negligence of the City. In case any suit or cause of action shall be brought against the City on account of any act, action, neglect, omission, or default on the part of the Contractor, his agents, successors, assignees, subcontractors and/or employees the Contractor hereby agrees and covenants to assume the defense thereof and to pay any and all costs, charges,

attorney's fees and other expenses and any and all judgments that may be incurred or obtained against the City. In the event the City is required to institute legal action and/or participate in the legal action to enforce this Indemnification and Hold Harmless Clause, the Contractor agrees to pay the City's legal fees, costs and disbursements incurred in establishing the right to indemnification. If the claim, suit, or action for injuries, death, or damages as provided for in the preceding paragraphs of this specification is caused by or results from the concurrent negligence of (a) the indemnitee or the indemnitee's agents or employees and (b) the indemnitor or the indemnitor's agents for employees the indemnity provisions provided for in the preceding paragraphs of this specification shall be valid and enforceable only to the extent of the indemnitor's negligence. The Contractor expressly waives, as respects the City only, all immunity and limitation on liability under any Industrial Insurance Act, including Title 51 RCW, or other workers compensation act, disability act, or other employees benefits of any act of any jurisdiction which would otherwise be applicable in the case of such a claim. BY INITIALING BELOW THE OWNER AND CONTRACTOR CERTIFY THE WAIVER OF IMMUNITY SPECIFIED BY THIS PROVISION WAS MUTUALLY NEGOTIATED.

12. This Contract has been and shall be construed as having been made and delivered within the State of Washington, and it is mutually understood and agreed by each party hereto that this Contract shall be governed by the laws of the State of Washington, both as to interpretation and performance. Any action in law, suit and equity or judicial proceedings for the enforcement of this contract or any provisions thereof, shall be instituted and maintained in the courts of competent jurisdiction located in King County, Washington.

13. The failure of the City to insist upon strict performance of any of the covenants and agreements of this Contract or to exercise any option herein conferred in any one or more instances shall not be construed to be a waiver or relinquishment of any such obligation, or any other covenants or agreements, but the same shall be and remain in full force and effect.

14. It is understood and agreed by the parties hereto that if any part of this agreement is determined to be illegal, the validity of the remaining portions shall be construed as if the agreement did not contain the particular illegal part.

15. No change or addition to this Contract shall be valid or binding upon either party unless such change or addition shall be in writing, executed by both parties.

16. The Contractor shall fully comply with all applicable state and federal employment and discrimination laws and regulations. IN WITNESS WHEREOF, the Contractor has executed this instrument, on the day and year first below written and the Mayor has caused this instrument to be executed by and in the name of the said City, the day and year first above written.

IN WITNESS WHEREOF, the Contractor has executed this instrument, on the day and year first below written and the Mayor has caused this instrument to be executed by and in the name of the said City, the day and year first above written.

CITY OF SNOQUALMIE ("CITY")	_____ [CONTRACTOR]
By _____	By _____
Typed Name: Katherine Ross_____	Typed Name _____
Its: Mayor_____	Its _____
Phone: _____	Phone: _____
Fax: _____	Fax: _____
Date: _____	Date: _____
	WA Contractor's License No. _____

City of Snoqualmie
Reclaimed Water Distribution System Improvements
Prepared by RH2 Engineering, Inc.
Bid Tabulation

Sealed Bids were Opened on March 21, 2025 at 11:00 AM at City of Snoqualmie City Hall

				Engineer's Estimate		Apparent Low Bidder: Prospect Construction, Inc.		McClure and Sons, Inc.		Award Construction, Inc.		Average	
Bid Item No.	Bid Item Description	Unit	Quantity	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price
A - 1	**Mobilization, Demobilization, Site Prep. and Clean Up (10% Max. of Total)**	LS	1	$612,000.00	$612,000.00	$200,000.00	$200,000.00	$350,000.00	$350,000.00	$350,000.00	$350,000.00	$300,000.00	$300,000.00
A - 2	**Excavation Safety and Shoring**	LS	1	$36,000.00	$36,000.00	$25,000.00	$25,000.00	$85,000.00	$85,000.00	$90,000.00	$90,000.00	$66,666.67	$66,666.67
A - 3	**Temporary Erosion and Sedimentation Control (TESC)**	LS	1	$30,000.00	$30,000.00	$40,000.00	$40,000.00	$55,000.00	$55,000.00	$40,000.00	$40,000.00	$45,000.00	$45,000.00
A - 4	**Dewatering**	LS	1	$25,000.00	$25,000.00	$40,000.00	$40,000.00	$10,000.00	$10,000.00	$35,000.00	$35,000.00	$28,333.33	$28,333.33
A - 5	**Site Work**	LS	1	$930,000.00	$930,000.00	$1,148,347.00	$1,148,347.00	$415,000.00	$415,000.00	$1,050,000.00	$1,050,000.00	$871,115.67	$871,115.67
A - 6	**Site Utilities**	LS	1	$776,000.00	$776,000.00	$1,100,000.00	$1,100,000.00	$1,400,000.00	$1,400,000.00	$1,130,000.00	$1,130,000.00	$1,210,000.00	$1,210,000.00
A - 7	**Landscaping**	LS	1	$125,000.00	$125,000.00	$140,000.00	$140,000.00	$190,000.00	$190,000.00	$170,000.00	$170,000.00	$166,666.67	$166,666.67
A - 8	**Utility Potholing**	EA	20	$1,200.00	$24,000.00	$599.00	$11,980.00	$1,200.00	$24,000.00	$2,000.00	$40,000.00	$1,266.33	$25,326.67
A - 9	**Unscheduled Excavation**	CY	410	$51.22	$21,000.00	$73.00	$29,930.00	$80.00	$32,800.00	$170.00	$69,700.00	$107.67	$44,143.33
A - 10	**Unscheduled Structural Backfill**	TON	200	$55.00	$11,000.00	$44.00	$8,800.00	$68.00	$13,600.00	$100.00	$20,000.00	$70.67	$14,133.33
A - 11	**Structural - Reservoir**	LS	1	$2,120,000.00	$2,120,000.00	$2,000,000.00	$2,000,000.00	$2,420,000.00	$2,420,000.00	$2,530,000.00	$2,530,000.00	$2,316,666.67	$2,316,666.67
A - 12	**Structural - Irrigation Pump Station**	LS	1	$598,000.00	$598,000.00	$500,000.00	$500,000.00	$566,489.00	$566,489.00	$500,000.00	$500,000.00	$522,163.00	$522,163.00
A - 13	**Mechcanical - Reservoir**	LS	1	$162,000.00	$162,000.00	$100,000.00	$100,000.00	$190,000.00	$190,000.00	$220,000.00	$220,000.00	$170,000.00	$170,000.00
A - 14	**Mechancial - Irrigation Pump Station**	LF	1	$459,000.00	$459,000.00	$400,000.00	$400,000.00	$430,000.00	$430,000.00	$400,000.00	$400,000.00	$410,000.00	$410,000.00
A - 15	**Electrical**	LS	1	$327,000.00	$327,000.00	$320,000.00	$320,000.00	$420,000.00	$420,000.00	$360,000.00	$360,000.00	$366,666.67	$366,666.67
A - 16	**Telemetry and Automatic Control**	LS	1	$330,000.00	$330,000.00	$350,000.00	$350,000.00	$400,000.00	$400,000.00	$400,000.00	$400,000.00	$383,333.33	$383,333.33
A - 17	**As-Builts, Construction Records, and O&M Manuals**	LS	1	$10,000.00	$10,000.00	$10,000.00	$10,000.00	$5,000.00	$5,000.00	$10,000.00	$10,000.00	$8,333.33	$8,333.33
A - 18	**Testing, Startup, and Training**	LS	1	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00
A - 19	**Minor Change**	LS	1	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00
Subtotal Probable Construction Cost					**$6,726,000.00**		**$6,554,057.00**		**$7,136,889.00**		**$7,544,700.00**		**$7,078,548.67**
Sales Tax - 9.2%					**$619,000.00**		**$602,973.24**		**$656,593.79**		**$694,112.40**		**$652,000.00**
Total Probable Construction Cost - Schedule A					**$7,346,000.00**		**$7,157,030.24**		**$7,793,482.79**		**$8,238,812.40**		**$7,730,548.67**
						Provided	$6,554,057.00	Provided	$7,136,889.00	Provided	$7,544,700.00		

				Engineer's Estimate		Prospect Construction, Inc.		McClure and Sons, Inc.		Award Construction, Inc.		Average	
Bid Item No.	Bid Item Description	Unit	Quantity	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price
B - 1	**Existing Irrigation Pump Station Mechanical and Electrical Demolition**	LS	1	$50,000.00	$50,000.00	$20,000.00	$20,000.00	$50,000.00	$50,000.00	$20,000.00	$20,000.00	$30,000.00	$30,000.00
Subtotal Probable Construction Cost					**$50,000.00**		**$20,000.00**		**$50,000.00**		**$20,000.00**		**$30,000.00**
Sales Tax - 9.2%					**$5,000.00**		**$1,840.00**		**$4,600.00**		**$1,840.00**		**$3,000.00**
Total Probable Construction Cost - Schedule B					**$55,000.00**		**$21,840.00**		**$54,600.00**		**$21,840.00**		**$33,000.00**
						Provided	$20,000.00	Provided	$50,000.00	Provided	$20,000.00		

TOTAL PROBABLE CONSTRUCTION COST - SCHEDULE A & B (w/o Sales Tax)					**$6,776,000.00**		**$6,574,057.00**		**$7,186,889.00**		**$7,564,700.00**		**$7,108,548.67**
TOTAL PROBABLE CONSTRUCTION COST - SCHEDULE A & B (w/ Sales Tax)					**$7,401,000.00**		**$7,178,870.24**		**$7,848,082.79**		**$8,260,652.40**		**$7,763,548.67**

Signature?	✓	✓	✓
Bid Bond?	✓	✓	✓
Insurance?	✓	✓	✓
Addendum No. 1?	✓	✓	✓
Addendum No. 2?	✓	✓	✓
ECY Certification of Nonsegregated Facilities?	✓	✓	✓
ECY Form 6100-3?	✓	✓	✓
ECY Form 6100-4?	✓	✓	✓
Subcontractor's List?	✓	✓	✓

Signed:
3/25/2025

RH2 ENGINEERING
Bothell
22722 29th Drive SE, Suite 210
Bothell, WA 98021
1.800.720.8052 / rh2.com

March 27, 2025

Mr. Andrew Vining
Project Manager
City of Snoqualmie
PO Box 987
Snoqualmie, WA 98065

Sent via: *Email*

Subject: **Evaluation of Bids and Recommendation of Award**
City of Snoqualmie Reclaimed Water Distribution System Improvements

Dear Mr. Vining:

This letter presents RH2 Engineering, Inc.'s (RH2) recommendation of award and summarizes RH2's review of the three bids received on March 21, 2025, at 11:00 a.m. for the City of Snoqualmie's (City) Reclaimed Water Distribution System Improvements project.

Prospect Construction, Inc., (Prospect) submitted the lowest apparent bid. Prospect's bid total was $6,554,057.00 for Schedule A and $20,000 for Additive Bid Item B-1 (both excluding Washington State Sales Tax). The required bid forms have been completed by Prospect and submitted on time, and Prospect's bid has been determined to be responsive.

Prospect's bid for Schedule A and Schedule B was approximately 3 percent below RH2's opinion of probable construction cost of $6,776,000.00 (excluding Washington State Sales tax). The three bids received for both schedules combined (excluding Washington State Sales tax) for this project are as follows. A copy of the bid tabulation is attached.

Prospect Construction, Inc	$6,574,057.00
McClure and Sons, Inc.	$7,186,889.00
Award Construction, Inc.	$7,564,700.00

Per the Information to Bidders, the proposal is evaluated on the following items:

1. Contractor qualifications.
2. Subcontractor qualifications.
3. Bid price.
4. Compliance with the specifications.

To evaluate responsibility, the lowest bidder was required to submit a Bidder Qualification criteria per the requirements of Section 00 04 00 within 48 hours of the bid opening. RH2 has evaluated Prospect's qualifications submittal and checked its references. Prospect's Contract Documents are attached. Prospect is headquartered in Puyallup, Washington, and is regularly engaged in contracting for public agencies to complete water and wastewater treatment projects. Both the qualifications packet and the references are acceptable to the City's requirement for responsibility. Therefore, RH2 has determined that Prospect has the required work qualifications.

Based on the contract language and requirements, RH2 considers Prospect's proposal to comply with the contract requirements and recommends award of the Reclaimed Water Distribution System Improvements project for both Schedule A and Schedule B to Prospect Construction, Inc., for $6,554,057.00 (excluding Washington State Sales Tax).

If you have any questions or concerns regarding this recommendation, please feel free to contact me at (425) 951-5456.

Sincerely,

Barney Santiago, PE
Project Manager
BS/CB/fs/am

Attachments:

Bid Tabulation
Contract Documents and Attachments

Signed: 03/27/2025

Bid Tabulation

City of Snoqualmie
Reclaimed Water Distribution System Improvements
Prepared by RH2 Engineering, Inc.
Bid Tabulation

Sealed Bids were Opened on March 21, 2025 at 11:00 AM at City of Snoqualmie City Hall

				Engineer's Estimate		Apparent Low Bidder: Prospect Construction, Inc.		McClure and Sons, Inc.		Award Construction, Inc.		Average	
Bid Item No.	Bid Item Description	Unit	Quantity	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price
A - 1	**Mobilization, Demobilization, Site Prep. and Clean Up (10% Max. of Total)**	LS	1	$612,000.00	$612,000.00	$200,000.00	$200,000.00	$350,000.00	$350,000.00	$350,000.00	$350,000.00	$300,000.00	$300,000.00
A - 2	**Excavation Safety and Shoring**	LS	1	$36,000.00	$36,000.00	$25,000.00	$25,000.00	$85,000.00	$85,000.00	$90,000.00	$90,000.00	$66,666.67	$66,666.67
A - 3	**Temporary Erosion and Sedimentation Control (TESC)**	LS	1	$30,000.00	$30,000.00	$40,000.00	$40,000.00	$55,000.00	$55,000.00	$40,000.00	$40,000.00	$45,000.00	$45,000.00
A - 4	**Dewatering**	LS	1	$25,000.00	$25,000.00	$40,000.00	$40,000.00	$10,000.00	$10,000.00	$35,000.00	$35,000.00	$28,333.33	$28,333.33
A - 5	**Site Work**	LS	1	$930,000.00	$930,000.00	$1,148,347.00	$1,148,347.00	$415,000.00	$415,000.00	$1,050,000.00	$1,050,000.00	$871,115.67	$871,115.67
A - 6	**Site Utilities**	LS	1	$776,000.00	$776,000.00	$1,100,000.00	$1,100,000.00	$1,400,000.00	$1,400,000.00	$1,130,000.00	$1,130,000.00	$1,210,000.00	$1,210,000.00
A - 7	**Landscaping**	LS	1	$125,000.00	$125,000.00	$140,000.00	$140,000.00	$190,000.00	$190,000.00	$170,000.00	$170,000.00	$166,666.67	$166,666.67
A - 8	**Utility Potholing**	EA	20	$1,200.00	$24,000.00	$599.00	$11,980.00	$1,200.00	$24,000.00	$2,000.00	$40,000.00	$1,266.33	$25,326.67
A - 9	**Unscheduled Excavation**	CY	410	$51.22	$21,000.00	$73.00	$29,930.00	$80.00	$32,800.00	$170.00	$69,700.00	$107.67	$44,143.33
A - 10	**Unscheduled Structural Backfill**	TON	200	$55.00	$11,000.00	$44.00	$8,800.00	$68.00	$13,600.00	$100.00	$20,000.00	$70.67	$14,133.33
A - 11	**Structural - Reservoir**	LS	1	$2,120,000.00	$2,120,000.00	$2,000,000.00	$2,000,000.00	$2,420,000.00	$2,420,000.00	$2,530,000.00	$2,530,000.00	$2,316,666.67	$2,316,666.67
A - 12	**Structural - Irrigation Pump Station**	LS	1	$598,000.00	$598,000.00	$500,000.00	$500,000.00	$566,489.00	$566,489.00	$500,000.00	$500,000.00	$522,163.00	$522,163.00
A - 13	**Mechcanical - Reservoir**	LS	1	$162,000.00	$162,000.00	$100,000.00	$100,000.00	$190,000.00	$190,000.00	$220,000.00	$220,000.00	$170,000.00	$170,000.00
A - 14	**Mechancial - Irrigation Pump Station**	LF	1	$459,000.00	$459,000.00	$400,000.00	$400,000.00	$430,000.00	$430,000.00	$400,000.00	$400,000.00	$410,000.00	$410,000.00
A - 15	**Electrical**	LS	1	$327,000.00	$327,000.00	$320,000.00	$320,000.00	$420,000.00	$420,000.00	$360,000.00	$360,000.00	$366,666.67	$366,666.67
A - 16	**Telemetry and Automatic Control**	LS	1	$330,000.00	$330,000.00	$350,000.00	$350,000.00	$400,000.00	$400,000.00	$400,000.00	$400,000.00	$383,333.33	$383,333.33
A - 17	**As-Builts, Construction Records, and O&M Manuals**	LS	1	$10,000.00	$10,000.00	$10,000.00	$10,000.00	$5,000.00	$5,000.00	$10,000.00	$10,000.00	$8,333.33	$8,333.33
A - 18	**Testing, Startup, and Training**	LS	1	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00	$30,000.00
A - 19	**Minor Change**	LS	1	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00	$100,000.00
Subtotal Probable Construction Cost					**$6,726,000.00**		**$6,554,057.00**		**$7,136,889.00**		**$7,544,700.00**		**$7,078,548.67**
Sales Tax - 9.2%					**$619,000.00**		**$602,973.24**		**$656,593.79**		**$694,112.40**		**$652,000.00**
Total Probable Construction Cost - Schedule A					**$7,346,000.00**		**$7,157,030.24**		**$7,793,482.79**		**$8,238,812.40**		**$7,730,548.67**
						Provided	$6,554,057.00	Provided	$7,136,889.00	Provided	$7,544,700.00		

				Engineer's Estimate		Prospect Construction, Inc.		McClure and Sons, Inc.		Award Construction, Inc.		Average	
Bid Item No.	Bid Item Description	Unit	Quantity	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price	Unit Cost	Total Price
B - 1	**Existing Irrigation Pump Station Mechanical and Electrical Demolition**	LS	1	$50,000.00	$50,000.00	$20,000.00	$20,000.00	$50,000.00	$50,000.00	$20,000.00	$20,000.00	$30,000.00	$30,000.00
Subtotal Probable Construction Cost					**$50,000.00**		**$20,000.00**		**$50,000.00**		**$20,000.00**		**$30,000.00**
Sales Tax - 9.2%					**$5,000.00**		**$1,840.00**		**$4,600.00**		**$1,840.00**		**$3,000.00**
Total Probable Construction Cost - Schedule B					**$55,000.00**		**$21,840.00**		**$54,600.00**		**$21,840.00**		**$33,000.00**
						Provided	$20,000.00	Provided	$50,000.00	Provided	$20,000.00		

TOTAL PROBABLE CONSTRUCTION COST - SCHEDULE A & B (w/o Sales Tax)					**$6,776,000.00**		**$6,574,057.00**		**$7,186,889.00**		**$7,564,700.00**		**$7,108,548.67**
TOTAL PROBABLE CONSTRUCTION COST - SCHEDULE A & B (w/ Sales Tax)					**$7,401,000.00**		**$7,178,870.24**		**$7,848,082.79**		**$8,260,652.40**		**$7,763,548.67**

Signature?	✓	✓	✓
Bid Bond?	✓	✓	✓
Insurance?	✓	✓	✓
Addendum No. 1?	✓	✓	✓
Addendum No. 2?	✓	✓	✓
ECY Certification of Nonsegregated Facilities?	✓	✓	✓
ECY Form 6100-3?	✓	✓	✓
ECY Form 6100-4?	✓	✓	✓
Subcontractor's List?	✓	✓	✓

Signed:
3/25/2025

Contract Documents and Attachment

NAME OF FIRM SUBMITTING BID: Prospect Construction Inc.

SECTION 00 03 00
FORM OF BID AND BID SCHEDULE

Deliver to:

City of Snoqualmie City Hall
Attn: Director of Parks and Public Works
38624 SE River Street
Snoqualmie, WA 98065

1.01 Form of Bid

A. The undersigned, as Bidder, declares that we have examined all the Contract Documents herein contained and that we will contract with City of Snoqualmie on the Agreement form provided herewith and at the prices and on the terms and conditions contained herein to do everything necessary for the fulfillment of the **Reclaimed Water System Improvements.**

B. We agree that the Form of Bid constitutes our bid. To be responsive, a bid guaranty bond issued by a surety licensed to conduct business in the state of Washington, or a cashier's check, certified check or money order payable to City of Snoqualmie in the amount of 5% of the Total Bid Price must accompany our bid.

C. We agree that our bid constitutes an offer to City of Snoqualmie. If our bid is accepted, we agree to sign the Agreement form and to furnish the Performance and Payment Bond only on the form contained herein, along with evidences of insurance required herein, within ten days after receipt from City of Snoqualmie of written Notice of Selection. We further agree if awarded a contract to plan and prosecute the work with such diligence that the work and portions thereof shall be completed and ready for use within the period set forth in these Contract Documents.

D. By submitting a bid we certify that we are currently registered as a Contractor in accordance with RCW 18.27 by the state of Washington and will remain so registered throughout the performance of the Contract. We further certify that we are skilled in the general class and type of work called for in the Contract Documents.

1.02 SUBMITTALS

The following submittals are required to be submitted with the bid proposal:

- Certification of Nonsegregated Facilities (Attachment 3).
- DBE Subcontractor Utilization Form (EPA Form 6100-4).
- One copy of DBE Subcontractor Performance Form (EPA Form 6100-3) for each DBE subcontractor.
- Subcontractors List.

1.03 ERRORS ON FORM OF BID

We authorize City of Snoqualmie to correct any mathematical or clerical errors that may appear on our Form of Bid. Such errors may in the City's sole discretion be considered immaterial bid irregularities.

1.04 WAIVER OF INDUSTRIAL INSURANCE IMMUNITY

In accordance with the provisions of the Contract Documents and RCW 4.24.115, we waive any industrial insurance immunity and acknowledge this waiver was the subject of mutual negotiation.

1.05 TAXES

Taxes shall be in accordance with Section 00 01 00 paragraph 2.03.

1.06 BINDING BIDS

Bids shall constitute offers to City of Snoqualmie, which shall be binding for 180 days from the date of bid opening.

1.07 BIDDING SCHEDULES

A. The bidding schedules include completion of the Project in full. The work of each bid Item is specified or shown in the Contract Documents and described further in the Special Provisions, Section 00 09 00. A lump sum or unit price, as applicable, shall be offered for each bid Item, failure to do so shall render your bid non-responsive. To be considered responsive, bidders must complete and submit all three bidding schedules.

B. **Lump Sum Items.** For the Lump Sum Bid Items, the Bidder shall provide the price to perform all work as specified or shown herein, including labor, materials, equipment and all overhead and profit, as well as any other ancillary costs associated with completing this work.

C. **Unit Price Items.** For Unit Price Bid Items, the Bidder shall provide unit prices for each of the bid items set forth under Unit Price Items. The Contractor shall be compensated for the actual unit quantities performed in accordance with the terms and conditions set forth in the Contract. The unit price shall include all labor, materials, equipment and, all overhead and profit, as well as any other ancillary costs associated with completing a unit of work. The City does not guarantee the quantities estimated for each unit price bid item; nor does the City limit itself to the estimate numbers. Quantities estimated and/or stated on the Bid Form shall not be considered contract indications for purposes of the contract's Differing Site Condition clause.

D. The abbreviations under the "Unit" column shall be defined as follows: "CY" means cubic yard, "EA" means each; "EST" means estimated; "LF" means linear (lineal) foot, "LS" means lump sum, "SF" means square foot, and "SY" means square yard. Unit prices shall be multiplied by the estimated quantity to calculate an extended amount for that bid item. The Total Bid Price shall be the sum of the lump sum amounts and extended amounts for all bid Items on the bidding schedules.

E. We, the Bidder, propose to perform the work on the terms and conditions contained herein for the prices set forth below:

F. We agree that, if we are awarded this Contract, we will be entitled to payment only for actual unit quantities performed. The above unit prices are to be utilized during construction to increase or decrease the total contract amount as construction conditions warrant.

BID SCHEDULE

RECLAIMED WATER SYSTEM IMPROVEMENTS

NOTES: Unit prices for all bid items, all extensions, and the total amount bid must be shown.
All entries must be typed or entered in ink.

Schedule of Prices					
ITEM	DESCRIPTION	UNITS	QTY.	UNIT PRICE	TOTAL PRICE
1	Mobilization, Demobilization, Site Prep. and Clean Up (10% Max. of Total)	LS	1	$200,000.00	$200,000.00
2	Excavation Safety and Shoring	LS	1	$ 25,000.00	$ 25,000.00
3	Temporary Erosion and Sedimentation Control	LS	1	$40,000.00	$ 40,000.00
4	Dewatering	LS	1	$ 40,000.00	$ 40,000.00
5	Site Work	LS	1	$1,148,347.00	$1,148,347.00
6	Site Utilities	LS	1	$1,100,000.00	$1,100,000.00
7	Landscaping	LS	1	$140,000.00	$140,000.00
8	Utility Potholing	EA	20	$ 599.00	$ 11,980.00
9	Unscheduled Excavation	CY	410	$ 73.00	$ 29,930.00
10	Unscheduled Backfill	TON	200	$ 44.00	$ 8,800.00
11	Structural: Reservoir	LS	1	$2,000,000.00	$2,000,000.00
12	Structural: Irrigation Pump Station	LS	1	$500,000.00	$500,000.00
13	Mechanical: Reservoir	LS	1	$ 100,000.00	$100,000.00
14	Mechanical: Irrigation Pump Station	LS	1	$ 400,000.00	$400,000.00
15	Electrical	LS	1	$ 320,000.00	$320,000.00
16	Telemetry and Automatic Control	LS	1	$ 350,000.00	$350,000.00
17	As-builts	LS	1	$ 10,000.00	$ 10,000.00
18	Testing, Startup and Training	LS	1	$30,000.00	=$30,000.00
19	Minor Change	EST	1	$100,000.00	=$100,000.00
SUBTOTAL BASE BID ITEMS (WITHOUT SALES TAX)					=$6,554,057.00

Schedule of Prices: Additive Bid Item					
ITEM	DESCRIPTION	UNITS	QTY.	UNIT PRICE	TOTAL PRICE
B-1	Existing Irrigation Pump Station Mechanical and Electrical Demolition	LS	1	$ 20,000.00	$ 20,000.00
SUBTOTAL ADDITIVE BID ITEMS (WITHOUT SALES TAX)					=$ 20,000.00

Note: The total amount of either the base bid or the base bid plus additive bid item A-1 shall be used in the determination of the award of the contract, at the discretion of the Owner.

1.08 ACKNOWLEDGEMENT OF ADDENDA

We acknowledge addenda numbers 1 through 2 have been delivered to us and have been taken into account as a part of our bid. ***(Failure to acknowledge addenda shall render the Bid non-responsive and shall be cause for its rejection.)***

1.09 BID EVALUATION AND CONTRACT AWARD

A. In accordance with the provisions of these Contract Documents, bids will be evaluated to determine the lowest Total Bid Price and a contract will be awarded, if at all, to the responsive and responsible Bidder with the **lowest Total Bid Price**. The Bidder must meet the requirements of a responsible Bidder as established under RCW 39.04.350 and 39.06.020, and the supplemental bidder responsibility criteria in Section 00 04 00.

B. City of Snoqualmie reserves the right to reject any bid, any portion of any bid and/or to reject all bids. City of Snoqualmie further reserves the right, but without obligation, to waive informalities and irregularities.

C. The Bidder, if awarded the contract, shall verify that each of its first tier subcontractors, regardless of subcontract amount, at the time of subcontract execution, meets the Bidder responsibility criteria established under RCW 39.04.350, 39.06.020 and Section 00 04 00. Each first tier subcontract shall require the same from each of its subcontractors. Upon request of the City, the awarded Bidder (Contractor) shall promptly provide documentation demonstration that all subcontractors regardless of tier meet the Bidder responsibility criteria.

1.10 LIST OF SUBCONTRACTORS

A. The Bidder is expected to meet the Requirements of RCW 39.30.060.

B. The Bidder shall list as part of its bid in the space provided below either itself or the names of the subcontractors with whom the Bidder will subcontract for performance of the work.

C. The requirement to name the Bidder's proposed HVAC, plumbing, electrical, reservoir, and prestressor subcontractors applies only to the proposed HVAC, plumbing and electrical subcontractors who will contract directly with the Bidder (i.e., first-tier subcontractors only, even if that first-tier subcontractor intends to hire a sub-tier subcontractor to perform all or part of the HVAC, plumbing or electrical work).

Category of Work	Name of Firm *(DO NOT LEAVE BLANK)*	
HVAC	HERMANSON COMPANY, LLC	
Plumbing	HERMANSON COMPANY, LLC	
Electrical	SERVICE ELECTRIC	
Reservoir	WARD HENSHAW, CONSTRUCTION CO. INC.	
Prestressor	DN TANKS	

Additional sheets may be used if necessary.

1.11 FORM OF BID SIGNATURE

SIGNED this 21st day of March, 2025.

Firm: Prospect Construction Inc.

Address: 116 23rd St. SE

City: Puyallup State / Zip: WA 98372

Telephone: 253-446-1600 Fax No.: 253-446-1601

State of Incorporation: WA

WA State Contractor's License No: PROSPCI022CD

Federal Tax ID Number: 91-1871877

WA Workers Comp Acct #: 953-190-00

UBI Number: 601 850 637

Employment Security Account No. 000-037070-00-2

State Excise Tax Registration No. 601 850 637

By: _____ Ryan Sondgroth

Signature Print Name

Title: Vice President

END OF SECTION 00 03 00

SECTION 00 03 10
BID GUARANTEE BOND

KNOW ALL BY THESE PRESENTS: That we, Prospect Construction Inc,
as Principal, and Liberty Mutual Insurance Company,
as Surety, are jointly and severally held and firmly bound unto City of Snoqualmie, hereinafter called the Obligee, each in the penal sum of five percent (5%) of the Principal's Total bid Price for the work, this sum not to exceed:

Five Percent of the Total Bid Amount
DOLLARS
($ 5% of the Total Bid Amount) (hereinafter referred to as "penal sum") of lawful money of the United States, for the payment whereof unto the Obligee.

WHEREAS, the Principal is herewith submitting its offer for the fulfillment of the Reclaimed Water Distribution System Improvements Project.

NOW, THEREFORE, the condition of this obligation is such that if the Principal is awarded the Contract, and if the Principal, within the time specified, fulfills all of the requirements of the Contract Documents which are conditions precedent to the execution of the Contract, enters into, executes and delivers to the Obligee an agreement on the form provided herein complete with evidences of insurance, and if the Principal, within the time specified, gives to the Obligee the Performance and Payment Bond on the forms provided herein, then this obligation shall be void; otherwise, the Principal and Surety shall pay unto the Obligee the penal sum; provided however, in no event shall the Surety's liability exceed the penal sum.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable under this obligation as Principal, and that nothing of any kind or nature whatsoever that will not discharge the Principal shall operate as a discharge or a release of liability of the Surety.

IT IS HEREBY FURTHER DECLARED AND AGREED that this obligation shall be binding upon and inure to the benefit of the Principal, the Surety and the Obligee and their respective heirs, executors, administrators, successors and assigns.

SIGNED this 20th day of March, 2025.

Principal:	Prospect Construction Inc	Surety:	Liberty Mutual Insurance Company
By:		By:	Katharine J. Snider
Title:	VP ESTIMATING	Title:	Katharine J. Snider, Attorney-in-Fact
Address:	116 23rd Street SE	Address:	1001 4th Ave Suite 3700
City/Zip:	Puyallup, WA 98372	City/Zip:	Seattle, WA 98154
Telephone:	(253) 446-1600	Telephone:	(206) 473-3788

Note: A dated power of attorney must be provided which appoints the Surety's true and lawful attorney-in-fact to make, execute, seal and deliver this bid guaranty bond.

END OF SECTION 00 03 10

Liberty Mutual. SURETY

POWER OF ATTORNEY

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

Certificate No: **8213216-023049**

KNOWN ALL PERSONS BY THESE PRESENTS: That The Ohio Casualty Insurance Company is a corporation duly organized under the laws of the State of New Hampshire, that Liberty Mutual Insurance Company is a corporation duly organized under the laws of the State of Massachusetts, and West American Insurance Company is a corporation duly organized under the laws of the State of Indiana (herein collectively called the "Companies"), pursuant to and by authority herein set forth, does hereby name, constitute and appoint, Holli Albers; James B. Binder; Charla M. Boadle; Amelia G. Burrill; Brandon K. Bush; Julie A. Craker; Carley Espiritu; Jacob T. Haddock; Brent E. Heilesen; Lindsey Elaine Jorgensen; Aliceon A. Keltner; Christopher Kinyon; Alyssa J. Lopez; Michael Mansfield; Jamie L. Marques; Julianne Morris; Kari Michelle Motley; Justin Dean Price; Annelies M. Richie; Tamara A. Ringeisen; Travis J. Robles; Donald Percell Shanklin, Jr.; Edward Sims; Katharine J. Snider; Lois F. Weathers; Sarah Whitaker; Eric A. Zimmerman

all of the city of Tacoma state of WA each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents and shall be as binding upon the Companies as if they have been duly signed by the president and attested by the secretary of the Companies in their own proper persons.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Companies and the corporate seals of the Companies have been affixed thereto this 26th day of February, 2025.

Liberty Mutual Insurance Company
The Ohio Casualty Insurance Company
West American Insurance Company

By: _____
Nathan J. Zangerle, Assistant Secretary

State of PENNSYLVANIA
County of MONTGOMERY ss

On this 26th day of February, 2025 before me personally appeared Nathan J. Zangerle, who acknowledged himself to be the Assistant Secretary of Liberty Mutual Insurance Company, The Ohio Casualty Company, and West American Insurance Company, and that he, as such, being authorized so to do, execute the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.

Commonwealth of Pennsylvania - Notary Seal
Teresa Pastella, Notary Public
Montgomery County
My commission expires March 28, 2029
Commission number 1126044
Member, Pennsylvania Association of Notaries

By: _____
Teresa Pastella, Notary Public

This Power of Attorney is made and executed pursuant to and by authority of the following By-laws and Authorizations of The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company which resolutions are now in full force and effect reading as follows:

ARTICLE IV – OFFICERS: Section 12. Power of Attorney.
Any officer or other official of the Corporation authorized for that purpose in writing by the Chairman or the President, and subject to such limitation as the Chairman or the President may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Corporation to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Corporation by their signature and execution of any such instruments and to attach thereto the seal of the Corporation. When so executed, such instruments shall be as binding as if signed by the President and attested to by the Secretary. Any power or authority granted to any representative or attorney-in-fact under the provisions of this article may be revoked at any time by the Board, the Chairman, the President or by the officer or officers granting such power or authority.

ARTICLE XIII – Execution of Contracts: Section 5. Surety Bonds and Undertakings.
Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

Certificate of Designation – The President of the Company, acting pursuant to the Bylaws of the Company, authorizes Nathan J. Zangerle, Assistant Secretary to appoint such attorneys-in-fact as may be necessary to act on behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

Authorization – By unanimous consent of the Company's Board of Directors, the Company consents that facsimile or mechanically reproduced signature of any assistant secretary of the Company, wherever appearing upon a certified copy of any power of attorney issued by the Company in connection with surety bonds, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

I, Renee C. Llewellyn, the undersigned, Assistant Secretary, The Ohio Casualty Insurance Company, Liberty Mutual Insurance Company, and West American Insurance Company do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy of the Power of Attorney executed by said Companies, is in full force and effect and has not been revoked.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seals of said Companies this 20th day of March, 2025.

By: _____
Renee C. Llewellyn, Assistant Secretary

Addendum No. 1 is hereby made a part of the Contract Documents, and its terms and conditions are fully binding on the Contract Documents holder. He/she shall acknowledge receipt of Addendum No. 1 by signing in the space provided below and attaching it to his/her proposal. In addition, Contract Documents holder shall fill out 1.07 Acknowledgment of Addenda on page 00 03 00 – 22 in the Form of Bid.

CITY OF SNOQUALMIE

Barney Santiago, RH2 Engineering Project Manager

Issued March 14, 2025

Received and Acknowledged:

Prospect Construction Inc.

Company Name

Signature of person receiving addendum

Vice President

Title

3/14/2025

Date

Addendum No. 2 is hereby made a part of the Contract Documents, and its terms and conditions are fully binding on the Contract Documents holder. He/she shall acknowledge receipt of Addendum No. 1 by signing in the space provided below and attaching it to his/her proposal. In addition, Contract Documents holder shall fill out 1.07 Acknowledgment of Addenda on page 00 03 00 – 22 in the Form of Bid.

CITY OF SNOQUALMIE

Barney Santiago, RH2 Engineering Project Manager

Issued March 17, 2025

Received and Acknowledged:

Prospect Construction Inc.

Company Name

Signature of person receiving addendum

Vice President

Title

3/17/2025

Date

ATTACHMENT 3

CERTIFICATION OF NONSEGREGATED FACILITIES

(Applicable to federally assisted construction contracts and related subcontracts exceeding $10,000 which are not exempt from the Equal Opportunity clause.)

The federally assisted construction contractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor certified, further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The federally assisted construction contractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work area, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or area, in fact, segregated on the basis of race, creed, color, or national origin, because of habit, local custom, or otherwise. The federally assisted construction contractor agrees that (except where he has obtained identical certifications from proposed contractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such, certification in this file.

Signature _____ Date 3/21/2025

Ryan Sondgroth, Vice President
Name and title of signer (please type)

[THIS FORM SHALL BE COMPLETED IN FULL AND SUBMITTED WITH THE BID PROPOSAL]

DEPARTMENT OF ECOLOGY
State of Washington

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Utilization Form

This form is intended to capture the prime contractor's actual and/or anticipated use of identified certified DBE[1] subcontractors[2] and the estimated dollar amount of each subcontract. An EPA Financial Assistance Agreement Recipient must require its prime contractors to complete this form and include it in the bid or proposal package. Prime contractors should also maintain a copy of this form on file.

Prime Contractor Name Prospect Construction	Project Name Reclaimed Water Distribution System Improvements	
Bid/ Proposal No. SNQ 22.0187	Assistance Agreement ID No. (if known) WQC-2025-Snoqua-00167	Point of Contact Ryan Sondgroth
Address 116 23rd St. SE Puyallup, WA 98372Click here to enter text.		
Telephone No. 253-446-1600	Email Address rsondgroth@prospectconst.com	
Issuing/Funding Entity **Department of Ecology**		

I have identified potential DBE certified subcontractors ☑ YES ☐ NO

If yes, please complete the table below. If no, please explain: Click here to enter text.

Subcontractor Name/ Company Name	**Company Address/ Phone/ Email**	**Estimated Dollar Amount**	**Currently DBE Certified?**
Click here to enter text. LORN COATINGS	Click here to enter text. 3409 C St. NE1, AUBURN, WA 98002.	Click here to enter text. $26,615.00	Click here to enter text. YES
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.
Click here to enter text.	Click here to enter text.	Click here to enter text.	Click here to enter text.

Add more lines if needed

[1] A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

[2] Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

DEPARTMENT OF ECOLOGY
State of Washington

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Utilization Form

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	**Print Name**
	Ryan Sondgroth
Title	**Date**
Vice President	3/21/2025

DEPARTMENT OF ECOLOGY
State of Washington

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Performance Form

This form is intended to capture the DBE[1] subcontractor's[2] description of work to be performed and the price of the work submitted to the prime contractor. An EPA Financial Assistance Agreement Recipient must require its prime contractor to have its DBE subcontractors complete this form and include all completed forms in the prime contractors bid or proposal package.

Subcontractor Name Lorn Coatings	Project Name Snoqualmie Reclaimed Water Distribution Project	
Bid/ Proposal No. Click here to enter text. SNQ 22.0187	Assistance Agreement ID No. (if known) Click here to enter text. WQC-2025-Snoqua-00167	Point of Contact Thavy Lorn
Address 3409 C St. NE 1 Auburn, WA 98002		
Telephone No. 2063041700	Email Address thavyl@lorncoatings.com	
Prime Contractor Name Click here to enter text. Prospect Construction	Issuing/Funding Entity **Department of Ecology**	

Contract Item Number	**Description of Work Submitted to the Prime Contractor Involving Construction, Services, Equipment, or Supplies**	**Price of Work Submitted to the Prime Contractor**
Click here to enter text.	Painting	Prospect Construction $26,615
DBE Certified By: ☐DOT ☐ SBA ☒ Other: OMWBE		Meets/ exceeds EPA certification standards? ☐ YES ☐ NO ☐ Unknown

[1] A DBE is a Disadvantaged, Minority, or Woman Business Enterprise that has been certified by an entity from which EPA accepts certifications as described in 40 CFR 33.204-33.205 or certified by EPA. EPA accepts certifications from entities that meet or exceed EPA certification standards as described in 40 CFR 33.202.

[2] Subcontractor is defined as a company, firm, joint venture, or individual who enters into an agreement with a contractor to provide services pursuant to an EPA award of financial assistance.

DEPARTMENT OF ECOLOGY
State of Washington

Disadvantaged Business Enterprise (DBE) Program
DBE Subcontractor Performance Form

I certify under penalty of perjury that the forgoing statements are true and correct. Signing this form does not signify a commitment to utilize the subcontractors above. I am aware of that in the event of a replacement of a subcontractor, I will adhere to the replacement requirements set forth in 40 CFR Part 33 Section 33.302 (c).

Prime Contractor Signature	**Print Name**
	Ryan Sondgroth
Title	**Date**
Click here to enter text. Vice President	Click here to enter text. 3/20/2025

Subcontractor Signature	**Print Name**
	Thavy Lorn
Title	**Date**
Owner	3/20/25

TECHNICAL MEMORANDUM

Client:	City of Snoqualmie
Project:	Reclaimed Water Distribution System Improvements
Project File:	SNQ 0220187.00.0006
Project Manager:	Barney Santiago, PE
Composed by:	Cassidy Brand, EIT, and Barney Santiago, PE
Reviewed by:	Rick Ballard, PE
Subject:	Reclaimed Water Irrigation Pump Station
Date:	August 1st, 2024

Signed: 08/01/2024

Background

The City of Snoqualmie (City) owns and operates a reclaimed water supply and distribution system that is 25 years old. The City's Water Reclamation Facility supplies Class A reclaimed water to Eagle Lake, where it is stored as irrigation supply for City-supplied customers and The Club at Snoqualmie Ridge Golf Course. City customers are supplied irrigation water from the City-owned Irrigation Pump Station (IPS) located near Eagle Lake. The Golf Course irrigation system is owned and operated by the Golf Course and is separate from City operations. The City currently is designing improvements for its reclaimed water system to meet updated National Pollutant Discharge Elimination System Permit requirements. Improvements include a new closed water reservoir to be located just east of SE Ridge Street and north of Hole 2 at the Golf Course.

The City asked RH2 Engineering, Inc., (RH2) to prepare this technical memorandum to evaluate the advantages and disadvantages of using the existing IPS or building a new IPS to serve end users from the new reclaimed water system reservoir.

Existing IPS

RH2's *Reclaimed Water Distribution System Engineering Report* (2023) **(Attachment 1)** assumed the City would reuse the existing IPS as part of the reservoir improvements. The main advantage of reusing the existing IPS is that it would reduce the cost of near-term improvements to the reclaimed water system. However, there are several disadvantages to continuing to operate the existing IPS, including the following:

- The existing IPS is aging and in poor condition. The suction side piping and irrigation pumps have deteriorated due to decades of withdrawing Class A water from Eagle Lake, resulting in expedited wear on the pump cans and related suction piping.
- A new control structure and clearwell would be required to hydraulically operate the existing IPS with the new reservoir.

- The existing IPS is structurally connected to the Golf Course's irrigation pump station. Operating the new reservoir with the existing IPS would require modifying the existing yard piping that is in close proximity to the Golf Course's primary irrigation piping.
- Connecting the existing IPS to the new reservoir would require additional irrigation force main to be installed on Eagle Lake Drive SE, which would disrupt homeowners and Golf Course activities during construction. Eagle Lake Drive SE is congested with buried utilities and construction of a new 10-inch irrigation force main in the right-of-way would be slow and complex.

The construction cost to extend the irrigation transmission main from the reservoir to the existing IPS as well as to construct ancillary control and clearwell structures would range between $650,000 and $900,000. The existing IPS pumps are approximately 25 years old and have limited useful life remaining. If the existing IPS is reconfigured to accommodate the new reclaimed water reservoir, the City would need to plan to replace the pumps in the next 5 to 10 years. This would be an additional cost of approximately $200,000 to $300,000.

Proposed IPS

A new IPS would be constructed at the reclaimed water reservoir site. Although constructing a new IPS would be more costly than reusing the existing IPS, there are several advantages, including the following:

- The existing IPS pumps have 5 to 10 years of useful life remaining.
- Additional features that increase operability and efficiency of the reclaimed water system could be implemented at a new IPS. These features include variable frequency drives for the pumps, connections to a portable backup power generator, and emergency chlorination.
- The new reclaimed water reservoir will slightly change the hydraulic grade of the reclaimed water system. The new IPS can be designed around the reservoir hydraulics to maximize efficiency.
- The proposed IPS equipment and piping will only convey high quality Class A reclaimed water instead of a mixture of Class A water and low-quality raw surface water currently drawn from Eagle Lake. Additionally, the new IPS will have the ability to dispose of Class A water to the sewer system if it does not meet specifications.
- The proposed IPS will be located at the secured reservoir site adjacent to the reservoir. This will limit the number of sites that operators and maintenance personnel must regularly visit.

The construction cost to implement a new IPS at the reservoir site would range between $2,200,000 and $2,800,000.

Recommendations

Based on the many advantages of building a new IPS at the reclaimed water reservoir site, RH2 recommends the City design and construct the proposed IPS. A new IPS would cost $1,300,000 to $1,600,000 more than reusing the existing IPS, and the City would have a new facility independent from Golf Course infrastructure dedicated to conveying high-quality Class A reclaimed water. If the City were to reuse the existing IPS, the transmission main to connect the reservoir to the existing IPS would be a costly and disruptive construction project that may be abandoned years after installation. It would be more economical to implement new irrigation infrastructure now than to invest in depreciating assets associated with the existing pump station that has limited useful life remaining.

Attachments

Attachment 1 – Reclaimed Water Distribution System Engineering Report

Attachment 1

Reclaimed Water Distribution System Engineering Report

RECLAIMED WATER DISTRIBUTION SYSTEM ENGINEERING REPORT

Prepared for City of Snoqualmie

December 2023

SNQ 22-0187

Prepared by:
RH2 Engineering, Inc.
22722 29th Drive SE, Suite 210
Bothell, WA 98021
1.800.720.8052 / rh2.com

City of Snoqualmie
Reclaimed Water Distribution System
December 2023

Prepared by RH2 Engineering, Inc.

Prepared for City of Snoqualmie

Note: This Engineering Report was completed under the direct supervision of the following Licensed Professional Engineers registered in the State of Washington.

Sincerely,

RH2 ENGINEERING, INC.

Signed: 12/07/2023

City of Snoqualmie
Reclaimed Water Distribution System
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City of Snoqualmie
Reclaimed Water Distribution System
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City of Snoqualmie
Reclaimed Water Distribution System
Engineering Report

Introduction

This Engineering Report (Report) evaluates alternatives for the City of Snoqualmie (City) to improve its reclaimed water distribution system to meet the requirements of the Washington State Department of Ecology's (Ecology) Reclaimed Water Rule and to comply with Permit Section R8.A.1 of the City's current Reclaimed Water Permit. This Report includes the reclaimed water system alternatives analysis and the preliminary design of the preferred alternative.

Background

The City owns and operates a potable water system, a sanitary sewer system, and a reclaimed water system. The reclaimed water supply and distribution system finished construction in 1999. The City's Water Reclamation Facility (WRF) supplies Class A reclaimed water to Eagle Lake, where it is stored as irrigation supply for City-supplied customers and the Snoqualmie Ridge Golf Course (Golf Course). City customers are supplied irrigation water from the City owned Irrigation Pump Station (IPS) located near Eagle Lake. The Golf Course irrigation system is owned and operated by the Golf Course and is separate from City operations. **Figure 1** shows the reclaimed water transmission main from the WRF to Eagle Lake, as well as the City's reclaimed water system irrigation areas.

In 2021, Ecology issued the City's updated National Pollutant Discharge Elimination System (Permit) Permit (No. WA0022403), which included additional requirements for the City's reclaimed water system. These updates are based on the recently modified Reclaimed Water Rule, Chapter 173-219 Washington Administrative Code (WAC), which includes requirements that did not exist at the time the reclaimed water system was constructed. Through the NPDES Permit, Ecology is requiring the City to modify the reclaimed water distribution system to "…not allow contamination of reclaimed water by lower quality water, such as urban stormwater runoff." The purpose of this Report is to analyze alternatives and propose reclaimed water system improvements to fulfill Permit Section R8.A.1 submittal requirements. The use of reclaimed water is necessary to help meet the growing need for clean water for beneficial use. It is RH2 Engineering, Inc., (RH2) and the City's understanding that the goal of the Reclaimed Water Rule and the Permit, as it pertains to the City's Class A reclaimed water irrigation system, is to prevent degradation of reclaimed water quality from other sources.

The existing City irrigation system is a non-expanding reclaimed water system. At this time, the City has no intention to increase the service area or number of customers that receive reclaimed water.

Historical Irrigation Usage

Currently, reclaimed water is produced at the WRF, sent to Eagle Lake via the Reclaimed Water Transmission Main, and then pumped from the IPS to the City's irrigation distribution system. The municipal side of the IPS has three pumps that supply a 10-inch pipeline that connects to

the City's irrigation distribution system. **Table 1** shows the existing pumps' capacity, total dynamic head, and horsepower.

Table 1

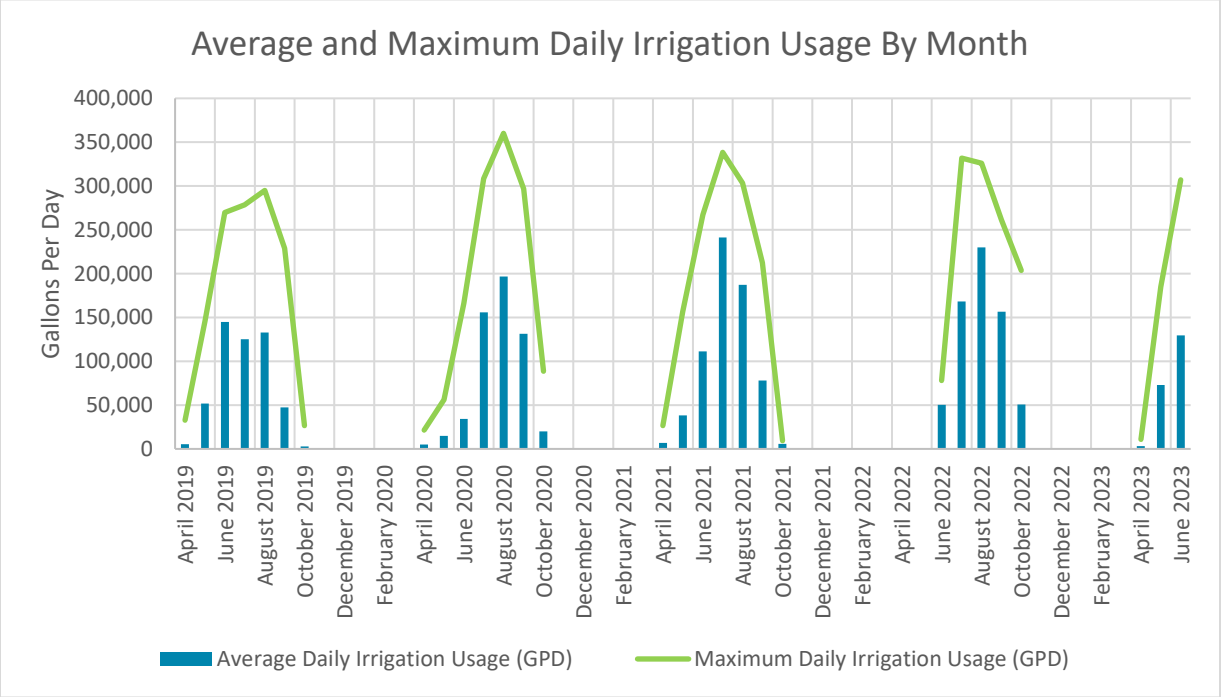
Existing Municipal Irrigation Pumps

Pump Quantity and Type	Pump Capacity (gpm)	Total Dynamic Head (ft)	Horsepower
(2) Vertical Turbine Pumps	500	400	75
(1) Jockey Pump	40	600	7.5

Historically, the City supplied Eagle Lake from two sources; Class A reclaimed water from the City's WRF, and water from the City's potable water system. In 2019, the City transitioned to using only reclaimed water for irrigation to help conserve potable water for beneficial use. **Figure 2** shows the average and maximum daily irrigation use for each month from April 2019 to June 2023 during irrigation season. During the 2019 through 2022 irrigation seasons, the average volume of irrigation water used for the City's irrigation system was 17.9 million gallons (MG) per year. This is not total reclaimed water supply to Eagle Lake or does it include supply to the Golf Course irrigation system.

Figure 2

Average and Maximum Daily Irrigation Usage per Month



The existing City irrigation system controller is a Rain Bird Maxicom Central Control System with meters to the various points of connection to bill customers. This Maxicom system controls irrigation of City areas overnight between the hours of 10 PM and 6 AM. **Table 2** summarizes the daily irrigation water demands.

Table 2

City Irrigation Demands Summary

Condition	Criteria	Gallons
Average Daily Demand	Average Day Production in July and August 2019-2022	180,000
Maximum Daily Demand	Maximum Day Production from 2019-2022	360,000
Maximum Daily Irrigation Pump Capacity	Eagle Lake Pump Station capacity with two 500 gallons per minute (gpm) pumps continuously running for 8 hours each night	480,000

The City contracts with Extended Range Forecasting Company, Inc., (ERF, aka Water Management Group, Inc.) to manage the irrigation system. The irrigation system piping varies throughout distribution, and there are multiple pressure regulating valves which reduce pressure to the zone of application. The jockey pump operates intermittently to maintain a pressure setpoint within the system, a minimum of 70 pounds per square inch (psi).

Alternatives Analysis

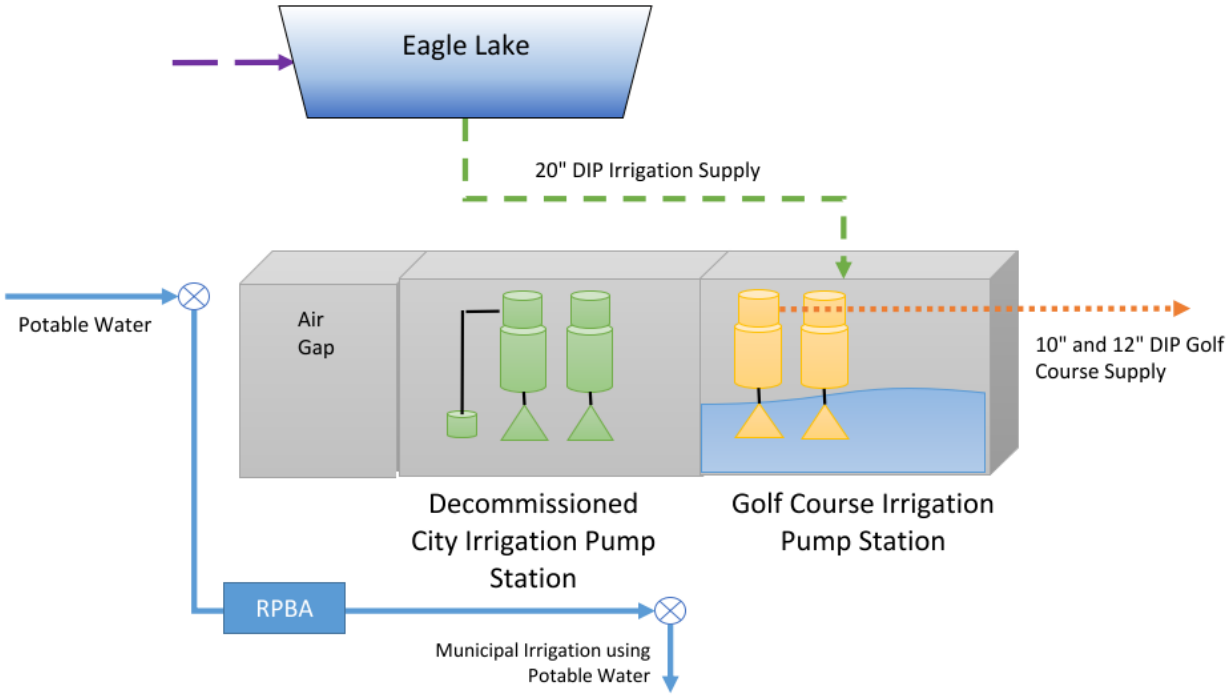
Ecology is requiring that the City's irrigation system be separated from Eagle Lake so that it does not pump water that is comingled with other potential water sources. In addition, the Reclaimed Water Rule requires that any Class A reclaimed water generator or distributor must maintain a free chlorine residual greater than 0.2 milligrams per liter (mg/L) or a total chlorine residual greater than 0.5 mg/L "…from the facility to the point of use to prevent biological growth, prevent deterioration of reclaimed water quality, and to protect public health." (WAC 173-219-370(1)). RH2 evaluated two distribution system improvement alternatives to comply with these regulations. Alternative 1 would transition the City's entire municipal irrigation supply downstream of the IPS to potable water, which inherently has a chlorine residual. Alternative 2 would construct a closed reservoir to store and separate reclaimed water generated by the WRF from the Golf Course's Eagle Lake. This alternative would either have a permanent chlorination system for disinfection or have appurtenances to implement emergency chlorination.

Alternative 1: Transition Irrigation Customers to Potable Supply

Alternative 1 would transition existing irrigation customers from reclaimed water to potable water. This can be accomplished by bypassing the IPS altogether and connecting the existing potable water supply directly to the 10-inch ductile iron pipe (DIP) municipal irrigation main. Piping associated with the municipal reclaimed IPS would be cut and capped. The existing 4-inch-diameter potable supply pipeline may need to be upsized to accommodate the new connection. A reduced pressure backflow assembly (RPBA) would be installed to prevent a cross connection to the domestic water system. The pipeline would be equipped with control valves

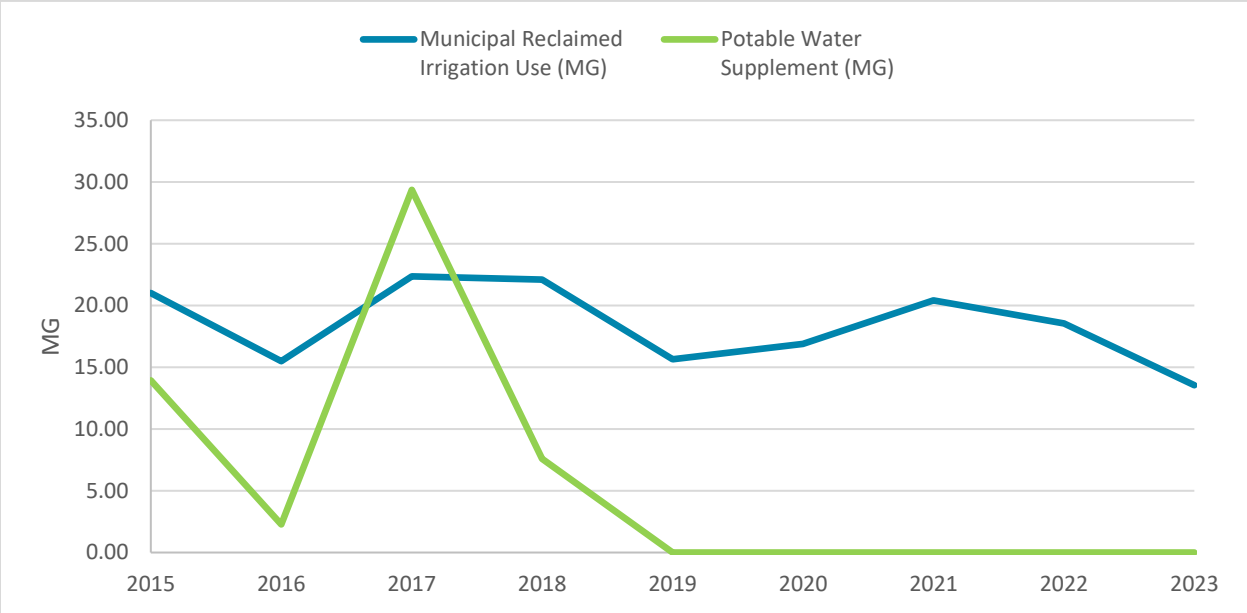
to regulate flow and a flow meter with a telemetry connection to allow the City to monitor water use. **Figure 3** shows a schematic of this alternative.

Figure 3
Alternative 1 Schematic



The City's Water Use Efficiency (WUE) Program, in accordance with the WUE Rule in the Municipal Water Supply – Efficiency Requirements Act, is helping to curtail excess potable water demands. Prior to 2019, potable water was used occasionally to supplement reclaimed water for irrigation. Since 2019, the City has not supplemented reclaimed water demands with potable water. **Figure 4** shows the historical annual municipal reclaimed water irrigation usage and potable water supplement. Converting municipal customers' irrigation supply from reclaimed water to potable water will result in higher potable water usage for irrigation. This will result in higher potable water usage for irrigation and may result in greater burden to water supply which has not been accounted for in water system planning.

Figure 4
Municipal Reclaimed Irrigation Use and Potable Water Supplement



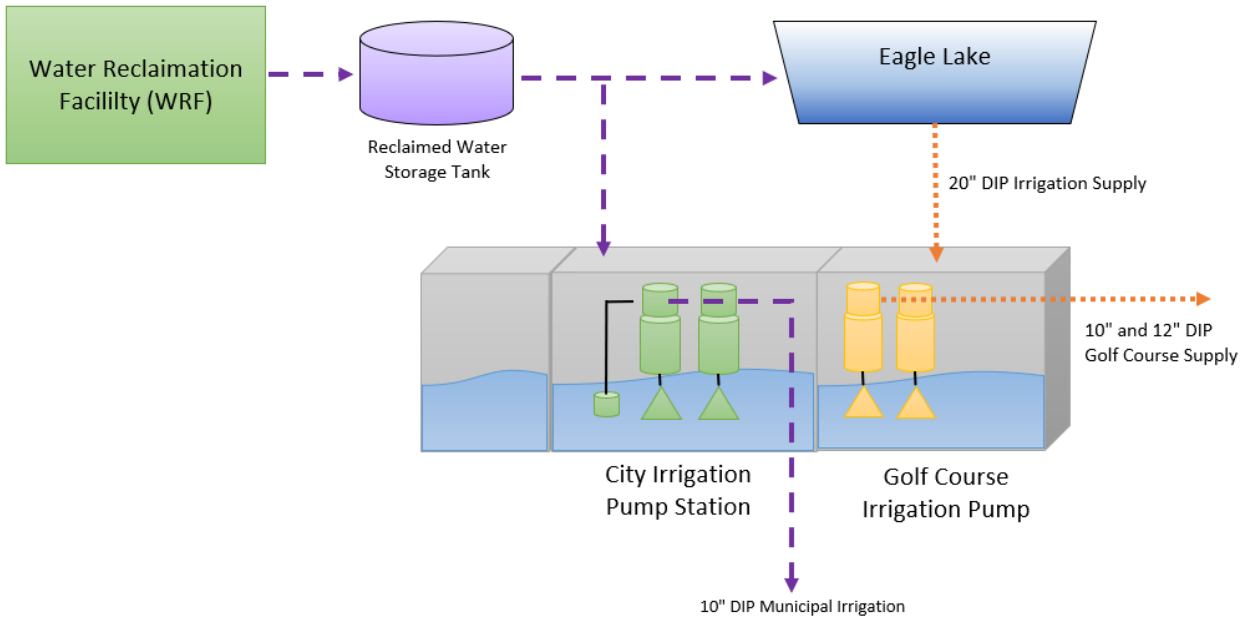
Converting the City's irrigation supply to potable water also will cause an increase in prices for City customers currently billed for reclaimed water. Per City Ordinance 1187, the rate for retail customers of the municipal irrigation system for reclaimed water is a flat rate (based on the percent of total zones a customer owns) plus a volumetric rate of $3.21 per 100 cubic feet (ccf) in 2023. The commercial water/potable irrigation rate is a flat rate (based on the size of the customer's water meter) plus a volumetric rate of $4.09/ccf in 2023 (assuming the usage falls within 300 to 801 ccf). Therefore, transitioning customers from reclaimed water to potable water would result in a cost increase of $0.88/ccf in 2023.

The Water System Plan (WSP) details future water rights and source capacity limitations. Table 6-3 of the WSP shows that instantaneous water rights would be deficient by 2040 even factoring Water Use Efficiency (WUE). Table 7-2 of the WSP shows that projected water source capacity would be deficient by 2030. Due to the City's population growth, limited water rights, and customer cost impacts, potable water is not a viable long-term solution for the City to comply with the Reclaimed Water Rule.

Alternative 2: Separation of City Reclaimed Water Irrigation System

Alternative 2 consists of constructing a new reclaimed water reservoir. Reclaimed water produced at the WRF would be stored in the reservoir and then connected to the irrigation distribution system at the IPS, thereby completely separating Eagle Lake from the municipal irrigation system. This alternative would provide the City with complete control of the reclaimed water quantity and quality as it leaves the WRF. Eagle Lake would continue to be supplied with reclaimed water for use by the Golf Course. **Figure 5** shows a schematic of this alternative.

Figure 5
Alternative 2 Schematic



Alternative 2A: Reclaimed Water Reservoir with Chlorination

To maintain a chlorine residual per WAC 173-219-370, a chlorination system would inject sodium hypochlorite into the City's irrigation pump station discharge as the water is pumped to the municipal irrigation distribution system. The disinfection infrastructure would include a bulk sodium hypochlorite chemical storage and feed system, chlorine residual analyzers in the irrigation distribution system at key locations (to ensure a residual greater than 0.2 mg/L free chlorine or greater than 0.5 mg/L total chlorine), and electrical and control improvements.

The disadvantages of chlorinating reclaimed water not only include the additional capital and operational costs for the chemical feed system, but also the challenges and labor required to maintain a chlorine residual in this type of distribution system. As shown in **Figure 1**, unlike a potable water distribution system that typically loops fresh water throughout a system, the reclaimed water distribution system consists of a 10-inch-diameter transmission main to Eagle Lake and a branching network of irrigation lines from the pump station. This results in many dead-end, small diameter pipelines, each with their own extended water age issues. It would be challenging to monitor the various extents of the irrigation zones for chlorine residual. It would be even more challenging to consistently maintain a healthy chlorine residual in an intermittent system that only operates overnight and is dormant for most of the day. A fully looped irrigation system would require a complete rebuild of this distribution system.

Alternative 2B: Reclaimed Water Reservoir without Chlorination

WAC 173-219-370 allows for the distribution chlorine residual requirement to be waived or modified if the reclaimed water generator can demonstrate a benefit from reducing or eliminating the chlorine residual. The City previously requested a distribution chlorine residual waiver in a December 2015 Engineering Report under the condition that the chlorination disinfection system be maintained to either mitigate biological growth within the irrigation distribution system or provide disinfection in the event the ultraviolet (UV) disinfection system

cannot meet reclaimed water standards. In 2019, the City received formal approval from Ecology and the Washington State Department of Health (DOH) to waive the distribution chlorine residual requirement for the UV application. The City is requesting that Ecology and DOH continue to waive the distribution chlorine residual requirement for the proposed application of completely separating Eagle Lake from the municipal irrigation system by constructing a reclaimed water reservoir. The many benefits of not chlorinating the City's reclaimed water include the issues referenced previously. City operations staff would not need to operate and maintain the chlorine storage and feed equipment or monitor chlorine residual throughout the various dead-end irrigation zones overnight during the hours of irrigation.

One of the strongest reasons to not chlorinate is that the City has been operating this irrigation system for more than two decades without any recorded violations or public health concerns regarding the use of reclaimed irrigation water. The City has complete control of the irrigation system, there are no unauthorized users of the reclaimed water system, and the late-night hours of operation limit human exposure to the Class A reclaimed water. Augmenting this water with a chlorine residual would require extensive additional maintenance for City staff with minimal health benefit.

To provide disinfection flexibility, the City can keep the WRF reclaimed water pump discharge chemical injection point available if sodium hypochlorite is ever needed to sanitize the irrigation distribution system in an emergency. The City previously chlorinated Class A reclaimed water before the UV light disinfection system was implemented at the WRF.

Recommendation

Separating the City's reclaimed water allotment from Eagle Lake by installing a new closed water reservoir is the best solution to meet the updated Permit requirements. This will allow the City to have full control of the quality of reclaimed water generated by the WRF. Maintenance of a chlorine residual to comply with WAC 176-219-370 may require rebuilding the City's entire irrigation distribution system, as well as extensive operator labor to maintain and operate a chlorine storage and injection system and monitor chlorine residuals in dead-end zones overnight. The non-looped irrigation distribution system may not feasibly sustain a chlorine residual due to extensive water quality issues within dead-end pipes. The effort required for maintaining this residual has minimal benefit since the City has had no reported public health issues with humans interacting with this reclaimed irrigation water since 1999 when construction was completed. It would be challenging to estimate the costs of chlorinating reclaimed water while upgrading the reclaimed water distribution system to ensure a persistent chlorine residual. The City is formally requesting Ecology waive the requirement of maintaining a chlorine residual as outlined in WAC 173-219-370, since separation through a proposed reclaimed water reservoir will meet the intent of the NPDES Permit.

Reclaimed Water Reservoir Preliminary Design

Reservoir Sizing

The reservoir will be sized to provide at least enough storage to meet the maximum day demand of the existing system over the 8 hour irrigation period. The irrigation period is from 10 PM to 6 AM and most reclaimed water is produced during the day. **Table 3** shows the basis of design for the reservoir's volume.

Table 3

Reclaimed Water Reservoir Volume Basis of Design

Condition	Criteria	Design Usage (gal)
Average Daily Demand	Average Day Demand (During Peak Irrigation Season)	180,000
Minimum Storage Volume	1.5 x Average Day Demand (per Reclaimed Water Facilities Manual)	270,000
Maximum Daily Storage Volume	Maximum Production from 2019-2022	360,000
Conservative Maximum Daily Storage Volume	Maximum Production with a 10% Safety Factor	400,000
Maximum IPS Pumping Condition	Eagle Lake Pump Station capacity with two 500 gpm pumps continuously running for 8 hours each night	480,000

The proposed reservoir should be sized to store approximately 400,000 gallons to provide some conservatism for the maximum daily volume. The exact size will be determined in a future phase of this project.

Reservoir Location

The proposed reclaimed water reservoir will be constructed along the reclaimed water transmission main that currently runs from the WRF to Eagle Lake. Reclaimed water will flow from the reservoir to the IPS and bypass Eagle Lake. A new control structure and clearwell also will need to be installed at the IPS. **Figure 6** provides six possible sites for the proposed reservoir. Sites 1 and 2 are preferable as they are out of the neighborhood's public view; however, they are both within Bonneville Power Administration's (BPA) easement and would require additional coordination and permitting prior to construction. If the BPA permitting timeline would prevent the tank from being constructed and operational by June 30, 2026, then Site 3 or 4 should be selected. Site 3 is within view of the Golf Course and many homeowners; therefore, it would require additional coordination with these stakeholders. Site 4 is at the WRF. This site would simplify operations and maintenance; however, due to hydraulic constraints, a reservoir at the WRF would have to be very shallow and would be significantly more expensive than the other sites. Site 5 would require constructing an additional clarifier at the WRF and utilizing it as a reclaimed water reservoir until City growth requires it to function as a clarifier to increase WRF treatment capacity. This option was eliminated as it is significantly more expensive than sites 1-3 and once a third clarifier is needed at the WRF, another reclaimed water reservoir also would be necessary. Site 6 is next to the IPS. This site was

eliminated due to the large number of existing utilities in the area. **Planning-Level Capital Costs** for all six sites are presented later in this Report.

Reservoir Access

The site will be developed to allow for large vehicles to drive to the infrastructure for any future work. The reservoir will be buried or partially buried depending on the selected location. There will be a single roof access hatch that will be a minimum of 30 inches in diameter for interior access and transport of any maintenance equipment inside the reservoir. The interior access ladder will be stainless steel and equipped with a safety climb system. The reservoir will be designed to prevent any stormwater intrusion to maintain the water quality of the reclaimed water.

Reservoir Mechanical

A control structure or mechanical piping system will be designed in a future phase of this project to split reclaimed water flows to the reservoir and to Eagle Lake. Due to the volume differences between the reservoir and Eagle Lake, the intent of the control structure would be to prioritize filling the reservoir first. The reservoir inlet pipe will be ductile iron outside of the reservoir, stainless steel under and through the reservoir foundation, and coated steel within the reservoir. The inlet pipe sizing and location will be determined during future phases of the project.

The separate outlet pipe also will be coated steel pipe inside the reservoir, stainless steel piping through the reservoir, and ductile iron piping outside the reservoir. There also will be new ductile iron piping from the reservoir outlet to the City's municipal irrigation pump station clearwell. The outlet pipe sizing will be determined during future phases of the project.

The reservoir control structure would direct any reservoir overflow water to Eagle Lake. This will be designed during future phases of the project. Reservoir drainage will also be determined during the design phase of the project and will account for the partially buried or completely buried structure, likely through piping or an accessory structure.

All pipes entering or leaving the reservoir will have expansion joints to allow for differential settling without putting strain on the pipes.

The reservoir will have one roof vent to move air during normal operation and provide vacuum protection for a major drawdown event. The vent system will be confirmed during the design phase of the project.

Reservoir Electrical, Telemetry, and Lighting

The reservoir instrumentation will communicate with the City's Supervisory Control and Data Acquisition (SCADA) system through fiber optic lines. The location of the existing wiring that can be extended to the site will be evaluated during future phases of the project.

The SCADA system at the reservoir site will monitor reservoir levels, notify staff of access hatch intrusion, and notify the City if there is an overflow event. Updates to the telemetry system at

the IPS will allow City operators to monitor and control water levels in Eagle Lake and the bypass control structure.

The reservoir will have site lighting to help facilitate City staff to access the reservoir anytime throughout the day. Additional security measures will be determined during future phases of the project.

Operations and Maintenance Considerations

City WRF staff would operate and maintain the proposed reservoir and control structure, but the required labor is expected to be minimal due to the passive nature of these distribution system improvements.

If irrigation water is required in early spring before the WRF starts producing Class A reclaimed water regularly, then the irrigation system should be configured to be supplemented with potable water through an air gap or an approved backflow prevention device for potable cross-connection control.

The City can plan on shock chlorinating the transmission main, reservoir, and pipeline routinely as a maintenance procedure to ensure sanitary conditions at the start of each irrigation season. The emergency chlorination injection point can be activated for this activity. At the end of each irrigation season, the irrigation distribution system can be flushed and drained as much as possible.

Once construction of the reclaimed water reservoir is complete, the City will update its *Reclaimed Water Operations and Maintenance Manual* per the NPDES Permit requirements. This will include shock chlorination and flushing protocols for the reclaimed water distribution system, updates to the sign maintenance program, and cross-connection control maintenance activities, such as proper backflow prevention assembly testing protocols.

Planning-Level Capital Costs

This section summarizes the capital costs of the reclaimed water storage tank alternatives presented in **Figure 6**. **Table 4** presents an opinion of probable construction and overall project costs for a proposed reservoir on Sites 1 through 3, as these three sites have similar capital costs related to being undeveloped with minimal existing infrastructure and utilities. **Table 5** presents an opinion of probable cost for Site 4, which is significantly higher than Sites 1, 2, and 3 due to the shallow and wide geometry of the proposed tank to make the WRF location feasible. **Table 6** presents an opinion of probable cost for Site 5, which constructs a new clarifier to function as a reclaimed water reservoir. **Table 7** presents an opinion of probable cost for Site 6, which locates the proposed reservoir directly adjacent to the IPS. Costs and contingencies will be further refined during future phases of the project.

Table 4

Engineer's Opinion of Probable Capital Cost for Sites 1 through 3 (Greenfield Sites)

Item	Unit	Total Cost
Mobilization, Demobilization, Site Prep, and Cleanup (10%)	LS	$265,000
Site Work	LS	$275,000
Structural	LS	$2,239,000
Utility	LS	$100,000
Electrical, Telemetry, and Automatic Control	LS	$100,000
Construction Cost Subtotal		**$2,979,000**
Construction Contingency (30%)		$894,000
Sales Tax (8.9%)		$265,200
Total Estimated Construction Cost		**$4,139,000**
Engineering Design, Survey, Geotechnical, Permitting, Bid-Phase Services, Construction-Phase Services		$1,449,000
City Project Administration		$621,000
Total Project Cost		**$6,300,000**

Table 5

Engineer's Opinion of Probable Capital Cost for Site 4 (at WRF)

Item	Unit	Total Cost
Mobilization, Demobilization, Site Prep, and Cleanup (10%)	LS	$323,000
Site Work	LS	$300,000
Structural	LS	$2,688,000
Utility	LS	$90,000
Electrical, Telemetry, and Automatic Control	LS	$150,000
Construction Cost Subtotal		**$3,551,000**
Construction Contingency (30%)		$1,066,000
Sales Tax (8.9%)		$316,000
Total Estimated Construction Cost		**$4,933,000**
Engineering Design, Survey, Geotechnical, Permitting, Bid-Phase Services, Construction-Phase Services		$1,727,000
City Project Administration		$740,000
Total Project Cost		**$7,400,000**

Table 6

Engineer's Opinion of Probable Capital Cost for Site 5 (WRF Clarifier)

Item	Unit	Total Cost
Mobilization, Demobilization, Site Prep, and Cleanup (10%)	LS	$302,000
Site Work	LS	$450,000
Structural	LS	$1,715,000
Utility	LS	$450,000
Electrical, Telemetry, and Automatic Control	LS	$400,000
Construction Cost Subtotal		**$3,317,000**
Construction Contingency (30%)		$996,000
Sales Tax (8.9%)		$296,000
Total Estimated Construction Cost		**$4,610,000**
Engineering Design, Survey, Geotechnical, Permitting, Bid-Phase Services, Construction-Phase Services		$1,614,000
City Project Administration		$692,000
Total Project Cost		**$7,000,000**

Table 7

Engineer's Opinion of Probable Capital Cost for Site 6 (at IPS)

Item	Unit	Total Cost
Mobilization, Demobilization, Site Prep, and Cleanup (10%)	LS	$316,000
Site Work	LS	$400,000
Structural	LS	$1,910,000
Utility	LS	$750,000
Electrical, Telemetry, and Automatic Control	LS	$100,000
Construction Cost Subtotal		**$3,476,000**
Construction Contingency (30%)		$1,041,000
Sales Tax (8.9%)		$309,000
Total Estimated Construction Cost		**$4,826,000**
Engineering Design, Survey, Geotechnical, Permitting, Bid-Phase Services, Construction-Phase Services		$1,687,000
City Project Administration		$723,000
Total Project Cost		**$7,300,000**

Sites 1, 2, and 3 are the lowest cost options for the proposed reclaimed water reservoir and are to be further explored during future phases of this project. Locating the reservoir at the WRF (Site 4) was eliminated since it is more expensive and would reduce the amount of expandable area at the WRF. While developing a third WRF clarifier (Site 5) would be more expensive than Sites 1 through 3, it has the benefit of being converted into a future clarifier when needed.

However, this option postpones a true reclaimed water storage solution for the future and has been eliminated. Building the reservoir directly at the IPS (Site 6) would require a massive reconstruction of below-grade utilities; this option has been eliminated due to the additional cost and unknown risks.

Conclusions and Next Steps

The recommended alternative to comply with the Reclaimed Water Rule is for the City to store reclaimed water in a proposed reservoir, separating this supply. The proposed reservoir should be located in an open area near the Golf Course away from existing infrastructure and utilities (proposed Sites 1, 2, and 3). The irrigation system is a non-expanding system with no proposed new reclaimed water users in the near future. The existing infrastructure was operated and maintained for more than two decades with no public health concerns since the City irrigates overnight to minimize human exposure. Implementing a chlorination system to provide a chlorine residual would incur extensive costs and labor for minimal benefit.

The predesign and site selection will be finalized in 2023. A preliminary environmental review and planning-level State Environmental Policy Act (SEPA) Checklist has been prepared to comply with WAC 173-240-060(3)(r) and is attached as **Appendix A**. The City's determination of nonsignificance (DNS) letter associated with that planning-level SEPA is attached as **Appendix B**. A project-level SEPA and other permitting will be completed concurrent with the design phase of this project after site selection. Design of the recommended improvements is anticipated to begin in 2024, with the goal to have construction complete by June 30, 2026, to comply with the milestones listed on the Permit. The preliminary design-level cost estimate for this project is between $6,000,000 to $7,000,000, depending on the selected tank location.

Figures

FIGURE 1: EXISTING RECLAIMED WATER SYSTEM MAP

RECLAIMED WATER DISTRIBUTION SYSTEM ENGINEERING REPORT

RH2

CITY OF SNOQUALMIE

SCALE: 1" = 800'

0" 1/2" 1"

DRAWING IS FULL SCALE WHEN BAR MEASURES 1"

PLOT DATE: 6/28/2023

FILE PATH: J:\Data\SNO\22-0187\CAD\wlrw-d-fig1.dwg

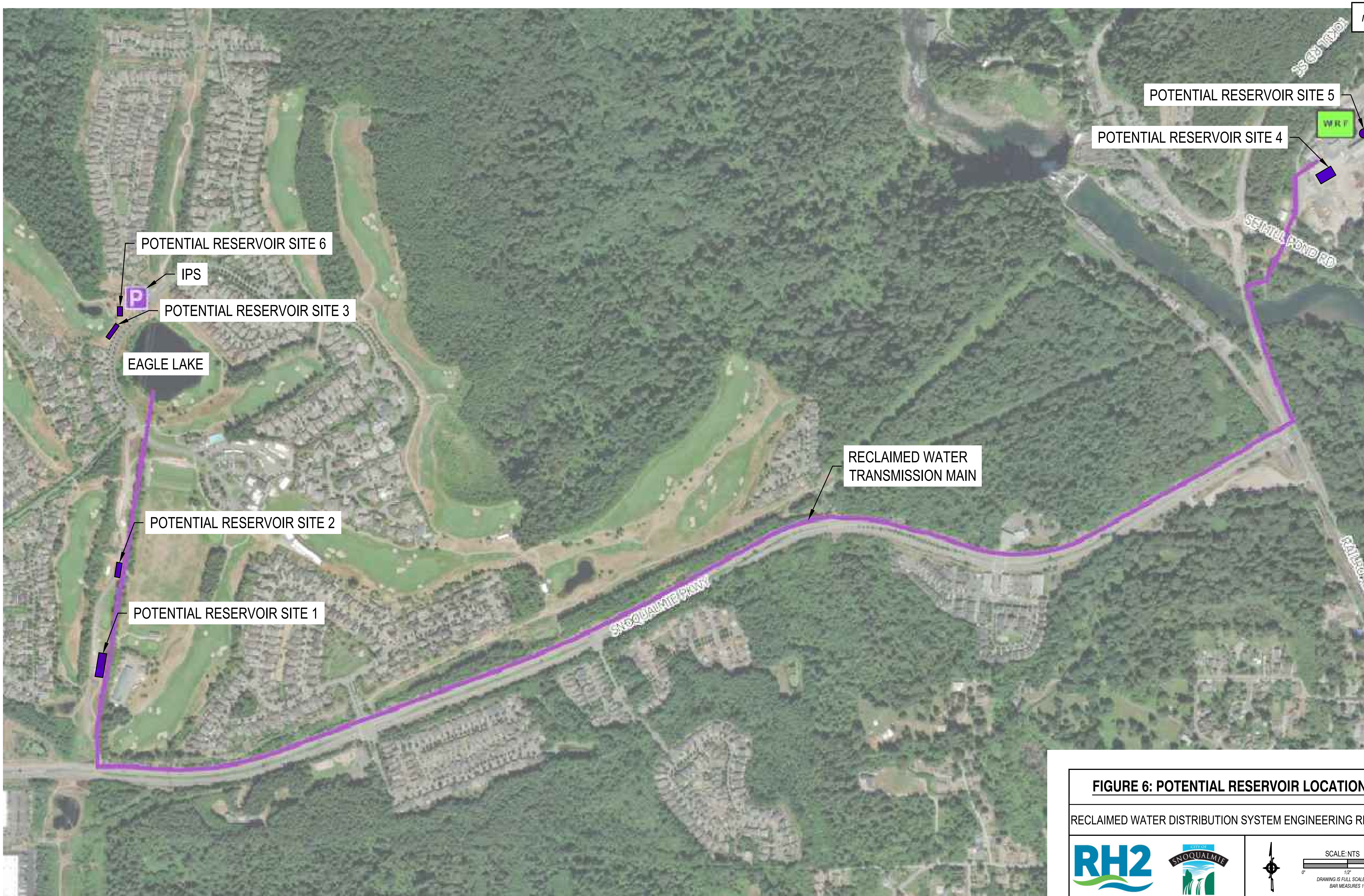


FIGURE 6: POTENTIAL RESERVOIR LOCATIONS

RECLAIMED WATER DISTRIBUTION SYSTEM ENGINEERING REPORT

RH2

CITY OF SNOQUALMIE

SCALE: NTS

Appendix A

SEPA Checklist

SEPA ENVIRONMENTAL CHECKLIST

Purpose of checklist

Governmental agencies use this checklist to help determine whether the environmental impacts of your proposal are significant. This information is also helpful to determine if available avoidance, minimization, or compensatory mitigation measures will address the probable significant impacts or if an environmental impact statement will be prepared to further analyze the proposal.

Instructions for applicants

This environmental checklist asks you to describe some basic information about your proposal. Please answer each question accurately and carefully, to the best of your knowledge. You may need to consult with an agency specialist or private consultant for some questions. **You may use "not applicable" or "does not apply" only when you can explain why it does not apply and not when the answer is unknown.** You may also attach or incorporate by reference additional studies reports. Complete and accurate answers to these questions often avoid delays with the SEPA process as well as later in the decision-making process.

The checklist questions apply to **all parts of your proposal,** even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Instructions for lead agencies

Please adjust the format of this template as needed. Additional information may be necessary to evaluate the existing environment, all interrelated aspects of the proposal and an analysis of adverse impacts. The checklist is considered the first but not necessarily the only source of information needed to make an adequate threshold determination. Once a threshold determination is made, the lead agency is responsible for the completeness and accuracy of the checklist and other supporting documents.

Use of checklist for nonproject proposals

For nonproject proposals (such as ordinances, regulations, plans and programs), complete the applicable parts of sections A and B, plus the Supplemental Sheet for Nonproject Actions (Part D). Please completely answer all questions that apply and note that the words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The lead agency may exclude (for non-projects) questions in "Part B: Environmental Elements" that do not contribute meaningfully to the analysis of the proposal.

A. Background

1. **Name of proposed project, if applicable:**

   Reclaimed Water Distribution System Improvements

2. **Name of applicant:**

   City of Snoqualmie (City) Public Works Department

3. **Address and phone number of applicant and contact person:**

   Andrew Vining, PE, Project Engineer
   City of Snoqualmie Public Works
   38624 SE River Street
   Snoqualmie, WA 98065
   (425) 831-8919, ext. 3004

4. **Date checklist prepared:**

   October 6, 2023

5. **Agency requesting checklist:**

   City Planning Department and Washington State Department of Ecology (Ecology)

6. **Proposed timing or schedule (including phasing, if applicable):**

   The *Reclaimed Water Distribution System Engineering Report* (Engineering Report) (RH2, 2023) is undergoing final review and pending approval with Ecology, which is planned to occur before the end of 2023. The predesign and site selection for the reservoir will be finalized in late 2023. Design of the recommended improvements is anticipated to begin in 2024, with the goal of having construction complete by June 30, 2026, to comply with the requirements of Ecology's Reclaimed Water Rule and with Permit Section R8.A.1 of the City's current National Pollutant Discharge Elimination System (NPDES) Permit.

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

   The existing City irrigation system is a non-expanding reclaimed water system. The City does not currently intend to increase the service area or number of customers that receive reclaimed water. Future improvements or expansion of the reclaimed water system would be covered in future State Environmental Policy Act (SEPA) review, as needed.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

   The Engineering Report, which includes a reclaimed water system alternatives analysis and preliminary design information for a preferred site alternative, has been prepared in support of this project. This SEPA Checklist has been prepared to accompany the Engineering Report review through Ecology, as well as detail anticipated project

improvements to the extent they are presently defined. Additional environmental documentation is anticipated to be prepared for construction of a preferred alternative, as well as for compliance with permitting processes, including the State Environmental Review Process (SERP) through Ecology. SERP is anticipated to be completed for this project as a condition of receiving Clean Water State Revolving Fund (CWSRF) funding.

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

   No pending applications or approvals are known.

10. **List any government approvals or permits that will be needed for your proposal, if known.**

    This SEPA will be processed by the City to accompany the Engineering Report. A project-level SEPA will be prepared following site selection and subsequent design. Approvals needed for the project include the following.

    - Project Design/Construction Review and Approval – Washington State Department of Health (DOH) and Ecology
    - SERP Compliance is anticipated to be required for the project pending award of CWSRF funding, including the following components – Ecology
        - Environmental Review (SEPA) (for project-level improvements)
        - Public participation/engagement
        - Section 106 National Historic Preservation Act (NHPA) Cultural Resources Review
        - Environmental Justice Review
        - Compliance with applicable federal cross cutters, as needed (e.g., Clean Air Act, Endangered Species Act, etc.)
    - Proposed Use of Bonneville Power Administration (BPA) Right-of-Way Approval would be needed for select potential reservoir sites – BPA
    - Clearing and Grading Permit – City
    - Critical Areas Review would be needed for select potential reservoir sites – City
    - Commercial Building Permit – City

11. **Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)**

    The City's Water Reclamation Facility (WRF) produces Class A reclaimed water and supplies it to Eagle Lake via a transmission main that traverses State Route (SR) 202 and Snoqualmie Parkway. Class A water is stored in Eagle Lake as irrigation supply for the City's Class A distribution system and the Snoqualmie Ridge Golf Course (Golf Course). Reclaimed water is

distributed to the above-mentioned sources via the City-owned Irrigation Pump Station (IPS) located near Eagle Lake.

In 2021, Ecology issued the City's updated NPDES Permit (No. WA0022403), which included additional requirements for the City's reclaimed water system. These updates are based on the recently modified Reclaimed Water Rule in Chapter 173-219 Washington Administrative Code (WAC), which includes requirements that did not exist at the time the reclaimed water system was constructed. Through the NPDES Permit, Ecology is requiring the City to modify the reclaimed water distribution system to "...not allow contamination of reclaimed water by lower quality water, such as urban stormwater runoff."

To comply with the 2018 update of the Reclaimed Water Rule, the City is proposing construction of a new closed reservoir to store and separate reclaimed water generated by the WRF from Eagle Lake. Reclaimed water produced at the WRF would be stored in the reservoir and then connected to the irrigation distribution system at the IPS, thereby completely separating Eagle Lake from the City's Class A distribution system. The proposed closed reservoir also would involve construction of a new reclaimed water pipeline to the IPS. Six potential reservoir sites are identified in the Engineering Report and four are being evaluated further to determine the optimal location for the new facility.

This SEPA Checklist is being included with the Engineering Report review and is intended to satisfy planning-level SEPA review. To the extent that details are known for the proposed alternative reservoir sites, they have been included; however, the City anticipates preparation of a project-level SEPA once the reservoir site is selected and subsequent design is completed.

12. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

Potential reservoir sites identified in the Engineering Report are all within City limits. Potential reservoir sites 1, 2, and 3 are in the Snoqualmie Ridge neighborhood, near the Golf Course. Potential reservoir site 4 is within the footprint of the City's existing WRF. The proposed reclaimed water transmission main alignment would be dependent on the reservoir site selected, but generally would traverse along existing rights-of-way from the IPS to the new reclaimed water reservoir. These reservoir sites are in the eastern half of Section 25, Township 24 North, Range 07 East.

Potential reservoir sites 1 and 2 are located within the BPA overhead power line corridor on parcel no. 2524079001, which encompasses the Golf Course. These sites are along an unnamed private road that spans south to north from Snoqualmie Parkway to SE Ridge Street through the Golf Course and is primarily used for Golf Course operations and maintenance.

Potential reservoir site 3 is located on parcel no. 2624079045, northwest of Eagle Lake, on the northwest side of Eagle Lake Drive SE and southwest of the existing IPS.

Potential reservoir site 4 is on parcel no. 3024089079 at the existing WRF site, on the north side of the Snoqualmie River and north of SE Stearns Road, approximately 1.5 miles east of Eagle Lake. Potential reservoir site 4 was determined to have a much higher cost of design and construction due to hydraulic limitations and is omitted from further discussion in this SEPA Checklist.

Refer to the attached **Potential Reservoir Locations** map showing the potential reservoir sites and possible reclaimed water transmission main alignment.

B. Environmental Elements

1. Earth

a. General description of the site:

Circle or highlight one: (Flat), rolling, hilly, steep slopes, mountainous, other:

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on potential reservoir site 1 is associated with the hillside north of Snoqualmie Parkway and is approximately 5 percent. Potential reservoir site 2 is generally flat with some gentle hills. The steepest slope on potential reservoir site 3, associated with the Golf Course and the road embankment of Eagle Lake Drive, is approximately 13 percent.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them, and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.

According to the Natural Resources Conservation Service soil survey data, the potential reservoir sites are entirely within the Tokul gravelly medial loam, 8 to 15 percent slopes, soil map unit, which is comprised of a moderately well drained gravelly medial loam that develops from volcanic ash mixed with loess over glacial till on hillslopes or till plains. This soil is classified as a farmland of statewide importance and is not hydric.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No.

e. Describe the purpose, type, total area, and approximate quantities and total affected area of any filling, excavation, and grading proposed. Indicate source of fill.

Earthwork would be needed to construct a new approximately 480,000-gallon water reclamation reservoir, install a reclaimed water transmission main from the new reservoir to the existing IPS and install associated power and communication lines between the new reservoir and the existing IPS. Earthwork quantities vary between the potential reservoir sites and will be further detailed in the planned project-level SEPA.

f. Could erosion occur because of clearing, construction, or use? If so, generally describe.

Erosion could occur during construction and clearing activities; however, construction best management practices (BMPs) will be included in the project design to reduce the chance for erosion, water quality impacts, and sedimentation resulting from construction activities.

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Some impervious surfaces, associated with roadways and existing facilities, are present in the existing site areas. The proposed improvements would construct a partially buried reclaimed water reservoir, potentially increasing impervious surfaces. The project-level SEPA will detail anticipated impervious surface percentages associated with the selected reservoir site.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any.

During construction, appropriate temporary erosion and sedimentation control (TESC) measures will be implemented to limit the potential for erosion resulting directly from construction activities (e.g., proper soil cover, dust control, inlet protection, sediment control, etc.). TESC measures will be included on the design plans to address erosion control planning for construction of the project. The finished project is not expected to result in erosion.

2. Air

a. What types of emissions to the air would result from the proposal during construction, operation, and maintenance when the project is completed? If any, generally describe and give approximate quantities if known.

Temporary exhaust and dust emissions from construction equipment and vehicles are anticipated during construction but would not be present post-construction.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any.

Construction equipment and vehicles shall conform with Washington State standards for air quality, including using properly functioning equipment and vehicles that have passed emissions testing, using clean-burning fuels when possible, limiting diesel exhaust, limiting vehicle idling, etc.

3. Water

a. Surface Water:

1. Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Eagle Lake is an approximately 5-acre manmade waterbody surrounded by residential neighborhoods near the center of the Golf Course. Eagle Lake is a closed depression that is currently supplied by Class A reclaimed water from the City's WRF and has no natural outlet. Reclaimed water is stored and pumped from Eagle Lake via the IPS for land application of irrigation water at the Golf Course and throughout the City. Upon project completion, water allocated for the City's Class A distribution system will bypass Eagle Lake and be stored in the new reclaimed water reservoir.

Wetland and/or stream habitat may be present adjacent to some of the potential reservoir sites; however, site selection and subsequent design is needed to accurately determine project proximity and impacts to these features.

Water in the surrounding region generally drains to the Snoqualmie River, which flows to the northwest. Eagle Lake and drainage associated with the Golf Course do not flow into the Snoqualmie River; therefore, the Snoqualmie River will be unaffected by this proposal.

2. **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

   Reservoir site selection and additional design is needed to determine proximity and/or impacts to streams or wetlands. It is anticipated that project design will occur in a manner that minimizes impacts to these critical areas.

   No impacts to Eagle Lake or the Snoqualmie River are anticipated for any of the potential reservoir sites during construction and upon project completion.

3. **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

   None. The project will not involve fill or excavation within wetlands or waters of the state.

4. **Will the proposal require surface water withdrawals or diversions? Give a general description, purpose, and approximate quantities if known.**

   No.

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

   No Federal Emergency Management Agency mapped flood zones occur on or within proximity to the project sites.

6. **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

   No.

b. Ground Water:

1. **Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the**

well. Will water be discharged to groundwater? Give a general description, purpose, and approximate quantities if known.

No.

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

Not applicable.

c. Water Runoff (including stormwater):

1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.**

Surface water in the area is currently and will remain intercepted and routed directly to existing stormwater infrastructure associated with residential neighborhoods, public roadways, and the Golf Course. The completed project will not impact the existing runoff patterns of the site.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**

No.

3. **Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.**

No.

4. **Proposed measures to reduce or control surface, ground, and runoff water, and drainage pattern impacts, if any.**

BMPs will be implemented to avoid and minimize potential impacts to nearby areas during project construction. Project design will be completed to adhere to applicable local, state, and federal regulations that provide standards to reduce and control impacts to surface, ground, and storm waters and drainage patterns.

4. Plants

a. **Check the types of vegetation found on the site:**

- ☒ **deciduous tree: alder, maple, aspen, other**
- ☒ **evergreen tree: fir, cedar, pine, other**
- ☒ **shrubs**
- ☒ **grass**
- ☐ **pasture**
- ☐ **crop or grain**
- ☐ **orchards, vineyards, or other permanent crops.**
- ☐ **wet soil plants: cattail, buttercup, bullrush, skunk cabbage, other**

☐ **water plants: water lily, eelgrass, milfoil, other**
☐ **other types of vegetation**

b. What kind and amount of vegetation will be removed or altered?

Varying amounts of common lawn grasses and/or disturbed weedy vegetation will be removed for construction of the proposed reclaimed water reservoir. The amount and type of vegetation to be removed is dependent on the selected reservoir site, and this will be further detailed in a project-level SEPA.

c. List threatened and endangered species known to be on or near the site.

Based on a review of U.S. Fish and Wildlife Service (USFWS) Endangered Species Act maps and data, Washington State Department of Natural Resources Natural Heritage Data, and Washington Department of Fish and Wildlife Priority Habitats and Species data, the potential reservoir sites and surrounding areas do not support threatened or endangered plant species.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any.

To be determined with subsequent project design and detailed in subsequent project-level SEPA.

e. List all noxious weeds and invasive species known to be on or near the site.

According to the King County iMap GIS database, tansy ragwort (*Senecio jacobaea*), a King County Class B noxious weed, was observed near the potential reservoir sites.

5. Animals

a. List any birds and other animals that have been observed on or near the site or are known to be on or near the site.

Examples include:

- **Birds: hawk, heron, eagle, songbirds, other:**
- **Mammals: deer, bear, elk, beaver, other:**
- **Fish: bass, salmon, trout, herring, shellfish, other:**

b. List any threatened and endangered species known to be on or near the site.

According to USFWS Information for Planning and Consultation database, gray wolf (*Canis lupus*), North American wolverine (*Gulo gulo luscus*), marbled murrelet (*Brachyramphus marmoratus*), yellow-billed cuckoo (*Coccyzus americanus*), bull trout (*Salvelinus confluentus*), and monarch butterfly (*Danaus plexippus*) may be present in the area. However, based on the developed nature of the site, suitable habitat for these species is not present on or in the immediate vicinity of the project site. No threatened or endangered species or their habitats are anticipated to be present on or near the site.

c. Is the site part of a migration route? If so, explain.

The project area is within the Pacific Flyway migration route; therefore, it may provide habitat for migratory bird species. USFWS data shows five migratory species recognized as Birds of Conservation Concern that may be found in the project area (e.g., evening grosbeak, olive-sided flycatcher, rufous hummingbird, etc.).

d. Proposed measures to preserve or enhance wildlife, if any.

None anticipated at this time.

e. List any invasive animal species known to be on or near the site.

None known.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Gasoline and oil will be used to fuel equipment for construction of the project. Electric energy will continue to be used to operate pumps for the IPS.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any.

None known at this time.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur because of this proposal? If so, describe.

No.

1. Describe any known or possible contamination at the site from present or past uses.

None known.

a. Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity.

None known.

b. Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project.

Industrial paint coatings may be applied to the reservoir surface. Appropriate environmental containment will be implemented during construction.

Construction of the project will utilize oil- and gas-fueled equipment and may require temporary fuel storage onsite. These uses do carry some risk of spill; however, the risk should be minimized with the implementation of spill control methodologies to be outlined in the project design and technical specifications in accordance with Washington State pollution control standards.

c. **Describe special emergency services that might be required.**

No special emergency services are anticipated.

d. **Proposed measures to reduce or control environmental health hazards, if any.**

No additional measures beyond those mentioned previously.

b. Noise

1. **What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

Traffic noise, associated with Eagle Lake Drive SE and other roadways, is present at the site but is not anticipated to impact the project.

2. **What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site)?**

Temporary construction noise will occur to install the proposed reclaimed water reservoir. The contractor will need to follow regulations set forth in Snoqualmie Municipal Code (SMC) 9.36.020, including controlling the level and timing of construction noise. The completed project will not produce noise disturbance above ambient levels at the site.

3. **Proposed measures to reduce or control noise impacts, if any.**

No additional measures beyond those mentioned previously.

8. Land and Shoreline Use

a. **What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe.**

All potential reservoir sites are along the City's existing 10-inch reclaimed water Class A transmission main alignment. Land uses near the potential reservoir sites include public and private roadways, the BPA overhead power line corridor, and Golf Course operations. Additional design and project-level SEPA completion will further define land uses in proximity to the selected reservoir site, as well as potential impacts to current surrounding land uses.

b. **Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses because of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

No.

1. **Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how?**

   No.

c. **Describe any structures on the site.**

   Potential reservoir sites 1 and 2 contain few above-ground structures including BPA overhead power lines and associated power poles, buildings that house Golf Course facilities and equipment, and other miscellaneous structures. No above-ground structures are present at potential reservoir site 3.

d. **Will any structures be demolished? If so, what?**

   No.

e. **What is the current zoning classification of the site?**

   According to the City's Official Zoning Map 2016, the entire project is within the Mixed Use (MU) local zoning classification.

f. **What is the current comprehensive plan designation of the site?**

   The current comprehensive plan designation of the site is MU.

g. **If applicable, what is the current shoreline master program designation of the site?**

   Not applicable.

h. **Has any part of the site been classified as a critical area by the city or county? If so, specify.**

   Wetlands and/or streams could be present adjacent to select potential reservoir sites.

i. **Approximately how many people would reside or work in the completed project?**

   None.

j. **Approximately how many people would the completed project displace?**

   None.

k. **Proposed measures to avoid or reduce displacement impacts, if any.**

   None proposed.

l. **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any.**

The proposed project is consistent with existing and projected land uses. With subsequent design, project land use approval, including review of consistency with existing and projected land uses, will be completed by the City's Community Development Department

m. Proposed measures to reduce or control impacts to agricultural and forest lands of long-term commercial significance, if any.

None proposed.

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any.

Not applicable.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The proposed reclaimed water reservoir is anticipated to be approximately 24 feet tall, with up to 10 feet of the structure above grade. No other above-ground structures are proposed.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any.

Following site selection, design of the selected reclaimed reservoir site will be conducted to minimize aesthetic impacts. Specific measures will be detailed in a project-level SEPA.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any.

None proposed.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Potential reservoir sites 1, 2, and 3 are located within the Golf Course.

Additionally, Snoqualmie Falls, a popular scenic attraction, is located approximately 1 mile northeast of Eagle Lake. Associated with the 270-foot waterfall is a 2-acre park, gift shop, observation deck, and the Salish Lodge.

b. Would the proposed project displace any existing recreational uses? If so, describe.

The project will not impact the continued use of existing recreational opportunities in proximity to the site.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any.

None proposed.

13. Historic and Cultural Preservation

a. Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers? If so, specifically describe.

Approximately 1.25 miles to the east of the potential reservoir sites is the Snoqualmie Falls Hydroelectric Power Plant Historic District and the Snoqualmie Falls Cavity Generating Station, both listed on the National Register of Historic Places and the Washington Heritage Register. The proposed improvements will not affect either of these historic places.

b. Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources.

None known. According to the Washington State Department of Archaeology and Historic Preservation's (DAHP) Washington Information System for Architectural and Archeological Records Data (WISAARD) predictive model database, the proposed reservoir project sites are within an area with moderately low risk of containing as-yet unidentified archaeological sites. However, construction in the project footprint will occur primarily in previously disturbed areas associated with the Golf Course, so the probability of inadvertent discovery is anticipated to be minimal. A Cultural Resources Assessment will be prepared and reviewed as part of the project.

c. **Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.**

It is anticipated a professional cultural resources consultant will conduct a background review, contact DAHP and area Tribes, conduct field investigations, and prepare a report, as necessary, to identify archaeological and historic evidence in the selected reclaimed water reservoir project location and evaluate the potential for the project to affect cultural resources.

d. **Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required.**

Specific cultural resources review and minimization measures will be detailed in a subsequent project-level SEPA.

14. Transportation

a. **Identify public streets and highways serving the site or affected geographic area and describe proposed access to the existing street system. Show on site plans, if any.**

The potential reservoir sites can be accessed via Snoqualmie Parkway. All potential reservoir sites are serviced by SR 202 and Interstate 90.

b. **Is the site or affected geographic area currently served by public transit? If so, generally describe. If not, what is the approximate distance to the nearest transit stop?**

The nearest transit stop to the project is located at Ridge Street and Fairway Avenue, located approximately 1/4 mile from the site.

c. **Will the proposal require any new or improvements to existing roads, streets, pedestrian, bicycle, or state transportation facilities, not including driveways? If so, generally describe (indicate whether public or private).**

None proposed.

d. **Will the project or proposal use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

No.

e. **How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?**

None.

f. **Will the proposal interfere with, affect, or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe.**

No.

g. Proposed measures to reduce or control transportation impacts, if any.

None proposed.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, public transit, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Not applicable.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other:

b. **Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

Proposed utilities to be installed at the selected reclaimed water reservoir site include a Class A reclaimed water reservoir, pipeline, and power and communication lines.

C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

X Andrew Vining (Oct 9, 2023 09:02 PDT)

SEPA Responsible Offical

Type name of signee: Andrew Vining, PE

Position and agency/organization: Project Engineer/City of Snoqualmie

Date submitted: 10/9/2023

Redline comments reflect updates to the checklist based on public comments received on Monday November 27th, 2023.

D. Supplemental sheet for nonproject actions

IT IS NOT REQUIRED to use this section for project actions.

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment.

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. **How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?**

   This proposal would not directly increase discharges to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise. The site selection alternatives outlined in the Engineering Report will divert reclaimed water currently conveyed to Eagle Lake to a new closed reservoir for separate storage and City Class A reclaimed water use, thereby preventing comingling of City irrigation water with other sources and reducing the amount of reclaimed water discharged to Eagle Lake in the long-term.

   - **Proposed measures to avoid or reduce such increases are:**

   The proposed Engineering Report and subsequent reclaimed water system improvements will bring the City's reclaimed water system into compliance with the requirements of its current NPDES Permit. The changes are prompted by the 2018 modifications to the Reclaimed Water Rule, Chapter 174-219 WAC. Improvements and preliminary design described in the Engineering Report shall be compliant with local, state, and federal laws governing discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise.

2. **How would the proposal be likely to affect plants, animals, fish, or marine life?**

   The Engineering Report and reclaimed reservoir site selection alternatives have been developed with consideration for avoidance and minimization of impacts to plants, animals, fish, and marine life. Site selection alternatives are in areas of previous disturbance, including the Golf Course, roadways, improved roadside shoulder areas, and along the alignment of the existing Class A reclaimed water transmission main and other utilities. Since the sites are entirely in previously disturbed areas, which coincide with areas providing low habitat value, impacts to plants, fish, and other wildlife are anticipated to be minimal.

   - **Proposed measures to protect or conserve plants, animals, fish, or marine life are:**

   No additional measures, as it pertains to the Engineering Report and preliminary design information, are proposed to protect, or conserve plants, fish, and other wildlife currently. After the preferred site alternative has been selected, and during design, the City will evaluate potential impacts to plants, animals, fish, or marine life. These proposed Class A reclaimed water improvements will be designed in accordance with City critical areas regulations and state and federal laws governing the protection of natural resources and fish and wildlife. The City will prepare a project-level SEPA,

once the reservoir site is selected and subsequent design is complete, that will include a further review of potential vegetation and wildlife impacts.

3. **How would the proposal be likely to deplete energy or natural resources?**

   Findings from the Engineering Report indicate that no impacts to energy or natural resources are anticipated for any of the potential reservoir sites. The proposed alternatives utilize existing pumps for irrigation water; therefore, no additional permanent energy needs are anticipated.

   - **Proposed measures to protect or conserve energy and natural resources are:**

   None proposed.

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection, such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?**

   The site selection alternatives identified in the Engineering Report avoid and minimize, to the maximum extent possible, impacts on environmentally sensitive areas or areas designated for governmental protection. Impacts to wetlands and/or wetland buffers and areas containing cultural resources are possible, dependent on the site alternative selected; however, the City anticipates preparation of a project-level SEPA, once subsequent design is complete, that will include a further review of potentially impacted environmentally sensitive areas or areas designated for governmental protection.

   - **Proposed measures to protect such resources or to avoid or reduce impacts are:**

   Specific critical areas and cultural resources review and minimization measures will be detailed in a subsequent project-level SEPA. No additional measures to avoid or reduce impacts to environmentally sensitive areas or areas designated for governmental protection are proposed currently.

5. **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

   The improvements provided in the Engineering Report are compatible with existing land use plans, including the *Snoqualmie Comprehensive Plan 2032*, Snoqualmie Ridge II Development Standards, and the *Snoqualmie Ridge Class "A" Water System and Irrigation Plan*. Improvements will not impact land or shoreline use in the region.

   - **Proposed measures to avoid or reduce shoreline and land use impacts are:**

   The proposed Engineering Report and reclaimed water system improvements would continue to allow all permissible land and shoreline uses in the Mixed Use zone of the City. No additional measures to avoid or reduce shoreline and land use impacts are proposed.

6. **How would the proposal be likely to increase demands on transportation or public services and utilities?**

   The proposal is not likely to increase demands on transportation or public services and utilities. The existing City irrigation system is a non-expanding reclaimed water system

and the proposed improvements described in the Engineering Report would only serve to separate the City's reclaimed water storage from the Golf Course supply.

- **Proposed measures to reduce or respond to such demand(s) are:**

No measures to reduce or respond to such demands are proposed currently. In the event that the City experiences an increase in service area or number of customers that receive reclaimed water, improvements or expansion of the reclaimed water system would be covered in future SEPA review, as needed.

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

The proposed Engineering Report and subsequent improvements are being developed to comply with state requirements for protection of the environment, including Chapter 173-219 WAC. Through the City's NPDES Permit, Ecology is requiring the reclaimed water system to be modified to "... not allow contamination of reclaimed water by lower quality water, such as urban stormwater runoff." The proposed Engineering Report analyzes alternatives and proposes reclaimed water system improvements to fulfill NPDES Permit requirements. No conflict with any other local, state, or federal laws or requirements are anticipated because of this proposal.

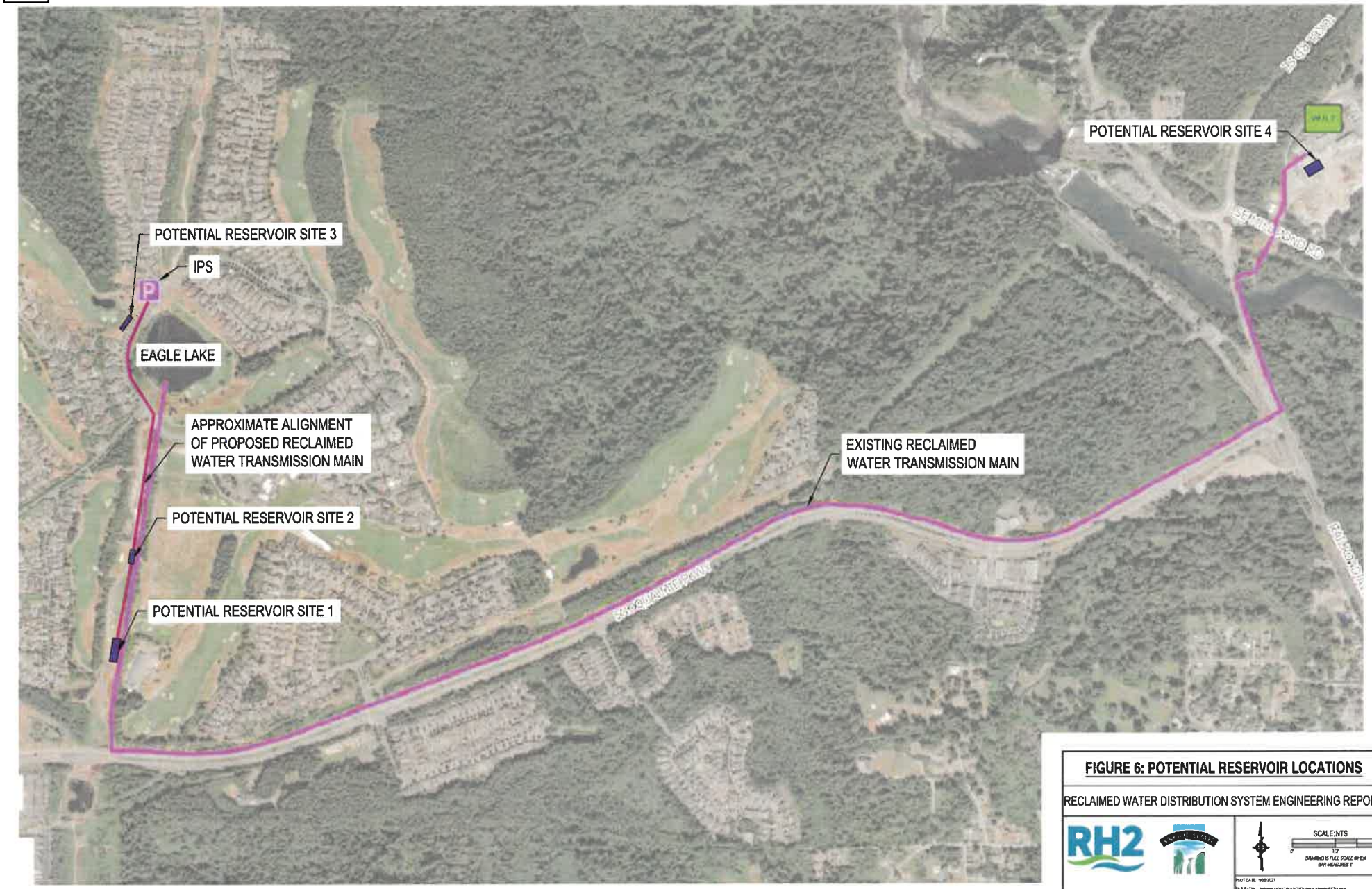


FIGURE 6: POTENTIAL RESERVOIR LOCATIONS

RECLAIMED WATER DISTRIBUTION SYSTEM ENGINEERING REPORT

SNQ_Reclaimed Water Reservoir_SEPA Checklist 10092023

Final Audit Report 2023-10-09

Created:	2023-10-09
By:	Andrew Vining (AVining@snoqualmiewa.gov)
Status:	Signed
Transaction ID:	CBJCHBCAABAA6nvdFyxNJbuIvvDeqsKjPRv6UJFD_eb0

"SNQ_Reclaimed Water Reservoir_SEPA Checklist 10092023" History

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Signature Date: 2023-10-09 - 4:02:24 PM GMT - Time Source: server

Agreement completed.
2023-10-09 - 4:02:24 PM GMT

Appendix B
DNS Letter

COMMUNITY DEVELOPMENT DEPARTMENT

38624 SE River Street
PO Box 987
Snoqualmie, WA 98065

Office: 425-888-5337
Fax: 425-831-6041

www.snoqualmiewa.gov

DETERMINATION OF NONSIGNIFICANCE (DNS)

Project Name:	Reclaim Water Reservoir
File Number:	SEPA2023-0005
Issuance Date:	November 22, 2023
Publication Date:	November 22, 2022
Proponent:	City of Snoqualmie, Parks and Public Works Department P.O. Box 987 Snoqualmie, WA 98065
Description of Proposal:	The City of Snoqualmie is considering various sites for the construction of a closed reservoir and a new reclaimed water pipeline to store and separate reclaimed water generated by the WRF from Eagle Lake.
Project Location:	Potential reservoir sites under consideration include parcels numbers 2524079001, 2624079045 and 3024089079.
Lead Agency:	City of Snoqualmie
Existing Environmental Documents:	Reclaimed Water Distribution System Engineering Report by RH2, dated October 2023, SEPA Checklist dated, October 9, 2023.
Threshold Determination:	The City of Snoqualmie has determined the proposal does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision is made after review of a completed environmental checklist and other information on file with the city. This information is available to the public on request, email: communitydevelopment@snoqualmiewa.gov, phone: 425-888-5337. This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for 14 days after the date of issuance. Legal notice is provided pursuant to RCW 43.21C.080.
Responsible Official:	Emily Arteche, AICP, Community Development Director, 38624 SE River Street PO Box 987 Snoqualmie, WA 98065, PH: 425-888-5337.
Public Comment:	Comments on the DNS may be submitted until December 5, 2023, by 5:00 PM via e-mail: communitydevelopment@snoqualmiewa.gov or mail: City of Snoqualmie, Community Development Department, PO Box 987 Snoqualmie, WA 98065. Please include File Number: SEPA 2023-0005 in the comment. The city will not take final action on this proposal until after the end of the comment period. The issuance of this DNS should not be interpreted as acceptance or approval of this proposal as presented. The City of Snoqualmie (City) reserves the right to deny or approve said proposal subject to conditions if it is determined to be in the best interest of the City and/or necessary for the general health, safety, and welfare of the public.
APPEAL:	This DNS may be appealed, pursuant to WAC 197-11-680.

SIGNATURE: Emily Antocha **DATE:** November 22, 2023

Council Agenda Bill

AB Number

AB25-049

Agenda Bill Information

Title *

On-Call Water & Sewer Design Services

Action *

Motion

Council Agenda Section

Committee Report

Council Meeting Date *

04/14/2025

Staff Member

Andrew Vining

Department *

Public Works

Committee

Parks and Public Works

Committee Date

04/08/2025

Exhibits

Packet Attachments - if any

x1 Resolution.docx	22.05KB
x2 (Agreement).pdf	1MB
x3 Consultant Selection Memo.pdf	1.3MB

Summary

Introduction *

Brief summary.

This agenda bill seeks approval to select RH2 Engineering for upcoming on-call services needed to support the water and sewer utility. The City's water system plan identifies priority capital improvement projects and system capacity based on 2017 data. Updated system modeling and evaluation is needed to consider capacity for new development and scope upcoming capital improvements.

Proposed Motion

Approved resolution XXXX selecting RH2 for on-call water & sewer design services.

Background/Overview *

What was done (legislative history, previous actions, ability to hyperlink)

The General Sewer Plan (GSP) and Water System Plan (WSP) provide a comprehensive analysis of each utility including priority capital improvements and projected system capacity. The utility plans are based on system wide modeling and evaluation completed in 2017. Over the past seven years utility conditions have changed. Noteworthy improvements include new equipment at the WRF and replacement of old utility

mains downtown. Operational equipment failures occurred at the canyon springs water treatment facility and at the 1040 and 799 zone booster pump stations requiring timely repairs to avoid service interruptions. New developments have added the number of utility services including those at Timber Trails, Panorama Apartments, and the Casino Hotel expansion. Planning for new development at the Mill Site, Snoqualmie Hospital, and downtown is underway. A current snapshot of the utility system is needed to best scope upcoming capital improvements and review utility needs for new development. RH2 prepared both water and sewer utility system plans and has demonstrated experience evaluating and modeling the City's utility needs.

Analysis*

The City recently completed major sewer utility improvements and will soon begin design of priority water utility improvements. The utility system plans serve as an excellent planning resource but specific items such as updated water
capacity, distribution system analysis, and detailed site-specific evaluation is needed to effectively scope upcoming project needs. This on-call service contract includes work associated with the following six tasks:

i. Review of water and sewer availability, and developer funded utility improvements including at the Mill Site.
ii. Analyze water system pressure conditions with emphasis on the 599 and 799 pressure zones.
iii. Evaluate the chlorination facility at Canyon Spring and consider capacity increases for aquifer storage and recharge.
iv. Evaluate feasibility and alternatives for utilities attached to the SR 202 bridge.
v. Evaluate pumps and electrical gear at the 1040 booster pump station.
vi. Provide general on-call services to support the WRF and renew the NDPES permit.

Work under this contract is expected to occur over the next three years and will assist the City in kicking-off broader design efforts associated priority capital improvements. Administration recommends selecting RH2 for an on-call services contract to support the water and sewer utility.

Budgetary Status*

Funds have already been authorized in this year's budget.

Fiscal Impact

Amount of Expenditure	Amount Budgeted	Appropriation Requested
$440,511.00	$21,446,724.00	$0.00

Budget Summary

Administration recommends approving a contract with RH2 Engineering in the amount of $440,511 to provide on-call water and utility support services. Work associated with tasks 4 through 7 are incorporated into the draft 2025-2030 Utility Capital Improvement Plan (#417), the 2025- 2026 Biennial Budget, and the continuing project appropriations adopted under Ordinance No. 1296.

See Table 1 for the assignment of capital costs, totaling $210,012. The Pressure Zone Conversions Project has a life-of-project budget of $237,930, with $465 spent and $13,107 encumbered for city labor and overhead, leaving $203,425 after the on-call assigned amount of $34,040. The Canyon Spring Improvement Project has a life-of-project budget of $1,549,308, with $3,678 spent and $8,553 encumbered for city labor and overhead,

leaving $1,524,690 after the on-call assigned amount of $20,940. The SR 202 Bridge Utility Main Replacement has a life-of-project budget of $6,943,211, with $98,668 spent and $13,031 encumbered for city labor and overhead, leaving $6,722,237 after the on-call assigned amount of $122,306. The Utility Main & Drainage System Replacement Program has a life-of-project budget of $3,540,078, with $14,069 spent and $59,974 encumbered for city labor and overhead, leaving $3,493,283 after the on-call assigned amount of $32,726.

The remaining tasks 1-3 and 8-9, totaling $230,499, will be funded through utility operations' budgets and any charges associated with new developments will be billed to the appropriate developer. See Table 2 for the breakout. Services within Water Operations (#401) has a biennial budget of $4,222,665 and has incurred $383,974, with committed expenses of $2,984,516, leaving $769,240 after the on-call assigned amount of $84,936. Services within Wastewater Operations (#402) has a biennial budget of $4,953,532 and has incurred $441,379, with committed expenses of $3,016,405, leaving $1,350,185 after the on-call assigned amount of $145,563.

Fiscal Impact Screenshot

Table 1: RH2 On-Call for Utility Capital (#417)

	Capital Life-of-Project Budget (Ord. 1296)			
	Pressure Zone Conversions Project	Canyon Spring Improvement Project	SR 202 Bridge Utility Main Replacement Project	Utility Main & Drainage System Replacement Program
Beginning Budget	$ 237,930	$ 1,549,308	$ 6,943,211	$ 3,540,078
Expenditures	$ (465)	$ (3,678)	$ (98,668)	$ (14,069)
Outstanding Contract Value (Previously Approved)	$ -	$ -	$ -	$ -
Estimated Labor Value for Remainder of Biennium (City Employees)	$ (13,107)	$ (8,553)	$ (13,031)	$ (59,974)
Current Available Budget	$ 237,465	$ 1,545,630	$ 6,844,543	$ 3,526,009
Value of this On-Call Contract (AB25-049)	$ (34,040)	$ (20,940)	$ (122,306)	$ (32,726)
Available Budget after the On-Call Contract	$ 203,425	$ 1,524,690	$ 6,722,237	$ 3,493,283

Table 2: RH2 On-Call for services within Water Operations (#401) and Wastewater Operations (#402)

	2025-2026 Biennial Budget	
	Water Services (#401)	Wastewater Services (#402)
Beginning Budget	$ 4,222,665	$ 4,953,532
Expenditures	$ (383,974)	$ (441,379)
Outstanding Contract Value (Previously Approved)	$ (2,984,516)	$ (3,016,405)
Current Available Budget	$ 854,176	$ 1,495,748
Value of this On-Call Contract (AB25-049)	$ (84,936)	$ (145,563)
Available Budget after the On-Call Contract	$ 769,240	$ 1,350,185

RESOLUTION NO. XXX

A RESOLUTION OF THE CITY COUNCIL OF CITY OF SNOQUALMIE, WASHINGTON AWARDING AND AUTHORIZING EXECUTION OF A CONTRACT WITH RH2 ENGINEERING FOR ON-CALL UTILITY SUPPORT SERVICES

WHEREAS, pursuant to Ordinance No. 448 as codified in Snoqualmie Municipal Code Section 1.08.010, the City of Snoqualmie has adopted the classification of non-charter code city, retaining the mayor-council plan of government as provided for in Chapter 35A.12 RCW; and

WHEREAS, upon review of qualified engineering firms with experience providing water and sewer engineering support services on the MRSC roster, the City chose to select RH2 Engineering to provide the requested engineering services for the On-Call Services; and

WHEREAS, the City requests utility related engineering services to review developer proposals and begin scoping of various utility capital improvement projects identified in Ordinance No. 1296 Adopting the 2025-2026 Biennial Budget and in the draft 2025-2030 Capital Improvement Plan; and

WHEREAS, City Staff recommends using RH2 Engineering as the most qualified firm to provide on-call utility support services.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SNOQUALMIE, WASHINGTON AS FOLLOWS:

Section 1. Award of Engineering Services Contract. The City hereby awards the contract for an On-Call Utility Support Services to RH2 Engineering.

Section 2. Authorization for Contract Execution. The Mayor is authorized to execute a contract for planning services in the amount of $440,511 with RH2 Engineering in substantially the form attached hereto as Exhibit A.

PASSED by the City Council of the City of Snoqualmie, Washington, this 14th day of April 2025.

_____
Katherine Ross, Mayor

Attest:

_____
Deana Dean, City Clerk

Approved as to form:

_____
Dena Burke, City Attorney

CITY OF SNOQUALMIE
AGREEMENT FOR CONSULTANT SERVICES
Contract Title: On-Call Utility Support Services

THIS AGREEMENT made and entered into by and between the CITY OF SNOQUALMIE, a Washington municipal corporation (the "City"), and RH2 Engineering, Inc., a Washington corporation ("Consultant") is dated this ____ day of 2025.

Consultant Business: RH2 Engineering, Inc.
Consultant Address: 22722 29th Drive SE, Suite 210
Bothell, WA 98021

Consultant Phone: 425-951-5400

Consultant Fax: 425-951-5401

Contact Name: Dan Mahlum, P.E.

Contact e-mail: dmahlum@rh2.com

Federal Employee ID No.: 91-1108443

Authorized City Representative for this contract: Parks and Public Works Department Director

WHEREAS, the City desires to complete On-Call Utility Support Services:

WHEREAS, public convenience and necessity require the City to obtain the services of a consultant with expertise in the area of water and wastewater utility planning, design, and review; and

WHEREAS, the City finds that Consultant is qualified to perform and is experienced in performing the required services; and

WHEREAS, the city desires to engage the Consultant to provide the above-cited engineering services

NOW, THEREFORE, the parties herein do mutually agree as follows:

1. Employment of Consultant.

A. The City retains the Consultant to provide the services described in "Exhibit A" (the "Work"). Any inconsistency between this Agreement and the Scope of Work shall be resolved in favor of this Agreement. The Consultant shall perform the Work according to the terms and conditions of this Agreement.

B. The City may revise the Work and the compensation only by a written Change Order signed by the authorized City representative that shall become a part of this Agreement.

C. The project manager(s) of the Work shall be Dan Mahlum, P.E.. The project manager(s) shall not be replaced without the prior written consent of the City.

D. Work shall commence when the City issues a notice to proceed and it shall be completed no later than December 31st, 2027, unless the completion date is extended in writing by the City.

2. Compensation.

A. The total compensation to be paid to Consultant, including all services and expenses, shall not exceed $440,511 as shown on Exhibit B, which shall be full compensation for the Work. Consultant shall notify the City when its requests for payment reach eighty-five percent of the total compensation.

B. The Consultant shall be paid in such amounts and in such manner as described in Exhibit B.

C. Consultant shall be reimbursed for Eligible Expenses actually incurred. "Eligible Expenses" means those types and amounts of expenses that are approved for reimbursement by the City in writing before the expense is incurred. If travel and/or overnight lodging is authorized, Consultant shall lodge within the corporate limits of City.

3. Request for Payment.

A. Not more than once every thirty days the Consultant shall file its request for payment, accompanied by evidence satisfactory to the City justifying the request for payment, including a report of Work accomplished and tasks completed, and an itemization of Eligible Expenses with copies of receipts and invoices.

B. All requests for payment should be sent to

City of Snoqualmie
Attn: Andrew Vining
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

4. Work Product.

A. The Consultant shall submit all reports and other documents specified in Exhibit A according to the schedule established in Exhibit A. If, after review by the City, the information is found to be unacceptable, Consultant, at its expense, shall expeditiously correct such unacceptable work. If Consultant fails to correct unacceptable work, the City may withhold from any payment due an amount that the City reasonably believes will equal the cost of correcting the work.

B. All reports, drawings, plans, specifications, and intangible property created in furtherance of the Work, and any intellectual property in such documents, are property of the City and may be used by the City for any purpose; provided that re-use without Consultant's permission shall be at the City's sole risk.

5. Termination of Contract. City may terminate this Agreement by sending a written notice of termination to Consultant ("Notice") that specifies a termination date ("Termination Date") at least fourteen (14) days after the date of the Notice; provided, however, that in the event of a material breach of this Agreement, termination may be effective immediately or upon such date as determined by the City in its sole discretion. For purposes of this Agreement, "material breach" is defined as misfeasance, malfeasance or violation of any criminal law, ordinance or regulation.. Upon receipt of the Notice, the Consultant shall acknowledge receipt to the City in writing and immediately commence to end the Work in a reasonable and orderly manner. Unless terminated for Consultant's material breach, the Consultant shall be paid or reimbursed for all hours worked and Eligible Expenses incurred up to the Termination date, less all payments previously made; provided that work performed after date of the Notice is reasonably necessary to terminate the Work in an orderly manner. The Notice may be sent by any method reasonably believed to provide Consultant actual notice in a timely manner

6. Assignment of Contract – Subcontractors. Consultant shall not assign this contract or sub-contract or assign any of the Work without the prior written consent of the City.

7. Indemnification.

A. To the extent provided by law and irrespective of any insurance required of the Consultant, the Consultant shall defend and indemnify the City from any and all Claims arising out of or in any way relating to this Agreement; provided, however, the requirements of this paragraph shall not apply to that portion of such Claim that reflects the percentage of negligence of the City compared to the total negligence of all persons, firms or corporations that resulted in the Claim.

B. Consultant agrees that the provisions of this paragraph 7 apply to any claim of injury or damage to the persons or property of consultant's employees. As to such claims and with respect to the City only, consultant waives any right of immunity, which it may have under industrial insurance (Title 51 RCW and any amendment thereof or substitution therefore). THIS WAIVER IS SPECIFICALLY NEGOTIATED BY THE PARTIES AND IS SOLELY FOR THE BENEFIT OF THE CITY AND CONSULTANT.

C. As used in this paragraph: (1) "City" includes the City's officers, employees, agents, and representatives; (2) "Consultant" includes employees, agents, representatives sub-consultants; and (3) "Claims" include, but is not limited to, any and all losses, claims, causes of action, demands, expenses, attorney's fees and litigation expenses, suits, judgments, or damage arising from injury to persons or property.

D. Consultant shall ensure that each sub-consultant shall agree to defend and indemnify the City to the extent and on the same terms and conditions as the Consultant pursuant to this paragraph.

8. Insurance.

A. Consultant shall comply with the following conditions and procure and keep in force at all times during the term of this Agreement, at Consultant's expense, the following policies of insurance with companies authorized to do business in the State of Washington. The Consultant's insurance shall be rated by A. M. Best Company at least "A" or better with a numerical rating of no less than seven (7) and otherwise acceptable to the City.

1. Workers' Compensation Insurance as required by Washington law and Employer's Liability Insurance with limits not less than $1,000,000 per occurrence. If the City authorizes sublet work, the Consultant shall require each sub-consultant to provide Workers' Compensation Insurance for its employees, unless the Consultant covers such employees.
2. Commercial General Liability Insurance on an occurrence basis in an amount not less than $1,000,000 per occurrence and at least $2,000,000 in the annual aggregate, including but not limited to: premises/operations (including off-site operations), blanket contractual liability and broad form property damage.
3. Business Automobile Liability Insurance in an amount not less than $1,000,000 per occurrence, extending to any automobile used by Consultant in the course of the Work. A statement by Consultant and approved by the City Administrator, certifying that no vehicle will be used in accomplishing this Agreement, may be substituted for this insurance requirement.
4. Professional Errors and Omissions Insurance in an amount not less than $1,000,000 per occurrence and $1,000,000 in the annual aggregate. Coverage may be written on a claims made basis; provided that the retroactive date on the policy or any renewal policy shall be the effective date of this Agreement or prior, and that the extended

reporting or discovery period shall not be less than 36 months following expiration of the policy. The City may waive the requirement for Professional Errors and Omissions Insurance whenever the Work does not warrant such coverage or the coverage is not available.

5. Each policy shall contain a provision that the policy shall not be canceled or materially changed without 30 days prior written notice to the City.

Upon written request to the City, the insurer will furnish, before or during performance of any Work, a copy of any policy cited above, certified to be a true and complete copy of the original.

B. Before the Consultant performs any Work, Consultant shall provide the City with a Certificate of Insurance acceptable to the City Attorney evidencing the above-required insurance and naming the City of Snoqualmie, its officers, employees and agents as Additional Insured on the Commercial General Liability Insurance policy and the Business Automobile Liability Insurance policy with respect to the operations performed and services provided under this Agreement and that such insurance shall apply as primary insurance on behalf of such Additional Insured. Receipt by the City of any certificate showing less coverage than required is not a waiver of the Consultant's obligations to fulfill the requirements.

C. Consultant shall comply with the provisions of Title 51 of the Revised Code of Washington before commencing the performance of the Work. Consultant shall provide the City with evidence of Workers' Compensation Insurance (or evidence of qualified self-insurance) before any Work is commenced.

D. In case of the breach of any provision of this section, the City may provide and maintain at the expense of Consultant insurance in the name of the Consultant and deduct the cost of providing and maintaining such insurance from any sums due to Consultant under this Agreement, or the City may demand Consultant to promptly reimburse the City for such cost.

9. Independent Contractor. The Consultant is an independent Contractor responsible for complying with all obligations of an employer imposed under federal or state law. Personnel employed by Consultant shall not acquire any rights or status regarding the City.

10. Employment. The Consultant warrants that it did not employ or retain any company or person, other than a bona fide employee working solely for the Consultant, to solicit or secure this Agreement or pay or agree to pay any such company or person any consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City shall have the right either to terminate this Agreement without liability or to deduct from the Agreement price or consideration or to otherwise recover, the full amount of such consideration.

11. Audits and Inspections. The Consultant shall make available to the City during normal business hours and as the City deems necessary for audit and copying all of the Consultant's records and documents with respect to all matters covered by this Agreement.

12. City of Snoqualmie Business License. Consultant shall obtain a City of Snoqualmie business license before performing any Work.

13. Compliance with Federal, State and Local Laws. Consultant shall comply with and obey all federal, state and local laws, regulations, and ordinances applicable to the operation of its business and to its performance of the Work.

14. Waiver. Any waiver by the Consultant or the City of the breach of any provision of this Agreement by the other party will not operate, or be construed, as a waiver of any subsequent breach by either party or prevent either party from thereafter enforcing any such provisions.

15. Complete Agreement. This Agreement contains the complete and integrated understanding and agreement between the parties and supersedes any understanding, agreement or negotiation whether oral or written not set forth herein.

16. Modification of Agreement. This Agreement may be modified by a Change Order as provided in Paragraph 1, or by a writing that is signed by authorized representatives of the City and the Consultant.

17. Severability. If any part of this Agreement is found to be in conflict with applicable laws, such part shall be inoperative, null and void, insofar as it is in conflict with said laws, the remainder of the Agreement shall remain in full force and effect.

18. Notices.

A. Notices to the City of Snoqualmie shall be sent to the following address:

City of Snoqualmie
Attn: Public Works Director
38624 SE River Street
P.O. Box 987
Snoqualmie, WA 98065

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

RH2 Engineering, Inc.
Attn: Dan Mahlum, PE
22722 29th Drive SE, Suite 210
Bothell, WA 98021

19. Venue. This Agreement shall be governed by the law of the State of Washington and venue for any lawsuit arising out of this Agreement shall be in King County.

IN WITNESS WHEREOF, the City and Consultant have executed this Agreement as of the date first above written.

	CONSULTANT: Please fill in the spaces and sign in the box appropriate for your business entity.
CITY OF SNOQUALMIE, WASHINGTON By:_____ Its: Mayor Date:_____	Corporation RH2 Engineering By:_____ Typed/Printed Name:_____ Its:_____ Date:_____
ATTEST: Deana Dean, City Clerk Date:	
APPROVED AS TO FORM:	

Dena Burke, City Attorney
Date:_____

Exhibit A

Scope of Work

EXHIBIT A
Scope of Work
City of Snoqualmie
Water and Sewer On-Call Services

January 2025

Background

The City of Snoqualmie (City) has requested assistance from RH2 Engineering, Inc., (RH2) to provide on-call support services for its water and sewer utilities. Major tasks anticipated for this on-call contract are described as follows.

Water and Sewer Availability Certificates

Assist the City with reviewing water and sewer availability certificates for new developments as requested. Perform water and sewer model updates to include recent improvements and operational changes. Review the developer's proposed improvements and perform analyses to determine if the City's water and/or sewer systems can provide the necessary pressure and fire flows. Determine if the City has the necessary storage, water rights, and capacity to serve the proposed developments.

Mill Site Utility Proposals

As requested, review utility proposals associated with the proposed Mill Site development. Work could include analyses to review the wastewater flows and pretreatment requirements proposed for the commercial/industrial development at the Mill Site. Perform sewer system analyses to determine conveyance system options and impacts at the Water Reclamation Facility. Perform water system analyses to determine water system improvements, including water main looping and a potential new storage reservoir, to support the Mill Site.

Review Pressure Zone Conditions in Water Distribution System

The City has been experiencing issues with the pumps in its Winery Pump Station in the 799 Pressure Zone for the last few years. The City has been working with PumpTech to determine the root cause of the issue. The pump station is having trouble priming the pumps and is possibly running dry. In addition, the City is evaluating a 599 Pressure Zone reconfiguration. As requested, RH2 is prepared to assist the City by performing hydraulic analyses to evaluate the condition and performance of the pressure zones. Assist with prioritizing water system Capital Improvement Plan (CIP) projects as requested.

Canyon Springs Chlorination Facility and On-Site Sodium Hypochlorite Generation System

The City currently is planning to run an Aquifer Storage and Recovery (ASR) Pilot Study at its Canyon Springs source to determine if it can withdraw additional water from the aquifer for storage. As part of this study, the City has obtained additional water rights at the Canyon Springs source (from 1.0 cubic feet per second (cfs) to 1.5 cfs). The City has requested that RH2 evaluate the existing

chlorination system and on-site sodium hypochlorite generation (OSHG) system at the Canyon Springs source to determine if upgrades are necessary to handle the increased capacity.

State Route 202 Bridge Crossing Feasibility Study and Alternatives Analysis

The Washington State Department of Transportation (WSDOT) has plans to replace its State Route (SR) 202 bridge crossing that currently holds two City water mains, a sewer force main, and a reclaimed water main. The City has requested that RH2 evaluate alternatives for the utility crossings, including utilizing the new WSDOT bridge, microtunneling, or horizontal directional drilling. Permitting needs, planning-level cost estimates, and easement/property acquisitions also will be evaluated for each alternative.

1040 BPS Resiliency Improvements

Recently, the 1040 Booster Pump Station (BPS) lost power in an isolated incident. Upon inspection, City operators discovered that two of three busbars in the electrical panel had melted and one of the four pumps had faulted due to over ramping. Since this occurred, the BPS has been operating on generator power until the busbars can be replaced. The City is working to provide a second backup generator to the site and evaluate repairs for the pump. The City requested that RH2 evaluate the BPS to determine improvements to enhance the resiliency of the station.

General Assumptions

The following assumptions were made when preparing this Scope of Work:

- *RH2 will rely upon the accuracy and completeness of information, data, and materials generated or produced by the City or others in relation to this Scope of Work. RH2 assumes that the entity providing such information to RH2 is either the owner of such information or has obtained written authorization from the owner to distribute said information.*
- *Deliverables will be submitted in electronic format (PDF) unless otherwise noted.*
- *RH2 will perform the services described up to the amounts included in the attached Fee Estimate. If the City requests additional effort or changes to this Scope of Work, the City and RH2 will mutually determine a contract amendment.*
- *RH2 may perform site visits as requested by the City. At no time shall RH2 be responsible for the site safety or direction of others. The City shall ensure adequate access when requesting RH2 visit any site in the performance of this Scope of Work.*

Task 1 – Project Management

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

Approach:

1.1 Provide direction, coordination, and oversight to the RH2 project team. Organize, manage, and coordinate technical disciplines as described herein and implement quality assurance and quality control reviews to execute this Scope of Work. Document and retain information generated during the execution of the project.

1.2 Prepare monthly invoices and budget status summaries.

RH2 Deliverables:

- Monthly progress reports with schedule, budget, work performed, and billed to date updates.

Task 2 – Review Water and Sewer Availability Certificates

Objective: Provide assistance to City staff as requested to review water and sewer availability certificates.

Approach:

2.1 Perform water and sewer model updates to include recent system improvements and operational changes. *Model updates will be performed as requested by the City.*

2.2 Review and analyze proposed plans for development for compliance with City water and sewer development standards and practices.

Assumptions:

- *Work will not be performed by RH2 without written authorization by the City for individual water and sewer availability requests.*

Provided by City:

- Water and sewer system hydraulic models.
- Proposed plans for development.

RH2 Deliverables:

- Review of water and sewer availability certificates for proposed developments.
- Other deliverables as requested by the City.

Task 3 – Review Mill Site Utility Proposals

Objective: Provide assistance to City staff as requested to review water and sewer proposals for the Mill Site.

Approach:

3.1 Review and comment on Mill Site water and sewer development plans as requested.

3.2 Perform analyses as requested to evaluate the sizing, location, and configuration of the on- and off-site water and sewer infrastructure required to service the Mill Site and meet the City's level of service goals for its utilities.

3.3 Attend meetings with the City and developer as requested to review comments and analysis results.

Assumptions:

- *Work will not be performed by RH2 without written authorization by the City.*

Provided by City:

- Utility development plans and other documentation to support the requested development reviews.

RH2 Deliverables:

- Review comments on the Mill Site water and sewer development plans in electronic PDF and via email.
- Other deliverables as requested by the City.

Task 4 – Review Pressure Zone Conditions in Water Distribution System

Objective: Provide assistance to City staff and operators as requested to review pressure zone conditions and configurations in the water system.

Approach:

4.1 Review and analyze the existing Winery Pump Station operations, hydraulics, and pump conditions. Determine if improvements are necessary. Summarize findings in a technical memorandum.

4.2 Review the potential for a 599 Pressure Zone reconfiguration at the Williams development.

4.3 Assist the City with prioritizing CIP projects for pump stations and other water system facilities as requested.

Assumptions:

- *Work will not be performed by RH2 without written authorization by the City.*

Provided by City:

- Available operational data and analyses for the existing system.

RH2 Deliverables:

- Technical memorandum for Winery Pump Station analyses.
- Other deliverables as requested by the City.

Task 5 – Canyon Springs Chlorination Facility and OSHG System

Objective: Evaluate the Canyon Springs chlorination facility and OSHG system to determine improvements needed to serve an increased capacity of 1.5 cfs. Prepare a technical memorandum summarizing the results of the evaluation.

Approach:

5.1 Perform one (1) site visit to observe the condition of mechanical and electrical components of the facility and discuss existing infrastructure with the operators. Review existing Canyon Springs facility data, including chlorination usage and doses for the last year.

5.2 Perform hydraulic analyses and model calibration for the Canyon Springs source and facilities.

5.3 Evaluate the capacity of the existing OSHG system equipment. Perform an alternatives analysis for treating the increased water rights, including temporary and permanent solutions. Prepare planning-level cost estimates for each alternative.

5.4 Prepare a draft technical memorandum summarizing the chlorination facility improvement alternatives. Submit the draft technical memorandum to City staff for review.

5.5 Attend one (1) meeting with City staff to discuss the draft technical memorandum. Revise and finalize the technical memorandum based on City review comments.

Provided by City:

- Access to the facility during the site visit.
- Canyon Springs chlorine usage and doses for the last year.
- Review comments on draft technical memorandum.
- Attendance at review meeting.

RH2 Deliverables:

- Attendance at one (1) site visit.
- Attendance at review meeting.
- Draft and final technical memorandum.

Task 6 – SR 202 Bridge Crossing Feasibility Study and Alternatives Analysis

Objective: Perform a feasibility study and alternatives analysis for the City's utilities on the WSDOT SR 202 bridge that is to be replaced. Evaluate planning-level costs, permitting needs, property/easement acquisitions, and schedule for each alternative. Prepare an Alternatives Analysis Report.

Approach:

6.1 Review City-provided as-builts, geotechnical explorations and reports, existing topographic and utility maps, and relevant studies.

6.2 Evaluate pipe sizing requirements and possible upsizing based on hydraulic modeling analyses and existing conditions. Specifically, analyze a new wastewater force main, water supply main and reclaimed water supply main.

6.3 Coordinate with WSDOT, as requested by the City, regarding the timing of the bridge replacement project and the possibility of utilizing the replacement bridge for the City's utility lines. Present to WSDOT the number of pipes, liquid to convey, material choices and pipeline attachment alternatives. Examples of couplings to relieve strain caused by thermal expansion or seismic events will also be presented. Attend one (1) Teams meeting to present alternatives and possibility of integrating some or all of the mains onto the future bridge.

6.4 Procure geotechnical engineer as a subconsultant to RH2 to review available geologic and geotechnical information and provide input on the feasibility. *Four (4) different locations within 2,000 feet east of the existing SR 202 bridge will be reviewed for feasibility. Existing*

borings, test pits, and geotechnical reports will be relied upon for this analysis. Subsurface geotechnical explorations will occur in later phases of this project once the number of viable alternative crossing methods have been reduced.

6.5 Develop alternative approaches and conceptual plans for replacing the water, sewer, and reclaimed water mains, including relocations, construction method(s), required access, temporary or permanent easements, and temporary bypass routes. Alternatives will be developed to a level suitable to describe the proposed approach and planning-level costs. Currently, the following construction alternatives are envisioned for analysis to create a new water and sewer utility crossing of the Snoqualmie River:

a) Microtunneling beneath the Snoqualmie River. One (1) large diameter casing tunneled into place could contain all four (4) pipelines.

b) Installation of the four (4) pipelines by horizontal directional drilling. Sub-alternatives include consolidation of water supply pipelines into a common carrier and wastewater force main and reclaimed pipelines into another, or other variations.

c) Construction of a new bridge over the Snoqualmie River to carry the utilities. This alternative could include a pedestrian/bicycle bridge to be integrated into the design.

d) Coordination with WSDOT for permission to install the four (4) new utility pipelines on the proposed SR 202 bridge.

e) Conversion of the existing SR 202 bridge into a utility and pedestrian/bicycle bridge after the new SR 202 bridge is built.

f) Combinations of these alternatives.

6.6 Prepare a draft Alternatives Analysis Report summarizing the alternatives and conceptual design including the following primary criteria:

a) Estimated cost.

b) Required permitting including analysis of the ability to obtain the permit and the estimated cost and time to get them.

c) The ability to acquire right-of-way or permanent easement for the utilities and temporary easements for their construction.

d) The ability to build the new mains on schedule as they are needed.

e) The level of risk to the City posed by the construction and operation of the new utility crossing.

Prepare a numerically scored ranking system to assist in making a recommendation. Submit the draft report with preliminary recommendations to City staff for review. Attend one (1) Teams meeting to discuss preliminary recommendations.

6.7 Attend one (1) meeting with City staff to discuss the draft report. Revise and finalize the Alternatives Analysis Report based on City review comments.

Provided by City:

- Available as-builts, relevant studies, and maps.
- Review comments on the draft Alternatives Analysis Report.
- Attendance at Teams meeting to discuss initial scoring of alternatives and in-person review meeting.

RH2 Deliverables:

- Draft and final Alternatives Analysis Report.
- Attendance at Teams meeting to discuss initial scoring of alternatives and in-person review meeting.

Task 7 – 1040 BPS Resiliency Improvements

Objective: Evaluate the existing 1040 BPS pumps and electrical equipment and recommend improvements to enhance the resiliency of the pump station.

Approach:

7.1 Attend field testing on existing pumps to determine hydraulic performance and electrical power requirements. Evaluate pump operational range and identify recommended control changes or pump replacements.

7.2 Evaluate existing pump station electrical equipment and recommend improvements to reliably supply power to the pump station.

7.3 Summarize field testing findings and recommended improvements in a technical memorandum.

Provided by City:

- Access and operational assistance at 1040 BPS for pump testing and electrical equipment evaluation.

RH2 Deliverables:

- Technical memorandum for 1040 BPS Resiliency Improvements.

Task 8 – General On-Call Services

Objective: Provide general water and sewer on-call services as requested by the City.

Approach:

8.1 Perform on-call services for the City's water and sewer systems, including hydraulic analyses, hydraulic model updates, attendance and support at meetings, technical assistance, and other related services as requested by the City.

8.2 Provide ongoing operations support for the WRF, including site meetings, process data review, recommendations on modifications, and follow-up with City staff.

8.3 Provide support to the City during the National Pollutant Discharge Elimination System (NPDES) permit renewal process. Assist with the creation and development of the renewal application, coordinate with the City and Ecology during the application process. And provide review and comment on the draft NPDES submittal from Ecology.

Assumptions:

- *Work will not be performed by RH2 without written authorization by the City for individual requests.*

RH2 Deliverables:

- Deliverables as requested by the City.
- Correspondence, data analysis, and recommendations for ongoing operations support.
- NPDES permit renewal application, correspondence, and review comments on draft permit.

Task 9 – Management Reserve

Objective: Provide additional services as requested by the City.

Approach:

9.1 Provide additional services as requested and authorized by the City. Submit scope of work and budget estimate for supplemental services requested by the City. The City shall provide written authorization to proceed with any supplemental services.

RH2 Deliverables:

- Scope of work and budget estimate for supplemental services.
- Other deliverables as requested by the City under the authorization for any supplemental services.

Project Schedule

RH2 is prepared to commence with the work upon Notice to Proceed from the City. This project is anticipated to be completed by December 2025.

EXHIBIT B

COMPENSATION

EXHIBIT B

Fee Estimate
City of Snoqualmie
Water and Sewer On-Call Services
Jan-25

	Description	Total Hours	Total Labor	Total Subconsultant	Total Expense	Total Cost
Task 1	**Project Management**	**44**	**$ 11,700**	**$ -**	**$ 293**	**$ 11,993**
1.1	Provide direction, coordination, and oversight to RH2 team	16	$ 5,088	$ -	$ 127	$ 5,215
1.2	Prepare monthly invoices and budget status summaries	28	$ 6,612	$ -	$ 165	$ 6,777
Task 2	**Review Water and Sewer Availability Certificates**	**140**	**$ 29,794**	**$ -**	**$ 2,615**	**$ 32,409**
2.1	Perform water and sewer model updates	64	$ 13,536	$ -	$ 1,246	$ 14,782
2.2	Review and analyze proposed plans for development	76	$ 16,258	$ -	$ 1,369	$ 17,627
Task 3	**Review Mill Site Utility Proposals**	**204**	**$ 49,666**	**$ -**	**$ 2,861**	**$ 52,527**
3.1	Review and comment on Mill Site development plans	72	$ 17,296	$ -	$ 1,010	$ 18,306
3.2	Perform analyses for water and sewer infrastructure	96	$ 22,624	$ -	$ 1,446	$ 24,070
3.3	Attend meetings with City and developer as requested	36	$ 9,746	$ -	$ 405	$ 10,151
Task 4	**Review Pressure Zone Conditions in Water Distribution System**	**146**	**$ 31,466**	**$ -**	**$ 2,574**	**$ 34,040**
4.1	Review and analyze Winery Pump Station operations	72	$ 14,986	$ -	$ 1,337	$ 16,323
4.2	Review 599 Pressure Zone reconfiguration	48	$ 10,186	$ -	$ 860	$ 11,046
4.3	Assist City with prioritizing CIP projects	26	$ 6,294	$ -	$ 377	$ 6,671
Task 5	**Canyon Springs Treatment Facility and OSHG System**	**92**	**$ 19,714**	**$ -**	**$ 1,226**	**$ 20,940**
5.1	Perform site visit and review existing Canyon Springs facility data	22	$ 5,010	$ -	$ 394	$ 5,404
5.2	Perform hydraulic analyses and model calibration	16	$ 3,256	$ -	$ 301	$ 3,557
5.3	Evaluate capacity of existing OSHG system and perform analyses	16	$ 3,258	$ -	$ 274	$ 3,532
5.4	Prepare draft technical memorandum	22	$ 4,590	$ -	$ 115	$ 4,705
5.5	Attend review meeting and finalize technical memorandum	16	$ 3,600	$ -	$ 142	$ 3,742
Task 6	**SR 202 Bridge Crossing Feasibility Study and Alternatives Analysis**	**244**	**$ 61,226**	**$ 57,548**	**$ 3,532**	**$ 122,306**
6.1	Review City-provided as-builts and relevant studies	28	$ 7,392	$ -	$ 457	$ 7,849
6.2	Evaluate pipe sizing requirements and possible upsizing	26	$ 6,216	$ -	$ 430	$ 6,646
6.3	Coordinate with WSDOT regarding bridge project	16	$ 4,080	$ -	$ 267	$ 4,347
6.4	Coordinate with geotechnical engineer to review geologic information	20	$ 5,856	$ 26,843	$ 229	$ 32,928
6.5	Develop alternative approaches and conceptual plans	52	$ 13,968	$ 19,504	$ 569	$ 34,041
6.6	Prepare draft Alternatives Analysis Report	84	$ 18,998	$ 11,201	$ 1,245	$ 31,444
6.7	Attend review meeting and finalize Alternatives Analysis Report	18	$ 4,716	$ -	$ 335	$ 5,051
Task 7	**1040 BPS Resiliency Improvements**	**126**	**$ 30,992**	**$ -**	**$ 1,734**	**$ 32,726**
7.1	Attend field testing on existing pumps	36	$ 9,064	$ -	$ 553	$ 9,617
7.2	Evaluate existing electrical equipment	22	$ 5,404	$ -	$ 300	$ 5,704
7.3	Prepare technical memorandum	68	$ 16,524	$ -	$ 881	$ 17,405
Task 8	**General On-Call Services**	**403**	**$ 104,354**	**$ -**	**$ 4,217**	**$ 108,571**
8.1	Perform on-call water and sewer services as requested	108	$ 24,224	$ -	$ 1,706	$ 25,930
8.2	Provide ongoing operations support for WRF	204	$ 55,752	$ -	$ 1,889	$ 57,641
8.3	Provide support during NPDES permit renewal	91	$ 24,378	$ -	$ 622	$ 25,000
Task 9	**Management Reserve**	**100**	**$ 23,638**	**$ -**	**$ 1,362**	**$ 25,000**
9.1	Provide additional services as requested and authorized	100	$ 23,638	$ -	$ 1,362	$ 25,000
	PROJECT TOTAL	**1499**	**$ 362,550**	**$ 57,548**	**$ 20,413**	**$ 440,511**

EXHIBIT C RH2 ENGINEERING, INC. 2025 SCHEDULE OF RATES AND CHARGES		
RATE LIST	**RATE**	**UNIT**
Professional I	$174	$/hr
Professional II	$192	$/hr
Professional III	$214	$/hr
Professional IV	$235	$/hr
Professional V	$252	$/hr
Professional VI	$270	$/hr
Professional VII	$295	$/hr
Professional VIII	$318	$/hr
Professional IX	$328	$/hr
Technician I	$136	$/hr
Technician II	$148	$/hr
Technician III	$167	$/hr
Technician IV	$182	$/hr
Technician V	$199	$/hr
Technician VI	$219	$/hr
Technician VII	$238	$/hr
Technician VIII	$250	$/hr
Administrative I	$91	$/hr
Administrative II	$106	$/hr
Administrative III	$127	$/hr
Administrative IV	$148	$/hr
Administrative V	$171	$/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	$0.6700	price per mile (or Current IRS Rate)
Subconsultants	15%	Cost +
Outside Services	at cost	

Rates listed are adjusted annually.

Phone (425) 831-5784
Fax (425) 831- 4798

Andrew Vining, PE
City of Snoqualmie
Parks & Public Works
Superintendent
P.O. Box 987, Snoqualmie, Washington 98065
www.ci.snoqualmie.wa.us

MEMORANDUM

Date: January 13th, 2025

Subject: On-Call Utility Engineering Support Services– Design Consultant Selection

After reviewing the qualifications of the following five vendors, **RH2 Engineering, Gray & Osborne Consulting Engineers, Parametrix, Tetra Tech, and Kennedy Jenks** selected from the MRSC roster. Staff have determined that **RH2 Engineering** Statement of Qualifications is the best fit for the proposed On-Call Utility Engineering Support Services Contract.

The following criteria were considered in choosing **RH2 Engineering** for this project.

- Demonstrated experience in planning water and sewer utility for similar size utilities in Washington state;
- Experience and familiarity modeling Snoqualmie water and sewer utility systems;
- Demonstrated communication of technical information with City Staff;
- Quality of previous work products including current utility system plans;
- Responsiveness to City's needs; and
- Staff readily available for the project

Andrew Vining, P.E.
City of Snoqualmie
Parks and Public Works

Council Agenda Bill

AB Number

AB25-050

Agenda Bill Information

Title*

Amendment for Water Reclamation Facility Phase 3 Services During Construction

Action*

Motion

Council Agenda Section

Committee Report

Council Meeting Date*

04/14/2025

Staff Member

Andrew Vining

Department*

Public Works

Committee

Parks and Public Works

Committee Date

04/08/2025

Exhibits

Packet Attachments - if any

x1 Agreement.docx	35.18KB
x2 Scope and Fee.pdf	749.12KB
x3 Aerial Overview.pdf	283.88KB
x4 WRF Phase 3 Interim Operations Plan.pdf	2.96MB

Summary

Introduction*

Brief summary.

The WRF Phase 3 Improvements have increased treatment capacity, enhanced performance, and replaced critical components that were nearing the end of their expected service life. Basin 1 process and SCADA commissioning is underway, and improvements at Kimball Creek Lift Station are scheduled to begin this spring. During construction necessary out-scope services were encountered and are presented in Amendment No. 4.

Proposed Motion

Approve amendment No. 4 to the agreement with RH2 Engineering for services during construction

Background/Overview*

What was done (legislative history, previous actions, ability to hyperlink)

LEGISLATIVE HISTORY

The original contract with RH2 Engineering was approved by Council on February 28, 2022 under AB22-031 to complete preliminary design of the WRF Phase 3 Improvements. On August 22, 2022 under AB22-108 Council Approved Amendment No. 1 to the services agreement to include final design, permitting, and services during bidding of the WRF Phase 3 Improvements. On January 9, 2023 under AB23-002 Council Approved Amendment No. 2 to the services agreement to include engineering services support services during construction and SCADA Programming at the Kimball Creek Lift Station. On May 22, 2023 under AB23-063 Council Approved Amendment No. 3. to the services agreement to include engineering services during construction and supervisory control and data acquisition (SCADA) programming.

BACKGROUND

The 2021 General Sewer Plan (GSP) identified the need to begin the planning process and increase the WRF capacity. The WRF Phase 3 Improvements have successfully upgraded aging components with new more efficient equipment sized to handle future sewer flows and loads projected through the year 2040.

In May 2022, during WRF Phase 3 preliminary design, the City entered into an agreement with the Snoqualmie Tribe for the provision of added sewer utility service related to Casino expansion which is expected to come online later this year. The agreement included General Facility Charges (GFCs) as well as project schedule milestones which the City has completed ahead of schedule.

Below is a summary of the engineering services related to the Phase 3 Improvements currently underway:

- Task 11 – Support During Construction of Major WRF Improvements

- Task 12 –SCADA Programming for Major WRF Improvements

During construction RH2 supported the project team through multiple complex and iterative process interruptions and startups. This included implementation of the Plan for Interim Operation (enclosed) which outlines steps needed to maintain treatment during the replacement of the headworks, oxidation ditches, and solids handling facility equipment. These major process transitions were completed successfully but at times required the project team to make timely adjustments and complete essential tasks related to the facility retrofit and SCADA programming.

The following necessary tasks required a greater level of support during construction: headworks screen replacement, arc flash power study, change order 1 catwalk design and power shutdown, change order 2 air pipe modifications and bubble mixer, and increased process and SCADA support during startup and commissioning of both activated sludge basins and two aerobic digesters.

Remaining support tasks include completion of the facility operation and maintenance manual, commissioning of basin 1, and additional SCADA programming including preparation of SCADA QA/QC report and documentation of commissioning.

Analysis*

WRF Phase 3 construction is nearly complete and initial process commissioning indicates that the improvements are successful. Construction advanced ahead of schedule and resulted in intensive construction and SCADA support services during the second half of 2024 and first half of 2025. Additional support services were necessary to avoid cost increases associated contractor delays and staff overtime,

and to ensure permit compliance. The purposed expanded tasks are necessary to complete process commissioning, SCADA programming and documentation of the phase 3 improvements.

City staff recommended approving an amendment for RH2 to complete additional effort needed to accomplish project closeout and commissioning of the Phase 3 Improvements.

Budgetary Status *

Funds have already been authorized in this year's budget.

Fiscal Impact

Amount of Expenditure	Amount Budgeted	Appropriation Requested
$196,000.00	$16,990,359.00	$0.00

Budget Summary

Administration recommends approving a fourth amendment to the contract with RH2 Engineering, Inc. in the amount of $196,000 for WRF Phase 3. This project was incorporated in the 2025-26 Biennial Budget (Ord. 1296) as a part of the continuing appropriations for capital projects within the Utility Capital Fund (#417). The budget for this project is $16,990,359. Over the life of this project, $15,620,474 has been spent, $988,599 has been encumbered for previously-approved contracts, and $71,550 has been encumbered for estimated City employee labor. With the addition of the RH2 amendment of $196,000, the project has a remaining available budget of $113,736. Therefore, sufficient appropriation exists within the WRF Phase 3 budget (#417) to fund this amendment.

Fiscal Impact Screenshot

WRF Phase III

		Life-of-Project Budget *(Multiple Bienniums)*
Beginning Budget	$	16,990,359
Expenditures	$	(15,620,474)
Outstanding Contract Value *(Previously approved)*	$	(988,599)
Estimated Labor Value for Remainder of Biennium (City Employees)	$	(71,550)
Current Available Budget	$	309,736
Value of this Contract *Amendment (AB25-050)*	$	(196,000)
Available Budget after AB25-050	$	113,736

CITY OF SNOQUALMIE
AGREEMENT FOR CONSULTANT SERVICES
Amendment No. 4
Water Reclamation Facility Phase 3 Improvements

This Amendment No. 4 to Agreement for Consulting Services is entered into this ____ day of April, 2025 by and between the City of Snoqualmie, a Washington municipal corporation ("City") and RH2 Engineering, Inc., a Washington corporation ("Consultant"). City and Consultant are collectively referred to herein as "the Parties."

WHEREAS, the City and Consultant previously entered into an Agreement for Consultant Services on March 1, 2022 ("Agreement"), which provided for Consultant to complete preliminary design of the WRF Phase 3 improvements; and

WHEREAS, on August 22, 2022, Council approved Amendment No. 1 to the Agreement that included final project design, permitting and support during bidding; and

WHEREAS, on January 9, 2023, Council approved Amendment No. 2 to the Agreement that included engineering support services during construction and Supervisory control and Data Acquisition (SCADA) programming at the Kimball Creek Lift Station;

WHEREAS, on June 7th, 2023, Council approved Amendment No. 3 to the Agreement that included services including engineering support services during construction and SCADA Programming of major improvements at the Water Reclamation Facility (WRF) Site; and

WHEREAS, the City has requested Consultant to provide additional services including expanded support services during construction and additional SCADA programming for the major improvements at the WRF Site.

WHEREAS, Consultant has the resources and capability to perform this work and has provided a scope of work and an hour and fee estimate for such additional work;

NOW, THEREFORE, the parties herein do mutually agree as follows:

Section 1. Scope of Work Amended. Exhibit A ("Scope of Work") to the March 1, 2022 Agreement is hereby amended to add the additional work tasks set forth in Exhibit A to this Amendment No. 4.

Section 2. Compensation Amended. Section 2 of the March 1, 2022 Agreement ("Compensation") is hereby amended to increase the total compensation to be paid Consultant for the work from $2,728,199 to $2,924,199.

Section 3. Exhibit B ("Compensation") Amended. Exhibit B to the March 1, 2022 Agreement is hereby amended to add the additional compensation and fee details set forth in Exhibit B to this Amendment No. 4

.

CITY OF SNOQUALMIE, WASHINGTON By:_____ Its: Mayor Date:_____	CONSULTANT – RH2. By:_____ Typed/Printed Name:_____ Its:_____ Date:_____
ATTEST: Deana Dean, City Clerk Date:	
APPROVED AS TO FORM: Dena Burke Date:_____	

EXHIBIT A
Scope of Work
Amendment No. 4
City of Snoqualmie
Water Reclamation Facility Phase 3 Improvements
Additional Services During Construction

April 2025

Background

The City of Snoqualmie (City) owns and operates the Water Reclamation Facility (WRF). To accommodate projected flows and loads, handle replacement of aging components installed over 20 years ago, and meet regulatory requirements, the City's 2021 *General Sewer Plan* (GSP) identified multiple projects for Phase 3 of the WRF Improvements.

The City originally contracted with RH2 Engineering, Inc., (RH2) in February of 2022 to provide preliminary design of major WRF improvements, and preliminary and final design of Kimball Creek Lift Station (LS). Over the last 2 years, the contract has been amended and additional tasks have been added. The previous scope of work included the following tasks:

Task 1 – Project Management
Task 2 – Preliminary Design of Major WRF Improvements
Task 3 – Preliminary and Final Design of Kimball Creek LS
Task 4 – Management Reserve
Task 5 – Services During Bidding (SDB) for Kimball Creek LS
Task 6 – Final Design of Major WRF Improvements
Task 7 – Washington State Department of Ecology (Ecology) Review and City Permitting for Major WRF Improvements
Task 8 – SDB for Major WRF Improvements
Task 9 – Services During Construction (SDC) for Kimball Creek LS
Task 10 – Supervisory Control and Data Acquisition (SCADA) Programming for Kimball Creek LS
Task 11 – SDC for Major WRF Improvements
Task 12 – SCADA Programming for Major WRF Improvements

Amendment Introduction

This Scope of Work includes expanding existing Tasks 11 and 12 to provide additional SDC and SCADA programming for Major WRF Improvements.

The construction of the Major WRF Improvements began in August of 2023 and is projected to finish in April of 2025. Throughout the project, the Management Reserve Task has served as a contingency resource during preliminary and final design, and construction related tasks.

The Management Reserve Task has already been used for additional services requested by the City during the project, including the headworks screening replacement, a third-party structural review

during design of the WRF, the Arc Flash Power Study, the catwalk design (Change Order No. 1), the digester pipe modifications (Change Order No. 2), the coarse bubble mixing design (Change Order No. 2), the power shutdown, and emergent SCADA support during interim conditions. The Management Reserve Task also was utilized to absorb the overages of the certified testing company for material testing and special inspection during construction of the Major WRF Improvements. It was determined that the inspector underbudgeted for the full project and the Management Reserve Task was used for its additional fee.

Due to the project's complexities, RH2 needed to provide a higher level of service throughout SDC. Since initial construction began in August 2023, RH2 teamed with City staff and the contractor to develop interim operation plans for a full plant power shutdown, headworks screen shutdown, two oxidation basin shutdowns, and three digester shutdown events. During construction, issues also arose that required RH2's involvement, field support, and additional design services beyond the level anticipated. Some of these issues included mixer locations and associated crane access, axial flow pump catwalk extension, handrail and gate modifications, and oxidation reduction potential (ORP) probe maintenance accessories. Additionally, the headworks screening replacement added via the Management Reserve Task required involvement during construction that was not included in Amendment No. 3. The screen installation required coordination with the manufacturer's representative and field coordination with the contractor as additional components and field modifications to existing components were necessary due to the pre-purchased product's varying dimensions. RH2 also provided additional support to the City by having process coordination meetings on an as-needed basis to review and streamline the WRF's operations, maintain permit compliance, and demonstrate design objectives.

In addition to the efforts needed for SCADA programming of the Major WRF Improvements, some issues arose that resulted in additional SCADA programming efforts beyond what was originally expected. These issues included the following: the temporary pumping system installed by the contractor required daily operational control changes; and emergent operations support was needed during process commissioning to debug SCADA control issues to avoid staff overtime due to nuisance alarms.

As a result of this, the project's scope of work spanning from preliminary design efforts through construction, the requirement to maintain treatment operations and respond to emergent issues, and the City's additional service requests, the original contingency built into the Management Reserve Task was not sufficient for this project's scope. As a result, Tasks 11 and 12 have been amended for RH2 to provide additional SDC and SCADA support for the City through project completion.

Task 11A – Additional SDC for Major WRF Improvements

Objective: Provide additional SDC of the Phase 3 improvements to the level of effort stated in the Fee Estimate. This existing task is amended to cover the remainder of the proposed improvement's construction.

Approach:

11.8A Prepare Additional Facility Operation and Maintenance (O&M) Manuals – Prepare detailed O&M manual sections for the WRF Phase 3 improvements. Include an overview of process components, detailed descriptions of normal and emergency operational procedures, troubleshooting and preventative maintenance measures, and operator safety considerations. Include appendices of process schematics, manufacturer documentation, material safety data sheets, and periodic operations checklists. Provide Ecology with a copy of the WRF O&M manual sections for review and incorporate comments into the final O&M manual section documents.

11.9A Provide Additional Consultation During Commissioning – Review SCADA and daily process operations data and consult with City staff on the operational strategy to ensure permit compliance and design objectives are consistently met.

Assumptions:

- *The services described in Task 11A for additional SDC support to the City will be performed to the level of effort identified in **Exhibit B**.*

Task 12A – Additional SCADA Programming for Major WRF Improvements

Objective: Provide additional control software development services for new operator interface (OI) and programmable logic controller (PLC) equipment. Provide additional software development services for SCADA computer systems. Provide additional field testing and commissioning support services related to the control system software at the WRF. This existing task is amended to cover the remainder of the proposed improvement's construction. *This Task will be supported by RH2's subsidiary, Control Systems NW LLC, via a subconsultant services agreement.*

Approach:

12.3A Provide Additional Development of PLC Software – Develop the PLC data point names, descriptions, and addresses based on the control panel design and City data point standards defined in Amendment No. 3, subtask 12.2, and gathered during the workshops. Develop control loop descriptions, alarm interlocks, and control data required between controllers based on facility requirements. Develop software using Studio 5000 for Logix PLCs based on the previously defined PLC information.

12.4A Provide Additional Development of OI Software – Develop the OI for the control panels. *OI screen designs will be consistent with human machine interface (HMI) screen designs. OI screens will contain the same graphical program that will be a subset of the HMI screen design. Public Works Director will have final approval of HMI screen designs.*

12.5A Provide Additional Configuration and Development of SCADA Computer Software – Work with City staff to design and configure HMI computer systems and develop HMI screen designs and layouts based on HMI standards defined by the City SCADA Master Plan and at software development workshops. *Public Works Director will have final approval of HMI screen designs*. Work with City staff to develop the following HMI computer software:

- Update to overall facility process display that identifies major plant information in one overall screen. Links from this screen will dynamically display facility subsections.
- Facility displays for each treatment subsystem.
- Facility setpoint control components.
- Facility real time and historical alarms and events displays. *Historical displays will filter alarms and events by specific time and data*.
- Facility historical trending of analog and discrete data. This screen will be configurable to display normal groups of data or ad-hoc data. Trend data/time information will be selectable. Trend data will be capable of exporting to CSV files.
- Summary displays will show summaries of totals, averages, minimums, and maximums. This information will be displayed for daily, monthly, and yearly periods of time.
- Develop system reports based on information identified during software development workshops.

12.8A Perform Additional Commissioning Services and Quality Assurance/Quality Control (QA/QC)

- SCADA Computer Systems
  - Work with City staff to install and configure existing HMI computer systems. *This work will consist of updating existing computer HMI software and software utilities required to maintain the SCADA computer systems.*
- Facility Commissioning and QA/QC
  1. Install facility software components on the SCADA computers prior to testing.
  2. RH2, the City, and the contractor will be on site at the WRF during testing.
  3. Rerun the factory tests that were implemented during Amendment No. 3, subtask 12.7, using existing facility instrumentation.
  4. Test communications between the facility controllers and the HMI computer systems.
  5. Test data points and control capabilities between the facility controllers.
  6. RH2, the contractor, and the City will test control capabilities of the facility.

7. RH2 and the City will approve the completion of a facility based on the original design and information developed and approved in Amendment No. 3, subtasks 12.1 through 12.5. *Major changes to the system at the time of testing are not included in this Scope of Work*.

12.9A Prepare Additional O&M Documentation – Provide a summary report documenting the QA/QC completed on the WRF Phase 3 SCADA improvements. The report will include a full list of new devices, objects, and alarms installed under Phase 3 and included in QA/QC procedure, the Arc Flash Power Study, and reference to O&M controls narratives.

Assumptions:

- *The services described in Task 12A for additional software development, testing, and startup services to City staff as described to the City will be performed to the level of effort identified in **Exhibit B**. City staff will review and approve all OI and HMI screen designs developed in subtasks 12.4A and 12.5A. Public Works Director will be responsible for final approval of design within a reasonable timeframe. RH2's Fee Estimate assumes a certain level of cooperation and timeliness from any third parties required for testing. All installation will be performed by others. If additional hours are needed to accomplish Task 12A due to events beyond RH2's control, RH2 will notify the City in advance of additional hours needed, and additional hours shall be mutually negotiated.*
- *This Scope of Work does not include HMI data point validation of remote LS facilities. It is assumed that the existing HMI data points for remote LS facilities are valid.*
- *RH2 is not responsible for site safety or directing others in their work.*

RH2 Deliverables:

- QA/QC Report in electronic PDF.

Project Schedule

RH2 anticipates that SDC for the Major WRF Improvements will be completed in April 2025 for the process and mechanical portions of the project and February 2026 for the completion of ongoing control systems integration support.

EXHIBIT B
Fee Estimate
Amendment No. 4
City of Snoqualmie
Water Reclamation Facility Phase 3 Improvements
Additional Services During Construction
Apr-25

	Description	Total RH2 Hours	Total RH2 Labor	Total CSNW Hours	Total CSNW Labor	Total Expense	Total Cost
Task 11A	**Additional SDC for Major WRF Improvements**	**315**	**$ 70,920**	**-**	**$ -**	**$ 2,813**	**$ 73,733**
11.8A	Prepare Additional Facility O&M Manuals	105	$ 24,110	-	$ -	$ 749	$ 24,859
11.9A	Provide Additional Consultation During Commissioning	210	$ 46,810	-	$ -	$ 2,064	$ 48,874
Task 12A	**Additional SCADA Programming for Major WRF Improvements**	**146**	**$ 33,220**	**321**	**$ 85,153**	**$ 3,894**	**$ 122,267**
12.3A	Provide Additional Development of PLC Software	20	$ 4,882	32	$ 8,288	$ 357	$ 13,527
12.4A	Provide Additional Development of OI Software	20	$ 4,882	20	$ 5,180	$ 279	$ 10,341
12.5A	Provide Additional Configuration and Development of SCADA Computer Software	30	$ 6,774	58	$ 15,782	$ 674	$ 23,230
12.8A	Perform Additional Commissioning Services and QA/QC	28	$ 6,360	147	$ 39,023	$ 1,750	$ 47,133
12.9A	Prepare Additional O&M Documentation	48	$ 10,322	64	$ 16,880	$ 835	$ 28,037
	PROJECT TOTAL	**461**	**$ 104,140**	**321**	**$ 85,153**	**$ 6,707**	**$ 196,000**

EXHIBIT C 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
Control Specialist I	$169	$/hr
Control Specialist II	$187	$/hr
Control Specialist III	$208	$/hr
Control Specialist IV	$228	$/hr
Control Specialist V	$245	$/hr
Control Specialist VI	$259	$/hr
Control Specialist VII	$278	$/hr
Control Specialist VIII	$292	$/hr
Control Specialist IX	$292	$/hr
Control Technician I	$132	$/hr
Control Technician II	$144	$/hr
Control Technician III	$162	$/hr
Control Technician IV	$177	$/hr
Control Technician V	$193	$/hr
Control Technician VI	$213	$/hr
Control Technician VII	$231	$/hr
Control 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
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Copies (bw) 8.5" X 14"	$0.14	price per copy
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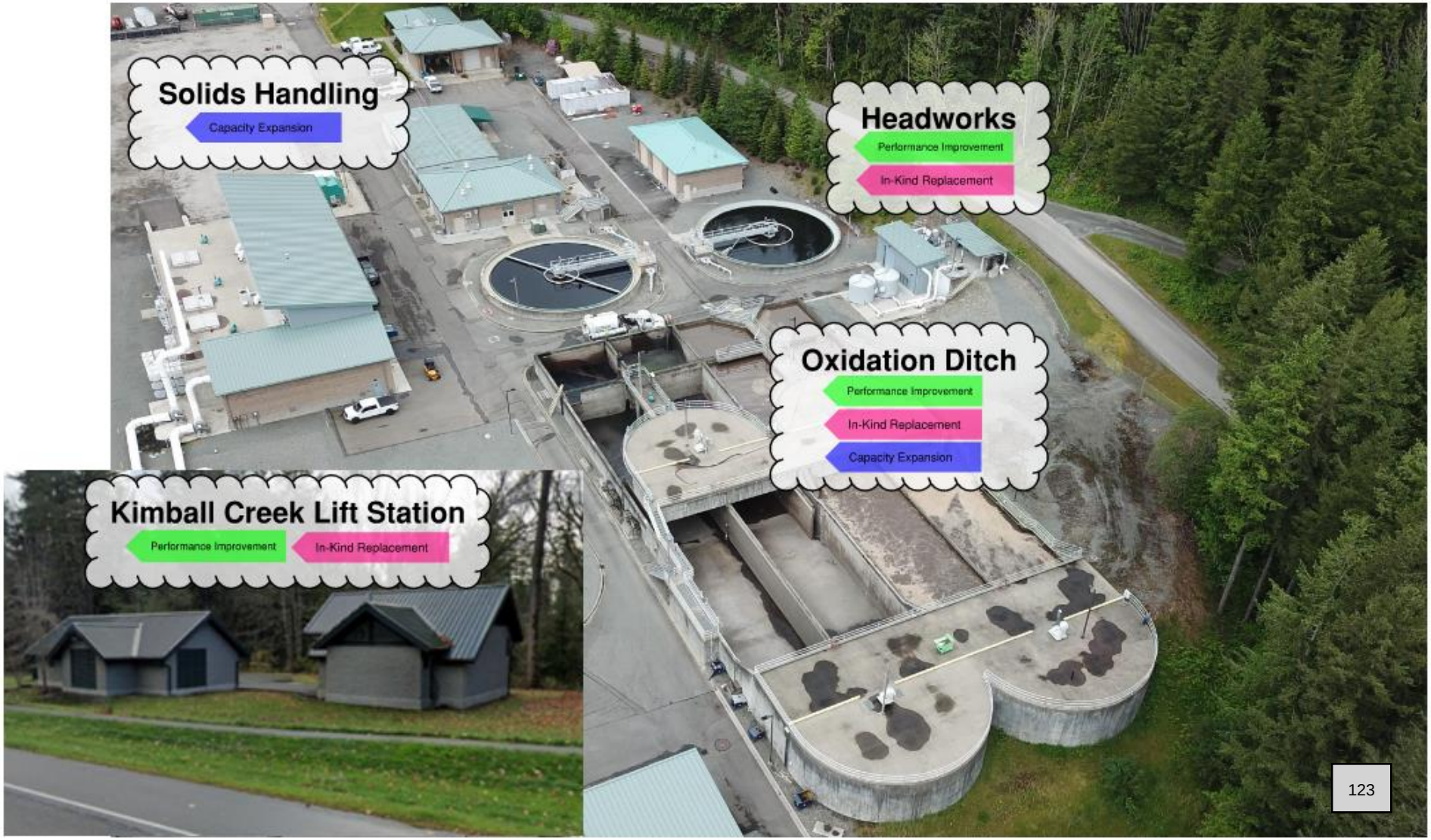
Technology Charge	2.50%	% of Direct Labor
Night Work	10.00%	% of Direct Labor
Mileage	$0.7000	price per mile (or Current IRS Rate)
Subconsultants	15%	Cost +
Outside Services	at cost	

Rates listed are adjusted annually.

Overview of Construction Improvements



Appendix C – Plan for Interim Operation

INTRODUCTION

Per WAC 173-240-070, a plan for the interim operations of a domestic wastewater facility is required to be included in the Plans and Specifications for upgrades to such facilities. This appendix is intended to fulfill that requirement.

The Contractor must meet the requirements of Technical Specification Division 1.72 for scheduling and sequencing of construction activities at the Water Reclamation Facility (WRF). This appendix provides the general approach to interim operations of facility components for WRF staff to utilize in relation to the Contractor's work at each location for this project.

HEADWORKS

The headworks influent flow must be temporarily bypassed to allow the Contractor to replace the screen and upgrade the grit removal system. The Plans outline temporary bypass configurations for the main screening channel and grit chamber systems that must remain operational while the proposed improvements are made. Short term manual operations are allowed as outlined in the Technical Specifications for the Contractor to set-up and remove temporary systems. WRF staff will operate all equipment, devices and valving necessary to start-up and shut-down equipment.

Key Interim Operational Considerations:

1. The WRF staff operate all necessary equipment to bypass influent flow around the main screening channel. The bypass channel has a manual bar screen that the Contractor will rake and clean during operation. The main screening channel may be temporarily offline as allowed by the Technical Specifications.
2. The WRF staff operate all necessary equipment to bypass flow around the grit system. A short-term temporary shutdown of the grit chamber is allowed as outlined in the Technical Specifications. A short-term temporary shutdown of the grit system may allow some grit to pass into the oxidation ditches. This will not affect plant operations or effluent quality and grit will be removed by WRF staff during the normal annual cleaning and switching of online oxidation ditches.

OXIDATION DITCH CONVERSION TO ACTIVATED SLUDGE BASINS

The conversion and start-up activities for the new activated sludge basins are required to be phased in a manner that maintains the operability of one existing ditch (or one new basin) at all times in order to ensure that secondary treatment is maintained. In general, both clarifiers will also be able to be utilized through the majority of construction and start-up except for brief periods as described below.

WRF staff will operate all necessary valving and equipment as required to switch ditches/basins and in general, will be required to operate existing and new systems to maintain permit compliance.

The Technical Specification Division 1.72 describes the requirements for construction phasing that must be followed by the Contractor to maintain operability of the WRF.

A fundamental criterion for the start-up of the Activated Sludge Basins will be to avoid the co-mingling of the existing activated sludge with the activated sludge formed in the new basins. The start-up phases have been specifically configured for this purpose.

See the attached schematic figures, referenced throughout this section, depicting the activated sludge basin startup configurations.

Interim operational requirements of the secondary treatment system:

Ditch No. 2 Conversion (Figure 1)

1. WRF staff will empty and maintain Oxidation Ditch (Ditch) No. 2 offline prior to the Contractor's work in this ditch.
2. The WRF staff operate all necessary equipment to direct the main influent flow to Ditch No. 1 (southern ditch) while the Contractor performs work on Ditch No. 2 (northern ditch).
3. Activated Sludge Basin No. 2 will initially be full of clean water upon completion of the Contractor's testing and check-out of the interlocking controls.

Basin No. 2 Start-Up (Figure 2)

1. Upon successful conversion of Ditch No. 2, the Contractor will provide the three necessary temporary pumping systems for start-up of Activated Sludge Basin No. 2 as described in Division 1.72 (each with 500 gpm capacity):
    a. Temporary pump and pipe system from the Headworks to the An1 zone to supply influent to the basin.
    b. Temporary pump and pipe system from the Ox2 zone to the An1 zone for the recycle process.
    c. Temporary pump and pipe system from the Mixed Liquor Outfall structure to the manhole north of the basins to recycle flows back to the Headworks.
2. RH2 will provide temporary SCADA system programming to allow the temporary pumps to operate automatically at operator-defined setpoints. Temporary SCADA system programming will also be provided for the Activated Sludge Basin No. 2 equipment through start-up. In general, the aeration, mixing and internal recycle equipment in Ox3 will be cycled to facilitate retention of the activated sludge in this basin through start-up. Minimal sludge wasting will occur from this basin during start-up.
3. Activated Sludge Basin No. 2 will be operated by WRF staff through start-up and into full operation. The operational requirements through start-up of this basin generally consist of the following:
    a. The City will begin feeding approximately 100 gpm (0.14 MGD) of the influent into Activated Sludge Basin No. 2 via the temporary pump provided at the Headworks. Effluent from this basin will be returned to the Headworks for treatment through the online Ditch No. 1 via the temporary pump at the Mixed Liquor Outfall structure from Activated Sludge Basin No. 2. An additional temporary pump will provide an internal recycle stream from

Ox2 to An1, which will return activated sludge to the anaerobic zones during the start-up period, as no clarifier will be dedicated to Activated Sludge Basin No. 2 during start-up. This configuration should allow activated sludge to develop in the new basin without significant concern of degrading effluent quality.

b. During the start-up of Activated Sludge Basin No. 2, the WRF staff will monitor the mixed liquor suspended solids (MLSS) concentration in the new basin and incrementally increase the daily feed volume to the new basin up to 500 gpm (0.72 MGD) as the MLSS concentration increases. Conversely, the WRF staff will monitor Ditch No. 1 MLSS concentration and allow it to be reduced incrementally through wasting as daily influent is reduced to this ditch.

c. The WRF staff will monitor the concentration, settleability and other characteristics of the activated sludge in the new basin as is typical for any activated sludge operation. WRF staff will also monitor the effluent quality from Ox3 by sampling mixed liquor from Ox3, allowing it to settle and analyzing the supernatant for conventional parameters and nutrients. This information will be used to gauge the treatment afforded by the new basin relative to influent flow. Once the MLSS has risen in the new basin to an appropriate level (likely in the range of 3,000 mg/L, though this will be determined by WRF staff) and the activated sludge population has sufficiently formed, this basin will be ready to receive all influent flow and begin discharging to Secondary Clarifier No. 2.

d. The WRF staff will isolate Secondary Clarifier No. 2 and will waste the remaining sludge from this clarifier to the solids handling system in preparation of receiving flow from Activated Sludge Basin No. 2.

Basin No. 2 Commissioning (Figure 3)

1. The WRF staff will isolate Ditch No. 1 and Secondary Clarifier No. 1.
2. The WRF staff will direct all influent flow to Activated Sludge Basin No. 2 and direct mixed liquor from Activated Sludge Basin No. 2 to Secondary Clarifier No. 2. The Contractor will remove all temporary pumping systems from Activated Sludge Basin No. 2. At this time Activated Sludge Basin No. 2 and Secondary Clarifier No. 2 will be considered fully commissioned and under normal operation. The City will verify that effluent from the new system can reliably meet permit requirements prior to sludge removal from Ditch No. 1.

Ditch No. 1 Sludge Removal (Figure 4)

1. The Contractor will reconfigure the two necessary temporary pumping systems for use in the sludge removal from Ditch No. 1 and Secondary Clarifier No. 1 (each with 500 gpm capacity):
    a. Temporary pump and pipe system from the end of Ditch No. 1 to Secondary Clarifier No. 1.
    b. Temporary pump and pipe system from the Secondary Clarifier No. 1 outfall to Ditch No. 1 to recycle effluent.
2. In this configuration, WRF staff will continually waste sludge from Secondary Clarifier No. 1 to the solids handling system. Non-potable water will be added via an existing hydrant to Ditch No. 1 to continually replace the wasted liquid. At a wasting rate of 100 gpm, it is estimated that the City will be able to reduce the Ditch No. 1 sludge concentration to approximately 500 mg/L in 3 days through this configuration. Less than 100,000 gallons of thickened sludge (2-3% solids) will be pumped to the digesters during this period and sufficient digester volume should be made

available in advance of this work. During this period, no wasting will occur from Activated Sludge Basin No. 2 and Secondary Clarifier No. 2.

Ditch No. 1 Draining (Figure 5)

1. The City will suspend mixing and aeration to Ditch No. 1.
2. The Contractor will utilize a temporary pump to transfer the majority of the supernatant from Ditch No. 1 to Secondary Clarifier No. 1.
3. The City will continue to waste from Secondary Clarifier No. 1 as necessary. The supernatant will pass through the clarifier and into the effluent. WRF staff will closely monitor the effluent concentrations and reduce or suspend supernatant pumping by the Contractor if needed.
4. The sludge remaining in Ditch No. 1 will settle once mixing and aeration are suspended. ~~It is expected that less than 100,000 gallons of sludge will remain in the ditch after the supernatant is pumped out. The Contractor will remove and dispose of this remaining sludge.~~ **The Contractor is required to hose and pump settled activated sludge to the clarifier until the anticipated amount of material is remaining as described in Division 1.72 of the Technical Specifications. The Contractor must remove and dispose the remaining grit, sludge, and other materials unable to be pumped to the clarifier. The Contractor shall submit documentation describing their removal approach and disposal location and will coordinate with the City on any procedures to ensure Washington State Department of Ecology's process requirements are met.** The Contractor and WRF staff will coordinate to ensure sludge is not drained to the in-plant pump station.[1]

Ditch No. 1 Conversion (Figure 6)

1. The Contractor will convert Ditch No. 1 to Activated Sludge Basin No. 1 as described in Division 1.72 of the Technical Specifications.
2. Activated Sludge Basin No. 1 will initially be full of clean water upon completion of the Contractor's testing and check-out of the interlocking controls.
3. Activated Sludge Basin No. 1 will remain offline until WRF staff are ready to switch the online basins.

SOLIDS HANDLING FACILITY AND AEROBIC DIGESTERS

Work to install the improvements in the digesters must not be performed during conversion of the ditches or during basin start-up as described in Division 1.72 of the Technical Specifications. WRF staff will isolate each digester in order for the improvements to be completed sequentially.

1. WRF staff will isolate Digester No. 1 while keeping Digesters Nos. 2 and 3 online during the construction improvements in Digester No. 1.
2. WRF staff will isolate Digester No. 2 while keeping Digesters Nos. 1 and 3 online during the construction improvements in Digester No. 2.
3. The Contractor provides a temporary pump and pipe system for digester clean water testing as described in Division 1.72 of the Technical Specifications.
4. It is anticipated that the biosolids will continue to meet the Class B requirements during this work. However, if vector attraction reduction requirements cannot be met due to reduced solids retention time during this work, the City can pay an additional tipping fee for immediate incorporation of the biosolids at the land application site.

[1] Addendum No. 1 dated May 8, 2023

DITCH NO. 2 OFFLINE FOR:
- CONVERSION TO ACTIVATED SLUDGE BASIN NO. 2
- CLEANWATER TESTING

HEADWORKS

SECONDARY CLARIFIER NO. 2

ONLINE

INF

An2

An3

Ax1

An1

Ax2

PROPOSED MIXER

INSTALL ADJUSTABLE FIXED BLADE WEIR ALONG ENTIRE LENGTH OF PROPOSED CONCRETE WALL. SEE DWG NO. G004 FOR WEIR ELEVATION AND SEE DWG NO.M318 FOR DETAIL.

Ox1

Sw1

TO ML OUTFALL

Ox3B

Ox3A

ACTIVATED SLUDGE BASIN NO. 2

99'-4"

58'-0"

APPROX. LOCATION OF CONDENSATE PIPE TAP ON THE UNDERSIDE OF AERATION PIPE

Ox2

60'-10"

4'-4"

RAS

OXIDATION DITCH NO. 1

ONLINE

INFLUENT+ RAS

ONLINE

SECONDARY CLARIFIER NO. 1

MIXED LIQUOR TO CLARIFIERS

GRATED PLATFORM

GRATED PLATFORM

PROPOSED BLOWER BUILDING

VACTOR DECANT STATION

FIGURE 1

DITCH NO. 2 CONVERSION

RH2

CITY OF SNOQUALMIE

SCALE:NTS

0" 1/2" 1"

DRAWING IS FULL SCALE WHEN BAR MEASURES 1"

3/9/2023

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FIGURE 2

BASIN NO. 2 START-UP

HEADWORKS

TEMP PUMP

SECONDARY CLARIFIER NO. 2

ONLINE

PORTION OF INF. TO AN1

INF

BASIN EFFLUENT

TEMP PUMP

GRAVITY TO CLARIFIERS

An2

An3

Ax1

An1

Ax2

Ox1

Ox3B

Ox3A

ACTIVATED SLUDGE BASIN NO. 2

PROPOSED MIXER

Sw1

RECYCLE

Ox2

TEMP PUMP

RAS

OXIDATION DITCH NO. 1

ONLINE

INFLUENT+ RAS

ONLINE

SECONDARY CLARIFIER NO. 1

MIXED LIQUOR TO CLARIFIERS

GRATED PLATFORM

PROPOSED BLOWER BUILDING

VACTOR DECANT STATION

RH2

CITY OF SNOQUALMIE

SCALE: NTS

0" 1/2" 1"

DRAWING IS FULL SCALE WHEN BAR MEASURES 1"

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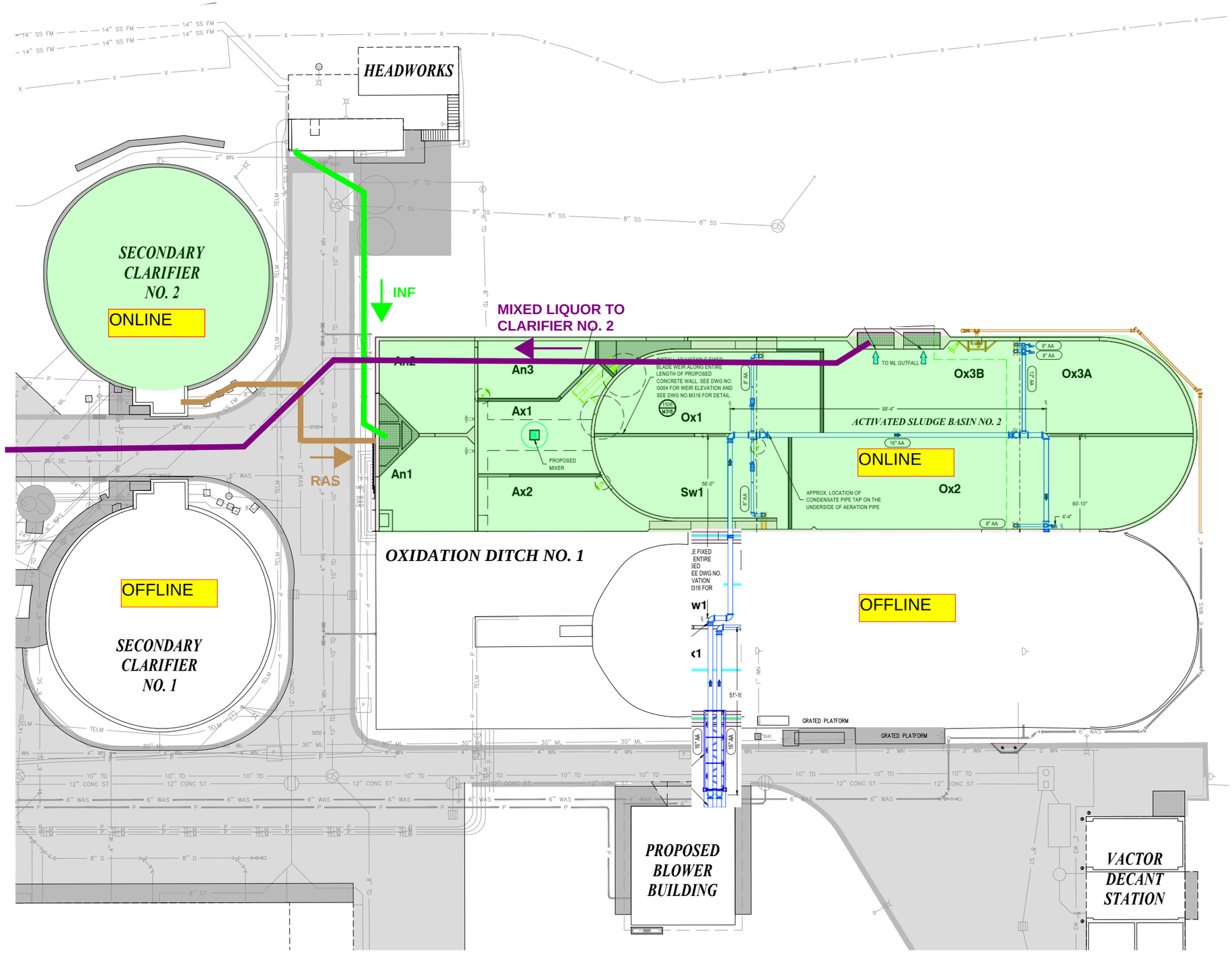

FIGURE 3

BASIN NO. 2 COMMISSIONING

RH2

CITY OF SNOQUALMIE

SCALE: NTS

0" 1/2" 1"

DRAWING IS FULL SCALE WHEN BAR MEASURES 1"

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HEADWORKS

SECONDARY CLARIFIER NO. 2

ONLINE

INF

MIXED LIQUOR TO CLARIFIER NO. 2

An2

An3

Ax1

An1

Ax2

PROPOSED MIXER

INSTALL ADJUSTABLE FIXED BLADE WEIR ALONG ENTIRE LENGTH OF PROPOSED CONCRETE WALL. SEE DWG NO. G004 FOR WEIR ELEVATION AND SEE DWG NO.M318 FOR DETAIL.

Ox1

Sw1

TO ML OUTFALL

Ox3B

Ox3A

ACTIVATED SLUDGE BASIN NO. 2

ONLINE

Ox2

APPROX. LOCATION OF CONDENSATE PIPE TAP ON THE UNDERSIDE OF AERATION PIPE

RAS

TEMP PUMP IN OUTFALL

WAS

SECONDARY CLARIFIER NO. 1

OFFLINE:
- WASTE SLUDGE TO THICKENER AND DIGESTERS

OXIDATION DITCH NO. 1

EFFLUENT RETURN

MIXED LIQUOR

w1

x1

GRATED PLATFORM

OFFLINE:
- RECYCLE DITCH CONTENTS THROUGH CLARIFIER
- WASTE SOLELY FROM DITCH NO. 1 AND CLARIFIER NO. 1

TEMPORARY PUMP

NON POTABLE WATER ADDITION TO REPLACE WASTING

PROPOSED BLOWER BUILDING

VACTOR DECANT STATION

FIGURE 4

DITCH NO. 1 SLUDGE REMOVAL

RH2

CITY OF SNOQUALMIE

SCALE: NTS

0" 1/2" 1"

DRAWING IS FULL SCALE WHEN BAR MEASURES 1"

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HEADWORKS

SECONDARY CLARIFIER NO. 2

ONLINE

INF

MIXED LIQUOR TO CLARIFIER NO. 2

RAS

An3

Ax1

An1

Ax2

Ox1

Sw1

Ox3B

Ox3A

ACTIVATED SLUDGE BASIN NO. 2

ONLINE

Ox2

OXIDATION DITCH NO. 1

w1

x1

OFFLINE

SECONDARY CLARIFIER NO. 1

TEMP PUMP

SUPERNATANT

OFFLINE:
- WASTE ANY RESIDUAL SLUDGE TO THICKENER AND DIGESTERS

PROPOSED BLOWER BUILDING

VACTOR DECANT STATION

GRATED PLATFORM

FIGURE 5

DITCH NO. 1 DRAINING

RH2

CITY OF SNOQUALMIE

SCALE: NTS

0" 1/2" 1"

DRAWING IS FULL SCALE WHEN BAR MEASURES 1"

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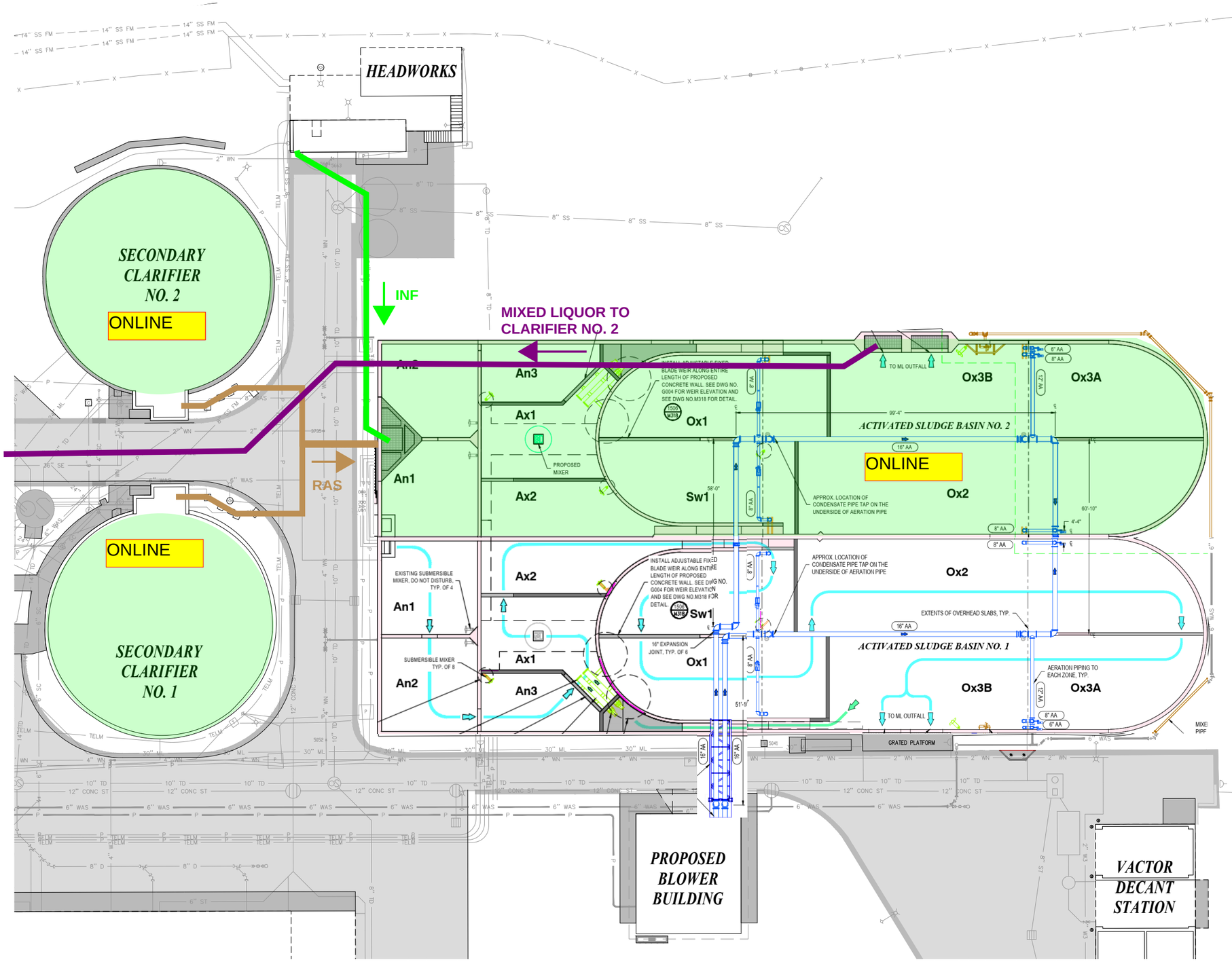

OFFLINE:
- COMPLETE CONVERSION TO ACTIVATED SLUDGE BASIN NO. 1
- CLEANWATER TEST

FIGURE 6

DITCH NO. 1 CONVERSION

SCALE: NTS

0" 1/2" 1"

DRAWING IS FULL SCALE WHEN BAR MEASURES 1"

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Parks & Events Commission

Have a new commissioner and can now reach quorum & meet regularly (Emily Anderson, Paul Sweum, Amanda Frame)

- At our last meeting on March 11th, we:
  - Voted on a recommendation to seek out an appropriate local park for a cricket field (e.g., Jeanne Hanson, Centennial)
  - Discussed implementation of communication boards at specific playgrounds (e.g., likely all-inclusive playground at Centennial Park, splash pad, possible Riverview Park to start).
    - Working with City staff on potential grant proposal(s).
  - Established a new schedule- 2nd Tuesday, every other month (odd months)
  - Discussed new function and purpose of PECS, including:
    - Creating a priority list for immediate and long-term projects
    - Working with City staff to provide local input on designs for upcoming playground/park updates
    - Attending P&PW Committee meetings quarterly to provide updates/successes