

RESOLUTION NO. 18-1278

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
BLACK DIAMOND, KING COUNTY, WASHINGTON
AUTHORIZING THE MAYOR TO EXECUTE A
PROFESSIONAL SERVICES AGREEMENT WITH RH2
ENGINEERING, INC. FOR THE SPRINGS
RECONSTRUCTION DESIGN AND ENGINEERING**

WHEREAS, the City does not have the staff expertise or resources to design the many features involved in the reconstruction of the transmission main, the pump station, the River crossing, and the springs collection capping; and

WHEREAS, the City advertised for civil engineering services and received Statements of Qualifications from interested consultants on January 9, 2018; and

WHEREAS, RH2 Engineering, Inc. is familiar with the City's water and sewer systems; and

WHEREAS, The project has been budgeted for and is financed by Palmer Coking Coal and Oak Pointe through the Water Supply and Facilities Funding Agreement; and


WHEREAS, City staff recommends authorizing a professional services agreement with RH2 Engineering, Inc. for this project;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. The Mayor is hereby authorized to execute a \$662,000 contract with RH2 Engineering, Inc. for the Springs Reconstruction Project.

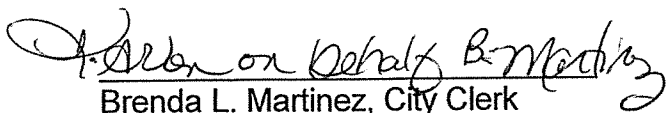
PASSED BY THE CITY COUNCIL OF THE CITY OF BLACK DIAMOND, WASHINGTON, AT A REGULAR MEETING THEREOF, THIS 1ST DAY OF NOVEMBER, 2018.

CITY OF BLACK DIAMOND:



Carol Benson, Mayor

Attest:



Brenda L. Martinez, City Clerk

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CITY OF BLACK DIAMOND:



Carol Benson, Mayor

Attest:

Brenda L. Martinez, City Clerk

CITY OF BLACK DIAMOND PROFESSIONAL SERVICES AGREEMENT

THIS Agreement is made by and between the City of Black Diamond (the "City"), a municipal corporation organized under the laws of the State of Washington, whose address is:

CITY OF BLACK DIAMOND, WASHINGTON
24301 Roberts Drive
Black Diamond, WA 98010

Contact: Seth Boettcher Phone: 360-886-5700 Fax: 360-886-5700

and RH2 Engineering, Inc. ("Consultant"), a corporation, organized under the laws of the State of Washington, doing business at:

RH2 Engineering, Inc.
22722 29th Drive SE, Suite 210
Bothell, WA 98021

Contact: Geoffrey G. Dillard, PE Phone: 253-327-1522 Fax: 425-951-5401
E-mail: gdillard@rh2.com

Tax Id No. 91-1108443

for professional services in connection with the following Project:

Black Diamond Springs Rehabilitation

TERMS AND CONDITIONS

1. Services by Consultant.

A. Consultant shall perform the services described in the Scope of Work attached to this Agreement as Exhibit "A." The services performed by the Consultant shall not exceed the Scope of Work without prior written authorization from the City.

B. The City may from time to time require changes or modifications in the Scope of Work. Such changes, including any decrease or increase in the amount of compensation, shall be agreed to by the parties and incorporated in written amendments to the Agreement.

2. Schedule of Work.

A. Consultant shall perform the services described in the scope of work expeditiously, with the following goals: 1) Complete the design of Phase 1B by December 31st, so that bids can be received and pumps ordered and installed and operational before the end of May 2019. The other phases have permitting and other issues that could delay going to bid. Roughly the goal is to be ready to go to bid on all other phases by the end of 2019 or earlier and construction complete by the end of 2020.

B. Consultant is authorized to proceed with services upon receipt of a written Notice to Proceed.

3. **Term.** This Agreement shall commence on the effective date and shall terminate on May 1st, 2020 unless extended in writing by the authority of Mayor, upon satisfactory completion of the project or as outlined in Section 8 of this Agreement.

4. **Compensation.**

TIME AND MATERIALS NOT TO EXCEED. Compensation for these services shall not exceed \$662,000 without written authorization and will be based on the fee schedule attached hereto as Exhibit B, and the billing rates and reimbursable expenses attached hereto as Exhibit C.

5. **Payment.**

A. Consultant shall maintain time and expense records and provide them to the City monthly after services have been performed, along with monthly invoices in a format acceptable to the City for work performed to the date of the invoice.

B. All invoices shall be paid by City warrant within sixty (60) days of receipt of a proper invoice. If the City objects to all or any portion of any invoice, it shall so notify the Consultant of the same within fifteen (15) days from the date of receipt and shall pay that portion of the invoice not in dispute, and the parties shall immediately make every effort to settle the disputed portion.

C. Consultant shall keep cost records and accounts pertaining to this Agreement available for inspection by City representatives for three (3) years after final payment unless a longer period is required by a third-party agreement. Copies shall be made available on request.

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

E. If the services rendered do not meet the requirements of the Agreement, Consultant will correct or modify the work to comply with the Agreement. City may withhold payment for such work until the work meets the requirements of the Agreement.

6. **Discrimination and Compliance with Laws**

A. Consultant agrees not to discriminate against any employee or applicant for employment or any other person in the performance of this Agreement because of race, creed, color, national origin, marital status, sex, age, disability, or other circumstance prohibited by federal, state, or local law or ordinance, except for a bona fide occupational qualification.

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

C. Consultant shall obtain a City of Black Diamond business license prior to receipt of written Notice to Proceed.

D. Violation of this Paragraph 6 shall be a material breach of this Agreement and grounds for cancellation, termination, or suspension of the Agreement by City, in whole or in part, and may result in ineligibility for further work for City.

7. **Relationship of Parties.** The parties intend that an independent contractor-client relationship will be created by this Agreement. As the Consultant is customarily engaged in an independently established trade which encompasses the specific service provided to the City hereunder, no agent, employee, representative or sub-consultant of the Consultant shall be or shall be deemed to be the employee, agent, representative or sub-consultant of the City. In the performance of the work, the Consultant is an independent contractor with the ability to control and direct the performance and details of the work, the City being interested only in the results obtained under this Agreement. None of the benefits provided by the City to its employees including, but not limited to, compensation, insurance, and unemployment insurance are available from the City to the employees, agents, representatives or sub-consultants of the Consultant. The Consultant will be solely and entirely responsible for its acts and for the acts of its agents, employees, representatives and sub-consultants during the performance of this Agreement. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work that the Consultant performs hereunder.

8. **Suspension and Termination of Agreement**

A. Termination without cause. This Agreement may be terminated by the City at any time for public convenience, for the Consultant's insolvency or bankruptcy, or the Consultant's assignment for the benefit of creditors.

B. Termination with cause. The Agreement may be terminated upon the default of the Consultant.

C. Rights Upon Termination.

1. *With or Without Cause.* Upon termination for any reason, all finished or unfinished documents, reports, or other material or work of Consultant pursuant to this Agreement shall be submitted to City, and Consultant shall be entitled to just and equitable compensation for any satisfactory work completed prior to the date of termination, not to exceed the total compensation set forth herein. Consultant shall not be entitled to any reallocation of cost, profit or overhead. Consultant shall not in any event be entitled to anticipated profit on work not performed because of such termination. Consultant shall use its best efforts to minimize the compensation payable under this Agreement in the event of such termination. Upon termination, the City may take over the work and prosecute the same to completion, by contract or otherwise.

2. *Default.* If the Agreement is terminated for default, the Consultant shall not be entitled to receive any further payments under the Agreement until all work called for has been fully performed to the City's satisfaction. Any extra cost or damage to the City resulting from such default(s) shall be deducted from any money due or coming due to the Consultant. The Consultant shall bear any extra expenses incurred by the City in completing the work, including all increased costs for completing the work, and all damage sustained, or which may be sustained by the City by reason of such default.

D. Suspension. The City may suspend this Agreement, at its sole discretion. Any reimbursement for expenses incurred due to the suspension shall be limited to the Consultant's reasonable expenses, and shall be subject to verification. The Consultant shall resume performance of services under this Agreement without delay when the suspension period ends.

E. Notice of Termination or Suspension. If delivered to the Consultant in person, termination shall be effective immediately upon the Consultant's receipt of the City's written notice or such date as stated in the City's notice of termination, whichever is later. Notice of suspension shall be given to the Consultant in writing upon one week's advance notice to Consultant. Such notice shall indicate the anticipated period of suspension. Notice may also be delivered to the Consultant at the address set forth in Section 15 herein.

9. **Standard of Care.** Consultant represents and warrants that it has the requisite training, skill and experience necessary to provide the services under this agreement and is appropriately accredited and licensed by all applicable agencies and governmental entities. Services provided by Consultant under this agreement will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing in similar circumstances.

10. **Ownership and Use of Work Product.**

A. Ownership of the originals of any reports, data, studies, surveys, charts, maps, drawings, specifications, figures, photographs, memoranda, and any other documents which are developed, compiled, or produced as a result of this Agreement, whether or not completed, (collectively, "work product") are vested in the City and shall be submitted to the City upon termination of this Agreement. Consultant assigns to the City all of Consultant's right, title, and interest, including copyright, in any such work product. Any reuse of such work product by the City for projects or purposes other than those that fall within the scope of this Agreement and the Project to which it relates, without written concurrence by Consultant, will be at the sole risk of the City.

B. The City agrees to hold harmless and indemnify Consultant against all claims made against Consultant for damage or injury, including defense costs, arising out of the City's reuse of work product created under this Agreement beyond the use for which it was originally intended without the written authorization of Consultant.

C. All written information submitted by the City to the Consultant in connection with the services performed by the Consultant under this Agreement will be safeguarded by the Consultant to at least the same extent as the Consultant safeguards like information relating to its own business. If such information is publicly available or is already in Consultant's possession or known to it, or is rightfully obtained by the Consultant from third parties, the Consultant shall bear no responsibility for its disclosure, inadvertent or otherwise.

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

12. Indemnification. The Consultant shall defend, indemnify and hold the City, its officers, officials, employees, agents and volunteers harmless from any and all claims, injuries, damages, losses or suits, including all legal costs and attorneys' fees, arising out of or in connection with the performance of this Agreement, except for injuries and damages caused by the sole negligence of the City. The City's inspection or acceptance of any of the Consultant's work when completed shall not be grounds to avoid any of these covenants of indemnification.

Should a court of competent jurisdiction determine that this Agreement is Subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, agents and Volunteers, the Consultant's liability hereunder shall be only to the extent of the Consultant's negligence.

IT IS FURTHER SPECIFICALLY AND EXPRESSLY UNDERSTOOD THAT THE INDEMNIFICATION PROVIDED HEREIN CONSTITUTES THE CONSULTANT'S WAIVER OF IMMUNITY UNDER INDUSTRIAL INSURANCE, TITLE 51 RCW, SOLELY FOR THE PURPOSES OF THIS INDEMNIFICATION. THE PARTIES FURTHER ACKNOWLEDGE THAT THEY HAVE MUTUALLY NEGOTIATED THIS WAIVER. THE CONSULTANT'S WAIVER OF IMMUNITY UNDER THE PROVISIONS OF THIS SECTION DOES NOT INCLUDE, OR EXTEND TO, ANY CLAIMS BY THE CONSULTANT'S EMPLOYEES DIRECTLY AGAINST THE CONSULTANT.

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

A. Minimum Scope of Insurance

Consultant shall obtain insurance of the types described below:

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

B. Minimum Amounts of Insurance

Consultant shall maintain the following insurance limits:

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

2. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
3. Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.
4. Employer's Liability insurance each accident \$1,000,000; Employer's Liability Disease each employee \$1,000,000; and Employer's Liability Disease – Policy Limit \$1,000,000.

C. Other Insurance Provisions

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

1. The Consultant's insurance coverage shall be primary insurance as respect the City. Any insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.
2. The Consultant's insurance shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the City.
3. The City will not waive its right to subrogation against the Consultant. The Consultant's insurance shall be endorsed acknowledging that the City will not waive their right to subrogation. The Consultant's insurance shall be endorsed to waive the right of subrogation against the City, or any self-insurance, or insurance pool coverage maintained by the City.
4. If any coverage is written on a "claims made" basis, then a minimum of a three (3) year extended reporting period shall be included with the claims made policy, and proof of this extended reporting period provided to the City.

D. Acceptability of Insurers

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

E. Verification of Coverage

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

14. Assigning or Subcontracting. Consultant shall not assign, transfer, subcontract or encumber any rights, duties, or interests accruing from this Agreement without the express prior written consent of the City, which consent may be withheld in the sole discretion of the City.

15. Notice. Any notices required to be given by the City to Consultant or by Consultant to the City shall be in writing and delivered to the parties at the following addresses:

Carol Benson
Mayor

RH2 Engineering, Inc.
Attn: Geoffrey G. Dillard, PE

24301 Roberts Drive
Black Diamond, WA 98010

Phone: 360-886-5700
Fax: 360-886-2592

22722 29th Drive SE, Suite 210
Bothell, WA 98021

Phone: 253-327-1522
Fax: 425-951-5401

16. Resolution of Disputes and Governing Law.

A. Should any dispute, misunderstanding or conflict arise as to the terms and conditions contained in this Agreement or the parties' performance hereunder, the matter shall first be referred to the Mayor, who shall determine the term or provision's true intent or meaning. The Mayor shall also decide all questions which may arise between the parties relative to the actual services provided or to the sufficiency of the performance hereunder.

B. If any dispute arises between the City and the Consultant under any of the provisions of this Agreement which cannot be resolved by the Mayor's determination in a reasonable time, or if the Consultant does not agree with the Mayor's decision on a disputed matter, then any resulting litigation shall be filed in King County Superior Court, King County, Washington, which shall have exclusive jurisdiction and be the exclusive venue for any disputes arising out of or relating to this Agreement.

C. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington, without reference to its choice-of-law rules. In any suit or action instituted to enforce any right granted in this Agreement, the substantially prevailing party shall be entitled to recover its costs, disbursements, and reasonable attorney's fees from the other party.

17. General Provisions.

A. Non-waiver of Breach. The failure of either party to insist upon strict performance of any of the covenants and agreements contained herein, or to exercise any option herein contained in one or more instances, shall not be construed to be a waiver or relinquishment of said covenants, agreements, or options, and the same shall be in full force and effect.

B. Modification. No waiver, alteration, modification of any of the provisions of this Agreement shall be binding unless in writing and signed by a duly authorized representative of the City and the Consultant.

C. Severability. The provisions of this Agreement are declared to be severable. If any provision of this Agreement is for any reason held by a court of competent jurisdiction to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other provision.

D. Entire Agreement. The written provisions of this Agreement, together with any Exhibits attached hereto, shall supersede all prior verbal statements of any officer or other representative of the City, and such statements shall not be effective or be construed as entering into or forming a part of or altering in any manner whatsoever, the Agreement or the Agreement documents. The entire agreement between the parties with respect to the subject matter hereunder is contained in this Agreement and the Exhibits attached hereto, which may or may not have been dated prior to the execution of this Agreement. All of the above documents are hereby made a part of this Agreement and form the Agreement document as fully as if the same were set forth herein. Should any language in any of the Exhibits to this Agreement conflict with any language contained in this Agreement, then this Agreement shall prevail.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year set forth above.

CITY OF BLACK DIAMOND,
WASHINGTON

CONSULTANT

By: Carol Benson
Carol Benson
Mayor

By: Geoffrey G. Dillard

Name: Geoffrey G. Dillard, PE

Title: Principal

Attest:

By: _____
Brenda Martinez
City Clerk

APPROVED AS TO FORM:

By: _____
David Linehan
City Attorney

EXHIBIT A
Scope of Work

EXHIBIT A
Scope of Work
City of Black Diamond
Black Diamond Springs Rehabilitation
Phases 1, 2, and 3
 October 2018

Background

The City of Black Diamond (City) relies on natural groundwater springs on the south side of the Green River for its municipal water supply. The Black Diamond Springs (Springs) source includes two (2) active capture and impoundment facilities, an aboveground conveyance system that runs from the springs to the Green River crossing on an early 1900s cable suspension bridge, underground piping to the North Bank Pump Station (NBPS), and several thousands of feet of transmission main that deliver the water to the City's distribution system.

Many of the existing facilities are old, undersized, and vulnerable, most notably the aboveground conveyance system to the river crossing. The older facilities are near the end of their useful service life, difficult to access and maintain, and susceptible to damage or failure due to slope instability.

The purpose of the Black Diamond Springs Rehabilitation project is to repair, replace, and reconstruct the spring water source to enable full use of the City's water right in a long-term, efficient, and reliable manner that meets applicable Washington State Department of Health (DOH) requirements. This project will also increase the system's reliable capacity to fully utilize the City's maximum instantaneous (Qi) water right allocation of 1,410 gallons per minute (gpm) and maximum annual (Qa) water right allocation of 551 acre-feet per year (afy).

Based on previous work conducted by the City, it is assumed for this Scope of Work that a new cable suspension bridge will be constructed to cross the Green River. It is also understood that the City will contract directly with other firms to prepare the bridge design and address the geotechnical and surveying needs of this project. RH2 Engineering, Inc., (RH2) will use and rely upon information and data provided or generated by the City and others.

Project Phasing

1. **Phase 1 – Conveyance System Upgrade.** The system required to deliver spring water to the north side of the river is old, undersized, and vulnerable and should be upgraded, taking into consideration slope stability, pipeline access, permitting, construction and maintenance costs, flooding hazards, etc. The pipe will be replaced, a new suspension bridge will be constructed, and larger pumps will be installed at the NBPS to increase the reliable capacity of the pump station. Phase 1 will be bid in two phases: Phase 1a for the pump station improvements and Phase 1b for the conveyance system improvements.
2. **Phase 2 – Transmission Main Replacement.** The transmission capacity from the NBPS to the City's system is limited due to undersized pipe. In addition, the pipe is constructed of substandard material—asbestos cement (AC). Phase 2 will further augment the system's transmission capacity to fully utilize the City's water rights. Approximately 9,000 linear feet (LF) of transmission main will be replaced.
3. **Phase 3 – Spring Protection Improvements.** The Springs capture and impoundment facilities will be upgraded to reduce vulnerability to damage from natural events, isolate the impacts and risks of

contamination from surface water, reduce manmade contamination risks from maintenance activities, and reduce the likelihood that DOH could reclassify the springs and collection system as Ground Water Under the Influence of Surface Water (GWI).

Project Schedule

The City's goal is to increase the capacity of the Springs supply as soon as possible. Therefore, Phase 1 will be permitted and constructed first. Phase 1 should increase the deliverable capacity of the Springs from approximately 400 gpm to 950 gpm. Phase 2 should increase the deliverable capacity of the Springs from approximately 950 gpm to 1,410 gpm. It is anticipated that Phase 3 will not increase the Springs capacity, but it will improve reliability and avoid additional treatment requirements to address surface water influence concerns.

The City will contract directly with Parametrix, Inc. (Parametrix) to design the new cable suspension bridge and perform the surveying needs for the project. In addition, the City and Parametrix will work directly with PanGeo, Inc. (PanGeo) to perform the geotechnical investigations required for Phase 1 of this project. Permitting will involve King County and may involve the U.S. Army Corps of Engineers (USACE) and are long lead items.

Although all three phases will be sequenced over time, some tasks can be accomplished concurrently. A single State Environmental Policy Act (SEPA) process will be undertaken for all three phases. In addition, the geological investigation and preparation of engineering geology technical memoranda can be accomplished simultaneously for all three phases. A project report has already been prepared and approved by DOH for Phase 1. However, a second project report will be required for Phase 3.

Phase 1 – Conveyance System Upgrade

The existing springs collection systems and conveyance pipes from the Black Diamond Springs junction box to the NBPS are undersized, nearing the end of its useful service life, and not adequately secured along the steep-bank section on the south side of the Green River. RH2 will provide the design and permitting documents necessary to prepare the project for construction.

The existing conveyance system is approximately 1,330 LF in length, has two (2) existing pumps, and includes:

- Crossing under a tributary of the Green River on the upper south plateau (*replacement is assumed to be via open-trench construction*);
- Traversing a steep slope section from the upper south plateau to the Green River (*it is assumed that this section will be replaced with a new cable suspension bridge*);
- Crossing the Green River via an existing cable bridge (*it is assumed that this section will be replaced with a new cable suspension bridge*);
- Connecting to the existing NBPS (*assumed via open trench construction*); and
- Replacing the existing pumps at the NBPS.

This project will review the required pipe diameter and pump station upgrades necessary to deliver 1,410 gpm of water supply from the Black Diamond Springs to the City's water system.

Task 1 – Plans and Specifications

Objective: Prepare plans, specifications, and a construction cost estimate for the proposed conveyance system.

Approach:

- 1.1 Perform one (1) site visit to review the survey and proposed alignment.
- 1.2 Coordinate with Parametrix and Pan Geo on the proposed bridge. Attend three (3) coordination meetings with City staff and other firms to discuss alignment and design issues. Incorporate Parametrix's bridge design plans and specifications into the overall bid documents.
- 1.3 Evaluate soil corrosivity.
- 1.4 Evaluate and select pump sizes to deliver 950 gpm or 1,410 gpm based on the City's input.
- 1.5 Develop design plans to include the following.
 - Cover sheet and general information sheet.
 - Plan and profile sheets.
 - Access road construction and permanent improvements.
 - Tributary crossing.
 - Slope anchoring system for north bank water main.
 - Mechanical improvements.
 - Structural improvements.
 - Electrical improvements.
 - Telemetry and controls modifications.
 - Construction details.
- 1.6 Perform hydraulic analyses to develop system curves for pump selection and pipe material evaluation.
- 1.7 Evaluate the power requirements and assist the City with confirming load capacity of its power lines to the NBPS.
- 1.8 Develop preliminary specifications based on RH2 modified Washington State Department of Transportation (WSDOT) format. Assemble technical specifications and non-technical documents as needed for the water main work. The City shall provide RH2 with the most current version of the City's standard public works contract documents.
- 1.9 Develop project schedule, quantity schedules and an engineer's estimate.
- 1.10 Perform an internal quality assurance/quality control (QA/QC) review of the plans and technical specifications.
- 1.11 Attend three (3) coordination meetings with City staff to discuss alignment and design issues.
- 1.12 Finalize the plans, bid documents, and specifications based on City review comments and internal quality control review for Phase 1a pump station improvements.
- 1.13 Finalize the plans, bid documents, and specifications based on City review comments and internal quality control review for Phase 1b conveyance system improvements.

Assumptions:

- *Parametrix will provide design plans and specifications for inclusion into the RH2-prepared bid packages.*
- *RH2 will utilize the City-provided survey (prepared and updated by Parametrix in 2017).*

- *Plans will be produced in color at a 1-inch equals 20 feet scale.*
- *RH2 is entitled to rely on the accuracy and completeness of any data, information, or materials provided by the City or others in relation to this work.*
- *The City has an easement for access to property not owned by the City, and if additional negotiations are necessary then they will be handled by the City.*
- *The existing power grid can support the load from the new pumps.*
- *The existing telemetry panel will not need any modifications to control the new pumps.*

Provided by the City:

- Access to the site for a site visit.
- Access to property not owned by the City.
- Coordination with property owners.
- Construction easement.
- Geotechnical reports.
- Design plans and specifications for the new cable suspension bridge.

RH2 Deliverables:

- Attendance at six (6) coordination meetings.
- Project Schedule.
- Two (2) hard copies of the plans, specifications, and probable construction cost estimate, submitted to the City in 11-inch by 17-inch color format for 60-percent and final review.

Task 2 – Permitting Assistance

Objective: Identify environmental constraints associated with the proposed project improvements and evaluate the permits needed to accomplish the project. Prepare the permit applications and submit to applicable regulatory agencies. Facilitate permit reviews and approvals by responding to agency requests/questions.

Approach:

- 2.1 Compile the background environmental site data available from online public agency sources to guide site investigations and permit compliance, including soils, wetlands, water mapping, sensitive species and habitats, and regulatory requirements.
- 2.2 Attend a pre-application meeting with the City and the King County Department of Development and Environmental Services (KCDDDES). Prepare the permitting documents and respond to KCDDDES comments. *It is assumed that two (2) resubmittals will be required.*
- 2.3 Prepare a SEPA Environmental Checklist and a Conditional Use Permit (CUP) application for City submittal and processing. Attend and assist the City during the permitting intake meeting. *It is assumed that the City will prepare the SEPA Environmental Checklist prior to the submittal of the Shoreline Substantial Development Permit (SSDP) at King County (County). Unless determined otherwise through consultation with City Planning staff, it is assumed that the SEPA Environmental Checklist will be processed under the umbrella of the CUP, and that the Sensitive Areas, Tree Removal, and Clearing/Grading permits would be reviewed concurrently. Consequently, this subtask includes*

City of Black Diamond
Black Diamond Springs Rehabilitation

Exhibit A
Scope of Work

preparation of those permit packages as well. It is assumed that one (1) SEPA Environmental Checklist and CUP will be prepared to address Phases 1 through 3 of the project, with the expectation that a SEPA Environmental Checklist amendment may be needed for Phases 2 and 3 as more project information is developed. Additional documentation for the accompanying permit applications may be needed for Phases 2 and 3 as more project information is developed.

- 2.4 Prepare the SSDP for County submittal and processing. Prepare Critical Areas Report (CAR) and Mitigation Plan for inclusion with the SSDP. *It is assumed that the SSDP submittal will also include Site and Design Plans (e.g., clearing, grading, erosion control, structural, mitigation, etc.), Geotechnical Investigation and Report, Structural Assessment of the existing bridge, etc. Attend the permitting intake meeting and assist the City, as needed. It is assumed that the SSDP and CAR will address Phases 1 through 3 of the project; however, additional documentation for the accompanying permit applications may be needed for Phases 2 and 3 as more project information is developed.*
- 2.5 Prepare a Hydraulic Project Approval (HPA) application for submittal to the Washington Department of Fish and Wildlife (WDFW) to construct the creek crossing and possibly the river crossing. Work with the City to prepare the application and necessary submittal elements and submit the application on the City's behalf.
- 2.6 Prepare a Joint Aquatic Resource Permit Application (JARPA) for submittal to the USACE and the Washington State Department of Ecology (Ecology) for creek/river crossing work, as needed. This requirement is dependent on the selected method for crossing these waterbodies and will need to be further evaluated. *This subtask assumes that Section 404 approval through the USACE will also require Endangered Species Act (ESA) documentation in the form of a No Effect Letter and Cultural Resources Survey. If required, RH2 would sub-consult with a local cultural firm for the Cultural Resources Survey work. Submittal to USACE will also require specialized 8½-inch by 11-inch project plans.*

Assumptions:

- *Existing and newly completed additional survey data from Parametrix is adequate for this project.*
- *The City will submit application forms.*
- *The City will pay all permit fees directly.*
- *The project is not located within the public right-of-way; therefore, a grading permit through the County will be required.*
- *The City already has an easement with the Washington State Parks and Recreation Commission (Parks) and additional negotiations will not be necessary.*
- *Parks will not require additional permit applications.*
- *A Construction Stormwater General Permit (CSGP) will not be required for Phase 1 improvements.*

RH2 Deliverables:

- Electronic environmental site data for inclusion in project permit documents in PDF form.
- Documentation of correspondence with regulatory agency staff, meeting agenda and minutes, and associated coordination for site meetings, if needed.
- SEPA Environmental Checklist in PDF form.
- CUP application for City submittal in PDF form.
- CAR that meets both the County and City Sensitive Areas Code requirements in PDF form.

- Mitigation Plan for shoreline impacts – draft, one revision, and final *(to comply with County reviews)* in PDF form.
- Clear/Grade and Grading Permit application meeting both the County and City clearing/grading requirements in PDF form.
- SSDP application for submittal to the County in PDF form.
- HPA and JARPA applications for submittal to WDFW, Ecology, and USACE in PDF form.
- List of anticipated permits and costs included in the DOH project report in PDF form.

Task 3 – Services During Bidding for Phase 1a

Objective: Assist the City in advertising and administering the bids and awarding the construction contracts.

Approach:

- 3.1 Produce one (1) set of electronic bid documents to be used for online viewing by prospective bidders. Produce five (5) sets of half-size plans and specifications.
- 3.2 Prepare up to two (2) addenda to the plans and specifications, as needed, to notify prospective bidders of changes and provide clarification.
- 3.3 Respond to contractor questions regarding the project.
- 3.4 Attend the bid opening and assist the City in tabulating the bid results.

Assumptions:

- *It is assumed that the City will pay bid advertisement fees directly.*

Provided by the City:

- Bid award process and construction contract execution.
- Bid tabulation.
- Reference check of lowest bidder.
- Project award recommendation letter.

RH2 Deliverables:

- Plans and specifications for bidders, the City, and RH2 as outlined in subtask 4.1.
- Phone assistance to vendors and bidders during the advertisement phase.
- Up to two (2) addenda, if necessary, in electronic format.

Task 4 – Services During Bidding for Phase 1b

Objective: Assist the City in advertising and administering the bids and awarding the construction contracts.

Approach:

Produce one (1) set of electronic bid documents to be used for online viewing by prospective bidders. Produce five (5) sets of half-size plans and specifications.

- 4.1 Prepare up to two (2) addenda to the plans and specifications, as needed, to notify prospective bidders of changes and provide clarification.
- 4.2 Respond to contractor questions regarding the project.

4.3 Attend the bid opening and assist the City in tabulating the bid results.

Assumptions:

- *It is assumed that the City will pay bid advertisement fees directly.*

Provided by the City:

- Bid award process and construction contract execution.
- Bid tabulation.
- Reference check of lowest bidder.
- Project award recommendation letter.

RH2 Deliverables:

- Plans and specifications for bidders, the City, and RH2 as outlined in subtask 4.1.
- Phone assistance to vendors and bidders during the advertisement phase.
- Up to two (2) addenda, if necessary, in electronic format.

Phase 2 – Transmission Main Replacement

The existing 8-inch-diameter transmission main from the NBPS to the City's system is both undersized and of substandard material (AC). Portions of the water main are installed on sections of steep slope and along an abandoned railroad alignment. RH2 will prepare the bid documents necessary for construction of the transmission main replacement project.

Task 1 – Plans and Specifications

Objective: Prepare plans, specifications, and a construction cost estimate for the proposed transmission main.

Approach:

- 1.1 Perform one (1) site visit to review survey and proposed alignment.
- 1.2 Coordinate with the surveyor to obtain topographic information for the proposed alignment. *It is assumed that sub-surface investigation, such as ground penetrating radar (GPR), will be utilized to locate the existing water main.*
- 1.3 Develop preliminary plans to include the following.
 - Cover sheet and general information sheet.
 - Plan and profile sheets.
 - Construction details.
- 1.4 Develop preliminary specifications based on RH2 modified WSDOT format. Assemble technical specifications and non-technical documents as needed for the water main work. *The City shall provide RH2 with the most current version of the City's standard public works contract documents.*
- 1.5 Develop project schedule, quantity schedules and engineer's estimate.
- 1.6 Perform internal QA/QC review of the plans and technical specifications.
- 1.7 Attend three (3) coordination meetings with City staff to discuss alignment and design issues.

**City of Black Diamond
Black Diamond Springs Rehabilitation**

**Exhibit A
Scope of Work**

- 1.8 Finalize plans, bid documents, and specifications based on City review comments and internal quality control review.

Assumptions:

- *RH2 will utilize the City-provided survey for Task 1.1.*
- *RH2 will coordinate with the land surveyor for Task 1.2.*
- *Plans will be produced in color at a 1-inch equals 20 feet scale.*
- *RH2 is entitled to rely on the accuracy and completeness of any data, information, or materials provided by the City or others in relation to this work.*
- *The City has an easement for access to property not owned by the City and additional negotiations will not be necessary.*
- *AC pipe will be abandoned in place and an asbestos abatement plan will not be prepared.*

Provided by the City:

- Construction records/reports of the existing transmission main.
- Access to the site for a site visit.
- Access to property not owned by the City, if necessary.
- Coordination with property owners.
- Construction easement.

RH2 Deliverables:

- Attendance at three (3) coordination meetings.
- Project Schedule.
- Plans, specifications, and probable construction cost estimate submitted to the City as two (2) hard copy files in 11-inch by 17-inch color format for 60-percent and final review.

Task 2 – Permitting Assistance

Objective: Assist the City in preparing and submitting project permits.

Approach:

- 2.1 Perform environmental site investigations along the project alignment to inform project permitting efforts.
- 2.2 Prepare the grading permit for submittal to KCDDDES. Work with the City to submit the grading permit application, and associated plans, technical studies, etc., for permit issuance.
- 2.3 Prepare the CSGP Notice of Intent (NOI) and work with the City to publish notices for compliance under the National Pollutant Discharge Elimination System (NPDES) permit. Prepare documentation and the necessary application forms to coordinate work with the overhead power utility operator.
- 2.4 Prepare documentation and assist the City to coordinate with Parks. *It is assumed that two (2) coordination meetings will be required for this phase of the project.*

Assumptions:

- *Another pre-application meeting (in addition to the one conducted in Phase 1) will not be needed for this phase of the project.*
- *The SEPA Environmental Checklist will have been completed as part of the Phase 1 efforts and no additional SEPA work will be required for Phase 2. Additionally, the proposed pipe diameter is 12 inches, and not anticipated to cross state waters, thus it would be SEPA exempt.*
- *Critical areas are not present on the Parks property; therefore, no critical areas mitigation or report will be required. If critical areas are determined to be present through environmental site investigations, design can be modified to work around these features, thereby avoiding impacts and necessary permitting.*
- *The existing railroad alignment is considered a roadway prism for permitting processes and culvert crossings and work next to adjacent wetlands will not require additional permitting.*

Provided by the City:

- *The City will coordinate directly with private land owners along the alignment (i.e., the gun club).*
- *If Parks requires additional permit applications, then this process will be performed by City staff.*
- *The City will pay all permit fees directly.*

RH2 Deliverables:

- Grading permit application and submittal to KCDDDES in PDF form.
- CSGP NOI submittal online.
- Attendance at two (2) Parks meetings.

Task 3 – Geologic Review

Objective: Provide engineering geology and geotechnical evaluation to support the transmission main design.

Approach:

- 3.1 Conduct site reconnaissance along the transmission main alignment and evaluate the geologic hazards along alignment.
- 3.2 Perform a subsurface investigation at four (4) locations along the alignment, using a City-provided operator and backhoe. Collect soil samples for soil laboratory analysis.
- 3.3 Evaluate soil corrosivity.
- 3.4 Provide an engineering geology and geotechnical memorandum identifying the geological conditions and recommendations for design and construction. Evaluate the conditions for directional drilling, other trenchless construction options, and open-cut trenching.

Provided by the City:

- Backhoe, operator, and access to investigation locations.
- Payment of soil laboratory fees.

RH2 Deliverables:

- One (1) site visit to collect soil samples.
- Test pit logs, soil laboratory reports, and engineering geology and geotechnical memorandum in PDF form.

Task 4 – Services During Bidding

Objective: Assist the City in advertising and administering the bids and awarding the construction contracts.

Approach:

- 4.1 Produce one (1) set of electronic bid documents to be used for online viewing by prospective bidders. Produce five (5) sets of half-size plans and specifications.
- 4.2 Prepare up to two (2) addenda to the plans and specifications, if needed, to notify prospective bidders of changes and provide clarification.
- 4.3 Respond to contractor questions regarding the project.
- 4.4 Attend the bid opening and assist the City in tabulating the bid results.

Assumptions:

- *It is assumed that the City will pay bid advertisement fees directly.*

Provided by the City:

- Bid award process and construction contract execution.
- Bid tabulation.
- Reference check of lowest bidder.
- Project award recommendation letter.

RH2 Deliverables:

- Plans and specifications for bidders, the City, and RH2, as outlined in subtask 4.1.
- Phone assistance to vendors and bidders during the advertisement phase.
- Up to two (2) addenda, if necessary, in electronic format.

Phase 3 – Springs Protection Improvements

The Black Diamond Springs collection system is inadequately protected from the surrounding environment. This project will provide the infrastructure necessary to isolate the collection areas for Springs 1 and 3 from surface water runoff, rain, insects, animals, and human actions.

Task 1 – Prepare Project Report

Objective: Document the project intent in a project report. Summarize the proposed improvements and identify the estimated costs, schedules, and scope of the design.

Approach:

- 1.1 Prepare and evaluate up to three (3) design alternatives.
- 1.2 Estimate construction costs for each alternative.
- 1.3 Perform a site visit to collect additional observed data.
- 1.4 Prepare project schematic site plans utilizing the existing survey provided to the City (Parametrix 2017).
- 1.5 Prepare for and attend one (1) meeting with City staff to discuss the results of analysis and review design options.

- 1.6 Prepare a project report based on applicable Washington Administrative Code (WAC) report requirements. Document the background and objectives of the project, preliminary design, and project design criteria.

Provided by the City:

- Electronic files from the Parametrix survey in AutoCAD format.

RH2 Deliverables:

- Two (2) copies of schematic site plans and project report to DOH in PDF form.
- Attendance one (1) design option review meeting.

Task 2 – Geologic Review

Objective: Provide both an engineering geology and geotechnical evaluation to support the proposed design and constructability evaluation.

Approach:

- 2.1 Conduct site reconnaissance and evaluate the observable geologic hazards at the Springs collection system.
- 2.2 Investigate the subsurface conditions at up to two (2) locations using a City-provided backhoe and operator. Collect soil samples for soil laboratory analysis.
- 2.3 Provide an engineering geology and geotechnical memorandum summarizing findings, geological conditions, and recommendations for design and construction.

Provided by the City:

- Backhoe and operator, as well as access to investigation locations.
- Payment of all soil laboratory fees.

RH2 Deliverables:

- One (1) site visit to collect soil samples.
- Test pit logs and soil laboratory reports in PDF form.
- Engineering geology technical memorandum in PDF form.

Task 3 – Prepare Preliminary Design

Objective: Prepare the preliminary design plans that illustrate the improvements at Springs 1 and 3 based on the incorporated results of other tasks.

Approach:

- 3.1 Evaluate construction access requirements for Springs 1 and 3.
- 3.2 Prepare design concepts to guide the cost estimates and final design based on the selected alternative.
- 3.3 Evaluate construction methods and phasing issues to protect the Black Diamond Springs during construction.
- 3.4 Develop preliminary site plans for the project.
- 3.5 Develop a schematic design for the structures that are necessary to protect the Springs.

RH2 Deliverables:

- Two (2) sets of 11-inch by 17-inch color preliminary plans. *Construction bid documents will be prepared under a separate task.*

Task 4 – Permitting Assistance

Objective: Identify the environmental constraints associated with the proposed project improvements and evaluate the permits needed to accomplish the project. Prepare and submit environmental permit applications.

Approach:

- 4.1 Conduct investigations of the Springs, as needed, to supplement investigations performed in Phase 1. Document the investigations for permit applications.
- 4.2 Prepare a City building permit for review of the proposed Springs source cover.
- 4.3 Prepare sensitive areas permit and grading permit for City review and processing.
- 4.4 Coordinate with DOH staff and update the DOH project report.

Assumptions:

- *Existing survey data from Parametrix is adequate for this project.*
- *The SEPA Environmental Checklist, CUP, and Critical Areas reports completed for Phase 1 will be sufficient to cover Phase 3 improvements, such that no additional permitting with respect to these elements will be required.*

RH2 Deliverables:

- City Building permit application in PDF form.
- Two (2) hard copies of updated DOH project report for resubmittal.

Task 5 – Final Plans and Specifications

Objective: Prepare plans, specifications, and construction cost estimate for the proposed Springs protection improvements.

Approach:

- 5.1 Conduct one (1) site visit with City staff.
- 5.2 Plans to include the following.
 - Cover sheet and general information sheet.
 - Building elevations.
 - Mechanical improvements.
 - Structural improvements.
 - Collection box improvements.
 - Construction details.
- 5.3 Develop the specifications based on RH2 modified WSDOT format. Assemble technical specifications and non-technical documents as needed for the springs improvements. *The City shall provide RH2 with the most current version of the City's standard public works contract documents.*

City of Black Diamond
Black Diamond Springs Rehabilitation

Exhibit A
Scope of Work

- 5.4 Develop the project schedule, quantity schedules and engineer's estimate.
- 5.5 Perform an internal QA/QC review of the plans and technical specifications.
- 5.6 Attend three (3) coordination meetings with City staff to discuss the improvements and design issues.
- 5.7 Finalize plans, bid documents, and specifications based on City review comments and internal quality control review.

Assumptions:

- *Plans will be produced in color at a 1-inch equals 20 feet scale.*
- *RH2 is entitled to rely on the accuracy and completeness of any data, information, or materials provided by the City or others in relation to this work.*
- *All work will occur on City owned property.*

Provided by the City:

- Construction records/reports of existing Springs collection system.
- Access to the site for site visit.
- Access to property not owned by the City, if necessary.
- Coordination with property owner.
- Construction easement.

RH2 Deliverables:

- One (1) site visit.
- Project Schedule.
- Attendance at three (3) coordination meetings.
- Two (2) hard copy plans, specifications, and probable construction cost estimate, submitted to the City in 11-inch by 17-inch color format for 60-percent and final review.

Task 6 – Services During Bidding

Objective: Assist the City in advertising and administering the bids and awarding the construction contracts.

Approach:

- 6.1 Produce one (1) set of electronic bid documents to be used for online viewing by prospective bidders. Produce five (5) sets of half-size plans and specifications.
- 6.2 Prepare up to two (2) addenda to the plans and specifications, if needed, to notify prospective bidders of changes and provide clarification.
- 6.3 Respond to contractor questions regarding the project.
- 6.4 Attend the bid opening and assist the City in tabulating the bid results.

Assumptions:

- *It is assumed that City will pay bid advertisement fees directly.*

Provided by the City:

- Bid award process and construction contract execution.

City of Black Diamond
Black Diamond Springs Rehabilitation

Exhibit A
Scope of Work

- Bid tabulation.
- Reference check of lowest bidder.
- Project award recommendation letter.

RH2 Deliverables:

- Plans and specifications for bidders, the City, and RH2, as outlined in subtask 6.1.
- Phone assistance to vendors and bidders during the advertisement phase.
- Up to two (2) addenda, if necessary, in electronic format.

EXHIBIT B

Fee Schedule

EXHIBIT B.1

City of Black Diamond
Black Diamond Springs Rehabilitation
Phase 1 - Conveyance System Upgrade
Fee Estimate

Description		Total Hours	Total Labor	Total Expense	Total Cost
Classification					
Task 1	Plans and Specifications	1197	\$ 232,783	\$ 15,017	\$ 247,800
1.1	Perform One (1) Site Visit	26	\$ 5,210	\$ 402	\$ 5,612
1.2	Coordinate with Parametrix and Pan Geo	123	\$ 24,711	\$ 1,191	\$ 25,902
1.3	Evaluate Soil Corrosivity	8	\$ 1,576	\$ 596	\$ 2,172
1.4	Evaluate and Select Pumps	26	\$ 5,046	\$ 210	\$ 5,256
1.5	Develop Design Plans	506	\$ 98,606	\$ 5,460	\$ 104,066
1.6	Perform Hydraulic Analyses to Develop System Curves	72	\$ 14,562	\$ 636	\$ 15,198
1.7	Evaluate Power Requirements	12	\$ 2,168	\$ 191	\$ 2,359
1.8	Develop Preliminary Specifications	78	\$ 13,362	\$ 1,176	\$ 14,538
1.9	Develop Schedules and Engineer's Estimate	28	\$ 5,876	\$ 364	\$ 6,240
1.10	Perform Internal QA/QC Review of Plans and Specifications	76	\$ 15,652	\$ 911	\$ 16,563
1.11	Attend Three (3) Coordination Meetings	24	\$ 5,368	\$ 405	\$ 5,773
1.12	Finalize Plans, Bid Documents, and Specs for Phase 1a Pumps	142	\$ 27,114	\$ 2,350	\$ 29,464
1.13	Finalize Plans, Bid Documents, and Specs for Phase 1b Water Main	76	\$ 13,532	\$ 1,125	\$ 14,657
Task 2	Permitting Assistance	298	\$ 51,156	\$ 2,644	\$ 53,800
2.1	Compile Background Environmental Data	18	\$ 3,110	\$ 215	\$ 3,325
2.2	Prepare KCDDDES Permitting Documents	26	\$ 4,744	\$ 358	\$ 5,102
2.3	Prepare SEPA and CUP Applications	36	\$ 6,188	\$ 374	\$ 6,562
2.4	Prepare SSDP, CAR, and Mitigation Plan for County Submittal	86	\$ 14,478	\$ 691	\$ 15,169
2.5	Prepare HPA Application	66	\$ 11,318	\$ 503	\$ 11,821
2.6	JARPA Process	66	\$ 11,318	\$ 503	\$ 11,821
Task 3	Services During Bidding Phase 1a	59	\$ 11,481	\$ 1,219	\$ 12,700
3.1	Produce Bid Documents	17	\$ 2,977	\$ 729	\$ 3,706
3.2	Prepare Addenda	15	\$ 2,811	\$ 134	\$ 2,945
3.3	Respond to Contractor Questions	13	\$ 2,645	\$ 188	\$ 2,833
3.4	Attend the Bid Opening	14	\$ 3,048	\$ 167	\$ 3,215
Task 4	Services During Bidding Phase 1b	59	\$ 11,481	\$ 1,219	\$ 12,700
4.1	Produce Bid Documents	17	\$ 2,977	\$ 729	\$ 3,706
4.2	Prepare Addenda	15	\$ 2,811	\$ 134	\$ 2,945
4.3	Respond to Contractor Questions	13	\$ 2,645	\$ 188	\$ 2,833
4.4	Attend the Bid Opening	14	\$ 3,048	\$ 167	\$ 3,215
Phase 1 - Conveyance System Upgrade		1613	\$ 306,901	\$ 20,099	\$ 327,000

EXHIBIT B.2

City of Black Diamond

Black Diamond Springs Rehabilitation

Phase 2 - Transmission Main Replacement

Fee Estimate

Description		Total Hours	Total Labor	Total Subconsultant	Total Expense	Total Cost
Classification						
Task 1	Plans and Specifications	503	\$ 83,021	\$ -	\$ 9,979	\$ 93,000
1.1	Perform Site Visit	17	\$ 2,941	\$ -	\$ 523	\$ 3,464
1.2	Coordinate with Surveyor	8	\$ 1,424	\$ -	\$ 103	\$ 1,527
1.3	Develop Preliminary Plans	217	\$ 36,479	\$ -	\$ 4,914	\$ 41,393
1.4	Develop Preliminary Specifications	47	\$ 6,889	\$ -	\$ 267	\$ 7,156
1.5	Develop Schedules and Engineer's Estimate	13	\$ 2,377	\$ -	\$ 181	\$ 2,558
1.6	Perform Internal QA/QC Review	22	\$ 3,648	\$ -	\$ 323	\$ 3,971
1.7	Attend Coordination Meetings	28	\$ 5,386	\$ -	\$ 503	\$ 5,889
1.8	Finalize Plans and Specifications	151	\$ 23,877	\$ -	\$ 3,166	\$ 27,043
Task 2	Permitting Assistance	92	\$ 15,920	\$ -	\$ 1,280	\$ 17,200
2.1	Perform Environmental Site Investigations	23	\$ 3,980	\$ -	\$ 385	\$ 4,365
2.2	Prepare Grading Permit for KCDDDES	23	\$ 3,980	\$ -	\$ 313	\$ 4,293
2.3	Prepare CSGP NOI	23	\$ 3,980	\$ -	\$ 291	\$ 4,271
2.4	Prepare Documentation for Coordination with Parks	23	\$ 3,980	\$ -	\$ 291	\$ 4,271
Task 3	Geologic Review	78	\$ 16,274	\$ -	\$ 1,226	\$ 17,500
3.1	Conduct Site Reconnaissance	10	\$ 2,260	\$ -	\$ 174	\$ 2,434
3.2	Evaluate soil corrosivity	8	\$ 1,576	\$ -	\$ 596	\$ 2,172
3.3	Perform Subsurface Investigation	10	\$ 2,260	\$ -	\$ 139	\$ 2,399
3.4	Provide Geotechnical Memorandum	50	\$ 10,178	\$ -	\$ 318	\$ 10,496
Task 4	Services During Bidding	32	\$ 5,372	\$ -	\$ 928	\$ 6,300
4.1	Produce Bid Documents	10	\$ 1,442	\$ -	\$ 610	\$ 2,052
4.2	Prepare Addenda	8	\$ 1,276	\$ -	\$ 87	\$ 1,363
4.3	Respond to Contractor Questions	6	\$ 1,110	\$ -	\$ 83	\$ 1,193
4.4	Attend the Bid Opening	8	\$ 1,544	\$ -	\$ 148	\$ 1,692
Phase 2 - Transmission Main Replacement		705	\$ 120,587	\$ -	\$ 13,413	\$ 134,000

EXHIBIT B.3

City of Black Diamond

Black Diamond Springs Rehabilitation

Phase 3 - Springs Protection Improvements

Fee Estimate

Description		Total Hours	Total Labor	Total Expense	Total Cost
Classification					
Task 1	Prepare Project Report	170	\$ 33,714	\$ 2,086	\$ 35,800
1.1	Prepare and Evaluate Design Alternatives	22	\$ 4,896	\$ 215	\$ 5,111
1.2	Estimate Construction Costs and Alternatives	26	\$ 5,310	\$ 277	\$ 5,587
1.3	Perform Site Visit to Collect Data	20	\$ 4,104	\$ 356	\$ 4,460
1.4	Prepare Project Schematic Site Plans	15	\$ 2,633	\$ 292	\$ 2,925
1.5	Prepare for and Attend Meeting with City Staff	25	\$ 5,297	\$ 221	\$ 5,518
1.6	Prepare Project Report	62	\$ 11,474	\$ 725	\$ 12,199
Task 2	Geologic Review	32	\$ 7,276	\$ 324	\$ 7,600
2.1	Conduct Site Reconnaissance	5	\$ 1,141	\$ 144	\$ 1,285
2.2	Investigate Subsurface Conditions	5	\$ 1,141	\$ 38	\$ 1,179
2.3	Prepare Geotechnical Memorandum	22	\$ 4,994	\$ 143	\$ 5,137
Task 3	Prepare Design	92	\$ 18,408	\$ 1,392	\$ 19,800
3.1	Evaluate Construction Access Requirements	21	\$ 4,109	\$ 472	\$ 4,581
3.2	Prepare Design Concepts	37	\$ 7,479	\$ 362	\$ 7,841
3.3	Evaluate Construction Methods and Phasing Issues	26	\$ 5,240	\$ 279	\$ 5,519
3.4	Develop Preliminary Site Plans	4	\$ 790	\$ 140	\$ 930
3.5	Develop a Schematic Design to Protect the Springs	4	\$ 790	\$ 140	\$ 930
Task 4	Permitting Assistance	141	\$ 25,324	\$ 1,276	\$ 26,600
4.1	Conduct Investigations of the Springs	19	\$ 3,171	\$ 235	\$ 3,406
4.2	Prepare City Building Permit	53	\$ 9,759	\$ 443	\$ 10,202
4.3	Prepare Sensitive Areas and Grading Permit	34	\$ 6,071	\$ 323	\$ 6,394
4.4	Coordinate with DOH Staff and Update Project Report	35	\$ 6,323	\$ 275	\$ 6,598
Task 5	Final Plans and Specifications	498	\$ 92,000	\$ 10,000	\$ 102,000
5.1	Conduct Site Visit	32	\$ 6,408	\$ 523	\$ 6,931
5.2	Develop Plans	196	\$ 36,164	\$ 2,930	\$ 39,094
5.3	Develop Specifications	60	\$ 9,708	\$ 453	\$ 10,161
5.4	Develop Schedules and Engineer's Estimate	22	\$ 4,150	\$ 397	\$ 4,547
5.5	Perform Internal QA/QC Review	52	\$ 10,570	\$ 640	\$ 11,210
5.6	Attend Coordination Meetings	48	\$ 10,192	\$ 492	\$ 10,684
5.7	Finalize Plans and Specifications	88	\$ 14,808	\$ 4,566	\$ 19,374
Task 6	Services During Bidding	45	\$ 8,434	\$ 766	\$ 9,200
6.1	Produce Bid Documents	14	\$ 2,317	\$ 239	\$ 2,556
6.2	Prepare Addenda	12	\$ 2,151	\$ 179	\$ 2,330
6.3	Respond to Contractor Questions	10	\$ 1,985	\$ 175	\$ 2,160
6.4	Attend the Bid Opening	9	\$ 1,981	\$ 174	\$ 2,155
Phase 3 - Springs Protection Improvements		978	\$ 185,156	\$ 15,844	\$ 201,000

EXHIBIT C

Billing Rates and Reimbursable Expenses

EXHIBIT C RH2 ENGINEERING, INC. 2018 SCHEDULE OF RATES AND CHARGES		
RATE LIST	RATE	UNIT
Professional I	\$142	\$/hr
Professional II	\$158	\$/hr
Professional III	\$169	\$/hr
Professional IV	\$180	\$/hr
Professional V	\$197	\$/hr
Professional VI	\$209	\$/hr
Professional VII	\$226	\$/hr
Professional VIII	\$237	\$/hr
Professional IX	\$237	\$/hr
Technician I	\$103	\$/hr
Technician II	\$110	\$/hr
Technician III	\$136	\$/hr
Technician IV	\$144	\$/hr
Administrative I	\$71	\$/hr
Administrative II	\$83	\$/hr
Administrative III	\$99	\$/hr
Administrative IV	\$117	\$/hr
Administrative V	\$135	\$/hr
CAD/GIS System	\$27.50	\$/hr
CAD Plots - Half Size	\$2.50	price per plot
CAD Plots - Full Size	\$10.00	price per plot
CAD Plots - Large	\$25.00	price per plot
Copies (bw) 8.5" X 11"	\$0.09	price per copy
Copies (bw) 8.5" X 14"	\$0.14	price per copy
Copies (bw) 11" X 17"	\$0.20	price per copy
Copies (color) 8.5" X 11"	\$0.90	price per copy
Copies (color) 8.5" X 14"	\$1.20	price per copy
Copies (color) 11" X 17"	\$2.00	price per copy
Technology Charge	2.50%	% of Direct Labor
Mileage	\$0.545	price per mile (or Current IRS Rate)
Subconsultants	15%	Cost +
Outside Services	at cost	

Rates listed are adjusted annually.

Scott Hanis

From: Seth Boettcher
Sent: Monday, September 10, 2018 4:37 PM
To: Scott Hanis
Subject: FW: schedule

Follow Up Flag: Follow up
Flag Status: Flagged

From: Geoff Dillard <gdillard@rh2.com>
Sent: Monday, September 10, 2018 3:34 PM
To: Seth Boettcher <sboettcher@blackdiamondwa.gov>
Subject: schedule

City of Black Diamond
Springs Source Rehabilitation
Phasing & Cost Allocation

Phase - Description	2018	2019		2020		2021		Total
	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	
Phase 1 - Supply Pipes and Pumps								
Design & Permitting	\$ 200,000	\$ 395,000						\$ 595,000
Construction		\$ 2,460,000						\$ 2,460,000
Phase 2 - Transmission Main to City								
Design & Permitting		\$ 66,500	\$ 66,500					\$ 133,000
Construction				\$ 1,318,000				\$ 1,318,000
Phase 3 - Spring Source Rehabilitation								
Design & Permitting				\$ 103,500				\$ 103,500
Construction					\$ 928,500			\$ 928,500
Total	\$ 200,000	\$ 2,921,500	\$ 66,500	\$ 1,421,500	\$ 928,500	\$ -	\$ -	\$ 5,538,000