

Contract for Professional Architectural and Engineering Services
Project W.O. 18-22 Leavens Reservoir Expansion and Zone 1
Improvements

In consideration of the mutual promises herein, City of Billings and HDR Engineering, Inc. agree as follows. This Contract consists of:

- Part I, consisting of 15 Sections of Special Provisions;
- Part II, consisting of 11 Sections of General Provisions;
- Appendix A consisting of 6 pages (Basic Services of Contractor);
- Appendix B consisting of 1 pages (Methods and Times of Payment);
- Appendix C consisting of 1 pages (Additional Services of Contractor);
- Appendix D consisting of 1 pages (Schedule of Professional Fees);
- Appendix E consisting of 1 pages (Project Schedule);
- Appendix F consisting of 21 pages (Certificate(s) of Insurance); and

PART I
SPECIAL PROVISIONS

Section 1. Definitions.

In this Contract:

- A. "Administrator" means the City Engineer of the Engineering Division of the Public Works Department or his designee.
- B. "Billings" means the City of Billings.
- C. "Contractor" means HDR Engineering, Inc..

Section 2. Scope of Services.

- A. The Contractor shall perform professional services in accordance with Appendix A, which is attached hereto and incorporated in this Section by reference.
- B. Billings shall pay the Contractor in accordance with Section 4.
- C. Billings shall not allow any claim for services other than those described in this Section. However, the Contractor may provide, at its own expense, any other services that are consistent with this Contract.

Section 3. Time for Performance.

- A. This Contract becomes effective when signed on behalf of Billings.
- B. The Contractor shall commence performance of the Work described in Section 2 on receipt of written Notice to Proceed and complete that performance in accordance with the schedule set forth in Appendix E.
- C. This Contract shall terminate at midnight on December 31, 2020.

Section 4. Compensation; Method of Payment.

- A. Subject to the Contractor's satisfactory performance, Billings shall pay the Contractor no more than One Hundred Sixty Nine Thousand Nine Hundred and no/100 dollars (\$169,900.00) in accordance with this Section and Appendix B.
- B. Each month, or at the conclusion of each phase of the Work for which payment is due, as negotiated on a per-task basis, the Contractor shall present a bill to the Administrator describing the Work for which it seeks payment and documenting expenses and fees to the satisfaction of the Administrator. If any payment is withheld because the Contractor's performance is unsatisfactory, the Administrator must, within ten (10) days of the payment denial, notify the Contractor of the payment denial and set forth, with reasonable specificity, what was unsatisfactory and why. Billings will pay Contractor within 30 days of receiving an acceptable invoice.
- C. The Contractor is not entitled to any compensation under this Contract, other than is expressly provided for in this Section.
- D. As a condition of payment, the Contractor shall have paid all City taxes currently due and owing by the Contractor.

Section 5. Termination of the Contractor's Services.

The Contractor's services under Section 2 of this Part may be terminated:

- A. By mutual consent of the parties.
- B. For the convenience of Billings, provided that Billings notifies the Contractor in writing of its intent to terminate under this paragraph at least 10 days prior to the effective date of the termination.
- C. For cause, by either party where the other party fails in any material way to perform its obligations under this Contract. Termination under this Subsection is subject to the condition that the terminating party notifies the other party of its intent to terminate, stating with reasonable specificity the grounds therefor, and the other party fails to cure the default within 30 days after receiving the notice.

Section 6. Duties Upon Termination

- A. If Billings terminates the Contractor's services for convenience, Billings shall pay the Contractor for its actual costs reasonably incurred in performing before termination and Billings shall pay for services rendered prior to termination. Payment under this Subsection shall never exceed the total compensation allowable under Section 4 of this Part. All finished and unfinished documents and materials prepared by the Contractor shall become the property of Billings.

- B. If the Contractor's services are terminated for cause, Billings shall pay the Contractor the reasonable value of the services satisfactorily rendered prior to termination, less any damages suffered by Billings because of the Contractor's failure to perform satisfactorily. The reasonable value of the services rendered shall never exceed ninety percent (90%) of the total compensation allowable under Section 4 of this Part. Any finished or unfinished documents or materials prepared by the Contractor under this Contract shall become the property of Billings at its option.
- C. If the Contractor receives payments exceeding the amount to which it is entitled under Subsections A or B of this Section, he shall remit the excess to the Administrator within 30 days of receiving notice to do so.
- D. The Contractor shall not be entitled to any compensation under this Section until the Contractor has delivered to the Administrator all documents, records, Work product, materials and equipment owned by Billings and requested by the Administrator.
- E. If the Contractor's services are terminated for whatever reason the Contractor shall not claim any compensation under this Contract, other than that allowed under this Section.
- F. If a final audit has not been performed before the Contractor's services are terminated, Billings may recover any payments for costs disallowed as a result of the final audit.
- G. Except as provided in this Section, termination of the Contractor's services under Section 5 of this Part does not affect any other right or obligation of a party under this Contract.

Section 7. Insurance.

- A. The Contractor shall maintain in good standing the insurance described in Subsection B of this Section. Before rendering any services under this Contract, the Contractor shall furnish the Administrator with proof of insurance in accordance with Subsection B of this Section.
- B. The Contractor shall provide the following insurance:
 - 1. Workers' compensation and employer's liability coverage as required by Montana law.
 - 2. Commercial general liability, including contractual and personal injury coverage's -- \$1,500,000 per occurrence.
 - 3. Commercial automobile liability -- \$1,500,000 per accident.
 - 4. Professional liability in the amount of \$1,500,000 per claim.
- C. Each policy of insurance required by this Section shall provide for no less than 30 days' advance notice to Billings prior to cancellation.
- D. Billings SHALL be listed as an additional insured on all policies except Professional Liability and Worker's Compensation Policies. In addition, all policies except Professional Liability and Worker's Compensation shall contain a waiver of subrogation against Billings.

Section 8. Assignments.

Unless otherwise allowed by this Contract or in writing by the Administrator, any assignment by the Contractor of its interest in any part of this Contract or any delegation of duties under this Contract shall be void, and an attempt by the Contractor to assign any part of its interest or delegate duties under this Contract shall give Billings the right immediately to terminate this Contract without any liability for Work performed.

Section 9. Ownership; Publication, Reproduction and Use of Material.

- A. Except as otherwise provided herein, all data, documents and materials produced by the Contractor under this Contract shall be the property of Billings, which shall retain the exclusive right to publish, disclose, distribute and otherwise use, in whole or in part, any such data, documents, or other materials. Exclusive rights shall not be attributed to portions of such materials presently in the public domain or which are not subject to copyright. Contractor shall retain rights to pre-existing proprietary property including but not limited to interactive models. The Contractor shall have the right to include photographic or artistic representations of the design and construction of the Project among the Contractor's promotional and professional materials. The Contractor's materials shall not include Billings' confidential or proprietary information regardless of whether Billings has previously advised the Contractor in writing of the specific information considered by Billings to be confidential and proprietary.
- B. Equipment purchased by the Contractor with Contract funds: See Appendix A, Section 3. Scope of Work.
- C. Should Billings elect to reuse Work products provided under this Contract for other than the original project and/or purpose, Billings will indemnify and hold harmless the Contractor from any and all claims, demands and causes of action of any kind or character arising as a result of reusing the documents developed under this contract. Additionally, any reuse of design drawings or specifications provided under this Contract must be limited to conceptual or preliminary use for adaptation, and the original Contractor's or subcontractor's signature, professional seals and dates removed. Such reuse of drawings and specifications, which require professional seals and dates removed, will be signed, sealed, and dated by the professional who is in direct supervisory control and responsible for adaptation.

Section 10. Notices.

Any notice required pertaining to the subject matter of this Contract shall be either sent via facsimile (FAX) or mailed by prepaid first class registered or certified mail, return receipt requested to the following addresses:

Billings: Ken Ard, PE
City of Billings
Engineering Division
2224 Montana Avenue
Billings, MT 59101

FAX: (406) 237-6291

Contractor: Craig Habben, PE

HDR Engineering, Inc.
970 S 29th St W
Billings, MT 59102

FAX: (406) 652-2758

Notices are effective upon the earlier of receipt, proof of good transmission (facsimiles only), or 5 days after proof of proper posting.

Section 11. Contract Budget.

In connection with its performance under this Contract, the Contractor shall not make expenditures other than as provided in line items in the Contract budget.

Section 12. Force Majeure.

- A. Any failure to perform by either party due to force majeure shall not be deemed a violation or breach hereof.
- B. As used in this Contract, force majeure is an act or event of substantial magnitude, beyond the control of the delayed party, which delays the completion of this Contract, including without limitation:
 - 1. Any interruption, suspension or interference resulting solely from the act of Billings or neglect of Billings not otherwise governed by the terms of this Contract.
 - 2. Strikes or Work stoppages.
 - 3. Any interruption, suspension or interference with the project caused by acts of God, or acts of a public enemy, wars, blockades, insurrections, riots, arrests or restraints of governments and people, civil disturbances or similar occurrences.
 - 4. Order of court, administrative agencies or governmental officers other than Billings.

Section 13. Financial Management System.

The Contractor shall establish and maintain a financial management system that:

- A. Provides accurate, current, and complete disclosure of all financial transactions relating to the Contract;
- B. Maintains separate accounts by source of funds for all revenues and expenditures and identifies the source and application of funds for the Contractor's performance under this Contract, including information pertaining to subcontracts, obligations, unobligated balances, assets, liabilities, outlays and income;
- C. Effectively controls and accounts for all municipal funds and Contract property;
- D. Compares actual expenditures with budgeted amounts and relates financial information to performance or productivity data including unit cost information where applicable;
- E. Allocates administrative costs to direct service delivery units;
- F. Minimizes the time between receipt of funds from Billings and their disbursement by the Contractor;
- G. Provides accounting records supported by source documentation; and
- H. Provides a systematic method assuring the timely and appropriate resolution of audit findings and recommendations.

Section 14. Funding Requirements.

In the event that any funding source for this Contract should impose additional requirements upon Billings for the use of those funds, the Contractor agrees to abide by those additional requirements immediately upon receipt of written notice thereof from Billings.

Section 15. Subcontracts.

The Contractor may enter into subcontracts for the purchase of goods and services necessary for the performance of this Contract, provided:

- A. Every subcontract shall be reduced to writing and contain a precise description of the services or goods to be provided and the nature of the consideration paid therefor.
- B. Every subcontract under which the Contractor delegates the provision of services shall be subject to review and approval by the Administrator before it is executed by the Contractor.
- C. Every subcontract in an amount exceeding \$1,000 shall require reasonable access to business records of the subcontractor relating to the purchase of goods or services pursuant to the subcontract.

PART II
GENERAL CONTRACT PROVISIONS

Section 1. Relationship of Parties.

The Contractor shall perform its obligations hereunder as an independent Contractor of Billings. Billings may administer the Contract and monitor the Contractor's compliance with its obligations hereunder. Billings shall not supervise or direct the Contractor other than as provided in this Section.

Section 2. Nondiscrimination.

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, or marital status or who is a "qualified individual with a disability" (as that phrase is defined in the Americans With Disabilities Act of 1990). The Contractor will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, or mental or physical impairment/disability. Such action shall include, without limitation, employment, upgrading, demotion or transfer, recruitment or recruiting advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor agrees to post, in conspicuous places available to employees and applicants for employment, notices setting forth the provisions of this non-discrimination clause.
- B. The Contractor shall state, in all solicitations or advertisements for employees to Work on Contract jobs, that all qualified applicants will receive equal consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex or marital status, or mental or physical impairment/disability.
- C. The Contractor shall comply with any and all reporting requirements that may apply to it which the City of Billings may establish by regulation.
- D. The Contractor shall include the provisions of Subsections A through C of this Section in every subcontract or purchase order under this Contract, so as to be binding upon every such subcontractor or vendor of the Contractor under this Contract.
- E. The Contractor shall comply with all applicable federal, state, and city laws concerning the prohibition of discrimination.
- F. The Contractor and subcontractor shall abide by the requirements of 41 CFR 60-300.5(a) and 41 CFR 60-741.5(a), which prohibit discrimination against qualified protected veterans and/or qualified individuals on the basis of disability, and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified protected veterans and individuals with disabilities.

Section 3. Permits, Laws, and Taxes.

The Contractor shall acquire and maintain in good standing all permits, licenses and other entitlements necessary to its performance under this Contract. All actions taken by the

Contractor under this Contract shall comply with all applicable statutes, ordinances, rules and regulations. The Contractor shall pay all taxes pertaining to its performance under this Contract.

Section 4. Nonwaiver.

The failure of either party at any time to enforce a provision of this Contract shall in no way constitute a waiver of the provision, nor in any way affect the validity of this Contract or any part hereof, or the right of such party thereafter to enforce each and every provision hereof.

Section 5. Amendment.

- A. This Contract shall only be amended, modified or changed by a writing, executed by authorized representatives of the parties, with the same formality as this Contract was executed.
- B. For the purposes of any amendment modification or change to the terms and conditions of this Contract, the only authorized representatives of the parties are:

Contractor: Jared Harris, Amanda McInnis, or Authorized Signatory

Billings: City Council or Authorized Designee

- C. Any attempt to amend, modify, or change this Contract by either an unauthorized representative or unauthorized means shall be void.

Section 6. Jurisdiction; Choice of Law.

Any civil action rising from this Contract shall be brought in the District Court for the Thirteenth Judicial District of the State of Montana, Billings. The law of the State of Montana shall govern the rights and obligations of the parties under this Contract.

Section 7. Severability.

Any provision of this Contract decreed invalid by a court of competent jurisdiction shall not invalidate the remaining provisions of the Contract.

Section 8. Integration.

This instrument and all appendices and amendments hereto embody the entire agreement of the parties. There are no promises, terms, conditions or obligations other than those contained herein; and this Contract shall supersede all previous communications, representations or agreements, either oral or written, between the parties hereto.

Section 9. Liability.

The Contractor shall indemnify, defend, save, and hold Billings harmless from any and all claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and

expenses including reasonable attorneys' fees and costs, arising from any wrongful or negligent act, error or omission of the Contractor or any agent, employee or subcontractor as a result of the Contractor's or any subcontractor's performance pursuant to this Contract.

- A. The Contractor shall not indemnify, defend, save and hold Billings harmless from claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses or attorneys' fees and costs arising from wrongful or negligent acts, error or omission solely of Billings occurring during the course of or as a result of the performance of the Contract.
- B. Where claims, lawsuits or liability, including attorneys' fees and costs arise from wrongful or negligent act of both Billings and the Contractor, the Contractor shall indemnify, defend, save, and hold Billings harmless from only that portion of claims, causes of action, lawsuits, damages, judgments, liabilities, and litigation costs and expenses including attorneys' fees and costs, which result from the Contractor's or any subcontractor's wrongful or negligent acts occurring as a result from the Contractor's performance pursuant to this Contract.

Section 10. Inspection and Retention of Records.

The Contractor shall, at any time during normal business hours and as often as Billings may deem necessary, make available to Billings, for examination, all of its records with respect to all matters covered by this Contract for a period ending three years after the date the Contractor is to complete performance in accordance with Section 2 of the Special Provisions. Upon request, and within a reasonable time, the Contractor shall submit such other information and reports relating to its activities under this Contract, to Billings, in such form and at such times as Billings may reasonably require. The Contractor shall permit Billings to audit, examine and make copies of such records, and to make audits of all invoices, materials, payrolls, records of personnel, and other data relating to all matters covered by this Contract. Billings may, at its option, permit the Contractor to submit its records to Billings in lieu of the retention requirements of this Section.

Section 11. Availability of Funds.

Payments under this Contract may require funds from future appropriations. If sufficient funds are not appropriated for payments required under this Contract, this Contract shall terminate without penalty to Billings; and Billings shall not be obligated to make payments under this Contract beyond those which have previously been appropriated.

IN WITNESS WHEREOF, the parties have executed this Contract on the date and at the place shown below.

City of Billings

Contractor

City Council or Designee

Date: _____

Name: _____

Title: _____

Date: _____

ATTEST:

IRS Tax ID # _____

City Clerk

APPROVED AS TO FORM:

Date: _____

By _____

BRENT BROOKS, City Attorney

STATE OF MONTANA)
 :ss.
COUNTY OF YELLOWSTONE)

On this ____ day of _____, 2018, before me, the undersigned, a Notary Public for the State of Montana, personally appeared _____, known to me to be the _____ of _____, and acknowledged to me that they executed the foregoing instrument on behalf of said corporation having first been authorized to do so.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Notarial Seal the day and year first above written.

Notary Public for the State of Montana
Residing at Billings, Montana
My Commission Expires: _____

Note: Final contract documents will require the Contractor's signature to be notarized.

Appendix A

Basic Services of Engineer City of Billings W.O. 18-22 Leavens Reservoir Expansion and Zone 1 Improvements

Section 1. Engineer's Rights and Duties.

- A. To furnish all labor, materials, equipment, supplies, and incidentals necessary to conduct and complete the Engineer's portion of the project as defined in the scope of work and to prepare and deliver to Billings all plans, specifications, bid documents, and other material as designated herein.
- B. Ascertain such information as may have a bearing on the work from local units of government, utility companies, and private organizations and shall be authorized to procure information from other authorities besides Billings, but shall keep Billings advised as to the extent of these contacts and the results thereof.
- C. Prepare and present such information as may be pertinent and necessary in order for Billings to pass critical judgment on the features of the work. The Engineer shall make changes, amendments or revisions in the detail of the work as may be required by Billings. When alternates are being considered, Billings shall have the right of selection.
- D. Engineer's work shall be in accordance with the standards of sound engineering and present City, State, and National standards and policies currently in use.
- E. Conform to the requirements of the Montana Code Annotated Title 18 "Public Contracts" and more particularly Sections 18-2-121 and 18-2-122, and all other codes of the State of Montana applicable to providing professional services including codes and standards nationally recognized.
- F. The Engineer shall certify with the submission of final plans that the plans are in conformance with applicable sections of Title 69, Chapter 4, Part 5, of the Montana Code Annotated as pertaining to existing utilities.
- G. To perform professional services in connection with the project and will serve as Billings' representative in those phases of the project to which this agreement applies.
- H. Where Federal funds are involved, the necessary provisions to meet all requirements will be complied with and documents secured and placed in the bidding documents.
- I. Submit an estimated progress schedule as to time and costs at the beginning of the work, and monthly progress reports thereafter until complete. The reports will include any problems, potential problems, and delays as foreseen by the Engineer. Reports will be submitted in a timely manner to permit prompt resolution of problems.

- J. Contract administration duties will include review of contractor certified payrolls for wage rate compliance. Discrepancies in certified payrolls will be resolved with the Contractor. A signed Engineer's Payroll Check Sheet (included in the Standard Modifications to MPWSS) will be submitted as proof of this review with one copy of each payroll.
- K. Name a Task Director who shall be the liaison between Billings and the Engineer. For this project the Task Director designated for the Engineer is Craig Habben working under the Principal-in-Charge, Amanda McInnis.

Section 2. Billings Rights and Duties.

- A. To furnish all labor, materials, equipment, supplies, and incidentals necessary to conduct and complete Billings' portion of the project as designated in the scope of work.
- B. Name a Task Director who shall be the liaison between the Engineer and Billings. For this project, the Task Director designated is Ken Ard, working under the City Engineer, Debi Meling.

Section 3. Scope of Work.

The project consists of engineering services for the preliminary evaluation, design, bidding and construction phases for the City of Billings W.O. 18-22 – Leavens Reservoir Expansion and Zone 1 Improvements. The purpose of the project is to add additional water storage for the Zone 1 Pressure Zone and to provide a second discharge from the Zone 1 discharge header in the lower level of the High Service Pump Station (HSPS) to Zone 1 distribution in Belknap Avenue. The size, location, type and style for the new Zone 1 Reservoir will be determined in the preliminary evaluation. The selected alternative from the preliminary evaluation will be designed and constructed.

The program will be implemented in the following phases:

- Phase I – Preliminary evaluation
- Phase II – Design, bidding and construction engineering services for the facilities selected during the preliminary evaluation

The Phase I scope of work is summarized below. The work scope for Phase II of the project will be developed upon the completion of Phase I and presented in a subsequent contract amendment.

Phase I – Preliminary Evaluation:

- Determine location of new storage reservoir.
 - Evaluate the Leavens site and other sites near the Leavens site.
 - City to facilitate communication with Montana State University Billings (MSUB).
- Provide geotechnical evaluation of selected site.
- Provide survey of selected site.
- Determine reservoir type and size.
 - Evaluation will be limited to prestressed, post-tension and cast-in-place structures

- Provide constructable layout of each type
 - Provide cost estimate of each type
- Determine baffle wall or mixing provisions in new reservoir
- Evaluate and provide recommendations for means to upgrade existing reservoir piping
- Evaluate and provide recommendations for providing a connection from Zone 3 to Zone 1.
- Provide schematic and preliminary layout of all new and existing piping including piping/valving in Rimrock Road and Normal Avenue.
- Determine need for a permanent backup generator for pumps and other components at Leavens Pump Station.
- Provide pipe routing and recommended size of new Zone 1 line at HSPS.
- Determine other Zone 1 changes at Water Treatment Plant (WTP).
- Provide recommendations for pipe materials and valve types.
- Provide design report including alternatives analysis and recommendations.

Phase II – Design, Bidding, and Construction Engineering Scope:

(To be further defined and included upon the completion of Phase I)

- Final Design and Construction Documents
- Bidding Services
- Construction Services
- Operations and Maintenance Manual

DETAIL SCOPE OF SERVICES

The scope of services that will be utilized on the Billings Leavens Reservoir Expansion and Zone 1 Improvements project is presented in the summaries for Tasks 100 through 600. The scope of services is organized as follows:

<u>Task Series</u>	<u>Description</u>
100	Project Initiation, Coordination, and Management (Project Management for task series 300-600 to be added by amendment).
200	Preliminary Evaluation
300	Final Design and Construction Documents (<u>scope and fee to be added by amendment</u>)
400	Bidding Services (<u>scope and fee to be added by amendment</u>)
500	Construction Services (<u>scope and fee to be added by amendment</u>)
600	Operations & Maintenance Manual (<u>scope and fee to be added by amendment</u>)

TASK SERIES 100 – PROJECT INITIATION, COORDINATION, AND MANAGEMENT

101 – Project Initiation

The purpose of this task is to kick off the project externally and internally. A project management plan (PMP) and all the support paperwork will be developed for all team members to have available to understand the project, the project team, and the project requirements. The PMP is updated with significant changes in the project. The project

will be kicked off with the City with pertinent staff from the City and HDR to review the project components, schedule, and the process for completing the preliminary evaluation portion of the project.

Deliverables:

- Meeting with City, agenda and meeting minutes.
- Project Schedule

102 – Meetings with City Staff

During the preliminary evaluation phase of the project, key members of the Consultant design team will meet with the City staff to review the project. Meeting minutes will be prepared and distributed to all parties attending the meeting. During the preliminary evaluation or feasibility study, meetings will be held monthly with a review meeting at the completion of the draft study. Three (3) total meetings are planned for. Meetings to normally be held at the Water Treatment Plant Conference Room.

Deliverables:

- Agenda and meeting minutes for each meeting.

103 – Preliminary Evaluation Phase Project Management

As part of this task, the Engineer's Project Manager will lead coordination of the project team with the City as well as supervise the project team. Project Manager and Accountant will monitor project status, maintain project schedule, coordinate with resources including sub-consultants, and prepare financial documents.

Deliverables:

- Monthly Invoices

TASK SERIES 200 – PRELIMINARY EVALUATION

This task series will evaluate the various components associated with a new water storage facility, repair of existing reservoir components, and Zone 1 piping at the WTP. The tasks associated with the preliminary evaluation include the following:

201 – Reservoir Site Evaluation

Evaluate potential sites for the new water storage facility. Likely areas include MSUB land near the Leavens reservoir. City will facilitate communication with MSUB. Advantages and disadvantages of any selected sites will be developed and compared to the Leavens site.

Deliverable:

- Site alternatives evaluation and recommendations

202 – Geotechnical Evaluation and Survey

Based on selected site, provide six boreholes to determine subsurface conditions of the site. Additionally provide one borehole in Rimrock Road near the existing reservoir inlet/outlet, one borehole in Normal Avenue near the proposed tie-in and one borehole in Belknap Avenue near the proposed Zone 1 tie-in. Provide a ground survey of the selected site. Utilize City information and information from Chemical Building/Disinfection project for survey information at WTP site.

Deliverables:

- Geotechnical Report
- Electronic file of survey

203 – Preliminary Design of New Reservoir Options

Based on selected site, provide layouts of round prestressed or post-tension concrete reservoirs and a cast-in-place rectangle reservoir as well as associated components. Alternatives will be located on site based on constructability for each option. Components to include baffle wall or mixing, inlet/outlet piping, overflow, perimeter drain, reservoir drain and hatches. Detailed appurtenances such as instrumentation will be evaluated during the final design or Phase II.

Deliverable:

- Reservoir and associated components layout.

204 – Existing Reservoir and Components Improvements

Develop options for replacing inlet/outlet piping for the existing reservoir and reinstating the flow pattern around the baffle wall. Evaluate capacity of existing overflow and determine any improvements. Assess options for repairing or replacing existing reservoir drain and valving.

Deliverables:

- Recommendation of improvements for the existing reservoir and reservoir components

205 – Miscellaneous Leavens Improvements

Assess need for provisions for moving water from Zone 3 to Zone 1. Provide layout and cost estimate of components. Assess need for permanent backup power to allocate Zone 1 storage for Zone 3 storage. Determine pump(s) that would be utilized and size a proposed generator. Provide cost estimate.

Deliverables:

- Layout of components
- Cost estimates

206 – Preliminary Design of WTP Zone 1 Provisions

Layout new piping in HSPS and on the site to connect the discharge of the HSPS Zone 1 pumps to the pipeline in Belknap Avenue. Determine and layout any other provisions for Zone 1 on the WTP site and Belknap Avenue.

Deliverable:

- Zone 1 piping modification layouts

207 – Cost Estimates

Preliminary construction cost estimates will be developed for each of the proposed reservoir types as well as the other components of the overall project.

Deliverable:

- Cost estimates for each alternative

208 – Design Report

Develop design report that summarizes the findings from the previous tasks. The report will address all the criteria in DEQ Circular 1 related to finished water storage and distribution systems. Report to be completed as Task Series 300 progresses.

Deliverable:

- Draft and Final Design Report.

TASK SERIES 300 – 600

Scope details to be added by amendment.

Appendix B

Methods and Times of Payment City of Billings W.O. 18-22 Leavens Reservoir Expansion and Zone 1 Improvements

Section 1. Payments for Basic Services.

Billings shall authorize payment to the Engineer for services performed under Appendix A of this Agreement. Partial payment shall be due the Engineer upon receipt of the Engineer's pay estimate, said estimate being proportioned to the work completed by the Engineer.

Partial payment shall be made to the Engineer upon receipt of the Engineer's pay estimate, said estimate being proportioned to the work completed by the Engineer. Billings shall deduct five percent (5%) from each monthly pay estimate to be held until the completion of the final scope of work. The final payment shall be made only after acceptance of final documents by Billings, and determination that the scope of work has been satisfactorily completed.

A. For services rendered prior to construction, Appendix A, the Engineer shall be paid based upon actual time accrued, but not to exceed the following amounts:

1. Project Initiation, Coordination and Management	\$13,800
2. Preliminary Evaluation	\$156,100
3. Final Design (to be added by amendment)	\$
4. Bidding Services (to be added by amendment)	\$
5. Construction Services (to be added by amendment)	\$
6. Operations & Maintenance (to be added by amendment)	\$
	<hr/>
	\$169,900

B. Final payment shall be the above stated basic fee less all previous payments.

Section 2. Payments for Extra Services when Authorized by Billings.

Requests made or conditions identified by interested groups at the agency or public meetings, which are beyond the scope and intent of this study shall be paid for based on a negotiated fee.

Section 3. Corrections.

Costs of Billings work that is required for corrections to the Engineer's work which requires redoing by Billings shall be deducted from any payments due the Engineer, if the Engineer fails to make the required corrections.

Section 4. Fee Increases

For contracts and services that are expected to require more than one (1) year to complete, the above stated basic services payments may be reviewed and adjusted annually by mutual agreement of the parties, based upon documented evidence that the Engineer's costs have increased for all comparable clients.

Appendix C

Additional Services of Engineer City of Billings W.O. 18-22 Leavens Reservoir Expansion and Zone 1 Improvements

Extra Services of the Engineer will be paid only with written prior authorization by Billings.

- A. Requests made or conditions identified which are beyond the scope and intent of the services identified under Appendix A.

Appendix D

Schedule of Professional Fees City of Billings W.O. 18-22 Leavens Reservoir Expansion and Zone 1 Improvements

Not used on this Contract.

Appendix E

Project Schedule City of Billings W.O. 18-22 Leavens Reservoir Expansion and Zone 1 Improvements

Based on a notice to proceed by Billings dated no later than July 23, 2018, the completion date for the Engineer's work shall be:

- A. Preliminary Evaluation – October 2018
- B. Final Design – January 2019
- C. Bidding – February 2019
- D. Construction – April 2019 through June 2020

Delays affecting the completion of the work within the time specified of more than ninety (90) days, not attributable to or caused by the Parties hereto, may be considered as cause for the renegotiation or termination of this Contract.

If the Engineer is behind on this Contract due to no fault of Billings, then the Engineer hereby acknowledges the right of Billings to withhold future Contracts to the Engineer in addition to any other remedy until this Contract is brought back on schedule or otherwise resolved.

Based on the results of the Alternatives Analysis, Engineer will reassess remainder of project schedule and revise accordingly with City's concurrence.

Appendix F

Certificate(s) of Insurance City of Billings W.O. 18-22 Leavens Reservoir Expansion and Zone 1 Improvements

(Attach Certificate(s) of Insurance)