

REQUEST AUTHORIZATION FOR MAYOR AND FINANCE OFFICER TO SIGN PROFESSIONAL SERVICES AGREEMENT OR AMENDMENT

Date:

Project Name & Number: Professional Engineering Services Contract for City of Rapid City Water Treatment Plant Upgrades – Phase 2A & 2B, Project No.: W07 - 1689 **CIP #:** 50696

Project Description: **Phase 2A** - Completion of existing Surface Water Treatment Plant and Jackson Springs Infiltration Gallery Facility Plans and provide support to the City's Water Advocacy Task Force.
Phase 2B - Conceptual Design Phase for Water Treatment Plant Upgrades including development of a Source Water Management Plan, development of conceptual designs for the recommended water treatment plant upgrades, and assistance in determining potential funding sources.
Phase 2C - Design, Bidding, and Construction Phase Services for the recommended water treatment plant upgrades. *This scope and fee to be negotiated upon completion of the conceptual design under Phase 2B.*

Consultant: Burns & McDonnell Engineering Co., Inc.

Original Contract Amount:

Original Contract Date:

Original Completion Date:

Amendment Number:

Amendment Description:

| | | | |
|---------------------------------|--------------|---------------------------------|---------|
| Current Contract Amount: | \$419,381.00 | Current Completion Date: | 6/31/08 |
| Change Requested: | | | |
| New Contract Amount: | \$419,381.00 | New Completion Date: | 6/31/08 |

Funding Source This Request:

| Amount | Dept. | Line Item | Fund | Comments |
|--------------|-------|-----------|------|--|
| \$419,381.00 | 933 | 4223 | 602 | Water Enterprise Replacement/Improvement |
| | | | | |
| | | | | |
| \$419,381.00 | Total | | | |

Agreement Review & Approvals

| | | | |
|---------------------------|------|------------------------|------|
| Project Manager _____ | Date | Division Manager _____ | Date |
| Department Director _____ | Date | City Attorney _____ | Date |

ROUTING INSTRUCTIONS

Route **two** originals of the **Agreement** for review and signatures.
 Finance Office - Retain one original
 Project Manager - Retain second original for delivery to Consultant
 cc: Public Works
 Engineering
 Project Manager

FINANCE OFFICE USE ONLY

(Note to Finance: Please write date of Agreement in appropriate space in the Agreement document)

| | Date | Initials | Approved | |
|---------------|------|----------|----------|---|
| Appropriation | | | Y | N |
| Cash Flow | | | Y | N |

PROFESSIONAL ENGINEERING SERVICES CONTRACT



**Rapid City Water Treatment Plant Upgrades
Phases 2A & 2B
City of Rapid City Project No. W07-1689 (CIP No. 50696)**



ENGINEER: Burns & McDonnell Engineering Co., Inc.

PROFESSIONAL ENGINEERING SERVICES CONTRACT

November 20, 2007

Project: Rapid City Water Treatment Plant Upgrades – Phases 2A & 2B
City of Rapid City Project No. W07-1689 (CIP No. 50696)

Owner Information:

City of Rapid City
300 Sixth Street
Rapid City, South Dakota 57701-2724

Contact: Mr. Stacey Titus, P.E.
Phone: (605) 394-4154
Fax: (605) 394-6636

ENGINEER:

Burns & McDonnell Engineering Co., Inc.
9785 Maroon Circle, Suite 400
Centennial, Colorado 80112

Contact: Mr. Mark Lichtwardt, P.E.
Phone: (303) 721-9292
Fax: (303) 721-0563

SCOPE OF SERVICES

General

Burns & McDonnell Engineering Company, Inc., (hereinafter ENGINEER) was selected by the City of Rapid City, South Dakota (hereinafter OWNER) to complete the Water Facilities Planning and Jackson Springs Water Treatment Facility Reconstruction project. After the consultant selection process, the professional services described in the “Request for Interviews” (Mr. Stacey Titus, August 8, 2005) were further refined by the OWNER. The Project shall be separated into the following major phases:

- **Phase 1A** – Existing Jackson Springs Infiltration Gallery Customer Water Supply Evaluation and evaluate the redundancy of backwash system at the existing Surface Water Treatment Plant. *(Completed under City of Rapid City Project No. PW04-1447/CIP 50570)*
- **Phase 1B** – Source Water Evaluation for Madison Wells, Infiltration Galleries, and Surface Water Source; and Facility Plans for Madison Wells, Girl Scout Infiltration Gallery, Meadowbrook Infiltration Gallery, Jackson Springs Infiltration Gallery and the preliminary review of the existing Surface Water Treatment Plant. *(Completed under City of Rapid City Project No. PW04-1447/CIP 50570)*
- **Phase 1C** – Design, Bidding, and Construction Phase Services for the recommended Phase 1A alternative. *(Completed under City of Rapid City Project No. PW05-1425.1A/CIP 50570)*
- **Phase 2A** – Completion of the existing Surface Water Treatment Plant and Jackson Springs Infiltration Gallery Facility Plans and provide support to the City’s Water Advocacy Task Force.
- **Phase 2B** – Conceptual Design Phase for Water Treatment Plant Upgrades including development of a Source Water Management Plan, development of conceptual designs for the recommended water treatment plant upgrades, and assistance in determining potential funding sources.
- **Phase 2C** – Design, Bidding, and Construction Phase Services for the recommended water treatment plant upgrades. *(Scope and Engineering Fee to be negotiated upon completion of the*

conceptual design phase 2B. The project will be considered in it's entirety in negotiation of future phases)

As such, the Scope of Services for Phases 2A and 2B as described herein are to be provided by ENGINEER for the OWNER.

Phase 2A – Completion of the existing Surface Water Treatment Plant and Jackson Springs Infiltration Gallery Facility Plans and provide support to the City's Water Advocacy Task Force

1. **Completion of the existing Surface Water Treatment Plant and Jackson Springs Infiltration Gallery Facility Plans** – Prepare Facility Plans for the OWNER's existing Surface Water Treatment Plant and the Jackson Springs Infiltration Gallery based on information collected during site visits and evaluation conducted under Phase 1B. The Facility Plans are intended to address the physical condition and mechanical components of each facility. Evaluations of the facilities shall consist of physical, mechanical, process, structural, architectural, electrical, and controls. The Facility Plan shall be included in the Phase 1B final report.
2. **Provide support to the City's Water Advocacy Task Force** – The ENGINEER attended meetings between February 2007 and August 2007 to make presentations and respond to questions related to the Source Water Evaluation and the Facility Plans. This effort assisted the task force in developing recommendations for upgrades to the City's water system.

Phase 2B – Conceptual Design Phase for Water Treatment Plant Upgrades

1. Project Initiation and Coordination

1.1. **Project Kick-off Meeting** – The ENGINEER will conduct a project kick-off meeting at the OWNER's facilities to include the following agenda items:

- A. Review goals and objectives
- B. Identify key project issues/OWNER concerns
- C. Review project schedule/budget
- D. Discuss project team and roles (including involvement of any subconsultants)
- E. Outline communication protocol

1.2. **Monthly Status Meetings** – Six (6) monthly status meeting will be held between the OWNER and ENGINEER beginning in the month following the kick-off meeting and ending at the Project Completion Date. When possible, these meetings will be held by teleconference. It has been assumed that a minimum of three meetings will be held by teleconference. The ENGINEER will provide an agenda for each meeting, provide a status report at each meeting, and prepare meeting minutes for distribution to the Project Team as needed.

2. **Develop Source Water Management Plan** – This task involves development of a broad strategy for operation of the City's source water facilities. The source water management plan will be in the form of a flowchart that the City's water system operators can refer to when making decisions as to which sources (i.e., groundwater vs. surface water) to utilize under a given scenario. In general, the strategy

shall allow the City to maximize use of surface water during wet years and rely more heavily on groundwater during drought years in an effort to preserve the aquifers over the long term. In developing the plan, the ENGINEER shall assume that the water treatment plant upgrades have been completed and the Jackson Springs Infiltration Gallery is online. The plan shall be based on the sustainable capacity of the current groundwater supplies and infiltration galleries (as agreed upon with the OWNER under Task 2.1).

- 2.1. Document Variables of Interest / Source Water Capacities – The ENGINEER will develop a list of variables to be included in the source water management plan based on recommendations from the *Source Water Evaluation Report* developed under Phase 1B and meeting minutes from the City’s Water Advocacy Task Force. Variables of interest will be investigated as needed under this task and shall include precipitation (i.e., wet year vs. dry year), reservoir levels, and minimum flows in Rapid Creek. The sustainable capacities of each source will be assumed to be equivalent to the current pumping capacity unless data from the *Source Water Evaluation Report (Appendix E)* or discussions with City staff indicate the sustainable capacity is less. Once documented, the variables of interest and capacities will be submitted to the City for review prior to proceeding with Task 2.2. Note that the intention is to limit the variables to a reasonable number (i.e., less than eight) to ensure the Source Water Management Plan is a useful tool for the operational staff.
- 2.2. Develop Source Water Management Plan Flowchart – The ENGINEER will determine a sequence of actions based on the variables of interest and develop the Source Water Management Plan.
- 2.3. Workshop to Review Source Water Management Plan – The ENGINEER will conduct a workshop with the OWNER to review the flowchart and discuss any necessary revisions to ensure it will be a useful tool as intended. The workshop shall be attended by representatives of the OWNER’s operational staff and water system management.

3. **Conceptual Designs**

- 3.1. Provide Recommendation on Filtration Avoidance – The ENGINEER will review any additional correspondence received from South Dakota Department of Environment and Natural Resources (SDDENR) regarding Filtration Avoidance and provide a recommendation to the OWNER as to whether or not this option should be pursued further.
- 3.2. Gather/Evaluate/Summarize Additional Water Quality Data – This task will include additional evaluation of water quality parameters for the various source waters to the Jackson Springs Complex (i.e. Rapid Creek and Jackson Springs Infiltration Gallery) and to the existing Mountain View Surface Water Treatment Plant (i.e., Rapid Creek, Girl Scouts Infiltration Gallery, Meadowbrook Infiltration Gallery). All critical water quality parameters will be tabulated and used as required to determine approximate design criteria and conceptual equipment sizing. These parameters will include turbidity, total organic compounds (TOC), iron, manganese, and similar parameters that can directly affect the performance of microfiltration or ultrafiltration membranes. If the required water quality parameters can not be provided by the OWNER, the OWNER shall provide any additional water quality sampling and analysis required to accomplish the data gathering needed for the treatment process analysis.

- 3.3. Evaluate Pretreatment & Chemical Feed Requirements – The ENGINEER will evaluate requirements for chemical pretreatment, coagulation/flocculation/sedimentation, and chemical post-treatment based on the collected water quality data and the ENGINEER’s experience with similar water quality.
- 3.4. Evaluate Membrane Design Loading – Based on the collected water quality data and the performance information from other similar piloting studies, the ENGINEER will evaluate recommended membrane flux rates and other critical performance parameters to be used for conceptual planning and design. Findings and recommendations will be presented in the Preliminary Design Report.
- 3.5. Provide Pilot Testing Recommendations – The ENGINEER shall provide a recommendation to the OWNER with regard to the need for pilot testing of pretreatment or membrane equipment based on the level of confidence or uncertainty in design loading rates. Note that the design loading rates are based primarily on historical water quality data, and any limitations to that data may result in uncertainty.
- 3.6. Determine Recommended Sizing of Mountain View Surface Water Treatment Facility – The ENGINEER shall determine the recommended sizing required to meet the Surface Water Management Plan and the water demands in 2020 (Phase 1 Expansion) and 2040 (Phase 2 Expansion) per the recommendation of the Rapid City Water Advocacy Task Force. For purposes of this analysis, the City’s 2020 maximum day water demand is assumed to be 42.4 MGD and the 2040 maximum day demand is assumed to be 59.6 MGD.
- 3.7. Develop Conceptual Designs – The ENGINEER will prepare conceptual layouts of the three treatment plant options below and provide a preliminary design report outlining the basic design principles for each discipline. These designs will be basic and provide enough information to develop conceptual opinions of probable cost under Task 3.9. The layouts will be based on the design criteria developed in previous tasks and assumptions typically made at the conceptual level. The OWNER shall provide any previously collected geotechnical or survey information. For the purposes of this conceptual design, the ENGINEER will select representative equipment manufacturers as necessary to complete the task.
 - 3.7.1. Jackson Springs Complex – The Jackson Springs Complex shall be designed with the capability of treating up to 8.0 MGD of water from any combination of the Jackson Springs Infiltration Gallery, the Cleghorn Water Users Association, or Rapid Creek utilizing microfiltration/ultrafiltration technologies. The facility shall be designed to pump treated water into two of the City’s distribution pressure zones with low service pumps designed to transfer water to the City’s Low Level pressure zone, and high service pumps to transfer water to the City’s Canyon Lake High Level pressure zone or directly to the Southwest Zone. The intake structure will be included in the conceptual design and conceptual opinion of probable cost assuming a location next to the infiltration gallery. Note that no geotechnical or survey information is currently available, so conceptual designs may be subject to change based on geotechnical/survey information obtained at a later date.

- 3.7.2. Mountain View Surface Water Treatment Plant (Retrofit) – The retrofit shall be designed to meet the recommended sizing from Task 3.6 utilizing microfiltration/ultrafiltration technologies. All major piping and equipment will be sized to meet the 2040 water needs. In addition, the plant will be designed in such a manner as to treat gallery water from the City’s Girl Scouts and Meadowbrook galleries. It is anticipated that as long as these galleries fall under the EPA’s ground water classification that the water could be disinfected, fluoride could be added, and the water added to the clearwell at the treatment plant. However, the plant should be equipped to introduce this water at the head of the plant (prior to filtration) in the event of reclassification as GWUDI. The retrofit design will include necessary improvements to the control room and laboratory, but will not include any improvements to administrative areas or offices.
- 3.7.3. Mountain View Surface Water Treatment Plant (New) – The design of a new facility within the existing property lines shall be evaluated. If the facility can be sited in accordance with Army Corp of Engineers requirements with regard to floodplain, a conceptual design will be prepared with similar parameters as the retrofit. For this scenario, the ENGINEER will make recommendations with regard to demolition of any existing facilities. Note that it is assumed that the existing administrative and office areas would continue to be used in this scenario.
- 3.8. Provide Opinion of Property Acquisition Costs – *[The ENGINEER will not proceed with this task without a task specific notice to proceed]*. The ENGINEER shall utilize a subconsultant experienced in commercial appraisals in Rapid City to provide an opinion of property acquisition costs for the 5 parcels (totaling 3.64 acres) recommended for purchase in the letter to Mr. Titus dated November 17, 2006. The cost opinion will be based solely on the commercial appraisal methods and consider the value of the dwellings and land. Other factors, including the owner’s willingness to sell, will not be considered in the opinion.
- 3.9. Prepare Conceptual Opinions of Probable Cost – The ENGINEER will provide an opinion of conceptual cost for the proposed treatment plant upgrade alternatives based on the conceptual layouts. The conceptual opinion of cost is based on the ENGINEER’s experience and judgement and will be used to establish a budget for the project and to make decisions for final design that may include cost considerations. The opinion will include the land acquisition costs and demolition of existing facilities will be included in the cost opinion. The opinion of cost may not reflect the actual value of bids received based on the final bid documents, since the opinion is conceptual and the ENGINEER does not have control over escalating construction costs or factors used by contractors in preparing their bids.

Jackson Springs Complex – The cost opinions shall include:

- The 8.0 MGD treatment facility with clearwell and finished water pumping.
- Structural improvements to the Jackson Springs Infiltration Gallery pump station as recommended in the 2007 Facility Plan or construction of a new pump station to an adjacent location not in the floodplain.
- Rehabilitation of the Cleghorn Facility and addition of pump station (if necessary).
- Demolition of existing facilities.
- An 8 MGD raw water intake to be located upstream of Jackson Springs (assume no property acquisition costs).

- Raw water transmission lines to the treatment facility from the infiltration gallery/pump station, intake structure, and Cleghorn facility.
- Finished water distribution improvements to allow tie in to two pressure zones. The ENGINEER will determine the conceptual firm pump capacity required to each pressure zone.

Mountain View Surface Water Treatment Plant (retrofit or new) – The cost opinions shall include:

- The treatment facility sized per Task 3.6 with an expanded clearwell and finished water pumping.
 - Yard piping to allow for Girl Scouts and Meadowbrook Infiltration Galleries to be delivered to the head of the plant or the clearwell. Note that piping will not extend beyond the property line for this estimate.
 - Demolition of existing facilities only to the extent necessary to accommodate the expansion or new facility.
 - Finished water distribution improvements to allow tie in to two pressure zones (as is done in existing facility). ENGINEER will determine the conceptual firm pump capacity required to each zone.
- 3.10. Evaluate Retrofit vs. New Surface WTP – The ENGINEER will conduct analyses as necessary and provide a recommendation as to whether the City should retrofit the existing water treatment plant or build a new surface water treatment plant at the same location.
- 3.11. Evaluate Staffing & Training Needs – The ENGINEER will prepare a written summary (to be included in the final report) of the current and future water treatment operator staffing requirements at the City of Rapid City and identify any operator certification that will be required upon completion of the water treatment plant upgrades.
- 3.12. Develop Conceptual Design & Construction Schedules – The ENGINEER will prepare a conceptual schedule for design and construction of the two water treatment plant facility upgrades (Jackson Springs Complex & Mountain View Surface Water Treatment Plant). For the purposes of this task, it will be assumed that the membrane equipment will be prepurchased by the OWNER. Note that the City's desire is to meet a construction completion date of March 2011.
- 3.13. Develop Bidding Recommendations – The ENGINEER will provide a recommendation for prepurchase of major equipment, prequalification of contractors, and bidding of construction including whether the upgrades at the two facilities should be bid as one or two projects.
4. **Potential Funding Options** - The ENGINEER will perform a funding analysis of the capital expenditures for the water treatment plant upgrades based on the Conceptual Opinion of Probable Costs developed under Task 3.9. This analysis will include three options for assessing the impact of capital requirements including revenue financing, bond financing, and grants for financing a portion of the capital requirements. The grant financing alternatives could include both federal and state funding. The analysis does not include any evaluation of project phasing options, various project delivery method options, and or any variation of implementation schedules.

- 4.1. Kick-Off Conference Call – Prior to completing the evaluation, the ENGINEER will conduct a conference call with the OWNER to discuss the funding options and to request and/or review data, review the scope, and develop assumptions.
- 4.2. Research Federal & State Funding Options – The ENGINEER will conduct research to identify potential sources of funding on the Federal and State level, including the South Dakota State Revolving Fund (SRF) program and any grant programs available to municipalities in South Dakota.
- 4.3. Prepare Brochure for Delegation – The ENGINEER will prepare a tri-fold brochure for the City to use when meeting with delegates. The brochure will provide a description of the project and discuss the importance of upgrading the City’s water treatment facilities. Any information obtained by the City when meeting with congressional delegates will be shared with the ENGINEER for consideration in completing the analysis of potential funding options.
- 4.4. Coordinate Meetings with South Dakota Congressional Delegates – *[The ENGINEER will not proceed with this task without a task specific notice to proceed]*. The ENGINEER will determine the potential for congressional assistance by contacting the Rapid City offices of the three congressional delegates and setting up a meeting with the staff of each delegate to include the ENGINEER and OWNER’s representative. The ENGINEER will prepare and present a brief presentation to the delegates (or their staff) and obtain information on the potential for the OWNER to receive funding through congressional appropriations. It is assumed that the three meetings will all be held in Rapid City and will be accomplished in one trip.
- 4.5. Develop Financing Alternatives and Assess Impacts on Rates – The ENGINEER will prepare a summary of the potential funding sources to include up to three scenarios for further consideration by the OWNER. The ENGINEER will conduct an analysis of the proposed financing alternatives to include identification of overall level of revenue increase expected under each option. (Note that this does not include the completion of a rate study.) The evaluation will take into account the following information in order to allow Rapid City to make an informed decision as to how to proceed:
 - Total capital project costs (based on Task 3.9)
 - Inflation
 - Financing mechanisms
- 4.6. Develop Opinion of Funding Alternatives – The ENGINEER will prepare a written summary of the alternatives and impacts, and provide guidelines for the OWNER to determine the best alternative to pursue. The written summary will be provided to the OWNER for review and will become part of the final report.

5. Prepare Final Report

- 5.1. Prepare Draft Report – Prepare and submit five (5) copies of the Draft Report to the OWNER. The OWNER will review the report and provide comments to the ENGINEER which will be discussed and incorporated into the report.

- 5.2. Prepare Executive Summary – Prepare and submit five (5) copies of a draft Executive Summary for the Final Report. The Executive Summary will be a stand-alone document intended for the non-technical reader interested in reviewing the recommendations. The OWNER will provide review comments to the ENGINEER which will be discussed and incorporated into the Executive Summary.
- 5.3. QA/QC – Provide an overall QA/QC review of the draft Final Report in accordance with ENGINEER’s quality control program. Resolve QA/QC comments and questions.
- 5.4. Prepare Final Report – Following the OWNER’s review, the QA/QC review, and incorporation of comments, the ENGINEER will prepare and submit the Final Report and Executive Summary in accordance with the Deliverables Section of this Contract.
- 5.5. Council Meetings to Present Source Water Management Plan – The ENGINEER will prepare a brief presentation of the Source Water Management Plan and attend up to two Water Advocacy Task Force meetings and one City Council meeting to present the plan.
- 5.6. Meetings to Present Conceptual Design Recommendations – The ENGINEER will attend up to five (5) meetings to present the conceptual design recommendations. These meetings may include public meetings, Council meetings, Water Advocacy Task Force meetings, or presentations to City staff. The OWNER will be responsible for any advertising of meetings and coordination of meeting location. It is anticipated that these meetings will occur after completion of all other deliverables. The ENGINEER will provide presentations up to one hour in length regarding the conceptual designs for the water treatment plant upgrades.
- 5.7. Meetings to Present Funding Alternatives – The ENGINEER will attend one (1) meeting to present the funding alternatives analysis (developed under Task 4) to the City Council. It is anticipated that this meeting will occur after completion of all deliverables in Task 4.

RESPONSIBILITIES OF OWNER

The OWNER shall provide the following:

Assistance by placing at ENGINEER’s disposal all available information pertinent to the assignment including historical water use data, water rights documentation, water quality data, survey data, geotechnical reports, as-built drawings, physical data on existing facilities, and relevant correspondence as required and/or requested by ENGINEER. ENGINEER shall rely on information made available by the OWNER as accurate without independent verification. In addition, the OWNER shall assist in schedule coordination of meetings, workshops, and field services with City to ensure the objectives can be completed in a timely manner.

DELIVERABLES

The OWNER will be provided deliverables as outlined in the Scope of Services. Unless otherwise specified, any draft copies for review by the OWNER will be provided in electronic (.pdf) format. One

final electronic copy (on CD) and twenty-five final hard copies will be provided. The City intends to distribute the hard copies as follows:

- City Council – 11 copies
- Water Advocacy Task Force – 9 copies
- City Staff – 5 copies

Reuse of Documents: All documents prepared or furnished by ENGINEER (and ENGINEER's independent professional associates or engineers) pursuant to this Agreement are instruments of service in respect of the Project, and ENGINEER shall have the ownership and property interest therein whether or not the Project is completed. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at OWNER'S sole risk and without liability or legal exposure to ENGINEER, or to ENGINEER's independent professional associates or engineers, and OWNER shall indemnify and hold harmless ENGINEER and ENGINEER's independent professional associates and engineers from and against all claims, damages, losses, and expenses, including attorneys' fees arising out of or resulting therefrom. Any such verification or adaptation will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

Electronic Media: Any electronic media (computer disks, tapes, and similar items) furnished with respect to ENGINEER's services are for OWNER'S information and convenience only. Such media are not to be considered part of ENGINEER'S instruments of service. (Due to the potential that information contained in electronic media can be modified by OWNER or others, ENGINEER, at its option, may remove all indicia of ENGINEER's ownership and involvement from each electronic display.) ENGINEER shall not be liable for loss or damage directly or indirectly, arising out of use of electronic media including, but not limited to, any loss of business or incidental or consequential damage. OWNER shall assume all risk and release, indemnify, and hold harmless ENGINEER, its officers, directors, employees, servants, agents, successors, and assigns, from and against each and every claim or cause of action that OWNER or others may have or which may arise in the future respecting use of the electronic media.

TIME OF SERVICE

ENGINEER will proceed with providing the services set forth herein immediately upon execution of this Agreement. Assuming a notice to proceed by December 3, 2007, the Phase 2A and Phase 2B services will be completed by April 22, 2008, with the exception of Tasks 2.4 and 5.5, which will be completed by June 31, 2008. City review of documents will be accomplished within a period of three weeks or less.

LUMP SUM (PHASE 2A)

A. Amount of Payment (Phase 2A):

1. For services performed in Phase 2A, OWNER shall pay ENGINEER the sum of Eighty-Seven Thousand Six-Hundred Fifty Dollars (\$87,650).

COST REIMBURSIBLE NOT TO EXCEED (PHASE 2B)

A. Amount of Payment (Phase 2B):

1. For services performed in Phase 2B, OWNER shall pay ENGINEER the sum of amounts determined as follows:
 - a. For time spent by personnel, payment at the hourly rates indicated on **Exhibit A**. Such rates include overhead and profit and are effective through Phase 2B of this project.
 - b. For expenses incurred by ENGINEER, such as authorized travel and subsistence including airfare, food, lodging, automobile rental, commercial services, and incidental expenses, the cost to ENGINEER.
 - c. For reproduction, printing, long-distance telephone calls, facsimile transmissions, company vehicle usage, testing apparatus, computer services and computer-assisted drafting (CAD), amounts will be charged according to the ENGINEER's standard rates as identified in **Exhibit B**. Engineer's Standard rates are updated annually on the first day of each calendar year.
 - d. For professional services rendered by others as subcontractor(s) to ENGINEER will be billed at the cost to ENGINEER plus 10 percent.
2. Total payment for the Scope of Services described herein shall not exceed Three Hundred Thirty-One Thousand Seven Hundred Thirty-One Dollars (\$331,731) without written approval of OWNER.
3. ENGINEER shall not begin work on any phase of the project without written authorization by the OWNER.

TERMS AND CONDITIONS

The attached Terms and Conditions for Professional Services is incorporated and made a part of this Agreement.

BURNS & MCDONNELL ENGINEERING CO.

ACCEPTED:

ATTEST:

By _____

By _____

Title Vice President

Title Principal

Date _____

Date _____

CITY OF RAPID CITY

ACCEPTED:

ATTEST:

By _____

By _____

Title Mayor

Title Finance Officer

Date _____

Date _____

REVIEWED:

By _____

Title Project Manager

Date _____

EXHIBIT A: SCHEDULE OF HOURLY PROFESSIONAL SERVICE BILLING RATES

| Position Classification | Classification Level | Hourly Billing Rate |
|-------------------------|----------------------|---------------------|
| General Office | 5 | \$54.00 |
| Technician | 6 | \$58.00 |
| Assistant | 7 | \$68.00 |
| | 8 | \$94.00 |
| | 9 | \$104.00 |
| Staff | 10 | \$114.00 |
| | 11 | \$126.00 |
| Senior | 12 | \$136.00 |
| | 13 | \$150.00 |
| Associate | 14 | \$162.00 |
| | 15 | \$174.00 |
| Principal | 16 | \$179.00 |
| | 17 | \$187.00 |

BMR908A (Projected)

Notes:

1. Position classifications listed above refer to the firm's internal classification system for employee compensation. For example, "Associate", "Senior", etc., refer to such positions as "Associate Engineer", "Senior Architect", etc.
2. The hourly rates shown above are effective for services through completion of the design and bidding phase of the contract, and are subject to revision thereafter.
3. For services rendered by others such as subcontractors, the client shall pay the cost to Burns & McDonnell plus 10%.
4. Monthly invoices will be submitted for payment covering services and expenses during the preceding month. Invoices are due upon receipt.

EXHIBIT B - SCHEDULE OF REIMBURSABLE EXPENSES

| Schedule of Reimbursable Expenses | | | | | | | | | |
|-----------------------------------|---|------------------------|--------------|-------------------------------|--------------|--------------------------|--------------|------------------------|--------------|
| Description | Unit Cost | | | | | | | | |
| Personal Mileage: | \$0.485 | | | | | | | | |
| Reproduction/Printing: | <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">8.5"x 11" Copies White</td> <td style="text-align: right;">\$0.09/sheet</td> </tr> <tr> <td>22" x 34" Drawings White Bond</td> <td style="text-align: right;">\$0.93/sheet</td> </tr> <tr> <td>22" x 34" Drawings Mylar</td> <td style="text-align: right;">\$9.90/sheet</td> </tr> <tr> <td>8.5"x 11" Copies Color</td> <td style="text-align: right;">\$1.00/sheet</td> </tr> </table> | 8.5"x 11" Copies White | \$0.09/sheet | 22" x 34" Drawings White Bond | \$0.93/sheet | 22" x 34" Drawings Mylar | \$9.90/sheet | 8.5"x 11" Copies Color | \$1.00/sheet |
| 8.5"x 11" Copies White | \$0.09/sheet | | | | | | | | |
| 22" x 34" Drawings White Bond | \$0.93/sheet | | | | | | | | |
| 22" x 34" Drawings Mylar | \$9.90/sheet | | | | | | | | |
| 8.5"x 11" Copies Color | \$1.00/sheet | | | | | | | | |
| Long Distance Telephone: | Cost | | | | | | | | |
| Postage: | Cost | | | | | | | | |
| Travel Expenses: | | | | | | | | | |
| Airfare: | Cost | | | | | | | | |
| Lodging: | Cost | | | | | | | | |
| Meals: | Cost | | | | | | | | |
| Rental Car: | Cost | | | | | | | | |
| Vehicle Expense: | | | | | | | | | |
| Sedan (4-door) | \$58/day + \$0.27/mile | | | | | | | | |
| SUV – 4WD | \$65/day + \$0.33/mile | | | | | | | | |

Total of billable hours plus reimbursable expenses shall not exceed the maximum Cost Reimbursable Not to Exceed Amount allowed under the contract, without a written amendment executed by the parties.

BURNS & MCDONNELL ENGINEERING COMPANY, INC.
TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

Project: CITY OF RAPID CITY WATER TREATMENT PLANT UPGRADES Date of Letter, Proposal or Agreement: _____

Client: CITY OF RAPID CITY, SOUTH DAKOTA

Client Signature: _____

1. SCOPE OF SERVICES

For the above-referenced Project, Burns & McDonnell Engineering Company, Inc. ("BMCD") will perform the services set forth in the above-referenced Letter, Proposal or Agreement, in accordance with these Terms and Conditions. BMCD has relied upon the information provided by Client in the preparation of the Proposal, and shall rely on the information provided by or through Client during the execution of this Project as complete and accurate without independent verification.

2. PAYMENTS TO BMCD

A. Compensation will be as stated in the above-referenced Letter, Proposal or Agreement. Statements will be in BMCD's standard format and are payable upon receipt. Time is of the essence in payment of statements, and timely payment is a material part of the consideration of this Agreement. A late payment charge will be added to all amounts not paid within 30 days of statement date and shall be calculated at 1.5 percent per month from statement date. Client shall reimburse any costs incurred by BMCD in collecting any delinquent amount, including reasonable attorney's fees. If a portion of BMCD's statement is disputed, Client shall pay the undisputed portion by the due date. Client shall advise BMCD in writing of the basis for any disputed portion of any statement.

B. Taxes as may be imposed on professional consulting services by state or local authorities shall be in addition to the payment stated in the above-referenced Letter, Proposal or Agreement.

3. INSURANCE

A. During the course of performance of its services, BMCD will maintain Worker's Compensation insurance with limits as required by statute, Employer's Liability insurance with limits of \$1,000,000 and Commercial General Liability and Automobile Liability insurance each with combined single limits of \$1,000,000. *PROFESSIONAL LIABILITY IN THE AMOUNT OF \$1,000,000 PER CLAIM.*

B. If the Project involves on-site construction, construction contractors shall be required to provide (or Client may provide) Owner's Protective Liability Insurance naming Client as a Named Insured and BMCD as an Additional Insured or to endorse Client and BMCD using ISO form CG 20 10 11 85 endorsement or its equivalent as Additional Insureds on all construction contractor's liability insurance policies covering claims for personal injuries and property damage in at least the amounts required of BMCD in 3 A above. Construction contractors shall be required to provide certificates evidencing such insurance to Client and BMCD. Contractor's compensation shall include the cost of such insurance including coverage for contractual and indemnification obligations herein.

C. Client and BMCD release each other and waive all rights of subrogation against each other and their officers, directors, agents, or employees for damage covered by property insurance during and after the completion of BMCD's services. A provision similar to this shall be incorporated into all construction contracts entered into by Client, and all construction contractors shall be required to provide waivers of subrogation in favor of Client and BMCD for damage covered by any construction contractor's property insurance.

4. INDEMNIFICATION

A. To the extent allowed by law, Client will require all construction contractors to indemnify, defend and hold harmless Client and BMCD from any and all loss where loss is caused or alleged to be caused in whole or in part by the construction contractors, their employees, agents, subcontractors or suppliers.

B. If this Project involves construction and BMCD does not provide consulting services during construction including, but not limited to, on-site monitoring, site visits, site observation, shop drawing review and/or design clarifications, Client agrees to indemnify and hold harmless BMCD from any liability arising from this Project or Agreement, except to the extent caused by BMCD's negligence.

THE CONSTRUCTION ACTIVITIES UNDERTAKEN FOR THIS PROJECT, EXCEPT TO THE EXTENT SUCH LIABILITY IS CAUSED BY BURNS & MCDONNELL'S NEGLIGENCE.
(continued on reverse side)
BMCD Consulting T&C Denver Rev1

5. PROFESSIONAL RESPONSIBILITY - LIMITATION OF REMEDIES

A. BMCD will exercise reasonable skill, care and diligence in the performance of its services and will carry out its responsibilities in accordance with customarily accepted professional practices. If BMCD fails to meet the foregoing standard, BMCD will perform at its own cost, the professional services necessary to correct errors and omissions reported to BMCD in writing within one year from the completion of BMCD's services for the Project. No warranty, express or implied, is included in this Agreement or regarding any drawing, specification, or other work product or instrument of service.

~~B. In no event will BMCD be liable for any special, indirect or consequential damages including, without limitation, damages or losses in the nature of increased Project costs, loss of revenue or profit, lost production, claims by customers of Client or for governmental fines or penalties.~~

C. BMCD's aggregate liability for all damages connected with its services for the Project not excluded by the preceding subparagraph, whether or not covered by BMCD's insurance, will not exceed the greater of \$100,000 or the compensation paid for BMCD's services.

\$1,000,000 OR BMCD'S INSURANCE LIMIT AS STATED IN SECTION 3.
D. These mutually negotiated obligations and remedies stated in this Paragraph 5, Professional Responsibility - Limitation of Remedies, are the sole and exclusive obligations of BMCD and remedies of Client, whether liability of BMCD is based on contract, warranty, strict liability, tort (including negligence), indemnity or otherwise.

6. PERIOD OF SERVICE AND SCHEDULE

The provisions of this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion of the services stated in the Proposal. BMCD's obligation to render services hereunder will extend for a period, which may reasonably be required for the completion of said services. BMCD shall make reasonable efforts to comply with deliverable schedules (if any) and consistent with BMCD's professional responsibility.

7. COMPUTER PROGRAMS OR MODELS

Any use, development, modification, or integration by BMCD of computer models or programs does not constitute ownership or a license to Client to use or modify such computer models or programs.

8. ELECTRONIC MEDIA AND DATA TRANSMISSIONS

A. Any electronic media (computer disks, tapes, etc.) or data transmissions furnished (including Project Web Sites or CAD file transmissions) are for Client information and convenience only. Such media or transmissions are not to be considered part of BMCD's instruments of service. BMCD, at its option, may remove all indicia of its ownership and involvement from each electronic display.

B. BMCD shall not be liable for loss or damage directly or indirectly, arising out of Client's use of electronic media or data transmissions.

9. DOCUMENTS

A. All documents prepared by BMCD pursuant to this Agreement are instruments of service in respect of the Project specified herein. They are not intended or represented to be suitable for reuse by Client or others in extensions of the Project beyond that now contemplated or on any other Project. Any reuse, extension, or completion by Client or others without written verification, adaptation, and permission by BMCD for the specific purpose intended will be at Client's sole risk and without liability or legal exposure to BMCD.

B. In the event that BMCD is to reuse, copy or adapt all or portions of reports, plans or specifications prepared by others, Client represents that Client either possesses or will obtain permission and necessary rights in copyright, patents or other proprietary rights and will be responsible for any infringement claims by others. Client warrants the completeness, accuracy and efficacy the information, data, and design

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provided by or through Client (including prepared for Client by others), for which BMCD shall rely on to perform and complete its services.

10. ESTIMATES, SCHEDULES, FORECASTS, AND PROJECTIONS

Estimates, schedules, forecasts, and projections prepared by BMCD relating to loads, interest rates and other financial analysis parameters, construction costs and schedules, operation and maintenance costs, equipment characteristics and performance, and operating results are opinions based on BMCD's experience, qualifications and judgment as a professional. Since BMCD has no control over weather, cost and availability of labor, material and equipment, cost of fuel or other utilities, labor productivity, construction contractor's procedures and methods, unavoidable delays, construction contractor's methods of determining prices, economic conditions, government regulations and laws (including the interpretation thereof), competitive bidding or market conditions and other factors affecting such estimates or projections, BMCD does not guarantee that actual rates, costs, quantities, performance, schedules, etc., will not vary significantly from estimates and projections prepared by BMCD.

11. POLLUTION

In view of the uncertainty involved in investigating and recommending solutions to environmental problems and the abnormal degree of risk of claims imposed upon BMCD in performing such services, notwithstanding the responsibility of BMCD set forth in Paragraph 5.A; To the maximum extent allowed by law, Client agrees to release, defend, indemnify and hold harmless BMCD and its officers, directors, employees, agents, consultants and subcontractors from all liability, claims, demands, damages, losses, and expenses, including, but not limited to, claims of Client and other persons and organizations, reasonable fees and expenses of attorneys and consultants, and court costs, except where there has been a final adjudication that the damages were caused by BMCD's willful disregard of its obligations under this Agreement. Such indemnification includes claims arising out of or in any way relating to the actual, alleged, or threatened dispersal, escape, or release of, or failure to detect or contain, chemicals, wastes, liquids, gases or any other material, irritant, contaminant or pollutant.

12. ON-SITE SERVICES

A. Project site visits by BMCD during investigation, observation, construction or equipment installation, or the furnishing of Project representatives shall not make BMCD responsible for construction means, methods, techniques, sequences or procedures; for construction safety precautions or programs; or for any construction contractor(s) failure to perform its work in accordance with the contract documents.

B. Client shall disclose to BMCD the location and types of any known or suspected toxic, hazardous or chemical materials or wastes existing on or near the premises upon which work is to be performed by BMCD's employees or subcontractors. If any hazardous wastes not identified by Client are discovered after a Project is undertaken, Client and BMCD agree that the scope of services, schedule and compensation may be adjusted accordingly. Client agrees to release BMCD from all damages related to any pre-existing pollutant, contaminant, toxic, or hazardous substance at the site.

13. CHANGES

Client shall have the right to make changes within the general scope of BMCD's services, with an appropriate change in compensation and schedule, upon execution of a mutually acceptable amendment or change order signed by authorized representatives of Client and BMCD.

14. TERMINATION

Services may be terminated by Client or BMCD by seven (7) days' written notice in the event of substantial failure to perform in accordance with the terms hereof by the other party through no fault of the terminating party. If so terminated, Client shall pay BMCD all amounts due BMCD for all services properly rendered and expenses incurred to the date of receipt of notice of termination, plus reasonable costs incurred by BMCD in terminating the services. In addition, Client may terminate the services for Client's convenience upon payment of twenty percent of the yet unearned and unpaid estimated, lump sum, or not-to-exceed fee, as applicable.

15. DISPUTES, NEGOTIATIONS, MEDIATION

A. If a dispute arises relating to the performance of the services to be provided and should that dispute result in litigation, it is agreed that the substantially prevailing party (as determined in equity by the court) shall be entitled to recover all reasonable costs of litigation, including staff time, court costs, attorney's fees and other related expenses.

~~B. The parties shall participate in good faith negotiations to resolve any and all disputes. Should negotiations fail, the parties agree to submit to and participate in a third-party facilitated mediation as a condition precedent to resolution by litigation. Unless otherwise agreed to, mediation shall be conducted under the rules of the American Arbitration Association.~~ PDF

C. Causes of action between the parties shall accrue, and applicable statutes of limitation shall commence to run the date BMCD's services are substantially complete.

16. WITNESS FEES

A. BMCD's employees shall not be retained as expert witnesses, except by separate written agreement.

B. Client agrees to pay BMCD pursuant to BMCD's then current schedule of hourly labor billing rates for time spent by any employee of BMCD responding to any subpoena by any party in any dispute as an occurrence witness or to assemble and produce documents resulting from BMCD's services under this Agreement.

17. CONTROLLING LAW AND VENUE

This Agreement shall be subject to, interpreted and enforced according to the laws of the State of Colorado, without regard to any conflicts of law provisions. Parties agree to submit to the exclusive venue and jurisdiction of the 48th Judicial District in the County of Douglas, State of Colorado, or the United States District Court for the District of Colorado. SOUTH VERMONT STATE OF SOUTH VERMONT, 7TH JUDICIAL CIRCUIT, PDF

18. RIGHTS AND BENEFITS - NO ASSIGNMENT

BMCD's services will be performed solely for the benefit of Client and not for the benefit of any other persons or entities. Neither Client nor BMCD shall assign or transfer interest in this Agreement without the written consent of the other. PENNINGTON COUNTY,

19. ENTIRE CONTRACT

These Terms and Conditions and the above-referenced Letter, Proposal or Agreement contain the entire agreement between BMCD and Client relative to BMCD's services for the Project herein. All previous or contemporaneous agreements, representations, promises and conditions relating to BMCD's services for the Project are superseded. Since terms contained in purchase orders do not generally apply to professional services, in the event Client issues to BMCD a purchase order, no preprinted terms thereon shall become part of this Agreement. Said purchase order documents, whether or not signed by BMCD, shall be considered only as an internal document of Client to facilitate administrative requirements of Client's operations.

20. SEVERABILITY

Any unenforceable provision herein shall be amended to the extent necessary to make it enforceable; if not possible, it shall be deleted and all other provisions shall remain in full force and affect.

- END -