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

Date: November 27, 2007

<b>Project Name &amp; Number:</b> Eik vale vvater R	ect Name & Number:	Elk Vale Water F
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CIP#:

50321

servoir

W07-1638

**Project Description:** 

Final design of the Elk Vale Low Level Reservoir and necessary piping and appurtenances in

accordance with the recommendations made in the October 2007 Preliminary Engineering Report

for the project.

Consultant:

Advanced Engineering and Environmental Services, Inc.

**Original** 

**Original** 

Original

**Contract Amount:** 

\$397,360.00

**Contract Date:** 

Nov. 21,2007

**Completion Date:** 

October 1, 2008

**Amendment Number:** 

**Amendment Description:** 

<b>Current Contract Amount:</b>		Current Completion Date:	
Change Requested:	•		
New Contract Amount:	\$0.00	New Completion Date:	

# **Funding Source This Request:**

Amount	Dept.	Line Item	Fund	Comments
\$397,360.00	934	4223	602	
\$397,360.00	Total			

Agreement Review & Approvals

Department Director

**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

Public Works Engineering Project Manager FINANCE OFFICE USE ONLY

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

Appropriation

Initials

Approved

Cash Flow

# AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES

# Elk Vale Low Level Water Reservoir Project No. W07-1638

THIS IS AN AGREEMENT effective as of <u>November 21, 2007</u> ("Effective Date") between <u>City of Rapid City, 300</u>

<u>Sixth Street, Rapid City, SD 57701</u> ("OWNER") and <u>Advanced Engineering and Environmental Services, Inc., 1815 Schafer</u>

<u>Street, Suite 301, Bismarck, ND 58501</u> ("ENGINEER").

OWNER intends to design and construct a water storage reservoir for the Low Level water service zone in the Elk Vale Road area ("Project"), as further described in Exhibit E (Project Description and Scope of Services). OWNER and ENGINEER in consideration of their mutual covenants as set forth herein agree as follows:

#### ARTICLE 1 - SERVICES OF ENGINEER

# 1.01 Scope

- A. ENGINEER shall provide the Basic and Additional Services set forth herein and in Exhibit A.
- B. Upon this Agreement becoming effective, ENGINEER is authorized to begin Basic Services as set forth in Exhibit A.
- C. If authorized by OWNER, ENGINEER shall furnish Resident Project Representative(s) with duties, responsibilities and limitations of authority as set forth in Exhibit D.

#### **ARTICLE 2 - OWNER'S RESPONSIBILITIES**

#### 2.01 General

A. OWNER shall have the responsibilities set forth herein and in Exhibit B.

#### **ARTICLE 3 - TIMES FOR RENDERING SERVICES**

# 3.01 General

- A. ENGINEER's services and compensation under this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion. Unless specific periods of time or specific dates for providing services are specified in this Agreement, ENGINEER's obligation to render services hereunder will be for a period which may reasonably be required for the completion of said services.
- B. If OWNER has requested changes in the scope, extent, or character of the Project, the time of performance of ENGINEER's services, rates, and compensation shall be adjusted equitably.
- C. For purposes of this Agreement the term "day" means a calendar day of 24 hours.

# 3.02 Suspension

- A. If OWNER fails to give prompt authorization to proceed with any phase of services after completion of the immediately preceding phase, or if ENGINEER's services are delayed through no fault of ENGINEER, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement.
- B. If ENGINEER's services, as described in Exhibit A, are delayed or suspended in whole or in part by OWNER, ENGINEER shall be entitled to equitable adjustment of rates and amounts of compensation provided for elsewhere in this Agreement to reflect, reasonable costs incurred by ENGINEER in connection with, among other things, such delay or suspension and reactivation.
- C. If OWNER's services, as described in Exhibit B, are delayed or suspended in whole or in party by ENGINEER, OWNER shall be entitled to equitable adjustment of rates and amounts of compensation provided for elsewhere in this Agreement to reflect, reasonable costs incurred by OWNER in connection with, among other things, such delay or suspension and reactivation.

#### **ARTICLE 4 - PAYMENTS TO ENGINEER**

# 4.01 Methods of Payment for Services and Reimbursable Expenses of ENGINEER

- A. For Basic Services. OWNER shall pay ENGINEER for Basic Services performed or furnished under Exhibit A, Part 1, as set forth in Exhibit C.
- B. For Additional Services. OWNER shall pay ENGINEER for Additional Services performed or furnished under Exhibit A, Part 2, as set forth in Exhibit C.
- C. For Reimbursable Expenses. In addition to payments provided for in paragraphs 4.01.A, Construction and Post-Construction, and 4.01.B, OWNER shall pay ENGINEER for Reimbursable Expenses incurred by ENGINEER and ENGINEER's Consultants as set forth in Exhibit C.

# 4.02 Other Provisions Concerning Payments

A. Preparation of Invoices. Invoices will be prepared in accordance with ENGINEER's standard invoicing practices and will be submitted to OWNER by ENGINEER, unless otherwise agreed. The amount billed in each invoice will be calculated as set forth in Exhibit C.

- B. Payment of Invoices. Invoices are due and payable within 45 days of receipt. If OWNER fails to make any payment due ENGINEER for services and expenses within 45 days after receipt of ENGINEER's invoice therefor, the amounts due ENGINEER will be increased at the rate of 1.0% per month (or the maximum rate of interest permitted by law, if less) from said forty-fifth day. In addition, ENGINEER may, after giving seven days written notice to OWNER, suspend services under this Agreement until ENGINEER has been paid in full all amounts due for services, expenses, and other related charges. Payments will be credited first to interest and then to principal.
- C. Disputed Invoices. In the event of a disputed or contested invoice, only that portion so contested may be withheld from payment, and the undisputed portion will be paid. IN the event of such, partial payment of the undisputed portion shall in no way be considered a waiver of the disputed portion.

# D. Payments Upon Termination.

1. In the event of any termination under paragraph 6.06, ENGINEER will be entitled to invoice OWNER and will be paid in accordance with Exhibit C for all services performed or furnished and all Reimbursable Expenses incurred through the effective date of termination.

#### 2. Not Used.

- E. Records of ENGINEER's Costs. Records of ENGINEER's costs pertinent to ENGINEER's compensation under this Agreement shall be kept in accordance with generally accepted accounting practices. To the extent necessary to verify ENGINEER's charges and upon OWNER's timely request, copies of such records will be made available to OWNER at cost.
  - F. Not Used.
  - G. Not Used.

#### **ARTICLE 5 - OPINIONS OF COST**

# 5.01 Opinions of Probable Construction Cost

A. ENGINEER's opinions of probable Construction Cost provided for herein are to be made on the basis of ENGINEER's experience and qualifications and represent ENGINEER's best judgment as an experienced and qualified professional generally familiar with the industry. However, since ENGINEER has no control over the cost of

labor, materials, equipment, or services furnished by others, or over the Contractor's methods of determining prices, or over competitive bidding or market conditions, ENGINEER cannot and does not guarantee that proposals, bids, or actual Construction Cost will not vary from opinions of probable Construction Cost prepared by ENGINEER. If OWNER wishes greater assurance as to probable Construction Cost, OWNER shall employ an independent cost estimator as provided in Exhibit B.

# 5.02 Designing to Construction Cost Limit

#### A. Not Used.

#### 5.03 Opinions of Total Project Costs

A. ENGINEER assumes no responsibility for the accuracy of opinions of Total Project Costs.

#### **ARTICLE 6 - GENERAL CONSIDERATIONS**

#### 6.01 Standards of Performance

- A. The standard of care for all professional engineering and related services performed or furnished by ENGINEER under this Agreement will be the care and skill ordinarily used by members of ENGINEER's profession practicing under similar circumstances at the same time and in the same locality. ENGINEER makes no warranties, express or implied, under this Agreement or otherwise, in connection with ENGINEER's services.
- B. ENGINEER shall be responsible for the technical accuracy of its services and documents resulting therefrom, and OWNER shall not be responsible for discovering deficiencies therein.
- C. ENGINEER shall perform or furnish professional engineering and related services in all phases of the Project to which this Agreement applies. ENGINEER shall serve as OWNER's prime professional for the Project. ENGINEER may employ such ENGINEER's Consultants as ENGINEER deems necessary to assist in the performance or furnishing of the services. ENGINEER shall not be required to employ any ENGINEER's Consultant unacceptable to ENGINEER.

- D. ENGINEER and OWNER shall comply with applicable Laws or Regulations and OWNER-mandated standards. This Agreement is based on these requirements as of its Effective Date. Changes to these requirements after the Effective Date of this Agreement may be the basis for modifications to OWNER's responsibilities or to ENGINEER's scope of services, times of performance, or compensation.
- E. OWNER shall be responsible for all requirements, programs, instructions, reports, data, and other information furnished by OWNER to ENGINEER pursuant to this Agreement. ENGINEER may at it's own risk, use such requirements, reports, data, and information in performing or furnishing services under this Agreement.
- F. OWNER shall make decisions and carry out its other responsibilities in a timely manner.

#### G. Not Used.

- H. ENGINEER shall not be required to sign any documents, no matter by whom requested, that would result in the ENGINEER's having to certify, guarantee or warrant the existence of conditions whose existence the ENGINEER cannot ascertain. OWNER agrees not to make resolution of any dispute with the ENGINEER or payment of any amount due to the ENGINEER in any way contingent upon the ENGINEER's signing any such certification.
  - I. Not Used.
  - J. Not Used.
  - K. Not Used.
  - L. Not Used.

# 6.02 Authorized Project Representatives

A. Contemporaneous with the execution of this Agreement, ENGINEER and OWNER shall designate specific individuals to act as ENGINEER's and OWNER's representatives with respect to the services to be performed or furnished by ENGINEER and responsibilities of OWNER under this Agreement. Such individuals shall have authority to transmit instructions, receive information, and render decisions relative to the Project on behalf of each respective party. Where South Dakota State law dictates, project decisions will be made by the Rapid City Common Council.

#### 6.03 Design without Construction Phase Services

- A. Should OWNER provide Construction Phase services with either OWNER's representatives or a third party, ENGINEER's Basic Services under this Agreement will be considered to be completed upon completion of the Final Design Phase or Bidding or Negotiating Phase as outlined in Exhibit A.
- B. It is understood and agreed that if ENGINEER's Basic Services under this Agreement do not include Project observation, or review of the Contractor's performance, or any other Construction Phase services, and that such services will be provided by OWNER, then OWNER assumes all responsibility for interpretation of the Contract Documents and for construction observation or review and waives any claims against the ENGINEER that may be in any way connected thereto.

#### 6.04 Use of Documents

- A. All Documents are instruments of service in respect to this Project, and ENGINEER shall retain an ownership and property interest therein (including the right of reuse at the discretion of the ENGINEER) whether or not the Project is completed.
- B. Copies of OWNER-furnished data are limited to the printed copies (also known as hard copies) that are delivered to the ENGINEER pursuant to Exhibit B. Files in electronic media format of text, data, graphics, or of other types that are furnished by OWNER to ENGINEER are only for convenience of ENGINEER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.
- C. Copies of Documents that may be relied upon by OWNER are limited to the printed copies (also known as hard copies) that are signed or sealed by the ENGINEER. Files in electronic media format of text, data, graphics, or of other types that are furnished by ENGINEER to OWNER are only for convenience of OWNER. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk.

- D. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. ENGINEER shall not be responsible to maintain documents stored in electronic media format after acceptance by OWNER.
- E. When transferring documents in electronic media format, ENGINEER makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by ENGINEER at the beginning of this Project.
- F. OWNER may make and retain copies of Documents for information and reference in connection with use on the Project by OWNER. Such Documents are not intended or represented to be suitable for reuse by OWNER or others on extensions of the Project or on any other project. Any such reuse or modification without written verification or adaptation by ENGINEER, as appropriate for the specific purpose intended, will be at OWNER's sole risk and without liability or legal exposure to ENGINEER or to ENGINEER's Consultants. OWNER shall indemnify and hold harmless ENGINEER and ENGINEER's Consultants from all claims, damages, losses, and expenses, including attorneys' fees arising out of or resulting therefrom.
- G. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- H. Any verification or adaptation of the Documents for extensions of the Project or for any other project will entitle ENGINEER to further compensation at rates to be agreed upon by OWNER and ENGINEER.

#### 6.05 Insurance

A. ENGINEER shall maintain insurance coverage for Workers' Compensation, General Liability, and Automobile Liability and will provide certificates of insurance to OWNER upon request.

#### B. Not Used.

C. OWNER shall require Contractor to purchase and maintain general liability and other insurance as specified in the Contract Documents and to cause ENGINEER and ENGINEER's Consultants to be listed as additional insureds with respect to such liability and other insurance purchased and maintained by Contractor for the Project

#### D. Not Used.

- E. All policies of property insurance shall contain provisions to the effect that ENGINEER's and ENGINEER's Consultants' interests are covered and that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder.
- F. At any time, OWNER may request that ENGINEER, at OWNER's sole expense, provide additional insurance coverage, increased limits, or revised deductibles. If so requested by OWNER, with the concurrence of ENGINEER, and if commercially available, ENGINEER shall obtain and shall require ENGINEER's Consultants to obtain such additional insurance coverage, different limits, or revised deductibles for such periods of time as requested by OWNER.

#### 6.06 Termination

A. The obligation to provide further services under this Agreement may be terminated:

#### 1. For cause.

a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party.

# b. By ENGINEER:

- 1) upon seven days written notice if ENGINEER believes that ENGINEER is being requested by OWNER to furnish or perform services contrary to ENGINEER's responsibilities as a licensed professional; or
- 2) upon seven days written notice if the ENGINEER's services for the Project are delayed or suspended for more than 90 days for reasons beyond ENGINEER's control.
- 3) ENGINEER shall have no liability to OWNER on account of such termination.

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c. Notwithstanding the foregoing, this Agreement will not terminate as a result of such substantial failure if the party receiving such notice begins, within seven days of receipt of such notice, to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt thereof; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.

#### 2. For convenience.

- a. By OWNER effective upon the receipt of notice by ENGINEER.
- B. The terminating party under paragraphs 6.06.A.1 or 6.06.A.2 may set the effective date of termination at a time up to 30 days later than otherwise provided to allow ENGINEER to demobilize personnel and equipment from the Site, to complete tasks whose value would otherwise be lost, to prepare notes as to the status of completed and uncompleted tasks, and to assemble Project materials in orderly files.
- C. In the event the Agreement is terminated for cause or for convenience by either party, ENGINEER shall deliver to OWNER all work products related to the project to date.

#### 6.07 Controlling Law

A. This Agreement is to be governed by the law of the State of South Dakota. Any legal action arising out of or relating to this Agreement shall be brought only in the Circuit Court of the State of South Dakota, Seventh Judicial Circuit, located in Rapid City, Pennington County, South Dakota.

#### 6.08 Successors, Assigns, and Beneficiaries

A. OWNER and ENGINEER each is hereby bound and the partners, successors, executors, administrators and legal representatives of OWNER and ENGINEER (and to the extent permitted by paragraph 6.08.B the assigns of OWNER and ENGINEER) are hereby bound to the other party to this Agreement and to the partners, successors, executors, administrators and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements and obligations of this Agreement.

- B. Neither OWNER nor ENGINEER may assign, sublet, or transfer any rights under or interest (including, but without limitation, moneys that are due or may become due) in this Agreement without the written consent of the other, except to the extent that any assignment, subletting, or transfer is mandated or restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- C. Unless expressly provided otherwise in this Agreement:
  - 1. Nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by OWNER or ENGINEER to any Contractor, Contractor's subcontractor, supplier, other individual or entity, or to any surety for or employee of any of them.
  - 2. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of OWNER and ENGINEER and not for the benefit of any other party. The OWNER agrees that the substance of the provisions of this paragraph 6.08,C shall appear in the Contract Documents.

# 6.09 Dispute Resolution

Not Used.

#### 6.10 Hazardous Environmental Condition

- A. OWNER represents to Engineer that to the best of its knowledge a Hazardous Environmental Condition does not exist.
- B. OWNER has disclosed to the best of its knowledge to ENGINEER the existence of all Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Material located at or near the Site, including type, quantity and location.
- C. If a Hazardous Environmental Condition is encountered or alleged, ENGINEER shall have the obligation to notify OWNER and, to the extent of applicable Laws and Regulations, appropriate governmental officials.

- D. It is acknowledged by both parties that ENGINEER's scope of services does not include any services related to a Hazardous Environmental Condition. In the event ENGINEER or any other party encounters a Hazardous Environmental Condition, ENGINEER may, at its option and without liability for consequential or any other damages, suspend performance of services on the portion of the Project affected thereby until OWNER: (i) retains appropriate specialist consultant(s) or contractor(s) to identify and, as appropriate, abate, remediate, or remove the Hazardous Environmental Condition; and (ii) warrants that the Site is in full compliance with applicable Laws and Regulations.
- E. OWNER acknowledges that ENGINEER is performing professional services for OWNER and that ENGINEER is not and shall not be required to become an "arranger," "operator," "generator," or "transporter" of hazardous substances, as defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1990 (CERCLA), which are or may be encountered at or near the Site in connection with ENGINEER's activities under this Agreement.
- F. If ENGINEER's services under this Agreement cannot be performed because of a Hazardous Environmental Condition, the existence of the condition shall justify ENGINEER's terminating this Agreement for cause on 30 days notice.

#### 6.11 Allocation of Risks

- A. Indemnification
  - 1. Not Used.
  - 2. Not Used.
- 3. To the fullest extent permitted by law, ENGINEER's total liability to OWNER and anyone claiming by, through, or under OWNER for any cost, loss, or damages caused in part by the negligence of ENGINEER and in part by the negligence of OWNER or any other negligent entity or individual, shall not exceed the percentage share that ENGINEER's negligence bears to the total negligence of OWNER, ENGINEER, and all other negligent entities and individuals.
  - 4. Not Used.
  - 5. Not Used.

#### 6.12 Limits of Liability

A. Notwithstanding any other provision of this Agreement, and to the fullest extent permitted by law, the total liability, in the aggregate, of ENGINEER and ENGINEER's officers, directors, partners, employees, agents, and ENGINEER's Consultants, and any of them, to OWNER and anyone claiming by, through, or under OWNER for any and all claims, losses, costs, or damages whatsoever arising out of, resulting from or in any way related to the Project or the Agreement from any cause or causes, including but not limited to the negligence, professional errors or omissions, strict liability or breach of contract, or warranty express or implied, of ENGINEER or ENGINEER's officers, directors, partners, employees, agents, or ENGINEER's Consultants, or any of them (hereafter "OWNER's Claims"), shall not exceed the total insurance proceeds paid on behalf of or to ENGINEER by ENGINEER's insurers in settlement or satisfaction of OWNER's Claims under the terms and conditions of ENGINEER's insurance policies applicable thereto (excluding fees, costs and expenses of investigation, claims adjustment, defense, and appeal).

#### 6.13 Notices

A. Any notice required under this Agreement will be in writing, addressed to the appropriate party at its address on the signature page and given personally, or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

#### 6.14 Survival

A. All express representations, indemnifications, or limitations of liability included in this Agreement will survive its completion or termination for any reason.

#### 6.15 Severability

A. Any provision or part of the Agreement held to be void or unenforceable under any Laws or Regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and ENGINEER, who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

#### 6.16 Waiver

A. Non-enforcement of any provision by either party shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Agreement.

#### 6.17 Headings

A. The headings used in this Agreement are for general reference only and do not have special significance.

#### **ARTICLE 7 – DEFINITIONS**

#### 7.01 Defined Terms

- A. Wherever used in this Agreement (including the Exhibits hereto) and printed with initial or all capital letters, the terms listed below have the meanings indicated, which are applicable to both the singular and plural thereof:
  - 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Documents.
  - 2. Additional Services-The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 2 of this Agreement.
  - 3. Agreement-This "Standard Form of Agreement between OWNER and ENGINEER for Professional Services," including those Exhibits listed in Article 8 hereof.
  - 4. Application for Payment—The form acceptable to ENGINEER which is to be used by Contractor in requesting progress or final payments for the completion of its Work and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
  - 5. Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
  - 6. Basic Services—The services to be performed for or furnished to OWNER by ENGINEER in accordance with Exhibit A, Part 1, of this Agreement.

- 7. Bid--The offer or proposal of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 8. Bidding Documents--The advertisement or invitation to Bid, instructions to bidders, the Bid form and attachments, the Bid bond, if any, the proposed Contract Documents, and all Addenda, if any.
- 9. Change Order--A document recommended by ENGINEER, which is signed by Contractor and OWNER to authorize an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Construction Agreement.
- 10. Construction Agreement--The written instrument which is evidence of the agreement, contained in the Contract Documents, between OWNER and Contractor covering the Work.
- 11. Construction Contract--The entire and integrated written agreement between the OWNER and Contractor concerning the Work.
- 12. Construction Cost—The cost to OWNER of those portions of the entire Project designed or specified by ENGINEER. Construction Cost does not include costs of services of ENGINEER or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement. Construction Cost is one of the items comprising Total Project Costs.
- 13. Contract Documents--Documents establish the rights and obligations of the parties engaged in construction and include the Construction Agreement between OWNER and Contractor, Addenda (which pertain to the Contract Documents), (including documentation Contractor's Bid accompanying the Bid and any post-Bid documentation submitted prior to the notice of award) when attached as an exhibit to the Construction Agreement, the notice to proceed, the bonds, appropriate certifications, the General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Construction Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and ENGINEER's written interpretations and clarifications

- issued on or after the Effective Date of the Construction Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 14. Contract Price—The moneys payable by OWNER to Contractor for completion of the Work in accordance with the Contract Documents and as stated in the Construction Agreement.
- 15. Contract Times--The numbers of days or the dates stated in the Construction Agreement to: (i) achieve Substantial Completion, and (ii) complete the Work so that it is ready for final payment as evidenced by ENGINEER's written recommendation of final payment.
- 16. Contractor--An individual or entity with whom OWNER enters into a Construction Agreement.
- 17. Correction Period.—The time after Substantial Completion during which Contractor must correct, at no cost to OWNER, any Defective Work, normally one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee or specific provision of the Contract Documents.
- 18. Defective--An adjective which, when modifying the word Work, refers to Work that is unsatisfactory, faulty, or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment.
- 19. Documents--Data, reports, Drawings, Specifications, Record Drawings, and other deliverables, whether in printed or electronic media format, provided or furnished in appropriate phases by ENGINEER to OWNER pursuant to this Agreement.
- 20. Drawings--That part of the Contract Documents prepared or approved by ENGINEER which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings are not Drawings as so defined.

- 21. Effective Date of the Construction Agreement—The date indicated in the Construction Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Construction Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 22. Effective Date of the Agreement--The date indicated in this Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 23. ENGINEER's Consultants--Individuals or entities having a contract with ENGINEER to furnish services with respect to this Project as ENGINEER's independent professional associates, consultants, subcontractors, or vendors. The term ENGINEER includes ENGINEER's Consultants.
- 24. Field Order--A written order issued by ENGINEER which directs minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
- 25. General Conditions-That part of the Contract Documents which sets forth terms, conditions, and procedures that govern the Work to be performed or furnished by Contractor with respect to the Project.
- 26. Hazardous Environmental Condition--The presence at the Site of Asbestos, PCB's, Petroleum, Hazardous Waste, or Radioactive Materials in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 27. Hazardous Waste—The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 28. Laws and Regulations; Laws or Regulations—Any and all applicable laws, rules, regulations, ordinances, codes, standards, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
  - 29. PCB's--Polychlorinated biphenyls.

- 30. Petroleum.—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 31. Radioactive Materials--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 32. Record Drawings--The Drawings as issued for construction on which the ENGINEER, upon completion of the Work, has shown changes due to Addenda or Change Orders and other information which ENGINEER considers significant based on record documents furnished by Contractor to ENGINEER and which were annotated by Contractor to show changes made during construction.
- 33. Reimbursable Expenses—The expenses incurred directly by ENGINEER in connection with the performing or furnishing of Basic and Additional Services for the Project for which OWNER shall pay ENGINEER as indicated in Exhibit C.
- 34. Resident Project Representative—The authorized representative of ENGINEER, if any, assigned to assist ENGINEER at the Site during the Construction Phase. The Resident Project Representative will be ENGINEER's agent or employee and under ENGINEER's supervision. As used herein, the term Resident Project Representative includes any assistants of Resident Project Representative agreed to by OWNER. The duties and responsibilities of the Resident Project Representative are as set forth in Exhibit D.
- 35. Samples--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 36. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to ENGINEER to illustrate some portion of the Work.
- 37. Site--Lands or areas indicated in the Contract Documents as being furnished by OWNER upon which the Work is to be performed, rights-of-way and

- easements for access thereto, and such other lands furnished by OWNER which are designated for use of Contractor.
- 38. Specifications--That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
- 39. Substantial Completion--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of ENGINEER, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 40. Supplementary Conditions--That part of the Contract Documents which amends or supplements the General Conditions.
- 41. Total Project Costs—The sum of the Construction Cost, allowances for contingencies, the total costs of services of ENGINEER or other design professionals and consultants, cost of land, rights-of-way, or compensation for damages to properties, or OWNER's costs for legal, accounting, insurance counseling or auditing services, or interest and financing charges incurred in connection with the Project, or the cost of other services to be provided by others to OWNER pursuant to Exhibit B of this Agreement.
- 42. Work--The entire completed construction or the various separately identifiable parts thereof required to be provided under the Contract Documents with respect to this Project. Work includes and is the result of performing or furnishing labor, services, and documentation necessary to produce such construction and furnishing, installing, and incorporating all materials and all equipment into such construction, all as required by the Contract Documents.

- 43. Work Change Directive—A written directive to Contractor issued on or after the Effective Date of the Construction Agreement and signed by OWNER upon recommendation of the ENGINEER, ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.
- 44. Written Amendment—A written amendment of the Contract Documents signed by OWNER and Contractor on or after the Effective Date of the Construction Agreement and normally dealing with the non-engineering or non-technical rather than strictly construction-related aspects of the Contract Documents.

# ARTICLE 8 - EXHIBITS AND SPECIAL PROVISIONS

# 8.01 Exhibits Included

- A. Exhibit A, "ENGINEER's Services," consisting of three pages.
- B. Exhibit B, "OWNER's Responsibilities," consisting of two pages.
- C. Exhibit C, "Payments to Engineer for Services and Reimbursable Expenses," consisting of one page and Appendix 1 to Exhibit C, "2008 Hourly Rate and Reimbursable Expense Schedule" consisting of one page.
  - D. Exhibit D, Not Used.
- E. Exhibit E, "Project Description and Scope of Services", consisting of four pages.
  - F. Exhibit F, Not Used.
  - G. Exhibit G, Not Used.
  - H. Exhibit H, Not Used.
  - I. Exhibit I, Not Used.

#### J. Exhibit J, Not Used.

#### 8.02 Total Agreement

A. This Agreement (consisting of pages 1 to 12 inclusive, together with the Exhibits identified above) constitutes the entire agreement between OWNER and ENGINEER and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

page 1.	
OWNER:	ENGINEER:
Alan Hanks	Brett M. Jochim, PE
Ву:	By: Tallfool
Title: Mayor	Title: Chief Operating Officer
Date Signed:	Date Signed:
ATTEST:	ATTEST: Lissell Dresson
Name: Jim Preston	Name: Russell R. Sorenson, PE
Title: Finance Officer	Title: Operations Manager
Address for giving notices:	Address for giving notices:
City of Rapid City	Advanced Engineering and Environmental Services, Inc.
300 Sixth Street	1815 Schafer Street, Suite 301
Rapid City, SD 57701	Bismarck, ND 58501
Designated Representative (paragraph 6.02.A):	Designated Representative (paragraph 6.02.A):
Dan Coon, P.E.	Deon Stockert, PE
Title: Project Manager	Title: Drinking Water Manager
Phone Number: (605) 394-4154	Phone Number: <u>(701) 221-0530</u>
Facsimile Number: <u>(605)</u> 394-6636	Facsimile Number: (701) 221-0531
E-Mail Address: dan.coon@rcgov.org	E-Mail Address: deon.stockert@ae2s.com

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, the Effective Date of which is indicated on

This is EXHIBIT A, consisting of three pages, referred to in and part of the Agreement between OWNER and ENGINEER for Professional Services dated November 21, 2007.

#### **ENGINEER's Services**

Article 1 of the Agreement is amended and supplemented to include the following agreement of the parties. ENGINEER shall provide Basic and Additional Services as set forth below.

#### PART 1 -- BASIC SERVICES

- A1.01 Study and Report Phase Not Used.
- A1.02 Preliminary Design Phase Not Used.
- A1.03 Final Design Phase
  - A. In connection with completing the Assignment, as more fully described in Exhibit E, the ENGINEER shall:
  - 1. Prepare final Drawings indicating the scope, extent, and character of the Work to be performed and furnished by Contractor. Specifications will be prepared, where appropriate, using City of Rapid City Standard Specifications for Public Works Construction, supplemented with detailed specifications as necessary.
  - 2. Provide technical criteria, written descriptions, and design data for OWNER's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design of the Project and assist OWNER in consultations with appropriate authorities.
  - 3. Advise OWNER of any adjustments to the opinion of probable Construction Cost and any adjustments to Total Project Costs known to ENGINEER.
  - 4. Perform or provide the following additional Final Design Phase tasks or deliverables: None identified as of the effective date of the Agreement.
  - 5. Prepare and furnish Bidding Documents for review and approval by OWNER, its legal counsel, and other advisors, as appropriate, and assist OWNER in the preparation of other related documents.
  - 6. Submit five (5) final copies of the Bidding Documents and a revised opinion of probable Construction Cost to OWNER.
- B. In the event that the Work designed or specified by ENGINEER is to be performed or furnished under more than one prime contract, or if ENGINEER's services are to be separately sequenced with the work of one or more prime Contractors (such as in the case of fast-tracking), OWNER and ENGINEER shall, prior to commencement of the Final Design Phase, develop a schedule for performance of ENGINEER's services during the Final Design, Bidding or Negotiating, Construction, and Post-Construction Phases in order to sequence and coordinate properly such services as are applicable to the work under such separate prime contracts. This schedule is to be prepared and included in or become an amendment to Exhibit A whether or not the work under such contracts is to proceed concurrently.
- C. The number of prime contracts for Work designed or specified by ENGINEER upon which the ENGINEER's compensation has been established under this Agreement is one (1).
- D. ENGINEER's services under the Final Design Phase will be considered complete on the date when the submittals required by paragraph A1.03.A.6 have been accepted by the OWNER.

#### A1.04 Bidding or Negotiating Phase

- A. In connection with completing the Assignment, as more fully described in Exhibit E, the ENGINEER shall:
- 1. Assist OWNER in advertising for and obtaining bids or negotiating proposals for the Work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, attend pre-Bid conferences, if any, and receive and process Contractor deposits or charges for the Bidding Documents.
  - 2. Issue Addenda as appropriate to clarify, correct, or change the Bidding Documents.
- 3. Consult with OWNER as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by Contractor for those portions of the Work as to which such acceptability is required by the Bidding Documents.
- 4. Perform or provide the following additional Bidding or Negotiating Phase tasks or deliverables: None identified as of the effective date of the Agreement.
- 5. Attend the Bid opening, prepare Bid tabulation sheets, and assist OWNER in evaluating Bids or proposals and in assembling and awarding contracts for the Work.
- B. The Bidding or Negotiating Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective Contractors.

#### PART 2 -- ADDITIONAL SERVICES

#### A2.01 Additional Services Requiring OWNER's Authorization

- A. If authorized in writing by OWNER, ENGINEER shall furnish or obtain from others Additional Services of the types listed below. These services will be paid for by OWNER as indicated in Article 4 of the Agreement.
  - 1. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans or advances in connection with the Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.
  - 2. Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by OWNER.
  - 3. Services resulting from significant changes in the scope, extent, or character of the portions of the Project designed or specified by ENGINEER or its design requirements including, but not limited to, changes in size, complexity, OWNER's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date of this Agreement or are due to any other causes beyond ENGINEER's control.
  - 4. Services resulting from OWNER's request to evaluate additional Study and Report Phase alternative solutions.
  - 5. Services required as a result of OWNER's providing incomplete or incorrect Project information with respect to Exhibit B.
    - 6. Providing renderings or physical models for OWNER's use beyond those identified in Exhibit E.

- 7. Undertaking additional investigations and studies including, but not limited to, detailed consideration of operations, maintenance, and overhead expenses; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules, and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing, and assisting OWNER in obtaining process licensing; detailed quantity surveys of materials, equipment, and labor; and audits or inventories required in connection with construction performed by OWNER beyond those identified in Exhibit E.
  - 8. Furnishing services of ENGINEER's Consultants for other than Basic Services.
  - 9. Services attributable to more prime construction contracts than specified in paragraph A1.03.C.
- 10. Services during out-of-town travel required of ENGINEER other than for visits to the Site or OWNER's office beyond those identified in Exhibit E.
- 11. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructability review requested by OWNER; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other Bidding Documents as a result of such review processes beyond those identified in Exhibit E.
- 12. Preparing additional Bidding Documents or Contract Documents for alternate bids or prices requested by OWNER for the Work or a portion thereof.
  - 13. Not Used.
- 14. Assistance in connection with Bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services.
  - 15. Not Used.
  - 16. Not Used.
- 17. Providing assistance in resolving any Hazardous Environmental Condition in compliance with current Laws and Regulations.
  - 18. Not Used.
  - 19. Not Used.
- 20. Preparing to serve or serving as a consultant or witness for OWNER in any litigation, arbitration or other dispute resolution process related to the Project.
- 21. Providing more extensive services required to enable ENGINEER to issue notices or certifications requested by OWNER under paragraph 6.01.G of the Agreement.
  - 22. Other services performed or furnished by ENGINEER not otherwise provided for in this Agreement.

This is **EXHIBIT B**, consisting of two pages, referred to in and part of the **Agreement between OWNER and ENGINEER** for **Professional Services** dated November 21, 2007.

#### **OWNER's Responsibilities**

Article 2 of the Agreement is amended and supplemented to include the following agreement of the parties.

- B2.01 In addition to other responsibilities of OWNER as set forth in this Agreement, OWNER shall:
- A. Provide ENGINEER with all criteria and full information as to OWNER's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which OWNER will require to be included in the Drawings and Specifications; and furnish copies of OWNER's standard forms, conditions, and related documents for ENGINEER to include in the Bidding Documents, when applicable.
- B. Furnish to ENGINEER any other available information pertinent to the Project including reports and data relative to previous designs, or investigation at or adjacent to the Site.
- C. Following ENGINEER's assessment of initially-available Project information and data and upon ENGINEER's request, furnish or otherwise make available such additional Project related information and data as is reasonably required to enable ENGINEER to complete its Basic and Additional Services.
- D. Give prompt written notice to ENGINEER whenever OWNER observes or otherwise becomes aware of a Hazardous Environmental Condition or of any other development that affects the scope or time of performance of ENGINEER's services, or any defect or nonconformance in ENGINEER's services or in the work of any Contractor.
- E. Authorize ENGINEER to provide Additional Services as set forth in Part 2 of Exhibit A of the Agreement as required.
- F. Arrange for safe access to and make all provisions for ENGINEER to enter upon public and private property as required for ENGINEER to perform services under the Agreement.
- G. Examine all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by ENGINEER (including obtaining advice of an attorney, insurance counselor, and other advisors or consultants as OWNER deems appropriate with respect to such examination) and render in writing timely decisions pertaining thereto.
- H. Provide reviews, approvals, and permits from all governmental authorities having jurisdiction to approve all phases of the Project designed or specified by ENGINEER and such reviews, approvals, and consents from others as may be necessary for completion of each phase of the Project.
  - I. Provide, on it's own behalf, as required for the Project:
    - 1. Accounting, bond and financial advisory, independent cost estimating, and insurance counseling services.
  - 2. Legal services with regard to issues pertaining to the Project as OWNER requires, Contractor raises, or ENGINEER reasonably requests.
  - 3. Such auditing services as OWNER requires to ascertain how or for what purpose Contractor has used the moneys paid.
    - 4. Placement and payment for advertisement for Bids in appropriate publications.

Page 1 of 2 Pages (Exhibit B - OWNER's Responsibilities)

- J. Advise ENGINEER of the identity and scope of services of any independent consultants employed by OWNER to perform or furnish services in regard to the Project, including, but not limited to, cost estimating, project peer review, value engineering, and constructability review.
- K. Furnish to ENGINEER data as to OWNER's anticipated costs for services to be provided by others for OWNER so that ENGINEER may make the necessary calculations to develop and periodically adjust ENGINEER's opinion of Total Project Costs.

#### L. Not Used.

- M. If more than one prime contract is to be awarded for the Work designed or specified by ENGINEER, designate a person or entity to have authority and responsibility for coordinating the activities among the various prime Contractors, and define and set forth the duties, responsibilities, and limitations of authority of such individual or entity and the relation thereof to the duties, responsibilities, and authority of ENGINEER as an attachment to this Exhibit B that is to be mutually agreed upon and made a part of this Agreement before such services begin.
- N. Attend the pre-bid conference, bid opening, pre-construction conference, construction progress and other Project related meetings, and Substantial Completion and final payment inspections.
- O. Provide the services of an independent testing laboratory, as Owner deems necessary to perform additional inspections, tests, and approvals of Samples, materials, and equipment, or to evaluate the performance of materials, equipment, and facilities of OWNER, prior to their incorporation into the Work with appropriate professional interpretation thereof.

#### P. Not Used.

R. Perform or provide the following additional services: None identified as of the Effective Date of this Agreement.

This is EXHIBIT C, consisting of one page, referred to in and part of the Agreement between OWNER and ENGINEER for Professional Services dated November 21, 2007.

# Payments to ENGINEER for Services and Reimbursable Expenses

Article 4 of the Agreement is amended and supplemented to include the following agreement of the parties:

#### ARTICLE 4 -- PAYMENTS TO THE ENGINEER

#### C4.01 Hourly to a Maximum Method

- A. OWNER shall pay ENGINEER for Basic Services as set forth in Exhibit A as follows:
  - 1. An amount equal to the cumulative hours charged to the Project by each class of ENGINEER's employees times Standard Hourly Rates for each applicable billing class for all services performed on the Project, plus Reimbursable Expenses and ENGINEER's Consultant's charges, if any.
  - 2. ENGINEER's Reimbursable Expenses Schedule and Standard Hourly Rates are attached to this Exhibit C as Appendix 1.
  - 3. The total compensation maximum, including all Reimbursable Expenses, for services under Paragraph C4.01 is \$397,360.00 based on the following assumed distribution of compensation.
    - a. Final Design Phase \$ 374,606.00
    - b. Bidding or Negotiating Phase

\$ 22,754.00

- 4. ENGINEER may alter the distribution of compensation between individual phases noted herein to be consistent with services actually rendered, but shall not exceed the total compensation amount unless approved in writing by OWNER.
- 5. The total estimated compensation for ENGINEER's services included in the breakdown by phases as noted in paragraph 4.01.A.3 incorporates all labor, overhead, profit, Reimbursable Expenses and ENGINEER's Consultant's charges.

6. The amounts billed for ENGINEER's services under paragraph C4.01 will be based on the cumulative hours charged to the Project during the billing period by each class of ENGINEER's employees times Standard Hourly Rates for each applicable billing class, plus Reimbursable Expenses and ENGINEER's Consultant's charges.

#### 7. Not Used.

C4.02 For Additional Services Requiring
OWNER's Authorization in Advance

A. OWNER shall pay ENGINEER for services and reimbursable expenses for Additional Services set forth in Article A2.01 per the Hourly Rate and Reimbursable Expense Schedule included in Appendix 1 of Exhibit C.

#### C4.03 Not Used.

This is Appendix 1 to EXHIBIT C, consisting of one page, referred to in and part of the Agreement between OWNER and ENGINEER for Professional Services dated November 21, 2007.

# 2008 Hourly Rate and Reimbursable Expense Schedule

The Hourly Rate and Reimbursable Expense Schedule is subject to review and adjustment annually as of January 1. Hourly Rates and Reimbursable Expenses on the Effective Date of the Agreement are:

Labor Rates			
Engineer I	\$85.00	Administrative I	\$42.00
Engineer II	\$95.00	Administrative II	\$52.00
Engineer III	\$110.00	Administrative III	\$63.00
Engineer IV	\$125.00	Administrative IV	\$73.00
Engineer V	\$135.00	Administrative V	\$81.00
Engineer VI	\$145.00		
Engineer VII	\$157.00	Reimbursable Expense Rates	
Inglitor via		Transportation (4x4)	\$0.55/mile
Project Manager	\$135.00	Transportation (Auto)	\$0.55/mile
Technical Expert I	\$165.00	Survey Vehicle	\$0.65/mile
Technical Expert II	\$180.00	Photocopies	\$0.10/copy
Technical Expert III	Negotiable	Plots - Color Bond	\$1.25/s.f.
Tooldhout Empere III	110800000	Plots - Monochrome Bond/Vellum	\$0.75/s.f.
I&C Technician I	\$80.00	Plots - Film/Photo High Gloss	\$2.00/s.f.
I&C Technician II	\$90.00	Digital Imaging	\$10.00/day
I&C Technician III	\$100.00	Computer/CADD	\$10.00/hour
I&C Technician IV	\$110.00	Laser Printouts	\$0,20/page
I&C Technician V	\$122.00	Color Laser Printouts/Copies	\$0.95/page
I&C Technician VI	\$132.00	Fax – Receiving	\$1.00/page
1000 Toolington 71	φ10 <b>2</b> ,000	Fax - Sending	\$1.00/page
Land Surveyor I	\$72.00	Projector	\$25.00/hour
Land Surveyor II	\$82.00	Total Station	\$10.00/hour
Land Surveyor III	\$94.00	Total Station - Robotic	\$35.00/hour
Land Surveyor IV	\$104.00	Pro-XR GPS	\$15.00/hour
Land Surveyor V	\$116.00	Fast Static/RTK GPS	\$50.00/hour
Land Surveyor VI	\$135.00	All Terrain Vehicle/Boat	\$100.00/day
		Hydrant Pressure Recorders	\$10.00/day
Engineering Technician I	\$46.00	Telemetry Radio	\$50.00/site
Engineering Technician II	\$58.00	Pressure Recorder	\$5.00/day
Engineering Technician III	\$70.00	Outside Services*	cost *1.15
Engineering Technician IV	\$82.00	Out of Pocket Expenses**	cost*1.15
Engineering Technician V	\$92.00	Rental Car	cost*1.20
Engineering Technician VI	\$106.00		
Engineering Technician VII	\$126.00	<ul> <li>* Includes laboratory test</li> </ul>	_
<u>.</u>		and engineering consultants, surve	eying, etc.
Webmaster	\$85.00		
IT System Administrator	\$115.00	** Includes toll teleph	
CPA	\$120.00	postage, subsistence, techn	ical literature,
Financial Analyst	\$120.00	equipment rental, etc.	•
Senior Consultant	\$135.00		

This is EXHIBIT E, consisting of four pages, referred to in and part of the Agreement between OWNER and ENGINEER for Professional Services dated November 21, 2007.

#### **Project Description and Scope of Services**

The City of Rapid City is pursuing a project to design and construct a water storage reservoir for the Low Level water service zone in the Elk Vale area (Elk Vale Water Reservoir Project No. W07-1638). The project generally consists of the design and construction of a reservoir for the Low Level water service zone and necessary piping and appurtenances based on the Elk Vale Low Level Reservoir and Elk Vale High Level Reservoir Preliminary Engineering Report (October 2007). The scope of services for this phase of the project consists of the following:

#### FINAL DESIGN PHASE

The Final Design Phase is comprised of the primary tasks identified below:

- Plans, Specifications, and Bid Documents The ENGINEER to prepare plans, specifications, and bid documents for the construction of the Elk Vale Low Level Reservoir based on the Elk Vale Low Level Reservoir and Elk Vale High Level Reservoir Preliminary Engineering Report (October 2007). Final design will include:
  - a. The Project consists of the following major elements:
    - i. Construction of Elk Vale Low Level Reservoir and necessary piping and appurtenances.
    - ii. Control upgrades for the City of Rapid City Water Treatment Plant necessary to support controls from new Elk Vale Low Level Reservoir Project.
    - iii. Construction of new vaults at Signal Hill necessary for operation of new Elk Vale Low Level Reservoir.
  - b. Prepare plans and specifications to outline work necessary to receive bids for a 3.5 MG prestressed (or post-tensioned), partially buried concrete ground storage reservoir and conventional ring foundation, one ground storage reservoir valve vault with control valves, two new valve vaults with control valves located at Signal Hill, an anti-freeze/mixing system for the ground storage reservoir, system appurtenances, site fencing and gates, distribution system connection and transmission piping to the site, site piping, fire hydrant, process piping, and appurtenances, coatings, security, electrical service, and site work and restoration.
  - c. Architectural drawings for small brick/block building (standing seam metal roof) located above Elk Vale vault.
  - d. Electrical plans to include P&ID for new reservoir sensors, alarms, and evaluate on-line real time monitoring.
  - e. Plan sheets shall be prepared utilizing the latest City of Rapid City Drafting Standards. Plan documents shall adhere to current City of Rapid City project plan guidelines.
  - f. Provide detailed specifications supplementing the City of Rapid City Standard Specifications, as necessary.
  - g. Provide for the following items in reservoir design:
    - i. Elk Vale Low Level Reservoir will be a partially buried prestressed or post-tensioned concrete reservoir as recommended in the Elk Vale Low Level Reservoir and Elk Vale High Level Reservoir Preliminary Engineering Report (October 2007).
    - ii. Provide prequalification requirements for tank manufacturers and erectors.
    - iii. Provide prequalification requirements for general contractors.
    - iv. Provide design criteria and shop drawing requirements to facilitate reservoir manufacturer/erector final tank design details for construction.
    - v. Provide site plan(s) for grading, landscaping, fencing, etc.
    - vi. Provide process piping plans.
    - vii. Provide electrical/control plans for integrating the reservoir level sensor and alarms with the water distribution telemetry system.

- viii. Provide process and instrumentation diagram (P&ID), and general design of reservoir control/telemetry system to integrate with the existing water distribution control/telemetry system (Autocon Industries Microcat Class 9900).
- ix. Coordinate with existing Water Treatment Plant control system manufacturer/supplier (Autocon/Seimens) for detailed design requirements of system upgrade.
- x. Landscaping and irrigation plans.
- xi. Outline methods for cleaning and disinfection of new facilities.
- 2. Survey Services: ENGINEER to provide the following survey services:
  - a. Topographical and route survey of reservoir site and access road. Survey to include new valve vaults at Signal Hill.
  - b. Construction control information.
- 3. <u>City 11-6-19 Review and Approval:</u> ENGINEER will assist OWNER with preparation of materials needed for City 11-6-19 Review.
- 4. <u>Design Considerations:</u> ENGINEER will consider following items during final design:
  - a. Provide City with up to three ground storage reservoir architectural feature alternatives for selection. Alternatives will consist of pictures from similar projects and estimated additional construction costs.
  - b. Bid prestressed concrete and post-tensioned concrete reservoirs in an effort to obtain competitive bids.
  - c. Landscape plan per City of Rapid City ordinance 17.50.300.
  - d. Consider geotechnical and seismic design criteria.
  - e. Evaluate need for special coatings on reservoir.
  - f. Address ice formation during cold weather operation.
  - g. Flexible pipe connections for reservoir.
  - h. Reservoir inlet and outlet piping configurations to minimize water short-circuiting, ice, and water quality issues.
  - i. Conduct a Radio Path Study for new reservoir telemetry.
  - j. Coordinate Master PLC upgrade at Rapid City Water Treatment Plant and develop plans and specifications based on Quality Flow Systems quote to John Wagner dated November 5, 2007. Note this does not include Water Treatment Plant design beyond that described in the Quality Flow Systems quote.
  - k. Provide design of perimeter intrusion detection system similar to the Red Rock Facility (OmniTrax by Magal Senstar Inc.).
- 5. <u>Geotechnical Investigation:</u> ENGINEER to provide geotechnical investigation comprised of soil borings and laboratory analyses for reservoir site, water line location, and Signal Hill Vaults.
- 6. Opinion of Probable Construction Cost: ENGINEER to prepare Opinions of Probable Construction Cost and revise as required for 35%, 65%, 95%, and 100% plan and specification reviews.
- 7. <u>Property Acquisition</u>: ENGINEER to coordinate lot lines, property information, etc. and provide assistance to OWNER for acquisition of property for reservoir site and access road.
- 8. Existing Utilities: ENGINEER to coordinate with utility companies to ensure all existing utilities are located in the field; information regarding depth, material, size, etc. to be noted on the plans if available; and that conflicts requiring relocation of utilities or special construction techniques are specified in the contract documents.

- 9. Permits: ENGINEER to provide technical criteria, written descriptions, and design data for OWNER's use in filing applications for permits from or approvals of governmental authorities having jurisdiction to review or approve the final design of the Project and assist OWNER in consultations with appropriate authorities.
  - a. ENGINEER to provide project coordination with and submittals to the SDDENR as required.

#### 10. Summary of Deliverables

- a. Easement Exhibits
- b. 11-6-19 Review Submittal
- c. 65% Plans and Specifications
- d. 95% Plans and Specifications
- e. 100% Plans and Specifications

#### 11. Format of Deliverables:

- a. Construction plans on 22"x34" Mylar (one copy) and blue print copies (four copies). Mylar copies will only be provided after 100% design complete.
- b. Construction plans on CD (AutoCAD 2006).
- c. All topographic, control, and design points in the .dwg file and in tabular format, both on CD and on a hard copy printout.
- d. Complete supplemental (detailed) specifications on CD (Microsoft Word XP or previous versions) and four bound copies.
- e. Unit price cost estimate on CD (Microsoft Excel XP or previous version) and based on City of Rapid City "Engineer's Estimate".

# 12. Summary of Design Phase Meetings

- a. Design Kick-Off Meeting and inspection of Water Treatment Plant control/telemetry system (on-site)
- b. Public Information Meeting (on-site).
- c. Meetings with Siemens and Magal Senstar (AE2S only).
- d. 11-6-19 Review, Planning, and Engineering (video). Assume Architectural Selection via video at the same time.
- e. 65% Plans and Specs Review (on-site).
- f. 95% Plans and Specs Review (on-site).
- g. Two (2) intermittent meetings as required to ensure the necessary exchange of information (video).
- h. The OWNER has sole responsibility for coordinating and conducting the following meetings:
  - i. 100% Plan/Spec Review
  - ii. Award Recommendation to Committee or Council
  - iii. Bid Opening (KLJ to attend)
  - iv. Public Works Committee or Council Meetings

#### **Bidding Phase**

The Final Design Phase is comprised of the primary tasks identified below:

- 1. <u>Contractor Prequalification:</u> ENGINEER to conduct contractor prequalification evaluations and make recommendations.
- 2. Addenda: ENGINEER to issue addenda to the bid documents as required.
- 3. <u>Bid Tabulation and Recommendations:</u> ENGINEER to prepare Bid Tab and Recommendation in City of Rapid City Microsoft Excel project book format and submit this and a printed hard copy for posting on the City of Rapid City web site.
- 4. <u>Bid Document Review</u>: ENGINEER to review construction contract documents and other bid submittals from the contractor and submit to Public Works Department.

- 5. <u>Notice to Proceed:</u> ENGINEER to, upon Council authorization to award, prepare Notice to Proceed and submit to Public Works Department for mailing.
- 6. <u>Bid Documents:</u> ENGINEER will make available to contractors sets of plans and specifications for purchase and use in preparing bids for Project. ENGINEER will make available at offices of KLJ and AE2S along with plan exchanges.
- 7. Summary of Bid Phase Meetings:
  - a. Pre-Bid Conference (on-site)