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

Date: March 16, 2007   Project Name & Number: Memorial Park and Farlow Avenue Water Main Reconstruction CIP #: 50465   Project W07-1531 Project W07-1531 CIP #: 50465									
<b>Project Description:</b> Reconstruct 24 " & 4" Water Mains beginning near the Holiday Inn and ending at the intersection of Farlow Avenue and Anamosa Street.									
Consultant: Ferbe	r Engineeri	ing Company	1						
Original Contract Amount:	\$275,556.		Original Contract Date:	March 16, 2007	Original Completion [	Date: Se	ept. 1	, 2008	
Amendment Number	:								
Amendment Descrip	tion:								
Current Contract Amount: Change Requested:				Current Com	pletion Date:				
	ontract Am		\$0.	00 New Com	pletion Date:				
Funding Source This	Request:								
Amount	Dept.	Line Item	Comments						
\$275,556.00	933	4223							
\$275,556.00	Total								
			Agreement Rev	view & Approvals					
Project Manager			Date	Division Manager				Date	
Department Director			Date	City Attorney				Date	
	ROUTING INSTR				FINANCE OFFICE USI	E ONLY			
Route <b>two</b> originals of the <b>Agreement</b> for review and signatures. Finance Office - Retain one original				(Note to Finance: Please write			-		
Project Manager - Retain second original for delivery to Consultant cc: Public Works				Appropriation	Dale	Initials	Ap Y	proved N	
Engineering Project Manager				Cash Flow			Ŷ	N	

### AGREEMENT FOR PROFESSIONAL SERVICES

This Agreement is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_\_, 2007, by and between the City of Rapid City, hereinafter called the **OWNER**, and Ferber Engineering Company, Inc., a South Dakota Corporation, hereinafter called the **CONSULTANT**.

WHEREAS, the OWNER has determined the need to procure professional engineering services for the Memorial Park and Farlow Avenue Water Main Reconstruction Project – City Project No. W07-1631 / CIP No. 50465 as identified herein; and,

WHEREAS, the CONSULTANT has satisfied the OWNER that CONSULTANT is capable of providing those services;

NOW, THEREFORE, the OWNER and CONSULTANT in consideration of the payments and agreements herein contained, do hereby agree as follows:

### PROJECT DESCRIPTION

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This **PROJECT** is the reconstruction of approximately 2,600 lineal feet of large diameter water transmission main from the Rushmore Plaza Civic Center to Anamosa Street via Farlow Avenue. The **PROJECT** includes replacement of the Farlow Avenue 4-inch galvanized water main with 8-inch PVC water main as well as reconstruction of various other distribution mains in the **PROJECT** area. The **PROJECT** includes abandonment of various transmission and distribution mains, reconnection of all water services in Dilger and Farlow Avenues and asphalt patching of the disturbed streets. A two (2) inch asphalt overlay of Farlow Avenue is scheduled for 2009 and is not included in this **PROJECT** scope.

Funding for this project is from the 933 Water Improvements budget. Construction is anticipated to be substantially complete by September 1, 2008.

**CONSULTANT** will complete Investigative Services, Preliminary Design Services and Final Design Services for the **OWNER**. In addition, **CONSULTANT** will assist the **OWNER** in coordinating with property owners', legal survey, and preparation of documents for ROW and easement acquisition. **CONSULTANT** will assist **OWNER** in bidding the **PROJECT**. **CONSULTANT** will also provide Construction Related Services, including, construction administration and construction observation.



## **DESIGN CRITERIA**

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The **PROJECT** will be designed in conformance with the following Design Criteria:

- City of Rapid City Standard Specifications for Public Works Construction, 2004.
- City of Rapid City Design Policy Standards.
- City of Rapid City Drafting Standards.
- Design Criteria Manual for Water Distribution Systems and Sanitary Sewer Collection Systems for the City of Rapid City (DRAFT).
- Recommended Standards for Wastewater Facilities (Ten States Standards)

## **ARTICLE I SCOPE OF SERVICES**

## A. INVESTIGATIVE SERVICES

- A.1. **CONSULTANT** will meet with staff from City Engineering Division and Operations Division to obtain previous plans and studies, to discuss project requirements and system design parameters.
- A.2. **CONSULTANT** will modify the Low Level and North Rapid High Level water system model created for the *Van Buren Street Reconstruction Water System Study* to reflect the calibrated existing conditions water model created for the Rapid City Utility System Master Plan.
- A.3. **CONSULTANT** will use the revised water system model to investigate optimum main sizing and location for reconstructing the existing Memorial Park / Dilger Avenue transmission main. The scenarios to be investigated include:
  - A.3.1. North Rapid Booster is modified as recommended in the North Rapid High Level Water Study, but remains at the intersection of Anamosa Street and Dilger Avenue.
  - A.3.2. North Rapid Booster is modified as recommended in the North Rapid High Level Water Study, but is moved to College Park.
  - A.3.3. An interconnection is made along North Street between Memorial Park / Dilger Avenue Transmission Main and the Maple Avenue 18-inch Transmission Main.
    - A.3.3.1. **CONSULTANT** will investigate the impact of various main sizes for the North Street connection.
  - A.3.4. **CONSULTANT** will evaluate the hydraulics of various pipe materials within the scenarios outlined above.
- A.4. **CONSULTANT** will prepare a materials evaluation summary that includes typical construction costs, special handling procedures and recommendations for the scenarios investigated.



- A.5. CONSULTANT will prepare conceptual project costs for the scenarios investigated.
- A.6. CONSULTANT will prepare an Investigative Services Summary Report outlining the various scenarios investigated, the materials evaluation, conceptual construction costs and recommendations for the ultimate transmission main size and location.
- A.7.**CONSULTANT** will work with OWNER to determine feasibility of extending water distribution main(s) to loop the low level system along North Street. CONSULTANT will prepare preliminary estimates of probable construction costs and include recommendations on the feasibility of the distribution main improvements in the Investigative Services Summary Report.

### **B. DESIGN DATA ACQUISITION**

- B.1. **CONSULTANT** will obtain copies of existing street and utility plans for **PROJECT** area including the Rushmore Plaza Civic Center, Rushmore Plaza Holiday Inn, Dilger and Farlow Avenues and all cross streets up to and including Anamosa Street.
- B.2. CONSULTANT will complete courthouse research to identify property ownership, obtain recorded plats and easements and other information as necessary that is within the **PROJECT** area.
- B.3. CONSULTANT will subcontract with American Engineering Testing, Inc. (AET) to conduct a Geotechnical Investigation for the **PROJECT.** The Geotechnical Investigation will include eight (8) borings of 10 feet below existing grade along the final water transmission main corridor and along the distribution main replacement corridors. The boreholes will be logged and samples of the material will be collected. Standard laboratory testing will be conducted to determine the characteristic engineering properties of the soils. Soils resistivity testing will be performed. **AET** will provide a soils report compiling the field collected information and the laboratory analyses.
- B.4. **CONSULTANT** will obtain copies of maps and plans of existing utility infrastructure in the **PROJECT** area from Qwest Communications, Golden West Communications, Black Hills Power and Light, Montana Dakota Utilities, Midcontinent Communications and PrairieWave Communications. **CONSULTANT** will have the utility companies mark their existing infrastructure in the field.
- B.5. **CONSULTANT** will work with Qwest Communications, Golden West Communications, Black Hills Power and Light, Montana Dakota Utilities, Midcontinent Communications and PrairieWave Communications to coordinate expansion or relocation of their lines.
  - B.5.1. The utility companies will be invited to a pre-design meeting to notify them of the scope of the project, and request utility locates. After **CONSULTANT** identifies the preliminary improvements, they will be notified of any apparent utility conflicts.



- B.5.2. **CONSULTANT** will consider the location of the existing public and private utilities located within and adjacent to the different rights-of-way.
- B.5.3. **CONSULTANT** will work with the utilities and the City to determine the scope of any improvements. This utility coordination will continue through the final design phase to include checking for utility conflicts.

# C. PRELIMINARY DESIGN PHASE

# C.1. Survey

- C.1.1. CONSULTANT will perform Field Design Survey including:
  - C.1.1.1. Ties to at least two City of Rapid City Monuments utilizing state plane coordinates.
  - C.1.1.2. Topographic survey limits will be determined based on the findings provided in the Investigative Services Summary. In general, the area of survey will include all surface features, structures and utilities within the rights-of-way of Dilger Avenue, Farlow Avenue, a sufficient distance east and west of these streets along the intersecting streets, Anamosa and North Streets between Dilger Avenue and Farlow Avenue and a corridor along the existing 24-inch water transmission main between the Rushmore Plaza Civic Center and Holiday Inn.
  - C.1.1.3. **CONSULTANT** will subcontract with a utility contractor to assist in potholing various utility locations along the selected water transmission main route. **CONSULTANT** will survey the locations and elevations of the exposed utilities.
  - C.1.1.4. **CONSULTANT** will download the field survey files, reduce the files on the computer, and create topographic maps.
  - C.1.1.5. Create Digital Terrain Models based upon field survey data.
- C.1.2. **CONSULTANT** will perform Legal Survey services including establishing ties to lot corners, section corners and existing right-of-way monuments.
  - C.1.2.1. Prepare Plats for right-or-way acquisition if necessary.
  - C.1.2.2. Prepare legal descriptions and exhibits for easement acquisition for permanent and construction easements.

# C.2. Preliminary Design

C.2.1. CONSULTANT will Subcontract with Cathodic Engineering Inc. to provide cathodic protection and corrosion engineering services for water line on the **PROJECT.** The scope of corrosion engineering services will include:



- C.2.1.1. Design memorandum summarizing preliminary corrosion control design aspects of the **PROJECT** including recommendations for pipe and fitting material selection, pipe coatings, and cathodic protection (CP).
- C.2.1.2. Specifications and detail drawings for inclusion into the bid documents.
- C.2.1.3. Provide corrosion protection related technical support via telephone/email/fax as needed throughout the design phase of the **PROJECT**.

### C.3. Preliminary Design Report

- C.3.1. CONSULTANT will prepare a Preliminary Design Report that will include:
  - C.3.1.1. 11"x17" plan and profiles at a scale of 1"=40' Horizal and 1"=10' Vertical for the Memorial Park Water Transmission Main, and the Water Distribution Main extensions if it is determined that distribution main is to be constructed.
  - C.3.1.2. Preliminary plans will show the locations of proposed water mains in relation to adjacent property.
  - C.3.1.3. Preliminary plans will show the proposed limit of disturbance required to construct the **PROJECT**.
  - C.3.1.4. Preliminary plans will provide cathodic protection details required for the **PROJECT**.
  - C.3.1.5. Preliminary plans will provide a preliminary Traffic Control Plan for the **PROJECT**.
  - C.3.1.6. The Preliminary Design Report will include the Investigative Services Summary. It will include hydraulic model discussions of the selected water transmission main and ramifications of the North Rapid Booster Station future location.
  - C.3.1.7. The Preliminary Design Report will include preliminary engineer's estimates of probable construction costs for all recommended improvements to the streets and water system facilities.

## D. FINAL DESIGN PHASE

## D.1. Water

- D.1.1. **CONSULTANT** will make revisions to the plan and profile sheets identified during **OWNER** review.
- D.1.2. **CONSULTANT** will resolve conflicts between sanitary sewer and other utility infrastructure.
- D.1.3. CONSULTANT will prepare construction details and construction notes.



#### E. CONSTRUCTION DOCUMENTS PHASE

- E.1. **CONSULTANT** will produce Final Construction Plans on 22"x 34" mylar drawings at a horizontal scale of 1"= 20' and vertical scale of 1" = 5' to City of Rapid City 2007 Drafting Standards.
- E.2. CONSULTANT will create a cover sheet showing location and extent of the **PROJECT.**
- E.3. CONSULTANT will prepare general notes, typical sections, quantity summaries, etc.
- E.4. **CONSULTANT** will prepare survey data sheets.
  - E.4.1. Survey information will be provided including Station Offset for PC's, PI's and PT's; curve data and station/offsets for all items requiring field staking. Survey control and vertical benchmark information will also be provided in the Plans.
- E.5. **CONSULTANT** will provide project layout plan including lot lines and addresses of all properties adjacent to the **PROJECT**.
- E.6. CONSULTANT will prepare construction details and construction notes.

#### E.7. Construction Traffic Control Plans

- E.7.1. CONSULTANT will review sequence of construction operations and project sequencing.
- E.7.2. CONSULTANT will prepare conceptual Construction Traffic Control Plans.

#### **E.8.** Contract Documents

- E.8.1. CONSULTANT will work with OWNER to prepare CONTRACT DOCUMENTS based upon the City of Rapid City Standard Specifications for Public Works Construction.
- E.8.2. CONSULTANT will prepare a final estimate of probable construction cost.
- E.8.3. CONSULTANT will prepare final bidder's proposal.

#### E.9. Project Deliverables

- E.9.1. Construction Plans on 22-inch x 34-inch Mylar and 3 blue print copies and accompanying specifications.
- E.9.2. Two-Dimensional construction plans on CD in AutoCAD format.
- E.9.3. All topographic, control and design points in .dwg file and in tabular format both on CD and in hard copy.
- E.9.4. Complete supplemental (detailed) specifications on CD in Microsoft Word format.
- E.9.5. A unit price cost estimate on CD in Microsoft Excel format based upon City of Rapid City Microsoft Excel "Engineer's Estimate".



#### F. BIDDING PHASE SERVICES

- F.1. CONSULTANT will print and distribute CONSTRUCTION PLANS and CONTRACT DOCUMENTS, and will maintain a list of BIDDERS holding copies of the CONTRACT DOCUMENTS.
- F.2. CONSULTANT will attend pre-bid conference, make presentation, and answer bidder questions.
- F.3. CONSULTANT will conduct a pre-bid site visit to answer bidder questions.
- F.4. CONSULTANT will issue Addenda as required.
- F.5. CONSULTANT will assist OWNER in evaluating the bids.

#### G. CONSTRUCTION PHASE SERVICES

The construction of the **PROJECT** is anticipated to begin spring 2008. **OWNER** chooses to engage **CONSULTANT** to perform various Construction Related Services for the **PROJECT**.

- G.1. CONSULTANT shall provide Contract Administration as described in Exhibit B and Exhibit C.
- G.2. CONSULTANT shall provide Construction Observation as described in Exhibit B and Exhibit C.
- G.3. CONSULTANT shall prepare and submit as-built revisions to the plans drawings and specifications on 22"X34" Mylar and on CD in AutoCAD format.

#### ARTICLE II OWNERS RESPONSIBILITY

Except as otherwise provided herein, **OWNER** shall do the following in a timely manner so as not to delay the services of **CONSULTANT**, and shall bear all costs incident thereto:

2.1 Designate a person to act as **OWNER'S** representative with respect to the services to be performed or furnished by **CONSULTANT** under this Agreement.

2.2 Provide all criteria and full information as to **OWNER'S** requirements for the **PROJECT**, including design objectives and constraints, capacity and performance requirements, and any budgetary limitations.

2.3 Assist **CONSULTANT** by placing at **CONSULTANT'S** disposal all available information pertinent to the **PROJECT** including previous design reports and any other data relative to design or construction of the **PROJECT**.

2.4 Assist **CONSULTANT** by furnishing for **CONSULTANT'S** use Digital Existing Conditions Water System Geodatabase, including calibration information, as created during the Rapid City Utility System Master Plan.



2.5 Assist **CONSULTANT** by furnishing for **CONSULTANT'S** use Digital Files of Topographic Base Maps and Digital Terrain Models for the **PROJECT** area.

2.6 Arrange for access to and make all provisions for **CONSULTANT** to enter upon public and private property as required for **CONSULTANT** to perform services under this Agreement.

# ARTICLE III TIMES FOR RENDERING SERVICES

**CONSULTANT'S** services and compensation under this Agreement have been agreed to in anticipation of the orderly and continuous progress of the **PROJECT**. Unless specific periods of time or specific dates for providing services are specified in this Agreement, **CONSULTANT'S** obligation to render services hereunder will extend for a period which may reasonably be required for the preparation of the Plans and Bidding Documents, including extra work and required extensions thereto.

- 3.1 The **CONSULTANT** will begin work upon receipt of a signed Notice to Proceed.
- 3.2 *Investigative Services Summary* will be submitted to the **OWNER** within 45 Calendar Days after Notice to Proceed.
- 3.3 **CONSULTANT** will complete Final Design after Review Comments are provided to Ferber Engineering Company, Inc., by the City Engineering Division. 95% Plans and Engineers Estimate of Probable Construction Cost will be submitted by August 1, 2007. Final plans and specifications will be completed by September 14, 2007, unless **PROJECT** scope changes.
- 3.4 Completion of the Construction Phase Services shall be coincident with the completion of construction of the **PROJECT** except for as-built Drawings. As-built drawings will be completed within 30 days following completion of construction.
- 3.5 The **CONSULTANT** will retain copies of all payroll and expense records for a period of three (3) years after completion of the **PROJECT**.

# ARTICLE IV PAYMENTS TO CONSULTANT FOR SERVICES

4.1 **OWNER** shall pay to **CONSULTANT** for services performed in accordance with **ARTICLE I** on a per-diem basis in accordance with the attached Exhibit A, the **CONSULTANTS** hourly rates.

4.2 In addition to payments provided for in paragraph 4.1, **OWNER** shall pay **CONSULTANT** for Reimbursable Expenses incurred by **CONSULTANT** including mileage at the rates identified in Exhibit A.



- 4.3 The **CONSULTANT** will invoice the **OWNER** monthly for the services provided. Net payment for these services is due within thirty (30) days.
- 4.4 The maximum estimated fee for Article I, Items A-E, is \$152,652.00
- 4.5 The maximum estimated fee for Article I, Item F is \$122,904.00
- 4.6 If construction of **PROJECT** is not scheduled in 2008, **OWNER** shall meet with **CONSULTANT** to negotiate a revised scope of services and compensation for Article I, Item F.
- 4.7 The **CONSULTANT** will not exceed the amounts in paragraphs 4.4 and 4.5 without prior authorization by the **OWNER**.

### ARTICLE V ADDITIONAL SERVICES

5.1 If additional services beyond those contained in the scope of services must be performed, this agreement will be amended to identify the change in scope and the compensation due to the **CONSULTANT**.

## ARTICLE VI OPINIONS OF COST

6.1 **CONSULTANT'S** opinions of probable Construction Cost provided for herein are to be made on the basis of **CONSULTANT'S** experience and qualifications and represent **CONSULTANT'S** best judgment as an experienced and qualified professional engineer generally familiar with the construction industry. However, since **CONSULTANT** has no control over the cost of labor, materials, equipment or services furnished by others, or over the Contractors methods of determining prices or over competitive bidding or market conditions, **CONSULTANT** cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by **CONSULTANT**.

## ARTICLE VII GENERAL TERMS AND CONDITIONS

- 7.1 All services will be performed in accordance with the **CONSULTANT'S** *GENERAL TERMS AND CONDITIONS-RAPID CITY*, dated January 25, 2006 which are attached hereto and incorporated into this agreement by reference.
- 7.2 This Agreement represents the entire and integrated agreement between the **OWNER** and the **CONSULTANT** covering the services set forth herein and supersedes any prior negotiations, representations, or agreements therefore, either written or oral. This Agreement may be amended only by written instrument signed by both the **OWNER** and the **CONSULTANT**.



## Memorial Park and Farlow Avenue Water Main Reconstruction Project City Project No. W07-1631 / CIP No. 50465

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the date and year first above written.

THE CITY OF RAPID CITY, SOUTH DAKOTA

Jim Shaw, Mayor

ATTEST:

Date:

James F. Preston Finance Officer

FERBER ENGINEERING COMPANY, INC.

w BY:

Dan P. Ferber, President

Date: 3-16-07





#### **GENERAL TERMS AND CONDITIONS- RAPID CITY**

- Ferber Engineering Company, Inc., herein referred to as FEC, will bill the Client monthly with net payment due in thirty (30) days. Past due balances will be subject to a service charge at a rate of 1.5% per month. In addition, FEC may, after giving seven (7) days notice, suspend service under any agreement until the Client has paid in full all amounts due for services rendered and expenses incurred, including service charges for past due invoices.
- 2. The stated fees and scope of services constitute our best estimate of the fees and tasks required to perform the services as defined. This agreement, upon execution by both parties hereto, can be amended only by written instrument signed by both parties. For those projects involving conceptual or process development services, activities often cannot be fully defined during the initial planning. As the project does progress, facts and conditions uncovered may reveal a change in direction that may alter the scope of services. FEC will promptly inform the Client in writing of such situations so that changes in this agreement can be renegotiated.
- 3. Costs and schedule commitments shall be subject to renegotiation for delays caused by the Client's failure to provide specified facilities or information or for delays caused by unpredictable occurrences including without limitation, fires, floods, riots, strikes, unavailability of labor or materials, delays or defaults by suppliers of materials or services, process shutdowns, acts of God, or the public enemy, or acts or regulations of any governmental agency. Temporary delays of services caused by any of the above which results in additional costs beyond those outlined may require renegotiation of this agreement.
- 4. FEC will maintain insurance coverage for: Workers Compensation, General Liability, Professional Liability, and Automobile Liability. FEC shall at all times during the term of this Agreement maintain its General Liability insurance with a minimum of a One Million Dollar (\$1,000,000) limit per occurrence or equivalent. FEC shall furnish the Client with a certificate of insurance acceptable to the Client. Such certificate shall be attached hereto and incorporated herein along with a statement generally describing the coverage therein contained. Said insurance shall name the City of Rapid City as an additional insured.
- 5. It is acknowledged by both parties that FEC's scope of services does not include any services related to asbestos or hazardous or toxic materials. In the event FEC or any other party encounters asbestos or toxic materials at the jobsite, or should it become known in any way that such materials may be present at the jobsite or any adjacent areas that may affect the performance of FEC's services, FEC may, at their option and without liability for consequential or any other damages, suspend performance of services on the project until the Client retains appropriate specialist consultant(s) or contractor(s)to identify, abate, and or remove the asbestos or hazardous or toxic materials, and warrant that the jobsite is in full compliance with applicable laws and regulations.
- 6. The Client agrees to provide such legal, accounting, and insurance counseling services as may be required for the project.
- 7. Termination of this agreement by the Client or FEC shall be effective upon seven (7) days written notice to the other party. The written notice shall include the reasons and details for termination. FEC will prepare a final invoice showing all charges incurred through the date of the termination. Payment is due as stated in Paragraph 1. If the Client violates any of the agreements entered into between FEC and the Client or if the Client fails to carry out any of the duties contained in these terms and conditions, FEC may upon seven (7) days written notice, suspend services without further obligation or liability to the Client unless, within such seven (7) day period, the Client remedies such violation to the reasonable satisfaction of FEC. If FEC violates any of the agreements and conditions, Client may upon seven (7) days written notice, suspend payment without further obligation or liability to FEC unless, within such seven (7) day period, FEC remedies such violation to the reasonable satisfaction of the duties contained in these terms and conditions, Client may upon seven (7) days written notice, suspend payment without further obligation or liability to FEC unless, within such seven (7) day period, FEC remedies such violation to the reasonable satisfaction of the Client.
- 8. All documents including Drawings and Specifications provided or furnished by FEC pursuant to this Agreement are instruments of service in respect of the Project and FEC shall retain an ownership therein. Reuse of any documents pertaining to this project by the Client on extensions of this project or on any other project shall be at the Client's risk. The Client agrees to defend, indemnify, and hold harmless FEC from all claims, damages, and expenses including attorney's fees arising out of such reuse of the documents by the Client or by others acting through the Client.
- 9. FEC will endeavor to provide all services in accordance with generally accepted professional practices. FEC will not provide or offer to provide services inconsistent with or contrary to such practices nor make any warranty or guarantee, expressed or implied, nor to have any agreement or contract for services subject to the provisions of any uniform commercial code. Similarly, FEC will not accept those terms and conditions offered by the Client in its purchase order, requisition, or notice of authorization to proceed, except as set forth herein or expressly accepted in writing. Written acknowledgement of receipt of the actual performance of

#### Memorial Park and Farlow Avenue Water Main Reconstruction Project City Project No. W07-1631 / CIP No. 50465

services subsequent to receipt of such purchase order, requisition, or notice of authorization to proceed is specifically deemed not to constitute acceptance of any terms or conditions contrary to those set forth herein.

- 10. FEC intends to serve as the Client's professional representative for those services as defined in this agreement and to provide advice and consultation to the Client as a professional. Any opinions of probable project cost, approvals, and other decisions made by FEC for the Client are rendered on the basis of experience and qualifications and represent FEC's professional judgment.
- 11. This agreement shall not be construed as giving FEC the responsibility or authority to direct or supervise construction means, methods, techniques, sequences, or procedures of construction selected by any contractors or subcontractors or the safety precautions and programs incident to the work of any contractors or subcontractors.
- 12. The parties agree that the terms of this Agreement shall be governed by the laws of the State of South Dakota. In the event of any conflict of laws, the law of the State of South Dakota shall be controlling. 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.
- 13. In the event that any section(s), or provision(s) of this Agreement is declared invalid for any reason whatsoever by any competent court, such invalidity shall not affect any other section(s) or provision(s) of this Agreement if it can be given effect without the invalid section(s) or provision(s).

PW032707-10



### EXHIBIT A

# 2007 SCHEDULE OF CHARGES

EMPLOYEE CLASSIFICATION	HOURLY RATE
Principal-In-Charge	\$100.00
Registered Land Surveyor	\$90.00
Registered Professional Engineer	\$90.00
Graduate Engineer III	\$60.00
Graduate Engineer II	\$55.00
Graduate Engineer I	\$50.00
Senior Technician	\$55.00
Technician	\$40.00
Survey Crew 2-Man	\$85.00
Drafter	\$55.00
Clerical	\$45.00
Mileage	\$ .485

# **PRINTING CHARGES**

Bond Vellum Mylar Clear Film Photocopies, 8 <sup>1</sup> / <sub>2</sub> " x 11" (BW) Photocopies, 8 <sup>1</sup> / <sub>2</sub> " x 11" (Color)	\$ \$ \$	.20/sq ft .30/sq ft .50/sq ft .50/sq ft \$ .10 \$ .50
Photocopies, 8 <sup>1</sup> / <sub>2</sub> " x 11" (Color) Binding (up to 1")		\$ .50 \$ 2.00

# **GPS SURVEY**

Full Day	\$400.00 + Tech*
Half Day	\$250.00 + Tech*
*Tech includes hourly rate of employee plus expenses	

# EXHIBIT B

### GENERAL ADMINISTRATION OF THE CONSTRUCTION CONTRACT

- 1. Upon successful completion of the Bidding Phase, and upon written authorization from **OWNER**, **ENGINEER** shall consult with **OWNER** and act as **OWNER'S** representative as provided in the General Conditions and this Agreement. The extent and limitations of the duties, responsibilities and authority of **ENGINEER** shall not be modified, except as **ENGINEER** may otherwise agree in writing. All of **OWNER'S** instructions to Contractor will be issued through **ENGINEER** who shall have authority to act on behalf of **OWNER** in dealings with Contractor to the extent provided in this Agreement and said General Conditions except as otherwise provided in writing.
- 2. ENGINEER will provide the services of a Resident Project Representative (RPR) at the Site to assist ENGINEER and to provide more continuous observations of such Work on a full-time basis. ENGINEER will, prior to the pre-construction conference, submit a resume of the RPR'S qualifications for approval by OWNER. The duties, responsibilities, and limitations of authority of the RPR are as set forth in Exhibit C attached.
- **3. ENGINEER** will participate in a Pre-Construction Conference prior to commencement of Work at the Site.
- 4. ENGINEER will make visits to the Site at intervals appropriate to the various stages of construction, as ENGINEER deems necessary, but at least weekly, in order to observe as an experienced and qualified design professional the progress and quality of the various aspects of Contractor's Work. Such visits and observations by ENGINEER and the Resident Project Representative, if any, are not intended to be exhaustive or to extend to every aspect of the Work in progress, or to involve detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in this Agreement and the Contract Documents, but rather are to be limited to spot checking, selective sampling and similar methods of general observation of the Work based on ENGINEER'S exercise of professional judgment as assisted by the Resident Project Representative, if any. Based on information obtained during such visits and such observations, ENGINEER shall determine in general if such Work is proceeding in accordance with the Contract Documents
  - **4.1.** The purpose of **ENGINEER'S** visits to and representation by the Resident Project Representative at the Site will be to enable **ENGINEER** to better carry out the duties and responsibilities assigned to and undertaken by **ENGINEER** during the Construction Phase, and, in addition by the exercise of **ENGINEER'S** efforts as and experienced and qualified design professional, to express an informed professional opinion that the completed Work of Contractor will conform in general to the Contract Documents and that the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents has been



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implemented and preserved by Contractor. **ENGINEER** shall not, during such visits or as a result of such observations of Contractor's Work in progress, supervise, direct or have control over Contractor's Work nor shall **ENGINEER** have authority over or responsibility for the means, methods, techniques, sequences or procedures of construction selected by Contractor, for safety precautions and programs incident to the Work of Contractor or for any failure of Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to Contractor's furnishing and performing the Work. Accordingly, **ENGINEER** neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish and perform its Work in accordance with the Contract Documents.

- 5. During such visits and on the basis of such observations, ENGINEER shall have authority to recommend to OWNER the Contractor's Work be disapproved and rejected while it is in progress if ENGINEER believes that such Work will not produce a completed Project that conforms generally to the Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents.
- 6. ENGINEER will issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of the Work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. ENGINEER may issue Field Orders authorizing minor variations from the requirements of the Contract Documents.
- 7. ENGINEER will recommend Change Orders and Work Change Directives to OWNER, as appropriate, and shall prepare Change Orders and Work Change Directives as required.
- 8. ENGINEER will review and take appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Such reviews and approvals or other action will be completed with 14 days of receipt of Contractors submittal by ENGINEER and will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto.
- **9. ENGINEER** will evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor.
- 10. ENGINEER will require such special inspections or tests of the Work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by laws, rules, regulations, ordinances codes, orders or the Contract Documents. ENGINEER'S review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests or approvals comply with the requirements of the Contract Documents. ENGINEER shall be entitled to rely on the results of such tests.



- 11. ENGINEER will render formal written decisions on all claims of OWNER and Contractor relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the Work. In rendering such decisions, ENGINEER shall be fair and not show partiality to OWNER or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.
- **12.** Based upon **ENGINEER'S** observations as an experienced and qualified design professional and on review of Applications for Payment and the accompanying support documentation:
  - 12.1. Recommend the amounts that Contractor be paid. Such recommendations of payment will be in writing and will constitute ENGINEER'S representation to OWNER, based on such observations and review, that, to the best of ENGINEER'S knowledge, information and belief, the Work has progressed to the point indicated, the quality of such Work is generally in accordance with the Contract Documents, subject to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation, and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is ENGINEER'S recommendations of payment will include final determinations of quantities and classifications of such Work. The responsibilities of ENGINEER contained in the paragraph are expressly subject to the limitations set forth in the following paragraph and other express or general limitations in the Agreement and elsewhere.
  - 12.2. By recommending any payment ENGINEER shall not thereby be deemed to have represented that observations made by ENGINEER to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to ENGINEER in this Agreement and the Contract Documents. Neither ENGINEER'S review of Contractor's Work for the purposes of recommending payments nor ENGINEER'S recommendation of any payment including final payment will impose on ENGINEER responsibility to supervise direct or control such Work or for the means, methods, techniques, sequences or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with laws, rules, regulation, ordinances, codes or orders applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on ENGINEER to make and examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any of the Work, materials or equipment has passed to OWNER free and clear of any liens, claims, security interests or encumbrances, or that there may not be other matters at issue between OWNER and Contractor that might affect the amount that should be paid.



- **13. ENGINEER** will receive and review maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Contract Documents, certificates of inspection, tests and approvals, and marked-up record documents including Shop Drawings, Samples and other data and marked-up record Drawings which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment. **ENGINEER** shall transmit these documents to **OWNER**.
- 14. ENGINEER will prepare and furnish to OWNER a set of reproducible Project Record Drawings showing appropriate record information based on Project documentation received from Resident Project Representative and Contractor.
- 15. Following notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with **OWNER**, and Contractor, **ENGINEER** will conduct an inspection to determine if the Work is substantially complete. If after considering any objections of **OWNER**, **ENGINEER** considers the Work substantially complete; **ENGINEER** shall deliver a certificate of Substantial Completion to **OWNER** and Contractor.
- **16. ENGINEER** shall not be responsible for the acts or omissions of any Contractor or any of their subcontractors, vendors, suppliers, or of any other individual or entity performing or furnishing any of the Work. **ENGINEER** shall not be responsible for any Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.
- 17. The Construction Phase will commence with the execution of the Construction Agreement for the Project or any part thereof and will terminate upon written recommendation by **ENGINEER** of final payment to Contractor.



# EXHIBIT C

### **RESIDENT PROJECT REPRESENTATIVE**

- 1. ENGINEER shall furnish a Resident Project Representative (RPR), assistants and other field staff to assist ENGINEER in observing progress and quality of the Work. The RPR, assistants and other field staff to assist ENGINEER in observing progress and quality of the Work. The RPR, assistants and other field staff under this Exhibit C shall provide full time representation unless waived by OWNER.
- 2. Through such additional observations of Contractor's work in progress and field checks of materials and equipment by the **RPR** and assistants, **ENGINEER** shall endeavor to provide further protection for **OWNER** against defects and deficiencies in the Work. However, **ENGINEER** shall not, during such visits or as a result of such observations of Contractor's work in progress supervise, direct, or have control over Contractor's work nor shall **ENGINEER** have authority over or responsibility for the means, methods, techniques, sequences or procedures selected by Contractor, for safety precautions and programs incident to the Work, for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's failure to furnish and perform the Work in accordance with the Contract Documents. In addition, the specific limitations set forth in Exhibit B are applicable.
- 3. The duties and responsibilities of the **RPR** are limited to those of **ENGINEER** in **ENGINEER'S** Agreement with the **OWNER** and in the construction documents, and are further limited and described as follows:
  - **3.1. RPR** is **ENGINEER'S** agent at the Site, will act as directed by and under the supervision of **ENGINEER**, and will confer with **ENGINEER** regarding **RPR'S** actions. **RPR'S** dealings in matters pertaining to the Contractor's work in progress shall in general be with **ENGINEER** and Contractor, keeping **OWNER** advised as necessary. **RPR'S** dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor. **RPR** shall generally communicate with **OWNER** with the knowledge of and under the direction of **ENGINEER**.
  - **3.2.** Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by Contractor and consult with **ENGINEER** concerning acceptability.
  - **3.3.** Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.
  - **3.4.** Serve as **ENGINEER'S** liaison with Contractor, working principally through Contractor's superintendent and assist in understanding the intent of Contract Documents; and assist **ENGINEER** in serving as **OWNER'S** liaison with Contractor when Contractor's operations affect **OWNER'S** on-site operations.



- **3.5.** Assist in obtaining from **OWNER** additional details or information, when required for proper execution of the Work.
- **3.6.** Report to **ENGINEER** when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by **ENGINEER**.
- 3.7. Record date of receipt of approved Shop Drawings and Samples.
- **3.8.** Receive Samples which are furnished at the Site by Contractor, and notify **ENGINEER** of availability of Samples for examination.
- **3.9.** Advise **ENGINEER** and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample for which **RPR** believes that the submittal has not been approved by **ENGINEER**.
- **3.10.** Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with **RPR'S** recommendations to **ENGINEER**. Transmit to Contractor in writing decisions as issued by **ENGINEER**.
- **3.11.** Conduct on-site observations of Contractor's work in progress to assist **ENGINEER** in determining if the Work is in general proceeding in accordance with the Contract Documents.
- **3.12.** Report to **ENGINEER** whenever **RPR** believes that any part of Contractor's work in progress will not produce a completed Project that conforms generally to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged or does no meet the requirements of any inspection, test or approval required to be made; and advise **ENGINEER** of that part of Contractor's work in progress that **RPR** believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
- **3.13.** Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate details relative to the test procedures and startups.
- **3.14.** Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to **ENGINEER**.
- **3.15.** Consult with **ENGINEER** in advance of scheduled major inspections, tests, and systems startups of important phases of the Work.
- **3.16.** Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate **OWNER'S** personnel, and that Contractor maintains adequate records thereof.
- **3.17.** Observe, record, and report to **ENGINEER** appropriate details relative to the test procedures and systems startups.



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- **3.18.** Maintain at the Job Site, orderly files for correspondence, reports of job conferences, reproductions of original Contract Documents including all Work Change Directives, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, **ENGINEER'S** clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing and Sample submittals received from and delivered to Contractor and other Project related documents.
- **3.19.** Prepare a daily report or keep a diary or log book, recording Contractor's hours on the job Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed condition, Site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to **ENGINEER**.
- **3.20.** Record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.
- 3.21. Maintain records for use in preparing Project documentation.
- **3.22.** Upon completion of construction furnish original set of all RPR Project documentation to **ENGINEER**.
- **3.23.** Furnish to **ENGINEER** periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.
- **3.24.** Draft and recommend to **ENGINEER** proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- **3.25.** Furnish to **ENGINEER** and **OWNER** copies of all inspection, test, and system startup reports.
- **3.26.** Report immediately to **ENGINEER** the occurrence of any Site accidents, any Hazardous Environmental Conditions, emergencies, or acts of God endangering the Work, and property damaged by fire or other causes.
- **3.27.** Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to **ENGINEER**, noting particularly the relationship of the payment requested to the schedule of values, Work completed and materials and equipment delivered at the Site but not incorporated in the Work.
- **3.28.** During the course of the Work, verify that material and equipment certifications, maintenance and operation manuals and other data required by the Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to **ENGINEER** for review and forwarding to **OWNER** prior to payment for that part of the Work.
- **3.29.** Before **ENGINEER** issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.



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- **3.30.** Observe whether Contractor has had performed inspections required by Laws and Regulations applicable to the Work, including but not limited to, those to be performed by public agencies having jurisdiction over the Work.
- **3.31.** Participate in a final inspection in the company of **ENGINEER**, **OWNER**, and Contractor and prepare a final list of items to be completed or corrected.
- **3.32.** Observe whether all items on final list have been completed or corrected and make recommendations to **ENGINEER** concerning acceptance and issuance of the Notice of Acceptability of the Work.
- 4. Resident Project Representative shall not:

- **4.1.** Authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items) unless authorized by **ENGINEER**.
- **4.2.** Exceed limitations of **ENGINEER'S** authority as set forth in the Agreement or the Contract Documents.
- **4.3.** Undertake any of the responsibilities of Contractor, subcontractors, suppliers, or Contractor's superintendent.
- **4.4.** Advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor's work unless such advice or directions are specifically required by the Contract Documents.
- **4.5.** Advise on, issue directions regarding or assume control over safety precautions and programs in connection with the activities or operations of **OWNER** or Contractor.
- 4.6. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
- 4.7. Authorize OWNER to occupy the Project in whole or in part.
- **4.8.** Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by **ENGINEER**.

