

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

Date: 1/18/07

Project Name & Number: ST06-1334b, SSW06-1334b & EM1608(3)-PCN 012F

CIP #: 50521

Project Description: East Mall Drive Connection – North LaCrosse Street to East North Street

Consultant: Ferber Engineering Company

Original
Contract Amount: \$ 639,044.00

Original
Contract Date:

Original
Completion Date: 10/05/07

Amendment Number:

Amendment Description:

Current Contract Amount: _____

Current Completion Date: _____

Change Requested: _____

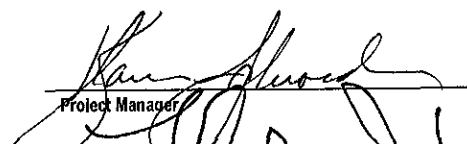
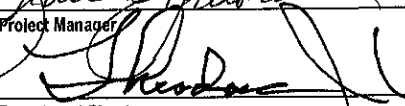
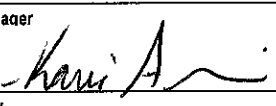
New Contract Amount: _____ \$0.00

New Completion Date: _____

Funding Source This Request:

Amount	Dept.	Line Item	Comments
\$538,558.00	8913	4223	Road Swap Funds
\$58,373.00	934	4223	Water Funds
\$42,113.00	834	4223	Sewer Funds
\$639,044.00	Total		

Agreement Review & Approvals

 Project Manager Date: 1/18/07	 Division Manager Date: 1/22/07
 Department Director Date: 1-19-07	 City Attorney Date: 1/22/07

ROUTING INSTRUCTIONS

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

FINANCE OFFICE USE ONLY

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

Date	Initials	Approved
Appropriation		Y N
Cash Flow		Y N

**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 Design, Preparation of Construction Plans and Specifications, Assistance with Bidding and Construction Phase Services for the **East Mall Drive Connection-North Lacrosse Street to East North Street, Rapid City Project No. ST06-1334b, CIP #50521, Grading [EM1608(3)-PCN 012F], and Utilities [SSW06-1334b]** 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

This **PROJECT** is the construction of East Mall Drive from the intersection with North LaCrosse Street easterly and southerly to the intersection with East North Street. This will be a 5-lane arterial street section approximately 1.25 miles in length. The street section will have a median constructed which will match or transition to the connecting roadway segments presently existing for the sections immediately to the west (Mall Drive west of North LaCrosse Street) and to the east (East Mall Drive east of East North Street) of this project.

The **PROJECT** includes the construction of water, sanitary sewer, storm sewer, and private utility infrastructure in the East Mall Drive right-of-way. The **PROJECT** will include the analysis of existing and fully developed drainage within the area draining to East Mall Drive as defined herein as well as design of the street and major drainage facilities in East Mall Drive. The **PROJECT** will include construction of street lighting.

The **PROJECT** shall include preparation of an Environmental Assessment of proposed alternative alignments including those identified in the Northeast Area Analysis report;

CONSULTANT will assist the **OWNER** in coordinating with property owners' land use plans, 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, construction observation and project closeout.

DESIGN CRITERIA

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

- *City of Rapid City Drainage Design Criteria Manual.*
- *City of Rapid City Street Design Criteria Manual.*
- *City of Rapid City Utility Design Criteria Manual.*
- *City of Rapid City Standard Specifications for Public Works Construction, 2004.*
- *AASHTO Policy on Geometric Design of Highways and Streets.*
- *Ten States Standards.*
- *North Rapid High Level and North Deadwood Avenue Water System Expansion Study*
- *Northeast Area Analysis*
- *East Mall Drive Preliminary Design Report*

ARTICLE I SCOPE OF SERVICES

A. ENVIRONMENTAL SERVICES

CONSULTANT will subcontract with Quality Services Inc. to conduct an Environmental Assessment for the **PROJECT**.

A.1. **CONSULTANT** will initiate project consultation with Federal and State Agencies through letters, phone calls, and emails immediately after receiving Notice to Proceed.

A.2. CULTURAL RESOURCES INVENTORY

A.2.1. **CONSULTANT** will research archeological and historical records at the SD State Archeological Research Center, and SD State Historical Preservation Office (SHPO), National Register of Historic Places (NRHP), and National Historic Landmarks.

A.2.2. **CONSULTANT** will perform a surface inventory of the corridor and prepare an inventory report.

A.2.3. **CONSULTANT** will locate and evaluate any archeological sites and prepare a surface record. If needed, **CONSULTANT** will also conduct subsurface testing on up to four (4) sites.

A.2.4. **CONSULTANT** will prepare a report including color digital photos and maps and present in hardcopy and digital format. The CULTURAL RESOURCES INVENTORY will comply with SHPO and other review agencies.

A.3. ENVIRONMENTAL ASSESSMENT

A.3.1. **CONSULTANT** will prepare an Environmental Assessment following the FHWA T6640.8a guidelines for the East Mall Drive Extension. The EA will be Coordinated with Planning and Engineering Staffs at the City of Rapid City including the following steps:

A.3.1.1. **CONSULTANT** will collect and review all data available for all alternative alignments, including the no-build alternative.

A.3.1.2. **CONSULTANT** will review and evaluate conditions used in the study and that of the current conditions.

A.3.1.3. **CONSULTANT** will apply existing and updated policies and criteria from the **OWNER, SDDOT, and FHWA** to make recommendations for the preferred alignment selection. **CONSULTANT** will propose improvements to alignment if needed to meet all requirements.

A.3.1.4. **CONSULTANT** will compile data and prepare maps, graphs, or other visual aids for public presentations.

A.3.1.5. **CONSULTANT** will solicit comments from appropriate public agencies and interested parties via mail, email, and other communications and provide a draft report of preliminary findings and recommendations.

A.3.1.6. **CONSULTANT** will make revisions to the draft report based on public, agency, and staff comments. We will prepare a final EA report for State and Federal approval in accordance with FHWA Technical Advisory T 6640.8a.

A.3.1.7. Working with **OWNER, SDDOT, and FHWA, CONSULTANT** will make a determination regarding the necessity for holding public meetings. If the determination is made that public meetings are necessary, **CONSULTANT** will prepare agendas, hearing notices, handouts and executive summary documents for public meetings. **CONSULTANT** will advertise, attend and conduct public meetings for presentation of the study information. **CONSULTANT** will prepare synopsis and document public comments as part of the final EA report.

B. DESIGN DATA ACQUISITION

- B.1. **CONSULTANT** will obtain and distribute copies of existing street and utility plans for East Mall Drive, LaCrosse Street, and East North Street within the limits of the **PROJECT** as planned.
- 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 14 borings to depths from 10 to 40 feet below existing grade along the East Mall Drive corridor. The holes will be logged, and samples of the material will be collected. Standard Laboratory testing of the samples will be conducted to determine characteristic engineering properties of the soils. Soils resistivity testing will be performed. AET will provide Ferber Engineering foundation recommendations for fills, allowable cut and fill slopes, suitability of the soils for use as engineering fill below the roadway.
- 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, Prairie Wave, Western Area Power Administration and West River Electric. **CONSULTANT** will have utilities 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, Prairie Wave, Western Area Power Administration, and West River Electric 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.
- B.6. **CONSULTANT** will conduct topographic surveys of the LaCrosse Street, East North Street, and Mall Drive areas that **CONSULTANT** has not previously surveyed. The topographic survey will be completed using Rapid City Control, with ties to SDDOT control at I-90 Exit 60.
- B.7. **CONSULTANT** will conduct legal survey on properties adjacent to the LaCrosse Street, East Mall Drive and East North Street that **CONSULTANT** has not previously

surveyed. The legal survey will include establishing ties to lot corners, section corners and existing right-of-way monuments.

B.7.1. **CONSULTANT** will prepare legal descriptions, Highway Plats, and Easement Exhibits for right-of-way and easement acquisition.

C. PRELIMINARY DESIGN PHASE

C.1. **Traffic Operations Study** **CONSULTANT** will subcontract with Interstate Engineering, Inc. (IE) to prepare a **Traffic Operations Study** for the East Mall Drive **PROJECT**.

C.1.1. **CONSULTANT** and Interstate Engineering will meet with representatives of the development company proposing to develop land between East Mall Drive and I-90 to ascertain traffic origination/destination data. **CONSULTANT** will incorporate development information into Traffic Operations Study including access locations, types, and signalization requirements.

C.1.2. **IE** will develop traffic projections for use with development of the Environmental Assessment.

C.1.3. **IE** will develop the full development footprint for the major intersections of East Mall Drive with LaCrosse Street and East North Street.

C.1.4. **IE** will investigate traffic operations on LaCrosse Street between the I-90 west-bound ramp intersections and East Mall Drive with recommendations for improvements.

C.1.5. **IE** will develop an access control plan for the East Mall Drive corridor that will include developing footprints for access intersections and anticipated traffic control requirements.

C.1.6. **IE** will develop conceptual plans for pavement and lane transitions for East Mall Drive east of LaCrosse Street and west of East North Street, and for LaCrosse Street north of East Mall Drive.

C.1.7. **CONSULTANT** will submit the Traffic Operations Study with the Preliminary Design Report. The Traffic Operations Study will document development of traffic projections utilized for design, and will document and provide supporting information for design of all intersections and traffic control devices within the **PROJECT**.

C.2. Sanitary Sewer Plan

C.2.1. **CONSULTANT** will meet with staff from City Engineering Division and Operations Division to obtain previous plans and studies, and to discuss project requirements.

- C.2.2. **CONSULTANT** will identify all existing and planned sanitary sewer facilities within the East Mall Drive area bounded by I-90 on the south, Dyess Avenue on the east, Seger Drive on the north, and LaCrosse Street on the west.
- C.2.3. Working with **OWNER**, **CONSULTANT** will review previous design studies for the East Mall Drive area and will endeavor to identify main size changes for Seger Drive to reflect main alignment changes that have been previously constructed or are included in this **PROJECT**.
- C.2.4. **CONSULTANT** will prepare conceptual sanitary sewer plans combining existing and planned sanitary sewer facilities with necessary connections to economically provide sewer service for the East Mall Drive area bounded by I-90 on the south, Dyess Avenue on the east, Seger Drive on the north, and LaCrosse Street on the west
- C.2.5. **CONSULTANT** will prepare preliminary plan and profile sheets for the sanitary sewer facilities in the East Mall Drive Corridor.
- C.2.6. **CONSULTANT** will prepare estimates of probable construction cost estimate for recommended facilities.

C.3. Water Plan

- C.3.1. **CONSULTANT** will meet with staff from City Engineering Division and Operations Division to discuss project requirements and system design parameters.
- C.3.2. **CONSULTANT** will expand the WaterCAD model **CONSULTANT** prepared for the *North Rapid High Level and North Deadwood Avenue Water System Expansion Study* to evaluate the pressure zone boundary and proposed loops for proper sizing and operational configuration.
- C.3.2.1. **CONSULTANT** will input fire flow requirements as well as peak day demands for proposed developments along East Mall Drive to determine the necessity for a second connection to Low Level System to meet anticipated demands.
- C.3.2.2. **CONSULTANT** will facilitate meeting between Rapid City Public Works staff and Ellsworth AFB staff to discuss possible connection of East Mall Drive water to the EAFB water supply line. **CONSULTANT** will use existing model to estimate impact of connection.
- C.3.3. **CONSULTANT** will meet with the Rapid City Fire Department to discuss fire hydrant placement along East Mall Drive as well as requirements for possible fire station along East North Street.
- C.3.4. **CONSULTANT** will meet with developers concerning future connections to the water system to serve the proposed commercial development adjacent to East Mall Drive. **CONSULTANT** will endeavor to provide main extensions to enable future connections without costly excavation in the new street.

- C.3.5. **CONSULTANT** will identify preliminary horizontal and vertical alignments for the proposed water mains.
- C.3.6. **CONSULTANT** Will provide recommendations for cathodic protection of the metal fittings used in the construction of the project, taking into consideration the owner's desire for a useful life of 75 years.
- C.3.7. **CONSULTANT** will prepare preliminary plan and profile sheets for the water main improvements to be constructed in East Mall Drive using current Rapid City Design Standards.
- C.3.8. **CONSULTANT** will prepare estimates of probable construction costs for all facilities recommended in the preliminary water plan.

C.4. Storm Drainage Plan

- C.4.1. **CONSULTANT** will prepare a drainage analysis of East Mall Drive identifying tributary runoff areas, evaluating street flows, and determining inlet size and location for East Mall Drive.
- C.4.2. **CONSULTANT** will prepare preliminary plans and profiles for the storm sewer system in East Mall Drive. The Preliminary plans will include size, location and slope for the storm sewer improvements and the location and extent of improvement to the outlet channels.
- C.4.3. **CONSULTANT** will modify the interim drainage report included in the East Mall Drive Preliminary Design Report prepared by Ferber Engineering Company.
 - C.4.3.1. **CONSULTANT** will obtain as-constructed information for recently completed reconstruction of I-90 and East North Street and incorporate into report.
 - C.4.3.2. **CONSULTANT** will expand the scope of the study to incorporate the major drainage channel crossing LaCrosse Street north of the East Mall Drive intersection. **CONSULTANT** will calculate basin flows and prepare design plan improvements for the outlet channel from the upstream reaches of the basin through the outlet channel crossing of Seger Drive.
 - C.4.3.3. Drainage report will identify type, size and location of major drainage crossings required to convey design storms across arterial and collector streets within the study area.

C.5. Street Plan

- C.5.1. **CONSULTANT** will create preliminary plan and profiles for the four alternative alignments for East Mall Drive from East North Street to approximately 1,500 ft west of LaCrosse Street.
- C.5.2. Working with our sub-consultants, **CONSULTANT** will evaluate the proposed alternative alignments as to earthwork balances, right-of-way requirements, utility

service, construction costs, drainage impacts, and access. **CONSULTANT** will identify any adverse impacts from any of the alignments. **CONSULTANT** will make recommendations based upon this evaluation, and forward a preferred alignment to **OWNER**, **SDDOT**, and **FHWA**.

C.5.3. **CONSULTANT** will incorporate alignment and geometry recommendations from Interstate Engineering into a preliminary horizontal and vertical design of the intersections of East Mall Drive and LaCrosse Street, and East Mall Drive and East North Street. **CONSULTANT** will also incorporate alignment and geometry recommendations from Interstate Engineering regarding intermediate street and access intersections as well as recommended median improvements.

C.5.4. **CONSULTANT** will determine the extent of improvements that need to be made to Mall Drive west of LaCrosse Street, North Street north of East Mall Drive, East Mall Drive east of East North Street, and LaCrosse Street north and south of East Mall Drive.

C.5.5. **CONSULTANT** will work with American Engineering Testing, Inc (AET) to identify and evaluate preliminary grading and pavement sections for East Mall Drive, as well as transition areas for LaCrosse Street and Mall Drive.

C.5.6. **CONSULTANT** will prepare a preliminary horizontal and vertical design of East Mall Drive from East North Street to LaCrosse Street including transitions. The preliminary design will include: Typical grading and paving sections; centerline horizontal and vertical alignment information; storm drainage improvements; auxiliary lane layout; signing and striping; and signalization.

C.5.7. **CONSULTANT** will present right-of-way and easement information in graphic as well as tabular format.

C.5.8. Using recent bid-tabulations, **CONSULTANT** will prepare estimates of probable construction cost for pavement structures.

C.6. Street Lighting and Signalization

C.6.1. **CONSULTANT** will subcontract with West Plains Engineering, Inc (WPE) to provide electrical engineering design of the street lighting of East Mall Drive, and signalization of the intersections of East Mall Drive and East North Street, and East Mall Drive and LaCrosse Street. Preliminary plans will include:

C.6.1.1. Layout and spacing of streetlights.

C.6.1.2. Conduit location and type.

C.6.1.3. Preliminary cost estimate for construction of street lighting.

C.7. Preliminary Design Report

C.7.1. **CONSULTANT** will prepare a Preliminary Design Report that will include:

C.7.1.1. 11"x 17" street plans and profile at a scale of 1"=40' for East Mall Drive. Street plan and profile will include storm sewer.

C.7.1.2. 11"x 17" water and sanitary sewer plan and profile at a scale of 1"=40' for East Mall Drive.

C.7.1.3. Preliminary Electrical Plans including street lighting and signalization.

C.7.1.4. Layout plans showing land ownership, easement and right-of-way acquisition for streets, utilities, and storm drainage facilities.

C.7.1.5. The Preliminary Design Report will include the Preliminary Drainage Plan as defined in Section C.4.

C.7.1.6. The Preliminary Design Report will include a summary of the analysis and recommendations for the design of the streets and intersections, and a summary of the analysis of the water and sanitary sewer system recommendations.

C.7.1.7. The Preliminary Design Report will include preliminary engineers estimates of probable construction costs for all recommended improvements to the streets, water, sanitary sewer and storm drainage facilities.

D. FINAL DESIGN PHASE

D.1. Water and Sanitary Sewer

D.1.1. **CONSULTANT** will make any revisions to the plan and profile sheets identified during **OWNER** review or landowner negotiations.

D.1.2. **CONSULTANT** will resolve any conflicts between water, sanitary sewer, and other utilities.

D.1.3. **CONSULTANT** will add construction details and construction notes.

D.1.4. **CONSULTANT** will work with **OWNER** and property owners to identify and detail future service connections.

D.2. Streets

D.2.1. **CONSULTANT** will make any revisions to the plan and profile sheets identified during **OWNER** review or landowner negotiations.

D.2.2. **CONSULTANT** will prepare curb and gutter layout sheets at a scale of 1"=40'.

D.2.3. **CONSULTANT** will prepare pavement jointing plans for mainline paving and intersecting streets at a scale of 1"=40'.

D.2.4. **CONSULTANT** will check conflicts between storm sewer and utilities and make revisions to storm sewer plans.

- D.2.5. **CONSULTANT** will add construction details and construction notes.
- D.2.6. **CONSULTANT** will create general notes, typical sections and summary sheets.
- D.2.7. **CONSULTANT** will create intersection layout sheets.
- D.2.8. **CONSULTANT** will create pavement marking and signage sheets.
- D.2.9. **CONSULTANT** will create survey data sheets.
- D.2.10. **CONSULTANT** will create final cross section sheets.

D.3. Electrical Plans

- D.3.1. **CONSULTANT** will make any revisions identified during **OWNER** review.
- D.3.2. **CONSULTANT** will check conflicts between electrical conduits and other utilities.
- D.3.3. **CONSULTANT** will add construction details and construction notes.

D.4. Construction Traffic Control Plans

- D.4.1. **CONSULTANT** will review sequence of construction operations.
- D.4.2. **CONSULTANT** will prepare detailed Construction Traffic Control Plans.

E. CONSTRUCTION DOCUMENTS PHASE

- E.1. **CONSULTANT** will produce Final Construction Plans on 11"x 17" paper drawings at a horizontal scale of 1"= 40' and vertical scale of 1" = 10' to City of Rapid City 2005 Drafting Standards.
- E.2. **CONSULTANT** will create a cover sheet showing location and extent of the **PROJECT**.
- E.3. **CONSULTANT** will prepare general notes, quantity summary, plan and profile sheets.
- E.4. **CONSULTANT** will prepare survey data sheets.
 - E.4.1. Survey information will be provided including Station and Offset 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. **Contract Documents**
 - E.7.1. **CONSULTANT** will prepare and submit Contract Documents.
 - E.7.2. **CONSULTANT** will prepare a final estimate of probable construction cost.

E.7.3. **CONSULTANT** will prepare final bidder's proposal.

F. BIDDING PHASE SERVICES

- F.1. **CONSULTANT** will provide advertisement for bids to CIC, Rapid City Journal, and **OWNER**.
- F.2. **CONSULTANT** will print and distribute Construction Plans and Contract Documents, and will maintain a list of Bidders holding copies of the Contract Documents.
- F.3. **CONSULTANT** will schedule and conduct a pre-bid conference, make presentation, and answer bidder questions.
- F.4. **CONSULTANT** will issue Addenda as required.
- F.5. **CONSULTANT** will conduct the bid opening at the City Finance Office, and compile the bids in Rapid City Excel Project Book format, in coordination with City Finance Personnel. **CONSULTANT** will forward the bid results to **OWNER** with recommendations.
- F.6. **CONSULTANT** will prepare Contract Documents after City Council permission to award.
- F.7. After required signatures are completed on the Contract Documents, **CONSULTANT** will prepare Notice To Proceed and forward to Contractor and **OWNER**.

G. CONSTRUCTION PHASE SERVICES

The construction of the **PROJECT** is anticipated to begin Fall 2007. **OWNER** engages **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. **CONSULTANT** will contract with a Geotechnical Engineer to provide soil compaction testing services.
- G.3. **CONSULTANT** shall provide Project Closeout services as described in Exhibit B and Exhibit C.
- G.4. **CONSULTANT** shall prepare and submit as-built revisions to the plans drawings and specifications on 22"X34" Mylar and on CD in AutoCAD format.

H. MEETINGS

- H.1. **CONSULTANT** shall attend meetings as required such as: Project scoping meeting, Kickoff meeting, 95% plans and Specifications review, 100% plans and Specifications

review, Prebid Conference, Bid Opening, Preconstruction Conference, Construction Progress meetings, Committee and Council meetings as required.

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 Files of Topographic Base Maps and Digital Terrain Models for the **PROJECT** area.

2.5 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. The schedule included in this Agreement is based upon receipt of the Notice To Proceed by February 10, 2007.

3.2 **CONSULTANT** will submit the draft EA to **OWNER** by April 6, 2007.

3.3 **CONSULTANT** will submit the final EA to **OWNER** by June 8, 2007.

- 3.4 **CONSULTANT** will submit the Preliminary Design Report to **OWNER** by May 18, 2007.
- 3.5 **CONSULTANT** will submit the 60% Plans to **OWNER** by July 10, 2007.
- 3.6 **CONSULTANT** will submit the 95% Plans to **OWNER** by August 10, 2007.
- 3.7 **CONSULTANT** will submit the 100% Plans to **OWNER** by September 14, 2007.
- 3.8 The **PROJECT** schedule anticipates prompt review and return of review comments to **CONSULTANT**. Delays in receiving review comments will affect future submittals.
- 3.9 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 60 days after completion of construction
- 3.10 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.
 - 4.3.1 The maximum estimated fee for Article I, Items A, is \$53,852.00.
 - 4.3.2 The maximum estimated fee for Article I, Items B-C, is \$193,375.00.
 - 4.3.3 The maximum estimated fee for Article I, Items D-E, is \$127,802.00.
 - 4.3.4 The maximum estimated fee for Article I, Items F, is \$10,429.00.
 - 4.3.5 The maximum estimated fee for Article I, Item G.1-G.4 is \$253,586.00.
 - 4.3.6 Total: \$639,044.00.
- 4.4 If **OWNER** deems necessary and grants a time extension to the Contractor for completion of the construction contract, the **CONSULTANT** shall be compensated additional fees for Construction Phase Services, commensurate with a rate calculated for the original contract, per the attached Schedule of Charges.

- 4.5 The **CONSULTANT** will not exceed the amounts in paragraphs 4.3 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**.

East Mall Drive Connection North Lacrosse Street to East North Street
Rapid City Project No. ST06-1334b, CIP #50521, Grading [EM1608(3)-PCN 012F], and
Utilities [SSW06-1334b] ~~PW013007-24~~

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

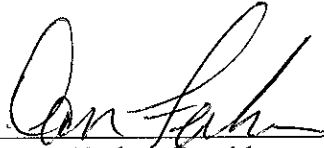
Jim Shaw, Mayor

ATTEST:

James F. Preston
Finance Officer

Date: _____

FERBER ENGINEERING COMPANY, INC.

BY: 
Dan P. Ferber, President

Date: 1-18-07

GENERAL TERMS AND CONDITIONS- RAPID CITY

1. 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 entered into between the Client and FEC or if FEC fails to carry out any 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

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).

EXHIBIT A

2007 SCHEDULE OF CHARGES

<u>EMPLOYEE CLASSIFICATION</u>	<u>HOURLY RATE</u>
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	\$.445

PRINTING CHARGES

Bond	\$.20/sq ft
Vellum	\$.30/sq ft
Mylar	\$.50/sq ft
Clear Film	\$.50/sq ft
Photocopies, 8 ½" x 11" (BW)	\$.10
Photocopies, 8 ½" x 11" (Color)	\$.50
Binding (up to 1")	\$ 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 conduct 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

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 within 14 days of receipt of Contractor's 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 assist the **OWNER** in evaluating and determining the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor.
10. **ENGINEER** will provide Public Service Announcements at appropriate times throughout the project to alert the public of project commencement and changes in the traffic control configuration.
11. **ENGINEER** will require such special inspections or tests of the Work under the guidelines of the Standard Specifications, and additional testing 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.

12. 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.

13. Based upon ENGINEER'S observations as an experienced and qualified design professional and on review of Applications for Payment and the accompanying support documentation:

13.1. 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** responsibility to observe the Work. In the case of unit price Work, **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.

13.2. 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.

14. **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**.
15. **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.
16. 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.
17. Upon final completion of the project by the Contractor, in company with **OWNER**, and Contractor, **ENGINEER** will conduct an inspection to determine if the Work is complete. **ENGINEER** shall deliver a certificate of final completion to the **OWNER** and Contractor, including the date for the start of the warranty period.
18. **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.
19. 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 under this Exhibit C shall provide full time representation during times when construction activities warrant, and part-time representation when the work does not warrant full-time representation. The total time of representation by the **RPR** through the duration of the project will be approximately equivalent to 2/3 full-time, 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 performing and furnishing the Work, or responsibility of construction for 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 not 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.
- 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.
 - 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 Notice of Project Completion and Start of Warranty Period.
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**.