

**PROFESSIONAL SERVICES AGREEMENT
for ENGINEERING SERVICES**

This AGREEMENT is made this 15TH day of December, 2004 by and between **the City of Rapid City, 300 Sixth Street, Rapid City, SD 57701**, hereinafter called the Client, and **FMG, Inc., 3700 Sturgis Road, Rapid City, SD 57702**, hereinafter called the Consultant.

The Client agrees to employ the Consultant to render Engineering services in connection with the Client's project described as:

**ELM AVENUE/MEADE STREET RECONSTRUCTION
PROJECT NO. DR03-1333**


It is agreed that the Consultant shall perform the services and the Client shall make payment for same in accordance with the terms and conditions set forth in the attached Articles and Exhibits which are herewith made a part of this Agreement. The Agreement between the parties consists of these terms, Exhibits, attached proposals, and other attachments noted. Together, these elements constitute the entire Agreement superseding any and all prior negotiations, correspondence, or agreements either written or oral. Any changes to this Agreement must be mutually agreed to in writing.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement (in duplicate) on the day and year first mentioned above.

**CLIENT:
CITY OF RAPID CITY**

**CONSULTANT:
FMG, INC.**

By: _____

By: 
Allen D. Foster, P. E.

Title: _____

Title: President

Date: _____

Date: 12/15/04

ATTEST:

By: _____

Title: _____

Date: _____

ARTICLE I - PROJECT PROVISIONS

A. PROJECT DESCRIPTION

The project is for preliminary engineering design of the reconstruction of Elm Avenue from St. Patrick Street south to E. Utah Street and for final design (100% Plans) for reconstruction of East Meade St. from Elm Avenue to Hoefer Ct. The project includes water main reconstruction, sanitary sewer reconstruction, drainage studies and drainage improvements, sidewalk, and surfacing.

B. SCOPE OF SERVICES

The anticipated services is set forth in the "Request for Proposal" dated September 24, 2004 from the City of Rapid City except that the services included herein for the Construction Phase are limited to those identified in the Man-Hour Projections and Estimated Fees attached hereto as Attachment B and Attachment C. The "Request for Proposal" dated September 24, 2004 is attached hereto as Attachment A.

The tasks to complete the project requirements are established in the Man-Hour Projections and Estimated Fees attached hereto as Attachment B and Attachment C. A detailed description of each task is included with Attachments B and C.

The anticipated scope of services for structural engineering related to the E. Meade Street segment of the project is set forth in the proposal from Albertson Engineering, Inc. dated November 19, 2004 which is attached hereto as Attachment D.

The anticipated scope of services for traffic engineering related to the Elm Street segment of the project is set forth in the proposal from Benschopf and Associates dated November 10, 2004 which is attached hereto as Attachment E. Data collection for existing parking trends and turning movements is included in the tasks identified in Attachment C.

The City shall furnish copies of existing reports, studies, and mapping appropriate for the study.

C. PAYMENTS OF THE CONSULTANT

For the engineering services performed by the Consultant under this Agreement, and as full compensation therefor, and for all expenditures made and all expenses incurred by the Consultant in connection with the Agreement, except as otherwise expressly provided herein, subject to and in conformance with all provisions of the Agreement, Client will pay consultant as follows:

1.1 For the Engineering Services described in Section B, Client will pay Consultant in accordance with the provisions of Article II. Total compensation, as outlined in the Estimated Man-Hours and Fees attached hereto as Attachment B and Attachment C, will not exceed \$202,891 without prior written approval of Client. The services will be billed on a unit-cost basis. The unit costs are considered fixed; however, the total will vary depending on the actual project work requirements and conditions.

Summary

100% Plans-E. Meade Street, Elm Avenue to Hoefer Ct. (Attachment B)	\$119,912
Preliminary Plans-Elm Ave. from E. St. Patrick St. to Utah St. (Attachment C)	<u>\$82,979</u>
Total Fees	\$202,891

1.2 For additional services rendered pursuant to Article II, Section 7.0, Client will pay Consultant on the basis hourly rates set forth in the Estimated Man-Hours and Estimated Fees attached hereto as Attachments B, C, D and E.

D. BILLING RATES

See Attachments B, C, D and E.

E. SCHEDULE

1.1 The provisions of this section have been agreed to in anticipation of the orderly and continuous progress of the Project through completion of construction. Consultant's obligation to render services hereunder will extend for a period which may reasonably be required for completion of the project including extra work and extensions thereto.

1.2 The schedule in the "Request for Proposal" dated September 24, 2004 from the City of Rapid City is no longer applicable. The schedule shall be adjusted with 100% P&S Submittal (Phase One) completion by August 15, 2005.

ARTICLE II - GENERAL CONDITIONS

SECTION 1.0 - STANDARD OF CARE

- 1.1 Consultant agrees to perform the services set forth in this Agreement in accordance with generally accepted professional practices, in the same or similar localities, related to the nature of the work accomplished, at the time the services are performed. Consultant's services shall not be subject to any other express or implied warranties whatsoever.
- 1.2 Client recognizes that site characteristics and subsurface conditions may vary from those observed at locations where observations, borings, surveys, or explorations are made, and that site conditions may change with time. Client further recognizes that even with a comprehensive sampling and testing program, implemented with experienced personnel who function in accordance with a professional standard of care, there may be failure to detect certain conditions. Client will furnish to Consultant all reports, data, studies, plans, specifications, documents and other information deemed necessary by Consultant for performance of the services. Consultant may rely upon Client provided documents in performing the services but Consultant assumes no responsibility or liability for the accuracy of such documents. Data, interpretations, and recommendations by Consultant will be based solely on information available to Consultant, and Consultant will not be responsible for hidden conditions or other parties' interpretations or use of the information developed.

SECTION 2.0 SITE ACCESS AND RIGHT OF ENTRY

- 2.1 Client will grant or obtain free access to the site for all equipment and personnel necessary for Consultant to perform the work set forth in this Agreement. Client will notify any and all possessors of the project site that Client has granted Consultant free access to the site. Consultant will take reasonable precautions to minimize damage to the site, but it is understood by Client that, in the normal course of work, some damage may occur but in the absence of any written damage agreement, Consultant shall not be liable or responsible for such damage. Any additional costs to facilitate site access will be charged to the Client at cost.

SECTION 3.0 TIME

- 3.1 The Consultant will perform the professional services in a timely manner consistent with sound engineering practices.

SECTION 4.0 DELAYS

- 4.1 It is recognized that unforeseen events or circumstances may arise causing delays beyond the control of either the Client or the Consultant. Whenever such delays occur or are about to occur, the Consultant shall immediately notify the Client. If such delays are not the fault of the Consultant and will increase his cost of performing the services required under this Agreement, the parties hereto shall enter into a written agreement describing the additional cost and the compensation therefor.

SECTION 5.0 OWNERSHIP OF DOCUMENTS

- 5.1 Reports, drawings, specifications, field data, laboratory test data, calculations, estimates, and other materials resulting from Consultant's efforts are intended solely for purposes of this Agreement; any reuse by Client or others for purposes outside of this Agreement or any failure to follow Consultant's recommendations, without Consultant's written permission, shall be at the user's sole risk. Client will furnish such reports, data, studies, plans, specifications, documents, and other information deemed necessary by Consultant for proper performance of its services. Consultant may rely upon Client-provided documents in performing the services required under this Agreement; however, Consultant assumes no responsibility or liability for their accuracy. Client-provided documents which are prepared, as instruments of service, shall remain

Consultant's property and consultant shall retain copyrights to these materials. Consultant will retain all pertinent records relating to services performed for a period of six years following submission of a report during which period the records will be made available to Client at all reasonable times.

SECTION 6.0 SAFETY AND WORK PROGRESS

- 6.1 The Consultant will perform professional services in accordance with custom and practice within the locality and in no instance is to be responsible for methods of performance of the work, superintendence, sequencing of construction, or safety in or about the jobsite.

SECTION 7.0 CHANGE IN SCOPE

- 7.1 It is recognized by the parties of this Agreement that unforeseen circumstances may arise during the development and completion of the project which will dictate changes in the scope of work, the procedures, and the Consultant's fees.
- 7.2 Consultant shall identify the changed conditions which in Consultant's judgment make such modification necessary, and Consultant and Client shall promptly and in good faith enter into modification of the work scope and fees of this agreement to help permit Consultant to continue to meet Client's needs. If mutually agreed in writing by the Client and the Consultant, the Consultant shall perform or obtain the services of others to perform any additional activities deemed necessary for completion of the project. Additional Services are not included as part of the original proposal and will be paid by the Client as provided in writing through subsequent work proposals, at the established rates and fees.

SECTION 8.0 CHANGE ORDERS

- 8.1 Whenever there occurs any change(s) affecting the scope or nature of the work and the terms and requirements of this Agreement, the Consultant shall issue a written supplemental agreement to be agreed upon by both parties hereto and become a part of this Agreement. The Supplemental Agreement shall describe the nature of and the reasons for such change and any change in compensation to be paid the Consultant by the Client.

SECTION 9.0 INVOICES AND PAYMENT

- 9.1 The Consultant will submit invoices to the Client monthly and/or a final bill upon completion of services. The invoices will be prepared in accordance with the applicable cost items indicated in Article I proposal(s), related attachments, and for any Additional Services provided.
- 9.2 If Client objects to all or any portion of any invoice, Client will so notify Consultant in writing within fourteen (14) calendar days of the invoice date, identify the cause of disagreement, and pay when due that portion of the invoice not in dispute. The parties will immediately make every effort to settle the disputed portion of the invoice. In the absence of written notification described above, the balance as stated on the invoice will be paid.
- 9.3 Payment is due upon presentation of invoice and is past due thirty (30) days from invoice date. Invoices are delinquent if payment has not been received within thirty (30) days from date of invoice. Client will pay additional charge of one-and-one-half (1.5) percent per month (or the maximum percentage allowed by law, whichever is lower) on any delinquent amount, excepting any portion of the invoiced amount in dispute and resolved in favor of Client. Payment thereafter will first be applied to accrued interest and then to the principal unpaid amount. All time spent and expenses incurred (including any attorney's fees) in connection with collection of any delinquent amount will be paid by Client to Consultant per Consultant's current fee schedules. Client's failure to pay Consultant within sixty (60) days may constitute a breach of this Agreement.

- 9.4 Payment to Consultant by Client is in no instance contingent upon Client's receipt of payment from any additional party including, but not limited to, insurance companies or governmental compensation funds.

SECTION 10.0 DISPUTES

- 10.1 DELETED

SECTION 11.0 RISK ALLOCATION

- 11.1 DELETED

- 11.2 DELETED

- 11.3 The Owner and Client acknowledges that the Consultant is a corporation and agrees that any claim made by the Owner or Client arising out of any act or omission of any director, officer or employee of the Consultant in the execution or performance of this agreement, shall be made against the Consultant and not against such director, officer or employee.

- 11.4 DELETED

SECTION 12.0 INSURANCE

- 12.1 The Consultant represents and warrants that it and its agents, staff, and subconsultants employed by it is and are protected by worker's compensation insurance and that the Consultant has such coverage under public liability and property damage insurance policies which the Consultant deems to be adequate. Certificates for all such policies of insurance shall be provided to the Client upon request in writing.

SECTION 13.0 ASSIGNS

- 13.1 Neither the Client nor the Consultant shall delegate, assign, sublet, or transfer his duties or interest in this Agreement without the written consent of the other party.

SECTION 14.0 TERMINATION

- 14.1 This Agreement may be terminated by either party upon seven (7) days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, the Consultant shall be paid for services performed to the termination notice date plus reasonable termination expenses.

- 14.2 In the event of termination, or suspension for more than three (3) months prior to completion of all drawings, specification, reports and other instruments contemplated by this Agreement, the Consultant may complete such analyses and records as are necessary to complete his files and may also complete a report on the services performed to the date of notice of termination or suspension. The expenses of termination or suspension shall include all direct costs of the Consultant in completing such analyses, records and reports.

SECTION 15.0 FORCE MAJEURE

- 15.1 Neither party to this Agreement will be liable to the other party for delays in performing the services, nor for the direct or indirect cost resulting from such delays, that may result from labor strikes, riots, war, acts of governmental authorities, extraordinary weather conditions or other natural catastrophe, or any other cause beyond the reasonable control or contemplation of either party.

SECTION 16.0 SEVERABILITY AND SURVIVAL

- 16.1 Any element of this Agreement later held to violate a law shall be deemed void, and all remaining provisions shall continue in force. However, Client and Consultant will in good faith attempt to replace any invalid or unenforceable provision with one that is valid and enforceable, and which comes as close as possible to expressing the intent of the original provision. All terms and conditions of this Agreement allocating liability and defining indemnities between Client and Consultant shall survive the completion of the services hereunder and the termination of this Agreement for any cause.

SECTION 17.0 GOVERNING LAW

- 17.1 The law of the State of South Dakota will govern the validity of the Agreement terms, their interpretation and performance.
- 17.2 This Agreement is binding upon the parties, their heirs, successors and assigns.
- 17.3 The parties have read the foregoing, understand completely the terms and conditions, and willingly enter into this Agreement.

CITY OF RAPID CITY

Engineering Division

300 Sixth Street
 Rapid City, SD 57701-2724
 Telephone: (605) 394-4154
 FAX: (605) 394-6636
 E-mail: rich.wells@rcgov.org
 Direct Phone: (605) 394-5377 Ext.218



September 24, 2004

RECEIVED

Mr. Jerry Foster
 FMG Inc.
 3700 Sturgis Rd.
 Rapid City, SD 57702

SEP 27 2004

FMG. INC.

RE: Elm Ave / Meade St. Reconstruction; DR03-1333

Dear Mr.Foster:

The City of Rapid City is soliciting proposals for a consultant to design the above noted project per the attached request for proposals. The following firms are on the list for this project:

Ferber Engineering
 Alliance
 FMG Inc.
 TSP Inc.

We look forward to receiving your proposal by October 8, 2004. Interviews are tentively scheduled for the following week.

If you have any questions, please do not hesitate to contact me.

Sincerely,

CITY OF RAPID CITY

Richard A. Wells, P.E.,L.S.
 Project Manger



EQUAL OPPORTUNITY EMPLOYER

REQUEST FOR PROPOSALS
for
ELM AVENUE/ MEADE ST. RECONSTRUCTION
PROJECT NO. DR03-1333

PW122804-12

PROJECT DESCRIPTION

The City of Rapid City proposes to reconstruct Elm Ave. from St. Patrick St. to E. Utah Street. In addition, the City also proposes to reconstruct Meade St. from Elm Ave. to Hoefer Ct. Reconstruction of Elm Ave. and Meade St. will consist of removal and replacement of the existing street section, storm sewer improvements (per Elm Ave Drainage Study & Preliminary Storm Sewer Design DR03-1333 – FMG 8/04), sanitary sewer main replacement (see Southeast Rapid City Infiltration/ Inflow Study CETEC 10/97) and reconstruction of water mains and reconstruction as necessary of the 20" transmission Elm Ave (see Corrosion Study for City Metallic Water Transmission Mains: - HKM 2/04). A map has been included with this request for proposals showing the proposed project limits.

Additional background information:

- Water Study – FMG 1985
- Geotechnical Evaluation for Utility Reconstruct – FMG 1999
- City Engineering Estimating Guide
- Meade St. Sewer Reconstruction Plans
- Hawthorne Phase 1 Reconstruction Plans

Design criteria for storm sewer facilities shall include the Rapid City Drainage Criteria Manual and the Meade/ Hawthorne Drainage Basin Design Plan. Criteria for street design shall include the Rapid City Street Design Criteria Manual, "A Policy on geometric Design of Highways and Streets" (AASHTO) and "AASHTO Guide for Design of Pavement Structures". Design criteria for sanitary sewer and water main design shall include Recommended Standards for Wastewater Facilities and Water Works (Ten States Standards) and Draft Design Criteria Manual for Water Distribution Systems and Sanitary Sewer collection Systems for City of Rapid City and Uniform Fire Code as adopted by the City of Rapid City. All construction plans shall be according to The City of Rapid City Standard Specifications, unless otherwise specified in the Detailed Specifications and/or General Notes.

Various amounts of Preliminary design were performed by FMG Inc. in the project limits. The main scope of FMG design work was for storm water. The consultant will be required to perform preliminary & final design of the Meade St portion of this project and preliminary plans and studies for Elm Ave. The consultant shall make detailed phasing limit recommendations and prepare the plans accordingly. City staff has identified preliminary phasing limits for this work as follows:

- 1) Meade St (Elm to Hoefer Crt)
- 2) Elm Ave. (Meade St. to St. Patrick St.)
- 3) Elm Ave. (E Utah St to Meade St.)

Note that these phasing limits shall likely need modification and detailing based on project budgeting and infrastructure needs.

SCOPE OF SERVICES REQUESTED

1. PRELIMINARY DESIGN PHASE (Elm Ave & Meade St.)

1.1. Review information, including but not limited to, the above listed criteria manuals and design plans and as built plans from previous projects. Review land use plans from City Planning. Also obtain and review water and sanitary sewer service records and utility maintenance televised sanitary sewer main. ~~It may be necessary to provide sanitary sewer flow monitoring to determine existing condition sanitary sewer flow.~~ Obtain ortho photos in electronic format provided by City GIS Department.

1.2. Perform the following planning tasks:

- Perform site surveys sufficient for design plans preparation;
- Perform legal survey necessary to provide preliminary and final platting services;
- Coordinate with private utility companies to determine locations of existing utilities;
- Perform preliminary horizontal and vertical alignment analysis; and,
- The City desires to achieve a minimum 40 year street design life and an 80-100 life for water & sewer.
- Prepare preliminary phasing limits for project.

- 1.3. Recommend utility layouts, extents of offsite Sanitary Sewer Main replacement if necessary, materials for pavement section, horizontal and vertical alignments, storm sewer improvements, intersection design, and limits of construction. Evaluate capacity of sanitary sewer based on present and future basin growth.
- 1.4. Verify ability to achieve the storm drainage improvements recommendations per the Elm Ave. Drainage Study and Preliminary Storm Sewer Design.. Additional preliminary drainage study and design plans shall be performed to determine feasibility of managing storm water from the Signal Heights area or portions thereof and determine what changes to the preliminary storm sewer design for Elm Ave are needed to facilitate the plan.
- 1.5. Verify ability to achieve sanitary sewer system improvements on Elm Avenue and Meade St per the Southeast Rapid City Infiltration/ Inflow Study, including analysis of future expansion effects and current capacity and flows. Recommend sanitary sewer service replacements based on condition and type of existing services.
- 1.6. Prepare preliminary opinion of probable construction cost. Cost shall be broken down to correspond to phasing limits.
- 1.7. Assist the City with property acquisition for any required additional right-of-way or construction easements; perform legal survey for property; and prepare plats and/or permanent/ temporary construction easement exhibits. Locate property monuments, indicate found and missing monuments and reference as necessary for replacement after construction is complete.
- 1.8. Provide all geotechnical investigations as may be necessary for design, provide in house services or negotiate an agreement for geotechnical engineering services, and coordinate with geotechnical engineer.
- 1.9. Prepare preliminary systems layouts (including profiles), e.g. locations of all hydrants, mainline valves, new and existing water mains in and immediately adjacent to service area, extents of Sanitary Sewer Main reconstruction, storm sewer system improvements (piping, open channels, inlet sizing, etc.) and inlet locations.
- 1.10. Prepare Preliminary Design Report, including water main, sanitary sewer main and storm sewer layout maps for future systems, with recommendations for review and comment by City staff, and conduct a review meeting with City staff. Sanitary Sewer, water flow & drainage calculations and recommendations will be required to be

submitted with the Preliminary Design Report. Modifications to the storm drainage facilities after the Preliminary Design Meeting will be required to be submitted at least by the 65% submittal.

2. FINAL DESIGN (Phase 1-Meade St.)

- 2.1. Provide complete plans and specifications for a unit price construction contract.
- 2.2. Provide route and topo survey, establish land ties and bench marks, locate property corners, and field locate all existing utilities. Scale of plan & profile sheets, 1" = 20' Horiz., 1" = 5' Vert. Construction staking information shall include either of the following formats:

2.2.1. On the Plans

- Station offset of all PC's, PI's, PT's, and any angle points
- Curve data
- Station offsets for all items of work requiring field staking

2.2.2. In tabular format on a plan sheet

- Coordinates and description of intervisible control points
- Curve data
- Coordinates of all items of work requiring field staking

Benchmark information shall be provided on each sheet.

- 2.3. Provide project layout plan to include lot lines (front and side) and addresses of all properties adjacent to construction.
- 2.4. Coordinate directly with utility companies' engineering divisions to ensure that all existing utilities are completely and accurately located in the field; that pertinent information regarding depth, material, size, etc. are noted on the plans; and that conflicts requiring relocation of utilities or special construction techniques are fully specified in the contract documents.
- 2.5. Provide general sequence of construction requirements in order to assist bidders to prepare their bids and to coordinate utilities construction with the street construction, to minimize interruption of service to water and sewer users and to protect the work area and adjacent properties from storm events causing flooding of the work zones and adjacent properties.

- 2.6. Provide Detailed Specifications supplementing *City of Rapid City Standard Specifications* as necessary. Detailed Specifications are required to be submitted, in addition to the 100% submittal, with the 65% and 95% submittals.
- 2.7. Provide Traffic Control Plans identifying detour routes and work areas for various stages of construction. Complete Traffic Control Plans will not be required for consultant design but will be a biddable item. Provide requirements for contractor provided traffic control plans including provisions for pedestrian access.
- 2.8. Prepare opinion of probable construction cost (engineer's estimate) for the project. Engineers Estimates are required to be submitted, in addition to the 100% submittal, with the 65% and 95% submittals.
- 2.9. Prepare any permits required by the City and any other regulatory agency.
- 2.10. Deliver the following:
 - Construction plans on 22"x34" mylar for printing by the City
 - Provide ½ size plans.
 - Construction plans on disk in AutoCAD 2002 format
 - All topographic, control, and design points in the .dwg file and in tabular format, both on disk and on a hard copy print-out
 - Complete specifications on disk in Word 2002 format for printing by the City
 - A unit price cost estimate on disk in Excel 2002 format

3. BIDDING PHASE

Provide the following standard bidding phase services:

- Attend Prebid Conference.
- Issue addenda and interpretation to the bid documents if required.
- Review prequalification submittals if required.
- Assist owner in evaluating bids.
- Bid tabs will be prepared by City.

- CONSTRUCTION PHASE

Provide construction management services as negotiated, which may include:

- Attend preconstruction conference and periodic progress meetings;
- Review and take action on shop drawings, test results, and other submittals;

- Provide construction surveys under this contract or under the appropriate construction Contract bid item;
- Provide construction observation, make periodic site visits at intervals appropriate to the various stages of construction;
- Review and recommend for payment the Contractors applications for payment;
- Prepare as-constructed drawings and submit compilation of construction observation reports, photos, etc.;
- Issue statement of substantial completion;
- Issue warranty letter to contractor; and
- Attend and participate in a post construction project review and critique.

5. MEETINGS AND SUBMITTALS

5.1. Project team members will include:

5.1.1. The consultant

5.1.2. City Engineering Division staff

- Project management
- Design
- Construction coordination

5.1.3. Operations divisions staff

- Water Division (service area and O&M related issues) and other departments as appropriate, e.g. Growth Development, Fire Department .

5.2. Meetings requiring the Consultant's participation will include:

- Kick-off Meeting
- Preliminary Design Report Presentation and Discussion
- 65% Plans and Specifications Review
- 95% Plans and Specifications Review
- Prebid Conference
- Preconstruction Conference

5.3. Meetings the Consultant may need to attend as negotiated, which may include

- Preconstruction Conference
- Construction Progress Meetings

- Post Construction meeting

5.4. Submittals required during the design phase include:

- Preliminary Design and Report (Elm & Meade)
- 50% Plans and Specifications (Meade St)
- 65% Plans and Specifications (Meade St)
- 95% Plans and Specifications (Meade St)
- 100% Plans and Specifications (Meade St)

PROPOSED PROJECT SCHEDULE

PW122804-12

Contract Negotiations Complete	November 1, 2004
Notice to Proceed with Design	November 15, 2004
Preliminary Design Submittal	February 28, 2005
50% Design Submittal (Phase One)	March 31, 2005
65% Design Submittal (Phase One)	April 29, 2005
95% Design Submittal (Phase One)	May 30, 2005
100% P&S Submittal (Phase One)	June 28, 2005

ESTIMATED CONSTRUCTION SCHEDULE

Phase One

Open bids	July 27, 2005
Award construction contract	August 1, 2005
Begin construction	September 1, 2005
Complete construction	April 30, 2006

PROPOSAL SUBMISSION

Please submit three (3) copies of your proposal no later than 4:00 p.m., October 8, 2004.

FMG, INC.
ELM AVENUE / MEADE STREET RECONSTRUCTION
100% PLANS - E. MEADE STREET FROM ELM AVENUE TO HOEFER COURT
PROJECT # DR03-1333
ESTIMATED MAN-HOURS AND FEES
 December 14, 2004

	PR/PE	DE/PE	CADD/ET	RLS	SC
Survey					
Research/Computations				8	
Property Corner Search					20
Legal, Boundary				8	16
Horizontal & Vertical Control					12
Existing Utility Locations-Coordination		4			8
Topo/Detail Main Line Route					40
Topo/Detail Elm Avenue at Meade Street-400'					8
Topo/Outfall & Existing Channel Area					8
Topo Intersecting Streets-Birch Avenue and Ivy Avenue					16
Field Check Survey		6		2	
Drafting Survey Data/Set Up Design Sheets			48		
Sub-Total Survey		10	48	18	128

DESIGN AND PLAN PREPARATION

Preliminary/Alternatives/Design Issues					
Data Collection & Review (Facilities, Reports, Mapping, Plans)	2	8			
Identify Land Ownership		2	6		
Review Mainline Drainage Alternates Previously Completed	8	8			
Outlet Area Alternate Study					
Alternate box/channels/pipe/alignment	8	16	8		
Constructability-existing structures, runoff, temporary diversions	8	16			
Street Profile, Width & Template	2	8	2		
Meade Street Water Main Replacement Size	8	4			
Sanitary Sewer Capacity Review	6	4			
Wellands Review at Outlet Structure	2				
Investigate/Analyze Pros and Cons of Prebuy for Box Culverts	8	8			
Meade Street Facilities-Construction Phasing	8	6			
Stockpile Waste Dirt/Storage Location		2			
Preliminary Design Report	12	8	4		
Meetings w/ Engineering, Utility Maintenance, Private Utilities	4	8			
Meetings w/ Other City Officials	4	4			
Public Meeting	8	8			
Sub-Total Preliminary/Alternatives/Design Issues	88	110	20	0	0

65% Design & Plan Preparation

Demolition/Take Out Plan Sheets (7 Sheets)	8	12	28		
Plan & Profile -Main Line (4 Sheets)	12	32	48		
Plan & Profile-Intersecting Streets (2 Sheets)	8	20	24		
Plan & Profile-Segment of Elm Avenue at Meade Street (1 Sheet)	8	16	12		
Plan-Outlet Structure	8	4	8		
Storm Sewers & Inlets Design	8	8	4		
Design Water Main & Appurtenances	8	16	16		
Design Sanitary Sewer (Includes Underdrain System)	6	12	16		
Plans Temporary Flow Diversion-Existing Channel to Outlet	4	4	4		
Corrosion Control Coordination	4				
Cross Sections (10 Sheets)	2	8	28		
Private Utility Coordination		6			
Plans Title Sheet			2		
Detail Sheets		8	12		
Property Control Drawings		4	8		
Horizontal/Vertical Control Data		2	8	4	

FMG, INC.
ELM AVENUE / MEADE STREET RECONSTRUCTION
100% PLANS - E. MEADE STREET FROM ELM AVENUE TO HOFER COURT
PROJECT # DR03-1333
ESTIMATED MAN-HOURS AND FEES
 December 14, 2004

	PR/PE	DE/PE	CADD/ET	RLS	SC
Construction Sequencing	2	4	4		
Conceptual Traffic Control/Detours	2	4	2		
Preliminary Easements	2		4		
Quantities & Opinion of Probable Cost	4	16	8		
Meetings w/ Engineering, Utility Maintenance, Private Utilities	8	8			
Sub-Total 65% Design	94	184	236	4	0

95% Design & Plan Preparation

Demolition/Take Out Plan Sheets (7 Sheets)	2	4	10		
Plan & Profile -Main Line (4 Sheets)	8	16	24		
Plan & Profile-Intersecting Streets (2 Sheets)	2	12	12		
Plan & Profile-Segment of Elm Avenue at Meade Street (1 Sheet)	4	8	12		
Plan-Outlet Structure	2	4	4		
Water Main & Appurtenances	2	4	8		
Sanitary Sewer (Includes Underdrain System)	2	4	8		
Plans Temporary Flow Diversion-Existing Channel to Outlet	2	8	8		
Corrosion Control Coordination	2	2			
Cross Sections (10 Sheets)	1	8	16		
Private Utility Coordination		4			
Plans Title Sheet			1		
Detail Sheets	1	4	8		
Property Control Drawings		2	4		
Horizontal/Vertical Control Data		1	2		
Construction Sequencing	4	4			
Traffic Control/Detours	4	2	2		
Final Easements			8	6	
Quantities & Opinion of Probable Cost	4	16	4		
General Plan Notes	8	4	6		
Detailed Specifications and Bid Form	8	2			
Public Meetings	8	8			
Reviews/Coordination	8	4			
Sub-Total/95% Design	72	121	137	6	0

100% Design & Plan Preparation

Final Revisions and Plotting	12	16	30		
Sub-Total/100% Design	12	16	30	0	0

BIDDING PHASE

Prebid Meeting	4	2			
Plans & Specifications Interpretation	6	6			
Prepare & Issue Addenda	8	8			
Sub-Total/Bidding Phase	18	16	0	0	0

CONSTRUCTION PHASE

Preconstruction Meeting	2	4			
Review shop drawings, Mix Designs & Materials	4	20			
Consultation for Change/Field Orders	8	8			
Additional Services to be Negotiated					
Sub-Total/Construction Phase	14	32	0	0	0

FMG, INC.
ELM AVENUE / MEADE STREET RECONSTRUCTION
100% PLANS - E. MEADE STREET FROM ELM AVENUE TO HOEFER COURT
PROJECT # DR03-1333
ESTIMATED MAN-HOURS AND FEES
December 14, 2004

ESTIMATED ENGINEERING FEES

	HOURS	RATE	TOTAL
PR/PE - PRINCIPAL/PROFESSIONAL ENGINEER	298	\$90.00/HR	\$ 26,820.00
DE/PE DESIGN ENGINEER/PROFESSIONAL ENGINEER	489	\$70.00/HR	\$ 34,230.00
CADD/ET - COMPUTER OPERATOR/ENGINEERING TECHNICIAN	471	\$45.00/HR	\$ 21,195.00
RLS-REGISTERED LAND SURVEYOR	28	\$65.00/HR	\$ 1,820.00
SC-2-MAN SURVEY CREW	128	\$90.00/HR	\$ 11,520.00
Geotechnical Evaluation & Pavement Design			\$ 3,727.00
Sub Consultant-Structural Engineer			\$ 19,000.00
Sub Consultant-Corrosion Control			\$ 1,000.00
Printing, Supplies, Mileage, Miscellaneous			\$ 600.00
TOTAL ESTIMATED ENGINEERING FEES			\$ 119,912.00

Summary

Route Survey	\$15,850.00
Preliminary/Alternatives/Design Issues	\$18,420.00
65% Design & Plan Preparation	\$42,670.00
95% Design & Plan Preparation	\$28,505.00
100% Plans	\$4,500.00
Bidding Phase	\$2,740.00
Limited Services for Construction Phase	\$3,500.00
Geotechnical Evaluation & Pavement Design	\$ 3,727.00
Total Fees	\$119,912.00

Geotechnical Cost Estimate

PW122804-12

PROJECT INFORMATION			CLIENT INFORMATION		
PROJECT NAME:	E. Meade Street	NAME:	City of Rapid City		
PROJECT LOCATION:	Project # DR03-1333	ADDRESS:	300 6th Street		
PROJECT TYPE:	Geotechnical Evaluation	ADDRESS:	Rapid City, SD 57701		

Task/Item/Materials	Quantity	Units	@	Rate	per Unit	Sub-Total
FIELD SERVICES						
Rig Mobilization	40	miles	@	\$1.35	per mile	\$54.00
Pickup Mobilization	120	miles	@	\$0.40	per mile	\$48.00
Crew Travel - 2 men		hours	@	\$75.00	per hour	\$0.00
Crew Expenses		man days	@	\$60.00	/man day	\$0.00
Drill Rig Operation	8	hours	@	\$45.00	per hour	\$360.00
Drill Rig Operator	10	hours	@	\$35.00	per hour	\$350.00
Field Technician		hours	@	\$35.00	per hour	\$0.00
Senior Field Technician		hours	@	\$40.00	per hour	\$0.00
Field Geologist	12	hours	@	\$55.00	per hour	\$660.00
Environmental Scientist		hours	@	\$65.00	per hour	\$0.00
Geotechnical Engineer or Materials Specialist		hours	@	\$85.00	per hour	\$0.00
Well materials, etc.		feet	@	\$8.00	per foot	\$0.00
Wellheads with locks		heads	@	\$85.00	per head	\$0.00
HNu (Photoionization Device)		days	@	\$50.00	per day	\$0.00
Rental of Traffic Sign Equipment		days	@	\$85.00	per day	\$0.00
Rental of Backhoe Equipment		hours	@	\$100.00	per hour	\$0.00
Sub-Totals						\$1,472.00

PHYSICAL LABORATORY						
Moisture Content/Density	4	tests	@	\$15.00	each	\$60.00
Atterberg Limits	4	tests	@	\$65.00	each	\$260.00
Standard Sieve Analysis	2	tests	@	\$50.00	each	\$100.00
Hydrometer Grain Analysis		tests	@	\$90.00	each	\$0.00
Unconfined Compression		tests	@	\$50.00	each	\$0.00
Consolidation/Swell		tests	@	\$275.00	each	\$0.00
Permeability		tests	@	\$150.00	each	\$0.00
MD Curve (AASHTO T-99)		tests	@	\$110.00	each	\$0.00
MD Curve (AASHTO T-180)	2	tests	@	\$110.00	each	\$220.00
California Bearing Ratio	2	tests	@	\$250.00	each	\$500.00
Direct Shear Test (2 Points)		tests	@	\$200.00	each	\$0.00
Triaxial Shear Test - CUPP		tests	@	\$800.00	each	\$0.00
Sample Preparation		hours	@	\$35.00	per hour	\$0.00
Sub-Totals						\$1,140.00

ENVIRONMENTAL TESTING						
TPH+BTEX (Gas in Soil & Water)		tests	@	\$85.00	each	\$0.00
TPH & Naphtha (Diesel in Water & Soil)		tests	@	\$105.00	each	\$0.00
Soils - TCLP Lead		tests	@	\$75.00	each	\$0.00
Soils - VOC's		tests	@	\$150.00	each	\$0.00
Sampling Materials (Bailers, Gloves, Etc)		materials	@	\$10.00	per borehole	\$0.00
Sub-Totals						\$0.00

OFFICE SERVICES						
Clerical	1	hours	@	\$25.00	per hour	\$25.00
Drafting (CAD)	2	hours	@	\$45.00	per hour	\$90.00
Senior Environmental Scientist (CPRR)		hours	@	\$65.00	per hour	\$0.00
Senior Field Geologist		hours	@	\$50.00	per hour	\$0.00
Geological Engineer/Design Engineer (EIT)	12	hours	@	\$55.00	per hour	\$660.00
Registered Professional Engineer		hours	@	\$70.00	per hour	\$0.00
Senior Professional Engineer/Project Managr	4	hours	@	\$85.00	per hour	\$340.00
Senior Project Manager (Officer)		hours	@	\$90.00	lump sum	\$0.00
Sub-Totals						\$1,115.00

Sales Taxes at 4%	\$3,727.00	All Sub-Totals	@	0.0%	percent	\$0.00
Grand Total Estimate	(plus any applicable taxes)					\$3,727.00

FMG, INC.
ELM AVENUE / MEADE STREET RECONSTRUCTION
PRELIMINARY PLANS - ELM AVENUE FROM E. SAINT PATRICK TO UTAH STREET
PROJECT # DR03-1333
ESTIMATED MAN-HOURS AND FEES
 December 14, 2004

	PR/PE	DE/PE	CADD/ET	RLS	SC
Survey					
Research/Computations				8	
Property Corner Search					24
Legal, Boundary				8	20
Horizontal & Vertical Control					12
Existing Utility Locations-Coordination		6			12
Topo/Detail Main Line Route					80
Topo/Detail East St. Patrick St.-400'					8
Topo Intersecting Streets (7 Streets/Intersections)		4			28
Field Check Survey	4	6		4	
Drafting Survey Data/Set Up Design Sheets			64		
Sub-Total Survey	4	16	64	20	184

DESIGN AND PLAN PREPARATION

Preliminary Design & Plan Preparation

Data Collection & Review (Facilities, Reports, Mapping, Plans)	4	8			
Identify Land Ownership		2	6		
Review Mainline Drainage Alternates Previously Completed	4	4			
Star Village Drainage Analysis and Impacts	8	6	4		
Demolition/Take Out Plan Sheets (11 Sheets)	2	16	24		
Plan & Profile -Main Line (7 Sheets)	12	28	42		
Plan & Profile-Intersecting Streets (3 Sheets)	8	24	24		
Plan & Profile-Segment of E. St. Patrick at Elm Avenue (1 Sheet)	2	4	8		
Storm Sewers & Inlets Preliminary	20	12	8		
Preliminary Design Water Main & Appurtenances	8	16	16		
Preliminary Design Sanitary Sewer	6	12	12		
Cross Sections (20 Sheets)		16	32		
Private Utility Coordination	4	8			
Plans Title Sheet			2		
Special Detail Sheets	2	8	16		
Property Control Drawings		4	12		
Horizontal/Vertical Control Data		2	8	4	
Coordination with City Corrosion Control Project	4	8	4		
Construction Sequencing	4	8	8		
Pavment Life Cycle Cost Analysis	12	12			
Preliminary Easements	2		4	4	
Review Current Parking Trends on Elm Avenue/Collect Data	2	6	6		
Traffic Counts for Traffic Engineering Consultant	2	4	8		
Quantities & Opinion of Probable Cost	4	20	8		
Preliminary Design Report	20	8			
Meetings w/ Engineering, Utility Maintenance	8	10			
Meetings w/ Other City Officials	8	8			
Public Meeting	16	16			
Sub-Total Preliminary Plans	158	260	246	8	0

FMG, INC.
ELM AVENUE / MEADE STREET RECONSTRUCTION
PRELIMINARY PLANS - ELM AVENUE FROM E. SAINT PATRICK TO UTAH STREET
PROJECT # DR03-1333
ESTIMATED MAN-HOURS AND FEES
 December 14, 2004

ESTIMATED ENGINEERING FEES

	HOURS	RATE	TOTAL
PR/PE - PRINCIPAL/PROFESSIONAL ENGINEER	162	\$90.00/HR	\$ 14,580.00
DE/PE DESIGN ENGINEER/PROFESSIONAL ENGINEER	276	\$70.00/HR	\$ 19,320.00
CADD/ET - COMPUTER OPERATOR/ENGINEERING TECHNICIAN	310	\$45.00/HR	\$ 13,950.00
RLS-REGISTERED LAND SURVEYOR	28	\$65.00/HR	\$ 1,820.00
SC-2-MAN SURVEY CREW	184	\$90.00/HR	\$ 16,560.00
Geotechnical Evaluation & Pavement Design			\$ 5,949.00
Sub Consultant-Traffic Engineer			\$ 10,200.00
Printing, Supplies, Mileage, Miscellaneous			\$ 600.00
TOTAL ESTIMATED ENGINEERING FEES			\$82,979.00

Summary

Route Survey	\$22,520.00
Preliminary/Alternatives/Design Issues	\$44,310.00
Geotechnical Evaluation & Pavement Design	\$ 5,949.00
Sub Consultant-Traffic Engineer	\$ 10,200.00
Total Fees	\$82,979.00

Geotechnical Cost Estimate

PW122804-12

PROJECT INFORMATION			CLIENT INFORMATION		
PROJECT NAME:	Elm Avenue	NAME:	City of Rapid City		
PROJECT LOCATION:	Project # DR03-1333	ADDRESS:	300 6th Street		
PROJECT TYPE:	Geotechnical Evaluation	ADDRESS:	Rapid City, SD 57701		

Task/Item/Materials	Quantity	Units	@	Rate	per Unit	Sub-Total
FIELD SERVICES						
Rig Mobilization	80	miles	@	\$1.35	per mile	\$108.00
Pickup Mobilization	240	miles	@	\$0.40	per mile	\$96.00
Crew Travel - 2 men		hours	@	\$75.00	per hour	\$0.00
Crew Expenses		man days	@	\$60.00	/man day	\$0.00
Drill Rig Operation	16	hours	@	\$45.00	per hour	\$720.00
Drill Rig Operator	20	hours	@	\$35.00	per hour	\$700.00
Field Technician		hours	@	\$35.00	per hour	\$0.00
Senior Field Technician		hours	@	\$40.00	per hour	\$0.00
Field Geologist	24	hours	@	\$55.00	per hour	\$1,320.00
Environmental Scientist		hours	@	\$65.00	per hour	\$0.00
Geotechnical Engineer or Materials Specialist		hours	@	\$85.00	per hour	\$0.00
Well materials, etc.		feet	@	\$8.00	per foot	\$0.00
Wellheads with locks		heads	@	\$85.00	per head	\$0.00
HNu (Photoionization Device)		days	@	\$50.00	per day	\$0.00
Rental of Traffic Sign Equipment		days	@	\$85.00	per day	\$0.00
Rental of Backhoe Equipment		hours	@	\$100.00	per hour	\$0.00
Sub-Totals						\$2,944.00

PHYSICAL LABORATORY						
Moisture Content/Density	8	tests	@	\$15.00	each	\$120.00
Atterberg Limits	8	tests	@	\$65.00	each	\$520.00
Standard Sieve Analysis	4	tests	@	\$50.00	each	\$200.00
Hydrometer Grain Analysis		tests	@	\$90.00	each	\$0.00
Unconfined Compression		tests	@	\$50.00	each	\$0.00
Consolidation/Swell		tests	@	\$275.00	each	\$0.00
Permeability		tests	@	\$150.00	each	\$0.00
MD Curve (AASHTO T-99)		tests	@	\$110.00	each	\$0.00
MD Curve (AASHTO T-180)	2	tests	@	\$110.00	each	\$220.00
California Bearing Ratio	2	tests	@	\$250.00	each	\$500.00
Direct Shear Test (2 Points)		tests	@	\$200.00	each	\$0.00
Triaxial Shear Test - CUPP		tests	@	\$800.00	each	\$0.00
Sample Preparation		hours	@	\$35.00	per hour	\$0.00
Sub-Totals						\$1,560.00

ENVIRONMENTAL TESTING						
TPH+BTEX (Gas in Soil & Water)		tests	@	\$85.00	each	\$0.00
TPH & Naphtha (Diesel in Water & Soil)		tests	@	\$105.00	each	\$0.00
Soils - TCLP Lead		tests	@	\$75.00	each	\$0.00
Soils - VOC's		tests	@	\$150.00	each	\$0.00
Sampling Materials (Bailers, Gloves, Etc)		materials	@	\$10.00	per borehole	\$0.00
Sub-Totals						\$0.00

OFFICE SERVICES						
Clerical	1	hours	@	\$25.00	per hour	\$25.00
Drafting (CAD)	2	hours	@	\$45.00	per hour	\$90.00
Senior Environmental Scientist (CPRR)		hours	@	\$65.00	per hour	\$0.00
Senior Field Geologist		hours	@	\$50.00	per hour	\$0.00
Geological Engineer/Design Engineer (EIT)	18	hours	@	\$55.00	per hour	\$990.00
Registered Professional Engineer		hours	@	\$70.00	per hour	\$0.00
Senior Professional Engineer/Project Managr	4	hours	@	\$85.00	per hour	\$340.00
Senior Project Manager (Officer)		hours	@	\$90.00	lump sum	\$0.00
Sub-Totals						\$1,445.00

Sales Taxes at 4%	\$5,949.00	All Sub-Totals	@	0.0%	percent	\$0.00
Grand Total Estimate	(plus any applicable taxes)					\$5,949.00



Albertson Engineering Inc.

RECEIVED

NOV 22 2004

FMG INC.

November 19, 2004

Mr. Al Foster
FMG, Inc.
3700 Sturgis Road
Rapid City, SD 57702-0317

RE: Elm Ave./Meade St. Box Culverts & Spillway
Structural Engineering Fee Proposal
Albertson Engineering File #2004-208

Dear Al,

Thank you for the opportunity to provide a fee proposal for structural engineering design services on the Elm Ave./Meade St. storm drainage project. Based on our review with you, we understand our scope of work to be as follows:

- Design and prepare construction documents per the City of Rapid City standards for the following items:
 - 18'x6' x 35' long (\pm) cast-in-place box culvert on Meade St. near the Elm Ave. intersection.
 - 20'x6' x 180' long (\pm) cast-in-place box culvert (curved) on Meade St. at the open channel storm sewer crossing. Portions of this culvert will be investigated early on for possible precast options in lieu of cast-in-place.
 - 30' x 185' (\pm) cast-in-place spillway and energy dissipator.
 - Cast-in-place connector for 8'x5' precast box to existing concrete open channel.

We propose to provide structural engineering design services on an hourly basis per your contract with the City of Rapid City, to an estimated maximum of \$19,000 plus applicable sales tax and reimbursable expenses. Attached is a breakdown of our estimated hours for your use in fee negotiation and contract preparation with the City. Please let us know if this is acceptable to you. If so, we can prepare a standard contract for our services.

If you have any questions, please feel free to give Mike or myself a call.

Sincerely,
Albertson Engineering Inc.

David Leppert, PE

Albertson Engineering Inc.

Project Fee Estimate

Project: Elm Avenue / Meade Street Box Culverts
Project#: 2004-208
Date: 11/17/2004
By: DEL
Client: City of Rapid City

Summary of Project

Prime: FMG, Inc

Scope of Work / Criteria

*18'x6' Converging Box Culvert x 35' 10'x5' and 14'x6' Box Culvert Inlets (2) 9'x6' Box Culvert Outlet	*30' Spillway Chute & Energy Dissipator x 185' *Other 8'x5' Box to Existing Open Channel Connector
*20'x6' Converging Box Culvert x 180' (2) 9'x6' Box Culvert Inlet Existing Open Channel Inlet Spillway Chute Outlet	

Hourly Rates

Drafting/Secretarily	\$	45.00
EIT	\$	65.00
Engineering	\$	100.00
Other		

Hourly Breakdown

	<u>Drafting</u>	<u>EIT</u>	<u>Engineering</u>
Meetings/Coordination:			
Project Initiation	0	0	2
Coordination Meetings w/ Owner	0	0	6
Inter-team Coord./Mtg's	0	0	8
Subtotal	0	0	16
Box Culvert / Spillway Design			
18'x6' x 35' Box	0	0	24
20'x6' x 185' Box	0	0	24
30' x 185' Spillway	0	0	16
Box to Existing Open Channel	0	0	8
Other (Temp. channel, etc.)	0	0	8
Subtotal	0	0	80
Plans Preparation			
18'x6' x 35' Box	24	0	16
20'x6' x 185' Box	24	0	16
30' x 185' Spillway	16	0	8
Box to Existing Open Channel	8	0	4
Other (Temp. channel, etc.)	8	0	4
Subtotal	80	0	48
Specifications/Bidding			
Coordination/Addendums	0	0	2
Specifications	0	0	4
Pre-Bid Meeting	0	0	2
Pre-Construction Meeting	0	0	2
Subtotal	0	0	10
Construction Administration			
Coordination	0	0	0
Shop Plans	0	0	0
Construction Admin Trips	0	0	0
Subtotal	0	0	0
Grand Total	80	0	154

Hourly Fee Breakdown Summary

	<u>Drafting</u>	<u>EIT</u>	<u>Engineering</u>
Meetings/Coordination	\$ -	\$ -	\$ 1,600.00
Design	\$ -	\$ -	\$ 8,000.00
Plans Preparation	\$ 3,600.00	\$ -	\$ 4,800.00
Specifications/Bidding	\$ -	\$ -	\$ 1,000.00
Construction Administration	\$ -	\$ -	\$ -
	\$ 3,600.00	\$ -	\$ 15,400.00

Hourly Fee Total: **\$ 19,000.00**



BENSHOOF & ASSOCIATES, INC.

TRANSPORTATION ENGINEERS AND PLANNERS

10417 EXCELSIOR BOULEVARD, SUITE TWO / HOPKINS, MN 55343 / (952) 238-1667 / FAX (952) 238-1671

PW122804-12

November 10, 2004

ATTACHMENT E

Mr. Jerry Foster
FMG Inc.
3700 Sturgis Road
Rapid City, SD 57702

RE: Proposal to Complete Traffic Study in Conjunction with Elm Avenue Project

Dear Jerry:

As a follow-up to our discussions and your e-mail communication dated November 8, this is to submit our proposal to complete a traffic study in conjunction with your work for the City of Rapid City to prepare 35 percent plans for improvements to Elm Avenue. As we understand, your work on Elm Avenue extends between E. St. Patrick Street on the north and E. Utah Street on the south. We agree with your suggestion that the traffic study should extend between E. St. Patrick Street and E. Fairmont Boulevard, given that E. Fairmont Boulevard is a major intersection along Elm Avenue, a short distance south of E. Utah Street.

The basic purpose of our work will be to develop a recommended traffic plan for the subject segment of Elm Avenue, which will enable this street to provide safe and efficient operations for the long-term future. In this context, our intention is to address all important traffic items, including:

- a) Number of traffic lanes needed along Elm Avenue, including any turn lanes at major intersections.
- b) Traffic lanes needed on all approaches at the intersections of Elm Avenue with E. St. Patrick Street and E. Fairmont Boulevard.
- c) Traffic controls at intersections, including whether traffic signal warrants will be met at any intersections.
- d) Extent to which on-street parking should be allowed along various portions of Elm Avenue.
- e) Recommendations to accommodate pedestrian movements, including the school crossing of Elm Avenue at E. Indiana Street.
- f) Provisions for bus stops along Elm Avenue.

In order to effectively answer the preceding questions and accomplish the overall purpose for this traffic study, we will complete the following work tasks:

- 1) **Confirm issues and obtain pertinent background information.** The first purpose of this task is to confirm with yourself and City staff the issues to be examined, either the items previously expressed or appropriate refinements to those items. A second purpose of this task is to obtain all items that influence the existing and future traffic related needs for Elm Avenue. Items obtained will include: existing and projected traffic volumes, peak period turn movement counts at major intersections (if available), existing characteristics for Elm Avenue (right-of-way width, street width, sidewalks, intersection traffic controls, on-street parking regulations, and traffic lane designations), usage of on-street parking, City standards regarding plans for arterial roadways, any City plans/policies that would affect functions served by Elm Avenue (e.g. traffic flow, parking, pedestrian and bicycle provisions), pedestrian routes to and from the two nearby schools, characteristics of existing school crossing of Elm Avenue, existing bus stops, any planned changes to transit services or bus stops, and status of plans to extend Elm Avenue south to E. Catron Boulevard.
- 2) **Collect additional traffic volume data if needed.** Based on review of the items obtained through task 1, we will determine whether any additional traffic data are needed. For example, one possibility is that peak period turn movements counts would be needed at one or two major intersections along Elm Avenue. If we identify any such needs, we will communicate this finding to you and will request that staff from your firm or the City obtain such additional traffic data.
- 3) **Review and analyze all information obtained through tasks 1 and 2 to develop draft findings and recommendations.** We will develop draft responses for all traffic items identified earlier in this letter and any refinements to those items. From these responses, we will establish preliminary findings and recommendations. In some instances, we may identify a couple of alternatives worthy of further consideration. In that event, we will identify principal advantages and disadvantages of each alternative. We will discuss the draft traffic findings and recommendations with you and appropriate City staff.
- 4) **Accomplish follow-up analyses and prepare traffic study report.** We will conduct further analyses as needed to respond to comments raised by staff persons in task 3. We will prepare a draft memorandum report to document the traffic analyses performed and the resultant recommended traffic plan for Elm Avenue. We will provide this report to yourself and City staff in draft form for review and comment. Upon receipt of comments, we will accomplish appropriate refinements and will resubmit the report in finished form.
- 5) **Participate at a public meeting.** For budget purposes, we have included time and cost for a trip to Rapid City that would enable us to meet with City staff and also to attend a public open house. At the open house, our intention

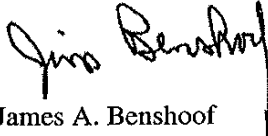
would be twofold: 1) to summarize the work performed and recommended traffic plan and 2) to respond to questions.

We will complete our work in an expeditious manner in order to effectively respond to scheduling objectives of your firm and the City. We will develop a detailed schedule for your concurrence as part of our work on task 1. Labor costs will be billed on an hourly basis using the following rates: Senior Principal - \$130.00, Principal - \$95.00, Professional II - \$80.00, Professional I - \$70.00, Technician - \$55.00, and Data Collector - \$30.00. Direct expenses will be billed at cost. Our total estimated cost to complete the scope of work described in this letter is \$10,200. We are available to provide additional service if such needs arise. The cost for any such extra services you may request will be billed on an hourly basis. We will not perform any such additional work without your prior authorization. We will coordinate closely with you and will focus tightly on the specific issues in order to complete our work effectively and at minimal cost. Invoices will be submitted on a monthly basis for work performed in the prior month. Payment terms are 30 days.

We appreciate the opportunity to submit this proposal and look forward to working with your firm to effectively meet the City's traffic related needs for the Elm Avenue project. We welcome any comments you and/or City staff may have regarding this proposal. We are willing to refine the proposal, if needed, to best meet the objectives for this project. I look forward to hearing your response.

Sincerely,

BENSHOOF & ASSOCIATES, INC.



James A. Benshoof