

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

Date: August 16, 2011

**Project Name & Number:** Jackson Boulevard Utilities Chapel Lane to Rapid Creek Bridge **CIP #:** 50177  
Project No. SSW10-1837

**Project Description:** Professional Engineering Services for the preliminary design of the Phase 2 Jackson Blvd Utilities.

**Consultant:** FMG, Inc.

**Original Contract Amount:** \$224,211.00      **Original Contract Date:** August 16, 2011      **Original Completion Date:** August 1, 2012

**Addendum No:**

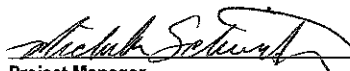
**Amendment Description:**

**Current Contract Amount:** \_\_\_\_\_      **Current Completion Date:** \_\_\_\_\_  
**Change Requested:** \_\_\_\_\_  
**New Contract Amount:** \_\_\_\_\_ \$0.00      **New Completion Date:** \_\_\_\_\_

**Funding Source This Request:**

Amount	Dept.	Line Item	Fund	Comments
\$47,084.00	8911	4223	505	
\$65,021.00	833	4223	604	
\$112,106.00	933	4223	602	
\$224,211.00	<b>Total</b>			

### Agreement Review & Approvals

 \_\_\_\_\_ 8/3/11  
**Project Manager** **Date**

\_\_\_\_\_  
**Division Manager** **Date**

 \_\_\_\_\_ 8/4/11  
**Compliance Specialist** **Date**

\_\_\_\_\_  
**Department Director** **Date**

\_\_\_\_\_  
**City Attorney** **Date**

**ROUTING INSTRUCTIONS**

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

**FINANCE OFFICE USE ONLY**

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

	<b>Date</b>	<b>Initials</b>	<b>Approved</b>	
<b>Appropriation</b>			Y    N	
<b>Cash Flow</b>			Y    N	

**Agreement Between City of Rapid City and FMG, Inc.  
for Professional Services for Task 1 of Jackson Boulevard Utilities Chapel Lane  
to Rapid Creek Bridge, Project No. SSW10-1837 / CIP No. 50177**

AGREEMENT made **August 16, 2011**, between the City of Rapid City, SD (City) and FMG, Inc., (Engineer), located at 3700 Sturgis Road, Rapid City, 57702. City intends to obtain services for Jackson Boulevard Utilities Chapel Lane to Rapid Creek Bridge, Project No. SSW10-1837, CIP No.50177. The scope of services is as described in Exhibits A.

The City and the Engineer agree as follows:

The Engineer shall provide professional engineering services for the City for preliminary design services of the Project as defined in Exhibits A, and C, serve as the City's professional engineering representative for the Project, and give professional engineering consultation and advice to the City while performing its services.

### **Section 1—Basic Services of Engineer**

#### **1.1 General**

- 1.1.1 The Engineer shall perform professional services described in this agreement, which include customary engineering services. Engineer intends to serve as the City's professional representative for those services as defined in this agreement and to provide advice and consultation to the City as a professional. Any opinions of probable project cost, approvals, and other decisions provided by Engineer for the City are rendered on the basis of experience and qualifications and represent Engineer's professional judgment.
- 1.1.2 All work shall be performed by or under the direct supervision of a professional Engineer licensed to practice in South Dakota.
- 1.1.3 All documents including Drawings and Specifications provided or furnished by Engineer pursuant to this Agreement are instruments of service in respect of the Project and Engineer shall retain an ownership therein. Reuse of any documents pertaining to this project by the City on extensions of this project or on any other project shall be at the City's risk. The City agrees to defend, indemnify, and hold harmless Engineer from all claims, damages, and expenses including attorney's fees arising out of such reuse of the documents by the City or by others acting through the City.

#### **1.2 Scope of Work**

The Engineer shall:



- 1.2.1 Consult with the City, other agencies, groups, consultants, and/or individuals to clarify and define requirements for the Project and review available data.
- 1.2.2 Perform the tasks described in the Scope of Services. (See Exhibits A and C.)
- 1.2.3 Conduct a location survey of the Project to the extent deemed necessary to provide adequate site information.
- 1.2.4 Prepare a report presenting the results of the study as outlined in the scope of services.

## **Section 2—Information Provided by City**

The City will provide any information in its possession for the project at no cost to the Engineer.

## **Section 3—Notice to Proceed**

The City will issue a written notification to the Engineer to proceed with the work. The Engineer shall not start work prior to receipt of the written notice. The Engineer shall not be paid for any work performed prior to receiving the Notice to Proceed.

## **Section 4—Mutual Covenants**

### **4.1 General**

- 4.1.1 The Engineer shall not sublet or assign any part of the work under this Agreement without written authority from the City.
- 4.1.2 The City and the Engineer each binds itself and partners, successors, executors, administrators, assigns, and legal representatives to the other party to this agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, regarding all covenants, agreements, and obligations of this agreement.
- 4.1.3 Nothing in this agreement shall give any rights or benefits to anyone other than the City and the Engineer.
- 4.1.4 This agreement constitutes the entire agreement between the City and the Engineer and supersedes all prior written or oral understandings. This agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.



- 4.1.5 The Engineer shall make such revisions in plans which may already have been completed, approved, and accepted by the City, as are necessary to correct Engineer's errors or omissions in the plans, when requested to do so by the City, without extra compensation therefore.
- 4.1.6 If the City requests that previously satisfactorily completed and accepted plans or parts thereof be revised, the Engineer shall make the revisions requested by the City. This work shall be paid for as extra work.
- 4.1.7 If the City changes the location from the one furnished to the Engineer, or changes the basic design requiring a new survey for the portions so changed, the redesign will be paid for as extra work.
- 4.1.8 The City may at any time by written order make changes within the general scope of this Agreement in the work and services to be performed by the Engineer. Any changes which materially increase or reduce the cost of or the time required for the performance of the Agreement shall be deemed a change in the scope of work for which an adjustment shall be made in the Agreement price or of the time for performance, or both, and the Agreement shall be modified in writing accordingly. Additional work necessary due to the extension of project limits shall be paid for as extra work.
- 4.1.9 Extra work, as authorized by the City, will be paid for separately and be in addition to the consideration of this Section.
- 4.1.10 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. Engineer will promptly inform the City in writing of such situations so that changes in this agreement can be renegotiated.
- 4.1.11 This Agreement may be terminated (a) by the City with or without cause upon seven days' written notice to the Engineer and (b) by the Engineer for cause upon seven days' written notice to the City. If the City terminates the agreement without cause, the Engineer will be paid for all services rendered and all reimbursable expenses incurred prior to the date of termination.

If termination is due to the failure of the Engineer to fulfill its agreement obligations, the City may take over the work and complete it. In such case, the Engineer shall be liable to the City for any additional cost to the extent directly resulting from Engineer's action.



- 4.1.12 The City or its duly authorized representatives may examine any books, documents, papers, and records of the Engineer involving transactions related to this agreement for three years after final payment. All examinations will be performed at reasonable times, with proper notice. Engineer's documentation will be in a format consistent with general accounting procedures.
- 4.1.13 The City shall designate a representative authorized to act on the City's behalf with respect to the Project. The City or such authorized representative shall render decisions in a timely manner pertaining to documents submitted by the Engineer in order to avoid unreasonable delay in the orderly and sequential progress of the Engineer's services.
- 4.1.14 Costs and schedule commitments shall be subject to renegotiation for delays caused by the City's failure to provide specified facilities or information or for delays caused by other parties, excluding sub-contractors and sub-consultants, 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 of regulations of any governmental agency or any other conditions or circumstances beyond the control of the City or Engineer. Temporary delays of services caused by any of the above which results in additional costs beyond those outlined may require renegotiation of this agreement.
- 4.1.15 The City will give prompt written notice to the Engineer if the City becomes aware of any fault or defect in the Project or nonconformance with the Project Documents.
- 4.1.16 Unless otherwise provided in this Agreement, the Engineer and the Engineer's consultants shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to hazardous materials in any form at the project site, including but not limited to asbestos products, polychlorinated biphenyl (PCB), or other toxic substances.
- 4.1.17 In the event asbestos or toxic materials are encountered 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 Engineer's services, Engineer may, at their option and without liability for consequential or any other damages, suspend performance of services on the project until the City retains



appropriate specialist CONSULTANT(S) or contractor(s) to identify, abate, and/or remove the asbestos or hazardous or toxic materials.

- 4.1.18 This agreement, unless explicitly indicated in writing, shall not be construed as giving Engineer 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.
- 4.1.19 Neither the City nor the Engineer, nor its Consultants, shall hold the other liable for any claim based upon, arising out of, or in any way involving the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids, or gases, waste materials, or other irritants, contaminants, or pollutants.
- 4.1.20 Neither the City nor the Engineer, nor its Consultants, shall hold the other liable for any claim based upon, arising out of, or any way involving the specification or recommendation of asbestos, in any form, or any claims based upon use of a product containing asbestos.
- 4.1.21 Engineer hereby represents and warrants that it does not fail or refuse to collect or remit South Dakota or City sales or use tax for transactions which are taxable under the laws of the State of South Dakota.

#### 4.2 **City of Rapid City NonDiscrimination Policy Statement**

In compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, the Age Discrimination act of 1975, the Americans with Disabilities Act of 1990, and other nondiscrimination authorities it is the policy of the City of Rapid City, 300 Sixth Street, Rapid City, SD 57701-5035, to provide benefits, services, and employment to all persons without regard to race, color, national origin, sex, disabilities/handicaps, age, or income status. No distinction is made among any persons in eligibility for the reception of benefits and services provided by or through the auspices of the City of Rapid City.

Engineer will permit access to any and all records pertaining to hiring and employment and to other pertinent data and records for the purpose of enabling the Commission, its agencies or representatives, to ascertain compliance with the above provisions.

This section shall be binding on all subcontractors or suppliers.



## Section 5—Payments to the Engineer

### 5.1 Schedule of Pay Rates

The City will pay the Engineer for services rendered or authorized extra work according to the Engineer's hourly rate schedule. (See Exhibit B.)

### 5.2 Fee

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed **\$224,211.00** unless the scope of the project is changed as outlined in Section 4. If expenses exceed the maximum amount, the Engineer shall complete the design as agreed upon here without any additional compensation. Sub task dollar amounts may be reallocated to other tasks as long as the total fee is not exceeded. Prime consultant may not mark up sub-consultant or sub-contractor services.

### 5.3 Progress Payments

Monthly progress payments shall be processed by the City upon receipt of the claim as computed by the Engineer based on work completed during the month at the rates established in Section 5.1 and approved by the City.

Net payment to the Engineer shall be due within forty-five (45) days of receipt by the City.

## Section 6—Completion of Services

The Engineer shall complete services based on the following schedule.

Notice to Proceed:	August 16, 2011
35% Submittal	August 1, 2012

## Section 7—Insurance Requirements

### 7.1 Insurance Required

The Engineer shall secure the insurance specified below. The insurance shall be issued by insurance company(s) acceptable to the City and may be in a policy or policies of insurance, primary or excess. Certificates of all required insurance including any policy endorsements shall be provided to the City prior to or upon the execution of this Agreement.



## 7.2 Cancellation

The Engineer will provide the City with at least 30 days' written notice of an insurer's intent to cancel or not renew any of the insurance coverage. The Engineer agrees to hold the City harmless from any liability, including additional premium due because of the Engineer's failure to maintain the coverage limits required.

## 7.3 City Acceptance of Proof

The City's approval or acceptance of certificates of insurance does not constitute City assumption of responsibility for the validity of any insurance policies nor does the City represent that the coverages and limits described in this agreement are adequate to protect the Engineer, its consultants or subcontractors interests, and assumes no liability therefore. The Engineer will hold the City harmless from any liability, including additional premium due, because of the Engineer's failure to maintain the coverage limits required.

## 7.4 Specific Requirements

- 7.4.1 Workers' compensation insurance with statutory limits required by South Dakota law. Coverage B-Employer's Liability coverage of not less than \$500,000 each accident, \$500,000 disease-policy limit, and \$500,000 disease-each employee.
- 7.4.2 Commercial general liability insurance providing occurrence form contractual, personal injury, bodily injury and property damage liability coverage with limits of not less than \$1,000,000 per occurrence, \$2,000,000 general aggregate, and \$2,000,000 aggregate products and completed operations. If the occurrence form is not available, claims-made coverage shall be maintained for three years after completion of the terms of this agreement. The policy shall name the City and its representatives as an additional insured.
- 7.4.3 Automobile liability insurance covering all owned, nonowned, and hired automobiles, trucks, and trailers. The coverage shall be at least as broad as that found in the standard comprehensive automobile liability policy with limits of not less than \$1,000,000 combined single limit each occurrence. The required limit may include excess liability (umbrella) coverage.
- 7.4.4 Professional liability insurance providing claims-made coverage for claims arising from the negligent acts, errors or omissions of the Engineer or its consultants, in the amount of \$1,000,000 each occurrence and \$1,000,000 annual aggregate. Coverage shall be





maintained for at least three years after final completion of the services.

### **Section 8—Hold Harmless**

The Engineer hereby agrees to hold the City harmless from any and all claims or liability including attorneys' fees arising out of the professional services furnished under this Agreement, and for bodily injury or property damage arising out of services furnished under this Agreement, providing that such claims or liability are the result of a negligent act, error or omission of the Engineer and/or its employees/agents arising out of the professional services described in the Agreement.

### **Section 9—Independent Business**

The parties agree that the Engineer operates an independent business and is contracting to do work according to his own methods, without being subject to the control of the City, except as to the product or the result of the work. The relationship between the City and the Engineer shall be that as between an independent contractor and the City and not as an employer-employee relationship. The payment to the Engineer is inclusive of any use, excise, income or any other tax arising out of this agreement.

### **Section 10-Indemnification**

If this project involves construction and Engineer does not provide consulting services during construction including, but not limited to, onsite monitoring, site visits, site observation, shop drawing review and/or design clarifications, City agrees to indemnify and hold harmless Engineer from any liability arising from the construction activities undertaken for this project, except to the extent such liability is caused by Engineer's negligence.

### **Section 11-Controlling Law and Venue**

This Agreement shall be subject to, interpreted and enforced according to the laws of the State of South Dakota, without regard to any conflicts of law provisions. Parties agree to submit to the exclusive venue and jurisdiction of the State of South Dakota, 7<sup>th</sup> Judicial Circuit, Pennington County.

### **Section 12-Severability**

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



**Section 13—Funds Appropriation**

If funds are not budgeted or appropriated for any fiscal year for services provided by the terms of this agreement, this agreement shall impose no obligation on the City for payment. This agreement is null and void except as to annual payments herein agreed upon for which funds have been budgeted or appropriated, and no right of action or damage shall accrue to the benefit of the Engineer, its successors or assignees, for any further payments. For future phases of this or any project, project components not identified within this contract shall not constitute an obligation by the City until funding for that component has been appropriated.



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

City of Rapid City:

Engineer:

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
FMG, Inc.

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

ATTEST:

\_\_\_\_\_  
FINANCE OFFICER

Reviewed By:

*Michelle Schweitzer*

Michelle Schweitzer, PROJECT MANAGER

DATE: 8/3/11

City's Designated Project Representative:

Engineering Firm's Designated Project Representative:

NAME Michelle Schweitzer, PE

NAME Jerry Foster, PE

PHONE 394-4154

PHONE 342-4105

EMAIL michelle.schweitzer@rcgov.org

EMAIL jfoster@fmgengineering.com



**EXHIBIT A**

**FMG ENGINEERING  
SCOPE OF SERVICES  
FOR  
TASK 1 OF JACKSON BOULEVARD UTILITIES  
CHAPEL LANE TO RAPID CREEK BRIDGE  
Project No. SSW10-1837 / CIP No. 50177**

**GENERAL**

The City of Rapid City proposes to reconstruct various water transmission lines, water distribution lines, sanitary sewers, and other miscellaneous City responsibility drainage improvements in conjunction with the SDDOT reconstruction of Jackson Boulevard.

This project is to be let in conjunction with South Dakota Department of Transportation Project P 0044(149)40, SD Highway 44, Jackson Boulevard from Chapel Lane Road to West of Argyle Street in Rapid City, SD. The SDDOT Statewide Transportation Improvement Program (STIP) currently indicates the project will be constructed in Fiscal Year 2014. Preliminary Jackson Boulevard Reconstruction Schedule Information from SDDOT is:

- SDDOT Preliminary Plans, Plats, and Aerial Photos to Right of Way      June 2012
- Plans Released to SDDOT Offices for Final Review                              October 2013
- Plans to Bid Letting Office    December 2013
- Bid Letting    February 2014

The proposed schedule for work to be completed under this agreement assumes Notice To Proceed on August 16, 2011. The Preliminary Design Submittal will be made to the City on or before August 1, 2012. The Preliminary Design Submittal date may be extended by written agreement if SDDOT does not provide the required information on a schedule to allow the City Preliminary Design to be completed on schedule.

The Project limits include the referenced SDDOT limits, plus tie ins to adjacent streets and utilities, plus adjacent areas needed for City storm sewer drainage improvements including stormwater quality.

The Scope of Work in this contract is for Task 1 - Preliminary Design Services, only. Separate contracts will be negotiated and prepared for Task 2 – Final Design Services, Task 3 – Bidding Period Services, Task 4 – Basic Construction Services and Task 5 – Expanded Construction Services.

The Consultant will provide services related to data collection, analysis, design, and coordination with SDDOT representing the City's interests, bidding and construction administration. Because this project will be let as part of a combination bid with the SDDOT, the consultant shall provide plans on behalf of the City to the SDDOT that can be utilized in the bid letting process. The plans will use DOT bid items.

**DESIGN CRITERIA**

Design criteria for the project shall include the current edition of the following items: City of:

- Rapid City Infrastructure Design Criteria manual (Draft);
- City of Rapid City Standard Specifications (current edition);
- City of Rapid City Stormwater Quality Manual (2009 Edition),
- City of Rapid City Utility System Master Plan (April 2008);
- South Dakota Department of Environmental Resources Standards and Recommended Design Criteria;
- Ten States Standards as adopted and supplemented by SDDENR;
- Handbook of PVC Pipe Design (UniBell) latest edition;
- AASHTO green book (current edition);

**EXHIBIT A**

- South Dakota Department of Transportation Standard Specifications for Roads and Bridges (current edition).

Conflicts between design criteria documents shall be resolved in favor of the more stringent requirement. Other documents and references may be proposed for use and requires written concurrence by the Project manager and may require application and approval of a Request for Exception to Rapid City Design Standard/Criteria/Regulations.

**TASK 1 - PRELIMINARY DESIGN SERVICES**

A general description of the Preliminary Design Services follows. Individual tasks to complete the work are shown in Exhibit C - Task Schedule.

## 1.) Project Coordination, General Investigative, Overall Coordination:

- The Consultant will review the SDDOT plans and be included in the SDDOT's list of project contacts. The Consultant will make recommendations to the City regarding changes to the plans that affect the City's infrastructure and components that differ from City standards, design criteria, and specifications.
- Consultant shall solicit input from affected property owners and to provide information to the neighborhood and general public regarding the City's project components.
- Consultant shall evaluate the requirements for easements and/or right of way for the City portions of the project. Include coordination with SDDOT proposed easements and/or right of way.
- The Consultant will review all SDDOT plans as the City's Representative and identify side street geometry, intersection, and profile issues. The Consultant will identify components that differ from City standards, design criteria, and specifications. Consultant will evaluate and provide cost differences between the City and DOT criteria and provide recommendations to the City and SDDOT.
- Consultant shall attend meetings as required with City staff, SDDOT, and City Parks staff/boards. Consultant shall prepare minutes of City sponsored meetings.
- Consultant shall submit a Preliminary Design Report with the 35% Drawings.

## 2.) Survey:

- The Consultant shall perform field surveys to supplement the SDDOT topographic surveys along Jackson Boulevard. Items to be surveyed along Jackson Boulevard are existing City water, sewer, and storm sewers, including the storm sewer outfall into Rapid Creek. The Consultant shall also search for and survey existing property corner monument along Jackson Boulevard.
- A topographic survey shall be made of the Golf Course where storm sewer outfalls are anticipated and the Heartland Court area where a storm water quality area is anticipated.
- A street centerline survey, including adjacent water and sewer locations, shall be made of Cottonwood Street and Evergreen Drive for the preliminary profile layout for the future Cottonwood Street box culvert outfall system.

**EXHIBIT A**

## 3.) Water Main design / analysis:

- A. Update the previous preliminary layout of the new 20" transmission line based on updated SDDOT drawings and proposed locations of private utilities.
- B. Recommendations will be made for local water main sizing.
- C. The improvements to be constructed shall include replacement, reconstruction, or repair of water mains.
- D. The location and condition (size/material) of services shall be evaluated along the Project corridor. Non-conforming services shall be identified with recommendations to correct them.
- E. Sizing of water main improvements will be based on a 75 year design. Analysis by the consultant to be in accordance with current City standards, draft utility design criteria manual, and modeled to provide service to currently developed areas as well as reasonably expected areas of future development.

## 4.) Sanitary Sewer Main design / analysis:

- A. The Consultant will provide recommendations for rehabilitation or replacement of the existing sanitary sewer mains. This includes identifying and coordinating with Utility Maintenance the sewers which need to be inspected by the City.
- B. The improvements to be constructed shall include replacement, reconstruction, or repair of sanitary sewer mains.
- F. The location and condition (size/material) of sewer services shall be evaluated in the Project corridor. Non-conforming services shall be identified with recommendations to correct them. Additional survey and/or investigation outside the project area may be needed to adequately analyze non-conforming services.
- D. Sizing of sanitary sewer improvements will be based on a 75 year design. Sizing shall be based on the areas currently serviced by gravity sewer or as otherwise projected by the City Utility Masterplan. Analysis by the consultant to be in accordance with current City standards, draft utility design criteria manual, and modeled to provide service to currently developed areas as well as reasonably expected areas of future development.

## 5.) Storm Sewer design / analysis:

- A. The Consultant will evaluate flows, capacity, condition, and provide a recommendations for improvements to the elements within the project limits and adjacent elements that will be affected by this project and future improvements. The recommendations for improvements to the elements outside of the project limits will be used by the City for scoping and programming future projects; no final designs are expected to be provided for these elements
- B. For the area between Rapid Creek and Canyon Lake Drive the Preliminary Design services will include an evaluation of the 2010 Design Basin Plan Amendment for Red Dale Drainage Basin and, if applicable, recommendations for amendments to the plan. If an amendment to the Design Plan is needed, it will be done under a separate agreement.
- C. Storm drainage evaluation includes drainage outfall routes and types from Jackson Boulevard to Rapid Creek. The outfalls are needed to convey the flows from various improvements recommended in the 2010 DBDP Amendment to Rapid Creek. Certain outfalls are expected to

**EXHIBIT A**

cross the golf course in some manner.

- D. The west extent of the project, from about Canyon Lake Drive to Chapel Lane, is outside of the limits of any existing City Drainage Basin Design Plan. The basin sizes in this area are small localized areas. The Consultant shall determine discharges from these areas and make recommendations for the flows that discharge through the project.
- E. The Consultant will review the SDDOT storm drainage design.
- F. The consultant shall compare the design criteria requirements between the City and SDDOT, and evaluate the construction cost difference between the storm sewer improvements within the project limits. The construction cost difference will be used by the City to negotiate the cost sharing agreement between these government entities.

6.) Post Construction Storm Water Quality Features:

- A. The 2010 Red Dale Drainage Basin Design Plan Amendment includes a storm water quality feature described as the Cottonwood Street Outfall. The Project shall include a water quality feature at this location. The Cottonwood Street box culvert is a future project; however, the design of the water quality feature shall include evaluation of a preliminary profile for the box culvert in order to establish grades for the storm water quality area.
- B. The design of the Cottonwood Street Outfall water quality feature shall account for additional flows that will reach the system from Jackson Boulevard.
- C. The storm sewer outfalls from Jackson Boulevard to Rapid Creek as described in 5(C) above shall be evaluated for incorporation of water quality features. These features will require coordination with Meadowbrook Golf Course.
- D. Other stormwater quality BMPs shall be evaluated for application to the project. This evaluation may include items such as water quality inlets, micro treatment areas, and off street porous pavement areas.
- E. Stormwater quality feature evaluation and design shall be coordinated with Landscape Architect.

7.) Land and Water Conservation Fund Review:

Portions of the project may impact property that is subject to the requirements of Section 6(f)(3) of the NPS Land and Water Conservation Act. The Consultant will prepare a Preliminary Analysis and Report of impacts of City portions of the project on the 6f properties. The Report will include the Consultants opinion as to whether replacement lands are required.

8.) 35% Preliminary Design Drawings:

- A. The Consultant shall prepare 35% Preliminary Design drawings to incorporate the proposed City water and sewer reconstruction. The plans shall utilize the SDDOT design drawings as base maps. Drawings shall be 11" x 17" color. Drawings shall include plan and profile information as well as other details appropriate to 35% design.

## EXHIBIT A

## 9.) Geotechnical Evaluation:

The SDDOT report Geotechnical Evaluation will be based on shallow holes and will only include the required information for the pavement section by the SDDOT designers. The SDDOT report will not include recommendations or sufficient data for the design and construction of project utilities. The Consultant will prepare a separate Geotechnical Evaluation for the City Project.

- A. To evaluate the existing soil and groundwater conditions to sufficient depths and develop recommendations for City utility and drainage construction, a total of 22 borings are planned along the Jackson Boulevard alignment and within areas considered for storm water quality features. The boreholes will be drilled to depths of approximately 15 feet below existing grades. Field testing will be performed and samples will be extracted for further laboratory analysis. Select soil samples will be tested in our laboratory to determine their general classification, physical properties, and engineering characteristics with respect to utility design and installation.
- B. Soil samples obtained from areas known or suspected to have historic petroleum releases will be field screened with a Photo-Ionization Detector (PID) for the presence of hydrocarbon contamination which may impact excavated soil disposal. Beyond the field identification of potentially contaminated soils for the purposes of identifying construction impacts, our geotechnical scope does not include an environmental assessment or evaluation in any sense.
- C. In addition to the drilling of boreholes, 10 in-situ soil electrical resistivity surveys will be performed along the proposed utility alignments in support of corrosion protection designs. The resistivity surveys will be performed in accordance with the City's Draft Corrosion Control Design Manual 2008, using the ASTM G57 Wenner four pin method.
- D. Upon completion of the field and laboratory testing and our analysis, a report will be prepared that transmits the geologic logs and testing results, and provides our recommendations. In general our recommendations will include excavation and fill placement recommendations, utility installation recommendations, and general construction recommendations that we consider applicable to the site conditions encountered.

## 10.) Landscape Architecture:

Storm water quality features are an important component of the Preliminary Design as described in Part 6. Landscape Architect shall be included in the evaluation and design of these features. The two major water quality features are the Cottonwood Street Outfall Area and Golf Course Crossing. The Golf Course Crossing is anticipated as an open channel and may cross holes 16, 17, and 18. Additionally, the Landscape Architect shall evaluate and consult with the Civil Engineer for possible locations for micro treatment areas.

In addition to the water quality related portions of the Landscape design, adjacent site amenities that may be appropriate to the features shall also be evaluated.

The Landscape Architecture task will assist with the Analysis and Report of the Land and Water Conservation Fund reviews as described in Task 7 above.

END OF SCOPE NARRATIVE



**EXHIBIT B**

**RATE SCHEDULE  
FOR  
TASK 1 OF JACKSON BOULEVARD UTILITIES  
CHAPEL LANE TO RAPID CREEK BRIDGE  
Project No. SSW10-1837 / CIP No. 50177**

**FMG INC. – PRIME CONSULTANT**

<b>Professional Engineer – Principal</b>	<b>\$130.00/hr</b>
<b>Professional Engineer – Senior Engineer</b>	<b>\$105.00/hr</b>
<b>Design Engineer – EIT</b>	<b>\$70.00/hr</b>
<b>Computer Drafting Technician</b>	<b>\$65.00/hr</b>
<b>Registered Land Surveyor</b>	<b>\$80.00/hr</b>
<b>Survey Crew</b>	<b>\$120.00/hr</b>
<b>Clerical</b>	<b>\$50.00/hr</b>

**WYSS ASSOCIATES – LANDSCAPE ARCHITECTURE SUBCONSULTANT**

<b>Project Director</b>	<b>\$150.00/hr</b>
<b>Senior Landscape Architect</b>	<b>\$105.00/hr</b>
<b>Landscape Architect</b>	<b>\$85.00/hr</b>
<b>Design Associate</b>	<b>\$68.00/hr</b>
<b>Administrative</b>	<b>\$42.00/hr</b>

**VEHICLES AND EXPENSES**

<b>Vehicle Mileage</b>	<b>\$0.65/mile</b>
<b>Travel Costs – air, lodging, transport, meals, etc</b>	<b>cost</b>
<b>Document/Plans Reproduction</b>	<b>cost</b>

FMG, INC. - TASK SCHEDULE **EXHIBIT C**  
**TASK 1 OF JACKSON BOULEVARD UTILITIES CHAPEL LANE TO RAPID CREEK BRIDGE**  
 Project No. #SSW10-1837 / CIP# 50177  
 August 3, 2011

<b>TASK 1 PRELIMINARY DESIGN SERVICES</b>		
<b>Task PD1</b>	<b>Meetings, General Investigative, Overall Coordination</b>	
PD1.1	Kickoff Meeting and Minutes	\$890.00
PD1.2	Interim Meetings Through Preliminary Design Submittal + Minutes	\$7,420.00
PD1.3	Field Inspection Design Review Meetings with SDDOT	\$2,200.00
PD1.4	SDDOT Coordination Meetings (2) in Pierre + Minutes	\$3,760.00
PD1.5	Meetings with Parks and Golf Staff and Boards + Minutes	\$2,710.00
PD1.6	Property Owner Questionnaire	\$980.00
PD1.7	Compile and Analyze Results of Questionnaire	\$970.00
PD1.8	Obtain/Review City Reports, As Built, Prev. Platting Issues, Etc	\$3,460.00
PD1.9	Obtain & Initial Familiarization with State Plans and Reports	\$3,460.00
PD1.10	Water and Sewer Cards	\$2,820.00
PD1.11	Utility/Roadway Template Sections -Overall Location Issues	\$1,520.00
PD1.12	Interim Technical Memorandums/Submittals	\$5,190.00
PD1.13	Preliminary City Right of Way/Easement Requirements	\$2,580.00
PD1.14	Review of SDDOT Plans as City Representative/Criteria Check	\$4,600.00
PD1.15	Special Exception Requests - City Items only	\$420.00
PD1.16	Constructability Phasing Evaluation	\$3,060.00
PD1.17	Internal Coordination, Administration	\$3,120.00
PD1.18	Overall Preliminary Design Report and Cost Estimate	\$5,670.00
	<i>Task PD1 Manhour Subtotal</i>	<b>\$54,830.00</b>

<b>Task PD2</b>	<b>Survey</b>	
PD2.1	Survey Research and Computations	\$1,540.00
PD2.2	Jackson Blvd R.O.W. Property Corner Search	\$4,800.00
PD2.3	Horizontal and Vertical Control	\$2,880.00
PD2.4	Utility Locates Coordination	\$740.00
PD2.5	Survey Exist Water, Sewer, and Storm Lines along Jackson	\$7,680.00
PD2.6	Cottonwood Street Box Culvert Route - CL Profile and Sewer	\$1,200.00
PD2.7	Detailed Topo Areas (Golf Course Storm Sewer Outfall Areas)	\$3,840.00
PD2.8	Detailed Topo Areas (Cottonwood St. Outfall Water Quality Area)	\$2,160.00
PD2.9	Drafting of Survey/Set Up to Match SDDOT	\$3,900.00
PD2.10	Field Check	\$960.00
	<i>Task PD2 Manhour Subtotal</i>	<b>\$29,700.00</b>

<b>Task PD3</b>	<b>Water Main Design Analysis</b>	
PD3.1	Existing Facilities Research/Inventory/Maintenance Issues	\$1,880.00
PD3.2	Local Water Main Sizing	\$840.00
PD3.3	Local Water Main Locations and Routing	\$1,520.00
PD3.4	Fire Protection Design Requirements	\$210.00
PD3.5	Update 20 Inch Water Main Alignment and Location	\$1,910.00
PD3.6	Service Line Requirements/Non Conforming Services	\$1,940.00
PD3.7	Subsection Design Report and Cost Estimates	\$3,180.00
	<i>Task PD3 Manhour Subtotal</i>	<b>\$11,480.00</b>

FMG, INC. - TASK SCHEDULE  
**EXHIBIT C**  
**TASK 1 OF JACKSON BOULEVARD UTILITIES CHAPEL LANE TO RAPID CREEK BRIDGE**  
 Project No. #SSW10-1837 / CIP# 50177  
 August 3, 2011

<b>Task PD4</b>	<b>Sanitary Sewer Design Analysis</b>	
PD4.1	Sanitary Sewer Research/Inventory/O&M Issues/Maintenance Records	\$1,100.00
PD4.2	Rehab/Replacement/Alternates Analysis	\$1,360.00
PD4.3	Reconstruction Routing and Location Analysis/Diversions	\$1,650.00
PD4.4	Service Line Requirements/Non Conforming Services	\$1,520.00
PD4.5	Project Needs/Requirements Beyond SDDOT Limits	\$970.00
PD4.6	Sanitary Sewer Sizing Analysis from Localized Basins	\$2,230.00
PD4.7	Subsection Design Report and Cost Estimates	\$3,180.00
	<i>Task PD4 Manhour Subtotal</i>	\$12,010.00

<b>Task PD5</b>	<b>Storm Drainage Design Analysis</b>	
PD5.1	Existing Facilities Research/Inventory/Maintenance Issues	\$840.00
PD5.2	Review/Evaluate Red Dale Drainage Basin Plan	\$1,100.00
PD5.3	Evaluate Alt. Outfall Routes from Jackson Boulevard to Rapid Creek	\$2,040.00
PD5.4	West Mini Basin Analysis (Canyon Lake Drive to Chapel Lane)	\$2,200.00
PD5.5	Determine Storm Sewer Criteria - SDDOT Vs City	\$630.00
PD5.6	Roadway Storm Sewer Sizing, Alts with SDDOT & City Requirements	\$3,040.00
PD5.7	Evaluate Related Future Drainage Needs Outside of SDDOT Work Limits	\$1,100.00
PD5.8	FEMA Floodplain Permit Requirements	\$680.00
PD5.9	Subsection Design Report and Cost Estimates	\$4,860.00
	<i>Task PD5 Manhour Subtotal</i>	\$16,490.00

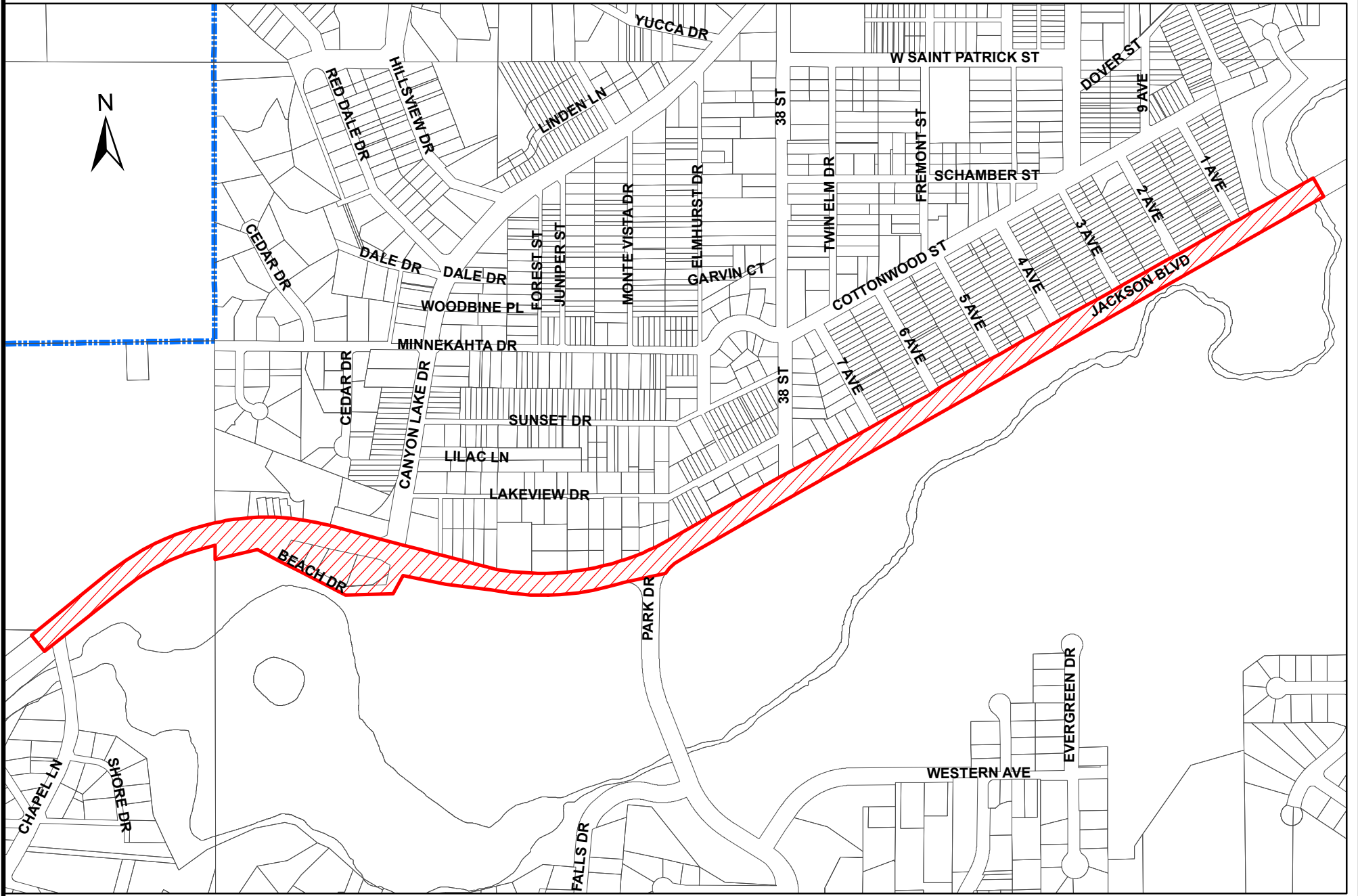
<b>Task PD6</b>	<b>Storm Water Quality Design Analysis</b>	
PD6.1	Golf Course 38th Street Outfall Area Alt/Design Analysis	\$2,200.00
PD6.2	Cottonwood Street Box Culvert Preliminary Upstream Profile	\$1,490.00
PD6.3	Cottonwood Street Outfall Water Quality Area Alts/Design Analysis	\$3,560.00
PD6.4	Evaluate other Potential Mini Water Quality Items	\$760.00
PD6.5	Subsection Design Report and Cost Estimates	\$2,760.00
	<i>Task PD6 Manhour Subtotal</i>	\$10,770.00

<b>Task PD7</b>	<b>Review of City Impacts to Land And Water Conservtion Fund Area</b>	
PD7.1	Analysis and Report	\$520.00
	<i>Task PD7 Manhour Subtotal</i>	\$520.00

<b>Task PD8</b>	<b>35% Preliminary Design Drawings</b>	
PD8.1	Set Up SDDOT Drawing Files For City Portion of Project	\$2,085.00
PD8.2	Update Drawing files as SDDOT provides changes	\$1,565.00
PD8.3	Cover Sheet	\$130.00
PD8.5	Survey Control	\$340.00
PD8.6	Plan Sheets (DOT area sheets - 13)	\$10,200.00
PD8.7	Profile Sheets (DOT area Sheets - 13)	\$10,200.00
PD8.8	Stormwater Plan Sheets (CottonWood Outfall-Est 2 sheets)	\$1,620.00
PD8.9	Stormwater Profile/Grading Sheets (Cottonwood Outfall Area - Estimate 2 sheets)	\$2,980.00
PD8.10	Stormwater Plan Sheets (38th St Outfall thru Golf Course -Estimate 2 sheets)	\$1,620.00
PD8.11	Stormwater Profile/Grading Sheets (38th Street Outfall thru Golf Course - Estimate 2 sheets)	\$2,980.00
PD8.12	35% Special Details	\$2,510.00
	<i>Task PD8 Manhour Subtotal</i>	\$36,230.00

**FMG, INC. - TASK SCHEDULE** **EXHIBIT C**  
**TASK 1 OF JACKSON BOULEVARD UTILITIES CHAPEL LANE TO RAPID CREEK BRIDGE**  
**Project No. #SSW10-1837 / CIP# 50177**  
 August 3, 2011

<b>TASK PD9</b>	<b>Geotechnical Evaluation</b>	<b>\$</b>	<b>20,730.00</b>
<b>TASK PD10</b>	<b>WYSS ASSOCIATES - LANDSCAPE ARCHITECTURE</b>		
PD10.1	Section 6(f)3 NPS LWCF Analysis and Report	\$	1,827.00
PD10.2	Site Investigation	\$	2,652.00
PD10.3	Meetings	\$	5,796.00
PD10.4	Golf Course Channel Analysis/Design for Landscape	\$	4,124.00
PD10.5	Cottonwood Area Pond Analysis/Design for Landscape	\$	5,024.00
PD10.6	Micro Type Water Quality Feature Analysis	\$	4,332.00
PD10.7	Design Narrative and Cost Estimate	\$	5,196.00
PD10.8	Expendibles and Mileage	\$	500.00
		\$	29,451.00
<b>TASK PD11</b>	<b>FMG Expendibles and Mileage</b>	<b>\$</b>	<b>2,000.00</b>
<b>TOTAL PRELIMINARY DESIGN COST</b>		<b>\$</b>	<b>\$224,211.00</b>



**JACKSON BOULEVARD UTILITIES  
CHAPEL LANE TO RAPID CREEK BRIDGE  
PROJECT NO. SSW10-1837      CIP NO. 50177**