

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

Date: 4-6-2015

**Project Name & Number:** South Truck Route Drainage Basin Design Plan – Element 203      **CIP #:** 51031  
Project Number 14-2207

**Project Description:** To provide professional engineering services related to the preparation of design plans for South Truck Route Drainage Basin Design Plan – Element 203

**Consultant:** FMG Engineering

**Original Contract Amount:** \$116,350.00      **Original Contract Date:** 4/10/2015      **Original Completion Date:** 6/30/2017

**Addendum No:**

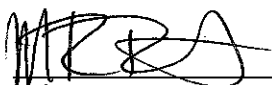
**Amendment Description:**

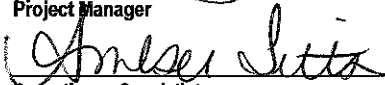
**Current Contract Amount:** \_\_\_\_\_      **Current Completion Date:** \_\_\_\_\_  
**Change Requested:** \_\_\_\_\_  
**New Contract Amount:** \_\_\_\_\_      **\$0.00**      **New Completion Date:** \_\_\_\_\_

**Funding Source This Request:**


Amount	Dept.	Line Item	Fund	Comments
\$116,350.00	7403	4223	609	Stormwater Drainage Expansion
\$116,350.00	<b>Total</b>			


### Agreement Review & Approvals

 \_\_\_\_\_      3-26-15      Date  
**Project Manager**

 \_\_\_\_\_      3/30/15      Date  
**Compliance Specialist**

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

 \_\_\_\_\_      3-26-15      Date  
**Division Manager**

 \_\_\_\_\_      3-27-15      Date  
**Department Director**

**ROUTING INSTRUCTIONS**

Route two originals of the Agreement for review and signatures.  
 Finance Office - Retain one original  
 Project Manager - Retain second original for delivery to Consultant  
 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)

Appropriation      Date      Initials      Approved

Cash Flow      4/2/15      [Signature]      (Y)      N

**Agreement Between City of Rapid City and FMG Engineering  
for Professional Services for  
South Truck Route Drainage Basin Design Plan – Element 203  
Project No. 14-2207 / CIP No. 51031**

AGREEMENT made \_\_\_\_\_, 20\_\_\_\_, between the City of Rapid City, SD (City) and FMG Engineering, (Engineer), located at 3700 Sturgis Road, Rapid City, 57702. City intends to obtain services for South Truck Route Drainage Basin Design Plan – Element 203, Project No. 14-2207 / CIP No. 51031. The scope of services is as described within this document and as further described in Exhibits A and B (attached).

The City and the Engineer agree as follows:

The Engineer shall provide professional engineering services for the City in all phases of the Project and as further defined in Exhibits A and B (attached), 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.



- 1.1.4 The contract will be based on an hourly rate and reimbursable fee schedule with a maximum not-to-exceed amount.

## 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 Exhibit A.)
- 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 and reimbursable rate schedule described in Exhibit C.

### **5.2 Fee**

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed **\$116,350.00** 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 per the hourly rates and allowable reimbursable as 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 on or before June 30, 2017 based on a notice to proceed on or before April 10, 2015.

## **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 Contractor agrees to hold the City harmless from any liability, including additional premium due because of the Contractor'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, of not less than \$1,000,000 each occurrence and not less than \$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 Engineering

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

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

ATTEST:

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

**Reviewed By:**



\_\_\_\_\_  
Mary Bosworth, PROJECT MANAGER

DATE: 3-24-15

CITY'S DESIGNATED PROJECT REPRESENTATIVE

ENGINEERING FIRM'S DESIGNATED PROJECT REPRESENTATIVE

NAME Mary Bosworth, PE, CFM  
PHONE 605-394-4154  
EMAIL mary.bosworth@rcgov.org

NAME Jerry Foster, PE  
PHONE 605-342-4105  
EMAIL jfoster@fmgenengineering.com



## **EXHIBIT A SCOPE OF SERVICES**

### **South Truck Route Drainage Basin Design Plan – Element 203 Project No. 14-2207 CIP 51031**

The City of Rapid City has determined the need to procure professional services including Preliminary Design Services, Final Design Services, and Bidding Services for the South Truck Route Drainage Basin Design Plan – Element 203. Basic Construction Services and Expanded Construction Services will be negotiated at a later date as a separate contract due to the need for a future LOMR submittal by consultant.

This project is for services related to the design and construction of a Detention Pond identified as South Truck Route Drainage Basin Design Plan (DBDP) Element 203. The South Truck Route DBDP describes Element 203 as an existing detention pond created by East Catron Boulevard. The existing pond capacity is limited and the DBDP recommends construction of a new embankment upstream of the existing pond. The design will evaluate the recommended improvement guidelines in the DBDP and make a final detailed technical analysis of the proposed improvements for Pond 203 and provide alternative recommendations as necessary. The design includes preparation of appropriate documentation to amend the South Truck Route DBDP.

It is anticipated that the project will include the following:

- Temporary construction and permanent drainage easement acquisition will be necessary for construction of this project. The consultant will be required to prepare easement exhibits and provide copies of deeds for the City to prepare the easement documents. The consultant will act as the City's agent in negotiating for the easements and in presenting City offers. The consultant will be responsible for meeting individually with property owners regarding necessary easements and general project coordination.
- The South Truck Route DBDP was developed in accordance with the City of Rapid City 2003 design standards which specified the basin be modeled using Urban Drainage Storm Water Management Model (UDSWM95). The consultant will provide a United States Army Corps of Engineers Hydraulic Engineering Center – Hydraulic Modeling System (HEC-HMS) computer model and provide comparisons and recommendations for runoff volumes to be used in the design of the improvements to Element 203 detention pond. The drainage area to be modeled with this project is only that which drains to the Element 203 detention pond.
- Portions of the project area are located in the Federal Emergency Management (FEMA) Special Flood Hazard Area (SFHA). Consultant will address all City of Rapid City and FEMA regulations for development located within a SFHA. The consultant will prepare a Conditional Letter of Map Revision (CLOMR) for submittal to FEMA prior the project being constructed. The consultant will apply for the Letter of Map Revision (LOMR) upon completion of construction. The FEMA map revision is to be the minimum length necessary with the upstream limits expected to be the limits of the detention pond pool. The downstream remapping limit is to be only as necessary to make a logical tie to the existing FEMA Map and is reasonably expected to be less than 500' downstream of Catron Boulevard. Remapping efforts beyond a point 500' downstream of Catron Boulevard centerline will require a contract amendment for additional survey and engineering costs.



- An evaluation and recommendation of water quality features for the detention pond and/or contributing runoff area.
- Access route for maintenance and construction of the detention pond
- The consultant shall prepare an Operation and Maintenance Manual for the pond including schedule.
- Wetland determination and mitigation if necessary.
- Modifications to entrance of existing box culvert under East Catron Boulevard.

FMG Inc, was selected through the City's consultant selection process to provide Engineering Services for Task 1 through Task 3. Tasks 4 and 5 will be combined into a separate contract at a later date.

TASK 1 - PRELIMINARY DESIGN SERVICES:

This task consists of all services necessary to take the project from beginning through the Preliminary Design submittal stage, and the following itemized services are anticipated.

- 1.1 Kick-off Conference: The consultant shall meet with City staff to detail project concept and scope. The consultant shall prepare an agenda, take minutes, and distribute minutes.
- 1.2 Collect and review background information listed in the RFP and any other resources as available.
- 1.3 Perform site surveys sufficient for design plan preparation. The route and topography survey shall be tied to at least two City of Rapid City Monument Control system monuments utilizing State Plane coordinates. Survey will include:
  - Boundary and Topographic Survey for Pond 203 area and extending 500' downstream of Catron Boulevard. Per scoping discussions it is assumed SDDOT will set corners along Catron Boulevard at request of City of Rapid City if said corners have not previously been set.
  - Limited Detail Survey of pond area at SW quadrant of 5<sup>th</sup> and Catron for purposes of determining overflow elevation and pipe data for purposes of flow diversion verification. No boundary survey will be performed at this location.
  - Limited Detail Survey of outlet structure and outlet piping at existing Detention Pond 205 for purposes of determining discharge characteristics at pond. No boundary survey will be performed at Pond 205.

FMG will contact landowners for permission to enter their property for field survey activities. This agreement assumes land owner permission will be granted.

- 1.4 Hold one initial individual meeting with each of the 3 property owners affected by Pond 203 work and the floodplain study area plus Pennington County and SDDOT officials. Meetings are for purposes of discussing ROW and permanent and temporary easements needs and other specific project issues and components as necessary. Prepare and distribute minutes of the meetings.



1.5 Private Utilities Base Plan Verification Meeting: The consultant shall send base plans to the private utilities requesting verifications that their utilities are shown correctly per their records. For the purposes of this project, the private water and sewer mains and services that exist south of Catron Boulevard are considered private and are to be treated same as Private Utility Companies. A meeting with the private utilities shall be scheduled after submitting plans to verify that the utilities are shown correctly and to make plans revisions as necessary. Consultant shall request copies of the Utility Company existing and proposed maps.

1.6 Perform Geotechnical Evaluation.

Due to site access constraints related to soft, swampy conditions in the areas of geotechnical interest, and related concerns about site disturbance, our geotechnical evaluation will be conducted as a desktop evaluation. We will perform a visual reconnaissance of the site and research available publications and data. We will approximate the underlying geotechnical site conditions based on past experience in the area with similar conditions.

Of primary interest when constructing embankments in soft, swampy conditions is the depth to which soft conditions exist. The extent to which these soft materials are present will ultimately have a direct impact on design and construction of the embankment. In absence of direct geotechnical exploration, our geotechnical evaluation report will present recommendations for contingencies such as extensive thicknesses of soft materials, subgrade stabilization, groundwater mitigation, excavation difficulties, and suitability of on-site materials for reuse.

As direct geotechnical exploration will not occur prior to design and construction, FMG, Inc. should be retained to provide geotechnical oversight during construction. FMG, Inc. will assess the geotechnical conditions encountered during construction, and assist as necessary with any design modifications or adjustments to construction techniques.

1.7 Not Used.

1.8 Conceptual Design Report

Prepare a Conceptual Design Report: The consultant shall establish and indicate project specific design criteria and standards within the Conceptual Design Report. The consultant shall submit all design assumptions for the recommended improvements to the detention pond and for the floodplain modifications. The Consultant shall include design life, design criteria, and reference of design resources. The Consultant shall use the City Infrastructure Design Criteria Manual to establish design criteria and standards. The Conceptual Design Report shall provide justification for the facility and analysis of alternatives. The project's geotechnical report shall be included within the Conceptual Project Design Report. The Consultant shall elaborate on other project components as necessary.

The Conceptual Design Report shall include the Hydrologic and Hydraulic analysis and modeling, including discussion of design alternates analysis, of the proposed project. The report shall also include a conceptual level floodplain analysis.

Per scoping discussions the percent impervious for land use shall use recommended values from the IDCM. Future land use information shall be taken from the current City of Rapid City



Comprehensive Plan. Land use in mixed use areas will be evenly averaged. Steep slopes, as judged by Consultant, are to be assumed as undevelopable.

Per scoping discussions the evaluation of the future proposed ponds upstream of Pond 203 is to be limited to using the stage storage data in the original DBDP with the exception that surveyed overflow and pipe data will be used at Pond 205. If additional ponds are needed or modifications are needed to the upstream ponds such that Pond 203 is not adversely affected by development the analysis will be limited to stating the amount of imperviousness in the upstream basins that is allowed without further upstream pond analysis being necessary by others at time of development.

Scope of work is to assume all flow from pond at SW corner of Catron Boulevard and 5<sup>th</sup> Street is diverted from the Pond 203 contributing basin. Per scoping discussions consultant is to verify the diversion capacity.

Pond 203 design is to be prepared such that the pond size is not a Small Dam as defined by the State of South Dakota.

The Conceptual Design Report shall include recommendations for Wetland Mitigation at Detention Pond 203.

Storm water quality discussion will also be included in the report. Per scoping discussions storm water quality features shall be secondary to the primary goal of the pond which is detention. Per the scoping discussions the Consultant is to assume the existing Wetlands plus Wetland Mitigation will be used as the water quality feature.

A probable opinion of construction costs for the project shall be included in the Concept Design Report. The costs shall be itemized based on the City's standard bid items and appropriate contingency item allowance.

Identify the existing right-of-way (ROW) location and any ROW or easements necessary for the Project. Include size and extent of such ROW and easements and contact information of property owners.

Submit three (3) copies and a PDF version of the Conceptual Design Report and preliminary plans and specifications to City of Rapid City's project manager for review and comment.

#### 1.9 Conceptual Design Drawings

The conceptual design drawings will, at a minimum, contain the following sheets:

- Cover Sheet
- Survey Control Sheet
- Property Layout and Land Ownership
- Plan and Profile Sheets - Show existing and proposed utility mains and existing services, storm sewers, driveway locations, fittings, and proposed surfacing curb and gutter layout, and guardrail locations. The utilities should be shown in profile as well where possible. Design criteria elements like profile grades, k values, vertical and horizontal curve data should be included.
- Grading Plan Sheets showing existing and proposed contours
- Special Details – Conceptual Layouts for special/critical elements.
- Grading Cross Sections



Because of the unique nature of the project Consultant shall use project required drafting standards rather than the City of Rapid City drafting standards.

- 1.10 Attend submittal review meeting with City staff.
- 1.11 Assist the City with easement(s) acquisition, obtain property owner contact information, prepare easement and ROW exhibits as necessary, provide copies of current deeds of properties where easements are needed, hold individual meetings with landowners for purpose of Easement and ROW Acquisition and other agreements that may be needed for the Pond 203 construction and for the floodplain modification submittals. Consultant is not responsible for negotiating compensation for easements and ROW. Consultant shall prepare and distribute minutes for meetings related to this task. Task is limited to two meetings per landowner.
- 1.12 Assist the City with Permit Acquisition from Agencies:
  - SDDOT Permit – Prepare application for SDDOT Permit to Occupy the Right of Way.
  - Threatened and Endangered Species – Permit task consists of requesting that appropriate agencies grant Threatened and Endangered Species Clearance for the project.
  - USACE 404 Permit – Consultant will prepare application forms for the United States Corps of Engineers 404 (wetland) permit for the areas disturbed by the project. This task includes wetlands identification and delineation, and mitigation design, and Permit applications.
- 1.13 Address Task 1 City Review comments, permitting requirements, and landowner approval comments and finalize the design report. Provide 2 copies and a PDF version of the Finalized Design Report.
- 1.14 DBDP Amendment Report  
DBDP Amendment Report shall be submitted independent of Finalized Design Report. The DBDP Amendment Report will contain only that information from the Finalized Design Report that is applicable to the Amendment. Provide 2 copies and a PDF version of the DBDP Amendment Report. The DBDP Amendment Report is limited to Hydrologic and Hydraulic analysis and recommendations and is only for the basin area that drains to Pond 203.

## TASK 2 - FINAL DESIGN SERVICES:

This task consists of all services necessary to take project from Task 1 Preliminary Design Services through the Final Design Services. The following itemized services are anticipated.

### 2.1 Final Review Design Drawings

Provide complete plans and specifications for a unit price construction contract. Plan sheets shall be prepared utilizing the latest City of Rapid City Drafting Standards. Plans documents shall adhere to current City of Rapid City guidelines.

It is anticipated the complete plans and specification will include the following.



- Title Sheet
- Legend Sheet
- Estimate of Quantities and General Note Sheets
- Estimate of Quantities Tables
- Survey Control Sheet / Horizontal/Vertical and Alignment Data
- Right of Way and Easement Layout Sheets including Property Control and Ownership
- Traffic Control sheets
- Existing Condition and Removal Sheets
- Erosion Control Plan Sheets
- SWPPP
- Erosion Control Details
- Plan and Profile Sheets
- Grading Plan Sheets
- Special Details for Detention Pond
- Special Details Catron Blvd. Box Culvert Modification
- Standard Details
- Cross Sections

The total number and/or type of sheets may vary upon final design depending on final project requirements.

Project layout sheet is to include lot lines (front and side) and addresses of all properties (adjacent to construction).

Incorporate design features as necessary to meet the requirements outlined in the Project Design Report.

Plans shall include adjustments to City of Rapid City sanitary sewer manholes for rim adjustments and/or watertight style lids. Design tasks do not include relocation of manholes or sewer mains.

Provide a complete stormwater pollution prevention narrative which will include detailed erosion and sediment control measures and specifications. Provide a complete erosion and sediment control site plan. Include both temporary and permanent erosion and sediment control measures. Include an erosion and sediment control sequence of implementation and phasing schedule. Each erosion control item shall be bid separately.

Provide detailed traffic control plans showing all devices required for a MUTCD compliant plan. Show all streets and alleys that may be impacted by this project. Show all existing signage, pavement markings, etc. All work zones, road closures, lane closures, and pavement marking removals shall be indicated on the plan. A detailed layout will be included for each phase of multi-phased projects. The traffic control sequence of implementation and phasing schedule shall coincide with erosion and sediment control sequence of implementation and phasing schedule. Each traffic control device shall be bid separately. The City will provide an electronic version of an aerial photo for the selected consultant's use.

Provide a Project Sequence of implementation and phasing schedule which shall include such items as traffic control, erosion and sediment control, utility installations, paving, restoration, and construction milestones.





Provide detailed specifications supplementing the City of Rapid City Standard Specifications, as necessary. Typically project drawing specific issues should be indicated as a General Note on the drawings. Material types and material specific items would be included as a detailed specification.

Staking information shall include either of the following formats:

On the Plans

- Station offsets for all items of work requiring field staking.
- In tabular form on a plan sheet (schedule)
- Coordinates and description of inter-visible control points.
- Coordinates of all items of work requiring field staking.
- Benchmark information shall be provided on each sheet.

- 2.2 Coordinate directly with private utility companies' engineering divisions to ensure that all existing utilities are completely and accurately identified and 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. Preliminary plans shall be provided to the pertinent utilities for comment at the time they are complete followed by a specific private utility coordination meeting in two to three weeks. Notify the City Project Manager if private utilities need to be relocated so the PM can formally notify the utilities to relocate. For the purposes of this project, the private water and sewer mains and services that exist south of Catron Boulevard are considered private and to be treated same as Private Utility Companies.
- 2.3 No Used.
- 2.4 Provide detailed project manual specifications as necessary to supplement the City of Rapid City Standard Specifications and Plan General Notes. Prepare bidders proposal spreadsheet for project manual.
- 2.5 Final Review Opinion of Probable Construction Cost.
- 2.6 Submit 3 copies and PDF version of Final Review Design submittal to City PM. Submittal shall consist of complete plans, specification, contract documents, and opinion of Probable Construction cost. The submittal shall be made when consultant believes the plans, specifications, contract documents, and opinion of probably cost are 100% complete.
- 2.7 Attend Final Review Design Submittal Meeting with City Staff.
- 2.8 Attend Final Review Design Meetings with SDDOT, County, and Property Owners. Limited to one meeting each with SDDOT, County, and 3 property owners.
- 2.9 Not Used.
- 2.10 Identify permits that will be required for the Contractor. Identify permit costs and indicate if any permit costs are paid for directly by the owner or if it is a Contractor cost. Typically all permit costs are the Contractor's obligation.



- 2.11 The City will submit plans and specifications to the Department of Environment and Natural Resources for approval, and the Consultant shall address any comments or corrections required.
- 2.12 Incorporate Final Review Comments and Make 100% Design Submittal.  
Submit 3 copies and a PDF version of the 100% Design Submittal. Submittal incorporate review comments made on Final Review Design Submittal and shall consist of complete plans, specifications, contract documents, and an opinion of Probable Construction Cost.
- 2.13 CLOMR Submittal  
CLOMR submittal shall include Final HECRAS and HECHMS models as required by FEMA, preparation and submittal of Operations and Maintenance Manual for Pond 203, preparation of required application documents, supporting figures and maps, property owner concurrence letters, agency concurrence letters, and other necessary or incidental information required by FEMA.

Floodplain submittals and mapping shall be limited to existing conditions hydrology and proposed Pond 203 construction.

CLOMR Application fees are not included in this agreement. CLOMR submittal application fees to be paid by City of Rapid City.

- 2.14 Final Bidding Documents
- Provide one (1) copy and a PDF version of bid documents including complete plans, specifications, and Engineer's Estimate of probable construction cost to the City of Rapid City's project manager for City distribution.
  - Provide complete plans on CD compatible with AutoCAD Release 2008 or newer format.
  - Provide all topographic, control, and design points in the .dwg file and in tabular format, both on CD and on hard copy printout.
  - Provide complete specifications and contract documents on CD in Microsoft Word XP or previous versions.
  - Provide a unit price cost estimate on CD in Microsoft Excel XP or previous version on the City of Rapid City "Engineer's Estimate" form. Provide Engineer's Estimate of probable construction costs as a component of this submittal.
  - Print and distribute five (5) copies of plans/drawings to the City of Rapid City at 11" x 17" scale for construction services personnel.

All submittals (drawings and specifications) believed by the Engineer of Record to be a final, shall contain a Certification Statement of Conformance with City Standards which shall read, "I (insert Engineer of Record's name) Certify that I have read and understand the provisions contained in the City of Rapid City Standard Specifications for Public Works Construction, current edition and the City of Rapid City's adopted Design Criteria Manuals. The drawings and specifications contained here within, to the best of my knowledge, were prepared in accordance with these documents or a properly executed exception to the Standard Specifications and/or Infrastructure Design Criteria Manual has been secured". This statement shall appear on the title sheet of the drawings and on the first page of specifications after the cover sheet. The "Certification Statement of Conformance with City Specifications" shall be signed and dated by the Engineer of Record.



## 2.15 LOMR Submittal

Prepare and submit LOMR request to FEMA based on As – Built conditions using As – Built drawings provided under Task 3.6. LOMR submittal tasks and fees in this agreement assume the project is constructed to meet the original design and that revised surveying, modeling and mapping for the LOMR are therefore not required.

Scope of work does not include revising models, data, or other application information in event of FEMA changes rules or regulations between date of CLOMR approval and LOMR submittal. Extra fees will be required if changes FEMA rules or regulations necessitate extra work.

Submittal shall include preparation of required application documents, supporting figures and maps, property owner concurrence letters, agency concurrence letters, and other necessary or incidental information required by FEMA. LOMR submittal application fees to be paid by City of Rapid City.

### TASK 3 – BIDDING SERVICES:

This task consists of all services necessary for the administration of the Bidding Services of the project, and may include the following itemized services.

- 3.1 Submit sufficient information to the City of Rapid City project manager for completion of City Advertising Authority form.
- 3.2 Consultant shall proof print quality at printers before full production of copies are made.
- 3.3 Arrange and conduct a Pre-bid Conference. Record attendance and minutes. Distribute minute copies to only Consultant and City.
- 3.4 Prepare and issue addenda to the bid documents as required.
- 3.5 Review Bidder's Proposals and review and sign the City Engineering Services prepared Bid Tab, and prepare an award recommendation letter to the City of Rapid City project manager.
- 3.6 Prepare "As Built" plans and specifications. A hard copy of "As Built" plans and specifications shall be submitted to the City in the same size and format as construction plans. The Consultant will provide PDF's, and CAD files on a CD or DVD. The digital submittal must be compatible with AutoCAD Civil 3D 2010, or newer, containing all files and data packaged in a format that will allow City personnel to seamlessly open "As Built" drawings. The Consultant will work with the City CAD technician to demonstrate the CAD file operation and compatibility with City CAD software, if necessary.

If the Consultant is hired for Tasks 4 and 5, "As Built" plans and specifications shall be provided thirty (30) days following project acceptance. However, if the Consultants is not hired for Tasks 4 and 5, "As Built" plans shall be provided thirty (30) days following the Consultants receipt of City markups/redlines. The Consultant will be paid for this work in advance, on the last invoice, but is required to complete the work at a later date per the contract, even if the Consultant has billed 100% of the Contract and the City has closed the Contract.



## SCHEDULE MILESTONES

The following schedule milestones are proposed but will be subject to change depending on land owner discussions and approvals, actual time required for permits, SDDOT reviews, FEMA reviews, etc.

- Notice to Proceed April 10, 2015
- Conceptual Design Submittal August 21, 2015
- Final Review Submittal November 20, 2015
- 100% Submittal December 14, 2015
- CLOMR Submittal December 21, 2015
- CLOMR Approval May 2016
- Bid Opening June 2016
- Construction Complete November 2016
- LOMR Submittal December 2016
- LOMR Approval June 2017



EXHIBIT B  
 TASK SCHEDULE-ESTIMATED MAN-HOURS AND FEES  
 SOUTH TRUCK ROUTE DRAINAGE BASIN DESIGN PLAN - ELEMENT 203  
 Project No. 14-2207 / CIP 51031

FMG, INC. - 2/24/2015

Task 1	TASK 1 - PRELIMINARY DESIGN SERVICES	
1.1	Kickoff Meeting	\$ 740.00
1.2	Collect and Review Background Information for Pond 203 Area.	\$ 280.00
1.3	Perform Site Surveys	\$ 11,962.00
1.4	One Initial Individual Meeting With 3 Landowners Plus County Planning Department and SDDOT	\$ 1,710.00
1.5	Private Utility Base Map Verification Meeting. Obtain Existing and Proposed Utility Maps	\$ 366.00
1.6	Perform Geotechnical Evaluation	\$ 2,760.00
1.7	No Used	\$ -
1.8	Conceptual Design Report	\$ 35,769.00
1.9	Conceptual Design Drawings - Pond 203 Construction Only	\$ 8,085.00
1.10	Attend Submittal Review Meeting with City Staff	\$ 510.00
1.11	Assist with Easement and ROW Acquisition and other Landowner Agreements for Pond 203 Construction and Floodplain Modification Submittals	\$ 3,022.00
1.12	Assist with Permit Acquisition from Agencies	\$ 6,741.00
1.13	Address Task 1 City Review comments, permitting requirements, and landowner approval comments and finalize the design report.	\$ 1,012.00
1.14	Prepare and Submit DBDP Amendment Report	\$ 1,087.00
1.15	Reimbursable, Printing, Supplies & Mileage Allowance for Task 1	\$ 650.00
	<b>TOTAL FOR TASK 1-PRELIMINARY DESIGN SERVICES</b>	<b>\$ 74,674.00</b>
Task 2	TASK 2 - FINAL DESIGN TASKS	
2.1	Final Review Design Drawings	\$ 18,290.00
2.2	Coordinate with Private Utility Companies	\$ 460.00
2.3	Not Used	\$ -
2.4	Project Manual Detailed Specifications, Bidders Proposal Spreadsheet	\$ 920.00
2.5	Final Review Submittal Opinion of Probable Construction Cost	\$ 1,332.00
2.6	Make Final Review Submittal to City PM	\$ 853.00
2.7	Attend Final Review Design Submittal Meeting with City Staff	\$ 510.00
2.8	Attend Final Review Design Meetings with SDDOT, County, and Property Owners. One individual meeting each.	\$ 1,430.00
2.9	Not Used	\$ -
2.10	Identify Permits required for the Contractor	\$ 230.00
2.11	Address DENR Comments	\$ 230.00
2.12	Incorporate Final Review Comments and Make 100% Design Submittal	\$ 1,604.00
2.13	CLOMR Submittal	\$ 6,909.00
2.14	Final Bidding Documents	\$ 1,387.00
2.15	LOMR Submittal	\$ 3,241.00
2.16	Reimbursable, Printing, Supplies & Mileage Allowance for Task 2	\$ 750.00
	<b>TOTAL FOR TASK 2-FINAL DESIGN</b>	<b>\$ 38,146.00</b>
Task 3	TASK 3 - BIDDING SERVICES FOR STREET PROJECT	
3.1	Information to City for Advertising Authority	\$ 115.00
3.2	Proof Print Quality at Printers	\$ 230.00
3.3	Prebid Meeting and Minutes	\$ 460.00
3.4	Prepare and Issue Addenda	\$ 1,111.00
3.5	Bid Tabulations, Review and Recommendation	\$ 370.00
3.6	Prepare "As Built" Plans From Contractor and Inspector Red Lines	\$ 1,144.00
3.7	Printing, Reimbursable, Supplies, & Mileage Allowance for Task 3	\$ 100.00
	<b>TOTAL FOR TASK 3-BIDDING PHASE</b>	<b>\$ 3,630.00</b>
	<b>TOTAL ALL TASKS 1 - 3</b>	<b>\$ 116,350.00</b>

Although dollar values have been provided for each task FMG shall retain the right to reallocate monies to other tasks, subject to the maximum limiting fee shown above.

## Exhibit C

### FMG ENGINEERING

#### RATE SCHEDULE

#### FOR

#### SOUTH TRUCK ROUTE DBDP – ELEMENT 203

Project No. 14-2207 CIP 51031

#### TASKS 1, 2, and 3

<u>PERSONNEL</u>	<u>RATE</u>
Principal Civil Engineer	\$140.00/hr
Senior Civil Engineer	\$115.00/hr
Senior Materials Specialist	\$105.00/hr
Civil Engineer – PE	\$80.00/hr
Civil Engineer – EIT	\$70.00/hr
Environmental Scientist	\$80.00/hr
Engineering Technician	\$52.00/hr
CADD Technician	\$68.00/hr
GIS Specialist	\$80.00/hr
Registered Land Surveyor	\$84.00/hr
Survey Crew Chief	\$65.00/hr
Survey Technician	\$52.00/hr
Senior Administrative Assistant	\$55.00/hr
 <u>VEHICLES &amp; EXPENSES</u>	
Mobilization (support vehicle)	\$0.70/mile
Travel Costs - air, lodging, transport, meals, etc.	cost
Document/Plans Reproduction	cost