



**Agreement Between City of Rapid City and Banner Associates, Inc.,  
for Professional Services for Rapid City Regional Airport Water Transmission  
Main Loop, Project No. 2011-1992 / CIP No. 50892**

AGREEMENT made December 20, 2011, between the City of Rapid City, SD (City) and **Banner Associates, Inc.**, (Engineer), located at **730 South Street, Suite 201; Rapid City, SD 57701**. City intends to obtain services for **Rapid City Regional Airport Water Transmission Main Loop, Project No. 2011-1992 / CIP No. 50892**. The scope of services is as described in Exhibits A and B.

The City and the Engineer agree as follows:

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

### 5.2 Fee

The maximum amount of the fee for the services as detailed in Section 1.2 shall not exceed **\$591,894.00** 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 on or before September 30, 2012 for the Design Services. It is anticipated five (5) separate bid packages will be prepared. The bid packages are anticipated to consist of four water pipeline projects and one (1) cathodic protection system project. The first Construction Contract (Project One) will be awarded on or before May 1, 2012. Subsequent Construction Contract awards are dependent on Airport/FAA reviews/approvals and on easement acquisitions. It is anticipated Bidding services for subsequent Construction Contract awards could be completed on or before October 31, 2012 provided Airport/FAA reviews/approvals and easement acquisitions proceed timely. Approval of federal permits and execution of easements is beyond the control of the Engineer and bidding schedules may need to be adjusted accordingly. Construction of the water transmission mains and appurtenant structures under this agreement are to be completed by June 2013, assuming Construction Contract awards are completed on or before October 31, 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 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, in the amount 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

\_\_\_\_\_  
BANNER ASSOCIATES, INC.

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

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

ATTEST:

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

**Reviewed By:**

\_\_\_\_\_  
STACEY TITUS, P.E., PROJECT MANAGER

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

**CITY'S DESIGNATED PROJECT  
REPRESENTATIVE**

**ENGINEERING FIRM'S DESIGNATED  
PROJECT REPRESENTATIVE**

NAME STACEY TITUS, P.E.  
PHONE (605) 394-4154  
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NAME SIGURDS ZVEJNIEKS, P.E.  
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**EXHIBIT "A"**

**SCOPE OF SERVICES  
For Engineering Services For  
Rapid City Regional Airport Water Transmission Main Loop  
CITY PROJECT NO. 2011 – 1992 / CIP 50892**

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**GENERAL**

The City has determined the need to procure professional services consisting of five Tasks: Preliminary Design Services, Final Design Services, Bidding Services, Basic Construction Services, and Expanded Construction Services for the Rapid City Regional Airport Water Transmission Main Loop, Project No. 2011-1992 / CIP 50892.

The project consists of constructing a 16" PVC water transmission main from the east terminus of Homestead Street east to the northern edge of the Airport. An internal 12" PVC watermain from the north side of the airport to the south side of the airport will also be included. The actual alignment will be established as part of the project design. In general the improvements will provide 3,000 gpm for fire flow and allow an additional 500 gpm for growth/economic development in and around the airport. The project will also provide redundancy by looping the distribution system.

The City has also requested the scope include evaluation and testing of the cathodic protection system for the City's 30" steel water main that exits the Mountain View Water Treatment Plant (WTP) and continues near the intersections of Omaha and Sixth Streets. The Cathodic Protection Stations (CPS) are inoperable and/or depleted and require rehabilitation. The project is necessary to provide protection from corrosion and to prolong the life of the 30" steel watermain.

It is currently anticipated the overall Project will be bid under five separate bid packages: Project 1 - Homestead Street to current terminus of Meadow Ridge, Projects 2 & 3 - route from Project 1 to airport property split into two projects, Project 4 - water line segments on airport property, and Project 5 - the 30" steel watermain CPS rehabilitation project. See Figures 1 & 2 of this Attachment "A" (Note: Project 5 is not shown).

Tasks 1 through 3 presented in this this Scope of Services are standard items as requested by the City in its RFP and defined through further discussion with City staff. Tasks 4 and 5 (not included under current scope) are "standard" construction tasks and are anticipated to be completed for this Project by Banner Associates, Inc. with the scope and budget anticipated to be negotiated prior to bidding Project 1.

**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 may include the following itemized services.

- 1.1 Kick-off Conference: The Engineer shall meet with City staff to detail project concept and scope. The Engineer shall prepare an agenda, take minutes, and distribute minutes. Three kick-off meetings are planned: 1) for Projects 1 through 3 including, City staff, City Utility Maintenance Staff, Subconsultant Sperlich Consulting, Inc. and geotechnical Subconsultant AET, Inc.; 2) for Project 4 will include Airport personnel, City Utility Maintenance Staff, City staff, aviation Subconsultant Bolton & Menk, Inc., and geotechnical Subconsultant AET, Inc.; and 3) for Project 5 will include City staff, City Utility Maintenance Staff and corrosion Subconsultant Rustnot Corrosion Control Services, Inc. As determined necessary, Rustnot will participate by telephone for portions of Projects 1 through 4 kick-off conferences.
- 1.2 Review background information listed in the RFP, and any other resources as necessary. The Engineer shall specifically refer to the Final Water Supply Study Rapid City Regional Airport, Rapid City, South Dakota, the City's Utility Master Plan, and appropriate Airport layout plans, operations & safety plans, and utility maps.
  - 1.2.1 Evaluate water transmission route alternatives from the current termination of Meadow Ridge Drive location to the intersection of Radar Hill Road and Long View Road. At a minimum, the route evaluation will include the route as shown in the RFP, an alternative route along the future Twilight Drive minor arterial, a southern variation of the Twilight Drive corridor route, and a Twilight Drive-Pioneer Road-Long View Road alternative route. Route evaluation will be based on City/County available contours and prior to landowner contacts (landowner contacts will only be made along selected route for final design).
  - 1.2.2 Route alternative evaluation shall consider the City's Major Street Plan, potential future street horizontal and vertical alignments and rough grading that may be necessary to avoid having the pipe excessively deep or too shallow when the future street is constructed. Alternative evaluation shall also consider access road criteria needed until the future street is constructed.
  - 1.2.3 Evaluate PVC pipe material alternatives and prepare a recommendation for inclusion in Concept Design Submittal. It is anticipated the water transmission main loop will be Certa-Lok, fusible PVC, or similar continuously restrained piping system.
  - 1.2.4 Engineer will provide cathodic engineering service through Rustnot Corrosion Control Services, Inc. to evaluate cathodic protection system of the 30" steel water main exiting the Mountain View WTP and terminating at the intersection of Omaha and Sixth Street. Specifically, utilizing City Utility Maintenance crews, establish test stations and confirm pipeline continuity, repair broken joints bonds as necessary, and determine condition of the two cathodic protection stations (rectifier and anodes). Rustnot's services will be performed based on a flexible schedule coordinated with City Utility Maintenance crew availability so that field testing can be completed at the same time as other Rustnot work in region to minimize travel costs and lessen impact to City Utility Maintenance Group. Based on observations and measurements, provide recommendations to adequately cathodically protection the 30" steel water pipeline. Rustnot and Banner will also provide cathodic engineering services (recommendations, details, and specifications) to protect metallic fittings and appurtenances on the Airport Water Transmission Main.
- 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. For Project 2 and 3, survey corridor shall be sufficiently wide to define limits of rough grading that may be required for the access road and/or portions of the future street vertical alignment. Survey scheduling will likely require multiple (at least two)

phased periods of surveying so the established route portion (Project 1 and 4) of the water main design can proceed while the route selection for the middle portion (Projects 2 and 3) is being evaluated and selected. The survey task includes post-processing of the field data and preliminary topography map generation. Project 5 field surveys will be limited to that sufficient to supplement aerial photography and create site plans necessary for the rehabilitation of the existing CPS and/or new CPS locations (route and topography survey not anticipated), and as required to define easements.

- 1.4 Identify right-of-way (ROW) and permanent and temporary construction easements acquisition needs for Projects 1 through 5. Include size and extent of such ROW and easements and contact information of property owners.
- 1.5 Prepare preliminary opinion of probable construction costs for each of the anticipated 4 projects of the overall airport water transmission main project, and also for the 30" steel water pipeline cathodic protection rehabilitation project
- 1.6 Engineer will provide the following geotechnical services through Subconsultant contract with American Engineering Testing, Inc. (AET):
  - 25 borings (minimum 3 on airport) drilled to variable depths of 10 to 20 feet, with 12 borings completed as a groundwater piezometer
  - Lab Testing including moisture/density, modified proctors, and electrical resistivity (corrosion considerations)
  - Project 5 (Airport) – screening samples for evidence of hydrocarbon contamination
  - Recommendations of slopes and compaction standards for embankment fills
  - Prepare a report summarizing lab testing and provide recommendations
- 1.7 Prepare preliminary plan and profile sheets including locations of existing and new utilities and street alignment. Show existing utilities locations with probable depths.
- 1.8 Attend submittal review meeting with City staff, as necessary.
- 1.9 Attend Public Works and Council meetings as necessary (two meetings assumed).
- 1.10 The water transmission main will be located within the street right-of-way for the portion along Meadow Ridge Drive, and property owners along that street will be contacted to determine access considerations during construction (Note: Water service in that area provided by Rapid Valley Sanitary District (RVSD). Engineer shall meet with RVSD to notify and coordinate). Individual meetings and contacts will be conducted with other property owners along the final selected route to determine special considerations that may be warranted regarding their property and access.
- 1.11 Engineer will arrange and attend water user group meetings to coordinate activities and determine desires for potential future connection(s) to the transmission main. A meeting with the Airport Board is also anticipated to assess expected future water demands for the airport as well.
- 1.12 Meet with individual property owners regarding ROW and permanent and temporary easement needs and to determine specific project issues and components for each parcel. Engineer will make initial contact and individually meet with property owners along selected alignments of Project 2 and 3. Depending upon final route selected, approximately 20 parcels are expected to be traversed by the water pipeline route. Two meetings are planned for each parcel: first to introduce project and receive comments, and second to accompany ROW negotiator to answer technical questions. Engineer will provide documentation of property acquisition and land owner meetings (separate report will be provided).
- 1.13 Conceptual Design Submittal (35% Submittal)

The Conceptual Design Submittal shall generally consist of the following documents:

A. Conceptual Design Report

Prepare a Conceptual Design Report: Prior to completion of the Conceptual Design Report, the initial phase of that process will be to evaluate alternate routes for Project 2 and 3. A minimum of 4 alternate alignments will be investigated. A recommendation of a final route will be provided to the City in a Technical Memorandum, and with City's concurrence of the selected route, the Concept Design will proceed on that alignment. Prior to completion of the Conceptual Design Report, a Technical Memorandum will be prepared for Project 1 prior to proceeding with 95% Submittal, with ultimate inclusion in the Conceptual Design Report.

The CEngineer shall establish and indicate project specific design criteria and standards within the Conceptual Design Report. The Consultant shall submit all design assumptions for pipe sections, water main locations, etc. The Engineer shall include design life, design criteria, and reference of design resources. The Engineer shall use the City Draft Utility Design Criteria Manual to establish design criteria and standards. Three Concept Design Reports will be prepared: 1) Projects 1 through 3; Project 4 – Airport; and Project 5 – CPS Evaluation and Recommendations. The Concept Report for the Airport will include criteria specific to airports and FAA requirements, with guidance provided by Subconsultant Bolton & Menk, Inc.

The Conceptual Design Report for Project 1 through 4 shall evaluate and recommend preliminary horizontal and vertical alignments for utilities, project phasing and limits, water quality and age analysis and recommendations to address the issue. Evaluation of water quality and age will include hydraulic modeling utilizing InfoWater software, The City shall provide Banner Associates the latest version of the City's InfoWater modeling database, or portions thereof that will allow adequate modeling of a looped airport water supply system. System analysis will include evaluating the use of non-motorized control valves (PRVs or other pressure-actuated valves) in below grade vaults to circulate water from the airport back towards the City, with those non-motorized control valves automatically activating and allowing reversed flows towards the airport during periods of fireflows or heavy demands in the vicinity of the airport. Hydraulic modeling will also establish number of needed connections at the airport to provide adequate fireflows throughout the airport, and evaluate any surge/water-hammer conditions that may impact the system.

If hydraulic modeling indicates water quality and age can be optimized by utilizing control valves in below grade vaults, recommended sizing and locations will be included in the Concept Design Report. Details and specifications for the control valves will then be included in one of the construction bid packages of this project. If hydraulic modeling indicates water quality and age can best be addressed by additional chemical booster stations, those facilities would be proposed in above grade utility building(s). The development of plans and details for chemical addition building(s) would only commence after direction by the City and would be considered as outside of the current project scope, and would be performed as an amended Additional Services.

The project's geotechnical report shall be included within the Conceptual Project Design Report and include soil classifications, N values, water levels, proctors, resistivity tests, access road embankment recommendations (sideslopes, compaction), and testing recommendations. The Engineer shall elaborate on other project components as necessary.

A probable opinion of construction costs for the five (5) projects shall be included. The costs shall be itemized based on the City's standard bid items and appropriate contingency item allowance.

The Engineer shall establish and indicate project specific design criteria and standards within the Conceptual Design Report. The Engineer shall submit all design assumptions for water main location, restrained PVC pipe alternatives, design life, design criteria, and reference of design resources. The Conceptual Design Report shall provide review of compliance with City's Standard Specifications for construction of the project(s). Evaluate and recommend preliminary horizontal and vertical alignment for utilities and other public improvements. Use the City Draft Utility Design Criteria Manual to establish design criteria and standards.

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 of the Conceptual Design Report and preliminary plans and specifications to City of Rapid City's project manager for review and comment.

#### B. Conceptual Drawings

Provide three (3) copies of the conceptual drawings. The conceptual drawings shall contain the following sheets:

- Cover Sheet – Note the index of Sheets indicating the anticipated drawing sheets shall be provided.
- Legend
- Estimate of Quantities and General Notes
- Property Layout and Land Ownership
- ROW & easement layout
- Survey Control Sheet
- Traffic Control
- Sediment and Erosion Control Plan
- Typical Sections
- Plan and Profile Sheets - Showing existing and proposed utility mains and existing services, storm sewers, driveway locations, fittings, and proposed surfacing and drainage items. The utilities will be shown in profile as well. Design Criteria elements like profile grades, "K" values, vertical and horizontal curve data will be included.
- Rapid City Standard Details



- Special Details - Conceptual layouts for special/critical elements. Projects 2 & 3 may require details for minor drainage structures to accommodate grading for access roads and/or portions of future roadway embankments. Scope does not include design and details for major drainage structures, such as box culverts or bridges, that may be required to accommodate future road profiles for significant drainage crossings. If control valves and vaults are recommended for water quality, those details and site plans will be incorporated into Project 3. Project 5 will include details and site plans to implement recommendations for rehabilitating and/or new installations of CPS to protect the 30" steel water main. All five projects will include specialty cathodic protection details.
- Plan sheets shall be prepared utilizing the latest City of Rapid City Drafting Standards.

1.14 Engineer will have his senior staff conduct a quality assurance/quality control review of the Concept Design Report and Plans.

## 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, and may include the following itemized services.

- 2.1 Address City comments from the Task 1 City review(s) and finalize Conceptual Design Report. With the addressing of comments, the Conceptual Design Report will become the basis for the "Project Design Report",
- 2.2 Engineer will make first contact meeting with landowners where easements are required, and document such meetings. Engineer will provide technical assistance to City's staff or agent who shall negotiate and complete ROW and easement(s) acquisition. Engineer will prepare easement and ROW exhibits as necessary. The City Attorney's Office shall prepare standard easement agreements and any necessary side agreement letters, and conduct closings. In addition to property owner meetings identified in Task 1.12, Engineer will attend additional meetings (estimated at 2 meetings per parcel) with City assigned easement negotiator to assist in resolving technical issues, alignment shifts, or address special considerations that need to be included on the plan sets.
- 2.3 Determine removal limits with approval of City of Rapid City representative.
- 2.4 Coordinate with the geotechnical engineer to complete these services, and provide a geotechnical report to be included in the Project Design Report and project plans or specifications,
- 2.5 Incorporate design features as necessary to meet the requirements outlined in the Project Design Report,
- 2.6 Incorporate Erosion and Sediment Control items,
- 2.7 Provide Erosion and Sediment Control Plans and include the appropriate bid items in the bidders proposal.
- 2.8 Address typical environmental and FAA requirements, wetland identification, ROW certification, letter notification to SHPO of project, and FAA CatX for Project 5. The Scope does not include wetlands mitigation, special investigations that may be requested by SHPO, and/or preparation of an Environmental Assessment and FONSI determination; should these

services be required. Performing these environmental/cultural service(s) would only commence after direction by the City and would be considered as outside of the current project scope, and would be performed as an amended Additional Services.

2.8A 65% Plans will be submitted for Project 2, 3, and 4.

2.8B For the duration of the overall Project design phase, monthly design coordination meetings will be held that will include Banner, specialty subconsultants as needed to address that month's agenda items, City Staff, Water Department Superintendent and personnel as appropriate, and City Utility Maintenance staff as appropriate. Subconsultant attendance for at some meeting will be by teleconference. Additionally, weekly progress updates and discussions will be heard between Banner's Project Manager and the City's Project Manager (and other City staff, if appropriate) – those meeting will typically be via telephone call.

2.9 Provide three (3) copies of the Project Design Report,

2.10 Provide three (3) copies of the Final Design Services submittal. The submittal shall consist of complete plans, specifications, contract documents, and opinion of probable construction cost to the City of Rapid City's project manager for review. The Final Design Services submittal will be made to the City when the Engineer believes the plans, specifications, contract documents, and opinion of probable construction cost are 100% complete. It is anticipated the overall Airport Water Transmission Main Project will be split into four (4) bid packages: Project One – connection at Homestead east to current termination of Meadow Ridge; Project Two and Three – route from Project 1 to airport property split into two projects; and Project Four – required water main construction on the Airport property. The ending point of Project Two/beginning point of Project Three will be determined during the development of the Design Report (see above) and selection of final route. A fifth bid package will be prepared to rehabilitate the cathodic protection stations in the Jackson Boulevard vicinity that were installed to protect the 30" steel water main. Development of those plans will depend on recommendations determined under Task 1.2.4.

- Project 1 - Homestead / Meadow Ridge, 0.47 miles – 22"x34" format with standard sheets and details plus approximately 5 plan & profiles sheets. Pending completion of easement acquisition, plans would be available for bidding on or before May 1, 2012.
- Project 2 – final route and distance to be determined, approximately 2.4 miles – 11"x17" formate with standard sheets and details plus approximately 25 plan & profile sheets. Pending completion of easement acquisition, anticipate plans to be available for bidding on or before September 30, 2012.
- Project 3 – final route and distance to be determined, approximately 2 miles – 11"x17" formate with standard sheets and details plus approximately 21 plan & profile sheets. If hydraulic modeling under Task 1.13 recommends installation of non-motorized control valves in a valve vault, those plans and details will be included as part of Project 3. Pending completion of easement acquisition, anticipate plans to be available for bidding on or before September 30, 2012.
- Project 4 - Airport Property – one 16" pipe diameter segment and on 12" diameter segment, total length 1.1 miles - 22"x34" format with standard sheets and details plus approximately 12 plan & profiles sheets. Pending federal FAA approvals, anticipate bidding on or before September 30, 2012.
- Project 5 - Cathodic Protection for 30" Steel Water main – 11"x17" format of standard sheets and specialty cathodic details and sites for CPS rehabilitation, estimated 15 sheets total. Plans development will be subject to evaluation and testing under a

flexible schedule as outline above, and number of bond repairs necessary to completed diagnostic services and recommendations.

- Submittals will include: 1) Technical Memorandums for Project 1 preliminary design and Project 2 & 3 route recommendations; 2) Two Concept Design Reports – one for Project 1 through 3, and one for Project 4 (Airport); 3) Design Reports following Concept Reports segregation plus separate Project 5 Design Report; 4) 65% Submittals for Projects 2 through 4; and 5) 100% Submittals on all Projects.

2.11 Provide and make submittals for review by the Rapid City Planning Commission and Airport Board, if required. Provide supplemental information and attend Planning Commission and Airport Board meetings as necessary to present the project or to respond to any questions or concerns.

2.12 Address 65% and 100% submittal staff comments as necessary.

2.13 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. In the urban settings (Project 1) and the Airport (Project 4) drawings will be 22"x34". The rural projects (Projects 2 and 3) and the 30" steel water main CPS rehabilitation project (Project 5) will utilize 11"x17" drawings.

2.14 Plans documents shall adhere to current City of Rapid City guidelines.

2.15 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.

2.16 Provide project layout to include lot lines (front and side) and addresses of all properties (adjacent to construction, or alternatively, in service area). Identify if property is owner occupied or a rental.

2.17 Provide conceptual traffic control plan showing all streets and alleys that may be impacted by the construction of 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. Traffic control plans shall indicate suggested sequence, intent, and general guidelines, but does not require identification or placement of project specific traffic control items. The City will provide an electronic version of an aerial photo for the selected Engineer's use. Elaborate on guidelines as necessary.

2.18 Coordinate directly with 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.

- 2.19 If desiring exceptions from City requirements or specifications, it is the Engineer's responsibility to request and secure exceptions. Failure by the City to comment on a nonconforming item during a review does not constitute the granting of an exception.
- 2.20 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.
- 2.21 Prepare applicable permits with exhibits required for the City.
- 2.22 Identify applicable City 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 as identified in the City's standard contract language under Section 2.22 "Drainage Fees, Building Permits and Taxes" Project bidding and contracting requirements will be coordinated consistent with this City contract language.
- 2.23 Prepare final "Engineer's Estimate" of probable construction cost for each project of the overall project discussed herein.
- 2.24 Deliver the following:
- Provide one (1) hardcopy and electronic files of bid documents including complete plans, specifications, contract documents, 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 to 2011 format and a pdf file. 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 the Design Report on CD in Microsoft Word XP or previous versions and as a pdf file.
  - 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.
- 2.25 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.
- 2.26 Engineer shall obtain an administrative design exception for draft criteria manual requirements that cannot be met.

- 2.27 The City will submit plans and specifications to the Department of Environment and Natural Resources for approval, and the Engineer shall address any comments or corrections required.
- 2.28 Project 1 only (Meadow Ridge Drive residents): Prior to the advertisement for bids, arrange and conduct a public open house with affected residents. The open house shall be held sufficiently ahead of the project advertisement for bids such that public comments and concerns may still be addressed within the final project documents. Notice of the open house shall be mailed to all property owners adjacent to the proposed work area(s), as well as those in the immediate area who may be directly impacted by the construction, as determined by the City. The Engineer shall tabulate the public comments and concerns and provide written recommendations for staff review regarding possible inclusion or exclusion of such requests.
- 2.29 95% Submittal
- Provide 3 copies of complete plans, specifications, and opinion of probable construction cost. The 95% Submittal will be made to the City when the Engineer believes the plans, specifications, contract documents, and opinion of probable construction cost are 100% complete. The estimate should list a breakdown of costs located on Airport property or eligible under Airport funding.
  - Provide 6 copies of the Project Design Report and a pdf of each report. In addition to normal project submittals as listed herein, Provide 6 copies of half-size (11"x17") final plans for Airport personnel use, and 5 copies each of half-size sets for Project 1 and 4 for City staff use.
- 2.30 Final Submittal
- Address City Staff, Airport Management and outside agencies (e.g., FAA, SDDENR, SHPO, etc.) comments of 95% Submittal and prepare Final Bidding Set for each of the five projects.
  - Provide 1 hardcopy at Project size identified above, and an electronic pdf of the complete plans and specifications.
  - Provide 1 copy of the final opinion of probable construction costs for the project.
- 2.31 Other. Work with City Public Works' and Attorney's Office staff to develop a policy for providing water service to properties outside the City limits. Research past Council actions and current policy, and evaluate process required for modifying existing policies or creating new policies to service individuals and entities not in a water company or sanitary district. Conduct meetings with City Staff and committee/task force that may be established by the City to address this water sales policy issue. Assumes task is performed in coordination with City staff and City-establish committees, and public hearings and/or meeting are not included. Policy would anticipating including a requirement that those properties outside City limits that accept water service would automatically be annexed into the City when City limits became contiguous to the serviced property. Policy may include a surcharge or multiplier of City rates until such time property is annexed into the 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. (Items 3.1 to 3.10 below are repeated for each of the five (5) associated projects addressed in this Scope of Services.)

- 3.1 Submit sufficient information to the City of Rapid City project manager for completion of City Advertising Authority form.
- 3.2 Provide one hard copy and a PDF version of final plans and specifications, stamped and signed by a Professional Engineer, for City printing and distribution.
- 3.3 Provide Engineer's Estimate of probable construction cost to the City of Rapid City's project manager.
- 3.4 Print and distribute five (5) copies plans/ drawings to the City of Rapid City at 11" x 17" scale.
- 3.5 Conduct a Pre-bid Conference. Prepare agenda, record attendance, and minutes. Distribute copies to City and Banner. The agenda shall be submitted to the Project Manager for review and comment one week prior to the Conference. Prepare meeting minutes of Pre-bid meeting and provide to City project Manager for City file.
- 3.6 Prepare and issue addenda to the bid documents as required, and evaluate contractor's qualifications.
- 3.7 Review Bidder's Proposals and review and sign the City Engineering Services prepared Bid Tab, prepare an award recommendation letter to the City of Rapid City project manager, and sign a City Engineering Services prepared Award Summary.
- 3.8 Review construction contract documents and other submittals from the contractor and submit to City of Rapid City project manager for distribution to City Attorney's for approval and signatures of the Mayor and Finance Officer.

**TASK 4 "Basic Construction Services" and TASK 5 "Expanded Construction Services" to be negotiated as a separate contract at a later date after final route selection has been determined.**

***NOTE: Project 1 is anticipated to be bid in late spring 2012 while route selection and easement acquisitions are finalized for Project 2 and 3. Project 4 bidding will be dependent on Airport/FAA approvals and anticipated for late summer 2012. Project 5 bidding may depend on results of continuity evaluation and available funding.***

**TASK 4 – BASIC CONSTRUCTION SERVICES:**

This task consists of all services necessary for the administration of the Basic Construction Services of the project construction stage, and may include the following itemized services.

- 4.1 Prepare Notice to Proceed for City of Rapid City project manager signature and distribution to contractor for execution.
- 4.2 Conduct a Pre-Construction Conference including agenda. Record minutes and distribute to all attendees. An example of an agenda is enclosed as Attachment Five for your information.
- 4.3 Provide written clarification regarding drawing and specification questions.
- 4.4 Provide recommendations to address changed or unknown conditions that may appear during construction.
- 4.5 Review and take action on shop drawings, product submittals, test results, and other submittals.
- 4.6 Prepare "As-Built" plans and specifications. "As-Built" plans and specifications shall be submitted as a hard copy and on CD compatible with AutoCAD Release 2008 or newer format. Submit to Engineering Services within 30 days of project completion. In the event that the City did not issue a "Notice to Proceed" for Task 5 services, then the City shall forward construction record documents for preparing the "As-Built" plans and specifications.
- 4.7 Other – Provide Basic Construction Services listed above, as appropriate, for Project 5, Cathodic Protection System rehabilitation for 30" steel water main between the Mountain View WTP and downtown.

***TASK 4 "Basic Construction Services" and TASK 5 "Expanded Construction Services" to be negotiated as a separate contract at a later date after final route selection has been determined.***

#### **TASK 5 – EXPANDED CONSTRUCTION SERVICES:**

This task consists of all services necessary for the administration of the Expanded Construction Services of the project construction stage, and may include the following itemized services.

- 5.1 Mark removal limits of appropriate items.
- 5.2 Prepare Public Service Announcements (P.S.A.'s) for Engineering Services. Engineering Services will be responsible for distribution to all local media. Copies of P.S.A.'s shall be distributed one week prior to start of work or change in operations that may significantly affect the public.
- 5.3 Appropriately notify affected Property Owners.
- 5.4 Conduct appropriate progress meetings. Record minutes and distribute to all attendees.
- 5.5 Provide daily on-site observation to assure that the methods and materials used by the contractor meet the intent of the plans and specifications. For buried installations such as the water transmission mains the Consultant shall be on site and witnessing the installation all of the time the Contractor is installing these buried installations.
- 5.6 Prepare daily reports. A daily record of activity will be maintained by the inspector including weather conditions, construction progress, deviations from the plans and specifications, work performed, quantities installed and any other pertinent information. Such information shall be neatly and concisely entered into the City of Rapid City Project Inspector's Diary and Inspection quantity book. Submit detachable copies to Engineering Services on a weekly basis. The Consultant shall coordinate with the City Construction Coordinator regarding whether electronic format will be accepted.
- 5.7 Perform stormwater inspections, prepare reports, and keep the erosion and sediment control plans current as required by the ordinance regulating construction site runoff control, Chapter 8.46, and the Stormwater Quality Manual.
- 5.8 Provide soil compaction testing according to the Standard Specifications. All test results shall be submitted to the City of Rapid City within 30 days of project completion.
- 5.9 Provide assurance testing (or witness Contractor testing) according to the Standard Specifications. All test results shall be submitted to the City of Rapid City within 30 days of project completion.
- 5.10 Prepare and submit monthly pay request information.
- 5.11 Prepare change orders, and extra work orders for contractor on City of Rapid City forms and make recommendations for their approval or denial.
- 5.12 Prepare and submit project completion punch list items to the Contractor and Engineering Services and oversee its completion.
- 5.13 Prepare and submit City of Rapid City project "Construction Project Close-out Checklist" indicating compliance with Standard Specifications and acceptance of the various infrastructure components. The Consultant is responsible for coordinating completion of the checklist items with the Contractor. The checklist is enclosed as Attachment Six for your information.
- 5.14 Prepare letter of certification of project completion verifying compliance with plans and specifications and start of warranty period.
- 5.15 Prepare a letter to SDDENR notifying them of project completion.

(continued)

- 5.16 Ensure Contractor's two-year warranty surety is provided to the City of Rapid City either within the performance bond or as a separate bond.
- 5.17 Assist the City in addressing and communicating warranty items with the Contractor that may arise during the City's two year warranty period.
- 5.18 Other - Provide Expanded Construction Services listed above, as appropriate, for Project 5, Cathodic Protection System rehabilitation for 30" steel water main between the Mountain View WTP and downtown.

#### PROJECT TEAM, MEETINGS, AND SUBMITTALS SUMMARY

##### 6.1 Project team members will include:

- The Engineer and Subconsultants.
- City Engineering Services staff
- Rapid City Regional Airport staff
- Operations Division staff
  - Utility Maintenance Division (Service area and O&M related issues)
  - Water Division

##### 6.2 Meetings requiring the Engineer's participation will likely include, but may not be limited to the following:

- Kick-off meeting (three meetings including specialty Subconsultants as appropriate), Task 1
- Conceptual Design Report and 35% Plans and Specifications submittal review meeting, Task 1 (meeting on recommended route selection plus one meeting each for anticipated three Concept Design reports.)
- Public meetings (one neighborhood meeting is assumed for the Meadow Ridge Drive area - existing paved street residential neighborhood.)
- Property owners meeting (meet individually, up to two times for each of 20 parcels)
- Private Utility coordination meeting, Task 2
- 65% submittals for Project 2, 3 and 4.
- 100% Plans, Specifications, and Contract Documents review, Task 2 (This submittal is made when the Engineer believes the plans, specifications, contract documents, and opinion of probable construction cost documents are complete).
- Prebid Conference, Task 3
- Pre-construction Conference, Task 4 (to be separate contract for Construction Phase services)
- Construction Progress Meetings, Task 5 (to be separate contract for Construction Phase services) Committee, Airport Board, and Council Meetings as required, all Tasks. Scope of Services includes up to three (3) meetings with airport personnel (or Board) and one (1) City Council meeting.



## 6.3 Submittals include:

- In general submittals shall be made as hard copies, electronic documents and pdf's as negotiated. Plan sizes will be standard 22"x34" for Project 1 and 4, and will be 11"x17" for Projects 2, 3, and 5.
- Kick-off meeting, Task 1 meeting minutes
- Conceptual Design Report and 35% Review Submittal, Task 1 including meeting minutes
- 65% Plans and Specifications submittal review meeting, Task 2 as negotiated
- Easement and ROW documents and corresponding property owner negotiation notes.
- (Final Project Design Report, Task 2 including meeting minutes. Final design reports shall be bound utilizing a comb binder or equal. 3-ring binders are not permitted without project manager's prior approval.
- 100% complete plans, specifications, contract documents, and opinion of probable construction cost Contract Documents Review, Task 2 including meeting minutes
- Public meeting minutes
- Property owners meeting minutes
- Open house (to be conducted at 35% level for Project 1) comments/concerns and Engineer's recommendations for inclusion or exclusion (see Public Meetings above)
- Final submittal of bid documents including complete plans, specifications, contract documents, and Engineer's Estimate of probable construction cost, Task 2 (for each of the five (5) projects)
- Prebid conference meeting minutes, Task 3 (for each of the five (5) projects)
- Award recommendation, Task 3 (for each of the five (5) projects)

**(to be under a separate contract under Construction Phase Services)**

- Pre-Construction conference meeting minutes, Task 4
- Shop Drawing submittal reviews, Task 4
- "As-Built" plans and specifications, Task 4
- Progress meeting minutes, Task 5
- Daily observation reports, Task 5
- Erosion and Sediment Control plan inspection reports, Task 5
- Project completion "Punch List", Task 5
- "Construction Project Close-out Checklist", Task 5
- Letter of certification of project completion, Task 5

The Engineer shall allow 10 working days for City review of the Conceptual Project Design Report and 35% review submittal, Final Design Report and 65% review submittal, and the 100% complete Design Report, drawings; specifications; contract documents; and opinion of probable construction cost Contract Documents submittal.

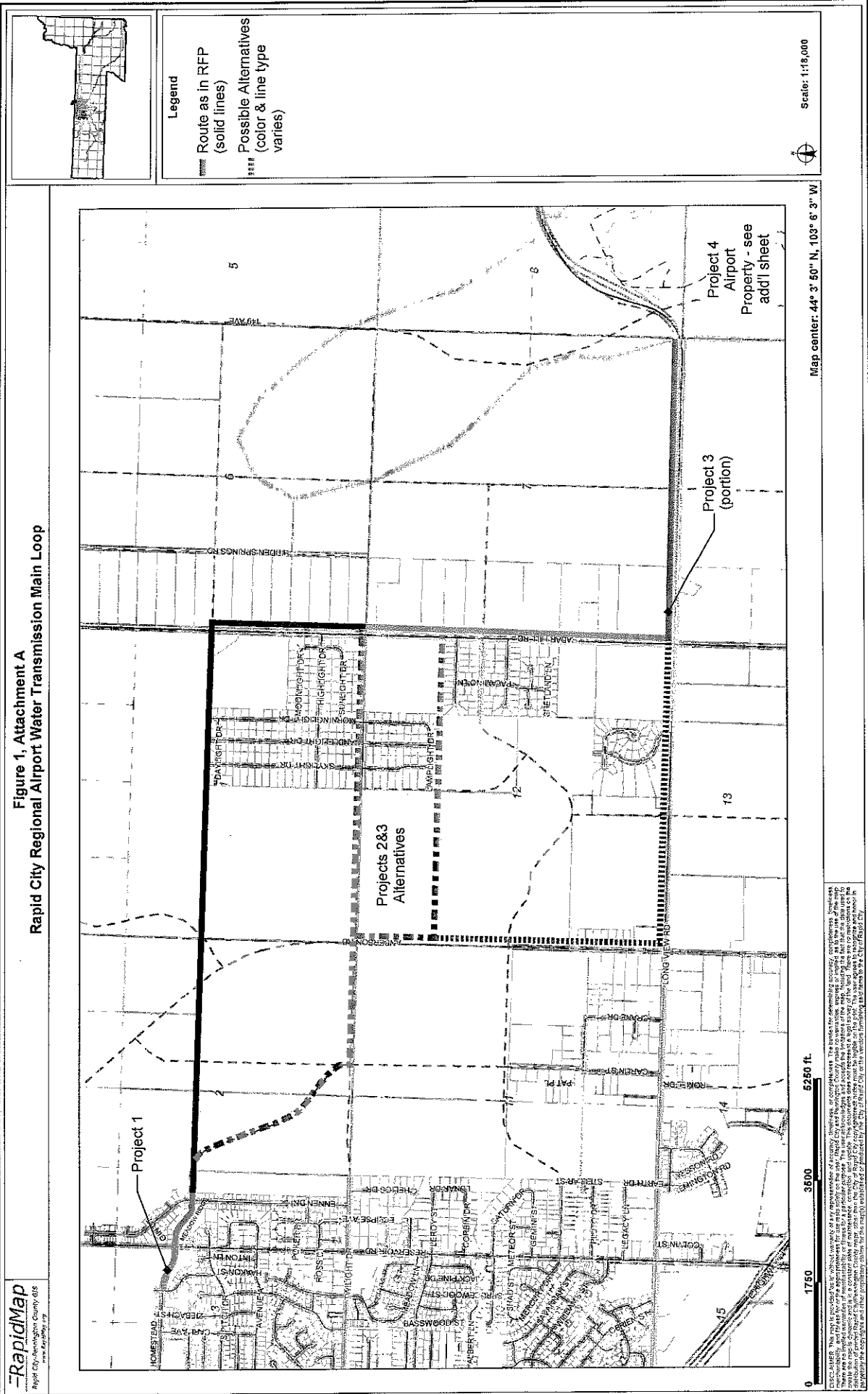
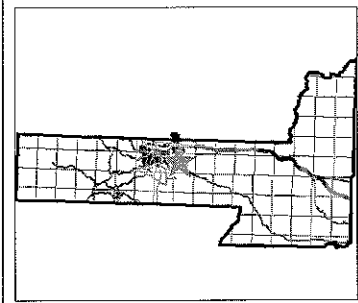
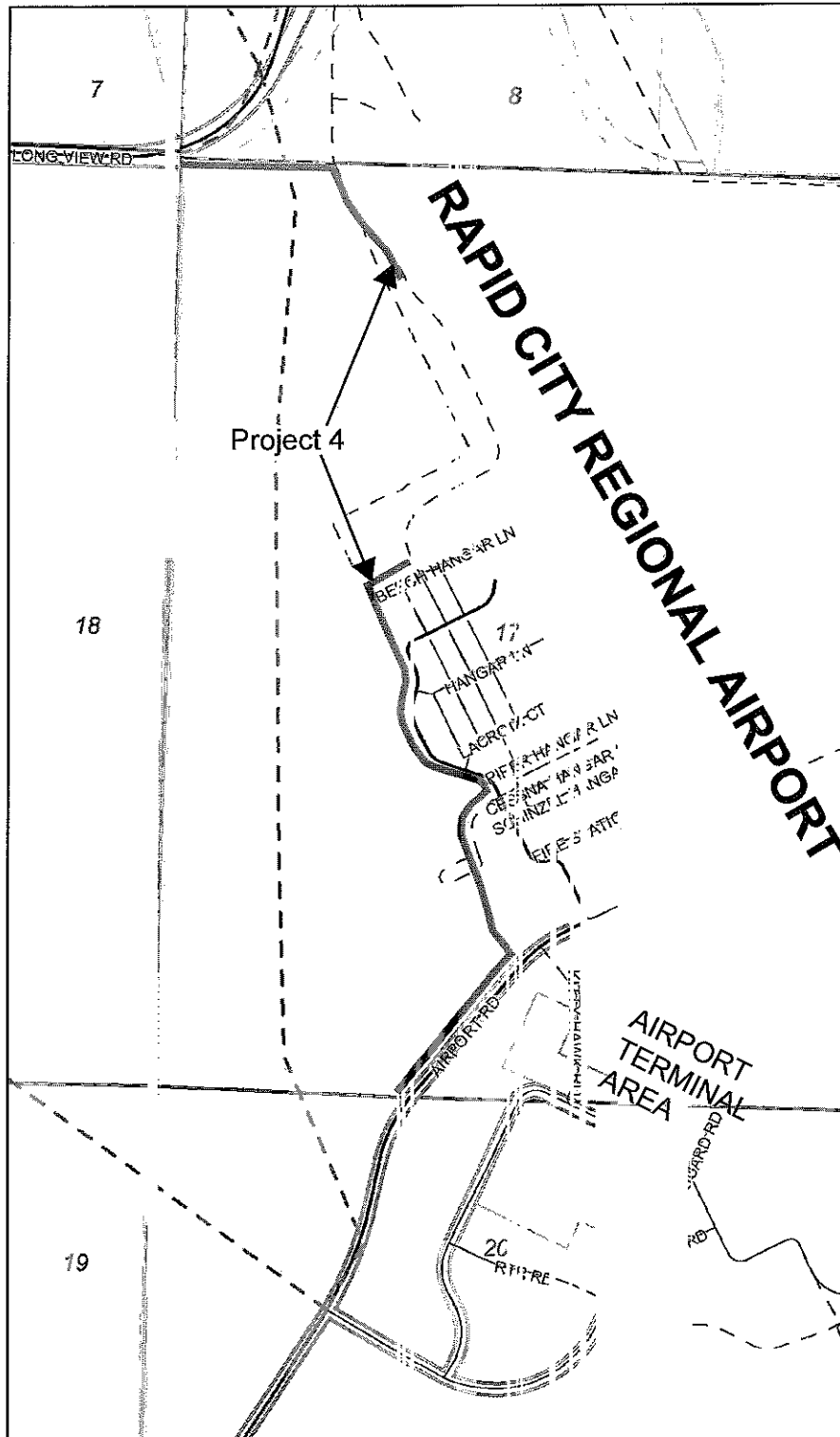



Figure 2, Attachment A  
 Rapid City Regional Airport Water Transmission Main Loop



### Legend

 Project 4

0 700 1400 ft.

Map center: 44° 2' 39" N, 103° 3' 54" W



Scale: 1:12,000

DISCLAIMER: This map is provided 'as is' without warranty of any representation of accuracy, timeliness, or completeness. The burden for determining accuracy, completeness, timeliness, merchantability, and fitness for or the appropriateness for use rests solely on the user. Rapid City and Pennington County make no warranties, express or implied, as to the use of the map. There are no implied warranties of merchantability or fitness for a particular purpose. The user acknowledges and accepts the limitations of the map, including the fact that the data used to create the map is dynamic and is in a constant state of maintenance, correction, and update. This document does not represent a legal survey of the land. There are no restrictions on the distribution of printed Rapid City/Pennington County maps, other than the City of Rapid City copyright/credit notice must be legible on the print. The user agrees to recognize and honor in perpetuity the copyrights and other proprietary claims for the map(s) established or produced by the City of Rapid City or the vendors furnishing said items to the City of Rapid City.

# **EXHIBIT "B"** **Design Services - Tasks 1 through 3**

Project Name: Rapid City Regional Airport Water Transmission Main Loop  
City Project No. 2011-1992 / CIP 50892

BAI No: 21425-00-00

Manager: Sigurds R. Zvejnieks, PE

TASK OUTLINE		TASK TOTAL
<b>Task 1: Preliminary Design Services</b>		
1.01. Kick-off Conferences - Total of 3	\$	3,393
1.02. Review background information	\$	1,922
1.02.1. Evaluate alternative routes - RFP route, Twilight, Twilight-Pioneer-Long View	\$	6,136
1.02.2. Future street vertical alignment - rough grading requirements	\$	9,916
1.02.3. Pipe material evaluation	\$	2,206
1.02.4. Cathodic Protection System Evaluation of 30" Steel Water Main (Jackson Blvd)	\$	1,204
1.03. Perform site surveys	\$	50,660
1.03A. Post processing, topo generation and base map	\$	9,240
1.04. Identify ROW and permanent & temporary construction easement needs	\$	3,156
1.05. Prepare preliminary cost estimate	\$	4,674
1.06. Recommend location and extent of geotechnical services	\$	496
1.07. Prepare preliminary plan and profile sheets	\$	15,336
1.08. Attend submittal review meeting with City staff	\$	2,986
1.09. Attend Public Works and Council Meetings	\$	1,206
1.10. Develop Questionnaire for Property Owners	\$	1,074
1.11. Attend water users group meetings	\$	1,747
1.12. Meet with individual property owners regarding easements	\$	10,378
1.13. Conceptual Design (35%)	\$	-
1.13A. Project 1 - Homestead / Meadow Ridge	\$	608
1.13B. Project 2 - N. portion, route to be determined	\$	5,497
1.13C. Project 3 - S. portion, route TBD & Long View E. of Radar Hill Rd	\$	6,709
1.13D. Project 4 - Airport Property	\$	4,459
1.13E. Project 5 - Cathodic Protection 30" Steel Watermain - WTP to Downtown	\$	717
1.14. Other - Senior QA/QC Review	\$	1,312
<b>Task 2: Final Design Services</b>		
2.01. Address City comments and finalize Concept Design Report	\$	8,060
2.02. Negotiate and complete ROW & easement(s) acquisition, prepare easement and ROW exhibits	\$	22,482
2.03. Determine removal limits with approval of City representative	\$	1,144
2.04. Coordinate with geotechnical engineer - Provide geotechnical report	\$	1,240
2.05. Incorporate design feature requirements in Project Design Report	\$	6,692
2.06. Incorporate Erosion and Sediment Control items	\$	1,816
2.07. Provide Erosion and Sediment Control Plans	\$	2,228
2.08. Address FAA requirements, wetland identification, SHPO, environmental, etc.	\$	3,592
2.08A. Provide 65% Plan Submittal for Projects 2, 3, & 4	\$	1,796
2.08B. Monthly Design Progress Meetings	\$	8,218
2.09. Provide copies of Project Design Report	\$	14,084
2.10. Final Design Services submittal - (3) copies	\$	-
2.10.1. Project 1 - Homestead / Meadow Ridge	\$	2,761
2.10.2. Project 2 - N. portion, route to be determined	\$	31,584
2.10.3. Project 3 - S. portion, route TBD & Long View E. of Radar Hill Rd	\$	31,024
2.10.4. Project 4 - Airport Property	\$	28,064
2.10.5. Project 5 - Cathodic Protection 30" Steel Watermain - WTP to Downtown	\$	7,000
2.11. Provide and make submittals for review by the Rapid City Planning & Airport Board	\$	1,252
2.12. Address 65% and 100% submittal staff comments as necessary	\$	13,176
2.13. Provide complete plans and specifications for unit price construction contract	\$	5,804
2.14. Plans documents shall adhere to current City of Rapid City guidelines	\$	1,812
2.15. Staking information on plans	\$	2,884
2.16. Provide project layout with lot lines and property addresses	\$	4,836
2.17. Provide concept traffic control	\$	1,616
2.18. Coordinate directly with utility companies to show location, depth, material, size, etc. on plans	\$	1,144
2.19. Consultant to request and secure exceptions from the City of Rapid City	\$	774
2.20. Provide detailed specifications for airport and PRV work	\$	7,260
2.21. Prepare any and all permits with exhibits required for the City	\$	3,108
2.22. Identify City permits that will be required for the Contractor	\$	810
2.23. Prepare final "Engineer's Estimate" of probable construction costs for the project	\$	5,454
2.24. Prepare copies of bid documents & CD (Word, Excel, PDF & final copies)	\$	3,516
2.25. Include Certification Statement of Conformance with City Standards on all submittals	\$	1,720
2.26. Administrative Design Exception for draft criteria that cannot be met	\$	1,098
2.27. Submit Plans and Specifications to SDDENR for approval and address concerns	\$	2,804

**EXHIBIT "B"**  
**Design Services - Tasks 1 through 3**

Project Name: Rapid City Regional Airport Water Transmission Main Loop  
City Project No. 2011-1992 / CIP 50892

BAI No: 21425-00-00

Manager: Sigurds R. Zvejnieks, PE

TASK OUTLINE		TASK TOTAL
2.28	Project 1 - Public open house prior to advertisement for bids	\$ 278
2.29	95% Submittal - Bid Documents & Design Report - eligible airport funding	\$ 3,100
2.30	Final Submittal - provide copies and pdf files of complete Plans & Specifications	\$ 6,894
2.31	Other - Develop Policy for non-City Water Connections	\$ 18,808
<b>Task 3: Bidding Services</b>		
3.01.	Submit information to City Project Manager - City Advertising Authority form	\$ 820
3.02.	Provide Final stamped plans & specs - 1 hardcopy & PDF version	\$ 1,640
3.03.	Provide Engineer's Estimate of probable construction cost to the City Project Manager	\$ 1,733
3.04.	Print copies of plans/drawings to deliver to City Project Manager (11x17)	\$ 1,798
3.05.	Conduct a Pre-bid conference	\$ 3,248
3.06.	Issue addenda as required and review Contractor qualifications	\$ 10,853
3.07.	Review Bid Tab and certify, prepare award recommendation letter	\$ 2,886
3.08.	Review construction contract documents and other contractor submittals	\$ 1,971
<b>TOTALS:</b>		
TOTAL LABOR DOLLARS (exclud. subconsultants):		\$ 429,914
SubConsultants Who/What		Cost
1.	Bolton & Menk, Inc. - Airport Consultant	\$ 38,500.00
2.	RUSTNOT Corrosion Control Services, Inc. - Corrosion Protection	\$ 57,500.00
3.	American Engineering Testing, Inc. - Geotechnical	\$ 16,000.00
4.	Sperlich Consulting, Inc. - Homestead to Meadow Ridge connection	\$ 38,500.00
<b>Total SubContracts</b>		\$ 150,500.00

**CONTRACT SUMMARY**

Task 1	\$	145,032
Task 2	\$	259,933
Task 3	\$	24,949
Labor Dollars	\$	429,914
Reimbursibles	\$	11,480
<b>BANNER TOTAL:</b>	<b>\$</b>	<b>441,394</b>
<b>Subcontract Amount:</b>	<b>\$</b>	<b>150,500</b>
<b>Contract Amount:</b>	<b>\$</b>	<b>591,894</b>

**EXHIBIT "C"****SCHEDULE OF LABOR RATES AND EXPENSES****Rapid City Regional Airport Water Transmission Main Loop Project**

<b><u>EMPLOYEE CLASSIFICATION</u></b>	<b><u>ID</u></b>	<b><u>Rate/Hr</u></b>
Sr. Project/Project Managers	1046	\$164.00/Hour
	2057	\$139.00/Hour
	2087	\$124.00/Hour
	2043	\$117.00/Hour
	1759	\$103.00/Hour
Project Engineer/ Staff Engineer	2123	\$ 89.00/Hour
	2031	\$ 84.00/Hour
	2108	\$ 81.00/Hour
	2061	\$ 81.00/Hour
GIS Specialist	2102	\$ 88.00/Hour
Sr. CADD Technician/ CADD Technician	1701	\$ 79.00/Hour
	1711	\$ 77.00/Hour
	1658	\$ 72.00/Hour
	2025	\$ 63.00/Hour
	2028	\$ 61.00/Hour
CADD Drafter	2092	\$ 56.00/Hour
	2106	\$ 56.00/Hour
Surveying/Geomatics	2101	\$ 88.00/Hour
	2120	\$ 79.00/Hour
	2105	\$ 64.00/Hour
	2076	\$ 56.00/Hour
Administration	1718	\$ 75.00/Hour
	1742	\$ 64.00/Hour
	2085	\$ 41.00/Hour

1.\* Transportation at \$0.45 per mile in addition to the above hourly rates.

2.\* Meals at State Rates.

3.\* Lodging at actual cost.

\* Basis is from Banner's Rapid City office for required travel

4. Reproduction:

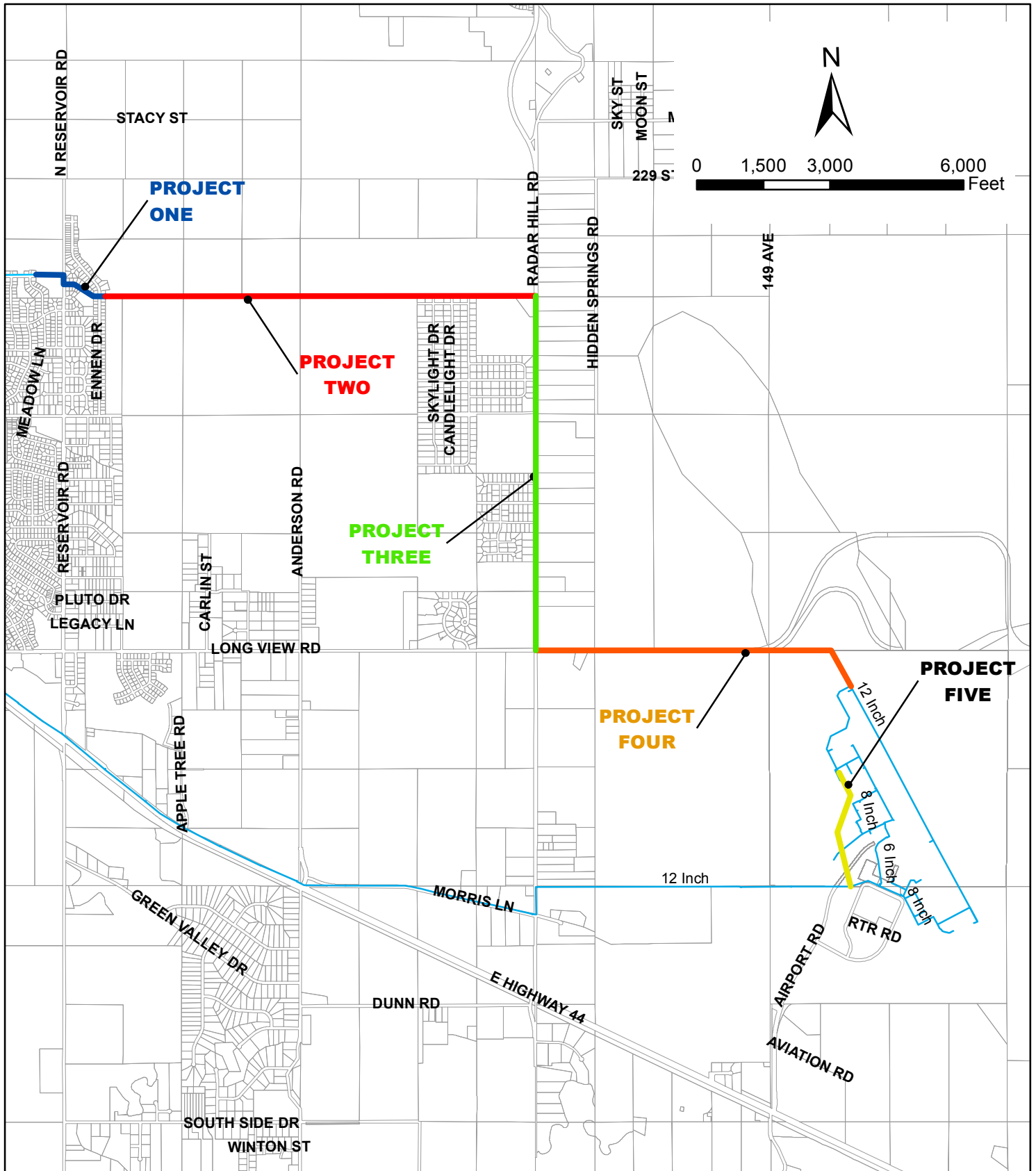
Photocopy.....	\$0.05/Copy
Color Copies.....	0.30/Copy
Black & White Laser Prints.....	0.10/Sheet
Vellabond & Plain Paper Plots .....	0.25/Sq.Ft.
Mylar Film Copies and Plots.....	0.75/Sq.Ft.

5. Subcontracts ..... Actual Cost

6. All other direct project expenses at actual cost of materials.

**We reserve the right to adjust the rates.**

FIGURE 1.0



**RAPID CITY REGIONAL AIRPORT  
WATER TRANSMISSION MAIN LOOP  
PROJECT NO. 2011-1992 CIP 50892**