

PW013101-23

REQUEST FOR PROPOSALS
for
HIGHWAY 16B SEWER EXTENSION
HIGHWAY 79 TO 5TH STREET
PROJECT NO. SS01-1052

PROJECT DESCRIPTION

The City of Rapid City proposes to construct Sanitary Sewer Main from Highway 79 to 5th Street. The construction shall include 15" Sanitary Sewer with groundwater drain and surface restoration according to the conceptual design of the "Rearage Road" as per the Preliminary Report for the 5th Street Extension Project by Ferber Engineering. See the attached map of the proposed route.

Design criteria for the project shall be as contained in the "City of Rapid City Standard Specifications"; "Recommended Standards for Sewage Works" (Ten State Standards); and "Design Criteria Manual for Water Distribution Systems and Sanitary Sewer Collection Systems for the City of Rapid City" (Draft).

Additional background information includes: "Design of Gravity Sewers, MOPFD-5, ASCE/WEF", 1982; "Handbook of PVC Pipe Design", Unibell, 1991; "Wastewater Facilities Plan for Rapid City, South Dakota 1979 to 1990", by Utility Engineering Corporation; "Wastewater Facilities Plan for Rapid City, South Dakota, Addendum No. 1, 1982 to 1990", by Utility Engineering Corporation; "South Robbinsdale Neighborhood Area Future Land Use Plan"; "Fifth Street Extension Preliminary Design Report", by Ferber Engineering Company, 2000; "South Robbinsdale Corridor Study", by Galyardt Associates, Inc, 1994; "South Truck Route Drainage Basin Design Plan"(Draft), by FMG and the "City of Rapid City Engineer's Estimating Guide".

SCOPE OF SERVICES REQUESTED

1. PRELIMINARY DESIGN PHASE

1.1. Review information listed on the prior pages.

- 1.2. Establish design criteria for the components of the project.
 - 1.3. Identify and evaluate potential utility conflicts associated with the proposed project.
 - 1.4. Perform the following planning and design tasks:
 - Perform site surveys sufficient for design plans preparation;
 - Perform preliminary horizontal and vertical alignment analysis; and,
 - Evaluate and recommend hydrogen sulfide control and/or protection, if necessary.
 - 1.5. Determine need for permanent and temporary easement acquisitions and assist the City with negotiations for property acquisition for temporary or permanent easements and for right-of-way required. Perform legal surveys for property acquisition, perform title searches, and prepare plats and/or easement exhibits as necessary.
 - 1.6. Incorporate the landowner negotiated alignment into the preliminary design.
 - 1.7. Identify potential conflicts with future storm drainage conveyance elements in the South Truck Route Drainage Basin Design Plan.
 - 1.8. Define the scope of geotechnical investigations as may be necessary for final design, assist the City in negotiation of an agreement for geotechnical engineering services, and coordinate with geotechnical engineer.
 - 1.9. Prepare preliminary systems layouts in the form of plan and profile sheets showing proposed alignment, manholes, and locations of existing utilities in and immediately adjacent to the construction limits. Show existing utilities locations with probable depth. Show future "Rearage Road" alignment, plan view and proposed right-of-way. Scale of plan & profile sheets shall be: 1" = 20' Horizontal, 1" = 5' Vertical.
 - 1.10. Prepare Preliminary Design Report, including water main, street and utility layout maps for future systems, with recommendations for review and comment by City staff, and conduct a review meeting with City staff.
 - 1.11. Prepare preliminary opinion of probable construction cost.
2. FINAL DESIGN
- 2.1. Provide complete plans and specifications for a unit price construction contract.

- 2.2. Provide additional route and topographical survey not provided in the Preliminary Design (establish land ties and bench marks, locate property corners, and field locate all existing utilities).
 - 2.3. Construction staking information shall include either of the following formats:
 - 2.3.1. On the Plans
 - Station offset of all PC's, PI's, PT's, and any angle points
 - Curve data
 - Station offsets for all items of work requiring field staking
 - 2.3.2. In tabular format on a plan sheet
 - Coordinates and description of intervisible control points
 - Curve data
 - Coordinates of all items of work requiring field staking
- Benchmark information shall be provided on each sheet.
- 2.4. Provide project layout plan to include proposed alignment and stationing, lot lines (front and side), landowners and addresses of all properties.
 - 2.5. Information shown on the drawings shall be drafted to scale, except where specifically noted. Where scaled details are rendered illegible by drafting to scale, such may be drafted in symbol form and so noted.
 - 2.6. Provide separate, special detail drawings at appropriate scale showing additional information necessary to construct the project but not shown adequately elsewhere in the drawings.
 - 2.7. Coordinate directly with utility companies' engineering divisions to ensure that all existing utilities are completely and accurately located in the field; that pertinent information regarding depth, material, size, etc. are noted on the plans; and that conflicts requiring relocation of utilities or special construction techniques are fully specified in the contract documents.
 - 2.8. Provide general sequence of construction requirements in order to assist bidders to prepare their bids and to coordinate utility construction to minimize interruption of service, ect.

- 2.9. Provide Detailed Specifications supplementing *City of Rapid City Standard Specifications* as necessary.
- 2.10. Provide Traffic Control Plans identifying detour routes and signage for various stages of construction if necessary.
- 2.11. Prepare opinion of probable construction cost (engineer's estimate) for the project based upon the City of Rapid City Engineer's Estimating Guide format and average bid price and engineering judgement.
- 2.12. Provide general provisions for dewatering, sediment control requirements, and waterway pollution prevention.
- 2.13. Prepare and include within the detailed specifications any permits required by the contractor for construction dewatering, etc.
- 2.14. Prepare any permits required by the City.
- 2.15. Include appropriate City of Rapid City Standard Details in the plan drawings. (The City can furnish the consultant with AutoCAD drawings of these details.)
- 2.16. Deliver the following:
- Construction plans on 22"x34" mylar for printing by the City
 - Construction plans on disk in AutoCAD 14.0 format
 - All topographic, control, and design points in the .dwg file and in tabular format, both on disk and on a hard copy print-out
 - Complete specifications on disk in Word 97 format for printing by the City
 - A unit price cost estimate on disk in Excel 97 format in the City of Rapid City Project Workbook format (based upon the City of Rapid City Bid Items listed in the Engineer's Estimating Guide)
 - Copies of the consultant's Quantity Take Off Sheets.
- 2.17. Review design, plans and specifications, and permanent or temporary or easement exhibits with City staff at 65% and at 95% stages.

3. BIDDING PHASE

Provide the following standard bidding phase services:

- Attend Prebid Conference

- Issue addenda to the bid documents if required
- Review prequalification submittals if required
- Assist owner in evaluating bids.
- Bid tabs will be prepared by the City of Rapid City.

4. CONSTRUCTION PHASE

Provide construction management services as negotiated, which may include:

- Attend preconstruction conference and periodic progress meetings
- Attend and participate in a post construction project review and critique.

5. MEETINGS AND SUBMITTALS

5.1. Project team members will include:

5.1.1. The consultant

5.1.2. City Engineering Division staff

- Project management
- Design
- Construction coordination

5.1.3. Operations divisions staff

- Utility Maintenance (service area and O&M related issues)
- Planning Department (master planning, traffic planning)

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

- Kick-off Meeting
- Preliminary Design Report Presentation and Discussion
- Utility companies coordination meeting
- 65% Plans and Specifications Review
- 95% Plans and Specifications Review
- Prebid Conference

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

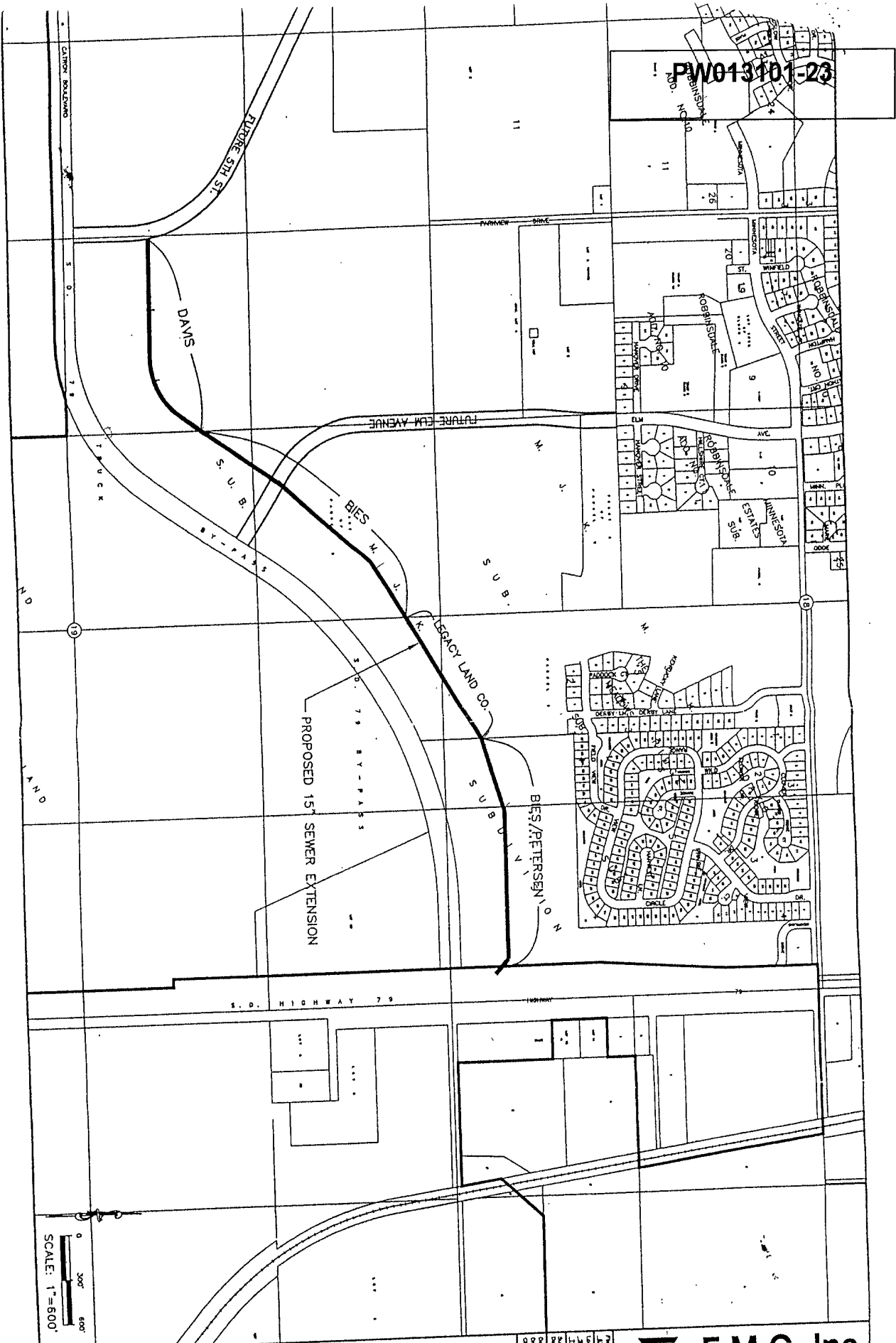
- Preconstruction Conference

- Construction Progress Meetings
 - Post Construction Meeting.
- 5.4. Submittals required during the design phase include:
- Preliminary Design Report
 - 65% Plans and Specifications and right-of-way plats and/or easement exhibits
 - 95% Plans and Specifications and right-of-way plats and/or easement exhibits
 - 100% Plans and Specifications and right-of-way plats and/or easement exhibits.
- NOTE: Right-of-way Plats and Easement Exhibits for property acquisition should be completed prior to 95% Plans and Specifications in order to facilitate securing the right-of-way and easements prior to construction.

PROJECT SCHEDULE

Contract Negotiations Complete	January 24, 2001
Notice to Proceed with Design	February 24, 2001
Preliminary Design Submittal	April 30, 2001
65% P&S Submittal	June 18, 2001
95% P&S Submittal	July 30, 2001
100% P&S Submittal	August 8, 2001 5

PW013101-23



0 300' 600'

SCALE: 1"=600'

Sheet Number:	1
Total Sheets:	1
Sheet Name:	VICINITY MAP
Revision:	
Number:	
Date:	

PROPOSED 15' SEWER EXTENSION

RAPID CITY, SD

Prepared By: J.M. JAMES

Checked By: J.M. JAMES

Date: 02/01/01



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