CETEC
Engineering Services Inc
cetec@rushmore.com

ENGINEERING SERVICES PROPOSAL

FOR

Mallridge Lift Station Improvements
City Project No. SS03-1255

To: City of Rapid City
Engineering Division
Attn: Dave LaFrance, P.E., Project Manager
300 6th Street
Rapid City, SD 57701-2724

From: CETEC Engineering Services, Inc.
1830 West Fulton Street
P.O. Box 9014
Rapid City, SD 57709-9014

Date: February 24, 2005

General Project Description:

The project consists of construction of a new raw wastewater pumping station for service to properties within the Mallridge gravity sewer service area. The lift station will be located at or near the site referred to as the "LaCrosse Street Site" in the document *"Summary Report, Preliminary Engineering Study, Mallridge Lift Station Improvements, City Project SS03-1255"*, CETEC Engineering Services, Inc., January 10, 2005.

The project work will include demolition of the existing Mallridge lift station at Viking Drive and Three Rivers Drive and restoration of the site. The demolition work will include gravity sewer and force main reconstruction work associated with abandoning the existing facility.

Gravity sewers and force main between the existing lift station site and new LaCrosse Street site will not be a part of the project design. Developers of the intervening properties will provide design and construction of these project elements. The Engineer will coordinate with the developer's engineers to define design and scheduling interfaces.

1830 West Fulton Street, 57702-4324 • PO Box 9014, Rapid City, SD 57709-9014 • (605) 341-7800 • Fax (605) 341-7864

Scope of Services:

Services to be provided by the Engineer and included in the overall fee proposal presented herein are as follows:

Final Design Phase

1. Meet with affected landowners, developers and City staff and provide recommendations regarding final site selection and pipeline design interfaces.
2. Prepare a design report with recommended project scope, design criteria, sizing calculations, site layout, and station design to include, but be not limited to the following:
   - Recommended property and easement acquisition.
   - System hydraulics, including force main and pump sizing, wet well sizing, cycle time calculations, etc.
   - Odor control system provisions and calculations.
   - Site acquisition and easement needs and limits.
   - Site layout, access, security and landscaping recommendations.
   - Catalog cuts for major equipment items.
   - Estimate of Probable Construction Cost.
   - Sequence of construction and scheduling recommendations.
   - Meet with City staff and revise project scope as may be required.
3. Define scope of geotechnical investigation needs and coordinate with geotechnical engineer regarding work scope and test hole locations.
4. Provide site topographic survey, survey controls, and utility locations for the new and existing lift station sites.
5. On the basis of the design report in Item 2, prepare complete plans and specifications per City drafting standards for a construction contract in lump sum format. Plans shall include mechanical, electrical, telemetry, structural, sitework and landscaping components.
6. Provide plans submittals at 35%, 65% and 95% completion level for City review and meet with City staff.
7. Coordinate and attend a utility coordination meeting with power and communication utilities.
8. Provide sequence of construction requirements to provide for continuous sewer services to users.
9. Identify regulatory permits required and assist with obtaining permits.

10. Provide 22" x 34" mylar plans, CD in AutoCad format for plans, topographic and control point data in .dwg and tabular format, specifications and associated bidding schedules in Word format.
11. Provide final construction cost estimate.

Bidding Phase

1. Attend prebid conference.
2. Respond to bidding questions and issue addenda.
3. Review and take action on equipment prequalifications.
4. Evaluate bids and provide recommendations regarding contract award.

Construction Phase

1. Attend and Administer preconstruction conference.
2. Review and take action on shop drawings and submittals.
3. Provide periodic on-site construction observation and testing services. Site visit frequency and duration will vary, but will average not less than two times per week. Testing services will include plastic and hardened concrete and trench backfill and embankment compaction. Prepare written reports of all observation and inspection activities and provide copies to the City.
4. Coordinate and conduct periodic progress meetings with Contractor, City, utility company, developer representatives and others as appropriate. Progress meetings are anticipated at a bi-weekly interval, but scheduling may vary through the construction period.
5. Review Contractor payment applications and make recommendations to the City.
6. Coordinate start-up services with City personnel, contractors, suppliers and manufacturers' authorized representatives. Document activities and report to City.
7. Prepare as-built drawings based on Engineer's and Contractor's field drawings.
8. Compile construction observation reports and provide to City.
9. Compile O&M manuals for various system components and provide to City.

Excluded Services:

Services which are not anticipated to be required of the Engineer, and therefore not included in the fee estimate presented herein are as follows:

1. Designs for gravity sewers and force main system through development properties between the existing Mallridge lift station site and the new lift station site are to be

performed by the developer's engineers and are therefore not included. However, the Engineer will provide overall design coordination between developers and City project elements.

2. The force main system routing has not been determined at the time of this proposal. Route surveys and design of force main which is not located with the intervening developments is not included in the fee proposal.
3. The new lift station site is anticipated to be located within or adjacent to new development with platting provided by the landowner/developer. Platting and description of easements associated with the lift station and pipelines is not included in the fee proposal.
4. The project is anticipated to be bid as a single general contract. Preparation of bidding documents for more than one project is not included. However, if certain project equipment items are to be acquired by advance purchase, the Engineer will provide the necessary documents for this activity as part of the fee proposal presented herein.
5. The proposed lift station site is not anticipated to be located within a mapped flood hazard zone, thus floodplain analysis and/or design associated with floodproofing is not included.
6. The project will not include a fixed base emergency electrical generator. The project will accommodate the storage and use of the City's existing trailer-mounted generator.

Fee:

CETEC proposes a maximum limiting fee contract in the amount of $70,615. The fee breakdown is included herein on Attachment #1. The Engineer will bill on the basis of hourly labor rates and reimbursable expenses up to the maximum fee, which includes subconsultant fees. Labor rates are as set forth in Attachment #2.

Schedule:

CETEC proposes to complete engineering services in accordance with the following schedule.

Task	Complete By
Engineering Agreement / Notice to Proceed	03-21-05
Final Design	06-13-05
Advertising Authority	07-06-05
Bid Opening	08-11-05
Award Contract	08-15-05
Construction	09-01-05 to 12-31-05 (120 days)
Start-Up	01-15-06

Respectfully Submitted:

CETEC Engineering Services, Inc.

Greg Wierenga, P.E., President

Attachment No.1
to
Engineering Services Proposal

Fee Proposal

Project: Mallridge Lift Station
Project No. 50376. SS03-1255
City of Rapid City, SD

Prepared By: Greg Wierenga, P.E.
CETEC Engineering Services, Inc.

Date: February 24, 2005

Task	Project Engineer	CAD Technician	Surveyor	Survey Assistant	Construction Observer	Clerical	Subconsultants	Totals
Final Design								
• Landowner and developer coordination / meetings	20						$ 2,720	
• Final design report and cost estimating	25	10				10		
• Geotechnical coordination / test hole locations	5		5	5				
• Topographic surveys and base plans	5	15	20	15				
• Plans and Specifications	180	165				15		
• Design review meetings (3)	10					5		
• Utility Coordination and meetings	5							
• Sequence of construction	5							
• Permits	5	5						
• Final submittals and estimates	5	5				5		
Labor Hours	265	200	25	20	0	35		
Labor Rate	$90	$55	$60	$35	$55	$30		
TOTAL	$23,850	$11,000	$1,500	$700	$0	$1,050	$2,720	**$40,820**

Bidding Phase								
• Prebid conference	5						$ 480	
• Bid consultations and addenda	15					5		
• Prebid equipment evaluations	5							
• Bid evaluation and recommendations	5							
Labor Hours	30	0	0	0	0	5		
Labor Rate	$90	$55	$60	$35	$55	$30		
TOTAL	$2,700	$0	$0	$0	$0	$150	$480	**$3,330**

Task	Project Engineer	CAD Technician	Surveyor	Survey Assistant	Construction Observer	Clerical	Subconsultants	Totals
Construction Phase								
• Preconstruction Conference	5				5		$ 3,040	
• Shop drawings and submittals	15					5		
• Periodic site visits, inspections, reports	40				100			
• Progress meetings	20				20	5		
• Contractor payment applications	10				10	5		
• Start-up coordination	20				10	5		
• Final inspections, recommendation and certifications	10				5	5		
• As-built drawings	5	10						
• O&M Manual compilation	10					10		
Labor Hours	135	10	0	0	150	35		
Labor Rate	$90	$55	$60	$35	$55	$30		
TOTAL	$12,150	$550	$0	$0	$8,250	$1,050	$3,040	**$25,040**
Reimbursable Expenses								
Vehicle Mileage Allowance (500 miles @ $.45/mile)								$225
Materials Testing Allowance (concrete cylinders, backfill compaction)								$1,200
TOTAL								**$1,425**

Total Fee **$70,615**

*Subconsultants

Electrical - LPS Engineering
HVAC - Malone Engineering

LPS ENGINEERING, INC.
823 QUINCY STREET
RAPID CITY, SD 57701
605.341.6939
605.341.6883 (Fax)

FAX TRANSMITTAL

February 24, 2005

Number of pages - 1

To:	CETEC	**Project:**	Mall Ridge Lift Station
Fax No.	341.7864	**#**	4139
Attn:	Greg		

Greg,

We propose to provide mechanical and electrical engineering for design, bidding and construction administration services for the Mallridge Lift Station as noted in your scope description of 2/24/05 for a lump sum fee of $6,240. The breakdown for each phase is as follows:

Design Phase	$2,720
Bidding	$ 480
Construction Administration	$2,400
Post Bid – O&Ms, as-builts, etc.	$ 640
Total Lump Sum Fee	$6,240

Please call if you have any questions. Thanks.

Bill Wold

Bill Wold, PE

Attachment No. 2

Labor Rate Schedule
2005

CETEC Engineering Services, Inc.

Labor Rates

Greg Wierenga, P.E.	-	$90.00/hr.
Randy Sauter, P.E.	-	$90.00/hr.
Ted Schultz, P.E.	-	$90.00/hr.
Keith Peterson, RLS	-	$60.00/hr.
Engineering Technician	-	$55.00/hr.
CAD Technician I	-	$45.00/hr.
CAD Technician II	-	$50.00/hr.
Construction Observer	-	$55.00/hr.
Survey Crew Chief	-	$55.00/hr.
Survey Crew (2 man)	-	$90.00/hr.
Survey Assistant	-	$35.00/hr.
Clerical	-	$35.00/hr.

Reimbursable Expenses

Project Travel	-	$0.45/mile
Telephone, Perdiem	-	Non-Reimbursable
Blueline Printing	-	Actual Cost
Outside Printing	-	Actual Cost
Subconsultants	-	Cost plus 10%