



**AMERICAN
ENGINEERING
TESTING, INC.**

January 6, 2005

PW011105-09
CONSULTANTS
• GEOTECHNICAL
• MATERIALS
• ENVIRONMENTAL

Mr. Stacey Titus
City of Rapid City Engineering Department
300 Sixth Street
Rapid City, South Dakota 57701

Subject: Geotechnical Exploration Program & Corrosion Protection Design
Proposed Mall Drive Transmission Main Ext. & Alt. A-N, Maple Water Ext.
Mall & Disk Drives Project No. W04-1260
Rapid City, South Dakota

Dear Stacey:

INTRODUCTION

American Engineering Testing Inc. (AET) is pleased to provide this proposal for conducting a Geotechnical Exploration Program with Corrosion Protection Design for the proposed Mall Drive Transmission Main Extension and Alternate A - N, Maple Water Extension project in Rapid City. The following proposal is based on the information provided by the City in your December 17, 2004 Request for Proposal.

PROJECT INFORMATION

We understand the project will consist of the placement of approximately 4300 feet of new 14 inch water line running along Mall Drive from Haines Avenue to LaCrosse Street. Approximately 1100 feet of new 8 inch water line will also be placed along North Maple from a point approximately 500 feet from the Disk Drive/ North Maple intersection to East Disk Drive. We understand the depth of the water lines will average around 8 feet below existing grades.

SCOPE OF WORK

The purpose of the geotechnical study will be to provide subsurface information along the water line alignments to provide information and engineering recommendations for planning and design of the project. Based on the results of the geotechnical data, detailed corrosion protection recommendations for a minimum design life of 80 years, will be provided for use in design and construction. AET will team with Cathodic Engineering Inc., of Englewood, Colorado to provide the detailed corrosion recommendations and with CETEC of Rapid City to provide the local knowledge and corrosion design review for this project.

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FEES

Project fees for AET's work scope and for those of our two consultants are attached. The following provides a summary of the project fees anticipated for this project.

AET - Geotechnical Study	\$6394
Cathodic Engineering Corrosion Design	\$4500
CETEC Corrosion Review & Consultation	\$3300
Total	\$14,194

SCHEDULE

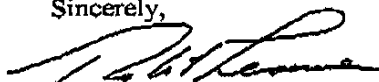
Assuming authorization to proceed can be given by January 18, 2005, the following schedule would apply:

Geotechnical Field Work	02-04-05
Initial Finding & Corrosion Protection Recommendations	02-18-05
Draft Report & Detailed Specifications	03-04-05
Final Report	03-18-05
Detailed Specifications	04-04-05

CLOSING

Thank you for considering American Engineering Testing (AET) for this project. If you have any questions please call our office at (605) 388-0029.

Sincerely,



Robert Temme P.E.
South Dakota Manager

AMERICAN ENGINEERING TESTING, INC.

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SERVICE AGREEMENT
TERMS AND CONDITIONSSECTION 1 - RESPONSIBILITIES

- 1.1 - The party to whom the proposal/contract is addressed is the Client of American Engineering Testing, Inc. (AET).
- 1.2 - Prior to AET performing work, Client will provide AET with all information that may affect the cost, progress, safety and performance of the work. This includes, but is not limited to, information on proposed and existing construction, all pertinent sections of contracts between Client and property owner, site safety plans or other documents which may control or affect AET's work. If new information becomes available during AET's work, Client will provide such information to AET in a timely manner. Also, Client will provide a representative for timely answers to project-related questions by AET.
- 1.3 - Work by AET will not relieve other persons of their responsibility to perform work according to the contract documents or specifications, and AET will not be held responsible for work or omissions by Client and other persons. AET will not be responsible for directing or supervising the work of others, unless specifically authorized in writing.
- 1.4 - Work by AET often includes sampling at specific locations. Inherent with such sampling is variation between sampling locations. Client recognizes this uncertainty and the associated risk, and acknowledges that opinions developed by AET, based on the samples, are qualified to that extent.
- 1.5 - AET is not responsible for interpretations or modifications of AET's recommendations by other person.
- 1.6 - Should changed conditions be alleged, Client agrees to notify AET before evidence of change is no longer accessible for evaluation.

SECTION 2 - SITE ACCESS AND RESTORATION

- 2.1 - Client will furnish AET safe and legal site access.
- 2.2 - It is understood by Client that in the normal course of the work, some damage to the site or materials may occur. AET will take reasonable precautions to minimize such damage. Restoration of the site is the responsibility of the Client.

SECTION 3 - SAFETY

- 3.1 - Client shall inform AET of any known or suspected hazardous materials or unsafe conditions at the work site. If, during the course of AET's work, such materials or conditions are discovered, AET reserves the right to take measures to protect AET personnel and equipment or to immediately terminate services. Client shall be responsible for payment of such additional protection costs.
- 3.2 - AET shall only be responsible for safety of AET employees at the work site. The Client or other persons shall be responsible for the safety of all other persons at the site.

SECTION 4 - SAMPLES

- 4.1 - Client is responsible for informing AET of any known or suspected hazardous materials prior to submittal to AET. All samples obtained by, or submitted to, AET remain the property of the Client during and after the work. Any known or suspected hazardous material samples will be returned to the Client at AET's discretion.
- 4.2 - Non-hazardous samples will be held for 30 days and then discarded unless, within 30 days of the report date, the Client provides a written request that AET store or ship the samples, at the Client's expense.

SECTION 5 - PROJECT RECORDS

The project records prepared by AET will remain the property of AET. AET shall retain these records for a period of three years following submission of the report, during which period the project records can be made available to the Client at AET's office at reasonable times.

SECTION 6 - STANDARD OF CARE

AET will perform services consistent with the level of care and skill normally performed by other firms in the profession at the time of this service and in this geographic area, under similar budgetary constraints. No other warranty is implied or intended.

SECTION 7 - INSURANCE

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AET carries Worker's Compensation, Property Damage and Professional Liability insurance. AET will furnish certificates of insurance to Client upon request.

SECTION 8 - DELAYS

If AET work delays are caused by Client, work of others, strikes, natural causes, weather, or other items beyond AET's control, a reasonable time extension for performance of work shall be granted, and AET shall receive an equitable fee adjustment.

SECTION 9 - PAYMENT, INTEREST AND BREACH

9.1 - Invoices are due on receipt. Client will inform AET of invoice questions or disagreements within 15 days of invoice date; unless so informed, invoices are deemed correct.

9.2 - Client agrees to pay interest on unpaid invoice balances at a rate of 1.5% per month, or the maximum allowed by law, whichever is less, beginning 30 days after invoice date.

9.3 - If any invoice remains unpaid for 60 days, such non-payment shall be a material breach of this agreement. As a result of such material breach, AET may, at its sole option, terminate all duties to the Client or other persons, without liability.

9.4 - Client will pay all AET collection expenses and attorney fees relating to past due fees which the Client owes under this agreement.

SECTION 10 - LITIGATION REIMBURSEMENT

~~Payment of AET costs for Client lawsuits against AET which are dismissed or are judged substantially in AET's favor will be the Client's responsibility. Applicable costs include, but are not limited to, attorney and expert witness fees, court costs, and AET costs.~~ R7
1-4-05

SECTION 11 - MUTUAL INDEMNIFICATION

11.1 - AET agrees to hold harmless and indemnify Client from and against liability arising out of AET's negligent performance of the work, subject to any limitations, other indemnifications or other provisions Client and AET have agreed to in writing.

11.2 - Client agrees to hold harmless and indemnify AET from and against liability arising out of Client's negligent conduct, subject to any limitation, other indemnifications or other provisions Client and AET have agreed to.

11.3 - If Client has indemnity agreement with other persons the Client shall include AET as a beneficiary.

SECTION 12 - LIMITATION OF LIABILITY

Client agrees to limit AET's liability to Client arising from professional acts, errors or omissions, such that the total aggregate liability of AET shall not exceed AET's ~~project fee~~ *required limits of insurance.* R7 1-4-05

SECTION 13 - TERMINATION

After seven days written notice, either party may elect to terminate work for justifiable reasons. In this event, the Client shall pay for all work performed, including demobilization and reporting costs to complete the file.

SECTION 14 - SEVERABILITY

Any provisions shall continue in force. However, Client and AET will in good faith attempt to replace an invalid or unenforceable provision with one that is valid and enforceable, and which comes as close as possible to expressing the intent of the original provision.

SECTION 15 - ENTIRE AGREEMENT

This agreement, including attached appendices, is the entire agreement between AET and Client. This agreement nullifies any previous written or oral agreements, including purchase/work orders. Any modifications to this agreement must be in writing.

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AMERICAN ENGINEERING TESTING, INC.SUBSURFACE BORING SUPPLEMENT
TO TERMS AND CONDITIONSSECTION 16 - UNDERGROUND UTILITY AND STRUCTURE CLEARANCE

16.1 - It is necessary that borings, excavations and other penetrations be located such that they maintain a minimum safe distance from underground utilities or other man-made improvements. ~~Client shall advise AET of all utilities that service or are located on the site, as well as any underground improvements located on the site.~~ AET will contact state notification centers, where available, or individual utility owners where a state notification centers are not available prior to drilling.

RT
1-4-05

16.2 - Public utility owners may not provide the locating service on private property. In such situations, the Client is responsible for location of such utilities prior to drilling.

16.3 - The property owner may have private underground improvements which cannot be cleared through the state notification center or public utility owners. The Client is responsible for location of these improvements.

16.4 - AET will not be responsible for any damages to "non-located" or incorrectly located underground utilities or other man-made improvements.

SECTION 17 - CONTAMINATION

17.1 - Client acknowledges and accepts that unavoidable contamination risks may be associated with AET's subsurface drilling, sampling and installation of monitoring devices. Risks include, but are not limited to, cross contamination created by linking contaminated zones to uncontaminated zones during the drilling process; containment and proper disposal of known or suspected hazardous materials, drill cuttings and drill fluids; and decontamination

17.2 - Because subsurface sampling is a necessary aspect of AET's work performed on the Client's behalf, Client agrees to hold harmless and indemnify AET from and against liability associated with contamination.

SECTION 18 - LOST EQUIPMENT

~~Equipment lost in bore holes may be required to be retrieved or properly abandoned by government agencies. Client agrees to pay AET all costs related to retrieving and/or abandoning such equipment at AET fee schedule rates, unless agreed otherwise.~~

RT
1-4-05SECTION 19 - LIMITATIONS OF SUBSURFACE EXPLORATION

Client recognizes that unavoidable risks occur whenever engineering or related disciplines are applied to identify subsurface conditions. Even a comprehensive sampling and testing program performed in accordance with a professional standard of care may fail to detect certain conditions, because they are hidden. For similar reasons, actual environmental, geologic and geotechnical conditions that AET characterizes to exist between sampling points may differ significantly from those that actually exist. The passage of time also must be considered, and Client recognizes that, due to natural occurrences or direct or indirect human activities at the site or distant from it, actual conditions discovered may change. Client recognizes that nothing can be done to eliminate the risks associated with these limitations.

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Project W04-1260
Mall Drive Transmission Main & Alternate A-N. Maple Water Extensions

Borings

Perform 15 borings to depths of 10 to 15 feet along the alignments.
Perform up to 5 additional auger borings, if required, to delineate hard rock along alignment

Laboratory Testing

Natural moisture-density tests	30
Proctor test	3
Soil pH, chlorides, sulfates, & sulfides	5
Soil resistivity	4

Report

The report will provide subsurface soil and groundwater information along the proposed alignments with recommendations regarding excavation/trenching, backfill/compaction, and groundwater/dewatering criteria along with results of the soil resistivity and pH, and chloride tests. Report will include detailed specifications for corrosion protection for a minimum of an 80 year design life.

Preliminary Fees

Borings

10 SPT to 10 feet @ \$14.00/foot	\$1400.00
5 SPT to 15 feet @ \$14.00/foot	\$980.00
PVC piezometer pipe 75 ft @ \$1/foot	75.00
5 Auger borings to 10 feet @ \$8.00/foot	\$400.00
Mobilization	\$200.00
Utility Locates - 2 hours @ \$55.00/hour	\$110.00

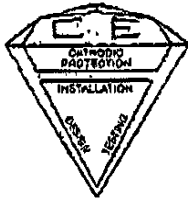
Laboratory Testing

Natural Moisture/Density tests - 30 @ \$15.00 each	\$450.00
Proctors - 3 @ \$125/each	\$375.00
Soil pH, chlorides, resistivity - 4 @ \$125/each	\$500.00

Report/Meetings

Senior Engineer - 8 hours @ \$100.00/hour	\$800.00
Project Engineer - 12 hours @ \$78.00/hour	\$936.00
Drafting - 2 hours @ \$48.00/hour	\$96.00
Clerical - 2 hour @ \$36.00/hour	\$72.00

Subtotal \$6,394.00

**CATHODIC ENGINEERING INC.**

CORROSION CONTROL SPECIALISTS

P.O. BOX 5085
ENGLEWOOD, CO 80155
(303) 694-3368
FAX: (303) 771-1793

January 6, 2005

American Engineering Testing, Inc.
Attn: Mr. Robert Tomme
1745 Samco Rd.
Rapid City, SD 57702

RE: City of Rapid City, SD
Mall Drive Water Transmission Main Extension and Alternate A - North Maple Water Main
Extension Project

Dear Mr Tomme:

Cathodic Engineering Inc. (CEI) is pleased to submit to American Engineering Testing, Inc. (AET) the following proposal to provide cathodic protection and corrosion engineering subconsulting services for the subject project.

SCOPE OF SERVICES**Predesign Tasks**

1. Review available geotechnical information and soil test data to assess soil chemistry and electrical characteristics.
2. Prepare and submit an initial written corrosion protection analysis for inclusion in AET's Preliminary Findings Report including recommendations for pipe material selection, pipe coatings, and cathodic protection.
3. Provide corrosion protection related technical support via telephone/email/fax as needed.
4. Attend one meeting in Rapid City with AET and City Engineering personnel to review the initial geotechnical findings including corrosion protection analysis and recommendations.

Design Tasks

1. Prepare and submit to AET draft specifications for corrosion protection for inclusion in AET's Draft Geotechnical Report. Submittal shall be in electronic format as well as on paper. AET to incorporate this information into its project documentation as needed for review and comment by City Engineering.
2. Incorporate City Engineering's review comments and prepare and submit final specifications for corrosion protection. Submittal shall be in electronic format as well as on paper. AET to incorporate this information into its Final Geotechnical Report.
3. Provide corrosion protection related technical support via telephone/email/fax as needed.
4. Prepare and submit corrosion protection technical specifications and detail drawings for inclusion in the City's project bid documents for construction of the project. Submittal shall be in electronic format as well as on paper.

American Engineering Testing, Inc.
Mr. Robert Temme
January 6, 2005
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The above services shall be completed within the schedule and dates outlined in the City's RFP for Project No. W04-1260 unless a revised schedule is otherwise agreed to by AET and CEI.

The fees to complete the above Scope of Services are as follows:

- \$110 per hour plus documented direct expenses (mileage, air transportation, rental car, reproduction, meals, lodging, etc.) which will be billed at cost. Total fees shall not exceed a total cost of \$4,500 without prior approval from AET.

Thanks you for the opportunity to submit this proposal. We look forward to working with you on this project.

Very truly yours,

CATHODIC ENGINEERING INC.



Mark A. Matthews, P.E.
President

Jan. 6, 2005 8:49AM

No. 4033 P. 1
PW011105-09

To: American Eng & Test



January 6, 2005

Mr. Robert Temme, PE
American Engineering Testing, Inc.
1745 Samco Road
Rapid City, SD 57702

**Re: Revised Fee Proposal - Water System Corrosion Protection Services
Mall Drive Transmission Main Ext. & Alt. A - N. Maple Water Ext.
Project No. W04-1260
City of Rapid City**

Dear Robert:

CETEC Engineering Services, Inc. is pleased to submit a proposal for engineering services for the Mall Drive Transmission Main Extension for the City of Rapid City. We are familiar with the current City Standard Specifications and we have completed recent projects with detailed corrosion control requirements on large City transmission mains. We propose to coordinate the work with your corrosion control consultant and American Engineering Testing (AET) during the evaluation and design phases of the project. We propose the following scope of work on the project:

Scope of Services:

1. Assist and recommend testing requirements, locations and scope of work.
2. Provide engineering reviews of corrosion protection recommendations and findings, review of local product availability, construction techniques and compatibility with City standards.
3. Attend kick-off meeting, initial findings meeting and City review meetings.
4. Review pipe coating and material recommendations for piping and fittings.
5. Review of final report, corrosion control specifications and bid documents, details and drawings prepared by the corrosion control consultant.
6. Attend review meeting and make final recommendations.
7. Provide cost estimates for typical water main and appurtenances without corrosion protection. Review material availability and evaluate pipe material types and benefits.
8. Review constructability issues and make recommendations on corrosion designs.
9. Provide summary of CETEC recommendations and coordinate implementation with the corrosion control consultant.

Schedule:

CETEC is immediately available to perform the described services and can provide reviews of PSI recommendations within 3-4 working days. The schedule is based on the assumption that the preliminary City water main plans will be available for review by February 1, 2005. We would anticipate reviews of corrosion control consultant submittals as listed:

Description of Services	Completion Date
Field Work Recommendations:	Late January 2005
Initial Findings and Corrosion Protection Recommendations:	February 18, 2005
Draft Report and Detailed Specifications:	March 4, 2005
Final Report:	March 18, 2005
Detailed Specifications:	April 4, 2005

Fee:

CETEC proposes to complete the work on a on an hourly contract basis with a maximum limiting fee. Additional work may be added at labor and expense rates or as negotiated. Fee for the work will be based on the labor and reimbursable expense rates attached to the proposal. Additional work outside of the proposed scope will be billed at the established 2005 Labor Rate Schedule.

Fee Breakdown:

Item	Unit	Rate	Total
PM Meetings (4 @ 2 hr.)	8 hr.	\$90/hr.	\$720
PM Initial Investigation and Findings	6 hr.	\$90/hr.	\$540
PM Draft Report Phase and Detailed Spec.	6 hr.	\$90/hr.	\$540
PM Final Phase	6 hr.	\$90/hr.	\$540
PM Administration & Coordination	4 hr.	\$90/hr.	\$360
Technician	4 hr.	\$55/hr.	\$220
Clerical	6 hr.	\$30/hr.	\$180
Fee Estimate			\$3,100

Exclusions:

1. Corrosion control design, specifications, cost estimates, and detail drawings are not included. We will review the work provided by the corrosion control consultant and will provide review comments and recommendations.

2. Water main designs, street designs, water main specifications, printing, report preparation and assembly are not included. Printing of drawings prepared by others will be billed at the normal technician labor rate schedule.

We look forward to the opportunity to assist you with this project. Please contact me with any questions regarding this proposal. A contract has been included for your review. Please return one signed contract to CETEC when accepted.

Sincerely,
CETEC Engineering Services, Inc.



Ted F. Schultz, P.E.
Project Manager