

**PUEBLO WEST METROPOLITAN DISTRICT
1MG WATER STORAGE TANK #3
CATHODIC PROTECTION PROPOSAL
PUEBLO WEST, COLORADO**

Thank you for the opportunity to submit a proposal to provide design, materials, installation, testing, and reporting for the cathodic protection system on 1MG Tank #3 located in Pueblo West, Colorado. This proposal defines the scope of work, assumptions, clarifications and cost estimates to complete this scope of work according to the RFP and information provided to QualCorr Engineering (QualCorr). They are based on our extensive experience with similar projects, our knowledge of these systems, and information and priorities discussed between Pueblo West (PW) and QualCorr.

SCOPE OF WORK

QualCorr will provide engineers and technicians that are registered PE's, NACE certified Technicians & Specialists, operator qualified and well experienced in providing quality corrosion control services. Each employee is required to participate in continuing education courses, registered with various professional monitoring services (IS Net World, Veriforce, etc.) and be qualified to operate all relevant survey and test equipment.

Design and Engineering

QualCorr will have a NACE certified Cathodic Protection Specialist complete a cathodic protection design for 1MG Tank #3. A final design and material submittal will be provided for approval prior to material procurement. QualCorr will perform a site visit to access the condition of water tank, obtain water samples, conduct resistivity testing, review existing conditions, and obtain other information to aid in the design process.

Materials

QualCorr will supply all necessary materials required for installing the cathodic protection system. Materials will include anode wire, rope, buoys, rectifier, junction boxes, pressure entrance fitting, and related materials to provide a complete and functional system.

Installation

QualCorr will provide an installation crew to install the cathodic protection system located in the tank interior. QualCorr will install all wiring, connections and components, and anodes at points indicated. Tank must be drained to allow for installation of the components. Hatch opening and access to be provided by PW. QualCorr will weld in a pressure entrance fitting and interior clips as required to support the cathodic protection system. Coating repairs will be completed by QualCorr.

The rectifier will be installed near the pressure entrance fitting outside the tank. QualCorr will terminate all wiring and connections within the rectifiers. AC Power to the rectifier is to be provided by PW. QualCorr will provide a NACE certified Cathodic Protection Specialist to oversee and verify proper installation of each cathodic protection system.

Commissioning, Testing, and Reporting

Upon completion of the cathodic protection system installation and placing the tank back in-service, QualCorr will commission and energize the CP system, obtain cathodic protection potential measurements, and submit records of the data obtained. QualCorr will provide a final report detailing the installation, commissioning, and testing of the cathodic protection system verified by a NACE certified Cathodic Protection Specialist.

On-Going Maintenance

QualCorr will provide NACE certified Technicians to operate, maintain, and inspect the installed cathodic protection system. Inspections typically occur on a semi-annual (Owner discretion) basis and QualCorr will report findings to the Owner.

ASSUMPTIONS

1. PW will secure access to the project Right-of-Way required to complete this project.
2. The tank is in a condition to safely ascend and descend all aspects including entering inside the tank interior. No climbing will be performed until any identified safety issues are remediated or mitigated by PW or the Owner (i.e. thin walls, ladder runs, hazardous chemicals, high output radio/cellular antennas, etc.).
3. PW will ensure the tank is taken out of service, completely drained, and air quality checks performed prior to installation of the CP system.

EXCLUSIONS

1. AC Power to the impressed current rectifier unit will be provided by PW or the Owner and any associated costs are not included as part of this proposal.
2. Hatch opening or removal during installation will be provided by PW and any associated costs are not included as part of this proposal.

SCHEDULING

1. As soon as practical after tank is taken out of service, QualCorr will perform a site visit to inspect the conditions of the tank and gathering the necessary design information.
2. After all planned welding work and re-coating is complete, QualCorr will install the internal components of the CP system.
3. External installations (i.e. junction box, rectifier, etc.) will be performed after the installation of the internal components.
4. After the tank is returned to service, QualCorr will return to complete system commissioning and final testing.

PROJECT COSTS

QualCorr provides the following cost breakdowns to complete the design, material procurement, installation, commissioning, testing, and reporting scopes of work:

Internal Tank System CP Design:	N/C—previously completed
Material Procurement & Installation:	\$23,750
Commissioning, Testing, & Reporting:	\$1,950

QualCorr proposes to complete the on-going maintenance scope of work for the sum of:

\$950 per occurrence

We thank you for the opportunity to provide a proposal for the Pueblo West 1MG Tank #3 Cathodic Protection Project. We believe that our expertise and services are second to none and pledge to provide the best corrosion protection design, installation, and testing services available. I look forward to hearing from you regarding this proposal. Please feel free to contact me at the number below to discuss this matter or any other corrosion protection concerns you may have.

Sincerely,



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