



Resolution 2004-008

A RESOLUTION AUTHORIZING THE CITY MANAGER TO ENTER INTO A CONTRACT WITH PETERSON STRUCTURAL ENGINEERS FOR THE SNYDER WATER TANK MAINTENANCE PROJECT

WHEREAS, the Project is contained in the city's Maintenance Work Program; and

WHEREAS, city staff utilized a consultant selection process for this project meeting the requirements of the city and state contract rules; and

WHEREAS, the firm was selected through this process to design the Snyder Water Tank Maintenance project; and

WHEREAS, the anticipated design cost of this project is \$36,910; and

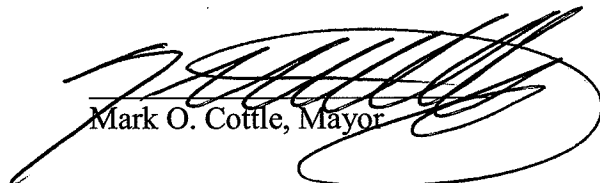
WHEREAS, the City Engineer recommends a design contingency of 20% (\$7,390) to cover unanticipated design costs.

NOW, THEREFORE, THE CITY RESOLVES AS FOLLOWS:

Section 1. The City Manager is authorized to enter into a contract with Peterson Structural Engineers for design of the Snyder Water Tank Maintenance project for an amount not exceeding \$44,300.

Section 2: This Resolution shall be effective upon its approval and adoption.

Duly passed by the City Council this 27th day of January 2004.


Mark O. Cottle, Mayor

ATTEST:

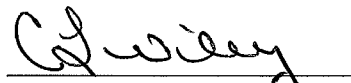

C.L. Wiley, City Recorder

Exhibit A

Scope of Work Snyder Tank Maintenance and Upgrade for the City of Sherwood

BACKGROUND AND OVERVIEW

This document presents a scope of engineering services for the maintenance and upgrade of the City of Sherwood's Snyder Tank. The tank was constructed in approximately 1972 and has received minimal maintenance. A structural evaluation was performed in 1999. Generally, the tank is in good condition; however, a number of items were identified that need repair or upgrading. Subsequent studies of water system vulnerability indicate the access hatch and vents require upgrades to meet new protection standards. Additionally, intrusion alarms need to be provided for water system protection.

Hydraulic analysis of the City's water system indicates the tank can not be taken out of service without compromising acceptable fire suppression capacity. This limits all construction to work on the exterior of the tank.

The City will provide Volume 1 – Bidding Requirements, Contract Forms and Conditions of Contract. The Consultant will provide Volume 2 – Technical Specifications, associated Contract Drawings, the project estimate and Bid Sheet. The City will be responsible for printing, binding and distribution of the contract documents and will obtain permits and approvals as necessary. Revisions resulting from permit review are the responsibility of the Consultant. Volumes 1 & 2 may be combined with an engineer's seal fly sheet covering the technical specifications.

The proposed engineering services include the following tasks:

- Task 1 – Analysis and Design of Exterior Reservoir Repairs and Appurtenances
- Task 2 – Structural Analysis, Alternatives and Details for The Bottom Wall and Floor Joint For Seismic Deficiencies
- Task 3 – Preparation of Technical Specifications, Contract Drawings and Project Estimate
- Task 4 – Technical Assistance During Project Bidding
- Task 5 – Technical Assistance During Construction

Tasks are more particularly defined as follows:

Task 1 – Analysis and Design of Exterior Reservoir Repairs and Appurtenances

Work under this task includes design of the work items generally identified in the proposed construction scope dated 10/31/03:

- 1.1 Clean, remove loose shotcrete, and pressure wash the roof slab, curb, relief band, and exposed portions of the tank wall
- 1.2 Clean and repair roof drain and provide vandal-proof hardware
- 1.3 Clean and repair overflow scuppers
- 1.4 Repair or replace access hatch to vandal-proof standards
- 1.5 Shim the roof slab/core wall gap to reduce roof translation from seismic loads and water proof the joint
- 1.6 Apply new epoxy-plaster to repair relief band and curb
- 1.7 Paint roof with elastomeric paint
- 1.8 Paint exposed wall and relief band with exterior acrylic paint (color to be determined by the City)
- 1.9 Prepare a Engineering Technical Memorandum summarizing the results of subtasks 1.1 through 1.9.

Work efforts will include:

- Field reconnaissance to review existing conditions
- Review of existing project documentation
- Analysis and design as appropriate of various appurtenances
- Documents at the 50% design stage will be presented to City and TVWD staff for review and comment
- Development of a technical memorandum summarizing the design results
- Attendance at a 50% design review meeting

Task 2 – Structural and detail analysis for the bottom wall and floor joint for seismic deficiencies

Work under this task includes structural analysis and the preparation of a technical report on alternatives to upgrade the bottom wall and floor joint for seismic deficiencies.

- 2.1 Analyze the bottom wall and floor joint for seismic deficiencies and develop alternatives to upgrade the connection
- 2.2 Prepare preliminary costs for viable alternatives
- 2.3 Prepare a technical report documenting the design analysis, alternatives developed, recommended alternative and preliminary project costs for the recommended alternative

Work efforts will include:

- Review of existing project documentation
- Structural analysis and design as appropriate of the various alternatives
- Preparation of a draft technical report for review by the City and TVWD
- Preparation of a final technical report

Task 3 – Preparation of Technical Specifications, Contract Drawings and Project Estimate

Under this task, the final drawings, technical specifications and construction estimates will be prepared. Technical specifications will be prepared using the Construction Specifications Institute (CSI) format. Up to five copies of these documents at the 90% completion level will be submitted to City and TVWD staff for review and comment. A final design review meeting will be held with the City and TVWD staff and comments and edits will be incorporated into the final contract documents. A camera ready copy will be provided to the City for project bidding.

Task 4 – Technical Assistance During Project Bidding

Under this task, the consultant will attend the pre-bid conference, respond to technical questions of bidders and plan holders regarding the project and the plans and specifications and maintain a written record of communications regarding questions.

Task 5 – Technical Assistance During Construction

This task includes the technical review and approval of submittals and on-site visits to the job site.

5.1 Attend the pre-construction conference

5.2 As requested by the city, review shop drawings and other technical submittals such as equipment, materials of construction, and laboratory test results. Review and evaluate alternatives or substitutions proposed by the contractor.

5.3 As requested by the City, provide clarification of the technical contract documents to the contractor based upon the contractor's written requests for clarifications, verbal requests or as the need otherwise arises. Prepare written responses and drawings or sketches as necessary to clarify the contract documents.

5.4 As the City's technical representative, provide four on-site technical review visits to evaluate the contractors work for conformance with the specification and drawings.

ENGINEERING SERVICES BUDGET

The proposed task fee budgets are tabulated and presented below. Work will be accomplished on a time and expense basis in accordance with the attached fee schedules. The total estimated fee for all tasks is not to be exceeded without prior written authorization of the City. Outside technical professional and other services will be invoiced at actual cost plus 10% to cover administration and overhead. A summary of estimated engineering fees associated with the above work is outlined as follows:

<u>Tasks and Description</u>	<u>Fee Budget</u>
Task 1 – Analysis and Design of Exterior Reservoir Repairs and Appurtenances	\$12,495
Task 2 – Structural analysis, alternatives and details for the bottom wall and floor joint for seismic cable deficiencies	\$2,760
Task 3 – Preparation of Technical Specifications, Contract Drawings and Project Estimate	\$9,025
Task 4 – Technical Assistance During Project Bidding	\$3,580
Task 5 – Technical Assistance During Construction	\$9,050
Outside Technical Services	\$0
Total Expenses	\$36,910

Project Expenses:

Expenses incurred in-house that are directly attributable to the project will be invoiced at actual cost.

SCHEDULE

Submittal of the final permit documents will be completed by 30 April 2004. The City anticipates a 6 week contract advertisement, bidding and award schedule to the Notice to Proceed.

SCHEDULE OF CHARGES

Personnel:

Senior Principal	\$125.00
Project Engineer	90.00
Staff Engineer	70.00

Project Expenses:

Expenses incurred in-house that are directly attributable to the project will be invoiced at actual cost. These expenses include the following:

Mileage	Current IRS Rate
Long Distance Telephone	At Cost
Lodging and Subsistence	At Cost
Postage	At Cost
Printing and Reproduction	At Cost

Outside Services:

Outside technical, professional and other services will be invoiced at actual cost plus 10 percent to cover administration and overhead.