

COUNCIL DECISION REQUEST

SUBJECT: Final Engineering for the C. C. Cragin Treated Water Pipeline

MEETING DATE: 05-05-11

PAYSON GOAL: NEW: EXISTING: X

ITEM NO.:

TENTATIVE SCHEDULE:

SUBMITTED BY: LaRon G. Garrett, Pub. Wks. Dir. AMOUNT BUDGETED: \$8,785,000

SUBMITTAL TO AGENDA

EXPENDITURE REQUIRED: \$436,811

APPROVED BY TOWN MANAGER

CONT. FUNDING REQUIRED: \$0



EXHIBITS (If Applicable, To Be Attached): Copy of Amendment No. 1

POSSIBLE MOTION

I move to ratify the approval of Contract Amendment No. 1 with Tetra Tech, Inc. for the Final Engineering Design of the C. C. Cragin Treated Water Pipeline with the Town Manager signing the necessary documents.

SUMMARY OF THE BASIS FOR POSSIBLE MOTION:

Town of Payson personnel have been working on bringing water from Blue Ridge Reservoir (Now called C. C. Cragin Reservoir) to Payson for over 30 years. We are beginning to see the realization of this project. In December, 2009 the Town entered into a contract with Tetra Tech, Inc. to prepare the Preliminary Treated Water Pipeline Plans. The original contract is structured to allow amendments as the scope expands to the final product. Those preliminary plans are now complete and we are ready to move forward with the final design. The treated water line plans include the plans to transport the treated water from the water treatment plant site near Mesa del Caballo to the Town of Payson system at Houston Mesa Road and Highway 87. They also include the "In-Town" portion of the water system upgrades that are necessary to accommodate the C. C. Cragin flows throughout Payson.

Following is a summary of the cost for this Amendment No. 1:

| | |
|-----------------------------------------------|-----------------|
| Houston Mesa Corridor | \$110,099 |
| In-Town System Upgrades | \$310,685 |
| Mesa del Caballo Booster Station Coordination | <u>\$16,027</u> |
| Total Amendment No. 1 | \$436,811 |

PROS: Approval will allow the Town to continue working towards making C. C. Cragin water a reality.

CONS: None

PUBLIC INPUT (if any): N/A

BOARD/COMMITTEE/COMMISSION ACTIONS/RECOMMENDATIONS (if any) (give dates and attach minutes): N/A

FUNDING:

Acct: 662-5-5451-00-8600 Budget: \$8,785,000 Available Expense: Remaining:

MAY 05 2011 *Z.3*

COUNCIL DECISION REQUEST

3A: _____ Date: _____



TETRA TECH

**AMENDMENT TO AGREEMENT FOR
PROFESSIONAL SERVICES
C.C. CRAGIN TREATED WATER LINE FINAL DESIGN**

Project No.: 134-16910-10001
Proposal No.: P11-122

This amendment dated March 24, 2011 is subject to the terms and conditions of the original agreement dated January 20, 2010 between the Town of Payson (Client) and Tetra Tech, Inc. (Engineer) and add the following scope of services.

Additional scope of work as more fully described on the attached Exhibit "A".

As compensation for these added services, Tetra Tech, Inc. shall receive a lump sum amount of Four Hundred Thirty-six Thousand Eight Hundred Eleven and No/100 dollars (\$436,811.00).

This Agreement shall be governed by the laws of the state where the services are performed.

Town of Payson
303 N. Beeline Hwy.
Payson, AZ 85541

TETRA TECH, INC.
431 S. Beeline Highway
Payson, Arizona 85541

By: Debra A. Galbraith

By: Scott M. [Signature]

Title: Town Manager

Title: Sr. Project Manager

Date: 4/15/11

Date: 4/25/11



EXHIBIT "A"

SCOPE OF SERVICES

13 Final Plans – Houston Mesa Corridor:

Prepare and process through final plan check approval with Gila County, Tonto National Forest, ADEQ, and the Town of Payson, the 2.5 miles of 18-inch water line and appurtenances on the Houston Mesa Corridor between the Mesa Del Booster Pump Station and State Route 87.

13.1 60% Plan and Profile Set Preparation

13.1.1 Engineer Field Walk Verification and Adjustment of Final Alignment.

13.1.2 Drafting of approximately 14 Plan and Profile Sheets at 40-scale, along with Cover Sheet, Key Map Sheet with General Notes, and Details. The set will be approximately 20-sheets not including Traffic Control. QA-QC will be done with in-house staff.

13.1.3 Create a Spreadsheet of the Sheet by Sheet Construction Notes and Quantities for use in the Cost Estimate.

13.1.4 Create an Engineers Cost Estimate based upon Construction Notes and recent local unit bid prices, when available, or Cost Estimating reference.

13.1.5 Submit Plan Set to Gila County and Tonto Forest District office.

13.1.6 Submit Plan Set and Cost Estimate to Town of Payson.

Total Fixed Fee . . . \$45,111.00

13.2 90% Plan and Profile Set Preparation

13.2.1 Complete County, Forest Service, and Town plan check corrections.

13.2.2 Update Construction Note Spreadsheet and Cost Estimate.

13.2.3 Prepare Traffic Control portion of Plan Set, Estimated to be 3 Sheets of Typical Roadside working conditions along Houston Mesa Road, with one Sheet of Details at SR87 and one Sheet of Details at Mesa Del Caballo.

13.2.4 QA-QC Check by Tetra Tech personnel not in the Payson Office.

13.2.5 Submit Plan Set with Traffic Control to Gila County and Tonto Forest District Office.



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13.2.6 Submit Plan Set with Traffic Control and revised Cost Estimate to Town of Payson.

Total Fixed Fee . . . \$24,240.00

13.3 100% Plan and Profile Set Preparation

13.3.1 Complete County, Forest Service, and Town plan check corrections including Traffic Control.

13.3.2 Update Construction Note Spreadsheet and Cost Estimate.

Total Fixed Fee . . . \$ 7,146.00

13.4 ADEQ Submittal

13.4.1 Preliminary Coordination Meeting with Town of Payson to discuss and plan what needs to be submitted and manner of submittal to ADEQ.

13.4.2 Meet with ADEQ to discuss the two sections of plans downstream of the Treatment Plant and determine the minimum calculations and report that they will want to review.

13.4.3 Prepare ADEQ Report and Calculations for Houston Mesa Corridor Plans.

13.4.4 Submit Plans & Report to ADEQ.

Total Fixed Fee . . . \$16,986.00

13.5 ADEQ Approval

13.5.1 Review ADEQ Plan Check Corrections with the Town of Payson and Complete the corrections.

13.5.2 Meet with ADEQ regarding any problems or unreasonable requests, to determine action before submittal.

13.5.3 Make Final Submittal to ADEQ.

Total Fixed Fee . . . \$ 3,432.00



13.6 Preparation of Bid Documents

13.6.1 Prepare Review Copy of Specifications, Bid Schedule, and Special Provisions.

13.6.2 Submit Bid Documents to Gila County, Tonto Forest District office, and Town of Payson to identify any form or function problems.

13.6.3 Complete County, Forest Service and Town plan check corrections.

13.6.4 Submit Corrected Bid Documents to Gila County, Tonto Forest District office, and Town of Payson.

13.6.5 Complete Final Bid Document corrections from County, Forest Service and Town.

Total Fixed Fee . . . \$ 6,953.00

13.7 Final Approved Release

13.7.1 Update any ADEQ Changes.

13.7.2 Update Cost Estimate and Bid Schedule.

13.7.3 Print and Release for Bid the Houston Mesa Corridor – Pipeline Plans and Specifications.

Total Fixed Fee . . . \$ 6,231.00

14 Final Plans – Payson Backbone System:

Prepare and process through final plan check approval with the Town of Payson and ADOT, the approximately 5.0 miles of 18-inch, 12-inch, 10-inch and 8-inch water line, seven pressure reduction stations, four jack bore highway crossings, and miscellaneous appurtenances along the proposed backbone alignment; along State Highways and local streets throughout the Town of Payson from Houston Mesa Road to the Tyler Parkway-State Route 260 Intersection.

14.1 60% Plan and Profile Set Preparation

14.1.1 Engineer Field Walk Verification and Adjustment of Final Alignment.

14.1.2 Drafting of approximately 66 Plan and Profile Sheets at 20-scale, along with Cover Sheet, Key map Sheet with General Notes, and Details. There will be Jack-bore Details and a Plan Detail of each Crossing. There will also be Reduction Station Details with a Plan Detail at each location. The set will be approximately 77-sheets not including Traffic Control. QA-QC will be done by in-house staff.



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14.1.3 Create a Spreadsheet of Sheet by Sheet Construction Notes and Quantities for use in the Cost Estimate.

14.1.4 Create an Engineers Cost Estimate based upon Construction Notes and recent local unit bid prices, when available, or Cost Estimating reference.

14.1.5 Submit Plan Set and Cost Estimate to Town of Payson.

Total Fixed Fee . . . \$153,376.00

14.2 90% Plan and Profile Set Preparation

14.2.1 Complete Town plan check corrections.

14.2.2 Update Construction Note Spreadsheet and Cost Estimate.

14.2.3 Prepare Traffic Control portion of Plan Set Estimated to be 5-Sheets of Typical ADOT / Roadside working conditions along with 4-Sheets of Special Conditions at street crossings and other local street complications. A total of 9-sheets.

14.2.4 QA-QC Check by tetra Tech personnel not in the Payson Office.

14.2.5 Submit Plan Set with Traffic Control to ADOT.

14.2.6 Submit Plan Set with Traffic Control to Town of Payson.

Total Fixed Fee . . . \$82,415.00

14.3 ADEQ Submittal

14.3.1 Prepare ADEQ Report and Calculations of Backbone delivery system, pressures, flows, etc.

14.3.2 Submit Plans and Report to ADEQ.

Total Fixed Fee . . . \$16,551.00

14.4 100% Plan and Profile Set Preparation

14.4.1 Complete ADOT and Town Plan Check Corrections including Traffic Control.

14.4.2 Update Construction Note Spreadsheet and Cost Estimate.

Total Fixed Fee . . . \$24,298.00



14.5 ADEQ Approval

14.5.1 Complete ADEQ Plan Check Corrections.

14.5.2 Meet with ADEQ regarding any problems or unreasonable requests, to determine action before submittal.

14.5.3 Make Final Submittal to ADEQ.

Total Fixed Fee . . . \$11,667.00

14.6 Preparation of Bid Documents

14.6.1 Prepare Review Copy of Specifications, Bid Schedule, and Special Provisions.

14.6.2 Submit Bid Documents to Town of Payson to identify any form or function problems.

14.6.3 Submit Corrected Bid Documents to Town of Payson.

Total Fixed Fee . . . \$ 7,953.00

14.7 Final Approved Release

14.7.1 Update any ADEQ Changes.

14.7.2 Update Cost Estimate and Bid Schedule.

14.7.3 Print and Release for Bid of Town of Payson Backbone System Plans and Specifications.

Total Fixed Fee . . . \$14,425.00

15 Coordination of Downstream Operations with Mesa Del Booster Pump Station

15.1 Prepare outline Specifications for Operations Criteria. This includes model studies to check operation limits under different conditions.

15.2 Meet with Town of Payson and Booster Station Consultant for Coordination of Operations.

15.3 Check 60% Booster Station Plans and Specifications. Run Model Study to check Operations criteria under required conditions.



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15.4 Check 90% Booster Station Plans and Specifications. Run extended model study to make sure that Booster Station will react as needed to long term conditions.

15.5 Incorporate final plans into the Town of Payson Model for a final check run.

Total Fixed Fee . . . \$16,027.00

16 AZPDES Submittal / Processing

15.1 Houston Mesa Corridor

15.2 Payson Backbone System

T&M Upon Request . . . \$0.00

17 ASR Model Revisions due to ASR Phase 1 and Phase 2 Activity

T&M Upon Request . . . \$0.00

18 ASR Site Plans and Model Study

T&M Upon Request . . . \$0.00

19 APP ADEQ Submittal / Processing

T&M Upon Request . . . \$0.00

TOTAL FIXED FEE \$436,811.00

EXCLUSIONS:

- ADEQ Analysis / Reports beyond Hydraulic Supply Requirements.
- Forest Service Issues beyond Route and Traffic.
- Requested Gross Alignment Changes.
- ADOT R/W Issues.
- Private Easements for Appurtenances, Lines, Jack-Bore activities.
- Bidding Process.
- SCADA Design or Plans.