



PLANNING
ENGINEERING
SURVEYING

& ASSOCIATES, INC.

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September 9, 2014

374TNPAH/PRO

Ron Pine, P.E.
Manager, Engineering Division
Town of Prescott Valley
7501 E. Civic Circle
Prescott Valley, AZ 86314

Dear Mr. Pine:

RE: Proposal for Construction Period Engineering Services
Tonopah Storm Water Management Project, Phase 2 - CIP # E354.2

Dava & Associates, Inc. is pleased to provide this scope and proposed fees for professional engineering services for the construction of the Tonopah Storm Water Management Project. Our proposed Scope of Professional Services is enclosed with the following estimated maximum fees summarized below:

| | |
|--------------------------------|---------------------------|
| Dava & Associates Services | \$ 42,850.00 |
| ETC Quality Acceptance Testing | \$ 4,090.00 |
| Project Expenses | \$ 500.00 |
| TOTAL | <u>\$47,440.00</u> |

The above scope of services will be provided on a fixed fee basis in accordance with our Town Engineer contract and will not exceed the estimated fees and allowances. If this proposed scope of services meets with your approval, we are ready to proceed at your direction. Should you have any questions, please contact me.

Sincerely,

DAVA & ASSOCIATES, INC.

Gordon Bowers, P.E.
Civil Engineer

Encl.

cc: Norm Davis, P.E. Public Works Director

Tonopah Storm Water Management Project, Phase 2 - CIP # E354.2
SCOPE OF PROFESSIONAL SERVICES AND FEES

This project, in general, consists of design services to prepare Phase 2 construction drawings and bid documents and provide construction period services as further described:

The basic service tasks the CONSULTANT will accomplish for this project are listed herein.

Task 1 – Base Mapping Services:..... Fixed Fee of \$2,360

The CONSULTANT will provide Base Mapping Services, as follows:

1. Blue Stake & Pothole Survey: Acquire new and available data applicable for the design of this project, including Blue Stake & sewer lateral pothole survey information.
2. Drainage Easement: Prepare description for drainage easement over property at 4124 Tonopah Drive.

Task 2 – Final Construction Drawings (100% Plans):..... Fixed Fee of \$5,760

The CONSULTANT will provide Final Construction Drawings as follows:

1. Profile Adjustment: Adjust storm drain profile per data received from sewer lateral pothole and updated blue stake survey.
2. Construction Drawings (100% Plans): Update the Phase 1 plan sheets per final design and Staff direction. Submit for reviews, complete design, and prepare 100% level plans.
3. Bid Documents: Update and revise Technical Specifications, Special Provisions, Bid Schedules, and Bid Proposal Packet. Submit and revise per Staff direction
4. Quantities and Final Cost Estimate: Determine final bid quantities and prepare Engineer’s Opinion of Probable Costs.
5. Utility Coordination: Continue to coordinate with utility companies and provide each utility with a copy of the final construction drawings for their information.

Task 3 – Bid & Award:..... Fixed Fee of \$1,980

The CONSULTANT will provide Bidding Services, as follows:

1. Pre-Bid Conference: Attend, conduct, and document the Pre-Bid Meeting, including preparation of agenda, sign-in sheets, and minutes.
2. Addenda: Prepare all required Addenda and submit to the Town for approval and distribution.
3. Bid Tabulation: Tabulate bids and verify lowest responsible bidder. Prepare letter of recommendation of award.

Task 4 – Construction Administration:..... Fixed Fee of \$7,300

The CONSULTANT will continue to provide Construction Administration for the duration of the construction, as follows:

1. Pre-Construction Conference: Attend, conduct, and document the Pre-Construction Meeting, including preparation of agenda, sign-in sheet, and minutes. Review contractor’s preliminary schedule and all regular updates to the construction schedule.
2. Submittals: Review shop drawings, material submittals, and other data as required and submitted by the Contractor, for compliance with design concepts. Maintain a submittal log.
3. Professional Design Support: During construction, provide professional services to facilitate and enable construction to be accomplished in conformance to the construction drawings, specifications, and other contract documents. Clarify and/or

interpret construction contract documents, when requested by the contractor and/or the Town.

4. RFI Review: Consider, evaluate and notify the Town of changes and/or alterations believed to be in the Town's best interest, due to actual field conditions encountered, etc. Provide supporting detail, including sketches, if needed, of the proposed change(s). Prepare and process any change orders, and/or any field orders that may be required. Issue instructions from the Town to the Contractor. Resolve issues in the best interests of the Town. Make recommendations to the Town on corrective actions or contractual measures that may be exercised by the Owner
5. Contractor's Progress Payments: Review progress payments, based on degree of completion of the work. Prepare cover letter for the Progress Payment, recommending issuance of such payment(s) by the Town. Copy the contractor on all pay recommendations letters.

Task 5 – Construction Observation & Coordination:..... Fixed Fee of \$5,800

The CONSULTANT will provide a qualified construction observer and perform Construction Observation, as follows:

1. Observation & Coordination: Develop working relationships and act as the liaison for the Town with the Contractor. Conduct timely, on-site construction observation to monitor the progress and process of ongoing and completed construction work, on an as-needed basis, to determine and certify compliance in accordance with the construction contract documents. Coordinate with the Contractor as to schedule for staking. Coordinate with utility companies
2. Quality Acceptance Testing (QA): Collect and review test and re-test results from the Contractor. Such test results will include, but not be limited to: densities, gradations, plasticity indexes, proctors, marshals, cylinder compression breaks, oil content, and laboratory tests. Provide on-call verification testing using our Sub-Consultant, Engineering Testing Consultants (ETC).
3. Construction Progress Meetings: Conduct regularly scheduled construction progress meetings with interested parties to provide close coordination and to verify Contractor's understanding of each aspect of the work, and to discuss project progress and issues. Prepare meeting notes for each meeting and distribute to all concerned parties.

Task 6 – Construction Surveying: Fixed Fee of \$9,500

The CONSULTANT will provide the following survey services, including construction stakes, lines and grades in conformance with the MAG Section 105.8 and the project specifications, as follows:

1. Locate, check and confirm control. Provide project control. Collect and calculate survey data, as needed.
2. Provide removal limits. Provide vertical control for staking of pavement replacement removal depth
3. Provide vertical and horizontal control for staking for storm drain pipe, junction and access location, and inlet structures.
4. Provide vertical and horizontal control for staking of roadway, subgrade, and ABC grade control.
5. Provide horizontal limits of inlet and outlet riprap.

Task 7 – Project Close-Out: Record Documents: Fixed Fee of \$7,590

The CONSULTANT will provide Project Close-Out Services, as follows:

1. As-Built Survey: Field surveys to collect measurements of completed construction items.
2. Final Acceptance: Perform final observations with Town and Contractor personnel and develop the "punch list" of deficiencies and incomplete work that needs to be corrected and finished for final acceptance and release of retention. Upon the contractor's completion of all punch list items, the CONSULTANT will conduct a final inspection to ensure and verify all punch list items are complete and prepare a recommendation of final acceptance letter to the Town.
3. Final Quantities: Determine final contract quantities.
4. Project Documentation and Record Drawings: Prepare an "Engineer's Certification" that all work has been completed in substantial conformance with the plans, specifications, and contract documents, including modifications to reflect shop drawing review, substitutions, clarifications, and change orders. Prepare and certify reproducible "Record Drawings" (one 36" x 24" Mylar set and one set of the scanned Mylar images in Town-approved digital formats) showing the "as-built" condition of the work for submission to the Town for their permanent records. Submit all planimetric and contour/dtm data used to develop the final project to the Town in DWG or DXF format.

Task 8 – Record of Survey: Fixed Fee of \$2,560

The CONSULTANT will provide the following survey services for the preparation of a Record of Survey and record, as follows:

1. Locate and establish location of record monuments for roadway alignment at PC and PT's.
2. Preparation of a Record of Survey identifying horizontal location of alignment monuments.
3. Submit Record of Survey for review, adjust per Town direction, and record once approved.

Task – Project Expenses Allowance Not to Exceed \$4,590

The CONSULTANT will have direct project expenses including, but not limited to: sub-consultant fees, printing, copying, submittal, review, shipping, permitting fees and other related expenses. These direct project expenses will be billed at actual cost with a 10% markup.

| | |
|------------------------------------|-----------------|
| TOTAL Tasks: | \$42,850 |
| Total Sub-Consultant: | \$ 4,090 |
| Total Expenses | \$ 500 |
| Total | \$47,440 |

Services provided shall be in conformance with:

1. this agreement, and all amendments thereof,
2. Dava & Associates, Inc. Town Engineer Services Contract; and
3. Town Code, specifically, but not limited to, Chapter 16 Engineering (<http://www.pvaz.net/Index.aspx?page=274>); and
4. hence, the Maricopa Association of Governments (MAG) Uniform Standard Specifications and Details for Public Works Construction, latest edition, including latest revisions and supplements (<http://www.mag.maricopa.gov/publications.cms>); and
5. the Town of Prescott Valley, Public Works Department, Engineering Division Design and Construction Standards and Specifications (<http://www.pvaz.net/Index.aspx?page=261>)
6. All applicable local, state, and federal laws and regulations.