

DAVA

PLANNING
ENGINEERING
SURVEYING

& ASSOCIATES, INC.

310 East Union Street
Prescott, AZ 86303

(928) 778-7587

FAX: (928) 778-1047
www.davacivil.com

January 28, 2014

374ENTPW/PRO

Norm Davis, P.E.
Public Works Director
7501 E. Civic Circle
Prescott Valley, AZ 86314

Dear Mr. Davis:

RE: PROPOSAL - DESIGN PERIOD ENGINEERING SERVICES
Enterprise Parkway Improvement Project - Valley Road to State Route 69

Dava & Associates, Inc. is pleased to provide this proposal for design period engineering services for the Enterprise Parkway Improvement Project. Our propose work scope is enclosed with the following estimated maximum fees summarized below:

D&A Design Period Services	\$51,250.00
Sub-Consultant Services (Fees)	\$17,110.00
Sub-Consultant Services (Allowance)	\$11,000.00
Reimbursable Expenses	<u>\$ 1,100.00</u>
Design Period Total	\$80,460.00

The above scope of services will be provided on a fixed fee basis in accordance with our Town Engineer contract. 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.

SCOPE OF SERVICES AND FEES

Enterprise Parkway Improvement Project, CIP# E364

This project, in general, consists of:

Construction of roadway improvements to extend Enterprise Parkway east of Superior Industries and Lockheed Martin to connect Valley Road with State Route 69 (SR 69) including deceleration/acceleration lanes at SR 69. The basic service tasks the CONSULTANT will accomplish for this project are listed herein.

Task 1 – Base Mapping Services:.....Fixed Fee of \$18,850

The CONSULTANT will provide Base Mapping Services, as follows:

1. Data Acquisition: Acquire new and available data applicable for the design of this project, including GIS, Preliminary Plans, Blue Stake & Other Information. Review preliminary plans; acquire existing easement and right of way documents; ROW Maps; available GIS information, available as-built or record drawings, available field markings for blue stake etc. applicable to this project.
2. Arizona Department of Transportation R/w Permit: Initiate contact with the Prescott District Office for application of right of way survey permit along State Route 69. Prepare and submit application for permit.
3. Utilities: Acquire new utility information applicable to this project. Coordinate this project with all the utility entities. Survey available bluestake for all underground utilities to verify location, as applicable. Survey above ground utility facilities.
4. Right of Way Survey: Provide boundary and right of way verification in appropriate level of detail to supplement the available GIS information collected previously. Locate, confirm, and tie into at least two benchmarks. Locate existing property pins. Prepare property description for acquisition of Enterprise Parkway right of way.
5. Design Survey: Provide topographic survey in appropriate level of detail to supplement the available GIS and utilities information collected previously. Tie into at least two benchmarks. Locate visible surface features. Cross section existing roadway subgrade; identifying existing dimensions, elevations, slopes, fencing, and as-built features. Set construction control monuments every 800 feet or so along alignment.
6. Base Map: Prepare base map with existing conditions and structures added since original 2008 mapping. Confirm project is in TOPV 2008 mapping datum or translate project into TOPV 2008 mapping datum. Include benchmarks, found pins, property lines, fencing, easements, rights-of-way, and encroachments, as well as existing utility information.

Task 2 – Preliminary Design Services (60% Plans):Fixed Fee of \$13,170

The CONSULTANT will provide Preliminary Design Services, as follows:

1. Meetings: Meet with Town staff and other entities to refine the scope, acquire data, identify special conditions, and schedule.
2. Preliminary Plans: Prepare initial plan & profile sheets based on original subgrade plans prepared by Claycomb-Rockwell Associates to reflect the current project conditions, limits, and alignment adjustments per the information acquired in Task 1 and Step 1 of Task 2. Review existing culvert placement and determine capacity in relation to likely storm water discharge. Prepare preliminary plans to 60% level of completeness. The preliminary plans shall include the following sheets:

- a. Cover: prepare new cover sheet that includes, vicinity map, project drawing with areas defined with sheet page numbers, legend, contacts list, table of contents, approval signature lines, etc.
 - b. Geometrics: Revise geometrics and prepare geometric sheet to reflect alignment adjustments, if any.
 - c. General Notes: Update general notes to reflect current ToPV construction notes.
 - d. Details: Include latest revision of ToPV Standard Details and other details that may be necessary.
 - e. Erosion Control Plan: Prepare sheets summarizing the overall project, with erosion control measures as necessary.
 - f. Plan and Profile Sheets: Prepare plan and profile sheets for the roadway improvements to reflect 2008 datum and other improvements made since original project.
3. SR 69 Widening Plans: Prepare widening plans for SR 69 to add decel/accel lanes at Enterprise Pkwy connection to SR 69.
 4. Quantities and Preliminary Cost Estimate: Determine preliminary construction quantities for preliminary cost estimation.
 5. Submittals: Submit the preliminary plans to the Town of Prescott Valley. Address Town review comments; make corrections as required; and resubmit as necessary until approved.
 6. Utilities Coordination: Continue to coordinate with utilities and provide each utility with a copy of the preliminary design plans for their review. Receive utility company input and address their comments and concerns. Field survey to mark potential alignment and conflicts; collect location of existing facilities as marked or located by the utility companies. Minimize, as feasible, the relocation of all utilities during preliminary design.
 7. ADOT Submittal; Submit SR 69 widening plans to ADOT District Office for Enterprise Pkwy connection to SR 69; Evaluate possible redesign requests and advise ToPV on potential costs. *Note: Proposed scope does not anticipate or cover hydrological studies to prove or confirm established discharge to ADOT right of way.*
 8. Traffic Impact Analysis: Lee Engineering will provide a preliminary analysis and report on current and future traffic generators to establish traffic volumes using the new route into Valley Road to and from SR 69. The findings will be used to provide a recommended pavement structural section and will become the foundation of a Traffic Impact Analysis required by ADOT. The study will include a Traffic Signal Needs Study, a planning analysis on when a signal would likely be warranted. A copy of the Lee Engineering Design Services proposal for this step is included with this scope.
 9. Geotechnical Report: Engineering & Testing Consultants, Inc. (ETC) will complete soil borings, analyze soil characteristics, and prepare a report with recommendations for pavement structural sections for opening year and future use. The analysis will depend on the results of a traffic impact analysis provided under Step 8. A copy of the ETC Design Services proposal is included with this scope.

Task 3 – Final Design Services (90% Plans):..... Fixed Fee of \$8,940

The CONSULTANT will provide Final Design Services, as follows:

1. Final Design Plans (90%): Update the preliminary plan sheets per the approved preliminary design plans and Staff direction. Complete final design and prepare 90% level plans. The 90% level plans will include other sheets as noted in the Preliminary Plan Review:
2. SR 69 Widening Plans: Adjust widening plans for SR 69 incorporating ADOT District Office review comments as approved by ToPV.
3. Bid Documents: Prepare draft Technical Specifications, Special Provisions, and Bid Schedules.
4. Provide submittals to the Town for review. Address review comments and make corrections. Resubmit with the original comments for approval.
5. Utilities Coordination: Continue to coordinate with utilities and provide each utility with a copy of the 90% design plans for their use. Coordinate with utility companies to

facilitate any required utility relocation before the project begins. Provide information to the utility companies, as needed for relocation of utilities if necessary.

6. Quantities and Cost Estimate: Determine quantities and Provide Detailed Opinion of Probable Cost (Engineer's Estimate).
7. ADOT Submittal: Submit 90% SR 69 Widening Plans to ADOT District Office for final review and comment.
8. Meetings: Meet with Town staff and other entities to update progress; address plan review comments; identify special conditions; and refine construction schedule.
9. Traffic Impact Analysis: It is known that the Arizona Department of Transportation will require a Traffic Impact Analysis meeting the requirements of their Traffic Engineering Policies, Guidelines, and Procedures Section 240 (PGP-240). Lee Engineering will meet with ADOT Staff to determine the final requirements for the PGP-240 Analysis, which could vary widely depending on the initial prediction of opening day traffic volumes. The results of their discussion will reveal the time and effort necessary to analyze and produce a document that will satisfy ADOT's concerns and requirements for Enterprise Pkwy to connect to the state highway system. Should it become necessary to include additional analyses to satisfy these requirements, an allowance has been included with this scope to compensate for that effort.

Task 4 – Final Construction Drawings (100% Plans):..... Fixed Fee of \$6,890

The CONSULTANT will provide Final Construction Drawings as follows:

1. Construction Drawings (100% Plans): Update the final plan sheets per the approved final design plans and Staff direction. Complete design and prepare 100% level plans.
2. SR 69 Widening Plans: Adjust widening plans for SR 69 incorporating ADOT District Office final review comments as approved by ToPV.
3. Bid Documents: Update and revise Technical Specifications, Special Provisions, and Bid Schedules per Staff direction.
4. Provide submittals to the Town for review. Make final corrections and resubmit, with the original comments, for approval.
5. Utilities Coordination: Continue to coordinate with utilities and provide each utility with a copy of the final construction drawings for their information.
6. Quantities and Final Cost Estimate: Determine Final Quantities and provide detailed Opinion of Probable Cost (Engineer's Estimate).
7. ADOT Submittal: Submit final SR 69 Widening Plans to ADOT District Office.
8. Meetings: Meet with Town staff and other entities to update progress; address plan review comments; identify special conditions; and refine construction schedule.

Task 5 – Bidding Services Task:..... Fixed Fee of \$3,400

The CONSULTANT will provide Bidding Services, as follows:

1. Pre-Bid Conference: attend, conduct, and document the Pre-Bid Conference, 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.
4. Coordination and Meetings: Coordination and administration of project. Meetings with Town staff to address construction issues, schedule, and budget.

Project Expenses Allowance Not to Exceed \$29,210

The CONSULTANT will have direct project expenses including, but not limited to: sub-consultant fees and allowances, printing, copying, submittal, review, shipping, permitting fees and other related expenses. These direct project expenses are excluded from the fees for each task and will be billed at actual cost with a 10% markup in accordance with our Town Engineer Services contract.

TOTAL D&A Services:	\$51,250
Sub-Consultants Fees – Traffic Impact	\$12,870
Sub-Consultants Fees – Soils/Pavement.....	\$ 4,240
Sub-Consultants Allowance – Additional Study Criteria	\$11,000
Expenses:.....	\$ 1,100
Total Expenses	\$29,210
TOTAL:	\$80,460

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.