

**REQUEST FOR PROPOSAL AND QUALIFICATIONS
ENGINEERING DESIGN SERVICES**

For

**ZONE 16 TANK, VIRGINIA STREET AND HAISLEY ROAD 12" WATER
MAIN AND VIRGINIA STREET PUMP STATION**

Public Works Department

Telephone: (928) 777-1130

Fax: (928) 771-5929

Due Date: 8/27/2015

REQUEST FOR PROPOSAL AND QUALIFICATIONS

ZONE 16 TANK, VIRGINIA STREET AND HAISLEY ROAD 12" WATER MAIN AND VIRGINIA STREET PUMP STATION

The City of Prescott, Arizona, Requests Proposals and Qualifications (RFP) from design professionals/engineering firms to provide professional engineering design services. Proposals must be received before 2:00 PM on Thursday **August 27, 2015**, City Clerk's Office, 201 S. Cortez Street, Prescott, Arizona 86303, at which time all proposals will be publicly opened.

A **MANDATORY** pre-proposal conference will be held at the Public Works conference room, 433 N. Virginia Street, Prescott, AZ 86301 at 10:00 AM on August 14, 2015.

Proposals must conform to this RFP and the attached Project Scoping Report available at the office of the Public Works Director, 433 N Virginia St, 928-777-1130 or the City of Prescott website at <http://www.prescott-az.gov/business/bids/>.

Any proposals received at or after 2:00 PM on the above stated date will be returned unopened. The City of Prescott reserves the right to reject any and all proposals and the City assumes no liability for the cost of preparing a response to this request.

The outside of the submittal envelope shall indicate the name and address of the respondent, shall be addressed to the City Clerk, City of Prescott, at the above address and shall be marked:
Request for Proposal Submittal: Zone 16 Tank, Virginia Street and Haisley Road 12" Water Main and Virginia Street Pump Station.



Kenneth Comstock, Contract Specialist
Published: 2TC 7/26/15 and 8/2/15

A. DESCRIPTION OF WORK

The City of Prescott will be reviewing the proposals and qualifications of engineering firms for the purpose of entering into contracts for the following services:

Haisley New Tank: This project is to replace the existing .15MG tank located in the Hidden Valley Ranch Subdivision with a new 1.00MG tank. The project would preferably replace the tank in its existing location. An alternate phase could be to locate and purchase land for the installation of a new 1.25 million gallon water reservoir.

Haisley A (Virginia) Pump Station Rehabilitation: This project is to upgrade the existing pump station from 2 pumps supplying 265gpm each to 3 pumps supplying 2100gpm to provide required domestic capacity and fire flows.

12" Line Virginia St. – Virginia St. Pump Station to Foothills Pump Station: This project is to upgrade 730 LF of the existing 6" and 8" water mains to a 12" water main, that connect the Virginia St. pump station to the Foothills pump station. The Virginia St. P.S. is located at the south end of Virginia St. and the Foothills P.S. is located at the intersection of Senator Hwy. and Haisley Rd.

12" Line Haisley Road - An existing 8-inch water main in Haisley Road, from Senator Highway to Valley Ranch Circle, will be replaced with 3,080 LF of new 12" water main. The Haisley Road 12" main will tie into an existing 12" main located in Senator Highway at the junction of the roads. Because of the poor condition of Haisley Road, the City anticipates full road replacement as a result of the utility construction.

All appurtenances will be included in the design for a fully functioning system from the water main connections, pump station, water tank and associated structures. Water service lines will include yokes, boxes and connections to existing service lines. New easements may be needed around the water tank site, along with public relations and multiple public meetings.

Additional information is included in the attached Project Scoping Report.

B. SUBMITTAL

Sealed Proposals and Statements of Qualifications will be received before 2:00 PM on Thursday **August 27, 2015**, at the City Clerk's Office, 201 South Cortez Street, Prescott Arizona 86303, at which time all submittals will be publicly opened. Any submittals received at or after 2:00 PM on the above-stated date will be returned unopened.

Proposals shall be submitted in seven (7 copies), and must conform to the attached Project Scoping Report dated July 22, 2015. The City of Prescott reserves the right to reject any and all statements and the City assumes no liability for the cost of preparing a response to this request.

The outside of the proposal envelope shall indicate the name and address of the respondent, shall be addressed to the City Clerk, City of Prescott at the above address and shall be marked: **Proposal and Statement of Qualifications: Zone 16 Tank, Virginia Street and Haisley Road 12" Water Main and Virginia Street Pump Station**

C. EVALUATION AND FORMAT OF PROPOSALS AND STATEMENTS OF QUALIFICATIONS;

C.1 EVALUATION

Proposals and Statements of Qualifications will be evaluated by a Review Committee appointed by the City for this project according to the following criteria, with weighting as indicated:

- 1) Specific experience of the firm with comparable pump station and water designs in municipalities within the State of Arizona - 20%
- 2) Experience and performance of the proposed project team and availability, within current and anticipated workload, for this project - 25%
- 3) Proposed project approach, to include a detailed discussion and identification of areas that will require special attention - 25%
- 4) Overall quality of the Proposal, evidencing interest in the project - 15%
- 5) Knowledge and experience with City of Prescott rules, regulations, procedures and local / regional construction conditions including subsurface and geophysical conditions - 15%

C.2 STATEMENTS OF QUALIFICATIONS

The statement shall be limited to no more than 5 pages, and include the following:

- Location of the firm
- Names of the team members proposed for the project
- A list of similar projects in which the team has participated, and contact information
- A brief resume of each of the team members describing their experience and background
- A summary of the current workload of key team members and list of their notable projects
- A list of all sub-consultants proposed to be utilized on the project and a description of their roles

Five (5) additional pages of appendices are allowed and may include graphs, charts, photos, or additional resumes. The letter of transmittal shall not exceed two pages and is exclusive of the 5/5 page limitation for the Statement of Qualifications.

C.3 PROPOSAL

The proposal shall be limited to no more than 5 pages, and include the following:

- A tentative schedule for completion of the project
- A proposal that demonstrates that the firm understands of the project purpose and scope, and a description of how the firm would approach, manage, and complete

the project. Refer to the attached Project Scoping Report for the City's expectations.

- Identify any suggestions to improve the project and/or schedule of delivery for the project.
- Cost Proposals will not be accepted with the initial response to this RFP. Submittal of a cost proposal with this RFP will automatically disqualify the submitting firm. Once selected, the City will negotiate a final scope of work and cost proposal with the successful firm.

Three (3) additional pages of appendices are allowed and may include graphs, charts, photos, or any additional information that would aid the review team in ranking this submittal.

D. SHORTLIST AND INTERVIEWS

Following evaluation of the Proposals and Statements of Qualifications, a shortlist of up to five (0-5) firms will be determined based upon the composite score of Review Committee members. A presentation-interview session with each of the top ranked firm(s) will comprise the second half of the evaluation/selection process, if deemed necessary by the City. In the presentation-interviews, candidate firms will be required to demonstrate their understanding and familiarity with the scope, location, and other aspects of this project. The Review Committee will have the opportunity to discuss questions regarding the firms' submittal and presentation at that time. Criteria and weighting for evaluation of the presentation-interviews are as follows:

- 1) Observation of existing conditions and grasp of key project information - 25%
- 2) Identification of issues or problems (solutions) that will need to be considered - 25%
- 3) Approach to project reports, information gathering and analysis, report formatting, including innovative ideas - 35%
- 4) Experience and capabilities with public meeting's and community outreach - 15%

It is highly recommended that candidate firms visit the project site(s).

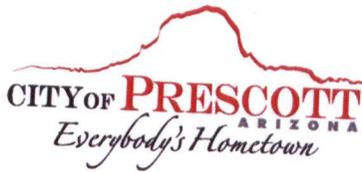
The City reserves the right to proceed to Final Ranking based on the Proposals and Statements of Qualifications submitted without conducting Interviews.

E. FINAL RANKING AND CONTRACT NEGOTIATION

The Review Committee members will individually evaluate the presentation-interviews of each of the candidate firm(s) and rank them according to the aforementioned criteria. The Review Committee will also consider information from the Proposals and Statements of Qualifications in their final ranking of firm(s). The Review Committee will then formulate a consensus ranking, notify each of the candidate firms of the final rankings and meet with the top-ranked firm for the purpose of initiating contract negotiations. If negotiations are

unsuccessful with the top ranked firm, the City will terminate negotiation efforts and open negotiations with the 2nd ranked firm. This process will continue until negotiation efforts are successful. The final list will remain in effect for a period of twelve months from the date of issuance by the City. The City also reserves the right to reject all submittals and readvertise the project should the City not reach agreement on the terms of the contract with the selected firm(s).

Approval of the City Council will be required for award of a contract for performance of the services described herein.



Public Works Department

433 N. Virginia Street
Prescott AZ 86301
928-777-1130

Project Scoping Report July 22, 2015

Project Description

Project Name: Zone 16 Tank, Virginia St & Haisley Rd 12-inch
Water Main and Virginia St Pump Station
CIP Number: CIP15-036
Project Type: Water
Project Account No.(s) 7007810 8930 16016, 71G7810 8930 16016
Funding Sources: Water Fund
Phase Schedule:

	Begin	End
PS&E	FY16	FY16
ROW	FY16	FY16
Construction	FY16	FY17

Project Team

Project Review Team:

- Project Manager – Ben Burns
- Program Manager – Steve Orosz
- City Engineer– Charles Andrews
- Transportation Engineering – Ian Mattingly
- Utilities Engineering – Bruce Canavan
- Drainage Engineering – Mark DuBroy
- Utilities Operations – Craig Dotseth

Goal Statement

- The project goal is to deliver a quality project on time that replaces approximately 3,810 LF of 6-inch and 8-inch water main with 12-inch water main on Virginia Street, at the south termination of the road, and Haisley Rd, from

Senator Hwy to Valley Ranch Cir. A new pump station will be constructed on Virginia St., and the Zone 16 Water Tank will be replaced.

Project Description

Haisley New Tank: This project is to replace the existing 0.15MG tank located in the Hidden Valley Ranch Subdivision with a new 1.00MG tank. The project would preferably replace the tank in its existing location. An alternate phase could be to locate and purchase land for the installation of a new 1.25 million gallon water reservoir.

Haisley A (Virginia) Pump Station Rehabilitation: This project is to upgrade the existing pump station from 2 pumps supplying 265 gpm each to 3 pumps supplying 2100gpm to provide required domestic capacity and fire flows.

12" Line Virginia St. – Virginia St. Pump Station to Foothills Pump Station: This project is to upgrade 730 LF of the existing 6" and 8" water mains to a 12" water main, that connect the Virginia St. pump station to the Foothills pump station. The Virginia St. P.S. is located at the south end of Virginia St. and the Foothills P.S. is located at the intersection of Senator Hwy. and Haisley Rd.

12" Line Haisley Road - An existing 8-inch water main in Haisley Road, from Senator Highway to Valley Ranch Circle, will be replaced with 3,080 LF of new 12" water main. The Haisley Road 12" main will tie into an existing 12" main located in Senator Highway at the junction of the roads. Because of the poor condition of Haisley Road, the City anticipates full road replacement as a result of the utility construction.

All appurtenances will be included in the design for a fully functioning system from the water main connections, pump station, water tank and associated structures. Water service lines will include yokes, boxes and connections to existing service lines. New easements may be needed around the water tank site, along with public relations and multiple public meetings.

Project Limits - Existing Conditions:

- The project limit location is from the south termination of Virginia Street at the pump station, to 730 LF south through Acker Park to the property line of Prescott Christian Church (PCC). A new 12-inch Water Main will be ready for connection in the church property. Continue with a new 12" from the south property of the PCC and connect to the existing 12" in Senator Highway. At the junction of Haisley Road and Senator Highway, a new 12-inch main will be designed for connection to an existing 12-inch main, and will run in a southerly direction down Haisley Road for 3,080 LF, to tie an existing 8-inch

water main at the intersection of Haisley Road and Valley Ranch Circle. Because of the poor condition of Haisley Road, the City anticipates a full road reconstruction. Water services for parcels along this portion of road will need to be replaced. The existing 0.15 million gallon Zone 16 water tank, inside of Hidden Valley Ranch, will be replaced with a new 1.00 million gallon water tank.

- See attached map

Associated Project Studies:

- Prescott Christian Church Construction (Available to selected consultant)
- City of Prescott Water Distribution System Model (Available to selected consultant)

Adjacent Public CIP Projects:

- Mt. Vernon Improvement Project Completed (Available to selected consultant)
- Senator Highway Improvement Plans Completed (Available to selected consultant)
- Virginia Street Pump Station original as-builts (Available to selected consultant)

Adjacent Private Development Projects:

- Prescott Christina Church Water and Sewer Extension (Available to selected consultant)
- Water Line Extension Along Haisley Road (Available to selected consultant)
- Summit Point Estates (Available to selected consultant)
- Hidden Valley Ranch Phase 2 (Available to selected consultant)
- Hidden Valley Ranch Phase 3 (Available to selected consultant)
- Hidden Valley Ranch Phase 4 (Available to selected consultant)
- Hidden Valley Ranch Phase 5 (Available to selected consultant)
- Hidden Valley Ranch Phase 8 (Available to selected consultant)
- Hidden Valley Ranch Phase 15 (Available to selected consultant)

Public Involvement:

- At least three public meetings are anticipated with a high level of public outreach, notices and mailings.
- The public will be very concerned with the water tank looks, size and height; be proactive in design and sensitivity to neighborhood impact.

- Coordination with the Prescott Christian Church may be critical because of on-going improvements in the parcel.
- Potential Council Presentation

Primary Technical / Administrative Issues

- Maintain the existing pump station in service during construction.
- Maintain service and pressure to the zone while tank is out of service.

Existing Utilities:

- Existing undersize Water Mains are present in all areas to be improved. An 8-inch Sewer Main runs parallel with the water main from Prescott Christian Church through the Virginia Street Pump Station Area at the south end of Virginia Street. The Hidden Valley Ranch area will need to maintain water service while the tank is replaced. All utilities (private and public) will need to be potholed to verify horizontal and vertical location. Locations to be identified on the improvement plans and identify all conflicts anticipated within project alignments.

Utility Relocation Issues:

- Relocations will be determined during design.

Design:

Roadway Design

- Haisley Road may need to be rebuilt from curb to curb because of the poor condition of the road.

Drainage Design

- Because of the construction required in Haisley Road, drainage design should be considered for more effective water transport during storm events. This may also involve implementation of best management practices along the creek near the Virginia Street Pump Station, along Haisley Road and the hillside surrounding the Zone 16 water tank.
- In general, supply a complete drainage hydrologic and hydraulic analysis for the proposed pump station site, access road and tank site. Provide design for appropriate conveyance and detention facilities in accordance with City of Prescott's drainage criteria manual standards.

Sewer Design

- None unless conflicts are encountered at crossings. The City will provide the CCTV to determine tap locations at the main.

Water Design

- A design memorandum will need to be completed for regulatory approval. The City will provide the hydraulic analysis.

Geotechnical Design and Recommendations

- Consultant to retain a qualified geotechnical firm to complete a subsurface investigation; and provide recommendations for site work to include road sub-grade analysis, water tank foundation analysis and pipeline.

Private Development Partners:

- N/A

Right-of-Way (R.O.W.) and Easements:

- The Zone 16 water tank site may need to be enlarged if the existing site is inadequate; determine if additional land is required for upgrades, evaluate alternatives and make recommendations.
- A TCE/Right of Entry or PUE may need to be obtained from the Prescott Christian Church.
- A TCE/Right of Entry may need to be obtained from parcel owners through the project alignment. Consultant to evaluate and advise.
- Consultant to provide research, surveying and legal descriptions for the City's use in acquiring new easements.

Environmental Constraints – Required Permits:

Subsurface Soils and Geologic Hazard Areas –

- Subsurface soils are expected to be a variety of alluvial deposits, ranging in size from clays to cobbles, with bedrock in some locations. It is anticipated that high groundwater could be a factor along Virginia Street. Decomposed granite, granite and blue granite may be encountered around the tank.

100-Year Floodplain –

- The Virginia Street Pump Station is near a seasonal creek.
- Water lines and Sewer lines cross the creek at the Virginia Street Pump Station site.

Railroad – N/A

ADOT – N/A

AZDEQ – Yavapai County Environmental Services

- Consultant will acquire all ADEQ permits from Yavapai County Environmental Services (YCES), including the Approval to Construct, Approval to Operate, and the Engineer's Certificate of Completion.
- The project will need to obtain an AzPDES permit with proper erosion control BMPs that will need to be incorporated into the plans and construction methods.
- Dust Control measures will need to be incorporated into the construction methods and a City construction permit will be required.

Yavapai County – N/A

Other Municipalities/Agencies/Stakeholders – N/A

Archaeological/Cultural Issues –

- An archaeological pre-determination will be required for this project, along with an archaeological survey, if deemed necessary in the pre-determination.

Endangered Species Act (ESA) –

- Consultant will be required to do a biological pre-determination for this project, along with an environmental survey.

Required Environmental Permits/Approvals -

- NPDES Permit – SWPPP and NOI

Construction Issues:

- Minimizing service disruptions during construction.
- Coordinate with City Water Operations to pre determine water outages prior to construction.
- Construct a new water tank to be astatically pleasing to the public.
- Maintaining traffic control and access for adjacent residents.
- Thorough coordination with private utility companies.
- Pump Station site work.

- New Tank site work.

Miscellaneous Issues:

City Liability and Risk Assessment

- Failures in the distribution main have caused avoidable maintenance expense.
- Regulatory mandated water loss requirements through the Arizona Department of Water Resources.
- Water loss and disruption of service to city customers in the event of a failure.
- Substandard water volume for customer demands.

Goal Statement

The project goal is to deliver a quality project on time and within budget that accomplishes the following:

1. A project to provide full build out pressure and volume capacity.
2. Design and construct a new water main; pump station and tank.
3. Provide full pavement reconstruction for Haisley Road.
4. Provide permanent BMPs to remove nutrients and E coli in the water shed.

Major Milestones

<u>Milestone</u>	<u>Tentative Date</u>
Advertise RFP/RSOQ	July 2015
Award Professional Services Contract 2015	September
Begin Construction	FY 17
Construction Complete	FY17

Anticipated Work Products

Alignment Plan & Phasing Study
 Material Evaluation
 Construction Plans and Specifications
 Engineer's Estimate
 Geotechnical Report
 Technical Design Report (Drainage, Water, and Structural Reports)
 Project Schedule
 Environmental/Cultural Reports
 Archeological Report
 Easements and Acquisition Plan
 Zone 16 system wide pressure analysis
 SCADA Design and Implementation
 Others as may be required

<u>Required Permits</u>	<u>Submittal Date</u>	<u>Approval Date</u>
<input type="checkbox"/> COE-404	TBD	TBD
<input type="checkbox"/> AzPDES Permit	TBD	TBD
<input type="checkbox"/> AZDOT Permit	TBD	TBD
<input type="checkbox"/> YCFCD Permit	TBD	TBD
<input type="checkbox"/> YC ROW Permit	TBD	TBD
<input type="checkbox"/> County/City Dust Control	TBD	TBD
<input type="checkbox"/> NEPA	TBD	TBD

Design Deliverables

1. **Project Kick-Off Meeting.** The Engineer will be required to attend a kick-off meeting with City staff at a time and on a date amenable to both parties. At that meeting, the Engineer will be required to provide a detailed design schedule, a list of the team members who will be involved in the project, along with their phone numbers and e-mail addresses, an org. chart showing the relationship of all of the team members and any submittals required contractually.
2. **Design Schedule.** The Engineer will be required to submit a detailed schedule depicting all major tasks and primary submittal dates for approval by the City. Thereafter, the Engineer shall submit monthly project schedule updates in the same format and shall highlight and provide justification for any changes to the approved schedule. The Engineer shall include 3 weeks for each of the City review periods.
3. **Preliminary Design Report and Preliminary Construction Cost Estimate.** Within 60 days of entering into a contract with the City of Prescott, the Engineer will be required to provide a set of preliminary alignment plans, a preliminary design report with major infrastructure

components sized and a preliminary cost estimate. An analysis of alternate design considerations shall be included in this submittal.

4. **Utility Review.** Concurrent with submittal to the City of the 30% design, the Engineer shall submit copies to the private utility companies (electric, cable, telephone, gas) for their comments and/or clearance letters. The Engineer will provide to the City copies of each of the transmittal letters to each of the utilities. If necessary, a meeting will be held between the Engineer and reviewing agencies to discuss the conceptual plan and construction scheduling. Based upon input from the 30% plans, the Engineer shall submit a revised design completion schedule.
5. **Utility Potholing.** The Engineer shall provide potholing to sufficiently establish the actual locations of all public and private utilities.
6. **Geotechnical Investigation and Recommendations.** As part of the scope of services of this project the awarded consultant shall retain a qualified geotechnical firm to complete a subsurface investigation; and provide recommendations for pipe bedding requirements, as well as maximum dry density and moisture content for backfill compaction requirements. The geotechnical report will be prepared to identify subsurface conditions and need for any special equipment for excavation. Backfill requirement for Arterial Streets typically requires Aggregate Base Coarse (ABC); however, it may be permissible to use native fill material for portions of the trench. At a minimum, Ten (10) soil borings up to eight (8) feet in depth will be performed and a geotechnical report will be prepared. Special attention should be taken around the Zone 16 Tank to establish subsurface soils structural parameters. Additional geotechnical research around the tank site may be required. Findings in the geotechnical report will be incorporated into the design and specifications.
7. **Preparation of Preliminary (30%) Design.** The conceptual design shall identify existing conditions, including: right-of-way and easements; topography; benchmarks; adjacent property lines; private property survey to determine tie in locations or areas to be designed around; existing pavement limits; proposed plan and profile pipe alignments; and all utilities (electric, gas, fiber, water, sewer, effluent, and storm drain) located within the project limits; and associated pump house and water tank structures. The conceptual design shall further identify any required additional easements/right-of-way; all existing water meters, water valves, sewer manholes and cleanouts and any other utility fixture or potential utility conflict, and any other efforts required to design and construct a quality

product. The design submittal shall include a detailed construction cost estimate.

In generating the specifications, the Engineer shall adhere to the City's boilerplate for technical specifications unless conditions require Special Provisions. ALL bid items SHALL be addressed in the technical provisions. Items NOT required for the project SHALL be deleted from the text. Any deviation(s) from the boilerplate shall be brought to the City's attention.

8. **Preparation of Preliminary (60%) Design.** The design shall identify existing conditions including: right-of-way and easements; topography; benchmarks; adjacent property lines; existing pavement limits; proposed plan and profile pipe alignments; and all utilities (electric, gas, fiber, water, sewer, and storm drain) located within the project limits. The design shall further identify any required additional easements/right-of-way; all existing water meters, water valves, sewer manholes and cleanouts and any other utility fixture or potential utility conflict, and any other efforts required to design and construct a quality product. The design submittal shall include a detailed construction cost estimate.

In generating the specifications, the Engineer shall adhere to the City's boilerplate for Technical Specifications unless conditions require Special Provisions. ALL bid items SHALL be addressed in the Technical Specifications or Special Provisions. Items NOT required for the project SHALL be deleted from the text. Any deviation(s) from the boilerplate shall be brought to the City's attention.

Review comments shall be solicited, received and addressed by the Engineer. Utility conflicts that were identified from the Utility Review shall be addressed with a detailed approach for mitigation of these conflicts and coordination with respective utility companies.

9. **60% Stakeholder/Public Meeting.** The Engineer will be responsible for coordinating public meetings. The Engineer shall prepare an agenda and exhibits for each public meeting and shall host such meetings and have sufficient staff available to respond to any nature of questions from the public.

Formats for individual meetings will be decided as scheduling of the meetings are determined. The Engineer shall prepare a newsletter publication for each public forum. The City shall be responsible for printing of such newsletters. The Engineer and the City will participate in

the public meeting and help the attendees understand the project, its limitations, the options considered, and other project aspects. Following the meeting, The Engineer shall meet with City staff to review the outcomes and will prepare the final pre-design report. This report will present the design that is to be carried out and will summarize the analyses and communications that led to the decisions

10. **Preparation of Pre-Final (90%) Plans, Specifications, and Estimate for Submittal to City and Utility Companies.** Final review comments shall be solicited, received, and addressed by the Engineer.

11. **Regulatory Agency Review.** It shall be the responsibility of the Engineer to prepare the application, plans, specifications, and design report for submittal by the City to YCES for review, respond to comments and obtain the "Approval to Construct". Any review fees assessed by the regulatory agency will be paid by the City. It will be the responsibility of the Engineer to include estimated time frames for the reviewing agency in the schedule.

12. **Preparation of Easement Legal Descriptions and Map/Drawings.** Engineer shall prepare all legal descriptions, maps and obtain all pertinent title reports for the acquisitions of additional easements required to construct the proposed improvements; this shall include new utility easements, temporary construction easements and right of entry easements. The Engineer should expect to obtain signatures for right of entry easements in all parcels affected by new service line installation for all phases of the design. In the event new utility easements are needed to construct the project, the Engineer shall provide two originals of detailed legal descriptions and maps/drawings, both stamped by a Registered Land Surveyor. The Engineer may be required to accompany the City (or their representative) at meeting(s) held with the affected property owner(s) to explain the need for the taking and its affect on the property. The Engineer will NOT be required to negotiate with the pertinent property owners for the acquisitions of any of the required easements but shall consult with the City in such events as may require negotiation. The City shall establish the offer and if needed, assist the engineering firm in obtaining signatures. A final easement map (record of survey) will be required which indicates new permanent easements required. The additional easements shall be staked prior to meetings with property owners. All obtained easements shall be submitted to the City for recording.

13. **Pre-Final (90%) Design Meeting.** A meeting will be held between the Engineer and the City to discuss any revisions or additional work required for generation of final (100%) plans and specifications.
14. **Final Concept Stakeholder/Public Meeting.** The final public meeting will be to present the final project plans. Formats for individual meetings will be decided as scheduling of the meetings are determined. The Engineer shall prepare a newsletter publication for each public forum. The City shall be responsible for printing of such newsletters. The Engineer and the City will participate in the public meeting and help the attendees understand the project, its limitations, the options considered, and other project aspects.
15. **Preparation of Final (100%) Plans, Specifications, Design Report, Bid Schedule and Engineers Estimate.** The final plans shall be prepared incorporating any adjustments or corrections made during the review of the pre-final plans. A set of final reproducible plans shall be provided on 3 mil Mylar and on disk (compatible with either MicroStation *.DGN or AUTOCAD *.DXF). A hard copy and disk of specifications, bid schedule, and engineers estimate, shall be submitted (compatible with Microsoft Word). Plans shall not be considered final until ADEQ (YCES) "Approval to Construct" is acquired. The Engineer will only be responsible for the technical provisions portion of the specifications, bidding schedule, and engineer's estimate. The City will prepare the formal contract documents.
16. **Construction Pre-Bid Meeting.** The Engineer shall attend the construction pre-bid meeting held by the City of Prescott to answer questions from prospective bidders. In the event an addendum or clarifications are required, the Engineer shall prepare the necessary changes to the plans and specifications and shall submit addendum items and clarifications to the City for inclusion of the bid packet. The engineer is not required to write the minutes however shall review the meeting minutes for accuracy.
17. **Pre-Construction Meeting.** The Engineer shall attend the pre-construction meeting held by the City of Prescott to answer questions from the construction contractor. The Engineer shall be prepared to address any design questions presented by the contractor.

18. **Progress Meetings.** In addition to those meetings indicated above, the Engineer shall attend the weekly construction meeting with City staff (as needed) to discuss the project status and any pertinent issues.
19. **Benchmarks.** The Engineer will be responsible for finding or setting sufficient temporary benchmarks in the field to allow the project to be constructed in accordance with the design. Permanent benchmarks may be included in some projects.
20. **Provision of Post-Design Consultation Services.** The Engineer will be retained to provide consultation assistance during construction, relative to questions pertaining to their design. Construction meeting attendance, technical submittals, RFI's, as-built coordination and preparation, quality assurance/control, project closeout, certification, and other construction phase engineering services shall be anticipated functions of the engineer of record.
21. **Meeting Minutes.** The Engineer shall be responsible for recording and preparing accurate minutes from all meetings involved with the project. A hard copy and disk of the minutes shall be submitted to the Public Works Department. The disk must be compatible with Microsoft Word.

Miscellaneous Other Deliverables

- Design memorandum to include hydraulic analysis (hydraulic analysis to be provided by the City)
- Other as may be required

Post-Design Construction Services

- Submittal / RFI reviews
- As-Built surveying and final mylar preparation; As-built certification
- Attending construction meetings
- Completion of Engineers Certificate of Completion including test packet
- Construction to be managed and inspected by City personnel. Consultant to be retained as Engineer of Record during construction phase.

Approvals

City Engineer Charles Andrews Date 7-28-15
Charles Andrews, PE

Program Development Manager Stephen Drosz Date 7-24-15
Stephen Drosz, PE

Infrastructure Manager Craig Dotsett Date 7-24-15
Craig Dotsett

Public Works Director Henry Hash Date 7-27-15
Henry Hash, PE

City of Prescott
CIP Design Submittal Requirements

In order to maintain a consistent and effective review of the plans, it is important for the necessary information to be provided as follows:

30% Submittal

1. Preliminary water design report
2. Preliminary drainage design report
3. Preliminary geotechnical report
4. Environmental permits and schedule for submittals
5. Preliminary pavement recommendations
6. Aerial photograph with catch points & preliminary right-of-way superimposed (1:50) scale
7. Preliminary plan & profile for all required facilities – road, water, storm sewer
8. Preliminary catch points
9. Alternative drainage analysis, conceptual drainage layout
10. Conceptual wall locations
11. Conceptual storm water control facility location
12. Preliminary land acquisition estimate
13. Preliminary Right of Way plans including parcel and owner information
14. Preliminary utility conflicts and relocations (dry & wet utilities)
15. Preliminary typical sections
16. Preliminary erosion control sheets
17. Total Estimated Quantities and Engineer's Estimate
18. Value Engineering Study (projects > 1 million or State or Federal funding)

60% Submittal

1. Draft final water design report
2. Draft final drainage design report
3. Draft final geotechnical report
4. Preliminary structural design report
5. Final pavement recommendations
6. Preliminary pavement mix design
7. Final plan & profile for all required facilities – road, water, storm sewer
8. Final Intersection horizontal layout (including curb return and curb ramp info.)
9. Draft final wall locations – Plan & Profile
10. Catch points
11. Draft final drainage layout including pipe profiles
12. Draft final water quality facility design
13. Draft final wetland mitigation plan
14. Preliminary striping and signing plans
15. Preliminary signal design layout
16. Updated utility locations/relocations

17. RW purchase plans, contact summary – including property owners for water, sanitary,
18. Roadway typical sections
19. Preliminary detail sheets
20. Draft construction notes
21. Erosion control plan sheets
22. Cross Section sheets
23. Draft Specifications, Special Provisions, including landscape requirements and slope stabilization
24. Total Estimated Quantities and Engineer's Estimate
25. Variance modification requests (as required)

90% Submittal

1. Final water design report
2. Final drainage design report
3. Final geotechnical report
4. Final structural design report
5. Final pavement recommendations
6. Final pavement mix design
7. Final plan & profile for all required facilities – road, water, storm, sewer
8. Final Intersection horizontal layout (including curb return and curb ramp info.)
9. Final wall locations – Plan & Profile
10. Catch points
11. Final drainage layout including pipe profiles
12. Final water quality facility design
13. Final wetland mitigation plan
14. Final striping and signing plans
15. Final signal design layout
16. Final utility locations/relocations
17. Roadway typical sections
18. Final detail sheets
19. Final construction notes
20. Final Erosion control plan sheets
21. Final Cross Section sheets
22. Final Specifications and Special Provisions
23. Total Estimated Quantities and Engineer's Estimate
24. Submit plans to all agencies required for permitting

Final P.S. & E

1. Final Civil plans (Mylar & Digital)
2. Submittal of all final Technical reports
3. Final Technical Specifications and Special Provisions
4. Final Total Estimates Quantities and Engineer's Estimate
5. Approved permits (DEQ, COE, etc.)

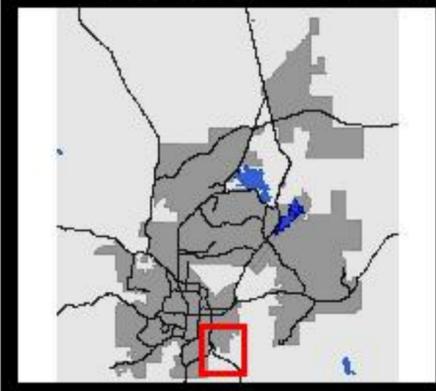
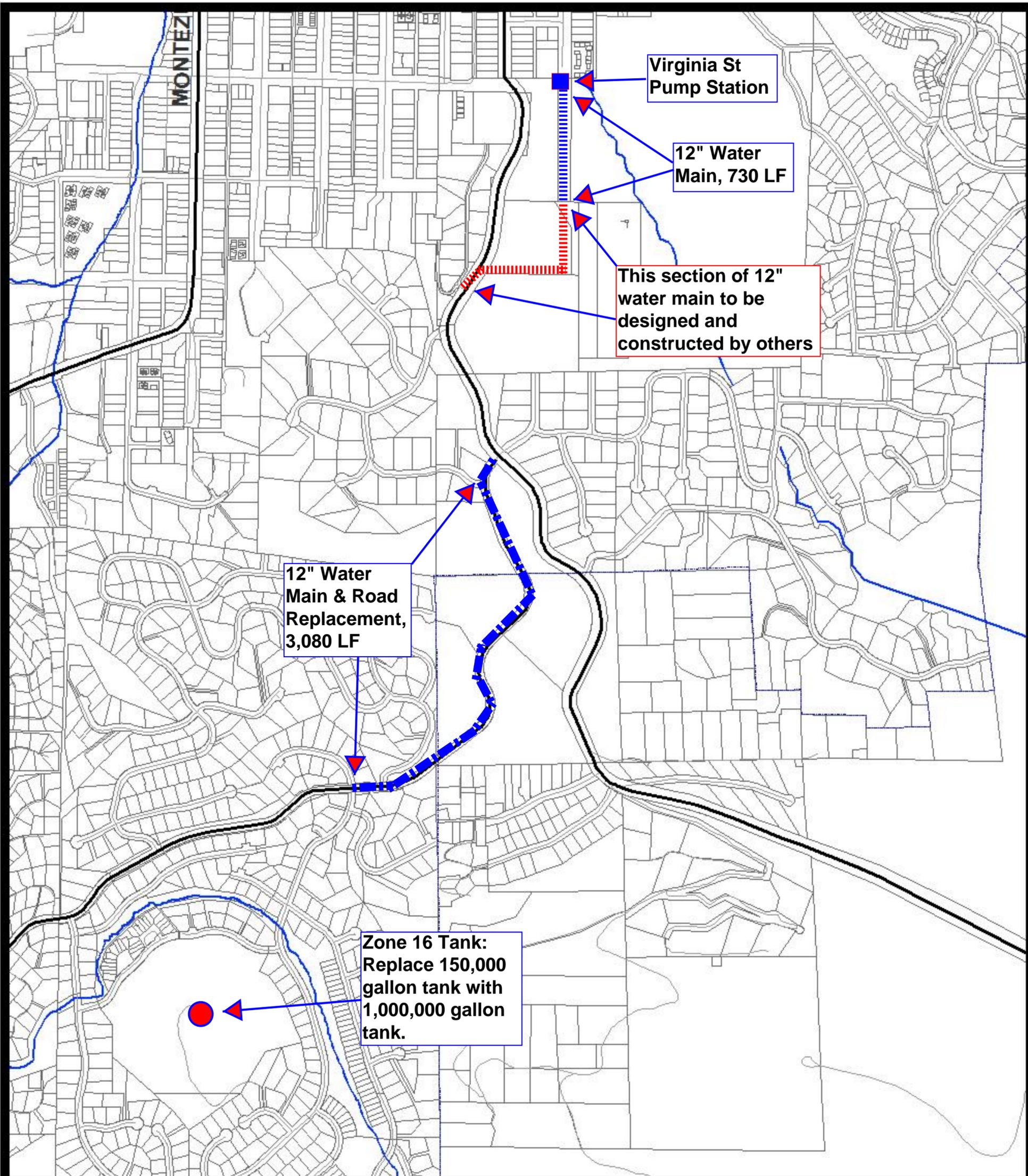
Definitions

Conceptual: General design idea or plan based upon experience and judgment from other comparable work. cursory plan view illustrations; calculations not required.

Preliminary: Introductory, but reasonably accurate, design element or feature. General consistency with design standards. Plan view illustration. Rough calculations and notes. First run models.

Final: Complete and ultimate design element or feature. Full consistency with design standards (or road modifications). Complete plan, profile and section views, as applicable. Thorough and complete engineering calculations and notes. Finished run models.

Alternative analysis: Study of all (at least two) viable options which satisfies a given transportation plan or design need. Analysis to include, but not limited to, comparisons of: safety, scope, cost, functionality, efficiency, compliance to standards and environmental effects.



Zone 16 Reservoir, Pump Station and 12" Water Main Replacement

This map is a product of The City of Prescott

