



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

For

ZONE 24 & ZONE 27 WATER MAIN PIPING REPLACEMENT

CIP 14-024

Public Works Department

Telephone: (928) 777-1130

Fax: (928) 771-5929

Due Date: January 8, 2015

REQUEST FOR PROPOSAL AND QUALIFICATIONS

Zone 24 & Zone 27 Water Main Piping Replacement

The City of Prescott, Arizona, Requests Proposals and Qualifications (RFP) from design professionals/engineering firms to provide professional engineering design services for the City of Prescott, Arizona. Statements must be received before 2:00 PM on Thursday, January 8, 2015, City Clerk's Office, 201 South Cortez Street, Prescott Arizona 86303, at which time all statements will be publicly opened.

Any statements received at or after 2:00 PM on the above stated date will be returned unopened. Statements must conform to this RFP and the attached Project Scoping Report. 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 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: "**RFP:** Zone 24 & Zone 27 Water Main Piping Replacement."

A **mandatory** pre-proposal conference will be held at the Public Works conference room, 433 N. Virginia Street, Prescott, AZ 86301 on Thursday, December 18, 2014, at 10:30 AM.



Crista Clevenger, Contract Specialist
Published: 2TC December 7 and 14, 2014

A. DESCRIPTION OF WORK

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

The Zone 24 & Zone 27 Water Main Piping Replacement Project is to design various water distribution mains improvements within water system Pressure Zone 24 and Zone 27 in the western part of Prescott including the installation of the following project elements:

- Approximately 5,910 linear feet of new 12-inch DIP water main from the Thumb Butte and Sherwood intersection to the new Zone 27 Reservoir on Skyline Drive
- Approximately 1,630 linear feet of new 12 inch DIP water main from the Zone 24 Reservoir at Lookout Lane to the new Zone 27 Reservoir on Skyline Drive.
- Abandoning approximately 255 lineal feet of 3", and 535 lineal feet of 6" water main on Skyline Drive, south of the Forest Hills Road intersection. The work will also include removing approximately 3 residential water services from the 3" and 6" water main and connecting them to the existing 12" water main.

Additional information is included in the attached Project Scoping Report.

B. SUBMITTAL

Sealed Proposal and Statements of Qualifications will be received before **2:00 PM on Thursday January 8, 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 **November 17, 2014**. 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: **RFP: Zone 24 & Zone 27 Water Main Piping Replacement**

C. EVALUATION AND FORMAT OF STATEMENTS OF QUALIFICATIONS

C.1 EVALUATION

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 water system analysis and designs in municipalities within the State of Arizona- 20%

- 2) Experience and availability of the proposed project team, in relation to 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 Statement 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 PROPOSED APPROACH AND SCOPE OF WORK

The proposed approach and detailed scope of work 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.
- Provide a detailed scope of work to complete the project.
- Identify any suggestions to improve the project and/or schedule of delivery for the project.
- Cost/Fee 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 re-advertise 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.



PROJECT SCOPING REPORT
November 17, 2014

Project Name: Zone 24 & Zone 27 Water Main Piping Replacement
CIP14-024

Project Type: Water

Project Account No.(s) 7007810-8410-15022
71H7810-8410-15022
7007810-8410-15024
71H7810-8410-15024

Project Review Team: Project Manager – Ben Mokhtari
Project Manager – Tim Sherwood
Design Consultant – TBD
City Engineer – Charles Andrews
Program Development Manager – Steve Orosz
Utilities Manager – Joel Berman

Project Description:

The **Zone 24 & Zone 27 Water Main Piping Replacement Project** is to design various water distribution main improvements within water system Pressure Zone 24 and Zone 27 in the western part of Prescott including the installation of the following project elements:

- Approximately 5,910 lineal feet of new 12-inch DIP water main from the Thumb Butte and Sherwood intersection to the new Zone 27 Reservoir on Skyline Drive
- Approximately 1,630 lineal feet of new 12 inch DIP water main from the Zone 24 Reservoir at Lookout Lane to the new Zone 27 Reservoir on Skyline Drive.
- Abandoning approximately 255 lineal feet of 3", and 535 lineal feet of 6" water main on Skyline Drive, south of the Forest Hills Road intersection. The work will also include removing approximately three residential water services from the 3" and 6" water main and connecting them to the existing 12" water main.

These system upgrades, consisting of removal and replacement of aged and undersized facilities, are necessary to meet current and future water demand. The new water mains identified above will also enhance public safety by augmenting fire flow capability throughout Pressure Zone 24 and Zone 27. The Zone 24 and Zone 27 Water Main Projects are another important step toward fulfillment of the "First Class Utility System" Council Goal in the FY15 CIP program.

It is anticipated that the water main design will commence in FY15 with construction in FY16. The Zone 24 & Zone 27 water main construction projects will be packaged as a single construction contract.

Project Limits - Existing Conditions:

- See attached map

Associated Project Studies:

- 2013 Water and Wastewater Model – City will provide consultant with information from model to be analyzed, verified, and utilized in the design and permitting of the project.
- Various as-built plans to be provided to the selected consultant (D11-1603, 0236, 0191, 0130) (D5-0066, 0076, 0824), Zone 27 Project

Public Involvement:

- Anticipate a minimum of four public meetings to be led by consultant and supported by the City
- A public relations firm will be required for this project
- Public notices/mailings
- Anticipate neighborhood interest. Design and constructability to be sensitive to neighborhood impact
- Council Presentation(s) – Project specific throughout the design and construction process.

Primary Technical / Administrative Issues

- Geology/rock
- Maintaining roadway/driveway/emergency access
- Utility conflicts
- Groundwater
- Maintaining water service/minimizing disruptions
- City to provide sewer video observations for possible segmental sewer improvements
- City to provide sewer video observations for existing tap locations

Utility Relocation Issues

- Investigation and identification of potential City Utilities (water/wastewater), dry utilities

Existing Utilities:

- Consultant to verify, physically locate and survey all existing Utilities (wet and dry) and will identify all conflicts anticipated within the project limits.
- Pothole utilities as needed.

Drainage Design

- Evaluate drainage facilities within this project. Restoration and/or replacement of existing facilities need to be identified.

Geotechnical Design and Recommendations

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

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

- It may be necessary to acquire additional ROW and/or TCEs through the project alignment from the Thumb Butte / Sherwood ROW to the new tank site. Consultant will be expected to provide City with metes and bounds descriptions of ROW or TCE's. City will coordinate acquisition of easements/ROW.

Environmental Constraints – Consideration and potential Permits:

- Environmental Determination - NA
- ADEQ - Consultant will acquire all permits
- Drainage – Flood Determination – NA
- ADOT – NA
- Stormwater (SWPPP, NPDES, Erosion Control) – City and Consultant to review
- City of Prescott (PAC, Building Permit, ROW) – NA
- Yavapai County - This project lies inside the incorporated City limits, no permits required.

Archaeological/Cultural Issues

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

Endangered Species Act (ESA) –

- A pre-determination for any listed endangered species that may be impacted within the project vicinity, along with an evaluation, if deemed necessary from the pre-determination.

Required Environmental Permits Approval

- Required
 - AZDOT Permit - None
 - NPDES Permit – SWPPP and NOI
 - FEMA – None

Construction Issues:

- Traffic control in roadway – Consultant will be required to consider construction techniques in the design process. Maintain one-lane traffic flow minimum.
- Impact to neighbors – Coordinate with City on providing information regarding the project to the neighborhoods. Maintain access to private property/commercial business
- Existing Utilities – Possible relocations or design constraints.

Construction post design services

- Submittal / RFI reviews
- Limited Inspection/Observation
- As-Builts
- Project close out and certification
- Attending construction meetings, as requested.

Work Products

- Plans and Specifications 30/60/100%/Bid Set submittals
- Engineer's Estimate of Cost 30/60/100%/Bid Set submittals
- Zone 24 & Zone 27 hydraulic analysis
- Geotechnical Report
- Technical Design Report (Drainage, Water, and Structural Reports)
- Project Schedule
- Archeological
- Public Relations Plan
- Other as may be required

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. **Public Meetings.** The Engineer will be required to attend and conduct 2 public meetings. These will be scheduled (tentatively) to correspond with the completion of the 30% and 90% plans. The initial meeting will be for the purpose of informing the public of the project intent and to receive comments. The latter meeting will be for the purpose of informing the public about the final design.

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, it's 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.

4. **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.
5. **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.

6. **Utility Potholing.** Based on the results of utility research, the need for utility potholing to establish existing horizontal and vertical locations of utilities will be established. For the purpose of this scope, the Engineer shall provide up to eight (8) utility potholes.
7. **Geotechnical Investigation and Recommendations.** A geotechnical report will be prepared to identify subsurface conditions and need for any special equipment for excavation. Six (6) soil borings up to eight (8) feet in depth will be performed and a geotechnical report will be prepared. Findings in the geotechnical report will be incorporated into the design and specifications.
8. **Preparation of Preliminary (30%) Design.** The conceptual 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, effluent, and storm drain) located within the project limits. 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 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.

9. **Preparation of Preliminary (60%) Design.** 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.
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 ADEQ 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.** The Engineer shall prepare all legal descriptions, maps, and obtain all pertinent title reports for the acquisitions of additional easements required, if any, to construct the proposed improvements. In the event additional easements are needed to construct the project, the Engineer shall provide two (2) 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 respective 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. 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.
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 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 "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 is required, the Engineer shall prepare the necessary changes to the plans and specifications.
 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. **Monthly Progress Meetings.** In addition to those meetings indicated above, the Engineer shall meet monthly with the City 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

- Zone wide pressure analysis to include distribution system model
- Technical Design Reports (Drainage, Water, Structural Reports, etc.)
- SWPPP Plan
- Public Relations Plan
- Other as may be required

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. Preliminary pavement recommendations
5. Aerial photograph with catch points & preliminary right-of-way superimposed (1:50) scale
6. Preliminary plan & profile for all required facilities – road, water, storm sewer
7. Preliminary catch points
8. Alternative drainage analysis, conceptual drainage layout
9. Conceptual wall locations
10. Conceptual storm water control facility location
11. Preliminary land acquisition estimate
12. Preliminary utility conflicts and relocations (dry & wet utilities)
13. Preliminary typical sections
14. Preliminary erosion control sheets
15. Total Estimated Quantities and Engineer's Estimate
16. 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. Updated utility locations/relocations
13. R/W purchase plans, contact summary – including property owners for water, sanitary,
14. Roadway typical sections
15. Preliminary detail sheets
16. Draft construction notes
17. Erosion control plan sheets
18. Cross Section sheets
19. Draft Specifications, Special Provisions, including landscape requirements and slope stabilization

20. Total Estimated Quantities and Engineer's Estimate

21. 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 utility locations/relocations
13. Roadway typical sections
14. Final detail sheets
15. Final construction notes
16. Final Erosion control plan sheets
17. Final Cross Section sheets
18. Final Specifications and Special Provisions
19. Total Estimated Quantities and Engineer's Estimate
20. 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

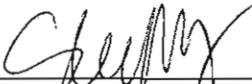
Conceptual: General design idea or plan based upon experience and judgment from other comparable work. cursory plan view illustrations; calculations not required.

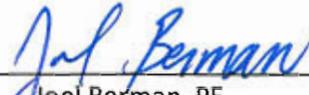
Preliminary: Introductory, but reasonably accurate, design element or feature. General consistency with design standards. Plan view illustration. Rough calculations and notes. First run models.

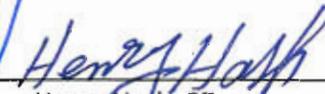
Final: Complete and ultimate design element or feature. Full consistency with design standards (or road modifications). Complete plan, profile and section views, as applicable. Thorough and complete engineering calculations and notes. Finished run models.

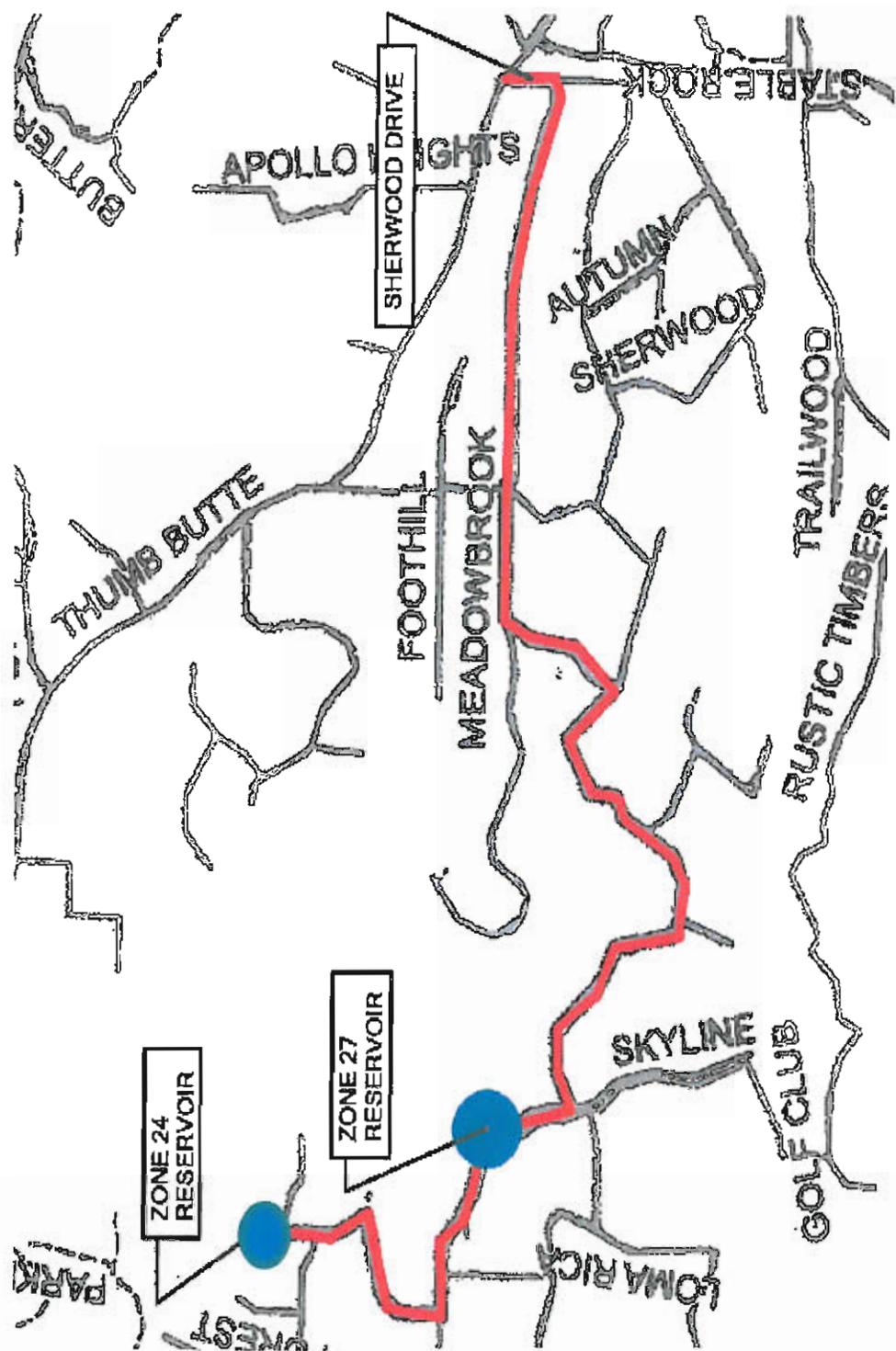
Alternative analysis: Study of all (at least two) viable options which satisfies a given transportation plan or design need. Analysis to include, but not limited to, comparisons of: safety, scope, cost, functionality, efficiency, compliance to standards and environmental effects.

Approvals

Program Development Manager  Date 12/4/14
Steve Orsz, PE

Utilities Manager  Date 12/4/14
Joel Berman, PE

Public Works Director  Date 12/5/14
Henry Hash, PE



ZONE 24-ZONE 27 WATERMAIN UP-GRADE
 THUMB BUTTE ROAD TO ZONE 27 RESERVOIR AND
 FROM UPPER THUMB BUTTE PUMP STATION TO ZONE 24 RESERVOIR