

**REQUEST FOR PROPOSALS  
FOR  
PROFESSIONAL SERVICES  
FOR THE  
2020 WATER SYSTEM MASTER PLAN  
CITY OF CASPER  
PUBLIC SERVICES DEPARTMENT  
DATE: APRIL 23, 2019**

The City of Casper, Wyoming is seeking qualification statements and service proposals from consulting groups experienced in studies of water distribution systems and a subsequent water system master plan. The proposals should be designed to provide the City with a clear understanding of each of the work tasks and the costs of each work task to complete the project. The specific nature of the scope of work for the project is outlined in this Request for Proposals (RFP). Consultants responding will be evaluated and a short list developed for formal interviews to be conducted at a later date. A tentative schedule for Consultant selection and project completion is included herein. Proposals shall be submitted to the City of Casper Engineering Division, 200 N. David Street, Casper, WY 82601 by Friday, May 17, 2019 at 5:00 p.m.

**I. Introduction, Background and Objective**

Over the past 60 years the City of Casper has relied upon water system master plans to plan and construct its water system to serve the residents in Casper and the surrounding area. The more recent plans were developed in 1982 (updated in 1997), and 2006. The 2006 plan was entitled “Casper Master Plan Level I Study” and was funded by the Wyoming Water Development Commission (WWDC). The 2006 Master Plan included water system growth projections, hydraulic modeling and system analysis, and recommendations for needed improvements to meet current and projected development in the system. There were 58 recommended improvements in the final report, ranging from short waterline installations to new or replacement booster stations and water tanks. Financial needs and recommendations were also presented.

The City of Casper and the greater Casper area have grown considerably even since 2006. With this new growth and development, the City of Casper desires to update its current 2006 Water System Master Plan with a new 2020 Water System Master Plan to determine future sizing and locations of new and/or modified water storage tanks, booster stations, and water transmission lines throughout the City of Casper.

The objective is to have a Consultant study and document the existing water distribution system in Casper, including modeling of the Central Wyoming Regional Water System, and prepare a new master plan that will make recommendations for future corrections, upgrades and designs in a new City of Casper 2020 Water System Master Plan.

## **II. Information to be Incorporated into the Project**

### **A. Information made available by the City of Casper upon request:**

1. 2006 Water Master Plan Level I Study
2. Geographical Information System (GIS) Water Data & Topography
3. Amended Standard Specifications for Public Works Construction and Infrastructure Improvements (2006)
4. Municipal Code Book (applicable sections)
5. Zoning Ordinance & Map
6. Casper Area Comprehensive Plan (July 2017)
7. As-built drawings of water system improvements and modifications
8. Individual Water System Project Studies
9. City of Casper Survey Benchmark Data
10. 2015 Aerial Mapping
11. Central Wyoming Regional Water System – Water Treatment Plant Preliminary Facilities Plan (2017)
12. 10-Million Gallon Reservoir Study and Inspection (2018)
13. 10-Million Gallon Reservoir Structural Assessment (2019)

### **B. Information to be collected by the Consultant from other sources:**

1. USGS Quad Maps for Supplemental Topography
2. SCS Soil Surveys
3. Copies of WYDOT existing data and proposed projects within City
4. Proposed developments in county areas within the study basins
5. Any state or federal agency reports or reviews within the study basins, such as USACOE, WDEQ, EPA reports or reviews
6. General Project Considerations

## **III. General Project Considerations**

A map showing the City of Casper municipal boundary is attached. All areas within the project boundary shall be evaluated within the scope of this project, and the Consultant must account for portions of the water system modeling beyond the municipal boundary.

### Project Schedule

Tuesday, April 23, 2019 – RFP made available to Consultants

Tuesday, May 7, 2019 – Questions and comments due for RFP amendment.

Friday, May 17, 2019 – Proposals due at City of Casper Engineering Office by 5pm.

May 22-24, 2019 – Interviews to be conducted with selected Consultants.

Tuesday, June 18, 2019 – City Council to award contract to selected Consultant.

Friday, December 20, 2019 – Draft Water System Master Plan (50%) due.  
Friday, April 10, 2020 – Preliminary Water System Master Plan (80%) due.  
Friday, May 1, 2020 – Final Water System Master Plan (100%) due.

Monthly written updates regarding the progress of the study shall be given to the City's management staff assigned to oversee the project.

#### **IV. Preliminary Scope of Services**

##### Task No. 1 – Project Meetings.

- A. A Project Kick-Off Meeting shall be held at City Hall early in the project schedule to familiarize City staff with the scope of the project, and to obtain input from affected parties. The Consultant shall prepare a presentation including some combination of projected presentation slides, large maps, personal hard-copy hand-outs and other visual aids to explain the project.
- B. Project Coordination Meetings shall be held at City Hall every other month for the duration of the project to update City staff on the progress of the master plan and to resolve any problems or questions related to the project. Consultant shall present any adjustments to the proposed schedule of the project during these meetings.
- C. A Project Completion Meeting shall be held at City Hall at the conclusion of the project to inform City officials during a City Council Work Session of the project findings and recommendations. The Consultant shall develop the information and materials to be presented after consultation with City staff and shall include some combination of projected presentation slides, large maps, personal hard-copy hand-outs and other visual aids to explain the findings and recommendations.

##### Task No. 2 – Review and Summarization of Previous Data/Studies.

The Consultant shall collect and review all available background information regarding the Central Wyoming Regional Water System, to include existing reports, planning documents, agency surveys, plans/engineering drawings, and other sources of data relating to the water distribution system. This review shall also include information obtained from studies conducted for the Central Wyoming Regional Water System. Information obtained through this task shall be summarized and used to help direct project work.

##### Task No. 3 – Service Area Determination/Land Use Planning.

The Consultant shall, in coordination with City staff, identify the service area for this project. The Consultant shall also coordinate with City and County planners from the outset of project scoping and through the entire course of the study. Resources from which to assist the study include the comprehensive growth management plan, transportation master plan, GIS coverages, etc. The Consultant shall utilize these resources to provide the framework from which the water master plan can build and synchronize similar components. The Consultant

shall incorporate existing local land use plans into this study for the purpose of service area delineation.

Task No. 4 – Water Use/Demand Projections.

Using the City’s data, the Consultant shall determine historic per capita demand rates. The Consultant shall also determine the expected impact on per capita demand of any conservation measures planned by or recommended to the City. Per capita values are useful for projecting system-wide flow rates for the average day, monthly average, maximum day, maximum hour, and storage replenishment conditions. The Consultant shall determine annual variations in per capita water demands and reach agreement with City staff regarding the “dry year” demand rates that should be used for projecting future water requirements.

The Consultant shall prepare population/demand projections for the service area. The projections shall be based on Department of Administration and Information population projections, industrial/commercial demand projections, and city/county planning office records and projections. The Consultant shall use this information to project future average day, monthly average, maximum day, maximum hour, fire-flow, and storage replenishment water use for the years 2020, 2025, 2030, and 2040. The projected demands shall be used to evaluate long term system expansion and water supply needs. A comparison shall be made of projected water demand compared to supply, including treatment capacity. Areas of potential future growth will also be designated. Issues regarding growth that will or may be affected by the choices made in building new water supply capacity will be highlighted, and resources cited. The goal will be to aid the City Council in making informed choices on interrelated growth and water supply matters. The issues examined regarding growth should include expected growth in county areas near the city, and county planning decisions or pending decisions on desired growth areas.

Task No. 5 – Inventory of Existing Facilities.

The Consultant shall review the system and evaluate the need for transmission line rehabilitation and upgrades. The Consultant shall also evaluate pump station modifications and upgrades necessary for maintaining and improving the system. An evaluation of storage facilities shall be made and capacities defined. The condition of the various storage facilities shall also be documented. The Consultant shall review existing reports, plans and data, and shall interview key staff members in the completion of this task. In addition, a visual inspection of major facilities shall be made. The Consultant shall then produce a summary of existing water works facilities.

Task No. 6 – Hydraulic Modeling.

The Consultant shall construct a hydraulic model of the City of Casper’s Water Supply System. The Consultant shall coordinate with the City in the completion of this task and shall only use software agreed to by City staff. The Consultant shall evaluate the adequacy of the water transmission and distribution system to meet current and future pressure and flow requirements. The Consultant shall consider municipal, industrial and fire flow needs in the

evaluation. The model shall be detailed enough to satisfy the needs of the project in evaluating the adequacy of the existing system to meet current demands as well as in the evaluation of future growth scenarios, considering, but not limited to storage, transmission, water quality, pressures, transient analyses, etc. The model shall be constructed as a base line, aid in the operations plan, and shall be able to be expanded upon as the system grows.

At the conclusion of this project, the Consultant shall deliver to the City Engineering staff the water model in appropriate software electronic files, including all associated data, information, assumptions, instructions, etc. to equip the City to modify, expand and operate the water model in-house. The Consultant shall report to City staff the number of elements, including all fire hydrants and fire hydrant lead pipelines, included in the model for the purpose of equipping the City to purchase appropriately sized software to run the model.

Task No. 7 – Identification of Rehabilitation and Expansion Needs.

Based on the work completed in Tasks 1 through 7, the Consultant shall identify the rehabilitation and expansion needs of the system. The Consultant shall determine the adequacy of the existing water storage and pumping systems and provide a recommended Capital Improvements Plan to maintain and, where needed, improve current service levels. The plan should be prioritized by immediacy, i.e. those requiring immediate attention and/or action (2020), those needs that are required to serve the year 2025 demands, then the year 2030 demands, and lastly those expected to meet year 2040 requirements. The recommended improvements to the system in the latter three scenarios shall be tied to projected population growth and/or water demand rates identified in Task 4.

Task No. 8 – Recommended Alternatives.

The Consultant shall identify the recommended alternatives to meet the needs identified in Task 8. The alternatives should include water source identification, ownership, existing water right, and modifications required for efficient utilization, system layout, pumping requirements, etc. to accurately describe the facilities proposed. Needed improvements should be prioritized for consideration by the City of Casper. Proposed system improvements shall be summarized and provided in the draft and final reports. Reconnaissance level designs shall be prepared for the improvements.

Task No. 9 – Preliminary Cost Analysis.

The Consultant shall provide cost estimates, including all design and construction components for specific improvements. The cost to end user calculations shall include all identified and recommended improvements. The Consultant shall provide permitting cost estimates to include all permits, easements, and clearances necessary for the project. These cost estimates shall be based on the year 2020 design and construction costs (including water supply, land acquisition, construction, permitting, meter installation, etc.), including construction engineering services and construction contingencies as outlined in the project requirements listed above.

Task No. 10 – Reports and Executive Summaries.

The Consultant shall submit to the City of Casper Engineering Office ten (10) copies of the draft report describing the results of all work completed in this study no later than April 10, 2020.

After receipt and incorporation of City staff review comments, the Consultant shall submit the final report to the City on or before May 1, 2020. The final report shall consist of five (5) hard copies and one (1) unbound reproducible original of both the final report and executive summary, three (3) USB flash drives containing the final report, executive summary, and supplemental/notebook materials in both Microsoft Word and Adobe Acrobat (PDF) formats. The executive summary shall outline the purpose, findings, recommendations and configuration of the project, and shall include detailed cost estimates. The summary should not exceed ten (10) pages. All reports shall be stamped and signed by a professional engineer licensed in the State of Wyoming.

**V. Selection**

The selection of the consulting firm will be based upon project team qualifications, team management/organization, ability of firm to recognize design opportunities in the project, demonstrated experience, willingness to meet time requirements, and community involvement of the firm. Three (3) or more firms may be interviewed by the City staff on the basis of the proposal submittals. Upon completion of these interviews, one firm will be selected on the basis of their qualifications and fee.

The procedure for considering the priced proposal will be that the top three (3) or more firms will be chosen based on the above qualifications-based criteria, excluding consideration of the fee proposal. Upon selection of the top three (3) or more firms, the fee proposals for these three firms shall be opened and analyzed by the City Engineer. The City Engineer will prepare a written summary of the price proposals to be distributed to the Engineering Selection Committee prior to the Consultant interviews. Price proposals for Consultants not short-listed shall be returned unopened to the Consultant. No prospective proposer shall withdraw his proposal for a period of sixty (60) days after the deadline for proposal submittals.

In making a proposal, the Consultant hereby certifies that he has reviewed this RFP and is familiar with all conditions contained therein.

City staff will review all proposals. Final selection of the Consultant will be made by the City Council.

All proposals received shall be subject to evaluation by a Selection Committee comprised of City staff. The evaluation shall be for the express purpose of selecting the proposal which

most clearly meets the RFP requirements. The following areas will be considered in the selection:

- A. Understanding the Problem: This refers to the Consultant's understanding the City of Casper's needs, objectives of the RFP, and the nature and scope of work involved.
- B. Consultant Qualifications: This includes the ability of the Consultant to meet the objectives of the RFP. Particularly, time constraints, cooperation and participation by City staff, elected officials, and special interest groups, and the quality and relevancy of recent studies and projects of similar nature completed by the Consultant.
- C. Professional Personnel: This refers to the competence of professional personnel assigned to the project by the Consultant. Qualifications of all professional personnel will be measured by education and experience, with particular emphasis on experience and analysis of innovative practices. Individual biographical resumes with specific project experience related to a study or project similar to this project will be given strong consideration.
- D. Soundness of Approach: Emphasis shall be placed on stated techniques for collecting and analyzing data, sequence and relationship of major program steps, methods for managing the project, rationale for stated methodology assessing economic incentives, and the practicality of implementing the recommendations.
- E. Cooperative Process: This refers to the Consultant's understanding, expression, and historical experience involving projects which demonstrate sensitivity to the need for developing a spirit of cooperation with the City staff, and other interested parties.

## **VI. General**

- A. Additional Information: In addition to the items addressed in the Scope of Services, the following information relating to the Consultant's qualifications is required. The Consultant shall submit four (4) copies of the non-priced technical proposal.
  - 1. The consulting firm's name, address, and telephone number.
  - 2. Types of services which your firm is qualified to provide.
  - 3. Names of key personnel, the experience of each available for this project, and their anticipated work load/availability for this project.
  - 4. Names and addresses of sub-consultants or associates which will be retained for assistance.

5. Number and type of current projects for which the firm is principal engineer.
6. Recent list of completed projects most similar to this project, including key contacts and references, approximate budget, and other pertinent information.

One (1) Engineering Fee proposal with upset amount in a separate sealed envelope shall be submitted with the set of four (4) non-priced technical proposals. The envelope containing the price proposal shall be labeled "City of Casper 2020 Water System Master Plan Project - PRICE PROPOSAL" The price proposal shall be signed by an authorized representative of the Consultant offering the proposal.

- B. Addendum or Supplement to Request for Proposal: In the event that it becomes necessary to revise any of this Request for Proposal (RFP), addenda to this RFP will be provided to each Consultant. The City reserves the right to change submission date(s) for any reason, including an Addendum or Supplement to the RFP. All questions and requests for additional information or clarification shall be made in writing on or before May 7, 2019
- C. Late Proposals: Late proposals will not be accepted. It is the responsibility of the Consultant to insure that the proposal arrives prior to 5:00 p.m., Local Time, Friday, May 17, 2019.
- D. Rejection of Proposals: The City of Casper reserves the right to reject any or all submissions, and to waive informalities and minor irregularities in submissions received, and to accept any portion of a proposal or all items if deemed in the best interest of the City of Casper.
- E. Response Material Ownership: All material submitted regarding this RFP becomes the property of the City of Casper and will only be returned to the Consultant at the City's option. Responses may be reviewed by any person after the final selection has been made. The City of Casper has the right to use any or all ideas presented in reply to this request. Disqualification of a Consultant does not eliminate this right.
- F. Incurring Costs: The City of Casper is not liable for any costs incurred by the Consultant prior to issuance of an agreement, contract, or purchase order.
- G. Acceptance of Proposal Content: The contents of the proposal of the successful Consultant may become contractual obligations if the City of Casper wishes to execute a contract based on the submitted proposal. Failure of the successful Consultant to accept these obligations in a purchase agreement, purchase order, contract, or similar instrument may result in cancellation of the award, and such Consultant may be removed from future solicitations.

- H. Reference Checks: The City of Casper reserves the right to contact any reference or any client listed in the documents for information which may be helpful to the City in evaluating the Consultant's performance on previous assignments.
- I. City Contact: The contact person at the City of Casper concerning this RFP is Mr. Scott R. Baxter, P.E., Associate Engineer, 200 North David Street, Casper, Wyoming 82601. Phone (307)235-8341, or email: [sbaxter@casperwy.gov](mailto:sbaxter@casperwy.gov)

## **VII. General Criteria for Evaluating Qualification Statements**

Experience: The experience of the Consultant should be documented, including experience in projects similar to the project proposed by the City of Casper. This experience will be examined on the basis of comprehensive water system master planning, computer modeling, and GIS work by the Consultant or his sub-consultants.

Expertise: Specific expertise is desirable in a variety of areas, including the following: Water System Master Plan work, associated computer modeling, GIS work, and familiarity with water system regulations, guidelines and manuals for municipalities. Professional references shall be provided wherever practicable.

Workability: The qualification statement should provide assurance of the demonstrated ability of the Consultant to work with a diverse group of individuals and agencies including citizens, property owners, businesses, governmental organizations and special interest groups.

Conflicts of Interest: The qualification statement shall specifically address any possible conflicts of interest and the proposer's position or response as to whether or not such other work or relationship may be deemed a conflict of interest with this planning study.

Special Qualifications: The qualification statement shall identify any specific qualifications which might make the proposer uniquely qualified to provide the requested services. These may include similar work experience related to another community of similar size or a project of similar nature.

Professional Staff: The experience of the proposed Consultant's or sub-consultant's personnel assigned to this project shall be noted. Individual biographical resumes should be included with specific project experience related to water system master plan work and associated computer modeling.

Timeliness: Time is of the essence. The qualification statement shall specify the time availability of the Consultant's or sub-consultant's personnel available for this project.

## **VIII. Sub-consultants**

The Consultant shall be responsible to retain any sub-consultant necessary to complete the work. The City and Consultant shall mutually agree, in writing, to the use of any sub-consultants which the Consultant desires to retain. The Consultant shall be responsible for the procurement, administration, management and payment of services provided by any sub-consultants.

## **IX. Engineer's Professional Certification and Warranty**

The Consultant shall affix his professional engineer's stamp, and shall date and sign the front cover of the master plan in accordance with Wyoming State Registration Statutes. The consulting engineer agrees that the work shall be performed with that degree of skill and judgment which is normally exercised by professional engineering firms performing services of a similar nature, and that the work shall be performed and shall conform to generally accepted engineering standards and practices. The Consultant will re-perform any services not meeting this standard without additional compensation.

## **X. Responsibilities of the City of Casper**

The City of Casper recognizes the Consultant's need for reasonable work effort on the part of the City of Casper for the Consultant to maintain contractual obligations to the City. The City of Casper will make available to the Consultant all existing studies, reports, and other available data and information that the City has on file which are pertinent to the project. The City will coordinate and conduct complete, timely reviews of all submittals and will make prompt decisions on questions posed by the Consultant. The City will advise the Consultant of any new developments that have the potential to affect the project.

## **XI. Contract**

The Consultant will be required to sign a contract with the City, relating to the work to be performed. Such contract shall include, but not necessarily be limited to, the following articles: method of compensation, time of performance, subcontracts, duties of the Consultant, termination of the contract, ownership of materials, changes, EEO, submission of materials, and obligations to the City. The City will work closely with the selected Consultant to develop or refine a detailed scope of work, a schedule for completion of tasks, and the costs associated with completed work included in the contract documents.

## **XII. Recommendations**

To be considered, the proposal must respond to all requirements in the RFP. Any other information believed to be relevant, but not applicable to the enumerated categories, should be provided as an appendix to the proposal. If publications are provided, the document and

page number shall be referenced. The proposal shall be divided into sections as indicated below:

Statement of Project Requirements: Each proposer shall state in sufficient terms its understanding of the project requirements presented in this RFP.

Scope of Work: Each proposer shall describe in narrative form the proposer's technical plan for accomplishing the work. Please use the Scope of Work tasks provided in this RFP as the point of departure. Additions to, or modifications of, the Task descriptions are permissible, but reasons for changes shall be fully allocated to each Task.

Personnel and Prior Experience: Each proposal should identify specific executive, professional and technical personnel who will be assigned to the project. The proposal shall indicate the responsibilities each person will have in the project and indicate the previous related work experience of each individual. Personnel indicated as having appropriate expertise for this project shall be assigned to the project and actively engaged in completion of the tasks. Any changes in assignment of personnel shall be reviewed with the City of Casper to assure consistent technical expertise throughout the term of the project.

Cost and Price Analysis: Each proposer is required to outline their fee for services and submit the outline in a separate, sealed envelope for consideration after Consultant selection. The proposal shall provide an estimate of the total costs involved in completing each Task in the project. The City reserves the right to contract for all or a portion of the project depending on budget constraints. If proposer desires to add anything to the project which he deems is pertinent and valuable, yet is missing from the scope of work written by the City, the proposer shall give a thorough written description and include the price proposal in successive Alternate numbers.

Sealed Proposals: Each proposal must be submitted to the City of Casper Engineering Division, 200 North David Street, Casper, Wyoming 82601.

### **XIII. Fees**

This project will be funded by Water Fund Reserves through the City of Casper.

After Consultant selection, the negotiated fee shall be based on estimated project costs, time, and materials, including hourly rates for technical personnel, and reimbursable expenses, with a not-to-exceed amount. A Fee Schedule will be required during negotiations to be included in the contract for professional services.