

## **NOTICE TO ALL PROPOSERS**

**Any Engineering Firm or Corporation wishing to enter into a contract with the Wyoming Water Development Commission must possess a Certificate issued by the Board of Registration for Professional Engineers and Professional Land Surveyors to practice engineering or land surveying in Wyoming. Geologists must possess a Certificate from the Board of Registration for Professional Geologists to perform work of a geologic nature.**

**Any Firm or Corporation wishing to enter into a contract with the Wyoming Water Development Commission must possess a Certificate of Good Standing issued by the State of Wyoming Office of the Secretary of State to conduct business in Wyoming.**

**Contracts will not be finalized until Firms have met these requirements.**



## WYOMING WATER DEVELOPMENT OFFICE

6920 Yellowtail Road  
Cheyenne, WY 82002

Phone: (307) 777-7626  
wwdc.state.wy.us

Mark Gordon  
Governor

### Commissioners

|                     |               |
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| Sheridan Little     |               |
| Mike Purcell        |               |

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### REQUEST FOR PROPOSAL NO. 20-9 SKYLINE ISD WATER SUPPLY, LEVEL II STUDY

SEALED NON-PRICED PROPOSALS, INCLUDING 10 PAPER COPIES AND 1 DIGITAL COPY IN PDF FORMAT ON A CD OR USB DRIVE, WILL BE RECEIVED by the WYOMING WATER DEVELOPMENT COMMISSION (Commission), 6920 Yellowtail Road, Cheyenne, Wyoming 82002 (82009 if shipping by means other than US Postal Service) until 1:00 p.m., August 23, 2019, at which time they will be publicly opened for PROFESSIONAL SERVICES required to conduct the Skyline ISD Water Supply, Level II Study.

SEALED PRICE PROPOSALS, INCLUDING 1 PAPER COPY AND 1 DIGITAL COPY IN WORD FORMAT ON A CD OR USB DRIVE, shall also be submitted in a single separate sealed envelope containing itemized prices accompanying the copies of the non-priced proposals. These envelopes shall be opened after the firms to be interviewed have been selected and prior to the interviews. Neither proposal contents nor prices will be released at the proposal openings.

Any inquiries regarding this request for proposal should be directed to Kevin J. Boyce, P.G., Project Manager, Wyoming Water Development Office, 6920 Yellowtail Road, Cheyenne, Wyoming 82002, Telephone (307) 777-7626.

Your proposal shall be based on the following attachments "A", "B", and "C".

DATED THIS 23rd DAY OF JULY, 2019.

Jason Mead, Interim Director  
Wyoming Water Development Office

**ATTACHMENT "A"**

**A. INFORMATION FOR PROPOSERS:**

1. In order to be considered for an award, each proposal must bear the signature of the proposer or his authorized representative, the work must be supervised by a Wyoming licensed engineer/geologist, as appropriate, and the firm must be registered with the State of Wyoming.
2. Proposals received after the date and time specified will not be accepted or considered. **This requirement is strictly enforced.**
3. After the successful proposer is selected, the Commission will negotiate a final contract, scope of services, and contract price based on, but not limited to, the work items in Attachment "B". The Commission, at its sole discretion and through duly authorized contract amendments, may request the selected consultant to complete additional work or phases beyond the scope of services included in the initial contract.
4. After the final contract is negotiated and work begun, payment to the successful proposer shall be based on an itemized billing of work completed as derived from the approved hourly rate and reimbursable expenses price schedule approved by the Commission and contained in the contract for services. A total contract amount and an amount for each task will be specified in the contract. The total contract amount is controlling and shall not be exceeded without prior written consent of the Commission. Requests for payment must be made on forms provided by the Commission, or an approved equivalent form, and must be properly executed. Payment will be made no more often than monthly.
5. The successful proposer shall furnish all materials, equipment and labor necessary to complete the study.
6. The State of Wyoming reserves the right to reject any or all proposals submitted.
7. The successful proposer shall be fully insured as to save the State of Wyoming harmless from any claims involving the employees or equipment used by the successful proposer and subconsultants while executing this service.
8. The successful proposer shall be familiar with all applicable state laws. The attention of prospective proposers is called to the requirements as to the conditions of employment to be observed and to all applicable laws affecting the work, particularly to the procurement procedures required by Section 9-2-1016 and Section 9-2-1027 through 9-2-1033, Wyoming Statutes.

9. No prospective proposer shall withdraw their proposal for a period of thirty (30) days after the actual date of proposal opening.

10. The Wyoming Water Development Office (Office) shall provide all possible assistance and cooperation to firms preparing proposals for this project. The proposer should understand that verbal comments may be subject to misinterpretation and are in no way binding on the individual, Office, or the Commission. If questions arise concerning any aspect of this request for proposals, the proposer should request clarification in writing. A copy of this request, as well as the written response, shall be provided to all firms receiving a request for proposals on the project.

11. The State of Wyoming hereby notifies all prospective proposers that it will affirmatively ensure that in any contract entered into pursuant to the advertisement, small or minority business enterprises will be afforded full opportunity to submit proposals in response to this invitation and will not be discriminated against on the grounds of age, race, religion, color, sex, national origin, or ancestry in consideration for an award.

12. The proposer hereby agrees that should they be awarded this contract, proposer shall not discriminate against any person who performs work thereunder because of age, race, religion, color, sex, national origin or ancestry.

13. The proposer has not and will not attempt to induce any other person or firm to submit or decline to submit a proposal for the purpose of restricting competition.

**B. PROPOSAL FORMAT:**

The proposal shall be prepared and contain the following information:

1. Cover letter submitted with proposal.
2. Title page.
3. Table of Contents.
4. Introduction.
5. Scope of Services:

A detailed Preliminary Scope of Services is included in Attachment "B". State how you intend to conduct the activities presented in the Preliminary Scope of Services, and list all assumptions made in preparing the proposal. The proposed work/approach should be presented in the same format as in Attachment "B" and should address all the requirements contained therein.

6. Proposed Scope Alterations:

If you feel that the Preliminary Scope of Services (Attachment "B") may be improved by additions, deletions, or changes, please elaborate in this section. State your alterations as specific task changes for the activities presented in the Preliminary Scope.

7. Qualifications:

a. Briefly show your firm's capability for performing this project.

b. List project team members and identify the project manager. As applicable, include a certification that the work conducted will be supervised by a professional engineer licensed in Wyoming as required by the provisions of WS 33-29-114 through WS 33-29-139 and a professional geologist licensed in Wyoming as required by the provisions of WS 33-41-101 through 33-41-121. Provide the Wyoming Board of Professional Engineer's license number of your firm.

c. State which of your offices will perform the project work.

d. Provide a resume for each key project member.

e. Identify all proposed subconsultants, list the work to be performed by the proposed subconsultants, and provide statements of project specific qualifications for each subconsultant.

f. If the proposer claims to be a "resident firm" as defined by 9-2-1028, Wyoming Statutes, the proposer must meet statutory requirements. The proposal from a resident firm must include sufficient information to demonstrate that the firm will meet these statutory requirements.

8. Listing of current clients whose interests may compete or conflict with the project described herein.

9. Work Schedule. Assume a Notice to Proceed will be issued mid-April. Provide a bar graph schedule depicting the duration of each work item and the proposed phasing of the work.

10. Previous Work for Sponsor. List any projects for which your firm has been under contract to the sponsor during the period of 2015 to 2019. This list should include individual project names, dates and contract amounts.

**C. PRICE PROPOSAL:**

Submitted with the non-priced proposal, but in a separate single sealed envelope, shall be one copy of the price proposal(s) in paper copy and one digital copy in Word format on a CD or USB drive. The envelope shall be labeled with the project name and shall indicate that it contains the price proposal(s).

Two price proposals may be submitted. One proposal, prepared in the format of Attachment "C", must give costs to perform the Preliminary Scope of Services as specified in Attachment "B". A second price proposal may also be submitted, in a format similar to Attachment "C", specifying costs for the Preliminary Scope of Services with Alterations as per Item B.6 (Proposed Scope Alterations). The proposed hourly rate and reimbursable expenses price schedules for each firm involved shall be included in each price proposal, and shall be in Word format.

**D. CONTRACTOR SELECTION PROCEDURES:**

The Commission will conduct the selection process in accordance with Sections 9-2-1016 and 9-2-1027 through 9-2-1033, Wyoming Statutes.

For those firms requesting consideration, the Commission has evaluated current statements of qualifications and performance data on file with the Office together with any applications submitted, and has selected not less than three (3) firms (if available) considered qualified to perform the required professional services to submit proposals. The Commission based this selection on the following:

- (i) Except as provided in paragraph (ii) of this subsection, the Commission selected firms that are resident firms as defined by Section 9-2-1028, Wyoming Statutes. Consideration between these qualified resident firms were based upon:
  - (A) The ability of professional personnel;
  - (B) Past performance;
  - (C) Ability to meet time requirements;
  - (D) Location;
  - (E) Current and projected workloads;
  - (F) The volume of work previously awarded to the firm by the Commission;
  - (G) The equitable distribution of contracts among the firms considered qualified.
- (ii) If less than three (3) firms which submitted for the project were resident firms as defined by Section 9-2-1028, Wyoming Statutes or if less than three (3) resident firms are determined to be qualified by the WWDC, consideration of all qualified firms will be based upon the considerations listed in subparagraphs (i) (A) through (G) of this subsection.

The goal of the initial screening process was to come up with a short list of five (5) firms qualified to provide the necessary professional services. Firms selected for the short list were asked to submit proposals.

- 1) If there were five (5) or more qualified resident firms, five (5) of those firms were selected.
- 2) If there were four (4) qualified resident firms, those firms were selected.
- 3) If there were three (3) qualified resident firms, those firms were selected.
- 4) If there were less than (3) qualified resident firms, the screening process looked to add qualified non-resident firms based on the criteria above to make a short list of five (5) qualified firms.

The Commission will evaluate proposals submitted by the short-listed firms and, based upon these proposals, select not less than three (3) firms, if possible, to be interviewed. The qualifications, experience, and expertise of the project team and contents of the work proposal will be considered in selecting firms to be interviewed. Price will not be considered in determining which firms will be invited to the interview process.

The interview shall be recorded and include discussion of each firm's approaches to the project, projections of project costs, qualifications, ability to furnish required professional services, use of alternative methods for furnishing required professional services, and an estimated fee based on the Commission's description of the work. The estimated fee and other information provided throughout this process may be used as a basis for selection by the Commission of the most appropriate firm for contract negotiations.

**ATTACHMENT "B"**

**A. AUTHORIZATION:**

It is anticipated that the Wyoming Legislature will authorize the Wyoming Water Development Commission to conduct the study described herein. The Consultant will complete the tasks and requirements outlined in D. Scope of Services.

**B. PROJECT DESCRIPTION:**

1. Location. Skyline Ranch is located 2 miles west of Jackson on State HWY 22 above the east banks of the Snake River (43° 29' 00" N, 110°49'35" W, Mallard Road entrance).
2. Purpose. To perform a Level II study for the Sponsor, Skyline Improvement and Service District. The Skyline ISD is requesting a water supply study that would include elements common to WWDC Level I/II examinations of rural-residential systems. The ISD has recently self-funded a reconnaissance-level system evaluation, installed fire/flushing hydrants, and commissioned a leak detection survey. "It has become increasingly clear that major improvements to the system are needed to extend the life of the systems. The ISD has completed the required improvement[s] note[ed] within their EPA [sanitary] surveys but it is clear that additional upgrades are required. *The vision of this funding request is to provide a review and master plan for the ISD that includes the well water pumping capacity, an optimal storage system and enhanced delivery system, perhaps using variable frequency drives [on well pumps].*" (from application rec'd 1/23/19, italics added)
3. History. Skyline Ranch was an early platted subdivision in Teton County (1967) and became an Improvement & Service District in 1989. Of the approximately 3 linear miles of water pipeline, the older lines are asbestos-concrete (serving about ½ the lots) and the remaining newer lines are PVC. The present operator is Clearwater Operations, Jackson WY.

Past WWDC Reports:

[http://library.wrds.uwyo.edu/wwdcrept/Teton/Teton\\_County-Water\\_Supply\\_Master\\_Plan\\_Level\\_I-Final\\_Report-1999.html](http://library.wrds.uwyo.edu/wwdcrept/Teton/Teton_County-Water_Supply_Master_Plan_Level_I-Final_Report-1999.html)

**C. PROJECT REQUIREMENTS:**

1. Monthly Progress Reports and Billing Statements

The Consultant shall submit a brief monthly progress report outlining the study status, progress, and results to date, regardless of whether or not a billing statement

is submitted, on or before the last working day of the month.

Each billing statement must include a task-by-task report justifying the cost items contained in the billing statement. The monthly progress report may be used as the justification for the billing statement as long as all cost items covered in the billing statement are addressed in the progress report.

2. Computer Models, Geographic Information System (GIS), Statement of Assumptions, Project Work File

a. If the Consultant writes or uses a computer program or spreadsheet as a part of this project, the Consultant shall submit to the Commission for approval all proposed program names and data formats prior to beginning work on that task. All data shall be submitted to the Commission in written and digital forms with the final report. Digital media shall be labeled by the Consultant to provide sufficient detail to access the information on the media. User manuals shall be submitted by the Consultant to the Commission providing complete documentation of computer programs developed under this project. The user manuals shall also contain the source code language and the type of computer equipment necessary to operate the program(s). The computer programs and spreadsheets (written and digital forms) are due on the same date as the final report, which contains the information generated by the programs.

b. If the Consultant develops, collects, and/or uses GIS data as a part of this project, the Consultant shall do so in accordance with the WWDC GIS Framework Plan and Technical Memorandum. Links to these documents are available at <http://wwdc.state.wy.us/index.html>. An updated webinar on GIS project standards, hosted by WWDC and WRDS, is also available and is strongly recommended.

The Consultant shall adhere to the following GIS standards:

(i) **FEATURE MAPPING.** The Consultant shall request a data template for feature mapping from the Office project manager prior to any GIS work. These templates define the organization and naming of “core” GIS data. Auxiliary GIS data layers, as needed for the project and described in the final contract, can be linked to the templates or managed separately as needed for project completion. Mapped features will be attributed according to the GIS data schema described in the Technical Memorandum of the WWDC GIS Framework Plan. All features modified or created shall include field attributes that indicate contract number, consultant, date modified, and accuracy.

(ii) **FORMATS and STANDARDS.** Simplified metadata shall be

completed in accordance with standards described in the Technical Memorandum of the WWDC GIS Framework Plan. Attribute codes not included as part of the “core” data templates shall be defined in the metadata. GIS data shall be saved in a Decimal Degree Coordinate system with a NAD83 datum, specifically “GCS\_North\_American\_1983,” as indicated in the Technical Memorandum. Project GIS deliverables may also include linked nonspatial data/databases (.accdb, .xlsx), rasters (various formats), photographs (.jpg), maps (.pdf), and file integrated metadata references (.xml, .txt). Data shall be delivered within the Office geodatabase template provided by the Office project manager. Auxiliary GIS data layers can be provided as .shp files.

(iii) MAPS. Project GIS deliverables shall be organized in such a way as to allow easy replication of the maps found in the final project report. The GIS project files should be provided as ESRI ArcGIS mxd files saved with relative path names to data sources.

c. To facilitate the Commission’s accurate evaluation of the Consultant’s work product, computations, conclusions and recommendations, the Consultant shall:

(i) Include in the final report a section describing the assumptions and methodology used by the Consultant in generating the data and conclusions contained in that chapter.

(ii) Maintain a project work file containing the materials used in project analysis. This file will be available for review by the Commission and should be organized in such a way as to allow replication of the steps and procedures used by the Consultant to reach the conclusions described in the study.

(iii) Prepare a project notebook containing a description of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach conclusions, described in the draft final report. The project notebook shall be submitted with the draft final report.

### 3. Cost Estimates

The Consultant shall use the following guidelines in calculating Level III cost estimates.

**WWDC ELIGIBLE PROJECT COSTS**

**CONSTRUCTION COSTS**

|   |                        |
|---|------------------------|
| Itemized Cost of Each Project Component             | \$ _____               |
|   | \$ _____               |
|   | \$ _____               |
|   | \$ _____               |
| Cost of Project Components TOTAL                    | \$ _____ (subtotal #1) |
| Construction Engineering Cost (subtotal #1 x 10%)   | \$ _____               |
| Components + Construction Engineering Costs         | \$ _____ (subtotal #2) |
| Contingency (subtotal #2 x 15%)                     | \$ _____               |
| Construction Cost Total (subtotal #2 + Contingency) | \$ _____ (subtotal #3) |

**PRE-CONSTRUCTION COSTS**

|   |                        |
|---|------------------------|
| Preparation of Final Designs & Specifications (subtotal #1 x 10%) | \$ _____               |
| Permitting and Mitigation   | \$ _____               |
| Legal Fees (Title of Opinion Only)                                | \$ _____               |
| Acquisition of Access and Rights of Way                           | \$ _____               |
| Pre-construction Costs Total                                      | \$ _____ (subtotal #4) |

**TOTAL WWDC ELIGIBLE PROJECT COST**

|  |                        |
|--|------------------------|
| Total WWDC Eligible Project Cost (subtotal #3 + subtotal #4) | \$ _____ (subtotal #5) |
|--|------------------------|

**WWDC INELIGIBLE PROJECT COSTS**

|   |                        |
|---|------------------------|
| Itemized Costs of Ineligible Project Components                   | \$ _____               |
|   | \$ _____               |
|   | \$ _____               |
|   | \$ _____               |
|   | \$ _____               |
| Additional Cost for Construction Engineering                      | \$ _____               |
| Additional Cost for Preparation of Final Designs & Specifications | \$ _____               |
| Total WWDC Ineligible Project Costs Total                         | \$ _____ (subtotal #6) |

**TOTAL PROJECT COST**

|  |          |
|--|----------|
| Total Project Cost (subtotal #5 + subtotal #6) | \$ _____ |
|--|----------|

**MATERIALS ONLY TOTAL**

|  |          |
|--|----------|
| Materials Only Total Project Cost ((Subtotal #1 + (Subtotal #1 x 10%)) | \$ _____ |
|--|----------|

Note: Any inflation costs, as determined by the consultant and Office project manager, will be applied to the Total Project Cost.

#### 4. Final Report

The Consultant shall use the Contract Scope of Services as the outline for draft and final reports so that Consultant compliance with Contract provisions can be verified. If the final report contains information of an engineering nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Engineer licensed in the State of Wyoming. If the final report contains information of a geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by a Professional Geologist licensed in the State of Wyoming. If the final report contains information of both an engineering and geologic nature, the cover of the final report, all plates, and the executive summary must be stamped and signed by both a Professional Engineer and a Professional Geologist licensed in the State of Wyoming.

#### 5. Final Report - Digital Format

In addition to the paper submittal described in Section C.4 above, the Consultant shall also provide the final documents and related materials in a digital format. This digital report shall be contained on CD/DVD(s), USB drive(s), or other media as approved by the Office project manager, and shall be in Searchable Image Adobe Acrobat format.

#### 6. Anticipated Project Funding Assistance

The Consultant shall clearly identify project components eligible for Commission funding, both in cost estimates and in project mapping. The Consultant shall verify project component funding eligibility with the Office project manager prior to commencing any economic analysis. Unless otherwise directed by the Office project manager, the Consultant shall assume that projects will be funded with a 67% grant. The remaining 33% shall be acquired from external sources (for municipal projects); or from external sources and/or a loan from the WWDC (for agricultural projects). The Commission loan will be financed at an interest rate of four percent (4%) with a term to be specified by the Office project manager. If funding is anticipated from another agency, such as the Office of State Lands and Investments or the USDA Rural Utilities Service (RUS), the Consultant shall prepare cost estimates for system components not eligible for Commission assistance in a format and level of detail acceptable to the potential funding agency.

If required in the Contract Scope of Services, the Consultant shall provide the information necessary to complete applications to RUS, the Office of State Lands and Investments, and any other identified funding sources.

#### 7. Project Access

The Consultant shall be responsible for obtaining access as required for project tasks.

8. Stand-By Time

The Commission will not reimburse the Consultant for stand-by time charges for the Consultant's supervisory personnel.

**D. SCOPE OF SERVICES:**

**Task 1. Meetings**

A scoping meeting shall be held early in the project schedule in the project area to familiarize the Sponsor with the scope of the project as well as obtain and provide input and information to and from all affected parties. The Consultant shall prepare all presentation material, including maps and other visual aids as necessary, to explain the project. The scoping meeting location and time shall be coordinated with the Sponsor and Office project manager and should be held after the Consultant has reviewed all background information as described in Task 2.

Additional project meetings shall be conducted to facilitate project activity coordination and to keep the Sponsor and all affected parties informed of progress. The Consultant should assume a minimum of two (2) project meetings in the study area. The Consultant shall be responsible for setting and conducting these meetings in coordination with the Office project manager and the Sponsor. The Consultant shall prepare all notices, needed materials, and the meeting record. In addition to the project meetings, several informal meetings with the Sponsor or Office project manager may be necessary during the course of the study. The Consultant shall notify the Office project manager in advance of any meetings with the Sponsor.

**Task 2. Information Review**

The Consultant will gather and review all existing information related to the Sponsor's water supply and distribution system. This includes information available through the Sponsor, WWDO, Water Resources Data System (WRDS), Wyoming State Engineer's Office, Wyoming Department of Environmental Quality Water Quality Division (DEQ), Teton County, U.S. Environmental Protection Agency (EPA), Skyline Ranch ISD "Level I Study" (Jorgensen, 2019), American Leak Detection – Inspection Report (July 24, 2018), and any other sources as appropriate. The Consultant shall coordinate with the Sponsor to obtain all past relevant studies that need to be reviewed. Improvements recommended to the water system in any of these reports should be documented. In addition, the status of those recommended improvements should be identified (i.e.: disregarded, completed, in progress, pending, etc.). The Consultant shall also review and summarize all local area development plans, zoning ordinances, annexation policies and other regulations that may affect this project. The Consultant shall provide a summary of existing information in the final report.

**Task 3. Growth and Demand Projections**

The Consultant shall develop population growth projections for the Sponsor's water service

area. Planning boundaries of the service area will be based on discussions with the District Board of Directors as to where future growth may occur. For example, the growth may occur within the corporate limits, the existing service area, or outside of both. This may result in the consideration of an expanded water service area that could reasonably be served by the Sponsor considering the investments in infrastructure.

Historic population data obtained from the Economic Analysis Division of the Wyoming Department of Administration and Information (EAD/DA&I) will be used as the basis of the projections. (Refer to <http://eadiv.state.wy.us/>.) Alternate population projections will be developed considering recent growth trends, projections developed by the EAD/DA&I, and projections from other sources including, but not limited to those that may be available from the Sponsor and county planning agencies. Another information source may be population projections available in environmental impact statements generated for mineral resource development in the area. The Consultant shall provide graphic representations of each alternate population projection.

Water demands, both current and projected, will be developed based on historic water use records. Alternate demand projections may be developed that consider the effects of an increasing tiered water rate system. Demand projections should include bulk water sales to rural or independent water districts or systems, industries, and others as applicable. The potential for any future high-impact water demand scenarios shall be examined. The Consultants shall also investigate any water service regionalization opportunities that may exist to satisfy future water demands.

#### **Task 4. Inventory, Evaluation, and GIS**

The Consultant shall confer with the Sponsor to identify specific problem areas and concerns that should be focused on during this task. The Consultant shall then propose the extent of inventory and evaluation to be performed in this task. Inventory and evaluations shall primarily focus on facilitating the objectives of this project that in part include addressing the Sponsor's areas of concern, identifying system deficiencies, and formulating improved GIS mapping. Updates to the Sponsor's existing GIS may include verification of the accuracy of the water system mapping in terms of piping connectivity, looping, location of system components, etc. During this task, the Consultant may coordinate with the Sponsor during field work to perform any required pot-holing to help verify and true-up the District's existing data. The Consultant shall coordinate with the Office project manager and Sponsor regarding the expectations and limitations of this effort and shall be mindful of the following intentions of this task:

- a. Inventory and evaluate the existing infrastructure to determine its ability to meet current water demands and future water demands developed in Task 3. Identify those components that presently require repair or replacement and those components that will require repair or replacement within the next twenty (20) years. Provide a schedule for the needed improvements as described in Task 7.
- b. Assess the capacity and serviceability of existing water treatment facilities,

transmission and distribution pipelines, wells, storage tanks, pump stations, PRV stations, hydrants, flow monitoring devices, SCADA, and other major components of the water supply system as applicable. Identify deficiencies and make recommendations for improvements needed to address these limitations. In conjunction with the hydraulic modeling task, pipe materials and pressure classes shall be examined in terms of suitability to provide adequate service.

- c. Evaluate the system for water losses, including leaks and other non-revenue water. Results of the hydraulic model can serve as an indicator for potential leakage locations along with observations and discussions with system operators. Identify locations that may warrant a future leak detection study. Identify factors and locations that may be the cause for leaks, such as corrosive soils.

The Consultant shall evaluate the management and operation of the public water system in the study area to determine if procedural changes would be beneficial. If so, the Consultant shall detail those changes. Results of the hydraulic model simulations can serve as a basis for this task along with observations and discussions with system operators. The Consultant shall evaluate the existing water metering system to ensure water bills can be or are based on metered usage. The Consultant may offer suggestions relating to the existing billing and metering procedures.

All mapping and corresponding data sets, existing and updated, shall be consolidated into a comprehensive GIS. Mapping shall be extended as needed to facilitate objectives of this project that include the hydraulic model, addressing the Sponsor's areas of concern, identification of system deficiencies, and development of a modern and efficient GIS. Coordination shall take place with the Sponsor and Office project manager on field survey limitations and any mapping logistics.

Deliverables to the Sponsor shall include at least two (2) sets of large size hard copy printouts of the service areas and associated features for the Sponsor's use. These items are in addition to the GIS deliverables described in Task 11. The Consultant shall coordinate with the Office project manager and Sponsor on final production of all hard copy mapping media and its delivery. GIS data deliverables shall be in accordance with the "WWDO GIS Framework Data Plan" and the accompanying "GIS Standards Technical Memorandum." (Refer to Section C.2.b. of Attachment B.)

## **Task 5. Water Source**

The Consultant shall gather and analyze data and information as needed to examine the Sponsor's water supply sources for its public water supply system. Capacities, diversion rates, pumping rates, pump capacities, and water treatment plant capacities shall be investigated as applicable. The Consultant shall determine if the water supply sources are limiting the ability to meet present and future water demands and if so, identify water supply alternatives to meet those demands.

The Consultant shall review existing water quality reports to determine if water supply sources and distributed water complies with EPA drinking water standards. If the reports indicate that the standards are not being met or suggest potential water quality problems, recommendations will be presented to mitigate these problems. Where applicable, the Consultant shall collect data on the number of households using septic systems, enhanced septic systems, sewage lagoon systems, or wastewater treatment plants to handle wastewater treatment within the Sponsor's water service area. These data will be used to determine if wastewater treatment, or lack thereof, is presently impacting the water quality or could impact the water quality of the Sponsor's water supply.

The Consultant will review the status of the Sponsor's water rights and produce a tabular inventory of these rights. The inventory shall include priority dates, quantities, permitted uses, permit conditions/status, if adjudicated, and other pertinent data. Historic use of water under each permit will be estimated to determine if the water rights must be expanded or altered to accommodate the recommendations in this project. The Consultant will also review any water supply contracts held by the Sponsor and discuss their purpose and importance to the Sponsor.

#### **Task 6. Hydraulic Model**

In conjunction with the updated GIS and water system information obtained in Task 4, the Consultant shall model the District's existing hydraulic model of its water system. The Consultant shall model the current system and proposed system improvements. Acceptable software platforms include the following or an Office approved equal:

- Innovyze/MWH Soft: InfoWater (ArcGIS based); H2OMap Water (stand-alone); or H2ONet (AutoCAD based)
- Bentley/Haestad Methods: WaterGEMS (ArcGIS based); WaterCAD (AutoCAD based or stand-alone)

The model shall analyze the system using an extended period simulation and shall be properly calibrated to available data sets or known system behavior. The Consultant shall evaluate the adequacy of the water transmission and distribution lines, pumping stations, and storage capacities to meet current and future pressure and flow requirements based on maximum day demands. System storage shall be modeled in terms of volume and water quality (i.e.: tank turnover, water age, etc.). System pressures shall be determined in the model and compared against the pressure classes of existing pipes to identify problem areas. The Consultant shall consider domestic, rural, commercial, municipal, and industrial demands as needed in the evaluation (i.e.: hospitals, colleges, golf courses, hotels, trailer park, schools, etc.) and incorporate planned development areas and all independent water systems that are supplied from the District's system. All pressure zones shall be properly accounted for and simulated in the model. All pump stations shall be simulated in the model, and the Consultant should assess the adequacy of the existing pumps in terms of capacity, hydraulic head, run-time, variable frequency drive (VFD) operation, etc. as deemed necessary. The Consultant shall use the model to size new pumps, transmission and distribution lines, storage, and other facilities as needed. In terms of fire flow,

coordinate with District staff to ascertain the Sponsor's expectations in providing fire flow to its service areas and the subsequent extent of fire flow simulations required. The model shall incorporate the recommended system upgrades or modifications and shall be detailed enough to satisfy the needs of the project

The Consultant shall construct and execute the hydraulic model to determine system capacity limits in terms of maximum growth potential. Any inactive or planned water taps within the system shall be incorporated into the model. The Consultant shall investigate whether the system has the capacity to effectively serve these taps should they eventually become active.

Within the final report, the Consultant shall fully describe all modeling efforts particularly in terms of the model extents and acquisition of model input, including but not limited to the following:

- Nodal Elevations
- Demands
- Diurnal Curve(s)
- Pump Curves
- Valve Settings
- Pipe Diameters and Material
- Pipe Friction Factors
- Tank Geometry

#### **Task 7. Recommendations and Cost Estimates**

The Consultant shall develop a listing and descriptions of recommendations for system improvements identified during the study. The recommendations shall address needed infrastructure capital improvement projects along with suggestions for the funding, operation, maintenance, and replacement of the system. The Consultant will prioritize the recommendations in coordination with the Sponsor. A schedule shall be developed that identifies a phased approach for the implementation of the recommendations in accordance with their priority.

The Consultant shall prepare construction cost estimates in tabular form for each of the recommended system improvements and shall be of sufficient detail to accommodate a Level III application. The table will identify both Commission eligible and non-eligible costs. Cost estimates for each infrastructure improvement shall be prepared as outlined in Attachment B, Section C.3. The Level III cost estimates will include costs of design, permitting, land acquisition, construction engineering, materials and equipment, construction, and construction contingencies. The cost estimates should be based on the year this study is completed. The Consultant shall then suggest an appropriate inflation factor that may be applied to the project's current year total cost and projected into the future per the schedule developed in this task.

The Consultant shall evaluate whether the project is in the public interest, stipulating if the

proposed project functions and services can be served by any person, association or corporation engaged in private enterprise, or if private enterprise has refused to provide the functions and services identified as being required by the proposed project. This information shall be included in the draft and final reports for the project.

### **Task 8. Water System Financing**

The Consultant shall work with the Sponsor to acquire all necessary financial data required for this task to determine the current and anticipated future water system revenues and expenditures. To initiate this task, the Consultant shall determine if the Sponsor has a water enterprise fund in which existing water revenues allow the water system to be financially self-supporting or if the Sponsor must subsidize the water system from other budgets and revenues such as bonds, grants, etc. In order for the water system to be self-supporting, revenues should be sufficient to accomplish the following:

- Retire existing water related debt (principal and interest).
- Pay the costs for employees.
- Pay the costs of materials, supplies, utilities, and outside services necessary to operate and maintain the water system and provide normal improvements and replacement requirements for the system.
- Pay for administrative and overhead expenses.
- Provide an emergency fund that annually accrues at least an amount equal to 1.5% – 2.5% of the operating expenses.
- Provide a fund that accrues sufficient reserves to pay for major repairs and replacement that will be required during the life of any associated project.
- Pay other costs as may be identified by the Consultant.

The Consultant shall first use the above criteria to make recommendations on the Sponsor's current water revenue structure (rates, tap fees, and other) that would support the existing water system based on a revenue structure that encourages water conservation (tiered water rates). The current water revenues shall be compared against current water expenditures based on the last five (5) years of data (if available). The Consultant shall prepare a suggested itemized annual budget for the existing water system that would result in the system becoming and staying financially self-supporting.

Next, the Consultant shall prepare two (2) funding scenarios for consideration by the Sponsor that demonstrate the adjustments in revenues that may be necessary to accommodate the prioritized recommendations, schedules, and cost estimates developed in Task 7. The Consultant shall present these amended water revenue structures that would support the identified system improvements while maintaining the system as financially self-supporting as defined by the above criteria. Within these adjustment scenarios, the Consultant shall demonstrate the effects on the average monthly bill for residential water users. These estimated average monthly bills will be compared against American Water Works Association (AWWA) standard of 2.5% of the annual median household income divided by 12 months. These two (2) scenarios shall be presented in

the draft and final reports in a tabular or other clear and concise format. The adjustment in revenues will be presented based on the following two (2) scenarios:

Scenario 1: Assume there will be no state, federal, or outside funding assistance utilized, i.e., the Consultant shall demonstrate the necessary adjustments in water system revenues under the assumption that the Sponsor independently finances the prioritized recommendations.

Scenario 2: Assume that funding for WWDC **eligible** components will be in the form of a 67% grant from WWDC and a 33% loan from WWDC (4%, 30-year term), and funding for WWDC **non-eligible** components will only be in the form of Sponsor contribution from current or proposed water system revenues.

The Consultant shall then identify additional funding sources outside of WWDC that the Sponsor can pursue to obtain the 33% loan component (Scenario 2 above) and to fund WWDC **non-eligible** components that are necessary for the completion of a Level III construction project. The Wyoming Drinking Water State Revolving Fund Program (DWSRF), the USDA Rural Utilities Service (RUS), the State Lands and Investments Board, the Wyoming Business Council, the DEQ Abandoned Mine Lands Program, and other eligible funding sources shall be considered for loans, grants, and combinations thereof.

The Consultant shall research and fully consider all eligibility requirements, application nuances, deadlines, and all logistical and timing challenges that may occur, report the amount of grant or loan funds that may be available through each agency, and analyze the probability of the Sponsor securing a grant or loan for the project(s) in question. The Consultant shall contact these agencies early in the study should the possibility exist that the Sponsor may seek funding from them. The Consultant shall obtain and review the latest versions of relevant guidance documents, forms, bulletins, supplements, information, etc. from each agency.

The Consultant shall also research and define the federal National Environmental Policy Act (NEPA) requirements for securing such loans in terms of the environmental review (ER) efforts specifically required for each agency. Throughout this task, the Consultant shall carefully distinguish and be mindful of the differences between DWSRF and RUS in terms of available funding packages and ER requirements. DWSRF and RUS guidance and contact information is as follows:

For DWSRF

Forms and Guidance: <http://deq.wyoming.gov/wqd/state-revolving-loan-fund/resources/1-srf-forms-and-guidance/>

Contact: Bill Tillman, SRF Principal Engineer  
WDEQ/WQD, 200 W. 17th Street, Cheyenne, WY 82002  
Tel 307-777-6941. Email: [william.tillman@wyo.gov](mailto:william.tillman@wyo.gov)

For RUS

Forms and Guidance: <http://www.rd.usda.gov/programs-services/all-programs/water-environmental-programs>

Contact: Lorraine Werner, Community Programs Director, USDA RUS  
Wyoming State Office, 100 East B Street, Rm 1005, Casper, WY 82602  
Tel 307-233-6710. Email: [lorraine.werner@wy.usda.gov](mailto:lorraine.werner@wy.usda.gov)

Lastly, in order to demonstrate whether the water system has the technical, financial, and managerial capabilities to ensure current and ongoing successful operations, the Consultant shall complete the most recent Capacity Assessment and Financial Worksheets as provided by Wyoming DEQ. Water systems must meet these capacity development requirements before a construction permit can be issued, and it is also part of eligibility for Drinking Water State Revolving Fund (DWSRF) loans. These worksheets shall be completed by the Consultant whether the Sponsor is anticipating DWSRF funding or not. Completed worksheets shall be submitted as an appendix within the final report to this project. Worksheets are available at <http://deq.wyoming.gov/wqd/state-revolving-loan-fund/resources/1-srf-forms-and-guidance/> or by contacting DEQ directly.

It should be noted that the Sponsor's ability to pay for the project in a timely manner is a key consideration in the WWDC's funding decisions. The annual requests for WWDC funding typically exceed the funding available. There are often uncertainties and delays in acquiring loans and, particularly, grants from other funding agencies. Therefore, the WWDC may give priority in its Level III funding deliberations to the projects in which the Sponsor has been advancing on a specific financing plan and there is documented evidence that the financing will be in place within the calendar year in which the Level III project funding is approved by the Legislature. If the WWDC finds it necessary to delay Level III funding requests due to the schedule for the financing plan, the WWDC may provide assurance to the Sponsor that it will recommend Level III funding the following year if the project financing is completed. This assurance can be used to assist the Sponsors in securing financing from other entities.

### **Task 9. Draft Report**

The Consultant shall submit to the Office five (5) hard copies of a draft report describing the results of all work completed in this study no later than May 1, 2021. Five (5) CD, DVD, or USB drive copies containing the draft report in a text-recognized Adobe Acrobat (pdf) format will also be provided, along with two (2) CD, DVD, USB drive, or portable hard drive copies of the draft GIS (if applicable) which comply with the standards specified in Attachment "B", Section C Project Requirements, item #2. The PDF version will be completely assembled into one standalone file, and shall be exactly the same version as the hard copy. Each CD, DVD, USB drive, or portable hard drive shall have a hard copy table of contents attached. The WWDO project manager shall provide the project Sponsor a copy of this draft report for their review.

## **Task 10. Report Presentations**

Upon completion of the draft report, the Consultant shall present the findings of the study at a public meeting near the project area. Information and materials to be presented at the public meeting shall be developed by the Consultant after consultation with the Office project manager. The Consultant shall be responsible for developing a record of the meeting which shall become an appendix in the final report. The record will include: any formal and/or informal notices; an affidavit of publication from the legal notice (public hearings only) as obtained from the Office; any materials presented or handed out at the meeting; a record of attendance; any written comments, statements, or exhibits received; recorded testimony, or a memorandum summarizing the views and comments presented at the meeting; and other pertinent data. The Consultant will also budget for a meeting in Casper or Cheyenne to present the results to the Commission. These presentations are independent of the meetings included under Task 1.

The Consultant shall coordinate with the Office project manager in planning for the presentations to ensure adherence to Office established policies and guidelines. The report presentation for this Level II Study shall also serve as a public hearing, with WWDC Office personnel serving as the hearing officer. The script for the hearing will be developed by the Office project manager and shall include the question as to whether there is a private entity interested in providing the proposed project functions and services in lieu of the sponsor. The Office is responsible for publishing a legal notice of the meeting in a statewide newspaper, once each week for three (3) weeks prior to the hearing; and in the local publication up to three (3) times prior to the hearing.

## **Task 11. Final Report and Deliverables**

After incorporation of the Office's and the Sponsor's review comments on the draft report, the Consultant shall submit one (1) final report and one (1) executive summary in hard copy along with one (1) CD or DVD or USB drive containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format to the Office 1 to 2 weeks prior to the final deadline for final comparison purposes. The pdf version shall be completely assembled into one stand-alone file and shall be exactly the same version as the hard copies. Any discrepancies discovered by the Office project manager between the hard copy and electronic copy during this final comparison are the responsibility of the Consultant to correct.

Upon completion of the final quality assurance process by the Office project manager, WRDS will assign an URL for the online posting of the final report and the Consultant shall submit all final documents and materials to the Office on or before July 16, 2021. These final documents and materials shall include: 1) Twelve (12) hard copies of the final report, and 2) Twelve (12) hard copies of the executive summary. 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. Any final reports which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant and date.

Four (4) CD, DVD, or USB drive copies containing the final report and executive summary in a text-recognized Adobe Acrobat (pdf) format will be provided. The pdf version will be completely assembled into one stand-alone file and shall be exactly the same version as the hard copy. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Two (2) CD, DVD, or USB drive copies containing the final report and executive summary in original formats (Word, Excel, etc.) and in a text-recognized Adobe Acrobat (pdf) format. The pdf version will be completely assembled into one stand-alone file. All electronic files shall be exactly the same version as the hard copies. Each CD, DVD, or USB drive shall have a hard copy table of contents attached.

Three (3) CD, DVD, or USB drive copies of the hydraulic model project file and all associated files shall be provided if applicable. The files shall create a working model that is fully functional and can be modified. Each CD, DVD, or USB drive shall have a hard copy table of contents attached. In addition to the above, one (1) electronic copy of the hydraulic model project file and all associated files will be included in the project notebook.

Three (3) CD, DVD, USB drive or portable hard drive copies of the GIS data according to the WWDC GIS Framework Plan and Technical Memorandum. See Attachment "B", Section C Project Requirements, Item 2 for further details.

One (1) project notebook containing the working files used in this project will be provided. The project notebook files shall include descriptions of the assumptions and methodologies used in the project analysis. The notebook shall be organized in such a way as to allow replication of the steps, calculations, and procedures used by the Consultant to reach the conclusions described in the final report. The preferred format for the project notebook is digital, provided on a CD, DVD, or USB drive. Any project notebooks which have been submitted in three-ring notebook format shall have spine labels clearly identifying the project, Consultant, and date.

REQUEST FOR PROPOSAL NO. 20-9 (Cont'd.):

**ATTACHMENT "C"**  
**PRICE PROPOSAL SUMMARY**  
**SKYLINE ISD WATER SUPPLY, LEVEL II STUDY**

| <u>Task</u>                           | <u>Estimated Cost</u> |
|---------------------------------------|-----------------------|
| 1. Meetings                           | \$ _____              |
| 2. Information Review                 | \$ _____              |
| 3. Growth and Demand Projections      | \$ _____              |
| 4. Inventory, Evaluation & GIS        | \$ _____              |
| 5. Water Source                       | \$ _____              |
| 6. Hydraulic Model                    | \$ _____              |
| 7. Recommendations and Cost Estimates | \$ _____              |
| 8. Water System Financing             | \$ _____              |
| 9. Draft Report                       | \$ _____              |
| 10. Report Presentations              | \$ _____              |
| 11. Final Report and Deliverables     | \$ _____              |

**PROJECT TOTAL COST**

**Including Labor, Reimbursable, and Subconsultant Expenses \$ \_\_\_\_\_**

In the spaces below, provide the Labor and Reimbursable Expenses of the prime consultant along with any additional Subconsultant Expenses which are included within the above tasks. These three amounts when added together should equal the project total cost listed above.

Proposed Labor Expenses (prime only) \$ \_\_\_\_\_  
Proposed Reimbursable Expenses (prime only) \$ \_\_\_\_\_  
Proposed Subconsultant Expenses \$ \_\_\_\_\_

Firm Name and Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Signature of Firm President or Authorized Agent: \_\_\_\_\_  
Employer Identification Number: \_\_\_\_\_