

Assessor's Parcel Number:  N/A

Date:  JANUARY 21, 2015

Recording Requested By:

Name:  EILEEN CHURCH, PUBLIC WORKS   
 (RR)

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Real Property Transfer Tax: \$  N/A



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KAREN ELLISON, RECORDER

**CONTRACT #2015.017**

(Title of Document)

# CONTRACT FOR SERVICES BY AN INDEPENDENT ENGINEER

A CONTRACT BETWEEN

**DOUGLAS COUNTY, NEVADA**

AND

**HDR ENGINEERING, INC.**

DOUGLAS COUNTY  
CLERK  
BY *[Signature]*  
DEPUTY

2015 JAN 21 AM 11:22

NO. 2015-017

FILED

This Contract for Services by an Independent Engineer (the "Contract") is entered into by and between Douglas County, a political subdivision of the State of Nevada, through the Board of County Commissioners (the "County"), and HDR Engineering, Inc. ("Engineer"). The County and Engineer are at times collectively referred to hereinafter as the "Parties" or individually as the "Party."

**WHEREAS**, Douglas County, a political subdivision of the State of Nevada, from time to time requires the services of independent Engineers; and

**WHEREAS**, it is deemed that the services of Engineer herein specified are both necessary and desirable and in the best interests of Douglas County; and

**WHEREAS**, Engineer represents that it is duly qualified, equipped, staffed, ready, willing and able to perform and render the services hereinafter described.

**NOW, THEREFORE**, in consideration of the mutual promises and covenants herein made, the County and Engineer mutually agree as follows:

**1. TERM AND EFFECTIVE DATE OF CONTRACT.** The Contract will become effective on the date it is approved and signed by representatives of both Parties. Time is of essence for performance of the professional services described herein and all tasks must be completed by Tuesday, September 01, 2015.

**2. INDEPENDENT ENGINEER STATUS.** The Parties agree Engineer will have the status of an independent Engineer and that the Contract, by explicit agreement of the Parties, incorporates and applies the provisions of NRS 333.700, as necessarily adapted to the Parties, including the express understanding that Engineer is not an employee of the County and that:

There shall be no:

- (1) Withholding of income taxes by the County;
- (2) Industrial insurance coverage provided by the County;
- (3) Participation in group insurance plans which may be available to employees of the County;

- (4) Participation or contributions by either the Engineer or the County to the public employee's retirement system;
- (5) Accumulation of vacation leave or sick leave; and
- (6) Unemployment compensation coverage provided by the County if the requirements of NRS 612.085 for independent Engineers are met.

**3. INDUSTRIAL INSURANCE.** Engineer further agrees that, prior to the commencement of any work and as a precondition to any obligation of the County to make any payment under the Contract, Engineer will provide the County with a work certificate and/or a certificate issued by a qualified insurer in accordance with NRS 616B.627. Engineer also agrees that, prior to commencing any work under the Contract, Engineer will complete and provide evidence to the County that Engineer has made the following written request to Engineer's insurer:

HDR Engineering, Inc. has entered into a contract with Douglas County to perform work through Tuesday, September 01, 2015, and requests that an authorized insurer provide to Douglas County: (1) A certificate of coverage issued pursuant to NRS 616B.627 and (2) Notice of any lapse in coverage or nonpayment of coverage that the Engineer is required to maintain.

The certificate and notice should be mailed to:

Douglas County  
Public Works Department  
Post Office Box 218  
Minden, Nevada 89423

Engineer agrees to maintain all required workers' compensation coverage throughout the entire term of the Contract. If Engineer does not maintain the required coverage throughout the entire term of the Contract, Engineer agrees that the County may, at any time the coverage is not maintained by Engineer, order the Engineer to stop work, suspend the Contract, or terminate the Contract at the sole discretion of the County. For each six-month period this Contract is in effect, Engineer agrees, prior to the expiration of the six-month period, to provide another written request to the insurer for the provision of a certificate and notice of lapse in, or nonpayment of, insurance coverage. If Engineer does not make the request or does not provide the certificate before the expiration of the six-month period, Engineer agrees that the County may order the Engineer to stop work, suspend the Contract, or terminate the Contract at the sole discretion of the County.

**4. SERVICES TO BE PERFORMED.** The Parties agree that the Engineer will perform the following:

Prepare Preliminary Engineering Reports for: 1) Uppaway Water System, 2) Cave Rock/Skyland Water System and 3) Zephyr Water Utility District Water System in accordance with the following:

- A. Scope of work attached as Exhibit A;
- B. Project schedule attached as Exhibit B;

- C. Compensation schedule attached as Exhibit C; and
- D. Rate schedule attached as Exhibit D.

**5. PAYMENT FOR SERVICES.** Engineer agrees to provide the services set forth in Paragraph 4 on a time and reimbursable expenses not to exceed One Hundred Ninety-Nine Thousand Seven Hundred Twenty-Three Dollars (\$199,723) (the "Contract Price") in accordance with the compensation schedule (Exhibit C) and rate schedule (Exhibit D). Unless Engineer has received a written exemption from the County, Engineer shall submit monthly requests for payment for services performed under this Contract. Requests for payment shall be submitted no later than fifteen (15) days after the end of a month and must include a detailed summary of the expenditures reported in a form that supports the approved budget. Specifically, Engineer agrees to provide with each request for payment a schedule of actual expenditures for the period, cumulative total expenditures for the entire contract, and a comparison of cumulative total expenditures to the maximum expected fee for the services and tasks set forth in Paragraph 4. County will pay Engineer's within 30 days of receipt of the Engineer's verified invoice.

**6. TERMINATION OF CONTRACT.** Either Party may terminate the Contract if either Party fails to correct any breach of the terms of the Contract within 30 days after receiving notice of such breach and having been given a reasonable opportunity to cure the breach.

**7. NONAPPROPRIATION.** All payments required pursuant to the Contract are contingent upon the availability of County funds. In accordance with NRS 354.626 and any other applicable provision of law, the financial obligations between the Parties will not exceed those monies appropriated and approved by the County for the Contract for the then current fiscal year under the Local Government Budget Act. The Contract will terminate and the County's obligations will be extinguished if the County fails to appropriate the necessary funding.

Nothing in the Contract will be construed to provide Engineer with a right of payment from any entity other than the County. Any funds budgeted by the County pursuant to the terms of the Contract that are not paid to Engineer will automatically revert to the County's discretionary control upon the completion, termination, or cancellation of the Contract. The County will not have any obligation to re-award or to provide, in any manner, the unexpended funds to Engineer. Engineer will have no claim of any sort to the unexpended funds.

**8. CONSTRUCTION OF CONTRACT.** The Contract will be construed and interpreted according to the laws of the State of Nevada. There will be no presumption for or against the drafter in interpreting or enforcing the Contract. In the event a dispute arises between the Parties, the Parties promise and agree to first meet and confer to resolve any dispute. If such meeting does not resolve the dispute, then the Parties agree to mediate any dispute arising from or relating to the Contract before an independent mediator mutually agreed to by the parties. The fee, rate or charge of the mediator will be shared equally by the Parties, who will otherwise be responsible for their own attorney's fees and costs. If mediation is unsuccessful, litigation may only proceed before a department of the Ninth Judicial Court of the State of Nevada in and for the County of Douglas that was not involved in the mediation process and attorney's fees and costs will be awarded to the prevailing party at the discretion of the court.

**9. COMPLIANCE WITH APPLICABLE LAWS.** Engineer promises and agrees to fully and completely comply with all applicable local, state and federal laws, regulations, orders, or requirements of any sort in carrying out the obligations of the Contract, including, but not limited

to, all federal, state, and local accounting procedures and requirements, all hazardous materials regulations, and all immigration and naturalization laws.

**10. ASSIGNMENT.** Neither Party will assign, transfer nor delegate any rights, obligations or duties under the Contract without the prior written consent of the other Party.

**11. COUNTY INSPECTION.** The books, time-based and reimbursable expense records, documents and accounting procedures and practices of Engineer related to the Contract will be subject to inspection, examination and audit by the County, including, but not limited to, the contracting agency, the County Manager, the District Attorney, and, if applicable, the Comptroller General of the United States, or any authorized representative of those entities.

**12. DISPOSITION OF CONTRACT MATERIALS.** Any books, reports, studies, photographs, negatives or other documents, data, drawings or other materials prepared by or supplied to Engineer in the performance of its obligations under the Contract (the "Materials"), with the exception of those standard details and specifications regularly used by the Contractor in its normal course of business will, upon payment of all amounts rightfully owed by the County to the Engineer, will be the exclusive property of the County and all such materials will be remitted and delivered, at Engineer's expense, to the County by Engineer upon the completion, termination or cancellation of the contract. Alternatively, if the County provides its written approval to Engineer, the Materials must be retained by Engineer for a minimum of six years after Engineer's receipt of the final payment from County and all other pending matters are closed. If, at any time during the retention period, the County, in writing, requests any or all of the Materials, then Engineer will promptly remit and deliver the materials, at Engineer's expense, to the County. Unless the County has requested the remittance and delivery by Engineer of the Materials, Engineer will not use, willingly allow or cause to have such Materials used for any purpose other than the performance of Engineer's obligations under the terms of the Contract without the prior written consent of the County. Any reuse or modification of the documents supplied by Engineer to the County for any purpose other than as requested by the County within the Engineer's Scope of Services (Paragraph 4) will be at the County's sole risk and without liability to the Engineer.

**13. PUBLIC RECORDS LAW.** Engineer expressly understands and agrees that all documents submitted, filed, or deposited with the County by Engineer, unless designated as confidential by a specific statute of the State of Nevada, will be treated as public records pursuant to NRS chapter 239 and shall be available for inspection and copying by any person, as defined in NRS 0.039, or any governmental entity. Engineer expressly and indefinitely waives all of its rights to bring, including but not limited to, by way complaint, interpleader, intervention, or any third party practice, any claims, demands, suits, actions, judgments, or executions, for damages or any other relief, in any administrative or judicial forum, against the County or any of its officers or employees, in either their official or individual capacity, for violations of or infringement of the copyright laws of the United States or of any other nation.

**14. INDEMNIFICATION.** Engineer agrees to indemnify, defend, and save and hold the County, its agents and employees harmless from any and all claims, causes of action or liability to the extent caused by or arising Engineer's negligent performance pursuant to the terms of the

Contract by Engineer or Engineer's agents or employees. Engineer's liability shall be limited to the percentage of the fault apportioned to Engineer by a court of law, arbitrator, or by the Parties' mutual written agreement.

**15. MODIFICATION OF CONTRACT.** The Contract and the attached exhibits constitute the entire agreement and understanding between the Parties and may only be modified by a written amendment signed by both of the Parties.

**16. AUTHORITY.** The Parties represent that they have the authority to enter into this agreement.

**17. STANDARD OF CARE.** Engineer will perform all services in a manner consistent with that level of care and skill ordinarily exercised by other members of Engineer's profession currently practicing in the same locality under similar conditions.

**18. WAIVER OF LIEN.** Engineer understands and agrees that the services it will render to the County are not intended for the improvement of real property or to otherwise grant any rights to Engineer pursuant to NRS chapter 108.

**19. THIRD PARTY BENEFICIARY.** Nothing contained in this Agreement is intended to convey any rights or to create a contractual relationship with any third party or to otherwise allow a third party to assert a cause of action against either Engineer or County.

**20. NOTICES.** All notices, requests, demands and other communications hereunder must be in writing and will be deemed delivered when sent via certified mail, return receipt requested or by commercial courier, provided the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the Party to be notified may have designated to the sender by like notice):

**To County:**

Douglas County  
Attn: Public Works Director  
1120 Airport Road, F2  
Post Office Box 218  
Minden, Nevada 89423  
Telephone: (775) 782-6227

**To Engineer:**

HDR Engineering, Inc.  
Attn: Joel Bellin  
9805 Double R Boulevard, Suite 101  
Reno, Nevada 89521-5917  
Telephone: (775) 817-4700

**21. CONFLICT OF INTEREST.** By signing the Contract, Engineer agrees that any information obtained from Douglas County, in whatever form, will not be divulged to other competing interests without the permission of the County Manager. In the event of a breach of this provision, Douglas County may immediately withdraw, without penalty or any payment,

from the Contract. Engineer must notify Douglas County of any other contracts or projects Engineer is working on that may impact Douglas County.

**IN WITNESS WHEREOF**, the Parties hereto have caused the Contract to be signed and intend to be legally bound thereby.

**HDR Engineering, Inc.**

By: Ruedy Edgington 12/18/14  
Ruedy Edgington, Vice President (Date)

Ruedy Edgington, Vice President  
Name/Title

**Douglas County**

By: Doug N. Johnson 1/15/15  
Chairman, Board of County Commissioners (Date)

# EXHIBIT "A" SCOPE OF SERVICES

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## Douglas County Lake Water Systems Preliminary Engineering Report

### PROJECT UNDERSTANDING

Douglas County (COUNTY) owns and operates three water systems at Lake Tahoe:

- Cave Rock/Uppaway Water System.
- Skyland Water System.
- Zephyr Water Utility District (ZWUD) Water System.

These water systems provide potable water to approximately 1,085 service connections. Historically, as small private water systems, the respective water companies lacked the managerial, technical, and financial resources to upgrade the water systems to meet the U.S. Environmental Protection Agency's (EPA's) Surface Water Treatment Rule (SWTR), and subsequent regulations such as Long-Term Surface Water Treatment Rule No. 1 and No. 2. As a result, the COUNTY acquired aging and failing water systems requiring extensive capital improvement needs.

While the Cave Rock and Uppaway systems are fiscally united, the Cave Rock system is connected physically to the Skyland Water system. As such, Cave Rock and Skyland water systems will be reviewed under the same PER, due to their physical layout, while the Uppaway system will be covered under a separate PER.

### Preliminary Engineering Report (PER)

The COUNTY seeks to obtain funding to complete the necessary improvements to the Lake Tahoe water systems. To be eligible to qualify for funding from sources including, but not limited to, the U.S. Department of Agriculture (USDA), U.S. Army Corps of Engineers, and the Nevada State Revolving Loan Fund, a PER must be prepared to:

- Identify existing system deficiencies.
- Evaluate alternatives to address the deficiencies.



- Prepare cost opinions for the alternatives.
- Identify preferred alternatives.
- Prepare schedules for the capital improvements.

The PER must be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2, as follows:

## I. Project Planning Area

- Location:** Scale maps and photographs of the project planning area and existing service areas. Legal and natural boundaries and a topographical map of the service area. COUNTY shall provide any mapping used to develop the location map for this water system.
- Environmental Resources Present:** Maps, photographs, and/or a narrative description of environmental resources present in the project planning area that affect design of the project. A summary of the environmental setting (affected environment) will be prepared using information collected and presented in the Environmental Reports.
- Population Trends:** U.S. Census or other population data (including references) for the service area for the past two decades, and population projections for the project planning area and concentrated growth areas for the project design period. Projections will be based on historical records with justification from recognized sources. Existing population data and growth trends will be presented using information available from the State of Nevada and Douglas County.
- Community Engagement:** Description of the COUNTY's planned approach to engage the community in the project planning process. Plans to engage the community will be discussed with COUNTY staff during the kick-off meeting.

## II. Existing Facilities

- Location Map:** A map and a schematic process layout of existing facilities. Facilities that are no longer in use or abandoned will be identified.

- b. **History:** Identification of when major water system components were constructed, renovated, expanded, or removed from service, using COUNTY-provided information. Component failure history and applicable violations of regulatory requirements will be provided by the COUNTY.
- c. **Condition of Existing Facilities:** CONSULTANT will provide a description of the present condition, suitability for continued use, adequacy of current facilities, and conveyance, treatment, storage, and disposal capabilities based on site visits and discussions with COUNTY staff. CONSULTANT's scope of work does not include a condition assessment of existing facilities. The existing capacity of each component of the water system will be identified. Overall current energy consumption will be included based on past energy bills provided by the COUNTY.
- d. **Financial Status of Existing Facilities:** COUNTY will provide CONSULTANT with the most recent audit or financial statement, current water rate schedules, annual operations and maintenance (O&M) costs (with a breakout of current energy costs), capital improvement programs, and tabulation of users by monthly usage categories for the most recent typical fiscal year. COUNTY will also provide CONSULTANT with status of existing debts and required reserve accounts.

### III. Need for Project

- a. **Health, Sanitation, and Security:** Concerns and relevant regulations and correspondence from/to federal and state regulatory agencies. Such correspondence will be provided by the COUNTY and will be included as an attachment to the PER.
- b. **Aging Infrastructure:** Identification of aging infrastructure with the greatest impact based on condition of existing facilities information provided in the "Existing Facilities" PER chapter. Water loss, inflow and infiltration, treatment or storage needs, management adequacy, inefficient designs, safety concerns, and other applicable problems will be identified.
- c. **Reasonable Growth:** Description of the reasonable growth capacity that is necessary to meet needs during the planning period.

Consideration will be given to designing for phased capacity increases. The number of new customers committed to this project will be estimated.

IV. **Alternatives Considered:** For each technically-feasible alternative, the description will include a description of the facilities, design parameters used for the evaluation, schematic layout map, process diagram for the water treatment plant, information about how alternatives may impact the environment, land requirements, potential construction issues (e.g., subsurface rock, high water table, limited access, existing resource or site impairment, or other conditions that may affect the cost of construction or operation of the facility), sustainability considerations, and cost estimate. Technically-infeasible alternatives that were considered will be mentioned briefly, along with an explanation of why they are infeasible.

V. **Selection of an Alternative**

- a. **Life-Cycle Cost of Each Alternative:** The costs and benefits of adding water meters to service connections will be evaluated. A life-cycle cost analysis will be performed to compare technically-feasible alternatives and to calculate the payback period. The life-cycle cost analysis will be based on an estimated water rate structure provided by COUNTY, and does not include a detailed water rate study for the system.
- b. **Non-Monetary Factors:** Selection of an alternative will also include consideration of nonmonetary factors (e.g., financial, social, and environmental).

VI. **Proposed Project (Recommended Alternative)**

- a. **Preliminary Project Design:** A preliminary project design for the recommended drinking water system improvements, which will include applicable water supply, treatment, storage, pumping station, and distribution improvements.
- b. **Project Schedule:** Project schedule will identify dates for submittal and anticipated approval of required documents, land and easement acquisition, permit applications, advertisement for bids, loan closing, contract award, initiation of construction, substantial completion, final completion, and initiation of operation.

- c. **Permit Requirements:** Construction, discharge, and capacity permits that will/may be required as a result of the project will be identified.
- d. **Sustainability Considerations:** Description of the aspects of the proposed project that address water efficiency, water conservation (e.g., use of meters), and energy-efficient design (e.g., variable frequency drives) that were incorporated into the selected alternative.
- e. **Total Project Cost Estimate:** An engineer's opinion of the probable construction cost of the recommended project will be provided.
- f. **Annual Operating Budget:** It is assumed that the COUNTY will provide CONSULTANT *existing* annual operating budget information including the following:
  - i. Income
  - ii. Annual O&M Costs
  - iii. Debt Repayments
  - iv. Reserves

CONSULTANT will prepare annual operating budgets for the *proposed* equipment and facilities.

## VII. Conclusions and Recommendations

The COUNTY is currently preparing a SCADA Master Plan and expects this to be completed in early 2015. Recommendations for SCADA upgrades must be incorporated into the PER.

*Note that CONSULTANT is not responsible for preparing the SCADA recommendations. The recommendations provided by COUNTY will be inserted into the PER by CONSULTANT.*

### **Environmental Report (ER)**

An ER for the preferred project alternatives will also be prepared for each water system (Cave Rock/Skyland, Uppaway, and ZWUD) to provide adequate information for state and federal funding agencies to prepare environmental documents required under the National Environmental Policy Act (NEPA). The environmental report shall be

prepared in accordance with USDA Rural Utilities Service Bulletin 1794A-062, as follows:

- I. **Purpose and Need for the Proposal** (applicable section of the PER will be referenced):
  - a. Project Description (Proposed Action)
  - b. Purpose and Need for the Proposal
- II. **Alternatives to the Proposed Action** (alternatives developed for the PER will be referenced).
- III. **Affected Environment/Environmental Consequences:** Focus on the key environmental issues in the project area (e.g., soils/water quality, biological resources, cultural resources, SEZ/wetlands, and scenic resources), using existing data sources and mapping available from regulatory agencies (e.g., no new surveys or technical studies will be performed). Other resource areas will be addressed, but at a level of detail commensurate with the low potential for significant impacts.
- IV. **Summary of Mitigation:** Identify changes to the project or new alternatives (e.g., facility alignments) to avoid potentially significant impacts, or develop mitigation measures to offset impacts that cannot be avoided (e.g., offsite SEZ restoration to offset impacts of a SEZ crossing that cannot be avoided).
- V. **Correspondence and Coordination**
- VI. **Exhibits**
- VII. **List of Preparers**

## **SCOPE OF WORK**

### **Task 1 - Project Management and Quality Assurance/Quality Control (QA/QC)**

This task includes all management activities required for on-time, on-budget project completion and to address the COUNTY's concerns. CONSULTANT will prepare invoices and progress reports on a monthly basis. The monthly progress reports will summarize budget and schedule status in measurable terms. Other activities include the scheduling of staff and coordinating all quality assurance efforts. To ensure objectivity,

senior technical staff, not immediately involved in the project, will perform internal QA/QC of deliverables before they are submitted to the COUNTY.

*Deliverables: Meeting agenda and minutes, and monthly invoices and progress reports.*

## **Task 2 – Data Collection/Review and Site Visits**

### **Subtask 2.1 – Data Collection**

CONSULTANT will obtain the pertinent information for each water system from the COUNTY, which will include the following (at a minimum):

- Distribution system maps.
- Water system record drawings.
- Water system models.
- Pumping records.
- Leakage repair records.
- Fire flow test data.
- Sanitary surveys.
- Nevada Department of Environmental Protection (NDEP) notices of compliance violations and enforcement actions.
- Past energy bills.
- Financials, including most recent audit or financial statement, current water rate schedules, annual operating budgets, capital improvement programs, and annual O&M costs (with a breakout of current energy costs), tabulation of users by monthly usage categories for the most recent typical fiscal year, and status of existing debts and required reserve accounts.
- Relevant studies and reports.

*Deliverables: Request for background information.*

### **Subtask 2.2 – Data Review**

CONSULTANT will compile and review the data as needed to complete the subsequent tasks.

### **Subtask 2.3 – Site Visits**

CONSULTANT will visit each water system to perform the following tasks:

- Observe condition of all existing facilities, such as tanks, wells, pumping stations, and water treatment plants.
- Take photographs of existing facilities and potential environmental impacts or construction limitations.
- Estimate land acquisition requirements and estimated costs, if necessary.

This subtask assumes site visits for the three water systems will be conducted in a one-day period. CONSULTANT's budget assumes site visits will occur on the same day as the kick-off meeting.

*Deliverables: Site visits notes.*

## **Task 3 –Cave Rock/Skyland Water System PER**

### **Subtask 3.1 - Project Planning**

CONSULTANT will prepare the "Project Planning" chapter of the PER in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Project Planning" chapter will be incorporated into the Cave Rock/Skyland Water System PER.*

### **Subtask 3.2 - Existing Facilities**

CONSULTANT will describe each part of the water system including: pipelines, pump stations, tanks, pressure reducing stations, and water treatment, if applicable. The "Existing Facilities" chapter of the PER will be prepared in accordance with USDA Rural

Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Existing Facilities" chapter will be incorporated into the Cave Rock/Skyland Water System PER.*

### **Subtask 3.3 - Need for Project**

CONSULTANT will describe the need for the project. The "Need for Project" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

CONSULTANT performed a preliminary design study (10 percent) of the Cave Rock and Skyland water systems titled "Cave Rock Water System Improvements" for the COUNTY in 2008. To be as efficient as possible, CONSULTANT proposes to use the results from this study as the project "Needs and Alternatives" for subtasks 3.3 and 3.6:

- **Removal of Cave Rock and Hidden Woods Pumping Stations:** The lower Cave Rock and Hidden Woods pumping stations are underground and do not meet current Nevada regulations based on state sanitary surveys. These pumping stations will be evaluated for removal.
- **Cedar Ridge Hydro-Pneumatic Station:** This hydro-pneumatic station has limited capacity and provides no fire flow. This station will be evaluated for removal or abandonment in conjunction with the Cave Rock pumping modifications.
- **Cave Rock Pumping Modifications:** Pumping system modifications to reduce costs.
- **Water Treatment Plant Redundancy:** The Cave Rock Water Treatment Plant will be evaluated for installation of a second membrane skid for redundant treatment capacity to meet NAC 445A requirements. Connection to ZWUD will be evaluated as another alternative.

Project Needs for the Skyland water system will include the following, at a minimum:

- **Water Line Replacements/Fire Flow Improvements:** Water line replacements needed to achieve fire flow throughout the water system.
- **Hidden Woods Tank Replacement:** This tank does not provide adequate storage volume to comply with NAC 445A.



- **Installation of Water Meters:** Cost-benefit analysis of adding water meters, including the payback period.

*Deliverables: "Need for Project" chapter will be incorporated into the Cave Rock/Skyland Water System PER.*

### **Subtask 3.4– Water System Modeling**

The Cave Rock/Skyland water system will be modeled under static conditions to determine the required distribution system improvements to meet fire flow, as required by the State Fire Marshal and/or the Tahoe Douglas Fire Protection District.

COUNTY will compare the existing water system models against recently collected GPS data to verify the models' integrity. For example, existing facilities will have their correct locations and elevations verified before the data is turned over to CONSULTANT.

This subtask does not include extended period model simulations for tank sizing or new water system inter-ties. Storage volume requirements will be based on Nevada Administrative Code 445A for fire storage, operating storage, and minimum reserve levels to determine static storage requirements.

COUNTY will provide the existing water system Watercad™ files to CONSULTANT.

*Deliverables: Copies of the water model and results to be incorporated into the Cave Rock/Skyland Water System PER.*

### **Subtask 3.5 – Identify Water Line Replacements**

Based on the results of the water modeling, and review of water line repair records and COUNTY input, water lines will be identified and sized for replacement to meet fire flow requirements.

*Deliverables: To be incorporated into the Cave Rock/Skyland Water System PER.*

### **Subtask 3.6 - Alternatives Analysis**

CONSULTANT will provide at least two alternatives for each Need identified in subtask 3.3. The alternatives will be evaluated under subtask 3.7.

The "Alternatives Analysis " chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2, and the assumptions identified in the Project Understanding of this Scope of Work document, to meet the identified needs.

*Deliverables: "Alternatives Analysis" chapter will be incorporated into the Cave Rock/Skyland Water System PER.*

### **Subtask 3.7 - Selection of an Alternative**

The "Selection of an Alternative" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Selection of an Alternative" chapter will be incorporated into the Cave Rock/Skyland Water System PER.*

### **Subtask 3.8 - Proposed Project (Recommended Alternative)**

The "Proposed Project (Recommended Alternative)" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document. COUNTY will provide pertinent financial "Annual Operating Budget" information including proposed water rates as identified under Section 6.f of the USDA PER outline. CONSULTANT will update operating budgets based on the proposed project.

*Deliverables: "Proposed Project (Recommended Alternative)" chapter will be incorporated into the Cave Rock/Skyland Water System PER.*

### **Subtask 3.9 - PER Preparation**

CONSULTANT will prepare the PER for the Cave Rock/Skyland Water System, which will include the information from Task 2 to Subtask 3.8, and will include a conclusions and recommendations chapter.

*Deliverables: A PDF copy of the draft PER for COUNTY's review and comment and four bound copies and a PDF copy of the final PER.*

## **Task 4 - Uppaway Water System PER**

### **Subtask 4.1 - Project Planning**

CONSULTANT will prepare the "Project Planning" chapter of the PER in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Project Planning" chapter will be incorporated into the Uppaway Water System PER.*

### **Subtask 4.2 - Existing Facilities**

CONSULTANT will describe each part of the water system including: pipelines, pump stations, tanks, pressure reducing stations, and water treatment, if applicable. The "Existing Facilities" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Existing Facilities" chapter will be incorporated into the Uppaway Water System PER.*

### **Subtask 4.3 - Need for Project**

CONSULTANT will describe the need for the project. The "Need for Project" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

Alternatives for the following project Needs will be evaluated as part of the PER:

- **Water Line Replacements/Fire Flow Improvements:** Water line replacements needed to satisfy fire flow requirements throughout the system.
- **Water Meter Installation:** Cost-benefit analysis of adding water meters, including the payback period.
- **Uppaway Water System Wells:** The Uppaway water system is supplied from two infiltration wells near Lake Tahoe. The capacity of the wells to meet system demands and up to three alternatives (e.g., drill another well, surface water

treatment, or a connection to a neighboring system) to address long-term sustainability of the water supply will be evaluated.

- **Uppaway Water Tank:** This water tank was constructed in 2010/2011 and is in good condition. Compliance with NAC 445A storage requirements will be evaluated.

*Deliverables: "Need for Project" chapter will be incorporated into the Uppaway Water System PER.*

#### **Subtask 4.4– Water System Modeling**

The water system will be modeled under static conditions to determine the required distribution system improvements to meet fire flow, as required by the State Fire Marshal and/or Tahoe Douglas Fire Protection District.

This subtask does not include extended period model simulations for tank sizing, or new water system inter-ties. Storage volume requirements will be based on NAC 445A for fire storage, operating storage, and minimum reserve levels to determine static storage requirements.

COUNTY will provide the existing water system Watercad™ files to CONSULTANT

*Deliverables: To be incorporated into the Uppaway System PER.*

#### **Subtask 4.5 – Identify Water Line Replacements**

Based on the results of the water modeling, and a review of the water line repair records and COUNTY input, water lines will be identified and sized for replacement to meet fire flow requirements.

*Deliverables: To be incorporated into the Uppaway System PER.*

#### **Subtask 4.6 - Alternatives Analysis**

CONSULTANT will provide at least two alternatives for each Need identified in subtask 4.3. The alternatives will be evaluated under subtask 4.7.

CONSULTANT will evaluate alternatives for improvements to the Skyland Water System, which will include:

- **Water Line Replacements/Fire Flow Improvements:** Water line replacements needed to achieve fire flow throughout the water system.

- **Installation of Water Meters:** Cost-benefit analysis of adding water meters, including the payback period.

The "Alternatives Analysis " chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Alternatives Analysis" chapter will be incorporated into the Uppaway Water System PER.*

#### **Subtask 4.7 - Selection of an Alternative**

The "Selection of an Alternative" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Selection of an Alternative" chapter will be incorporated into the Uppaway Water System PER.*

#### **Subtask 4.8 - Proposed Project (Recommended Alternative)**

The "Proposed Project (Recommended Alternative)" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document. COUNTY will provide pertinent financial "Annual Operating Budget" information including proposed rates as identified under Section 6.f of the USDA PER outline. CONSULTANT will update operating budgets based on the proposed project.

*Deliverables: "Proposed Project (Recommended Alternative)" chapter will be incorporated into the Uppaway Water System PER.*

#### **Subtask 4.9 - PER Preparation**

CONSULTANT will prepare the PER for the Uppaway Water System, which will include the information from Task 2 and Subtasks 4.1 to 4.8, and will include a conclusions and recommendations chapter.

*Deliverables: A PDF copy of the draft PER for COUNTY's review and comment, and four bound copies and a PDF copy of the final PER.*

## **Task 5 - ZWUD Water System PER**

### **Subtask 5.1 - Project Planning**

CONSULTANT will prepare the "Project Planning" chapter of the PER in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Project Planning" chapter will be incorporated into the ZWUD Water System PER.*

### **Subtask 5.2 - Existing Facilities**

CONSULTANT will describe each part of the water system including: pipelines, pump stations, tanks, pressure reducing stations, and water treatment, if applicable. The "Existing Facilities" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Existing Facilities" chapter will be incorporated into the ZWUD Water System PER.*

### **Subtask 5.3 - Need for Project**

CONSULTANT will describe the need for the project. The "Need for Project" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

Project Needs will include the following, at a minimum:

- **Water Line Replacements/Fire Flow Improvements:** Water line replacements needed to satisfy fire flow throughout the system. CONSULTANT will review Fluid Dynamics "Water System Evaluation Report" findings.
- **Water Service Lines:** Areas in Marla Bay and commercial areas where one service lateral serves multiple properties. Water system improvements to serve each property individually.
- **Installation of Water Meters:** Cost-benefit analysis of adding water meters, including the payback period.

- **ZWUD Water Treatment Plant:** Evaluation of water treatment plant capacity and summary of capital equipment needs, if any.

*Deliverables: "Need for Project" chapter will be incorporated into the ZWUD Water System PER.*

#### **Subtask 5.4– Water System Modeling**

The water system will be modeled under static conditions to determine the required distribution system improvements to meet fire flow, as required by the State Fire Marshal and/or Tahoe Douglas Fire Protection District.

This subtask does not include extended period model simulations for water tank sizing, or new water system inter-ties. Storage volume requirements will be based on NAC 445A for fire storage, operating storage, and minimum reserve levels to determine static storage requirements.

COUNTY will provide the existing water system Watercad™ files to CONSULTANT.

*Deliverables: To be incorporated into the ZWUD Water System PER.*

#### **Subtask 5.5 – Identify Water Line Replacements**

Based on the results of the water modeling, and a review of water line repair records and COUNTY input, water lines will be identified and sized for replacement to meet fire flow requirements.

*Deliverables: To be incorporated into the ZWUD Water System PER.*

#### **Subtask 5.6 - Alternatives Analysis**

CONSULTANT will provide at least two alternatives for each Need identified in subtask 5.3. The alternatives will be evaluated under subtask 5.7.

CONSULTANT will evaluate alternatives for improvements to the ZWUD Water System, which will include:

- **Water Line Replacements/Fire Flow Improvements:** Water line replacements needed to achieve fire flow throughout the system. CONSULTANT will review Fluid Dynamics "Water System Evaluation Report" findings.
- **Water Service Lines:** Areas in Marla Bay and commercial areas where one service lateral serves multiple properties. Water system improvements to serve and possibly measure water usage through meters for each individual property.
- **Installation of Water Meters:** Cost-benefit analysis of adding water meters, including the payback period.
- **ZWUD Water Treatment Plant:** Evaluation of water treatment plant capacity and a summary of capital equipment needs, if any.

The "Alternatives Analysis" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2, and the assumptions identified in the Project Understanding of this scope of work document, to meet identified needs.

*Deliverables: "Alternatives Analysis" chapter will be incorporated into the Cave Rock/Uppaway Water System PER.*

#### **Subtask 5.7 - Selection of an Alternative**

The "Selection of an Alternative" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document.

*Deliverables: "Selection of an Alternative" chapter will be incorporated into the ZWUD Water System PER.*

#### **Subtask 5.8 - Proposed Project (Recommended Alternative)**

The "Proposed Project (Recommended Alternative)" chapter of the PER will be prepared in accordance with USDA Rural Utilities Service Bulletin 1780-2 and the assumptions identified in the Project Understanding of this scope of work document. COUNTY will provide pertinent financial "Annual Operating Budget" information including proposed water rates as identified under Section 6.f of the USDA PER outline. CONSULTANT will update operating budgets based on the proposed project.



*Deliverables: "Proposed Project (Recommended Alternative)" chapter will be incorporated into the ZWUD Water System PER.*

### **Subtask 5.9 - PER Preparation**

CONSULTANT will prepare the PER for the ZWUD Water System, which will include the information from Task 2 and Subtasks 5.1 to 5.8, and will include a conclusions and recommendations chapter.

*Deliverables: A PDF copy of the draft PER for COUNTY's review and comment, and four bound copies and a PDF copy of the final PER.*

### **Task 6 – Environmental Reports (ERs)**

Task covers the preparation of three separate ERs, one for each water system: Cave Rock/Skyland, Uppaway, and Zephyr Water Utility District (ZWUD). CONSULTANT's subconsultant will take the lead in preparing the ERs and will follow the general ER outline provided in USDA Bulletin 1794A-602.

*Deliverables: PDF copy of draft ER for COUNTY' review and comment, and four bound copies and a PDF copy of the final ER.*

### **Task 7 – Public Workshops**

CONSULTANT will conduct up to three public workshops for each of the water systems (Cave Rock/Uppaway, Skyland, and Zephyr Water Utility District), for a total of nine workshops. A notice will be provided to COUNTY to be published in the local newspaper. The CONSULTANT will work with COUNTY to establish the workshop format. The workshop format may include the following:

- Presentation of CONSULTANT's findings on any water system deficiencies, proposed alternatives, and the respective costs and/or an open house format to provide information to the public.
- Funding and revenue strategy to meet water system requirements.
- Public comment and question session.

CONSULTANT will document the public comments for use in subsequent PER drafts and workshops.

It is anticipated that the first set of workshops will be held after the needs and alternatives have been identified, and the second set of workshops will occur after the recommended alternative is provided in the draft PER. A third set of workshops, if needed, will be provided after the final PER.

*Deliverables: Workshop presentation slides, and documentation of public comments.*

## **Task 8 – Meetings**

### **Subtask 8.1 - Kick-off Meeting**

CONSULTANT will meet with COUNTY staff to discuss project objectives and field reconnaissance of project areas. During this meeting, CONSULTANT will obtain distribution system maps, water system model files, booster station plans, flow data, and other pertinent data from COUNTY staff.

CONSULTANT's budget assumes one three-hour kick-off meeting for the three water systems.

*Deliverables: Meeting agenda and minutes.*

### **Subtask 8.2 – Review Meetings**

CONSULTANT anticipates the following review meetings with COUNTY staff during the project. To streamline the schedule and budget, CONSULTANT assumes the following review meetings to cover the respective PERs of the three water systems.

1. **Draft PER Review Meeting:** COUNTY comments incorporated into the draft final PERs.
2. **Final PER Review Meeting:** To gain consensus on the preferred alternatives and finalize the PERs.

CONSULTANT's budget assumes that review meetings for the three systems will be conducted on the same day and will take up to four hours for each review meeting.

*Deliverables: Meeting agenda and minutes.*

### **Subtask 8.3 – Board of County Commissioners' Meetings**

CONSULTANT will attend up to three County Board meetings to present PER findings and provide updates on the project's progress.

CONSULTANT's budget assumes County Board meetings for the three water systems will occur on the same day.

*Deliverables: Presentation material and handouts.*

## **ITEMS TO BE FURNISHED BY THE COUNTY**

- Access to the water system facilities, as requested by CONSULTANT staff.
- Items listed in Task 2.

## **EXCLUSIONS**

The following items are not included in CONSULTANT's scope of work, but can be performed on a time and materials basis or separate work scope:

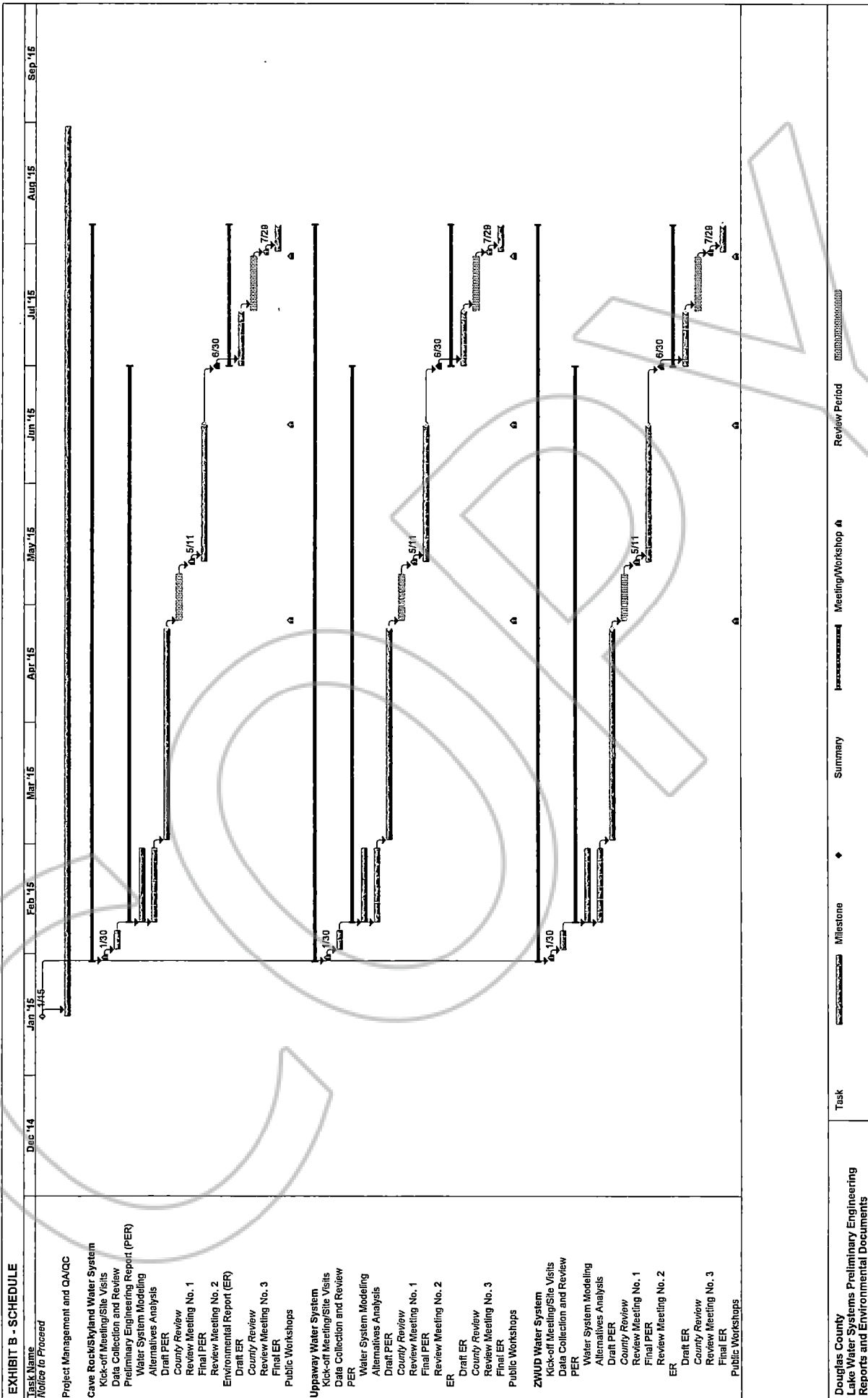
- Topographic site survey.
- Geotechnical investigation.
- Detailed water rate study.
- Extended period simulation water modeling, and water system intertie modeling.
- Final design drawings and specifications.
- Environmental assessment or impact reports.
- Tahoe Regional Planning Agency (TRPA) permits.

**EXHIBIT B  
SCHEDULE**

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**Douglas County  
Lake Water Systems  
Preliminary Engineering Report**

**DRAFT**



Douglas County  
 Lake Water Systems Preliminary Engineering  
 Reports and Environmental Documents

Task Milestone Summary Meeting/Workshop Review Period

## EXHIBIT C COMPENSATION

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### Douglas County *Lake Water Systems* *Preliminary Engineering Report*

Work will be performed on a time and materials basis for a not-to-exceed fee shown in Table C-1.

This amount will not be exceeded without prior written authorization.

A rate schedule with expenses is included in Exhibit D.



## Summary of Cost by Water System

Douglas County

Lake Water Systems - Preliminary Engineering Report

Task No.	Task Description	Total Cost (\$)
<b>Cave Rock/Skyland Water System</b>		
1	Project Management and QA/QC	\$ 1,428.33
2	Data Collection/Review and Site Visits	\$ 4,194.33
3	PER	\$ 35,386.00
6	ER	\$ 11,003.00
7	Public Workshops (up to 3)	\$ 12,526.00
8	Meetings	\$ 5,696.34
	<b>Subtotal Cave Rock/Skyland</b>	<b>\$ 70,234.00</b>
<b>Uppaway Water System</b>		
1	Project Management and QA/QC	\$ 1,428.33
2	Data Collection/Review and Site Visits	\$ 4,194.33
4	PER	\$ 27,011.00
6	ER	\$ 11,003.00
7	Public Workshops (up to 3)	\$ 12,526.00
8	Meetings	\$ 5,696.34
	<b>Subtotal Uppaway</b>	<b>\$ 61,859.00</b>
<b>ZWUD Water System</b>		
1	Project Management and QA/QC	\$ 1,428.33
2	Data Collection/Review and Site Visits	\$ 4,194.33
5	PER	\$ 32,782.00
6	ER	\$ 11,003.00
7	Public Workshops (up to 3)	\$ 12,526.00
8	Meetings	\$ 5,696.34
	<b>Subtotal ZWUD</b>	<b>\$ 67,630.00</b>
<b>Column Totals</b>		<b>\$ 199,723.00</b>

Table C-1. Estimated Work Effort and Cost  
Douglas County  
Lake Water Systems - Preliminary Engineering Report (includes Modeling)

Task No.	Task Description	Principal/ QA/QC	Project Manager	Project Engineer	Project Modelling	Public Outreach	Water Treatment	Sr. Financial Analyst	Financial Analyst	CADD Tech	Admin/ Clerical	Total HDR Labor Hours	Total HDR Labor (\$)	Total HDR Expenses (\$)	Subs (\$)	Total Cost (\$)
<b>Task 1 - Project Management and Quality Assurance/Quality Control (QA/QC)</b>																
1.1	Project Management	4	4	4	0	0	0	0	0	0	8	16	\$1,928	\$	\$	\$ 2,045
1.2	QA/QC Program	4	4	4	0	0	0	0	0	0	4	12	\$2,114	\$	\$	\$ 2,240
<b>Subtotal Task 1</b>																
2.1	Data Collection	4	4	4	0	0	0	0	0	0	12	28	\$ 4,043	\$	\$	\$ 4,285
2.2	Data Review	8	8	8	24	0	4	2	2	0	8	48	\$5,851	\$	\$	\$ 7,410
2.3	Site Visits	12	12	12	24	0	4	2	2	0	20	24	\$3,650	\$	\$	\$ 3,880
<b>Subtotal Task 2</b>																
<b>Task 3 - Cave Rock/Skyland Water System Preliminary Engineering Report (PER)</b>																
3.1	Project Planning	1	1	1	4	2	0	5	19	40	10	7	\$1,147	\$	\$	\$ 1,216
3.2	Existing Facilities	2	2	2	6	2	0	5	19	40	10	16	\$2,098	\$	\$	\$ 2,224
3.3	Need for Project	2	2	2	10	0	0	2	2	8	16	12	\$1,723	\$	\$	\$ 1,837
3.4	Water System Modeling	2	2	2	4	60	4	4	16	16	68	68	\$7,859	\$	\$	\$ 8,330
3.5	Identify Water Line Replacements	2	2	2	4	0	0	0	0	0	6	6	\$631	\$	\$	\$ 944
3.6	Alternatives Analysis	6	6	6	20	0	4	4	16	16	48	48	\$6,725	\$	\$	\$ 7,203
3.7	Selection of an Alternative (Life Cycle Cost Analysis)	2	2	2	4	0	0	0	0	0	28	28	\$5,128	\$	\$	\$ 5,659
3.8	Proposed Project (Recommended Alternative)	4	4	4	20	0	0	3	3	3	10	30	\$4,416	\$	\$	\$ 4,651
3.9	PER Preparation	6	6	6	24	0	4	5	19	44	16	249	\$33,383	\$	\$	\$ 35,368
<b>Subtotal Task 3</b>																
<b>Task 4 - Upstream Water System PER</b>																
4.1	Project Planning	2	2	2	2	2	0	5	19	44	8	6	\$1,031	\$	\$	\$ 1,093
4.2	Existing Facilities	2	2	2	6	2	0	5	19	44	8	16	\$2,098	\$	\$	\$ 2,224
4.3	Need for Project	2	2	2	8	0	0	2	2	8	10	10	\$1,452	\$	\$	\$ 1,559
4.4	Water System Modeling	2	2	2	2	30	0	4	16	16	34	34	\$4,034	\$	\$	\$ 4,340
4.5	Identify Water Line Replacements	2	2	2	6	0	0	0	0	0	8	8	\$1,171	\$	\$	\$ 1,282
4.6	Alternatives Analysis	4	4	4	12	0	0	4	16	16	32	32	\$4,187	\$	\$	\$ 4,448
4.7	Selection of an Alternative (Life Cycle Cost Analysis)	2	2	2	8	0	0	0	0	0	30	30	\$3,687	\$	\$	\$ 3,956
4.8	Proposed Project (Recommended Alternative)	2	2	2	6	0	0	1	3	3	8	26	\$3,770	\$	\$	\$ 3,986
4.9	PER Preparation	6	6	6	24	0	4	5	19	44	16	192	\$25,482	\$	\$	\$ 27,011
<b>Subtotal Task 4</b>																
<b>Task 5 - ZWUD Water System PER</b>																
5.1	Project Planning	2	2	2	2	2	0	5	19	44	8	6	\$1,031	\$	\$	\$ 1,093
5.2	Existing Facilities	2	2	2	6	2	0	5	19	44	8	16	\$2,378	\$	\$	\$ 2,522
5.3	Need for Project	2	2	2	8	0	0	2	2	8	10	10	\$1,452	\$	\$	\$ 1,559
5.4	Water System Modeling	2	2	2	4	40	0	4	16	16	46	46	\$5,595	\$	\$	\$ 5,868
5.5	Identify Water Line Replacements	2	2	2	6	0	0	0	0	0	8	8	\$1,171	\$	\$	\$ 1,242
5.6	Alternatives Analysis	6	6	6	18	0	4	4	16	16	42	42	\$6,233	\$	\$	\$ 6,607
5.7	Selection of an Alternative (Life Cycle Cost Analysis)	2	2	2	10	0	0	0	0	0	32	32	\$3,866	\$	\$	\$ 4,206
5.8	Proposed Project (Recommended Alternative)	2	2	2	16	0	0	3	3	3	36	36	\$4,892	\$	\$	\$ 5,186
5.9	PER Preparation	6	6	6	24	0	4	5	19	44	16	228	\$30,926	\$	\$	\$ 32,762
<b>Subtotal Task 5</b>																
<b>Task 6 - Environmental Reports (ERs)</b>																
6.1	Cave Rock/Upstream Water System ER	2	2	2	2	0	0	0	0	0	0	2	\$328	\$	\$	\$ 328
6.2	Skyland Water System ER	2	2	2	2	0	0	0	0	0	0	2	\$328	\$	\$	\$ 328
6.3	ZWUD Water System ER	0	0	0	0	0	0	0	0	0	0	6	\$988	\$	\$	\$ 33,009
<b>Subtotal Task 6</b>																
<b>Task 7 - Public Workshops</b>																
7.1	Cave Rock/Upstream Water System Workshops (up to 3)	27	27	27	27	27	0	0	0	0	12	66	\$11,044	\$	\$	\$ 12,526
7.2	Skyland Water System Workshops (up to 3)	27	27	27	27	27	0	0	0	0	12	66	\$11,044	\$	\$	\$ 12,526
7.3	ZWUD Water System Workshops (up to 3)	0	0	0	0	0	0	0	0	0	36	198	\$33,133	\$	\$	\$ 37,579
<b>Subtotal Task 7</b>																
<b>Task 8 - Meetings</b>																
8.1	Kick-off Meeting	4	5	6	3	3	0	2	2	0	0	18	\$3,445	\$	\$	\$ 3,652
8.2	Review Meetings (up to 3)	3	16	18	6	6	0	2	2	0	41	41	\$6,640	\$	\$	\$ 6,172
8.3	Board of County Commissioners Meetings (up to 3)	7	37	24	0	6	0	2	2	0	0	22	\$3,897	\$	\$	\$ 5,265
<b>Subtotal Task 8</b>																
<b>COLUMN TOTALS</b>																
29	225	254	154	154	88	12	1,032	61	19	128	74	1,032	\$153,808	\$	\$	\$165,723



## EXHIBIT D RATE SCHEDULE

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### Douglas County Lake Water Systems Preliminary Engineering Report January 2015 to December 2015

Architect	\$160 to \$175
CAD Technician	\$110 to 180
Cost Estimator	\$135 to \$235
Drafter	\$90 to \$110
Electrical Engineer	\$155 to \$255
Financial Analyst	\$80 to \$150
Senior Financial Analyst	\$150 to \$240
Modeler	\$110 to \$150
Principal	\$280 to \$295
Project Controller	\$85 to \$155
Project Coordinator	\$70 to \$130
Project Manager	\$155 to \$205
Senior Project Engineer	\$175 to \$295
Project Engineer	\$125 to \$175
Staff Engineer	\$105 to \$130
Public Outreach Specialist	\$200 to \$220
Technical Specialist	\$200 to \$295

*The billing rates cover payroll cost, employee benefits, and HDR overhead and profit.*

#### EXPENSES

##### In-House Expenses

Technology Charge per Direct Labor Hour	\$3.70
Vehicle Mileage (per mile)	Current Federal Travel Regulation (FTR)
Black/White Photocopies (per copy)	\$0.05 to \$0.09
Color Copy (per copy)	\$0.15 to \$0.30
Bond Plotting - Black & White (per square foot)	\$0.15
Bond Plotting - Color (per square foot)	\$0.90

*Please Note: Technology charges include computer, CADD, network, software, and other related technology services. Subconsultants are charged with a five percent markup.*

COPY

Douglas County

State of Nevada

CERTIFIED COPY

I certify that the document to which this certificate is attached is a full and correct copy of the original record on file in the Clerk-Treasurer's Office on this

21st day of April, 2015

By [Signature] Deputy

