



Well Drilling and Completion of Groundwater Evaluation Wells  
in Southern Nye County  
Bid Specifications and Request for Bids

January 2010

Nye County, Nevada  
Nuclear Waste Repository Project Office

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## PART I: BID

### **A. NOTICE OF INVITATION TO BID**

NOTICE IS HEREBY GIVEN that the Board of County Commissioners of the County of Nye, State of Nevada, will accept written bids from qualified contractors for the following: 1) Drilling, installation, and completion of up to 15 groundwater piezometer wells not to exceed 500 ft as a monitor wells.

This work is part of the Nye County Ground Water Evaluation Program (GWE), funded from a U.S. Department of Energy (DOE) grant to Nye County.

All well sites are located within 2 miles of highways and paved roads in Southern Nye County in Amargosa Valley, Oasis Valley and Pahrump Valley, Nevada. The sites are located on BLM, county, and private lands.

The following briefly summarizes the required drilling and well completion activities for the wells and boreholes:

#### **Not to exceed 500 ft deep groundwater piezometer wells with up to 480 ft of 4-inch PVC well casing**

##### *Borehole Drilling*

1. Drill and sample approximately 8-inch borehole using conventional air circulation with injection of a water and foam mixture. The boreholes will be drilled to a maximum depth of 500 ft or approximately 100 ft below the water table (or “first” water). Collect geologic samples (drill cutting samples) at 5-ft intervals from the discharge using a cyclone air/cuttings separator or similar system. A 20-foot deep 10-inch steel surface casing will be installed prior to main advance of the borehole.
2. Upon reaching total depth, remove the drill string from the borehole to permit open borehole geophysical logging by another Nye County contractor.

##### *Subsurface Completion*

1. Run in flush joint tremmie line, followed by 4-inch flush-threaded Schedule 80 PVC well casing with screens and blanks. Pump in Colorado silica sand through the tremmie line in stages to approximately 5 feet above the well screen. Set a 2-foot lift of 60-mesh sandpack. Seal well with 30% by weight bentonite grout in bottom-up approach through the tremmie line. Extend 10-inch surface casing to approximately 2 ft above ground level and cut down PVC well casing to slightly below surface casing. Install locking cap and 4-ft x 4-ft x 8-inch thick concrete well pad apron. Air lift well to remove drilling fluids from screen/sandpack interval.

**A single contract will be awarded for all of the above-delineated work; accordingly, any person or firm responding to this Notice must submit a proposal to conduct all these drilling and completion activities. Any bid, which does not address all of the work elements, will be rejected as incomplete and non-responsive.**

A full description of each drilling and well completion activity is included in the Bid Package for the project and is entitled: *Well Drilling and Completion of Groundwater Evaluation Wells in Southern Nye County - Bid Specifications and Request for Bids*. This has been prepared by Nye County and contains all specifications, general and special conditions, bid forms (including cost proposal and detailed qualifications statement), information for bidders, bonding requirements, Project schedule, sample contract, and other related materials. The complete bid package may be obtained by contacting the Nye County Nuclear Waste Repository Project Office (NWRPO), 2101 East Calvada Blvd., Suite 100, Pahrump, Nevada 89048, or by calling 775-727-7727.

All bids must be in writing, on the Bid Proposal form prescribed in the bid package, and sealed in an envelope marked "***Well Drilling and Completion of Groundwater Evaluation Wells in Southern Nye County, BID # 2010-06.***" The sealed bids must be received no later than 9:30 a.m. [local time] on **February 16, 2010**, at the **Nye County Clerk's Office, Nye County Courthouse, 1520 E Basin Road, Pahrump, Nevada, 89060.**

***Bids sent by facsimile transmission will not be accepted or considered. Bids sent to any other location or received after the time given will not be considered and will be returned to the bidder.*** Opening of the bids will commence at 10:00 A.M. on **February 16, 2010** at the Nye County NWRPO located at 2101 East Calvada Blvd, Pahrump, Nevada. The contract will be awarded upon approval of the Nye County Board of Commissioners. The target date for contract award is **March 2010**.

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The Contractor will be required to:

1. Furnish all of the labor, materials, equipment, tools, transportation, power, water, and services required to drill and complete the wells as specified.
2. Agree to commence the work, if awarded the contract, on or before **March 22, 2010**; and complete all work by **June 15, 2010**. Timely commencement and completion of the work is imperative for the success of the Project as a whole, so time will always be of essence to the contract.
3. Warranty and post a surety bond guaranteeing his, her, or its work, prior to final payment for the work.

Funding for this Project is subject to approval by the USDOE and its continued funding. If USDOE does not approve of and/or discontinues funding for the Project, the Project will be canceled. A Notice to Proceed will be issued on or after approval of the work and confirmation of funding by USDOE has been received by the County. The contract with the successful bidder will include express acknowledgment of the contingent nature of the contract. Additionally, because this Project is funded by Federal monies, certain conditions of employee compensation and other special requirements may or will apply. These are described in the Bid Package.

This Project will be carried out at a location on federally owned and/or managed lands. Accordingly, this Project is not subject to the statutory provisions of NRS Chapters 338, 339, 332, or 624 or the regulatory provisions of the associated chapters of the Nevada Administration Code. It is, however, subject to all of the applicable Federal procurement standards set forth in 10 C.F.R. 600.236. To the extent that otherwise applicable Nevada and Nye County procurement procedures conform to the applicable Federal law and standards, those procedures will be used for purposes of this Bid, and are incorporated in the Information to Bidders contained in the Bid Package.

The successful Bidder (and any subcontractors) will be required to pay his, her, or its employees at prevailing wage rates, or wages determined in accordance with the Federal Davis-Bacon Act and any applicable regulations whichever is higher. The Bidder will be responsible for ascertaining the applicable rates for each of its and its subcontractors' employees or class of employee and for maintaining all necessary records to establish compliance with that law.

The Bidder must:

1. Be a contractor presently licensed under Nevada law for the type of work specified for this Project, and hold a license with a limit sufficient to cover the total cost of the required wells in this contract (estimated for this project to be **\$300,000.00**). Additionally, contractor personnel must be licensed pursuant to NRS 534.140 as a well driller(s).
2. Furnish with his or her bid a bid guarantee, in the form and subject to the conditions provided in the Information to Bidders, and in the amount of Fifteen Thousand Dollars (**\$15,000.00**).
3. After award of contract and **prior to commencement of work**, post a performance bond and a payment bond, in the form and subject to the conditions provided in the

Information to Bidders, each such bond in the amount Three **Hundred Thousand Dollars** (\$300,000.00).

4. Submit with his or her bid, or at other specified time, information regarding subcontractors, as provided in the Information to Bidders.
5. Obtain and maintain general liability, employers and workers compensation and vehicle insurances, as provided in the Information to Bidders; and fully indemnify the County against claims and actions arising out of the Contractor's performance of its work for the Project.
6. Have established occupational health and safety policies appropriate to the nature of the Project and submit those policies to the County for review and approval for use on the Project, **prior to commencement of work**.
7. Agree to comply with all applicable Federal, State, and local law and regulations. Including: Executive Order 11246 (September 24, 1965), Equal Employment Opportunity, as amended by Executive Order 11375 (October 13, 1967), and as supplemented in Department of Labor regulations (41 C.F.R. Chapter 60); the Copeland Anti-Kickback Act (18 U.S.C. 874), as supplemented in Department of Labor regulations (29 C.F.R. Part 3); the Davis-Bacon Act (40 U.S.C. 276a to 276a-7), as supplemented by Department of Labor regulations (29 C.F.R. Part 5); Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330), as supplemented by Department of Labor regulations (29 C.F.R. Part 5); and all applicable standards, orders or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 C.F.R. Part 15).

All bids must be in writing, on the Bid Proposal form prescribed in the bid package, and sealed in an envelope marked **“Well Drilling and Completion of Groundwater Evaluation Wells in Southern Nye County, BID # 2010-06.”** The sealed bids will be received no later than **9:30 a.m. [local time] on February 16, 2010**, at the **Nye County Clerk's Office, Nye County Courthouse, 1520 E Basin Road, Pahrump, Nevada, 89060**.

***Bids sent by facsimile transmission will not be accepted or considered. Bids sent to any other location or received after the time given will not be considered and will be returned to the bidder.*** Opening of the bids will commence at 10:00 A.M. on **February 16, 2010**, in the Conference Room of the NWRPO Offices, 2101 East Calvada Blvd., Pahrump, Nevada. The contract will be awarded upon approval of the Nye County Board of Commissioners. The target date for contract award is **March 2010**.

Due to the highly technical nature of this program, the decision to award the contract for the Project will be based upon an evaluation of a number of bidder qualifications, and not merely upon the determination of the lowest cost submitted bid. The selection criteria are outlined in the Bid Package and include large diameter, deep, conventional circulation drilling capability (including equipment and technical competence); exploratory, deep, small diameter, single-wall conventional circulation drilling capability (including equipment and technical competence); past drilling experience in similar geologic units; past record of performance on contracts with government agencies and/or private industry; business ethics; and cost. The Board of County

Commissioners expressly reserves the right to waive any informality or to reject any and all bids pursuant to NRS 338.143(4).

No bidder may withdraw his or her bid within 60 (sixty) days after the actual date of the opening thereof.

DATED this \_\_\_\_\_ day of \_\_\_\_\_, **2010**.

BOARD OF COUNTY COMMISSIONERS  
COUNTY OF NYE, STATE OF NEVADA

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By: Gary Hollis, Chairman

ATTEST:

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Sandra L. Merlino, Nye County Clerk  
and Ex-Officio Clerk of the Board

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## **B. INFORMATION FOR BIDDERS**

### **1. Form, Delivery, and Opening of Bids**

- a. FORM OF Bid: **The Bid must include each of the following items to be accepted:**
  - i. The Bid form, fully completed and executed
  - ii. Cost Proposal (Fully completed Table 1)
  - iii. Bidder's Information
  - iv. Equipment Description
  - v. Qualifications Statement
  - vi. Executed Non-Debarment Certification
  - vii. Bid bonds in accordance with Section 12 of this Information for Bidders

The general Bid, Cost Proposal, Bidder's Information and Non-Debarment Certification shall be made on the forms found herein. The Qualifications Statement shall address each of the Bid Evaluation Criteria contained in Subsection 6 of this Section B. There is no required format for the Qualification Statement. Guidelines/suggestions for the Equipment Description are provided.

The complete Bid shall be enclosed in a sealed envelope bearing the name of the Bidder and the name of the project, as follows: "**Well Drilling And Completion Of Groundwater Evaluation Wells in Southern Nye County, BID # 2010-06.**" For a bid to be considered, it must be complete in all aspects; that is, contain items i through vii above.

- b. DELIVERY OF BID: **The Bid shall be delivered no later than 9:30 A.M., local time, on February 16, 2010 to the Nye County Clerk's Office, Nye County Courthouse, 1520 East Basin Road, Pahrump, Nevada, 89060.** Any Bid received at a location other than the Clerk's Office or after the scheduled closing time for receipt of Bid will be returned to the Bidder unopened. Unauthorized conditions, limitations or provisions attached to a Bid will or may cause its rejection. The completed Bid forms shall be without interlineations, alterations, or erasures. Alternative Bids will not be considered unless requested by the County. **Telephone, facsimile, or e-mailed Bids or modifications will not be considered.**
- c. OPENING OF BIDS: Opening of the Bids will commence no earlier than **10:00 A.M.** on **February 16, 2010**, in the Conference Room of the NWRPO Offices, 2101 East Calvada Blvd., Pahrump, Nevada. The contract will be awarded upon approval of the Nye County Board of Commissioners. The target date for contract award is **March 2010**.
- d. CONSIDERATION OF BIDS: Nye County may, but need not, consider any bid not prepared and submitted in accordance with the provisions hereof and may, but need not, waive any formalities or errors in form. Nye County reserves the right to reject any and all bids.

## **2. Scope of Work**

This Request for Bids is for performing well drilling and well construction activities described in Part V of this Contract Document, and furnishing all labor, materials (including but not limited to drill bits, drilling fluids, water and power), and equipment for these activities. All other materials, labor, and equipment necessary to properly and successfully perform the Scope of Work, except for those materials for which unit prices are solicited on the Bid forms, shall be provided at no additional cost to Nye County. The successful Bidder will be responsible for soliciting and securing any and all employees, vendors, and subcontractors required to fully perform the Scope of Work.

## **3. Site of Work**

All well sites are located within southern Nye County in Pahrump, Amargosa, and Oasis Valley.

## **4. Time of Completion and Liquidated Damages**

The Contractor shall commence work at the first well site no later than **March 22, 2010**; and Contractor shall complete all of the work described on or before **June 15, 2010**, unless an extension to the contract term is provided in writing by Nye County. Should the work not be complete within the specified time for completion, the Contractor will be liable for liquidated damages, payable to Nye County in the amount of Five Hundred Dollars (\$500.00) for each operational day beyond the deadline taken for completion, as provided for in the General and Special Provisions.

## **5. Obligation to Examine and Inspect**

It is the responsibility of the Bidder to examine the Contract Documents and the site of work in order to familiarize himself/herself/itself with all conditions and resources that could affect cost of work completion. At the time of the opening of the Bids, each Bidder will be presumed to have read and thoroughly familiarized him/her/itself with all of the Contract Documents. The failure or omission of any Bidder to examine any form, instrument or document, or to inspect the sites of work shall in no way relieve any Bidder from any obligation in respect to his, her, or its Bid.

## **6. Selection Criteria**

Pursuant to 10 C.F.R. 600.236(b)(8), Nye County must make its award of the Contract to responsible contractor who or which possesses the ability to perform successfully under the terms and conditions given for the Project. Specifically, in order to be deemed responsible, a Bidder must provide evidence that he, she, or it has adequate financial resources to perform the Contract or the ability to obtain such resources; is able to comply with the required or proposed performance schedule, taking into consideration all existing commercial and government business commitments; has a satisfactory performance record; has a satisfactory record of integrity and business ethics; has the necessary organization, experience, accounting and operational controls, and technical skills, or the ability to obtain such organization, experience, controls, and skills; has the necessary production, construction and technical equipment and

facilities, or the ability to obtain such equipment and facilities; and is otherwise qualified and eligible to receive an award under applicable laws and regulations, 41 USCS, Section 403(7).

In evaluating the Bids, consideration must be given not only to the price of the labor and materials proposed by the Bidder, but also to such matters as contractor integrity, compliance with public policy, record of past performance, and financial and technical skills and resources. Accordingly, a Qualifications Statement must be submitted as a part of the Bidder's Bid.

The Qualifications Statement must address each of the following criteria, except cost, which must be provided on the Cost Proposal form (Table 1). Each Bid may be awarded points up to the amount listed. **Bidders are encouraged to provide any documentation that will substantiate statements made in their Qualifications Statements.**

<b>Selection Criteria</b>	<b>Maximum Points</b>
a. <b>Deep, small diameter, single-wall conventional circulation drilling equipment capability and technical competence.</b>	<b>15</b>
Ability to provide representative geologic samples and a borehole suitable for geophysical logging, complete monitoring wells to the desired depth and other design specifications, and ability to work within an integrated team of specialists and suppliers.	
b. <b>Past drilling experience with equipment described above in item a in a similar or correlative sequence of geologic units to be encountered in the present Project.</b>	<b>15</b>
Previous experience in drilling in layered relatively coarse grained alluvium and variably welded volcanic tuffs, particularly with respect to completion of deep exploratory boreholes and monitoring wells.	
c. <b>Record of past performance.</b>	<b>15</b>
Past record of performance on contracts with government agencies or private industry with respect to such factors as: control of costs, quality of work, and ability to meet schedules.	
d. <b>Cost</b>	<b>40</b>
e. <b>Adequacy of financial resources; ability to perform on schedule; record of integrity and business ethics; necessary organizational and operational controls.</b>	<b>15</b>

Nye County may make such investigations as it deems necessary to determine the qualifications of the Bidder, and each Bidder shall furnish to Nye County, upon request, any or all information and data for this purpose. Nye County reserves the right to reject any Bid if the statements submitted by the bidder, or any subsequent investigation of the Bidder fails to satisfy Nye

County that such Bidder (or any designated subcontractor) is qualified to carry out the obligations of the Contract and to complete the work contemplated therein.

## **7. Award of Contract**

- a. Award of the Contract will be based on an evaluation of the costs and associated benefits to Nye County, as determined by the ranking of selection criteria, as provided above.
  - i. The greatest weighting is given to cost, but the Bidder's qualifications, experience, and additional information requested and provided in the Qualifications Statement also will be determining factors in arriving at a decision to award the Contract.
  - ii. Pursuant to 10 C.F.R. 600.236(c)(2), the use of in-state or local geographical preferences in evaluation of the Bids, as provided in Nevada statutes or administrative regulations, is prohibited.
- b. Funding for this Project is subject to approval by USDOE and its continued funding. If USDOE does not approve of and/or discontinues funding for the Project, the Project will be canceled. The Contract with the successful bidder will include express acknowledgment of the contingent nature of the Contract.
- c. Nye County reserves the right to reject any and all bids, to waive any informality in a bid, and to make awards in the interests of Nye County.

## **8. Execution of Contract**

- a. One (1) contract will be executed for the Project's Scope of Work.
- b. Nye County has determined that a combination lump sum, unit price, and time and materials contract is the only type of contract suitable for the required drilling and well construction in this Project. Specifically, the contract will provide for lump sum compensation for mobilization and certain wellhead construction and materials; unit price compensation for drilling, certain completion tasks and completion materials; hourly compensation for NWRPO directed and standby time; and time and materials compensation for additional work for which the cost is negotiated.
- c. Due to the partial time and materials nature of the contract, pursuant to 10 C.F.R. 600.236(b)(10)(ii), the Contract for this portion of the Project will contain a ceiling price that the Contractor exceeds at his, her, or its own risk. The ceiling price for this Project has been set at **Three Hundred Thousand Dollars (\$300,000.00)**.
- d. The Bidder to whom award is made shall execute a written Contract with Nye County, shall secure all insurance, and shall furnish certificates and bonds required by the Specifications within seven (7) calendar days after receipt of the Contract from Nye County.
- e. Failure or refusal to enter into a Contract as provided by Nye County (the form of which will be similar but not necessarily identical to the one included in this Bid Package) or to conform to any of the stipulated requirements in connection therewith shall be just cause

for annulment of the award. If the successful Bidder refuses or fails to execute the Contract, Nye County may award the contract to the second highest ranked Bidder.

## **9. Permits and Licenses**

All permits and/or waivers related to access to and use of the facilities, discharge of waters, air emissions, and monitoring well construction will be obtained by Nye County. All other permits, licenses, and compliance with Federal or Nevada rules and regulations concerning water well and monitoring well drilling shall be obtained by and at the expense of the Contractor.

## **10. Payments**

- a. In accordance with the General Conditions, except as hereafter provided, monthly progress payments will be made to the Contractor based on the lump sum, unit prices, hourly rates, and/or time and materials billings, in accordance with the prices and rates given in the Contractor's Bid.
  - i. The Contractor will receive payment for all work included in the approved pay requests, excluding ten percent (10%) retention. The Contractor will receive the final ten percent (10%) retention in the final payment as described in subsection 10(b) below.
  - ii. In the event that Nye County determines that any hourly billing unreasonably exceeds the progress made by the Contractor for that time, Nye County will pay only that portion of the invoice, which fairly reflects the actual progress made by the Contractor.
  - iii. If the Contractor fails to provide proof of proper payment of its and its subcontractors' employees, as required by Section 17(c) herein, no progress payment will be made until or unless that failure is fully remedied.
- b. Final payment will be made in accordance with lump sum, unit prices, and hourly rates shown in the Bid, adjusted to reflect any modifications in work required by Nye County to meet actual conditions encountered in the field at the time of construction. Said adjustments shall be based on provisions for changes in work as set forth in the General Conditions.
- c. In no event shall Contractor be paid a total of more than the ceiling price set in the Contract, unless the Contract is duly amended.

## **11. Licensure of Contractors**

Every Bidder must be licensed for the drilling of water wells in the State of Nevada, pursuant to NRS 534.140.

## **12. Bonds**

- a. **BID BONDS:** The Bidder must submit with his, her, or its Bid a Bid guarantee in the amount of Fifteen **Thousand Dollars (\$15,000.00)**. The Bid guarantee shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying the Bid as assurance that the Bidder will, upon acceptance of his, her, or

its Bid, execute such contractual documents as may be required within the time specified. Note: Pursuant to applicable law, the Bid guarantee must be no less than five percent (5%) of the Bid price. However, since the Contract in this Project will be partially a time and materials contract and not a fixed price contract, the guarantee amount is established as five percent (5%) of the ceiling price set for Table 1 work, Three **Hundred Thousand Dollars (\$300,000.00)**. **NOTE: In order to be acceptable, the face amount of the Bid Bond must be Fifteen Thousand Dollars (15,000.00) not five percent (5%) of the total bid.**

- b. PERFORMANCE AND PAYMENT BONDS: The successful Bidder, before commencing work on the Project, shall furnish performance and payment bonds, **each** in the amount of **Three Hundred Thousand Dollars (\$300,000.00)** to secure fulfillment of all the Contractor's (and subcontractors', if any) obligations under the Contract and assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the Contract, respectively. Note: Pursuant to applicable law, the performance and payment bonds each must be no less than one hundred percent (100%) of the ceiling price set for the Project, Three **Hundred Thousand Dollars (\$300,000.00)**.
- c. SURETY BOND: The Contractor(s) shall provide a surety bond guaranteeing his, her or its work, as provided hereafter in Section 19.

### **13. Insurances and Indemnification**

- a. The Contractor will maintain in effect for the term of the Contract: general liability (bodily injury and property damage liability) insurance with the minimum limits of Two Million/Three Million Dollars (\$2,000,000/\$3,000,000) per occurrence/aggregate; Employers' liability insurance and workers' compensation not less than the statutorily required minimums. Vehicle insurance with coverage not less than Five Hundred Thousand Dollars (\$500,000) per person and One Million Dollars (\$1,000,000) per occurrence for bodily injury and Three Hundred Thousand (\$300,000) for property damage.
  - i. All the insurance policies obtained and maintained to satisfy this requirement shall name Nye County as an additional insured, and shall indemnify Nye County against losses and/or claims arising from or during the Contractor's fulfillment of the Contract.
  - ii. The Contractor shall not commence work on the Project until he, she, or it has obtained all of the required insurances; has provided proof of those insurances to Nye County; and such insurances shall have been approved by Nye County as to form, amount, and carrier.
- b. The Contractor shall not allow any subcontractor to commence work on the Project unless that subcontractor has provided proof of insurances adequate for the type of work to be performed by the subcontractor and the form and amount of the subcontractor's insurance coverage has been approved by Nye County.
- c. The Contract will provide that the Contractor will indemnify and hold Nye County harmless from and against all claims, demands, actions or suits, including attorneys fees,

based upon or arising out of personal injury, including death, or property damage caused by or sustained by the Contractor and/or any other person or persons, in connection with the Contractor's fulfillment of the Contract.

#### **14. Workplace Safety Policies**

- a. It will be the responsibility of the Contractor(s) to be aware of, and comply with the conditions of the NWRPO Drilling and Well Construction Health and Safety Plan, which will be supplied to bidders upon request and to the Contractor upon the award of the contract.
- b. The Contractor(s) will provide a safety meeting regarding work site hazards at the beginning of each shift. Topics should include but are not limited to management of any potentially hazardous materials; trip, slip, and fall hazards; and discussion of desert environment related hazards (heat stroke and stress, dehydration, poisonous snakes, scorpions, and spiders).
- c. The Contractor(s) will assure that each one of its employees has successfully completed the OSHA or MSHA 40-hour Hazardous Materials training program.
- d. Drill rigs, and other heavy equipment will maintain safe distances when used near transmission lines.
- e. In all cases, the Contractor(s) will maintain compliance with all federal, state, and local safety regulations.

#### **15. Sexual Harassment Policy**

The Contractor(s) will be provided with a copy of the County's sexual harassment policy and will be responsible to take all steps necessary to assure that his, her, or its employees, agents, and subcontractors are made aware of and abide by that policy.

#### **16. Compliance with Applicable Law**

- a. By submitting a Bid, each Bidder agrees that if awarded the Bid, he, she, or it will comply with any and all applicable Federal, State and local laws, including but not limited to: Executive Order 11246 (September 24, 1965), Equal Employment Opportunity, as amended by Executive Order 11375 (October 13, 1967), and as supplemented in Department of Labor regulations (41 C.F.R. Chapter 60); the Copeland Anti-Kickback Act (18 U.S.C. 874), as supplemented in Department of Labor regulations (29 C.F.R. Part 3); the Davis-Bacon Act (40 U.S.C. 276a to 276a-7), as supplemented by Department of Labor regulations (29 C.F.R. Part 5); Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330), as supplemented by Department of Labor regulations (29 C.F.R. Part 5); and all applicable standards, orders or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, the Buy American Act (41 USCS § 10a), and Environmental Protection Agency regulations (40 C.F.R. Part 15).
- b. The Contract(s) will include a non-discrimination covenant, worded as follows:

Contractor covenants that in carrying out its business, it will in no way discriminate against, or allow the discrimination against, any person or persons on the basis of race, color, nationality, religion, gender, age, disability, or any other feature, trait, or characteristic now classified as worthy of protection or which becomes so classified, under the federal or state laws and constitutions, during the term of this Agreement. Contractor will take affirmative action to ensure that applicants for employment are not discriminated against on account of their race, color, sex, religion, creed, physical or mental handicap, medical condition, age, marital status, ancestry or national origin during the hiring process or their term of employment. This requirement shall apply to, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In the event that Contractor signs any subcontracts under any of the provisions of this Agreement, Contractor shall include a provision requiring compliance with this Section.

## **17. Labor Laws**

- a. The Contractor(s) will be subject to the Davis-Bacon Act (40 U.S.C. 276a to 276a-7), as supplemented by Department of Labor regulations (29 C.F.R. Part 5), and must pay his, her, or its employees at the prevailing wage rate determined and/or set by the U.S. Secretary of Labor. The Contract(s) shall contain the following mandatory stipulations:
  - i. The Contractor(s) and any subcontractor(s) shall pay all personnel employed directly upon the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment, computed at wage rates not less than those stated in the advertised specifications, regardless of any contractual relationship which may be alleged to exist between the Contractor(s) or subcontractor(s) and such personnel.
  - ii. That the Contractor(s) is required to post the scale of wages to be paid pursuant to the law in a prominent and easily accessible place at the site of the work; and
  - iii. That there may be withheld from the Contractor(s) so much of accrued payments as may be considered necessary by Nye County to pay to personnel employed by the Contractor(s) or any subcontractor(s) on the work the difference between the rates of wages required by the Contract(s) to be paid personnel on the work and the rates of wages received by such personnel and not refunded to the Contractor(s), subcontractors, or their agents.
- b. The Contractor(s) also will be subject to Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330), as supplemented by Department of Labor regulations (29 C.F.R. Part 5), relating to the payment of premium wages for hours worked in excess of forty (40) in a workweek.
- c. The Contractor(s) shall provide to Nye County with its monthly billings copies of its (and its subcontractor(s), if any) certified payroll records, clearly identifying the employees working on the Project, by classification; the total number of hours worked each day and week; the total compensation paid to each of the employees during the previous month

and the rate(s) of pay used for calculating the compensation; and the prevailing rates of pay applicable to the classifications of employees, as set by the U.S. Secretary of Labor. Nye County will not make any progress payment to the Contractor(s) if copies of the certified payroll records have not been submitted with the monthly billing or if Nye County determines from those records that the Contractor(s) or subcontractor(s) employees have not been paid as required by law.

## **18. Contract Not Assignable**

The Contract(s) let under this Notice of Invitation to Bid will not be assignable by the Contractor(s).

## **19. Guarantees and Surety Bond**

- a. The Contractor(s) shall guarantee the entire work constructed by him, her or it under the Contract(s) to be free of defects in materials and workmanship for a period of one (1) year following the date of acceptance of the work by Nye County. The Contractor(s) shall agree to make, at his, her or its own expense, any repairs or replacements made necessary by defects in material or workmanship which become evident within said guarantee period. The Contractor(s) shall further agree to indemnify and save harmless Nye County, and their officers, agents, and employees against and from all claims and liability arising from damage and injury due to said defects. The Contractor(s) shall make all repairs and replacements promptly upon receipt of written order from Nye County. If the Contractor(s) fails to make the repairs and replacements within one (1) week after being notified by Nye County, Nye County may do the work and the Contractor(s) and its surety shall be liable to Nye County for the cost of such work.
- b. The guarantee and conditions specified above shall be secured by a surety bond(s), which shall be delivered by the Contractor(s) to Nye County prior to the date on which final payment is made to the Contractor(s). Said bond shall be in an approved form and executed by a surety company or companies satisfactory to Nye County in the amount of Three Hundred Thousand Dollars (\$300,000) for the Project. Said bond shall remain in force for the duration of the guarantee period.

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**C. BID**

Proposal By:

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(Firm)

For:

Nye County Nuclear Waste Repository Project Office

*Well Drilling and Completion of Groundwater Evaluation Wells in Southern Nye County*  
**Bid 2010-06**

Nye County Nuclear Waste Project Office  
2101 E. Calvada Blvd., Suite 100  
Pahrump, Nevada 89048

Attention:      Darrell Lacy  
                    Director

The undersigned declares that he/she/it has carefully examined the locations of the proposed work and that he/she/it has examined all of the materials contained in this Bid Package and hereby proposes and agrees to furnish all labor, materials (as specified), equipment, tools, transportation, and services to do all work required to construct the well facilities described herein, and all appurtenances therefore, in strict conformance with the General Conditions, Special Conditions, Technical Specifications, and Drawings prepared by Nye County, for the prices shown on the following page(s). Item quantities and footages are based upon estimated quantities indicated in the Technical Specifications, and shall include all items necessary to complete the work.

It is understood and agreed that:

1. The undersigned has carefully examined all the Contract Documents which will form a part of the Contract, including the Notice of Invitation to Bid # 2010-06, the Information for Bidders, this Bid (including the Cost proposal and Qualifications of Bidder), Sample Contract, General Conditions, Special Conditions, Technical Specifications, and Drawings.
2. The undersigned has satisfied himself/herself/itself as to the nature and location of the work and fully informed himself/herself/itself/itself as to all conditions and matters that can in any way affect the work or the cost thereof.
3. The undersigned fully understands the scope of work and has checked carefully all words and figures inserted in the Bid and he/she/it/it further understands that Nye County will, in no way, be responsible for any errors or omissions in the preparation of this proposal.
4. The undersigned fully understands and acknowledges that all labor, materials, tools and equipment (including but not limited to drill bits, drilling fluids, drill pipe/rods, water and power) necessary to properly and successfully perform the Scope of Work, except for those materials for which unit prices are solicited on the Bid forms, shall be provided at

no additional cost to Nye County, and affirms that those costs are included in the linear foot and/or hourly drilling rates, as applicable, provided in this Bid.

5. The undersigned agrees and acknowledges that he, she, or it is aware of the provisions of Nevada Revised Statutes Chapters 616 through 617, inclusive, which require every employer to be insured against liability for workmen's compensation or to undertake self-insurance in accordance with the provisions of that law, and that the undersigned will comply with such provisions of that law before commencing the performance of the contract if it is awarded to the undersigned.
6. The undersigned will execute an Agreement and furnish the required bonds and certificates of insurance within seven (7) days after the Award of Contract.
7. The undersigned will begin work after Award of Contract and Notice to Proceed, provided all requirements in regard to bonds and insurance have been satisfied and will complete said work within the period of time specified in the Information for Bidders and the Special Provisions.
8. The undersigned hereby certifies that this Bid is genuine and not sham or collusive, nor made in the interest of, or in behalf of, any person not herein named, and the undersigned has not directly or indirectly induced or solicited any other bidder to put in a sham bid or any other person, firm, or corporation to refrain from bidding; the undersigned has not in any manner sought by collusion or secure for himself/herself/itself any advantage over any other Bidder.
9. If requested by Nye County, the undersigned shall furnish a notarized financial statement, references, and other information sufficiently comprehensive to permit an appraisal of his/her firm's current financial condition.
10. The undersigned will accept an award and enter into a contract for all work scheduled herein on which he/she/it puts in a bid.
11. This Bid may be withdrawn, in writing, prior to the date of opening the bids. This Bid, however, may not be withdrawn after the Bid opening until the expiration of sixty (60) days from the date of the Bid opening, and then only in writing in advance of the actual award of the Contract.
12. The following Cost Proposal (including Table 1); Bidder's Information; Equipment Description, Qualifications Statement, Non-Debarment Certification, and any supplemental pages thereto are included in and are an integral part of this Bid.

Bidding Firm: \_\_\_\_\_

By: \_\_\_\_\_

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

Date: \_\_\_\_\_

## **1. COST PROPOSAL**

The following Table 1 contains the Bidder's schedules of prices for drilling, and construction of two required and two optional monitoring wells in accordance with all of the provisions of the Bid Package. The schedules are divided into lump sum, hourly rate, and unit price items. Payment for hourly rate and unit price items will be based on actual quantities furnished, installed, or constructed, and payment will be made in accordance with the hourly rates and unit prices quoted herein. **It is understood that the following prices include all labor, equipment and non-bidded materials (including but not limited to drill bits, drilling fluids, drill pipe/rods, water and power) necessary to complete the well drilling and completion to the satisfaction of Nye County, in accordance with the Technical Specifications in Part V of this bid package.**

Complete and submit: Table 1 - Cost Consideration Schedule for Well Drilling and Construction of Groundwater Evaluation Wells in Southern Nye County.

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**Table 1**  
**Cost Consideration Schedule for Well Drilling and Construction of Groundwater Evaluation Wells**  
**in Southern Nye County**

Item No.	Description	Unit	Estimated Quantity	Estimated Unit Cost	Estimated Item Total
1	<b>Drill and Complete Piezometer Wells (not to exceed 500 ft depth).</b>				
1.1	Mobilization	job	1		
	Move rig from site to site.	job	14		
1.2	Install approximately 10-inch surface casing to approximately 20 ft (include drilling, casing, grouting materials and labor).	job	15		
1.3	Drill approximately 8-inch diameter borehole using conventional air foam drilling methods to a average depth of 300 ft.	ft	4500		
1.4	Install and complete average 300 ft deep, 4-inch Schedule 80 flush-threaded PVC well casing with sandpack and grout to surface. (not including materials)	ft	4500		
1.5	Completion Material - Blank casing, 4-inch Sch. 80 PVC, flush joint, F480 threads (include bottom and top caps).	ft	2850		
1.6	Completion Material - Well screen, 4-inch Sch. 80 PVC, 0.020 inch slots, flush joint, F480 threads.	ft	600		
1.7	Completion Material - Well screen, 4-inch Sch. 80 PVC, 0.040 inch slots, flush joint, F480 threads.	ft	600		
1.8	Completion & Plug Back Material - High solids bentonite grout (30% by weight). Baroid Aquagaurd or equivalent .	50 lb sack	700		
1.9	Completion Material - 8/12 mesh Colorado Silica Sand.	50 lb sack	550		
1.10	Completion Material - 6/9 mesh Colorado Silica Sand.	50 lb sack	550		
1.11	Completion Material – 60-mesh sand.	50 lb sack	15		
1.12	Airlift develop well with 2-inch airline	hr	30		
1.13	Surface completion including locked surface casing, surface grout seal and 4 ft x 4 ft x 8-in.concrete pad.	job	15		
1.14	NWRPO directed rig operating time. (miscellaneous work)	hr	15		
1.15	Rig standby time with crew. (standby on logging)	hr	15		
1.16	Rig standby time without crew. (standby on logging)	hr	15		
1.17	Crew per diem for well sites greater than 50 miles from Pahrump (3 wells/15 days)	days	15		
	<b>Total for 15 well program</b>			<b>Total</b>	

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## 2. BIDDER'S INFORMATION

The bidder shall furnish the following information. Failure to comply with this requirement will cause the Bid to be rejected. Additional sheets may be attached if necessary.

<b>1. Firm name and address</b> <hr/> <hr/> <hr/>	<b>2. Telephone number</b> _____
<b>3. Type of firm (check one):</b> Individual Partnership Corporation	
<b>4. Contractor's license (as applicable):</b> Primary class _____ License number _____ State of _____  Primary class _____ License number _____ State of _____  Primary class _____ License number _____ State of _____	
<b>5. State license to drill water wells:</b> License number _____ State of _____	
<b>6. Names and titles of all officers of the firm</b> <hr/> <hr/> <hr/>	
<b>7. Number of years as a contractor in construction work of this type:</b> _____	
<b>8. Three projects of this type and complexity recently constructed by bidder:</b> Contract amount _____ Type of project _____ Date completed _____ Owner's name and address _____ <hr/> <hr/> <hr/>	
<b>9. Subcontractors who will perform work in excess of \$10,000</b> Name _____ Address _____ Work to be performed _____ <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	

### 3. EQUIPMENT DESCRIPTION

**The bidder shall provide the following information regarding equipment, etc., to be provided, as available and applicable:**

Rig: Provide the following information as applicable and available for each rig:

Manufacturer and model  
Year of manufacture, general operating and overhaul history  
Type (tophead, table drive, etc.)  
Deck engine: type, mfr., rated horsepower  
Stroke, max/typical drillpipe or casing length handled  
Pullback/Pulldown capability rating  
Rotating torque vs. spindle rpm  
Makeup/breakout tools, type, size  
Description of pipe handling system  
Compressor type, rated horsepower, CFM@ pressure rating (sea level or 2,500 ft ASL if available)  
Water/foam injection capability  
Maximum casing size through table  
Auxiliary lines (sandline, etc.): size and length of line, winch/line rating  
Additional equipment provided with rig not listed above: i.e., welder/generator, oxy-acetylene torch/accessories, pipe racks, etc.  
Crew size provided

Drill pipe:

Size, types, lengths, linear feet provided

Core Barrels (if applicable):

Types, sizes, lengths

Tremmie pipe:

Size, types, lengths, linear feet provided

Auxiliary Compressor(s): (if needed)

Type, rated horsepower, CFM/PSI rating

Auxiliary vehicles/equipment:

Crane truck, service truck: specify type, manufacturer, capabilities, general list of equipment/tools provided with each

Gravel/Sand pump:

Type, capacity, system description

Grout Plant:

Capacity, tank volumes, etc.

Mud mixer (if needed):

Description of system, capacity

Lubricants:

Tool joint and casing lubricant: Type, manufacturer, and product designation

**4. QUALIFICATIONS STATEMENT**

The Qualifications Statement must be attached to the Bid in order for the Bid to be considered. There is no required format for the Qualifications Statement; however, it should address each and every item, except cost, listed in Section 6 (Selection Criteria) of the Information for Bidders.

**5. NON-DEBARMENT CERTIFICATION**

The Bidder shall execute the following Certification of Non-Debarment and submit it with his, her, or its Proposal. Failure to submit the required Certification shall be grounds for rejecting the Bidder's Proposal in whole.

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## **6. CERTIFICATION OF NON-DEBARMENT**

1. The Contractor certifies, by acceptance and execution of this Services Agreement, that to the best of his/her/its knowledge and belief, that he/she/it/it (and its principals if a corporation, partnership or other entity):

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three (3) year period preceding this Services Agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
- (d) Have not within a three (3) year period preceding this Services Agreement had one (1) or more public transactions (Federal, State or local) terminated for cause or default.

2. Contractor further agrees by accepting and executing this Services Agreement that he/she/it/it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts.

3. Where the Contractor or any lower tier participant is unable to certify to this statement, he/she/it/it shall attach an explanation to this Services Agreement.

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Name and Title of Signing Official

Date: \_\_\_\_\_

Business Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **PART II – AGREEMENT**

(Sample final agreement, to be finalized after award)

### **SERVICES AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between NYE COUNTY, NEVADA, a political subdivision of the State of Nevada, hereinafter referred to as "County" and \_\_\_\_\_, \_\_\_\_\_, hereinafter referred to as "Contractor."

### **WITNESSETH:**

**WHEREAS**, the Nye county Board of Commissioners ("Board"), has determined that it is important that the County evaluate and define the water resources in southern Nye County in order to benefit the health, welfare and the general well being of the County's residents; and

**WHEREAS**, the Board has determined that it is important to characterize the groundwater quality in the Pahrump Valley and water chemistry in the Amargosa Desert; and

**WHEREAS**, the County has received funding to implement the evaluation of groundwater resources in southern Nye County (the Project); and

**WHEREAS**, the County desires to let, coordinate and monitor contracts in order to further the implementation of the Project; and

**WHEREAS**, pursuant to applicable Federal procurement law and regulations, the County duly published and otherwise disseminated Notice of Invitation to Bid # 2010-06 opened and considered all received bids for the scope of work provided for in this Agreement; and determined that Contractor should be awarded this contract, pursuant to the selection criteria delineated in the Notice; and

**WHEREAS**, the County is desirous of employing the Contractor to provide certain drilling and well construction services on behalf of the County in furtherance of the Project, and contractor is qualified and desires to provide said support;

**NOW THEREFORE**, it is hereby agreed by and between the parties as follows:

### **1. SCOPE OF WORK**

The Contractor will receive direction from the Nye County Nuclear Waste Repository Project Office (NWRPO) Geoscience Manager or designated representative. The Contractor will perform drilling work in support of Nye County's Groundwater Evaluation Program. Specifically, the Contractor is to:

1.1. Complete all aspects of the Scope of Work as set forth in Exhibit "A", entitled Bid Package: Notice of Invitation to Bid *2010-06, Well Drilling and Completion of Groundwater Evaluation Wells in Southern Nye County* – Bid Specifications and Request for Bid, attached hereto and incorporated herein and hereafter referred to as the Scope of Work.

1.2. Complete daily and other reports as required by the NWRPO representative on progress made in completing the scope of the aforementioned specifications, and inform the County regarding the progress of the services at such times and in such a manner as the County may require, as requested by the NWRPO representative.

## **2. TERMS AND EXTENSIONS**

2.1. Contractor shall commence performance of this Agreement upon receipt of Notice to Proceed and shall complete the Services, as described in the Specifications, to the satisfaction of the County not later than **June 15, 2010**, unless the County grants a written extension. Extensions will only be granted in those instances in which the Contractor's inability to complete the Services are caused by circumstances beyond the Contractor's control.

2.2. Funding for this Project is subject to approval by the U.S. Department of Energy and its continued funding. If USDOE does not approve of and/or discontinues funding for the Project, the Project will be canceled. Contractor expressly acknowledges the contingent nature of this Agreement and agrees that in the event that either approval or funding is withheld or withdrawn by the USDOE, this Agreement shall be null and void, and County shall have no obligations to Contractor under it, other than to compensate Contractor for any work performed and materials provided after receipt of Notice to Proceed and prior to the withdrawal of approval or funding.

## **3. COMPENSATION**

3.1. As and for compensation for undertaking and completing the Scope of Work as described in Exhibit "A", the County shall pay the Contractor for work performed and materials supplied or used, at the rates set forth in Contractor's Bid Proposal submitted in response to Notice of Invitation to Bid **2010-06**, attached hereto and incorporated herein as Exhibit "B".

3.2. Contractor shall submit an invoice at least monthly to the County, including lump sum, unit price, hourly rates and time and material billings for all of his/her/its work as well as the work of any subcontractors.

3.2.1. Contractor shall provide to County with its monthly billings copies of its and its subcontractors' (if any) certified payroll records, clearly identifying the employees working on the Project, by classification; the total number of hours worked each day and week; the total compensation paid to each of the employees during the previous month and the rate(s) of pay used for calculating the compensation; and the prevailing rates of pay applicable to the classifications of employees, as set by the U.S. Secretary of Labor.

3.2.2. County will not make any progress payment to Contractor if copies of the certified payroll records have not been submitted with the monthly billing or if County determines from those records that the employees of Contractor or any subcontractor have not been paid as required by law.

3.3. Except as provided in subsection 3.2.2 above, subsection 5.1.2 below, or in the event that County determines that any hourly billing unreasonably exceeds the progress made by the Contractor for that time, the County will pay the Contractor for all work included in the approved pay requests, excluding ten percent (10%) retention. The Contractor will receive the final ten percent (10%) retention in the final payment as described in subsection 3.4 below.

3.3.1. If County determines that the billing exceeds the progress, it will pay only that portion of the invoice which fairly reflects the actual progress made by the Contractor.

3.3.2. County will withhold from the Contractor so much of accrued progress payments as may be considered necessary by County to pay to laborers and mechanics employed by Contractor or any subcontractor on the work the difference between the rates of wages required by law to be paid laborers and mechanics on the work and the rates of wages received by such laborers and mechanics and not refunded to Contractor, subcontractors or their agents.

3.4. Final payment to Contractor will be made in accordance with the lump sum, hourly rates, and unit prices shown in the Proposal, adjusted to reflect any modifications in the work required by County to meet actual conditions encountered in the field at the time of construction. Said adjustments shall be based on provisions for changes in work as set forth in the General Conditions.

3.5. Pursuant to 10 C.F.R. 600.236(b)(10)(ii), the ceiling price for this Scope of Work has been set at Three **Hundred Thousand Dollars (\$300,000.00)**.

3.5.1. Any work the Contractor (or subcontractors or employees) performs and materials supplied which exceeds the ceiling price for the Scope of Work is performed and/or supplied at Contractor's risk.

3.5.2. In no event shall Contractor be paid total compensation of more than the ceiling price for the Scope of Work or, unless this Agreement has been duly amended to reflect an adjusted ceiling price.

3.6. Contractor agrees that, upon receipt of monies from the County based upon a claim against the County for payment under this Agreement, monies due and owing to vendors, subcontractors and others under that claim will be paid to those vendors, subcontractors and others forthwith. Failure to do so constitutes a material breach of this Agreement. County reserves the right to make out reimbursement checks with Contractor and its vendors and subcontractors as joint payees if County determines that Contractor has failed in the past to pay its debts in a timely fashion after receiving payment from County.

#### **4. BONDS**

Upon execution of this Agreement, Contractor shall furnish to the County proof that the bonding requirements in the amounts and types set forth in Exhibit "A" have been obtained.

#### **5. PREVAILING WAGES**

5.1. Contractor may be subject to the Davis-Bacon Act (40 USCS § 276a), as supplemented by Department of Labor regulations (29 C.F.R. Part 5), and must pay his, her or its employees at the prevailing wage rate determined by Davis-Bacon and/or set by the U.S. Secretary of Labor whichever is higher.

5.1.1. Contractor and any subcontractor shall pay all mechanics and laborers employed directly upon the site of the work, unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account, the full amounts accrued at time of payment,

computed at wage rates not less than those stated in the advertised specifications, regardless of any contractual relationship which may be alleged to exist between the contractor or subcontractor and such laborers and mechanics;

5.1.2. Contractor shall post the scale of wages to be paid pursuant to the law in a prominent and easily accessible place at the site of the work; and

5.1.3. County will withhold from the Contractor so much of accrued progress payments as may be considered necessary by County to pay to laborers and mechanics employed by Contractor or any subcontractor on the work the difference between the rates of wages required by law to be paid laborers and mechanics on the work and the rates of wages received by such laborers and mechanics and not refunded to Contractor, subcontractors or their agents.

5.2. Contractor also is subject to Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330), as supplemented by Department of Labor regulations (29 C.F.R. Part 5), relating to the payment of premium wages for hours worked in excess of forty (40) in a workweek.

5.3. Contractor (and all subcontractors, if any) shall provide to County with its monthly billings copies of its certified payroll records, clearly identifying the employees working on the Project, by classification; the total number of hours worked each day and week; the total compensation paid to each of the employees during the previous month and the rate(s) of pay used for calculating the compensation; and the prevailing rates of pay applicable to the classifications of employees, as set by the U.S. Secretary of Labor. County will not make any progress payment to the Contractor (or any subcontractors) if copies of the certified payroll records have not been submitted with the monthly billing or if Nye County determines from those records that the Contractor's employees have not been paid as required by law.

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## 6. INDEPENDENT CONTRACTOR

The parties agree that Contractor, including any of Contractor's employees, agents, or subcontractors, is an independent contractor and that the Contractor is not a County employee or agent of the County, and, further, there will not be:

6.1. Withholding of income taxes by the County;

6.2. Industrial insurance coverage provided by the County;

6.3. Participation in group insurance plans which may be available to employees of the County;

6.4. Participation or contributions by either the independent contractor or the County to the public employees retirement system on behalf of the Contractor or his employees, agents, or subcontractors;

6.5. Accumulation of vacation or sick leave; or

6.6. Unemployment compensation coverage provided by the County.

## **7. TRANSFER OR ASSIGNMENT**

The parties hereto expressly agree that there shall be no transfers or assignment of, or participation in this Agreement of, or participation in this Agreement granted to any third party without written consent from the County.

## **8. INDEMNIFICATION AND PROOF OF INSURANCE**

8.1. The Contractor agrees to fully exonerate, indemnify and save the County harmless from and against all claims or actions, based upon or arising out of damage or injury (including death) to persons or property caused by and/or sustained in connection with the performance of the Agreement or by conditions created thereby, and further agrees, if requested by the County, to assume without expense to the County, the defense of any such claims or actions.

8.2. Contractor will maintain in effect, for the term of the Contract, general liability (bodily injury and property damage liability) insurance in the minimum limits of Two Million/Three Million Dollars (\$2,000,000/\$3,000,000) per occurrence/aggregate; employers' liability insurance and workers' compensation, at not less than the statutorily required minimums; and vehicle insurance on each vehicles used in the carrying out of this Agreement, with coverage of not less than Five Hundred Thousand Dollars (\$500,000) per person and One Million Dollars (\$1,000,000) per occurrence for bodily injury and Three Hundred Thousand (\$300,000) property damage.

8.2.1. All of the insurance policies obtained and maintained to satisfy this requirement shall name Nye County as an addition insured, and shall indemnify Nye County against losses and/or claims arising from or during the Contractor's fulfillment of the Contract.

8.2.2. The Contractor shall not commence work on the Project until he, she or it has obtained all of the required insurances; has furnished to the County certificates of insurance as proof of those insurances to; and such insurances shall have been approved by County as to form, amount, and carrier.

8.3. Contractor shall not allow any subcontractor to commence work on his, her or its subcontract until all similar insurances required of the subcontractor has been so obtained and approved.

## **9. COMPLIANCE WITH APPLICABLE LAW AND REGULATIONS**

9.1. During the term of this Agreement and while performing the scope of work, or as otherwise acting on behalf of the County, Contractor agrees to perform all terms and conditions of this Agreement in a lawful manner and in conformity with all applicable laws and ethics codes of the United States and of the State of Nevada, and all ordinances, rules, and regulations of the County and of any and all other competent public authority applicable to the performance of Contractor's duties, including but not limited to: Executive Order 11246 (September 24, 1965), Equal Employment Opportunity, as amended by Executive Order 11375 (October 13, 1967), and as supplemented in Department of Labor regulations (41 C.F.R. Chapter 60); the Copeland Anti-Kickback Act (18 U.S.C. 874), as supplemented in Department of Labor regulations (29 C.F.R.

Part 3); the Davis-Bacon Act (40 U.S.C. 276a to 276a-7), as supplemented by Department of Labor regulations (29 C.F.R. Part 5); Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330), as supplemented by Department of Labor regulations (29 C.F.R. Part 5); the mandatory standards and policies relating to energy efficiency which are contained in Nevada's energy conservation plan issued in compliance with the Energy Policy and Conservation Act, to the extent such standards and policies apply to the work of the Project; and all applicable standards, orders or requirements issued under section 306 of the Clean Air Act (42 U.S.C. 1857(h)), section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 C.F.R. Part 15); and any and all other environmental, health, safety, and other regulations applicable to the Nevada Test Site or other USDOE facilities or sites where Contractor may be performing under this Agreement.

9.2. Contractor expressly agrees to comply with Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352), Section 16 of the Federal Energy Administration Act of 1974 (Pub. L. 93-275), Section 401 of the Energy Reorganization Act of 1974 (Pub. L. 93-438), Title IX of the Education Amendments of 1972, as amended, (Pub. L. 92-318, Pub. L. 93-568, and Pub. L. 94-482), Section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112), the Age Discrimination Act of 1975 (Pub. L. 94-135), Title VIII of the Civil Rights Act of 1968 (Pub. L. 90-284), the Department of Energy Organization Act of 1977 (Pub. L. 95-91), the Energy Conservation and Production Act of 1976, as amended, (Pub. L. 94-385) and Title 10, Code of Federal Regulations, Part 1040.

9.2.1. In accordance with the above laws and regulations issued pursuant thereto, the Contractor agrees to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any activity under this Services Agreement.

9.2.2. Contractor shall execute the *Assurance of Compliance, Nondiscrimination in Federally Assisted Programs*, attached hereto and incorporated herein as Exhibit "C."

9.3. The Contractor shall comply with Executive Order 11246, entitled "Equal Employment Opportunity" as amended by Executive Orders 11375 and 12086 as supplemented in Department of Labor Regulations (41 CFR Part 60). The Contractor will not discriminate against any employee employed in the performance of this Services Agreement because of race, sex, creed, color, physical or mental handicap, or national origin.

9.3.1. The Contractor will take affirmative action to ensure that applicants for employment are not discriminated against on account of their race, sex, creed, color, physical or mental handicap, or national origin during the hiring process or their term of employment. This requirement shall apply to, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

9.3.2. In the event that the Contractor signs any subcontracts for provision of services under this Services Agreement, the Contractor shall include a provision requiring compliance with the aforementioned Executive Order and Department of Labor regulations.

9.4. If the Contractor intends to let and/or lets any subcontracts, the Contractor must take affirmative steps to and provide written documentation of his steps to:

- 9.4.1. Include qualified small, rural, minority, and women's businesses on solicitation lists; and
- 9.4.2. Assure that small, rural, minority, and women's businesses are solicited whenever they are a potential source;
- 9.4.3. When economically feasible, divide requirements into smaller tasks or quantities so as to permit maximum small, rural, minority, and women's businesses participation; and
- 9.4.4. When economically feasible, establish delivery schedules that will encourage participation of small, rural, minority, and women's businesses.

## **10. WORKPLACE SAFETY POLICIES**

- 10.1. The Contractor will submit its Health and Safety Plan for approval. The Contractor will provide a tailgate review of work site hazards, including management of any potentially hazardous materials; trip, slip, and fall hazards; and discussion of desert environment related hazards (heat stroke and stress, dehydration, poisonous snakes and spiders). All heavy equipment will maintain safe distances when used near transmission lines.
- 10.2. The Contractor will exercise due care at all times to ensure that fire danger is avoided. Flammable liquids, if present, will be stored in flammable-approved containers, and will be protected from ignition sources. Open ignition sources will be not be used in the presence of flammable liquids.

## **11. SEXUAL HARASSMENT POLICY**

Contractor has been provided with a copy of the County's sexual harassment policy and expressly covenants to take all steps necessary to assure that his or her employees, agents, and subcontractors are made aware of and abide by that policy.

## **12. RECORDS**

- 12.1. Contractor shall maintain such records and accounts, including property, personnel, and financial records, as are deemed necessary by the County to assure a proper accounting for all project funds. Specific records which must be maintained are set forth in Exhibit "D."
- 12.2. These records will be retained by Contractor for at least three (3) years after the expiration of this Agreement or after all other pending matters surrounding this Agreement are closed, whichever is longer. At the termination of this contract, the Contractor shall transfer a complete copy of all technical records to the County.
- 12.3. Contractor shall permit, and shall require its subcontractors to permit the County, the Comptroller General of the United States and USDOE, or their authorized representative, to inspect all work, materials, payrolls, and other data and records with regard to the Scope of Work until the three (3) year period expires.
- 12.4. Contractor shall collect and submit or otherwise make available to the County, at such times as it may require, such financial statements, data, records, contracts, and any other

documents related to the Services as may be deemed necessary by County until the three (3) year period expires.

### **13. PUBLICATION**

The Contractor may publish results of its function and participation in the Project, provided that:

13.1. Prior written approval of the County is obtained and that copies of each publication are furnished to the County prior to publication;

13.2. The data or information disseminated is not subject to the Federal export control or national security laws or regulations;

13.3. The report does not include data or information not produced by the Contractor that is copyrighted or developed by the Contractor and that is protected by The Energy Policy Act of 1992, P.L. 102-486 (42 U.S.C. § 13541(d)), i.e. information that if developed by the private sector would be a trade secret or commercial or financial information that is privileged or confidential; and

13.4. The following notice is contained in any report intended to be released to the public:

This report/information was prepared by \_\_\_\_\_  
pursuant to a Cooperative Agreement funded by the United States  
Department of Energy, and neither Nye County nor any of its  
contractors or subcontractors nor the United States Department of  
Energy, nor any person acting on behalf of either:

Makes any warranty or representation, express or implied, with  
respect to the accuracy, completeness, or usefulness of the  
information contained in this report, or that the use of any  
information, apparatus, method or process disclosed in this report  
may not infringe privately-owned rights; or

Assumes any liabilities with respect to the use of, or for damages  
resulting from the use of, any information, apparatus, method or  
process disclosed in this report. Reference herein to any specific  
commercial product, process or service by trade name, trademark,  
manufacturer, or otherwise, does not necessarily constitute or  
imply its endorsement, recommendation, or favoring by the United  
States Department of Energy. The views and opinions of authors  
expressed herein do not necessarily state or reflect those of the  
United States Department of Energy.

### **14. INTELLECTUAL PROPERTY PROVISIONS**

14.1. Authorization and Consent. Pursuant to FAR 52.227-1, the USDOE authorizes and consents to all use and manufacture of any invention described in and covered by a United States patent in the performance of this Services Agreement.

14.2. Patent and Copyright Infringement.

14.2.1. The Contractor shall report to the Project Manager, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this Services Agreement of which the Contractor has knowledge.

14.2.2. In the event of any claim or suit against the Federal Government on account of any alleged patent or copyright infringement arising out of the performance of this Services Agreement or out of the use of any supplies furnished or work or services performed under this Services Agreement, the Contractor shall furnish to the USDOE when requested by the Project Manager, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the USDOE except where the Contractor has agreed to indemnify the County.

14.3. Rights in Data Pursuant to FAR 52.227-14, except in certain specified circumstances, the USDOE shall have unlimited rights in data first produced in the performance of this Services Agreement; form, fit and function data delivered under this Services Agreement; data delivered under this Services Agreement (except for restricted computer software) that constitute manuals or instructional and training material for installation, operation or routine maintenance and repair items, components, or processes delivered or furnished for use under this Services Agreement; and all other data delivered under this Services Agreement.

14.3.1. Except as hereafter provided below, if the Services performed by Contractor pursuant to this Services Agreement result in a book or other copyrightable or licensable material, the Contractor may copyright or license the work and turn the copyright or licensing rights over to the County, the party ultimately receiving the copyright or licensing rights to the material to be determined at the end of the project. The USDOE and County reserves a royalty-free, non-exclusive and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, all technical information or data, and all copyrighted material resulting from the Services. The right to use the work for USDOE or County purposes includes the right to publicly distribute the information therein; and the right to prepare derivative works.

14.3.2. The Contractor agrees not to assert copyright in computer software first produced in the performance of this Services Agreement without prior written permission of the County and the USDOE Patent Counsel. When such permission is granted, the Patent Counsel shall specify appropriate terms, conditions and submission requirements to assure utilization, dissemination and commercialization of the data. The Contractor, when requested, shall promptly deliver to Patent Counsel a duly executed and approved instrument fully confirmatory of all rights to which the USDOE is entitled.

14.3.3. Upon request, at any time during the term of this Services Agreement and thereafter for three (3) years from the termination of this Services Agreement, the Contractor shall provide to the County and/or the USDOE all data first produced during or specifically used in performance of this Services Agreement. When data are to be delivered under this clause, the Contractor will be compensated for converting the data into the prescribed form, for reproduction and for delivery.

14.4. Patent Rights. If any discovery or invention arises out of or is developed in the course of, or is aided by these Services, it shall be fully reported to the County and the USDOE, as provided hereafter.

**14.4.1. Definitions:**

14.4.1.1. Invention means any invention or discovery that is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant that is or may be protected under the Plant Variety Protection Act (7 U.S.C. 2321, et seq.).

14.4.1.2. Made when used in relation to any invention means the conception of first actual reduction to practice of such invention.

14.4.1.3. Practical application means to manufacture, in the case of a composition or product; to practice, in the case of a process or method; or to operate, in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are, to the extent permitted by law or Government regulations, available to the public on reasonable terms.

14.4.1.4. Subject invention means any invention of the Contractor conceived or first actually reduced to practice in the performance of the Services under this Services Agreement.

14.4.1.5. Agency licensing regulations and agency regulations concerning the licensing of Government-owned inventions mean the USDOE patent licensing regulations at 10 CFR part 781.

14.4.2 *Allocation of principal rights.* The Contractor may retain the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this Section and 35 U.S.C. 203. With respect to any subject invention in which the Contractor retains title, the Federal Government shall have a nonexclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the subject invention throughout the world.

**14.4.3. Invention disclosure, election of title, and filing of patent application by Contractor.**

14.4.3.1. The Contractor will disclose each subject invention to the County and the USDOE within two (2) months after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The disclosure to the County and USDOE shall be in the form of a written report and shall identify this Services Agreement and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of the disclosure, of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or public use of the invention and whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the USDOE, the Contractor will promptly notify that agency of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Contractor.

14.4.3.2. The Contractor will elect in writing whether or not to retain title to any such invention by notifying USDOE within two (2) years of disclosure by County to the USDOE. However, in any case where publication, on sale or public use has initiated the one-year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by USDOE to a date that is no more than 60 days prior to the end of the statutory period.

14.4.3.3. The Contractor will file its initial patent application on a subject invention to which it elects to retain title within one (1) year after election of title or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale, or public use. The Contractor will file patent applications in additional countries or international patent offices within either 10 months of the corresponding initial patent application or six (6) months from the date permission is granted by the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

14.4.3.4. Requests for extension of time for disclosure, election and filing under the above sections may, at the discretion of the agency, be granted.

14.4.4. *Conditions when USDOE may obtain title.* The Contractor will convey to the USDOE, upon written request, title to any subject invention.

14.4.4.1. If the Contractor fails to disclose or elect title to the subject invention within the times specified above, or elects not to retain title; provided, that USDOE may only request title within 60 days after learning of the failure of the Contractor to disclose or elect within the specified times.

14.4.4.2. In those countries in which the Contractor fails to file patent applications within the times specified above; provided, however, that if the Contractor has filed a patent application in a country after the times specified above, but prior to its receipt of the written request of the USDOE, the Contractor shall continue to retain title in that country.

14.4.4.3. In any country in which the Contractor decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in reexamination or opposition proceeding on, a patent on a subject invention.

14.4.5. *Minimum rights to Contractor and protection of Contractor right to file.*

14.4.5.1. The Contractor will retain a nonexclusive royalty-free license throughout the world in each subject invention to which the Government obtains title, except if the Contractor fails to disclose the invention within the times specified above. The Contractor's license extends to its domestic subsidiary and affiliates, if any, within the corporate structure of which the Contractor is a party and includes the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the contract was awarded. The license is transferable only with the approval of the USDOE, except when transferred to the successor of that part of the Contractor's business to which the invention pertains.

14.4.5.2. The Contractor's domestic license may be revoked or modified by USDOE to the extent necessary to achieve expeditious practical application of subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions at 37 CFR part 404 and agency licensing regulations. This license will not be revoked in that field of use or the geographical areas in which the Contractor has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of USDOE to the extent the Contractor, its licensees, or the domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

14.4.5.3. Before revocation or modification of the license, USDOE will furnish the Contractor a written notice of its intention to revoke or modify the license, and the Contractor will be allowed 30 days (or such other time as may be authorized by USDOE for good cause shown by the Contractor) after the notice to show cause why the license should not be revoked or modified. The Contractor has the right to appeal, in accordance with applicable regulations in 37 CFR part 404 and agency regulations concerning the licensing of Government owned inventions, any decision concerning the revocation or modification of the license.

*14.4.6. Contractor action to protect the Government's interest.*

14.4.6.1. The Contractor agrees to execute or to have executed and promptly deliver to USDOE all instruments necessary to (i) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Contractor elects to retain title, and (ii) convey title to USDOE when requested under sub-section 14.4.4 above and to enable the Government to obtain patent protection throughout the world in that subject invention.

14.4.6.2. The Contractor agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Contractor each subject invention made under this Services Agreement, in order that the Contractor can comply with the disclosure provisions above, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. This disclosure format should require, as a minimum, the information required by section 14.4.3 above. The Contractor shall instruct such employees, through employee agreements or other suitable educational programs, on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

14.4.6.3. The Contractor will notify USDOE of any decision not to continue the prosecution of a patent application, pay maintenance fees, or defend in reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the response period required by the relevant patent office.

14.4.6.4. The Contractor agrees to include, within the specification of any United States patent application and any patent issuing thereon covering a subject invention the following statement: "This invention was made with Government support under Cooperative Agreement Number DE-FC28-02RW12163, awarded by the United States Department of Energy. The Government has certain rights in the invention."

*14.4.7. Subcontracts.*

14.4.7.1. The Contractor will include in all subcontracts under this Services Agreement, the language of this Section 14.

14.4.7.2. The USDOE, the County and the Contractor agree that the mutual obligations of the parties created by this Section constitute a contract between Contractor and the USDOE with respect to the matters covered by this Section 14.4; provided, however, that nothing in this paragraph is intended to confer any jurisdiction under the Contract Disputes Act in connection with proceedings under this Section 14.4.

14.4.8. *Reporting on utilization of subject inventions.* The Contractor agrees to submit, on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Contractor or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Contractor, and such other data and information as USDOE may reasonably specify. The Contractor also agrees to provide additional reports as may be requested by USDOE in connection with any march-in proceeding undertaken by that agency in accordance with this Section. As required by 35 U.S.C. 202(c)(5), USDOE agrees it will not disclose such information to persons outside the Government without permission of the Contractor.

14.4.9. *Preference for United States Industry.* Notwithstanding any other provision of this Section, the Contractor agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any product embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by USDOE upon a showing by the Contractor or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

14.4.10. *March-in rights.* The Contractor agrees that, with respect to any subject invention in which it has acquired title, USDOE has the right in accordance with the procedures in 37 CFR 401.6 and any supplemental regulations of the agency to require the Contractor, an assignee or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and, if the Contractor, assignee, or exclusive licensee refuses such a request, USDOE has the right to grant such a license itself if USDOE determines that:

14.4.10.1. Such action is necessary because the Contractor or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;

14.4.10.2. Such action is necessary to alleviate health or safety needs, which are not reasonable, satisfied by the Contractor, assignee, or their licensees;

14.4.10.3. Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Contractor, assignee, or licensees; or

14.4.10.4. Such action is necessary because the agreement required by section 14.4.9 above has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

14.4.11. *Communications.*

14.4.11.1. The Contractor shall direct any notification, disclosure or request to USDOE provided for in this Section to the USDOE patent counsel assisting the USDOE contracting activity, with a copy of the communication to the USDOE contracting officer and the County's Project Manager.

14.4.11.2. Each exercise of discretion or decision provided for in this Section is reserved for the USDOE Patent Counsel and is not a claim or dispute and is not subject to the Contract Disputes Act of 1978.

14.4.11.3. Upon request of the USDOE Patent Counsel or the USDOE contracting officer, the Contractor shall provide any or all of the following: (i) A copy of the patent application, filing date, serial number and title, patent number and issue date for any subject invention in any country in which the Contractor has applied for a patent; (ii) A report, not more often than annually, summarizing all subject inventions which were disclosed to USDOE individually during the reporting period specified; or (iii) A report, prior to termination of this Services Agreement, listing all subject inventions or stating that there were none.

14.4.12. *Inspection of Records.* The County and USDOE, and any authorized representative of either, shall, until three (3) years after final payment under this Services Agreement, have the right to examine any books (including laboratory notebooks), records, and documents of the Contractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the Services under this Services Agreement, to determine whether any such inventions are inventions subject to DEAR 952.227-11 or this Section; and the Contractor has complied with the provisions of both.

## **15. PROHIBITED USE OF FUNDS**

Contractor shall not seek funds from the County to be used either directly or indirectly to pay for: bad debts; contingencies; contributions and donations; entertainment; fines and penalties; interest and other financial costs; unrecovered costs under grant agreements; prosecution of claims against the Federal Government; or taxes which the County is not legally required to pay.

## **16. CONFIDENTIALITY OF INFORMATION**

16.1. All information, analysis or reports generated by the Contractor under the scope of this Contract shall be considered confidential until such time that the County releases the information, analysis or reports to the public or they enter the public domain through no fault of the Contractor.

16.2. All information, analysis or reports provided to the Contractor which are identified by the County as confidential shall not be released to any other party without the written approval of the County.

## **17. TECHNICAL CAPABILITIES AND LEVEL OF EFFORT**

The Contractor commits to provide such technical capabilities as will be required to perform in a competent and professional manner under this Agreement.

## **18. TERMINATION OF AGREEMENT WITHOUT CAUSE**

18.1. If USDOE does not approve of and/or discontinues funding for the Project, the Project will be canceled. In the event that either approval or funding is withheld or withdrawn by the USDOE, this Agreement shall be null and void, effective immediately upon written or verbal notice to the Contractor; and County shall have no obligations to Contractor under it, other than to compensate Contractor for any work performed and materials provided after receipt of Notice to Proceed and prior to the withdrawal of approval or funding.

18.2. The County may otherwise terminate the Agreement without cause by giving not less than thirty (30) days written notice to the Contractor. In the event of termination without cause by the County, the Contractor shall be compensated for all work completed up to the termination date, pursuant to the provisions of this Agreement.

## **19. TERMINATION OF AGREEMENT WITH CAUSE**

19.1. This Agreement may be terminated without prior notice by the County if the Contractor fails to complete the Scope of Work or furnish the materials in a manner which the County deems satisfactory, or if the Contractor violates or breach any of the terms of this Agreement.

19.2. In the event of termination with cause by the County, the Contractor shall be compensated for all work completed satisfactorily up to the termination date, pursuant to the provisions of this Agreement.

19.3. In the event of termination without prior notice by the County, the County shall give written notice to Contractor as soon thereafter as is practicable by U.S. Postal Service Certified Mail to Contractor's address herein, or by hand delivery of such notice to the Contractor.

19.4. In addition to termination, County may impose such sanctions as it may determine to be appropriate to the violation, breach or failure to complete or furnish, including, but not limited to:

19.4.1. Withholding of payments to the Contractor under this Agreement until the Contractor complies;

19.4.2. Charging to the Contractor all costs caused by the breach, violation or failure.

## **20. GUARANTEES AND SURETY**

The Contractor shall guarantee the entire work constructed by him under the contract to be free of defects in materials and workmanship for a period of one (1) year following the date of acceptance of the work by Nye County. The Contractor shall agree to make, at its own expense, any repairs or replacements made necessary by defects in material or workmanship which become evident within said guarantee period. The Contractor shall further agree to indemnify and save harmless Nye County, and their officers, agents, and employees against and from all claims and liability arising from damage and injury due to said defects. The Contractor shall make all repairs and replacements promptly upon receipt of written order from Nye County. If the Contractor fails to make the repairs and replacements within one (1) week after being notified by Nye County, Nye County may do the work and the Contractor and its surety shall be liable to Nye County for the cost of such work.

## **21. GOVERNING LAW**

This Agreement shall be construed and interpreted according to the laws of the State of Nevada.

## **22. ARBITRATION**

22.1. The parties agree that any dispute arising between the parties concerning the terms of this Agreement will be subject to binding arbitration if the dispute cannot otherwise be settled.

22.2. Any dispute subjected to arbitration must be handled in accordance with applicable rules administered by the American Arbitration Association.

22.3. In the event of arbitration to enforce any of the terms or conditions of this Agreement, the prevailing party shall be entitled to recoup such sums as the arbitrator may fix as attorney's fees, costs, and interests.

## **23. BANKRUPTCY**

Under no circumstances shall this Agreement, or any of Contractor's rights hereunder, constitute an asset of the estate of Contractor or any company in which Contractor holds an ownership interest, in bankruptcy or similar proceedings involving the insolvency of Contractor or such company.

## **24. NON-DEBARMENT CERTIFICATION**

Attached to and incorporated into this Agreement as Exhibit "E" is a Certification of Non-Debarment, which the Contractor must sign before performing or receiving compensation under this Agreement.

## **25. ENTIRE AGREEMENT**

This Agreement, including all of the Contract Documents and other information provided in the Bid Package (attached hereto as Exhibit "A"), constitutes the final and entire agreement between the parties and may only be modified by written amendment duly executed by the parties.

## **26. SEVERABILITY**

If any provision of this Agreement is held to be invalid, such invalidity shall not affect the validity of any other provisions of this Agreement that can be given effect without the invalid provision, and to this end, the provisions of this Agreement are declared to be severable.

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**IN WITNESS WHEREOF**, the parties do hereby execute this Agreement on the latest date hereinafter appearing, binding themselves to the full performance of this Agreement. This Agreement shall be binding upon Contractor's heirs, successors, executors, administrators, and assigns respective to the full performance of this Agreement.

**CONTRACTOR**

By: \_\_\_\_\_

Date: \_\_\_\_\_

**COUNTY**

NYE COUNTY BOARD OF COMMISSIONERS  
COUNTY OF NYE, STATE OF NEVADA  
P.O. Box 153  
Tonopah, Nevada 89049

By: \_\_\_\_\_  
Gary Hollis, Chairman

Date: \_\_\_\_\_

**ATTEST**

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Sandra L. Merlino, Nye County Clerk and  
Ex-Officio Clerk of the Board

**LIST OF EXHIBITS**

- A. *Notice of Invitation to Bid # 2010-06, Well Drilling and Completion of Groundwater Evaluation Wells in Southern Nye County* (from Bid Package)
- B. Contractor's Bid (from Bid Package)
- C. Assurance of Compliance, Nondiscrimination in Federally Assisted Programs
- D. Records Requirements
- E. Certification of Non-Debarment

## EXHIBIT A

### *Notice of Invitation to Bid 2010-06, Well Drilling and Completion of Groundwater Evaluation Wells in Southern Nye County*

NOTICE IS HEREBY GIVEN that the Board of County Commissioners of the County of Nye, State of Nevada, will accept written bids from qualified contractors for the following: 1) Drilling, installation, and completion of up to 15 groundwater piezometer wells not to exceed 500 ft as a monitor wells.

This work is part of the Nye County Ground Water Evaluation Program (GWE), funded from a U.S. Department of Energy (DOE) grant to Nye County.

All well sites are located within 2 miles of highways and paved roads in Southern Nye County in Amargosa Valley, Oasis Valley and Pahrump Valley, Nevada. The sites are located on BLM, county, and private lands.

The following briefly summarizes the required drilling and well completion activities for the wells and boreholes:

#### **Not to exceed 500 ft deep groundwater piezometer wells with up to 480 ft of 4-inch PVC well casing**

##### *Borehole Drilling*

1. Drill and sample approximately 8-inch borehole using conventional air circulation with injection of a water and foam mixture. The boreholes will be drilled to a maximum depth of 500 ft or approximately 100 ft below the water table (or “first” water). Collect geologic samples (drill cutting samples) at 5-ft intervals from the discharge using a cyclone air/cuttings separator or similar system. A 20-foot deep 10-inch steel surface casing will be installed prior to main advance of the borehole.
2. Upon reaching total depth, remove the drill string from the borehole to permit open borehole geophysical logging by another Nye County contractor.

##### *Subsurface Completion*

1. Run in flush joint tremmie line, followed by 4-inch flush-threaded Schedule 80 PVC well casing with screens and blanks. Pump in Colorado silica sand through the tremmie line in stages to approximately 5 feet above the well screen. Set a 2-foot lift of 60-mesh sandpack. Seal well with 30% by weight bentonite grout in bottom-up approach through the tremmie line. Extend 10-inch surface casing to approximately 2 ft above ground level and cut down PVC well casing to slightly below surface casing. Install locking cap and 4-ft x 4-ft x 8-inch thick concrete well pad apron. Air lift well to remove drilling fluids from screen/sandpack interval.

**A single contract will be awarded for all of the above-delineated work; accordingly, any person or firm responding to this Notice must submit a proposal to conduct all these drilling and completion activities. Any bid, which does not address all of the work elements, will be rejected as incomplete and non-responsive.**

A full description of each drilling and well completion activity is included in the Bid Package for the project and is entitled: *Well Drilling and Completion of Groundwater Evaluation Wells in Southern Nye County - Bid Specifications and Request for Bids*. This has been prepared by Nye County and contains all specifications, general and special conditions, bid forms (including cost proposal and detailed qualifications statement), information for bidders, bonding requirements, Project schedule, sample contract, and other related materials. The complete bid package may be obtained by contacting the Nye County Nuclear Waste Repository Project Office (NWRPO), 2101 East Calvada Blvd., Suite 100, Pahrump, Nevada 89048, or by calling 775-727-7727.

All bids must be in writing, on the Bid Proposal form prescribed in the bid package, and sealed in an envelope marked "***Well Drilling and Completion of Groundwater Evaluation Wells in Southern Nye County, BID # 2010-06.***" The sealed bids must be received no later than 9:30 a.m. [local time] on **February 16, 2010**, at the **Nye County Clerk's Office, Nye County Courthouse, 1520 E Basin Road, Pahrump, Nevada, 89060.**

***Bids sent by facsimile transmission will not be accepted or considered. Bids sent to any other location or received after the time given will not be considered and will be returned to the bidder.*** Opening of the bids will commence at 10:00 A.M. on **February 16, 2010** at the Nye County NWRPO located at 2101 East Calvada Blvd, Pahrump, Nevada. The contract will be awarded upon approval of the Nye County Board of Commissioners. The target date for contract award is **March 2010**.

**EXHIBIT B**  
**Contractor's Bid**

## **Exhibit C**

DOE F 1600.5  
(06-94)  
OMB Control No. 1910-0400  
All Other Editions Are Obsolete

U.S. Department of Energy  
Assurance of Compliance  
Nondiscrimination in Federally Assisted Programs

### **OMB Burden Disclosure Statement**

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans, and Oversight, HR-4.3, Paperwork Reduction Project (1910-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0400), Washington, DC 20503.

\_\_\_\_\_  
(Hereinafter called the  
"Applicant") HEREBY AGREES to comply with Title VI of the Civil Rights Act of 1964 (Pub. L. 88-352), Section 16 of the Federal Energy Administration Act of 1974 (Pub. L. 93-275), Section 401 of the Energy Reorganization Act of 1974 (Pub. L. 93-438), Title IX of the Education Amendments of 1972, as amended, (Pub. L. 92-318, Pub. L. 93-568, and Pub. L. 94-482), Section 504 of the Rehabilitation Act of 1973 (Pub. L. 93-112), the Age Discrimination Act of 1975 (Pub. L. 94-135), Title VIII of the Civil Rights Act of 1968 (Pub. L. 90-284), the Department of Energy Organization Act of 1977 (Pub. L. 95-91), the Energy Conservation and Production Act of 1976, as amended, (Pub. L. 94-385) and Title 10, Code of Federal Regulations, Part 1040. In accordance with the above laws and regulations issued pursuant thereto, the Applicant agrees to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity in which the Applicant receives Federal assistance from the Department of Energy.

### **Applicability and Period of Obligation**

In the case of any service, financial aid, covered employment, equipment, property, or structure provided, leased, or improved with Federal assistance extended to the Applicant by the Department of Energy, this assurance obligates the Applicant for the period during which Federal assistance is extended. In the case of any transfer of such service, financial aid, equipment, property, or structure, this assurance obligates the transferee for the period during which Federal assistance is extended. If any personal property is so provided, this assurance obligates the Applicant for the period during which it retains ownership or possession of the property. In all other cases, this assurance obligates the Applicant for the period during which the Federal assistance is extended to the Applicant by the Department of Energy.

## **Employment Practices**

Where a primary objective of the Federal assistance is to provide employment or where the Applicant's employment practices affect the delivery of services in programs or activities resulting from Federal assistance extended by the Department, the Applicant agrees not to discriminate on the ground of race, color, national origin, sex, age, or disability, in its employment practices. Such employment practices may include, but are not limited to, recruitment, advertising, hiring, layoff or termination, promotion, demotion, transfer, rates of pay, training and participation in upward mobility programs; or other forms of compensation and use of facilities.

## **Subrecipient Assurance**

The Applicant shall require any individual, organization, or other entity with whom it subcontracts, subgrants, or subleases for the purpose of providing any service, financial aid, equipment, property, or structure to comply with laws and regulations cited above. To this end, the subrecipient shall be required to sign a written assurance form; however, the obligation of both recipient and subrecipient to ensure compliance is not relieved by the collection or submission of written assurance forms.

## **Data Collection and Access to Records**

The Applicant agrees to compile and maintain information pertaining to programs or activities developed as a result of the Applicant's receipt of Federal assistance from the Department of Energy. Such information shall include, but is not limited to the following: (1) the manner in which services are or will be provided and related data necessary for determining whether any persons are or will be denied such services on the basis of prohibited discrimination; (2) the population eligible to be served by race, color, national origin, sex, age, and disability; (3) data regarding covered employment including use or planned use of bilingual public contact employees serving beneficiaries of the program where necessary to permit effective participation by beneficiaries unable to speak or understand English; (4) the location of existing or proposed facilities connected with the program and related information adequate for determining whether the location has or will have the effect of unnecessarily denying access to any person on the basis of prohibited discrimination; (5) the present or proposed membership by race, color, national origin, sex, age and disability in any planning or advisory body which is an integral part of the program; and (6) any additional written data determined by the Department of Energy to be relevant to the obligation to assure compliance by recipients with laws cited in the first paragraph of this assurance.

The Applicant agrees to submit requested data to the Department of Energy regarding programs and activities developed by the Applicant from the use of Federal assistance funds extended by the Department of Energy. Facilities of the Applicant (including the physical plants, buildings, or other structures) and all records, books, accounts, and other sources of information pertinent to the Applicant's compliance with the civil rights laws shall be made available for inspection during normal business hours on request of an officer or employee of the Department of Energy specifically authorized to make such inspections. Instructions in this regard will be provided by the Director, Office of Civil Rights, U.S. Department of Energy.

This assurance is given in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts (excluding procurement contracts), property, discounts or other Federal assistance extended after the date hereof, to the Applicants by the Department of Energy, including installment payments on account after such data of application for Federal assistance which are approved before such date. The Applicant recognizes and agrees that such Federal assistance will be extended in reliance upon the representations and agreements made in this assurance, and that the United States shall have the right to seek judicial enforcement of this assurance. This assurance is binding on the Applicant, the successors, transferees, and assignees, as well as the person(s) whose signatures appear below and who are authorized to sign this assurance on behalf of the Applicant.

### **Applicant Certification**

The Applicant certifies that it has complied, or that, within 90 days of the date of the grant, it will comply with all applicable requirements, of 10 C.F.R. 1040.5 (a copy will be furnished to the Applicant upon written request to DOE).

### **Designated Responsible Employee**

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Name and Title (Printed or Typed) and Telephone Number

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Signature and Date

---

Applicant's Name and Telephone Number

---

---

Address

---

Date

**Authorized Official:**  
**President, Chief Executive Officer, or Authorized Designee**

---

Name and Title (Printed or Typed) and Telephone Number

---

Signature and Date

## **EXHIBIT D**

### **Records Requirements**

Records Which Contractor Agrees to Maintain:

1. Certified payroll records, clearly identifying the employees working on the Project, by classification; the total number of hours worked each day and week; the total compensation paid to each of the employees during the previous month and the rate(s) of pay used for calculating the compensation; and the prevailing rates of pay applicable to the classifications of employees, as set by the U.S. Secretary of Labor.
2. Copies of all sub-contracts entered into pursuant to this Agreement.
3. Insurance policies obtained and/or maintained for compliance with this Agreement.
4. Documentation of Contractor's compliance with Section 10 of this Agreement, including but not limited to a record of the "tailgate reviews" of workplace safety held with Contractor's employees.
5. Documentation of Contractor's compliance with Section 9 herein, including but not limited to a record of all affirmative steps taken to include qualified small, rural, minority and women's businesses in any solicitation for subcontractors.
6. Copies of all invoices and/or receipts for materials, supplies and other personal property used to carry out this Agreement.
7. Copies of tax declarations, payments and other information documenting Contractor's compliance with all applicable federal, state and local taxation laws and regulations.
8. Copies of all licenses required to carry out this Agreement.
9. Copies of all bonds acquired and maintained for purposes of this Agreement.
10. Documentation of timely and full payment of all wages and other amounts due and owing to employees, subcontractors and vendors.
11. Copies of all invoices submitted, in the form prescribed by the County, including a certification that the charges are true and in accordance with this Agreement.
12. Originals of all financial business and financial records which are customarily kept in the due course of business which, if Contractor is audited, will allow complete and detailed documentation of all monies paid to Contractor by the County and work performed by the Contractor.

**NOTE: All correspondence (invoices, progress reports, letters, faxes, e-mails, etc.) relating to this Services Agreement must note the Award #, as follows: "Federal Grant Number DE-FG52-06NA27205."**

**EXHIBIT E**

**Certification of Non-Debarment**

1. The Contractor certifies, by acceptance and execution of this Services Agreement, that to the best of his/her/its knowledge and belief, that he/she/it/it (and its principals if a corporation, partnership or other entity):
  - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - (b) Have not within a three (3) year period preceding this Services Agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - (d) Have not within a three (3) year period preceding this Services Agreement had one (1) or more public transactions (Federal, State or local) terminated for cause or default.
2. Contractor further agrees by accepting and executing this Services Agreement that he/she/it/it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts.
3. Where the Contractor or any lower tier participant is unable to certify to this statement, he/she/it/it shall attach an explanation to this Services Agreement.

By: \_\_\_\_\_  
Signature

\_\_\_\_\_  
Name and Title of Signing Official

Date: \_\_\_\_\_

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

## PART III: GENERAL CONDITIONS

### **A. DEFINITION OF TERMS**

Whenever the following terms appear in the Bid Package, the meaning shall be as follows:

1. **Acceptance** - Acceptance means final acceptance of The Work.
2. **Bid** - The offer of the bidder for the work when completed and submitted on a prescribed bid form properly signed and guaranteed.
3. **Bidder** - Any individual, firm, or corporation submitting a Proposal for the work contemplated acting directly or through a duly authorized representative.
4. **Contract** - The written Agreement executed between Nye County and the Contractor.
5. **Contract Documents** - The Contract Documents are as follows: the Notice of Invitation to Bid, the Information for Bidders, the Bid (including the Cost Proposal and Table 1, Bidder's Information, Equipment Description, Qualifications Statement and Non-Debarment Certification), Contract, General Conditions, Special Conditions, Technical Specifications, and Drawings, and any addenda issued prior to the submission of the Bid. Also included shall be any and all addenda amending or extending the work, as may be required to complete the work.
6. **Contractor** - The party entering into contract with Nye County for performance of the work called for in these specifications, including the Contractor's authorized agents. The Contractor designated field representative (CDFR) shall represent the Contractor in the field.
7. **Nye County** - Nye County Nuclear Waste Repository Project Office (NWRPO), under the ultimate authority of the Nye County Board of Commissioners. The Nye designated field representative (NDFR) shall represent the County in the field.
8. **Plans** - The official plans, working drawings, figures, etc., or exact reproductions, approved by Nye County which show the locations, character, dimension, and details of the work to be done.
9. **Rig operating time, NWRPO directed** - Time during which rig operations are significantly affected by a factor (including but not limited to unanticipated hole conditions or scientific data collection), that is determined by the NDFR to require particular NWRPO oversight and/or direction and, therefore, to make linear unit price compensation inappropriate. All changes from regular to NWRPO-directed rig operating time, and the total amount of time during any day so designated, shall be memorialized in writing by the NDFR, either by notation on the daily drilling log or by other appropriate means. The hourly rate for such work shall include all labor, materials, tools and equipment (including but not limited to drill bits, drilling fluids, drillpipe/rods, water, and power) except for those materials (or classes of materials, in the event that a change in those materials is required by NWRPO) for which unit prices are solicited on the Cost Proposal, Table 1 and except for those stainless steel instrumentation related materials to be supplied by NWRPO.

10. **Specifications** - The General Conditions, Special Provisions, Technical Specifications, and Drawings which provide the directions, and requirements for the method and manner of performing the work, and to the amount and quality of material to be furnished.
11. **Subcontractor** - Any firm or corporation supplying labor and/or materials at the site of the work as part the Contractor's obligation under the Contract.
12. **Work** - The entire facility to be constructed as set forth in this contract.

## **B. NYE COUNTY'S AUTHORITY AND RESPONSIBILITIES**

### **1. Authority of Nye County**

Nye County shall have general supervision and direction of the Work. Within the scope of the Contract Nye County has the authority to enforce compliance with the plans and specifications. The Contractor(s) shall promptly comply with instructions from Nye County.

### **2. Extension of Time**

Nye County may extend the time fixed for completion of the Work under the Contract from time to time.

### **3. Temporary Suspension of Work**

- a. Nye County shall have the authority to suspend the Work, wholly or in part, for such period as Nye County may deem necessary, due to the failure of the Contractor to carry out orders given or to perform any provisions of the Work to the satisfaction of the County. The Contractor shall immediately comply with the written order of Nye County to suspend the Work wholly or in part, and shall not resume the Work until ordered to do so in writing by Nye County.
- b. If a suspension of Work is ordered because of failure on the part of the Contractor to carry out orders given or to perform any provisions of the work to the satisfaction of the County, such suspension of work shall not relieve the Contractor of its responsibility to complete the work within the time limit set forth in the Proposal, Information to Bidders, and Special Provisions, and shall not be considered cause for extension of the time for completion, and further, such suspension of work shall not entitle the Contractor to any additional compensation.
- c. In addition to the authority provided in subsection "a" above, if the NDNR observes any unsafe condition or situation, any Contractor activity not in accordance with the Contract, or any Contractor activity which may cause failure to obtain project specifications or objectives, the NDNR will advise the CDNR. If the NDNR and CDNR are unable to resolve the situation, then the NDNR may direct the rig and associated surface and downhole equipment to first be placed in a safe configuration as required, then shut down. At that time, NWRPO and Contractor will try to resolve the conflict.
  - i. If the shutdown is determined to be warranted, then Contractor will correct the situation and return to operation at Contractor's cost for rig downtime and returning to original rig/tool/equipment configuration.

- ii. If the shutdown is determined to be unwarranted, then Contractor may invoice actual time for rig standby time for the period of the shutdown, plus operating time to return to the original rig/tool/equipment configuration.

#### **4. Permit Procurement**

The permit for use of and access to the area required to construct the Work will be obtained by Nye County.

### **C. CONTRACTOR'S RESPONSIBILITIES**

#### **1. Work to be done by Contractor**

The Work to be done will consist of furnishing all labor, materials, methods or processes, implements, tools, and equipment necessary for the construction and completion of the well in accordance with the Agreement, and leave the construction site in a neat, clean, and orderly condition. All labor, materials and equipment necessary to properly and successfully perform the Scope of Work, except for those materials for which unit prices are given on the Proposal form, shall be provided at no additional cost to Nye County, but included in the lump sum and/or hourly compensation, as applicable.

#### **2. Time for Commencement and Completion**

The Contractor shall commence and complete work by the dates specified in Part I and Part II of this Contract Document, unless a written extension of that time is issued.

#### **3. Equipment**

The Contractor must furnish adequate equipment to properly perform the Work in accordance with these Specifications. All equipment must be in a good state of repair and maintained in such state during the progress of the Work. No worn or obsolete equipment shall be used, and in no case shall the maker's rating of capacity for any equipment be exceeded.

#### **4. Removal of Obstructions and Preparation of Sites**

The Contractor shall remove and dispose of all debris or other obstructions to the completion of the Work. In the case that the obstruction consists of an improvement not required by law to be removed by the County, the improvement shall be removed, maintained, and replaced by the Contractor at its expense. The County has previously prepared the well site, however, the Contractor is responsible for excavating necessary pits and berms to control drilling fluids and cuttings.

#### **5. Cleaning**

The Contractor, at short intervals, shall remove dirt, debris, waste, and rubbish from the working area and the construction site. At the completion of Work, the Contractor shall thoroughly clean and remove all refuse and debris from the site in the manner approved by Nye.

## **6. Final Clean-Up**

Upon completion and before making application for acceptance of the Work, the Contractor shall clean the construction site and all ground occupied by the Contractor in connection with the Work of all rubbish, excess materials, temporary structures, and equipment, and all parts of the Work shall be left in a neat and presentable condition. Pits and berms shall be graded to conform to the original topography. Care should be taken to prevent spillage and any such spillage or debris due to the Contractor's operations shall be immediately cleaned up.

## **7. Qualifications of Workers**

The Contractor shall employ none but competent personnel for the subject work.

## **8. Subcontractors**

- a. The Contractor may hire and use subcontractors to carry out parts of the Work; provided, however, before such hiring, the Contractor must request permission from Nye County to employ a subcontractor.
  - i. The Contractor will provide to Nye County all pertinent information about the proposed subcontractor and the portion of the Work to be completed by the subcontractor.
  - ii. Nye County will approve the hiring of the subcontractor if the information provided by the Contractor shows that hiring of the subcontractor is necessary or advantageous to the Contractor in the completion of the Work and without injury to Nye County's interests.
  - iii. A subcontractor shall be properly licensed for the type of work that it is to perform.
- b. A copy of each subcontract, in either writing or a written statement signed by the Contractor, giving the name of the subcontractor and the terms and conditions of each subcontract, shall be filed promptly with Nye County. Each subcontract shall contain a reference to the Agreement between Nye County and the Contractor, and the terms of that Agreement shall be made a part of each subcontract. Each subcontract shall provide for annulment of same by the Contractor upon written order of Nye County, if, in Nye County's opinion, the Subcontractor fails to comply with the requirements of the prime contract.
- c. The Contractor shall be responsible to Nye County for the acts and omissions of his, her, or its subcontractors and the subcontractors' employees to the same extent as he is responsible for his, her, or its own employees. Nothing contained in this Section shall create any contractual relationship between any subcontractor and Nye County or relieve the Contractor of any liability or obligation under the prime contract.

## **9. Supervision by Contractor**

The Contractor shall give efficient supervision to the Work, using his, her, or its best skill and attention, and shall provide and keep on the Work at all time a competent superintendent and any necessary assistants, all of whom, within reason, shall be satisfactory to Nye County. All

direction of Nye County shall be given to the superintendent and shall be as binding as if given to the Contractor in person.

## **10. Inspection**

The Contractor shall at all times maintain access to the Work during construction for Nye County and shall furnish Nye County with every reasonable facility for ascertaining the progress, workmanship, and character of materials used. The inspection of the Work shall not relieve the Contractor of any of its obligations to fulfill the Contract as prescribed. Defective work shall be made good and unsuitable materials may be rejected notwithstanding the fact that such defective work and unsuitable materials have been previously overlooked by Nye County and accepted.

## **11. Defective and Unauthorized Work**

All work that is defective in its construction or deficient in any of the requirements of the Bid Package shall be remedied or removed and replaced by the Contractor in an acceptable manner at its own expense. No compensation will be allowed for any Work done beyond the lines and grades shown on the plans or established by Nye County. Upon failure on the part of the Contractor to comply with any order of Nye County made under the provisions of this article, Nye County may cause the defective Work to be remedied or removed and replaced at the expense of the Contractor.

## **D. SPECIFICATIONS, PLANS, AND RELATED DATA**

### **1. Coordination of Bid Package Materials**

All of the documents and materials contained in the Bid Package are essential parts of the contract. A requirement occurring in any one is binding. These requirements are intended to be cooperative and to describe and provide for the complete Work. Specifications shall govern over the Plans.

### **2. Interpretation of Drawings and Specifications**

Should it appear that work to be done is not sufficiently detailed or explained by the Drawings or Specifications, the Contractor shall apply to Nye County for such further explanation as may be necessary and shall conform to such explanation or interpretation as part of the Contract. In the event of any discrepancy between drawings, specifications, etc., Nye County will provide correction information.

### **3. Drawings**

The Drawings for the Work will show conditions as they are supposed or believed by Nye County to exist. It is not intended to be inferred that the conditions as shown constitute a representation of conditions that are actually existent. Nye County shall not be liable for any loss sustained by the Contractor as a result of any variance of the conditions as shown on the Drawings and the actual conditions revealed during the progress of the Work.

#### **4. Supplements**

The approved Drawings may be supplemented by working drawings if necessary to perform the work adequately. All drawings shall be consistent with the Contract Documents. All drawings signed by Nye County and delivered to the Contractor shall be deemed written instructions to the Contractor.

#### **5. Errors or Discrepancies Noted by Contractor**

- a. If the Contractor, either before commencing work or in the course of the Work, finds any discrepancy between the Specifications and the Drawings, or between either Specifications and/or Drawings and the physical conditions at the site of the Work, or finds any error or omission in any of the Drawings or in any survey, he, she, or it shall promptly notify Nye County in writing of such discrepancy, error or omission.
- b. If the Contractor observes that any Drawings or Specifications are at variance with any applicable law, ordinance, regulation, order or decree, he, she, or it shall promptly notify Nye County in writing of such conflict. Nye County, on receipt of such notice shall investigate the circumstances and give appropriate instructions to the Contractor.

### **E. CONTROL OF WORKMANSHIP AND MATERIALS**

#### **1. Quantities of Work and Materials**

- a. The quantities of Work to be done and the materials to be furnished under this Contract are estimated only, and Nye County is not to be held responsible for the data or information relative to Nye County's estimate of quantities. The Bidder/Contractor must judge quantities for him/her/itself and other circumstances affecting the cost of the performance of this Contract and as to the accuracy of this estimate.
- b. The Contractor will not ask, demand, sue for, or seek to recover, for any compensation beyond the amounts payable for the different classes of Work enumerated which shall be actually performed at the prices herein agreed upon and fixed.

#### **2. Disputes**

On all questions related to the quantities, the acceptability of material, equipment, or workmanship, the execution, progress or sequence of work, the interpretation of Specifications or Drawings, and the acceptable fulfillment of the Contract on the part of the Contractor, the decision of Nye County shall govern and shall be precedent to any payment under the Contract. The progress and completion of the work shall not be impaired or delayed by virtue of any question or dispute arising out of or related to the foregoing matters and the instructions of Nye County.

#### **3. General Supervision**

Direction of the Work by Nye County shall in no way imply that Nye County or its representatives are in any way responsible for the safety of the Contractor or its employees or that Nye County or their representatives will maintain supervision over the Contractor's construction methods or personnel other than to ensure that the quality of the finished Work is in accordance with the Drawings and Specifications.

#### **4. Quality of Materials and Source of Supply**

- a. Articles, materials, and equipment to be used in the Work under the Contract shall be new or unused (unless otherwise specified), shall conform to the requirements of these Specifications, and be approved by Nye County before incorporation into the Work, and, where required, to conform to standard specifications or tests.
- b. Pursuant to the Buy American Act, all articles, materials, and equipment to be used in the work must be American-made, unless written permission is requested and obtained from the USDOE.
- c. At the option of Nye County, the source of supply of each of the materials shall be approved by Nye County before delivery is started.
- d. All materials proposed for use may be inspected or tested at any time during their preparation and use. If, after trial, it is found that sources of supply, which have been approved, do not furnish a uniform product or if the product from any source proves unacceptable at any time, the Contractor shall furnish approved material from other approved sources. After approval, any material which becomes unfit for use due to improper storage handling or any other reason shall be rejected.

#### **5. Samples and Tests**

- a. All tests of materials furnished by the Contractor shall be made in accordance with the commonly recognized standards of national organizations. Field tests of materials may be made by Nye County when deemed necessary and these tests shall be made in accordance with standard practices.
- b. The Contractor shall furnish such samples of all materials as are requested by Nye County without charge. No material shall be used until it has been approved by Nye County.

### **F. CHANGES IN WORK**

#### **1. Changes Initiated by Nye County**

Nye County may change the Drawings, Specifications, character of the work or quantity of work when determined necessary by Nye County. Change orders shall be in writing and state the dollar value of the change or establish method of payment, any adjustment in contract time, and, when negotiated prices are involved, shall provide for the Contractor's signature indicating their acceptance.

#### **2. Payment for Changes Initiated by Nye County**

- a. **CONTRACT UNIT PRICES:** If a change is ordered that results in a change to the quantity of an item of Work covered by a contract lump sum, linear foot, unit or hourly price, an adjustment in payment will be made based on the increase or decrease in quantity and the contract price.
- b. **CALCULATION OF PAYMENTS FOR OTHER CHANGES:** Payment for changes other than those set forth above in Subsection 2(a), i.e., changes which require the use of

different or additional equipment, materials and/or additional personnel shall be equal to the sum of:

- i. The labor and drilling equipment costs associated with the use of the different or additional equipment and/or additional personnel for purposes of carrying out the extra Work;
- ii. The cost of any of the class of materials enumerated in the Cost Proposal (i.e., casings, screens, sands, etc.) that is not covered by the Cost Proposal price due to a difference in size, type, quality, manufacturer, vendor or configuration; and
- iii. A fifteen percent (15%) mark-up calculated from the total of subsections 2.(b).i and 2.(b).ii.

c. DOCUMENTATION/AGREEMENT REQUIRED: Whenever payment for extra Work is made in accordance with Subsection (b), the Contractor shall maintain sufficient records to distinguish the cost of extra Work from the previously contracted Work.

- i. The Contractor shall furnish daily, on forms approved by Nye County, reports of extra Work. The reports shall itemize all costs for labor, materials, and equipment rental. The reports shall, for workmen, include hours worked, rates of pay, names, and classifications; and for equipment, shall include size, type, identification number, and hours of operation. All records and reports shall be made immediately available to Nye County upon its request. All reports shall be signed by the Contractor or his, her, or its authorized representative.
- ii. Nye County will compare its records with the Contractor's reports, make the necessary adjustments and compile the costs of extra Work. When extra Work reports are agreed upon and signed by both parties, they shall become the basis of payment.
- iii. Prior to beginning the Extra Work, the Contractor shall furnish a quote for unit hourly prices for the Extra Work, inclusive of all equipment, personnel and non-billable materials costs that may be negotiated by the Contractor and Nye County. The quote may include reasonable rental for the time that machinery or equipment is required; and, in addition, reasonable move-in and move-out charges. The equipment shall, in the opinion of Nye County, be in good working order, good condition, and suitable for its purpose. The final unit hourly price must be acceptable to both parties.
- iv. The materials cost billable under subsection 2.(b) above shall be the actual cost of such materials including sales taxes, freight, and delivery charges. Nye County reserves the right to approve materials and sources of supply of materials furnished by the Contractor, or if necessary to facilitate the progress of the Work, to furnish the materials to the Contractor. No percentage will be paid to the Contractor for any material furnished by Nye County.
- v. Invoices: Materials, equipment rental, and other costs shall be substantiated by vendors' invoices submitted with the current reports; or, if not then available, shall be submitted with subsequent reports. If vendors' invoices are not submitted within thirty (30) days after completion of the extra Work, Nye County may establish the cost of such items at the lowest current prices at which the items are available in the quantities required, delivered to the Work site.

- vi. Equipment or tools having a replacement value of One Hundred Dollars (\$100.00) or less, whether or not consumed by use, shall be considered small tools and no payment will be made therefore.
- d. OTHER PERMITTED PAYMENT: Nye County, at its sole discretion, may authorize and approve payment for necessary services and expenditures other than labor, materials, and equipment rentals.

## **G. PROGRESS AND PAYMENTS**

### **1. Progress Schedule**

Prior to the execution of the Contract, the Contractor shall submit to Nye County the practicable schedules for completing the Work, the dates at which the Contractor will start the several parts of the work, and the estimated dates of completion of the several parts. The progress schedule and supplementary progress schedules submitted shall be consistent, in all respects, with the time requirements of Nye County.

### **2. Payments for Extra Work**

Payments for extra work, when so ordered and accepted, shall be made on one or more of the bases set forth in Section F. Subsection 2, and as agreed to by Nye County and the Contractor, in accordance with the procedures for progress payments and final payment set forth herein.

### **3. Progress Payments**

The Contractor shall submit a progress payment request to Nye County on or before the 10<sup>th</sup> of each month, which will be based upon the Work completed during the preceding month. The Contractor will receive payment for all work included in the approved pay requests, excluding ten percent (10%) retention. The Contractor will receive the final ten percent (10%) retention in the Final Payment as described in subsection 5 below.

### **4. Deductions from Payment**

- a. Nye County may withhold payments to the Contractor, in whole or in part, due to: defective work not remedied; third party claims filed or reasonable evidence indicating the probable filing of such claims; failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment; reasonable evidence that the project cannot be completed for the unpaid balance of the contract price; damage to Nye County or other contractors; reasonable evidence that the Work will not be completed within the contact time; or the Contractor's persistent failure to carry out the Work in accordance with the Contract Documents.
- b. Nye County will withhold progress payments, in whole or part, when:
  - i. Nye County determines that any time and materials billing unreasonably exceeds the progress made by the Contractor for that time. Nye County will pay only that portion of the invoice that fairly reflects the actual progress made by the Contractor.

- ii. The Contractor fails to provide proof of proper payment of its and its subcontractors' employees, as required by the Contract, no progress payment will be made until or unless that failure is fully remedied.

## **5. Final Payment**

- a. Final payment will be made when all Work is completed in accordance with the Contract Documents; the Contract has been fully performed; the Work has been accepted by Nye County and any governmental agencies having jurisdiction over the Work; and the time period in which mechanics' liens may be filed by a contractor, subcontractor, or any material supplier has expired.
  - i. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.
  - ii. The final payment shall not be due and payable until the expiration of forty (40) days from the date of acceptance of the Work by Nye County.
- b. No certificate given or payments made under the Contract, except the final certificates or payment, shall be conclusive evidence of the performance of the Contract, either wholly or in part, and no payment shall be construed to be an acceptance of any defective work or improper materials.

## **6. Guarantees**

Besides guarantees required elsewhere, the Contractor must guarantee all Work for a period of one (1) year after the date of acceptance of the Work by Nye County and shall repair and replace any and all such Work, together with any other Work which may be displaced in doing so, that may prove defective in workmanship and/or materials within the one (1) year period from date of acceptance, without expense to Nye County. Ordinary wear and tear and usual abuse or neglect is excepted. In the event of failure to comply with the above-mentioned conditions within one (1) week after being notified in writing, Nye County is hereby authorized to proceed to have the defects repaired and made good at the expense of the Contractor, who hereby agrees to pay the cost and charges immediately on demand.

## **H. REQUIRED INSURANCES**

### **1. Workmen's Compensation and Employer's Liability Insurance**

The Contractor shall procure and maintain during the entire period of performance under this Contract workmen's compensation and occupation disease insurance coverage, in the minimum coverage amounts required by Nevada law.

### **2. General Liability Insurance**

The Contractor will maintain in effect, for the term of the Contract, general liability (bodily injury and property damage liability) insurance in the minimum limits of Two Million/Three Million Dollars (\$2,000,000/\$3,000,000) per occurrence/aggregate.

### **3. Automobile Liability Insurance**

The Contractor will maintain in effect, for the term of the Contract vehicle insurance on each vehicle used to carry out this Contract, with coverage of not less than Five Hundred Thousand Dollars (\$500,000) per person and One Million Dollars (\$1,000,000) per occurrence for bodily injury and Three Hundred Thousand (\$300,000) property damage.

### **4. Proof of Insurance**

- a. All of the insurance policies obtained and maintained to satisfy this requirement shall name Nye County as an additional insured, and shall indemnify Nye County against losses and/or claims arising from or during the Contractor's fulfillment of the Contract.
- b. The Contractor shall not commence work on the Project until he, she, or it has obtained all of the required insurances; has furnished to the County certificates of insurance as proof of those insurances to; and such insurances shall have been approved by County as to form, amount, and carrier.
- c. The Contractor shall not allow any subcontractor to commence work on his, her, or its subcontract until all similar insurances required of the subcontractor has been so obtained and approved.

### **5. Indemnification**

The Contractor agrees to fully exonerate, indemnify and save the County harmless from and against all claims or actions, based upon or arising out of damage or injury (including death) to persons or property caused by and/or sustained in connection with the performance of the Agreement or by conditions created thereby, and further agrees, if requested by the County, to assume without expense to the County, the defense of any such claims or actions.

## **I. BONDS AND LEGAL RESPONSIBILITY**

### **1. Bid Bonds**

The Bidder must submit with his, her, or its Proposal a Bid guarantee in the amount specified in Part I and Part II of this Contract Document. The Bid guarantee shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying the Bid as assurance that the Bidder will, upon acceptance of his, her, or its Bid, execute such contractual documents as may be required within the time specified. Note: Pursuant to applicable law, the Bid guarantee must be no less than five percent (5%) of the Bid price; however, since the Contract in this Project will be partially a time and material contract and not a fixed price contract, the guarantee amount is established as five percent (5%) of the ceiling price set for the Work specified in Part I and II of this Contract Document.

### **2. Performance and Payment Bonds**

The successful Bidder, before commencing work on the Project, shall furnish performance and payment bonds, each in the amount specified in Part I and II of this Contract Document, to secure fulfillment of all the Contractor's (and subcontractors', if any) obligations under the Contract and assure payment as required by law of all persons supplying labor and material in

the execution of the work provided for in the Contract, respectively. Note: Pursuant to applicable law, the performance and payment bonds each must be no less than one hundred percent (100%) of the Contract price; however, since the Contract in this Project will be partially a time and material contract and not a fixed price contract, the bond amounts are established as one hundred percent (100%) of the ceiling price set for the Work.

### **3.     Guarantee and Surety Bond**

- a. The Contractor shall guarantee the entire work constructed by him, her, or it under the contract to be free of defects in materials and workmanship for a period of one (1) year following the date of acceptance of the work by Nye County. The Contractor shall agree to make, at its own expense, any repairs or replacements made necessary by defects in material or workmanship which become evident within said guarantee period. The Contractor shall further agree to indemnify and save harmless Nye County, and their officers, agents, and employees against and from all claims and liability arising from damage and injury due to said defects. The Contractor shall make all repairs and replacements promptly upon receipt of written order from Nye County. If the Contractor fails to make the repairs and replacements within one (1) week of notification by Nye County, Nye County may do the work and the Contractor and its surety shall be liable to Nye County for the cost of such work.
- b. The guarantee and conditions specified above shall be secured by a surety bond, which shall be delivered by the Contractor to Nye County prior to the date on which final payment is made to the Contractor. Said bond shall be in an approved form and executed by a surety company or companies satisfactory to Nye County in the amount specified in Part I and Part II of this Contract Document for the Work. Said bond shall remain in force for the duration of the guarantee period.

### **4.     Additional Surety**

If, during the life of the Contract, any of the sureties named in said bond become insufficient in the opinion of Nye County, the County may require the Contractor to provide additional sufficient sureties within five (5) days of receipt of written order to do so. In the event the Contractor fails or neglects to furnish sufficient additional sureties, when ordered, within the prescribed time period, Nye County may suspend the work or terminate the contract, and the Contractor shall have no claim for damages.

### **5.     Unpaid Claims**

If, upon or before the completion of the work, or at any time prior to expiration of the period within which claims of lien may be filed for record, any person claiming to have performed any labor or to have furnished any materials, supplies, or services toward the performance of the Contract, or to have agreed to do so, shall file with Nye County a verified statement of such claim stating in general terms the kind of labor and materials, the value of same, and the name of the person to or for whom the same was furnished, together with a statement that the same has not been paid; or if any person shall bring against Nye County or any of its agents any action to enforce such claim, Nye County will, until the action is settled, withhold from monies due the Contractor an amount sufficient to satisfy the decision of the court together with costs.

## **PART IV: SPECIAL CONDITIONS**

### **A. INTENT OF CONTRACT DOCUMENTS**

It is the Intent of the Contract Documents to provide Nye County with complete and fully operational monitoring and test wells as specified.

### **B. SCOPE OF WORK**

The Contractor shall provide all materials (including but not limited to drill bits, drilling fluids, drillpipe/rods, water and power), labor, tools and equipment necessary for the drilling and construction of the well(s), as specified in Part V – Technical Specifications of this contract document. All labor, tools, materials, and equipment necessary to properly and successfully perform the Scope of Work, except for those materials for which unit prices are solicited on the Proposal form, shall be provided at no additional cost to Nye County, but included in the linear foot lump sum, drilling rates and/or hourly drilling rates, as applicable.

### **C. SCHEDULING AND TIME OF COMPLETION**

The Contractor shall complete construction of work no later than **June 15, 2010**. The scheduling of the work shall be subject to Nye County's approval.

### **D. CONDUCT OF WORK**

The work shall be carried on in such a manner to cause the least disturbance to the adjacent property. In addition, the drilling site will always be kept in a clean or orderly condition.

### **E. LIQUIDATED DAMAGES FOR DELAY**

The Contractor shall pay Nye County liquidated damages as fixed and agreed upon for each operation day's delay in the completion of the work beyond the time agreed upon, the following amounts: Five Hundred Dollars (\$500.00) per day.

### **F. DISPOSAL OF WASTE MATERIAL**

All cleared and waste material (except drill cuttings and water) shall be considered the property of the Contractor and shall be disposed of by them outside the limits of the work while complying with any and all applicable ordinances and regulations of governmental agencies having jurisdiction.

### **G. CONSTRUCTION WATER AND POWER**

The Contractor shall provide all water and power needed for construction of all items under this Contract. The Contractor shall at his, her or its own expense, convey the construction water and power, in each case, to the point of use. Construction water shall be fresh water only and the source of supply shall be approved by Nye County prior to its use. Under no circumstances will Nye County be responsible for the safety or success of the drilling operations with respect to water or power supply.

## **H. CONTRACTOR'S INSURANCE**

The Contractor shall not commence work under this Contract until he, she, or it has obtained all insurance required in the General Conditions from a company or companies acceptable to Nye County, nor shall the Contractor allow any subcontractor to commence work on his, her or its subcontract until all insurance required of the subcontractor has been obtained.

## **I. NUISANCE WATER**

It is anticipated that nuisance water, such as rainfall, groundwater, or surface runoff may be encountered within the construction site during the period of construction under the Contract. The Contractor, by submitting its bid, will be held to have investigated the risks arising from such waters, and to have made its bid in accordance therewith. The Contractor shall at all times protect the work from damage by such waters and shall take all due measures to prevent delays in progress of the work caused by such waters. The Contractor shall dispose of nuisance water at its own expense, and without adverse effects upon the adjacent property.

During drilling, discharge water will be carried away from the well site and discharged in such a way as to cause the least amount of erosion damage and in accordance with the applicable federal stipulations, if any. This will be done at the Contractor's expense.

## **J. INCLEMENT WEATHER CLAUSE**

If inclement weather prevents safe and efficient drilling operations in the opinion of the Contractor, drilling operations will cease until such time as conditions improve or the Contractor can provide mitigating measures. Delays caused by weather shall be at no cost to Nye County.

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## PART V: TECHNICAL SPECIFICATIONS

### **A. SCOPE OF WORK OVERVIEW**

#### **1. Purpose and Scope**

This work is part of the Groundwater Evaluation Program, funded from a U.S. Department of Energy (USDOE) grant. It involves: drilling of not to exceed 500 ft deep boreholes, testing, and completion as monitor wells with a single well screen approximately 100 feet below the water table.

The purpose of this work is to:

- Collect representative geologic samples to describe subsurface geologic units to a maximum depth of up to 500 ft.
- Collect geophysical logging data from formations and aquifers encountered.
- Pump test installed piezometers for constant discharge.
- Collect water chemistry samples from wells to characterize groundwater flow paths and aquifer conditions.

All well sites are located in southern Nye County in the Pahrump, Amargosa, and Oasis Valley.

The work includes all pre-drilling set-up activities, borehole drilling operations, well completion, and applicable documentation and reporting requirements. The Contractor will be required to supply all materials (unless specified otherwise), labor, equipment, tools, transportation, power, water, and services for the well drilling and well completion. All labor, materials and equipment necessary to properly and successfully perform the Scope of Work, except for those materials for which unit prices are solicited on the Bid forms or otherwise specified, shall be provided at no additional cost to Nye County. The successful Bidder will be responsible for soliciting and securing any and all employees, vendors and subcontractors required to fully perform the Scope of Work. All the work described herein is to be completed no later than **June 15, 2010**, unless a written extension to that deadline is issued.

#### **2. Summary of Drilling and Completion Activities**

The following summarizes the required drilling and well completion activities for all wells:

#### **Not to exceed 500 ft deep groundwater piezometer wells with up to 480 ft of 4-inch PVC well casing**

##### *Borehole Drilling*

1. Drill and sample approximately 8-inch borehole using conventional air circulation with injection of a water and foam mixture. The boreholes will be drilled to a maximum depth of 500 ft or approximately 100 ft below the water table (or “first” water). Collect geologic samples (drill cutting samples) at 5-ft intervals from the

discharge using a cyclone air/cuttings separator or similar system. A 20-foot deep 10-inch steel surface casing will be installed prior to main advance of the borehole.

Upon reaching total depth, remove the drill string from the borehole to permit open borehole geophysical logging by another Nye County contractor.

### *Subsurface Completion*

2. Run in flush joint tremmie line, followed by 4-inch flush threaded Schedule 80 PVC well casing with screens and blanks. Pump in Colorado silica sand through the tremmie line in stages to approximately 5 feet above the well screen. Set a 2-foot lift of 60-mesh sandpack. Seal well with 30% by weight bentonite grout in bottom-up approach through the tremmie line. Extend 10-inch surface casing to approximately 2 ft above ground level and cut down PVC well casing to slightly below surface casing. Install locking cap and 4ft x 4 ft x 8-inch thick concrete well pad apron. Air lift well to remove drilling fluids from screen/sandpack interval.

### **3. Local Conditions and Geology**

The anticipated geologic units to be penetrated by the Groundwater Evaluation boreholes include alluvium, sedimentary rock sequences and volcanic tuffs. The alluvium will include alternating thin (sometimes less than 1 ft thick) layers of relatively clean sand and gravel, sand and gravel with silt and/or clay, and clayey or silty sand and gravel. Sedimentary rocks sequences may include volcanic sandstones, siltstones, and mudstones. Underlying volcanics may include thin basalt flows and thick layers of ash-fall and ash-flow tuffs with varying in the degree of welding and alteration.

### **4. Statutory and Regulatory Responsibilities**

- a. **RIGHTS OF WAY:** No site disturbing activities may take place until the necessary right-of-way grant has been approved and all necessary permits and or waivers have been obtained. Nye County NWRPO will obtain a right-of-way grant from the U.S. Department of Interior, Bureau of Land Management and local land owners for access to all drilling sites and for the conduct of site disturbing activities and restoration.
- b. **NYE COUNTY RESPONSIBILITIES:**
  - i. Nye County NWRPO will obtain the following waivers as applicable from the Nevada Division of Water Resources:
    - Monitoring Well Drilling: Waiver from NAC 534.4351.1(c) to allow wells without regulatory requirement.
    - Monitoring Well Testing: Waiver from NAC 534.4353.2 permit for sampling and testing of nonconforming well designs.
    - Drilling in Designated Basins: Waiver per NAC 534.440 for wells located in Amargosa Desert.

Monitoring Well Construction: Waiver from NAC 534.4351.1(b) to use Westbay design.

ii. Nye County NWRPO will obtain permits or modify existing permits as follows:

Nevada Division of Environmental Protection Clean Air Act Permit: Nye County presently has an emission permit associated with their EWDP Phase IV drilling program. The County will amend this permit to include the new drilling locations.

Discharge Permit: Temporary discharge permits per NRS 445A.485 will be obtained, as necessary for well sampling and aquifer testing, from the Nevada Bureau of Water Pollution Control.

Temporary Appropriation: A temporary groundwater appropriation or waiver will be obtained, as necessary, for the conduct of aquifer tests from the Nevada Division of Water Resources.

iii. Nye County NWRPO will provide the Contractor with copies of any necessary affidavits required for notifications.

c. CONTRACTOR'S RESPONSIBILITIES:

i. Notifications: The Contractor will notify the Nevada Division of Water Resources before commencing drilling operations at any drill site by submitting a notice of intent to drill at least three (3) working days before the well rig is to be set up and the drilling commenced per the requirements of NAC 534.320. The notice of intent to drill must indicate the number of any permits or waivers that were issued by the Division for the well that is to be drilled. *Nye County has already provided the Division of Water Resources with a notarized Affidavit of Intent to Abandon that covers all wells as required by NAC 534.4353. Nye County will provide the Driller with the numbers of any permits or waivers that are applicable.*

ii. Waste Disposal: The Contractor will remove all solid waste, trash, and construction debris from the well sites and dispose of it in accordance with applicable regulations. No wastes are to be disposed of at the site. Hazardous wastes are not expected to be generated during the drilling process and monitoring process.

iii. Traffic Control: Because of the remote location of the planned well, traffic control will not be required. The Contractor will comply with all applicable State and Local limits and restrictions and will comply with any Nevada Department of Transportation and/or U.S. Department of Transportation requirements. *All vehicular traffic must be limited to roadways and pads within the right-of-way.*

iv. Health & Safety: It is the responsibility of the Contractor to be aware of, and comply with the conditions of the NWRPO Drilling and Well Construction Health and Safety Plan. This plan will be supplied to any bidder upon request and will be supplied to the Contractor upon award of the Contract. At the beginning of each shift, the Contractor will conduct a safety and operations briefing for Contractor personnel. Items to be discussed include but are not limited to work site hazards, hazardous material handling, desert environment hazards (spiders,

scorpions, snakes, heat stroke/stress, dehydration), and any other pertinent safety issues. NWRPO may provide operations briefing information to Contractor personnel at this time.

- v. Fire Prevention: The Contractor will exercise due care at all times to ensure that fire danger is avoided. Flammable liquids, if present, will be stored in flammable-approved containers, and will be protected from ignition sources. Open ignition sources will not be used in the presence of flammable liquids.
- vi Spill Prevention and Contingency Plan: Minor quantities of hazardous products and fuels may be used during the drilling process and will be properly handled by the Contractor. All such products will be used and managed in accordance with their labeling instructions, and will be stored in a locked cabinet when not in use. The Contractor will inform the on-site crew of the potential hazards associated with the products that will be on site, and spill kits will be maintained for any material kept on site in excess of the Reportable Quantity. Well casings, specialized cements and grouts, foaming agents or other additives, and other routinely required drilling materials will be delivered to the site and prepared for use as needed. Cements, grouts, and drilling additives will be mixed in a portable tank. All excess materials will be disposed of in accordance with applicable regulations. The Contractor will be equipped with either radio or cellular telephone communication. Spill notification information will be maintained on-site by the Contractor if reportable quantities of hazardous materials are present.
- vii. Training: Contractor personnel will supply the County with a statement of previous training and experience. Drilling personnel will conform to the latest revision of the Program Specific Health and Safety Plan. The Contractor will assure that each one of its employees has successfully completed the OSHA or MSHA 40-hour Hazardous Materials training program.

## **B. DRILLING/COMPLETION/DEVELOPMENT OPERATIONS**

### **1. General Specifications**

- a. COMMUNICATION AND RECORD KEEPING: NWRPO will designate a Nye Designated Field Representative (NDFR) that will be the primary contact person for any Contract-related operations. Contractor will designate their Contractor Designated Field Representative (CDFR).
  - i. At the end of each shift, the NDFR will prepare a written “field ticket” which will list each item invoiceable (e.g., 200 linear feet of drilling) under the Contract which has been performed by the Contractor during the shift.
  - ii. Both the NDFR and the CDFR must review and sign this ticket. Copies of the signed field ticket will be given to the CDFR for use in preparing invoices.
  - iii. If the CDFR disagrees with types or quantities of items on the field ticket, the CDFR will note such items on the field ticket before signing. The NDFR and CDFR will forthwith cooperate to resolve those issues in a timely fashion.
  - iv. Contractor will provide information to the NDFR regarding Contract-related operations as required, including but not limited to status, tool/material availability.

- b. GENERAL OPERATIONS: Contractor will ensure that the drilling process and related activity proceeds in an expeditious manner while operating within reasonable industry standards and utilizing prudent and safe practices.
  - i. No material or tools may be placed in any borehole without NDFR approval, including bottom-hole assemblies, changes in drilling fluid systems, etc.
  - ii. Unless actually performing downhole work, Contractor is responsible for placing a secure cover over any open casing or borehole at all times.
  - iii. Contractor will take reasonable precautions to avoid dropped tools and other items, loose tool and casing joints, and other situations which might result in fishing jobs or other nonproductive activity. All items dropped or otherwise lost in holes by Contractor personnel or caused to be dropped/lost by Contractor personnel actions must be fished out at Contractor's expense.
- c. ENVIRONMENTAL: Significant leakage of fluids from rig, vehicles, and other equipment is not acceptable and will be corrected promptly by the Contractor.
  - i. Any significant leakage noted on the rig mat is to be cleaned up promptly by the Contractor.
  - ii. Any absorbent material used to clean up spills; leaks, etc. will be disposed of properly off-location at Contractor's cost.
  - iii. Any new materials brought on location, as part of Contractor's responsibilities for which an MSDS sheet has not been previously submitted must have an MSDS sheet to be submitted to the NDFR.
- d. WORKDAY: Generally, the Contractor will work a ten (10) to twelve (12) hour workday per twenty-four (24) hour period. Generally, the Contractor will work ten (10) consecutive days followed by four (4) days of non-work. Deviations from this schedule must be approved by the NDFR.
- e. EARTHWORK: Drill sites (pads) will be prepared by the NWRPO prior to mobilization by the Contractor. The Contractor may be required to excavate shallow pit(s) to manage drill cuttings and water produced by drilling operations. The Contractor will be responsible for backfilling these pits before demobilization, as well as grading to the original topography any berms or trenches constructed on site to control surface water run-on or run-off.
- f. NUISANCE WATER: It is anticipated that nuisance water such as rainfall or surface runoff may be encountered during the period of well drilling and construction. The Contractor will at all times protect the work from damage by such waters and will take all due measures to prevent delays in progress of the work caused by such waters. The Contractor will dispose of nuisance water without adverse effects on the adjacent property.
- g. UTILITIES: No utilities will be available at any of the planned drilling locations. The Contractor will provide portable power-generating units sufficient to meet all drilling and well construction needs. The Contractor will obtain any necessary water for drilling operations by purchasing the water from existing well owners. Construction and make up water must be fresh water only and the source of the supply must be approved by the

NDFR. To the extent possible, the NDFR will facilitate the identification of water well owners that would be interested in selling water supplies to the Contractor.

- h. **SEQUENCE OF DRILLING:** Equipment will be mobilized and directed to drill/operate on NWRPO locations in a sequence as directed by NDFR.
- i. **PRE-MOBILIZATION REQUIREMENTS:** The rig, auxiliary equipment, drillpipe, and other downhole equipment and tools shall be mobilized in a clean condition, generally free of surface grease, soil, or other potential contaminants. Steam cleaning of grease, dirt, etc., from previous jobs not related to the subject work will not be allowed.

## **2. Mobilization**

Mobilization will be considered complete when all of the following items have been accomplished:

- a. The rig and associated equipment have been inspected and approved by the NDFR as being in good working order and clean condition.
- b. A containment mat has been installed under rig. Contractor will utilize appropriately heavy gauge single-piece plastic mat under the rig (and other equipment, as appropriate) to contain all leakage of hydraulic oil, lubricants, etc. This mat shall be constructed with a border using wooden skids or other materials to make a containment area not less than four inches (4") deep.
- c. The rig and associated equipment (including drilling fluid handling and sampling systems) is set up on the proposed hole location and is in a configuration ready to conduct linear footage drilling or other activities as directed by the NDFR. This set up includes excavating pits for liquid drilling fluids and drill cuttings as necessary.
- d. All personnel, equipment, tools, material, etc. as required under the Contract are on location, except those items not needed immediately. Contractor may use NWRPO lay-down yard for equipment storage; however, rig time incurred waiting on equipment, materials, tools, etc. to be provided by Contractor will be at Contractor's expense.
- e. The field ticket format has been reviewed and approved by the CDFR.
- f. MSDS sheets for all applicable materials on location have been submitted to the NDFR.
- g. All proofs of insurance, personnel training and other certifications as specified in the Contract have been submitted to NWRPO.
- h. All State of Nevada requirements for the Licensed Well Driller (i.e., "Notice of Intent to Drill", etc.) have been met, and applicable documents submitted to the State Engineer with copies to NWRPO.

## **3. Drilling/Sampling/Completion Scope of Work Details**

Refer to Attachment 1 of these Technical Specifications.

## **4. Other Requirements**

- a. **DRILLING FLUIDS:** Compressed air shall be the primary drilling fluid. Other drilling fluids and additives must be approved by the NDFR prior to their use and will only be allowed to maintain a stable borehole and provide for appropriate cuttings return.

- b. **LUBRICANTS:** Tool and casing-joint lubricants shall be environmental-grade Teflon-based products. A minimum of lubricant shall be used, any excess shall be removed prior to running in hole.
- c. **FIRST WATER AND PERCHED WATER LEVEL MEASUREMENTS:** The time and depth that first water is encountered during drilling will be recorded by the Contractor and NDFR will be notified. The drill string will be broken at the first joint near ground level, and the water level will be measured by NWRPO.
- d. **WATER SAMPLING:** If the NDFR determines that first water encountered should be sampled, the Contractor shall support NWRPO field personnel for water sampling activities, including setting up flow and sampling equipment to allow appropriate sampling. Set up activities will be conducted under NWRPO directed rig operating time. Contractor time during sampling will be considered "Standby with crew."
- e. **GEOPHYSICAL LOGGING:** Contractor shall allow access for geophysical logging to occur in drillpipe, and support the logging contractor in setting up for logging runs. Contractor time during logging will be considered "Standby with crew." Standard geophysical logs and other logs will be completed in the drill pipe, as directed by the NDFR. Non-nuclear logs may be run in stable open boreholes.
- f. **PIEZOMETER (WELL) CASING:** Contractor shall maintain tension on well casing strings during placement of completion materials
- g. **DEPTH CONTROL ON COMPLETION MATERIALS:** A sounding line shall be used to tag material depths unless NDFR directs Contractor to use a tremmie instead; tremmies shall NOT be used to determine depths on grouts. NWRPO will supply a sounding line.

## **C. EQUIPMENT SPECIFICATIONS**

### **1. Drill System Specifications**

SINGLE-WALL CONVENTIONAL CIRCULATION AIR-ROTARY DRILLING SYSTEM: Drill rig and supporting equipment including approximately 4.5-inch or larger OD single-wall drillpipe with sufficient air and weight capacity for drilling to 500 ft.

### **2. Other Drill Rig Tools/Equipment**

- a. **GENERAL:** All tools and equipment required for properly handling all drillpipe and casing sizes used. Also includes bits, subs, reamers, hole openers, etc.
- b. **TREMMIE PIPES:** Flush joint steel pipe as required in Attachment 1 of these Technical Specifications.
- c. **MUD MIXING SYSTEM:** Capable of mixing sufficient quantities of mud to condition borehole walls as described in Attachment 1 of these Technical Specifications (Section E of Part V).
- d. **GROUT PLANT AND PUMP:** Capable of mixing and pumping sufficient quantities of grout to conduct efficient annular sealing operations.

- e. GRAVEL PUMP: Centrifugal pump capable of accepting dry stemming materials on the suction side of the pump and pumping water/sand and water/sand/Benseal slurries into tremmies at reasonable rates.
- f. WATER TRUCK: Contractor will make a water truck available for drilling fluid system makeup, location water supply, and road watering as required.
- g. DEPTH SOUNDING LINE: Capability to detect sand and grout surfaces through tremmies. The NWRPO will supply this sounding line.

#### **D. MATERIAL SPECIFICATIONS**

All materials provided are “as specified” in Table 1 titled “Cost Consideration Schedule for Well Drilling and Completion of Groundwater Evaluation in Southern Nye County” located in Part I Section C Bid Package-Cost Proposal. NDFR may approve material equivalents/alternatives.

#### **E. ATTACHMENTS**

The following is a detailed scope of work including maps and diagrams that are attached to and incorporated by reference as a part of this Bid Package.

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## ATTACHMENT 1

### SCOPE OF WORK FOR GROUNDWATER EVALUATION PIEZOMETER WELL DRILLING AND CONSTRUCTION IN SOUTHERN NYE COUNTY

**Fifteen** not to exceed 500 ft deep boreholes will be drilled at various locations in Pahrump, Amargosa and Oasis Valleys. The boreholes will be drilled primarily with open-hole conventional air rotary (air-foam) methods and completed as 4-inch piezometer monitor wells to a maximum depth of 480 ft.

Drill pads and access roads will be constructed and maintained by the NWRPO.

#### **1.0 Drilling and Completing of Piezometer Wells (Not to Exceed 500 feet)**

The locations of the wells are shown in Figure 1. The well boreholes will be drilled to a maximum depth of 500 ft or approximately 100 ft below the water table. Upon reaching TD these boreholes will be geophysically logged. A single 4 inch piezometer well casing with well screens based on geologic and geophysical logs will then be completed to the ground surface in each borehole. Table 1 summarizes the approximate alluvium thickness, depth to water, maximum borehole depths, and the approximate piezometer screen depth interval.

A schematic well completion diagram for a typical piezometer well showing borehole diameter requirements and well completion requirements is shown in Figure 2. A schematic surface completion is shown in Figure 3.

##### *1.1 Background Information*

Nye County is conducting groundwater evaluation studies in southern Nye County under a Department of Energy (DOE) grant. As part of the grant work, the county will be installing a network of groundwater piezometer wells to supplement the existing groundwater monitoring network. This piezometer well program will also be supplemented by a deeper well drilling program, primarily in Amargosa Valley.

##### *1.2 Drilling and Sampling*

- 1.2.1 Drill and sample (at 5-foot interval) an approximately 15-inch diameter borehole to a depth of approximately 20 ft using conventional air rotary (with injection water/foam) methods. Install a 10-inch steel surface casing to approximately 20 feet with diverter head. Back-fill the annular space with Portland grout or high-solids bentonite grout (>30% bentonite by weight).
- 1.2.2 Advance borehole beyond the 20 ft surface casing with approximate 8-inch rotary bit using conventional air circulation with injection of a water and foam (Baroid QUIK FOAM or equivalent) mixture. The boreholes will be drilled to a maximum depth of 500 ft or approximately 100 ft below the water table (or “first” water). Collect geologic samples (drill cutting samples) at 5-ft intervals using a cyclone air/cuttings separator or similar system and a rotating Anaconda wet splitter or similar system attached to a

cyclone separator. Using the same separator and splitter, collect geologic samples from bedrock at 5-ft intervals in both the unsaturated and saturated zones (if encountered).

1.2.3 Condition/stabilize (with NWRPO approval) intervals of borehole wall in the unsaturated zone that are unstable and/or are responsible for lost circulation by injecting bentonite mud or bentonite mud and polymer into the annular space between the drill pipe and the formation wall using conventional circulation methods. Excess conditioning fluids that have been added during borehole conditioning will be removed from the borehole by conventional air circulation prior to advancing the borehole deeper into undrilled formation. Lost circulation zones in the open borehole can be addressed with bentonite mud and/or lost circulation materials only with prior NWRPO approval. However, if for any reason unstable borehole conditions and/or lost circulation conditions cannot be rapidly, easily, and safely overcome, borehole drilling will be stopped immediately. In short, when drilling becomes difficult, the drilling may be terminated at any point. Upon reaching total depth, remove the drill string from the borehole to permit open borehole geophysical logging by another Nye County contractor.

### 1.3 *Subsurface Completion*

A typical single string piezometer subsurface well completion diagram is presented in Figure 2. Depths for the well screens and sandpacks will be determined from geologic and geophysical logging data. Typically, an 80 foot screen interval with 10 ft blank casing on bottom, straddling or slightly below the upper water table will be installed. The depths of the 4-inch schedule 80 PVC casings will not exceed 480 ft. Note that target depths for all completion materials (including well casing/screen, sand pack and grout seals) must be achieved within several feet. Thus, the completion process must be conducted with extreme care including frequent tagging (i.e., measurement) of completion material depths. All materials will be emplaced with pump/tremmie line methods and at no time should the open end of the tremmie be more than 30 ft above the completion material level of the well. The tagging instrument will be supplied by the NWRPO and will include a small diameter (light weight) wire, a comparatively heavy tagging bar, and an accurate depth counting meter. Subsurface completion procedures are briefly described below.

1.3.1 Run a steel tremmie pipe (e.g., 1.5-inch ID) to near the bottom of the borehole.

1.3.3 Follow this by running the 4-inch flush threaded Schedule 80 PVC piezometer blank casings, well screens with mill-slotted 0.020 or 0.040 slot opening, and centralizers to a maximum depth of 480 ft. The piezometer string must be maintained under tension during the remaining completion activities.

1.3.4 Emplace the Colorado silica sand pack (8-12 or 6/9 mesh) through the tremmie into the borehole in stages to a depth of approximately 5 ft above the piezometer screen. The addition of the sand is accomplished by pumping clean water down the tremmie and adding the dry sand to the water stream on the suction side of the pump. Care should be taken to avoid bridging of the sand pack. Frequent tagging of the fill level will be conducted and compared with calculated caliper log volumes to assure correct sandpack emplacement.

- 1.3.5 Following the emplacement of the sand pack, pump another approximate 2 foot lift of fine mesh (60-mesh) silica sand above the existing sand pack.
- 1.3.6 Then pump high solids (30%) bentonite grout in a “bottom-up” method to a depth of approximately 5 ft below ground surface.

#### **1.4 Surface Completion**

A typical piezometer surface completion diagram is presented in Figure 3. Surface completion procedures are briefly described below.

- 1.4.1 Release tension from the piezometer well string. Cut down 4-inch PVC well casing to approximately 2 ft above ground surface. Install (weld on) a 2-foot extension to the 10-inch surface casing (with prefabricated locking cap) to form a lockable wellhead casing. Protect PVC well casing with a welding shield. The surface casing should extend approximately 2 ft above the ground surface. The 4-inch PVC blank casing should extend slightly below the surface casing. Fill annular space with bentonite grout to ground level. Add sufficient grout to complete surface seal between the 10-inch surface casing and the native soils.
- 1.4.2 Airlift develop well using approximately 2-inch steel air-lift line and a maximum of 80 feet of submergence for approximately 2 hours or until well discharge is clear of drilling fluids and suspended sediments.
- 1.4.3 Install a locking cap on the surface casing.
- 1.4.4 Install an approximately 8-inch thick by 4-ft square concrete pad that extends approximately 4 inches below and 4 inches above ground surface. Slope the top of the concrete pad approximately 0.25 inches per horizontal ft away from the surface casing.

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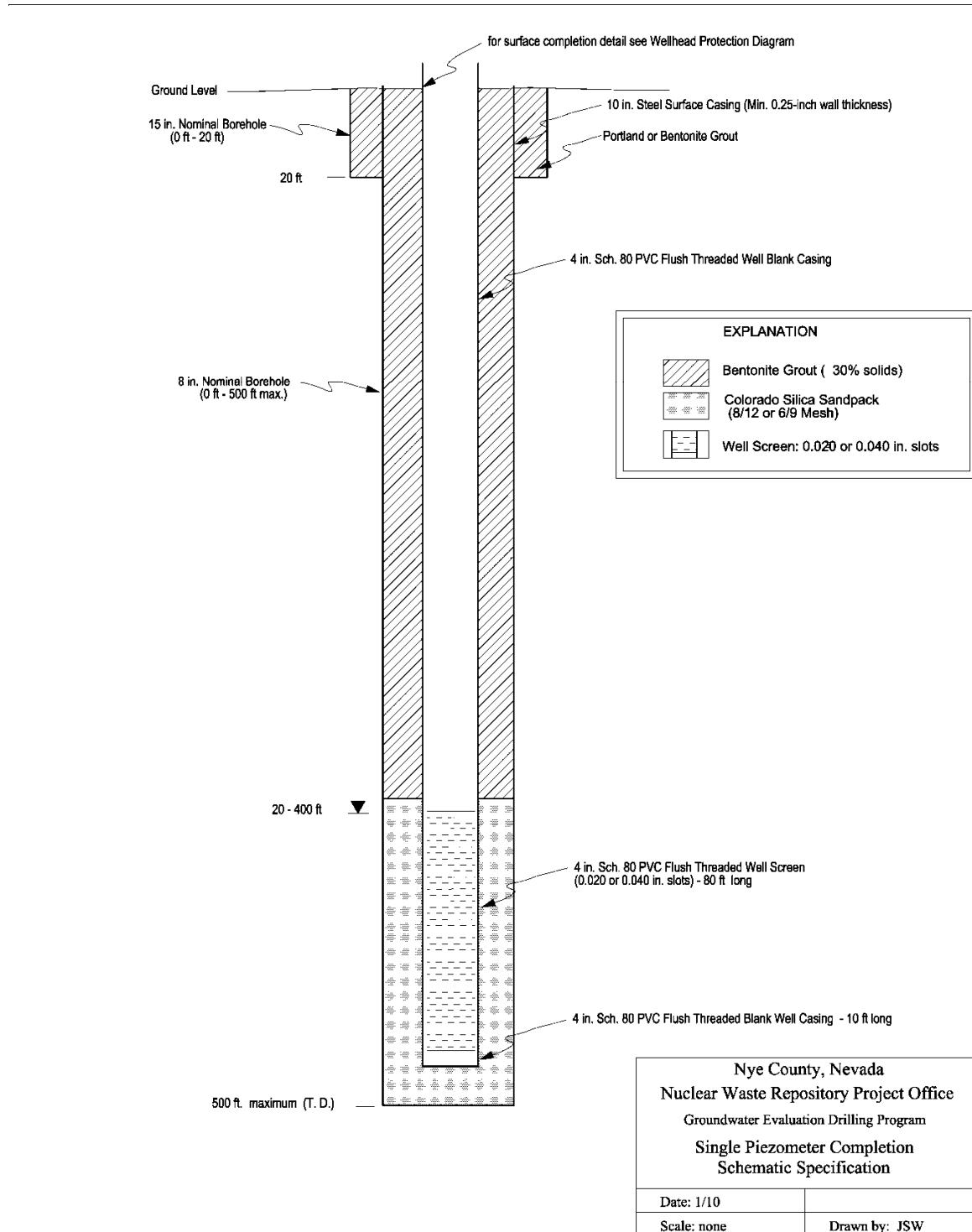
**Attachment Table 1**  
**Groundwater Evaluation Well Drilling**

Well No. (NC-GWE-) <sup>a</sup>	Drilling Method <sup>b</sup>	Maximum Total Depth (ft)	Completion Type	Approximate Screen or Sandpack Depths (ft, bgs)	Approximate Depth to Water (ft, bgs)	Approximate Alluvium Thickness (ft)
GF-3	CAR <sup>b</sup>	300	4-inch Sch. 80 PVC piezometer casing	150-230	120	+500
GF-4	CAR <sup>b</sup>	250	4-inch Sch. 80 PVC piezometer casing	100-180	30	40
8PA	CAR <sup>b</sup>	400	4-inch Sch. 80 PVC piezometer casing	300-380	300	250
Felderhoff 25-1PA	CAR <sup>b</sup>	400	4-inch Sch. 80 PVC piezometer casing	270-350	270	+500
2P	CAR <sup>b</sup>	400	4-inch Sch. 80 PVC piezometer casing	290-370	295	1000
33PA	CAR <sup>b</sup>	150	4-inch Sch. 80 PVC piezometer casing	210-250	200	200
PV-1	CAR <sup>b</sup>	500	4-inch Sch. 80 PVC piezometer casing	400-470	400	1000
PV-2	CAR <sup>b</sup>	440	4-inch Sch. 80 PVC piezometer casing	360-420	350	1000
PV-3	CAR <sup>b</sup>	500	4-inch Sch. 80 PVC piezometer casing	420-480	420	1000
PV-4	CAR <sup>b</sup>	440	4-inch Sch. 80 PVC piezometer casing	360-420	350	1000
PV-5	CAR <sup>b</sup>	300	4-inch Sch. 80 PVC piezometer casing	200-280	200	1000
PV-6	CAR <sup>b</sup>	200	4-inch Sch. 80 PVC piezometer casing	100-180	100	500
OV-1	CAR <sup>b</sup>	120 <sup>c</sup>	4-inch Sch. 80 PVC piezometer casing	20-100 <sup>c</sup>	20-50 <sup>c</sup>	+150
OV-2	CAR <sup>b</sup>	120 <sup>c</sup>	4-inch Sch. 80 PVC piezometer casing	20-100 <sup>c</sup>	20-50 <sup>c</sup>	+150
AN-1	CAR <sup>b</sup>	120 <sup>c</sup>	4-inch Sch. 80 PVC piezometer casing	20-100 <sup>c</sup>	20-50 <sup>c</sup>	+150

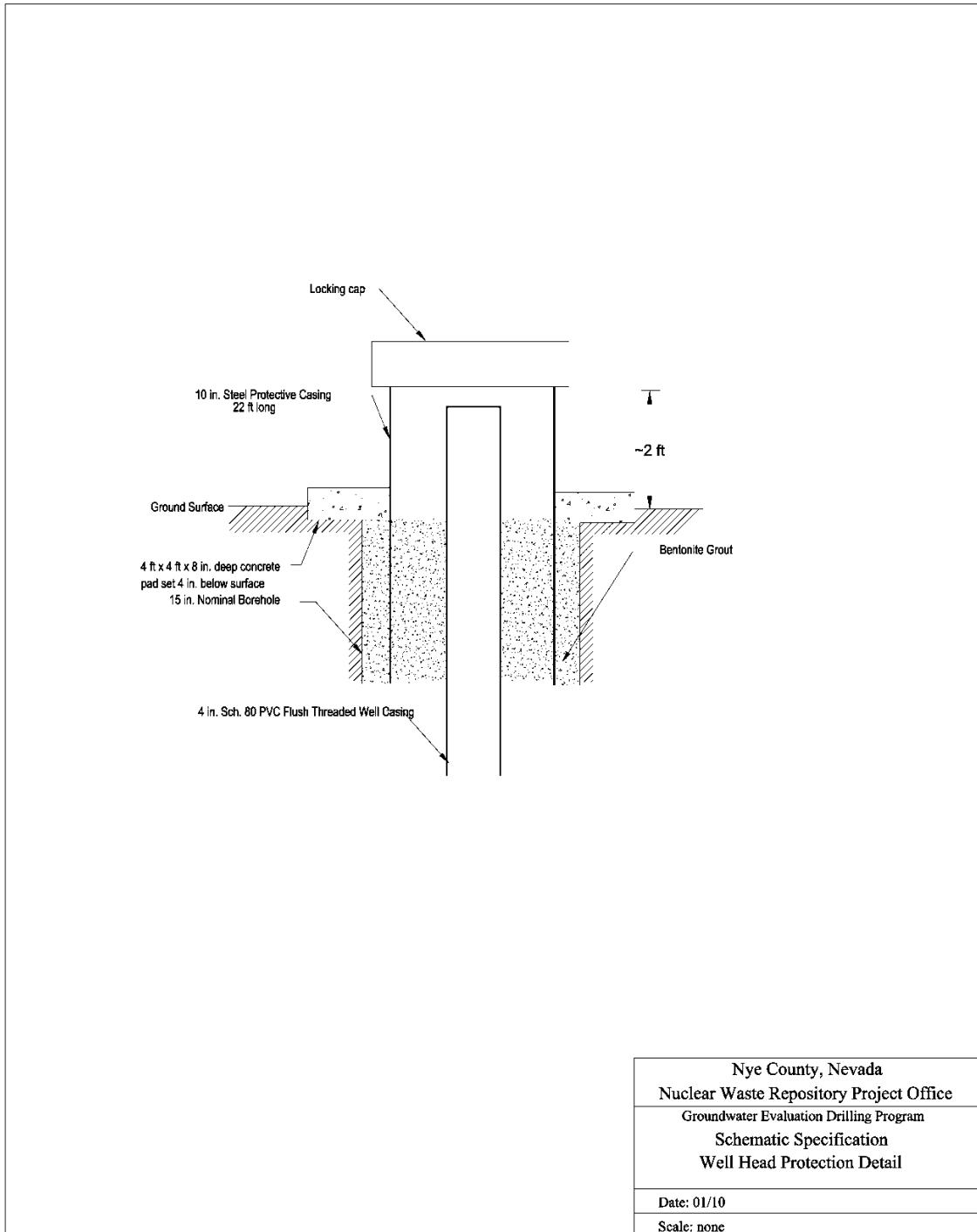
<sup>a</sup> Suffix for all GWE wells<sup>b</sup> Conventional Air Rotary (Air-Foam)<sup>c</sup> Estimated Value



**Attachment Figure 1**  
**Location Map**



**Attachment Figure 2**  
**Schematic Well Completion Diagram for GWE Piezometer Wells**



**Attachment Figure 3**  
**Schematic Well Head Protection detail for GWE Piezometer Wells**