

SECOND AMENDMENT TO THE PROFESSIONAL ENGINEERING SERVICES AGREEMENT FOR THE WELL REHABILITATION/IMPROVEMENT PROJECT

This Second Amendment to the Professional Engineering Services Agreement for the Well Rehabilitation/Improvement Project (“Second Amendment”) is made and entered into as of _____ (“Effective Date”) by and between the City of North Las Vegas, a Nevada municipal corporation, (“City”), and HDR Engineering, Inc., a Nebraska corporation (“Consultant”; collectively, City and Consultant will be referred to as the “Parties”).

RECITALS

WHEREAS, on October 3, 2018, the City and Consultant entered into the Professional Engineering Services Agreement for the Well Rehabilitation/Improvement Project (“Original Agreement”), which is attached hereto as “Exhibit A”;

WHEREAS, on September 7, 2022, the City and Consultant entered into the First Amendment to the Professional Engineering Services Agreement for the Well Rehabilitation/Improvement Project (“First Amendment”) to include additional compensation for additional construction management support services for the project (a copy of the First Amendment is attached hereto as “Exhibit B”);

WHEREAS, the construction phase of the Well Rehabilitation/Improvement Project (“Project”), originally planned to be 360 days, has been delayed to 660 days due to equipment procurement challenges and scope changes discussed in the amended Scope of Work attached hereto; therefore, the City and Consultant desire to amend the Original Agreement with this Second Amendment to include additional compensation for additional construction management support services for the Project; and

WHEREAS, the Parties wish to amend the compensation terms from a not-to exceed value of One Million Seven Hundred Thirty-Six Thousand Eighty Dollars and 00/100 (\$1,736,080.00) to a not-to-exceed value of One Million Eight Hundred Fifteen Thousand Six Hundred Fifty-Eight Dollars and 00/100 (\$1,815,658.00.00).

NOW, THEREFORE, in consideration of the above recitals and mutual promises contained herein, the parties hereto agree to amend the Original Agreement as follows:

AGREEMENT

1. Section VIII, Subsection A of the Original Agreement is hereby deleted and replaced with the following:

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A. Total Compensation

1. The City shall pay the consultant an amount for each of the tasks described in Exhibits “A” and “A-1” as follows:

<u>Basic Services</u>		<u>Lump Sum Amount</u>
1. Project Management	Not to exceed	\$116,130.00
2. Preliminary Design Services	Not to exceed	\$391,120.00
3. Final Design Services	Not to exceed	\$319,340.00
4. BID Phase Support	Not to exceed	\$ 25,320.00
		<u>Time & Materials Amount</u>
5. Construction Management Support Services		\$340,950.00
Subtotal		<u>\$1,192,770.00</u>
		<u>Time & Materials Amount</u>
Supplemental Services	Not to exceed	\$200,000.00
6. Amendment No.1	Not to exceed	\$343,310.00
Total, Basic Services/ Amend No. 1	Not to exceed	\$1,736,080.00
7. Amendment No. 2, CM Services	Not to exceed	\$79,578.00
Grant Total incl. Amend. No. 2	Not to exceed	<u>\$1,815,658.00</u>

2. The hourly rates listed in the Scope of Services, originally prepared in 2022 for 2022/2023 work activities have been updated for 2024 (four percent escalation) (an amended Scope of Work is attached hereto).

3. In all other aspects, the parties confirm and re-affirm the terms and provisions of the Original Agreement.

[SIGNATURES ARE ON FOLLOWING PAGE.]

IN WITNESS WHEREOF, the parties have caused this Second Amendment to be executed by their duly authorized representatives the day and year first above written.

City of North Las Vegas,
a Nevada municipal corporation

HDR Engineering, Inc.,
a Nebraska corporation

By _____
Pamela A. Goynes-Brown, Mayor

By: Craig W. Smart
Name: Craig Smart
Title: Vice President

Attest:

By: _____
Jackie Rodgers, City Clerk

Approved as to Form:

By: _____
Andy Moore, Acting City Attorney

Scope of Work for Amendment No. 2 - Construction Management Services, Wells Rehabilitation Project.

Construction duration for the project was expected to be 360 days. Due to procurement challenges and delays, especially with electrical components, extensions have been issued to the Contractor, extending this duration to 660 days. During that time, work has progressed on other areas of the project, as well as submittals, RFI's, and changes. Because of procurement issues, the project required extensive material substitution reviews, requiring unexpected time for submittal reviews, and encountered multiple RFIs.

The project also had scope added by the City during construction requiring design services, such as adding a storm drain connection to the Gowan Outfall project and the addition of a sand separator. Both required coordination with NDEP, including additional reviews. The Cheyenne well had a re-design of the air gap/storm drain due to unexpected existing utilities. In addition, there has been delays with NVE, requiring extensive unplanned coordination to bring power to the sites.

Tasks include:

- Review the progress schedule, schedule of shop drawing submissions, submittal lists and schedule of values prepared by the Contractor.
- Prepare agendas for and manage meetings as required for the project. Meetings to include preconstruction conferences, progress meetings, job conferences, and other Project related meetings with stakeholders. Take and distribute minutes of all such meetings.
- Monitor submittals as sent to the City or the design professional, as appropriate, which require review and/or approval.
- Review Requests for Information, consolidate input from engineer or City as appropriate.
- Evaluate requests for change by the Contractor and make recommendations concerning each to the City.
- Evaluate pay applications and provide recommendations.
- Establish and implement a quality assurance program to monitor the Contractor's work. Schedule inspections and sampling and testing per specification requirements.
- Keep and provide logs of submittals, RFI's, and change orders.
- Inspections and testing will be performed by City of North Las Vegas.

Services to be provide for duration of project, with construction beginning (continuance) in June of 2024 and a duration of approximately five months. Services should be part-time for duration of project.

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Consultant to invoice monthly for services provided on an hourly basis.

Table of Hourly Rates:

Classification	Rates
Project Manager	\$228.80
Senior Construction Manager	\$265.82
Technical Lead	\$218.40
Civil Engineer	\$192.40
Professional	\$166.40
Project Controller	\$124.80
Project Administration	\$ 93.60

EXHIBIT A

Original Agreement

Please see the attached page(s).

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT**

This Professional Engineering Services Agreement (as such may be modified, amended or supplemented, the "Agreement") is made and entered into as of the 3rd day of October, 2018, by and between the City of North Las Vegas, a Nevada municipal corporation, (the "City"), and HDR Engineering, Inc., a Nebraska corporation, (hereinafter referred to as "Consultant").

RECITALS:

1. The City intends to abandon Silver Mesa Well (APN 139-075-990-01), Sun Valley Well (APN 139-077-010-04), and Elstner Estate Well (APN 138-127-100-02) and construct a replacement production well at each of the respective sites (hereinafter referred to as the "Improvements").
2. The City desires to obtain quality professional services of the Consultant to perform the design, bid support and construction support services for the Well Rehabilitation/Improvement Project as described in Exhibit "A". (hereinafter referred to as the "Project") for construction of the Improvements; and
3. The Consultant's scope of service and compensation have been arrived at after meaningful negotiations between the City and the Consultant.

NOW, THEREFORE, in consideration of the above recitals and mutual promises contained herein, the parties hereto agree to the following terms, conditions and covenants set forth in Sections I through XII hereof.

SECTION I - RESPONSIBILITY OF CONSULTANT

In addition to any other responsibilities of Consultant set forth in this Agreement, Consultant shall have the following responsibilities:

- A. The Consultant shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all services furnished by the Consultant, by Consultant's subconsultants, and by any of the principals, officers, employees and agents of Consultant or any subconsultant under this Agreement. In performing these services, Consultant shall follow practices consistent with generally accepted professional engineering standards of care. The Consultant shall, without additional compensation, promptly correct and revise any errors or deficiencies in its design, drawings, specifications, reports and other services, or in any portion of the Project performed by Consultant's subconsultants. Approval by the City of any products or services furnished by Consultant shall not in any way relieve the Consultant of responsibility for the professional and technical accuracy of its services.

- B. Consultant shall assign Craig Smart, P.E., whose Nevada Professional Engineer license number is 14579 as the Principal-in-Charge ("Principal-in-Charge"), and Angela Mackinnon, P.E. whose Nevada Professional Engineer license number is 18452 as the Project Manager ("Project Manager"). All of the services specified by this Agreement shall be performed by the Project Manager, or by Consultant's associates, employees and subconsultants under the personal supervision of the Project Manager. Should the Principal-in-Charge or the Project Manager be unable to complete his or her responsibility for any reason, the Consultant shall notify the City in writing, and within four (4) calendar days thereafter, nominate a replacement for City approval, in its reasonable discretion, who has an equivalent amount of experience performing the same type of services as required for the Project. An approved replacement shall be assigned to the Project within ten (10) calendar days.
- C. In accordance with NRS 338.140, the Consultant shall not produce a design and/or specification for the Project which would limit the bidding, directly or indirectly, to any one specific concern unless a unique or novel product application is required to be used in the public interest, or only one brand or trade name is known to the City. The City shall be notified of and must pre-approve any sole source proposals.
- D. Consultant and any subconsultant shall furnish City with a preliminary draft of any proposed correspondence to any federal, state or other regulatory agency for the City's review and approval at least seven (7) calendar days prior to mailing such correspondence.
- E. The Consultant agrees that its officers, partners, employees, and subconsultants will cooperate with the City in the performance of services under this Agreement and will be available for consultation with City at such reasonable times with advance notice as to not conflict with other responsibilities.

SECTION II - RESPONSIBILITY OF CITY

- A. The City will cooperate with Consultant in the performance of services under this Agreement and will be available for consultation with Consultant at such reasonable times with advance notice as to not conflict with their other responsibilities.
- B. The services to be performed by Consultant under this Agreement are subject to periodic review by the City. For those documents submitted to the City by the Consultant with regard to the Project, the City will examine and respond in writing to the Consultant within twenty-eight (28) calendar days of receipt of such documents. It is understood that City comments upon review of the Consultant's documents do not relieve Consultant from the responsibility for the professional and technical accuracy of all work delivered under this Agreement.

- C. The City shall assemble selected data and information related to the Project and provide same to the Consultant on or prior to the kick-off meeting. The data and information to be provided by the City is identified as follows:

1. Drafting and plan sheet layout standards;
2. Standard "front-end" contract documents and general conditions;
3. Cover sheet format and City logo in AutoCAD Civil 3D format;

The Consultant shall be responsible for updating this data and information during the Project development process, and shall be responsible for acquiring supplemental data and information which the Consultant deems necessary.

- D. The City will be responsible for performing the work noted below and upon completion will provide the results thereof to the Consultant:

1. Obtaining preliminary title reports on those properties involving right-of-way acquisition, permanent easement or temporary construction access;
2. Preparing property acquisition parcel maps, and writing legal descriptions for property and easement acquisition;
3. Preparing right-of-way plans to illustrate the overall property ownership and acquisition aspects of the Improvements;
4. Obtaining right-of-way and easements;
5. Printing of the construction bidding document package;
6. Completing the competitive bidding procedures for public works projects; and
7. Performing construction management, inspection and quality assurance during construction of the Improvements.

SECTION III - SCOPE OF SERVICES

Services to be performed by the Consultant shall consist of the Basic Services described in Exhibit "A", and may consist of those Supplemental Services described in Exhibit "A-1" of this Agreement.

SECTION IV - CHANGES TO SCOPE OF SERVICES

- A. The City may at any time, but only by written order, make changes within the general scope of this Agreement and in the services or work to be performed. If such changes cause a significant increase or decrease in the Consultant's cost or time required for performance of any services under this Agreement, the Parties shall formally amend this Agreement. Any claim of Consultant for adjustment

under this clause must be asserted in writing within thirty (30) calendar days from the date of receipt by the Consultant of notification of changes by the City, or such claim shall be deemed waived by Consultant and Consultant will be deemed to have agreed to the changes without modification of the compensation or time of performance hereunder.

- B. No additional compensation shall be paid, and no increase in the time of performance shall be awarded, to the Consultant for changes in scope of work without the prior written authorization of the City to proceed with such changes.
- C. No additional compensation shall be paid to Consultant for additional costs or delay due to the negligence or intentional acts of Consultant or any subconsultant or any of the officers, employees, or agents of Consultant or any subconsultant.

SECTION V - SUPPLEMENTAL SERVICES OF CONSULTANT

Supplemental Services will be provided only as specifically authorized in writing by the City's representative and may consist of any or all of the work described in Exhibit "A-1". Any other significant change of work determined by the City as essential to efficient and timely completion of the Project shall require a formal Amendment to this Agreement as provided by Section IV of this Agreement.

SECTION VI - SUBCONSULTANTS

Consultant agrees to include in all professional service subcontracts in connection with performance of the terms and obligations imposed under this Agreement provisions in substantially the following form:

- A. Consultant agrees to pay the subconsultant when Consultant is paid for the subconsultant's portion of the work by the City and, upon written request by the City, to obtain and provide to City lien releases from the subconsultant for such payment.
- B. The subconsultant does not have any rights against the City.
- C. The subconsultant agrees to be bound by all terms, conditions and obligations of Consultant under this Agreement. Consultant shall provide a copy of this Agreement to each subconsultant.
- D. City has the right in its reasonable discretion to approve every subconsultant prior to such subconsultant's performance of any portion of the Project.
- E. The term "subconsultant" as used herein, also means a sub-subconsultant.

SECTION VII - TERM OF AGREEMENT

This Agreement commences upon the date this Agreement is approved by the City in a formal City Council proceeding and shall end one (1) year after the date the City makes final payment to the Consultant for services rendered under this Agreement, unless this Agreement is terminated by the City.

SECTION VIII - COMPENSATION AND TERMS OF PAYMENT

A. TOTAL COMPENSATION

1. The City shall pay the Consultant an amount for each of the tasks described in Exhibits "A" and "A-1" as follows:

<u>Basic Services</u>	<u>Lump Sum Amount</u>
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1. Project Management	\$ 116,130
2. Preliminary Design Services	\$ 391,120
3. Final Design Services	\$ 319,340
4. Bid Phase Support Services	\$ 25,230

	<u>Time & Materials Amount</u>
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5. Construction Management Support Services	\$ 340,950
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Subtotal	\$ 1,192,770
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	<u>Time & Material Amount</u>
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Supplemental Services	Not-to-exceed	\$ 200,000
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<u>Grand Total Not-to-Exceed</u>	\$ 1,392,770
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B. TERMS OF PAYMENT

1. Subject to the City's right to dispute any charges, the City shall make monthly progress payments to the Consultant for services performed as follows:
 - (a) With respect to progress payments for Basic Services completed, the City shall pay that percentage of the lump sum amount for each task (as set forth in Subsection VIII.A.1 above) in direct proportion to the percentage of completion of such task, less amounts paid by the City to Consultant in prior progress payments.

With respect to progress payments for Time & Materials Basic Services completed, the City shall make payments for completed services on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B".

- (b) With respect to Supplemental Services that are authorized in writing by the City's representative, the City shall make progress payments for completed Supplemental Services on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B".

- 2. Payment to the Consultant under Section VIII.A.1 shall be made within thirty (30) calendar days of the date City receives each invoice provided by the Consultant to the City, provided that such invoice is complete, correct, and undisputed by the City, and that it contains the following information:

- (a) With respect to progress payments for Basic Services, the Consultant shall prepare and submit to the City a written invoice indicating the percentage of completion of each Basic Services task set forth in Section VIII.A.1 during the invoice period. The invoice amount shall be supported with a written summary noting the various tasks worked on during the invoice period.

With respect to progress payments for Time & Materials Basic Services, the Consultant shall prepare and submit to the City a written invoice of costs for the work completed during the invoice period. The invoice amount shall be determined on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B" and shall be supported by backup documentation detailing labor costs and other expenses directly related to the authorized work.

- (b) For payment of Supplemental Services authorized in writing by the City's representative, the Consultant shall prepare and submit to the City a written invoice of costs for the work completed during the invoice period. The invoice amount shall be determined on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B", and shall be supported by backup documentation detailing labor costs and other expenses directly related to the authorized work.

- 3. The City shall have fourteen (14) calendar days after receipt of an invoice to dispute any or all of the charges on the invoice. Undisputed amounts shall be paid to the Consultant within thirty (30) calendar days of the date City receives the invoice. Disputed amounts shall be resolved through the Dispute Resolution mechanism in Section XII.O.

4. If the City fails to pay the Consultant an undisputed amount within thirty (30) calendar days after the date the City receives the invoice, the City may be assessed one-half of one percent ($\frac{1}{2}\%$) of the undisputed amount each month, not to exceed \$1,000 total for the Project.
5. Billings shall be submitted during the first week of each month for work performed during the preceding month. Invoices shall conform to the format provided by the City.

SECTION IX - TIME OF PERFORMANCE

Consultant shall commence work immediately following written notice to proceed by the City. Work shall be completed in accordance with the Project Schedule attached as Exhibit "C", as it may be amended from time to time by written agreement between the Consultant and the City.

If the Consultant's performance of services is delayed, Consultant shall notify the City's representative in writing of the reasons for delay and prepare a revised schedule for performance of services and submit the revised schedule to the City's representative. If the Consultant is delayed, the City shall have the right to retain from monthly payments up to ten percent (10%) of subsequent invoices until such time as the Consultant has complied with the schedule or presented an acceptable plan for compliance with the schedule.

No additional time shall be given to Consultant for delay due to the negligence or intentional acts of Consultant or any subconsultant or any of the officers, employees, or agents of Consultant or any subconsultant.

SECTION X - AUDIT: ACCESS TO RECORDS

- A. The Consultant shall maintain books, records, documents, and other evidence directly pertinent to performance under this Agreement in accordance with generally accepted accounting principles and practices. The Consultant shall also maintain the financial information and data used by the Consultant in the preparation or support of the invoices, and a copy of the cost summaries and invoices submitted to the City. The City, or any of its duly authorized representatives shall have access to such books, records, documents, and other evidence for the purpose of inspection, audit and copying. The Consultant will provide proper facilities for such access and inspection.
- B. Audits conducted pursuant to this provision shall be in accordance with generally accepted auditing standards and established procedures and guidelines for the reviewing or audit agencies.

- C. The Consultant agrees to the disclosure of all information and reports resulting from access to records pursuant to paragraph "A" above, to any Project funding agency provided that the Consultant is afforded the opportunity for an audit exit conference and an opportunity to comment and submit any supporting documentation on the pertinent portions of the draft audit report.
- D. Records pursuant to paragraph "A" above shall be maintained and made available during performance under this Agreement and until three (3) years from date of final payment for the Project. In addition, those records which relate to any dispute resolution, litigation or appeal, or the settlement of claims arising out of such performance, or costs or items to which an audit exception has been taken, shall be maintained and made available until three (3) years after the date of resolution of such dispute, litigation, appeal, claim, or exception. This Section X.D. shall survive the completion of the Project and the termination or expiration of this Agreement.
- E. Public Records Act. Pursuant to NRS 239.010, each and every document provided to the City is a "public record" open to inspection and copying by any person, except for those documents otherwise declared by law to be confidential. The City shall not in any way be liable to Consultant for the disclosure of any public record. In any event the City is required to defend an action with regard to a public records request for documents submitted by Consultant, Consultant agrees to indemnify, hold harmless, and defend the City from all damages, costs, and expenses, including court costs and attorney fees, in any action or liability arising under or because of the Nevada Public Records Act, NRS 239.010. This Section X.E. shall survive the completion of the Project and the termination or expiration of this Agreement.
- F. The Consultant agrees to include language substantially similar to the language of paragraphs "A" through "E" of this section in all Consultant subcontracts directly related to performance of services specified in this Agreement which are in excess of \$10,000.00.

SECTION XI - REPRESENTATIONS AND WARRANTIES

Consultant hereby represents and warrants for the benefit of City, in addition to any other representations and warranties made in this Agreement, with the knowledge and expectation of City's reliance thereon, as follows:

- A. Consultant is a duly formed and validly existing corporation and is in good standing pursuant to the laws of the State of Nevada, and has the full power, authority and legal right to execute, deliver and perform under this Agreement.

- B. The execution and delivery of this Agreement, the consummation of the transactions provided for herein, and the fulfillment of the terms hereof on the part of Consultant will not result in a breach of any instrument to which Consultant is a party or by which Consultant is bound or of any judgment, decree or order of any court or governmental body or any law, rule or regulation applicable to Consultant.
- C. The execution, delivery and performance of this Agreement and the taking of all other lawful actions necessary to consummate the Project contemplated hereunder, by the persons executing, delivering and performing the same on behalf of Consultant, have been duly and validly authorized (and by their execution hereof or of any document delivered in connection with the Project contemplated hereunder such persons individually represent and warrant that they are so authorized), and this Agreement and the other Agreements and instruments contemplated hereby, constitute legal, valid and binding obligations of Consultant, enforceable in accordance with their respective terms.
- D. No consent, approval or authorization of any governmental authority or private party is required in connection with the execution of this Agreement by Consultant.
- E. The Consultant's Project Manager and Principal-in-Charge are each a duly licensed Engineer with the State of Nevada, and each has a license that is in full force and effect. Consultant has obtained any and all licenses, certificates and permits that are required to be obtained by Consultant by the Nevada Revised Statutes and the Nevada Administrative Code, and by any other law, rule, regulation or ordinance applicable to Consultant and to the performance of the Project by Consultant.
- F. Consultant is duly licensed and authorized to do business in the City.
- G. Consultant is a sophisticated and qualified Consultant, whose personnel possess the level of professional expertise and experience that is necessary to properly perform the Project within the required time period, with an appropriate level of diligence, skill and care, and pursuant to the terms, specifications and conditions of this Agreement. Consultant has the necessary personnel, equipment, tools, supplies, materials, and facilities to properly perform the Project within the required time period, with an appropriate level of diligence, skill and care, and pursuant to the terms, specifications and conditions of this Agreement.
- H. Consultant is financially solvent, able to pay its debts as they mature, and possessed of sufficient working capital to complete the Project within the time period required by this Agreement, and to perform its obligations under this Agreement.
- I. Consultant shall require that each subconsultant performing any portion of the Project:

1. Is duly formed, in good standing, and authorized to do business in the State of Nevada;
 2. Is a duly licensed or registered engineer, as the case may be, with the State of Nevada, and such license or certificate of registration is in full force and effect;
 3. Has obtained any and all licenses, certificates and permits that are required to be obtained by subconsultant by the Nevada Revised Statutes and the Nevada Administrative Code, and by any other law, rule, regulation or ordinance applicable to subconsultant and to the performance of any part of the Project by subconsultant;
 4. Is duly licensed and authorized to do business in the City; and
 5. Shall comply with all laws, rules, regulations, and ordinances, as such may be amended, supplemented or modified from time to time, that are applicable to subconsultant and any portion of the Project performed by subconsultant.
- J. This Agreement may be signed in counterparts, each of which shall be deemed to be an original and all such counterparts together shall constitute one and the same original. Facsimile or electronic signatures shall be binding on the parties hereto as if they were original signatures.

The representations and warranties made by Consultant herein shall survive the completion of the Project and the termination or expiration of the Agreement.

SECTION XII - MISCELLANEOUS PROVISIONS

A. SUSPENSION:

City may suspend performance by Consultant under this Agreement for such period of time as City, in its sole discretion may prescribe, by providing written notice to Consultant at least seven (7) calendar days prior to the date on which City wishes to suspend such performance. Upon such suspension, City shall pay Consultant compensation based on percentage of Project completion, earned until the effective date of suspension less all previous payments. Consultant shall not perform further work under this Agreement after the effective date of suspension until receipt of written notice from City to resume performance. In the event that City suspends performance by Consultant for any cause other than the error or omission of the Consultant for an aggregate period in excess of thirty (30) calendar days, Consultant shall be entitled to an equitable adjustment of the compensation payable to Consultant under this Agreement to reimburse Consultant for additional costs occasioned as a result of such suspension of performance by City. In no event will the City be liable to the Consultant for more than \$2,000.00.

B. TERMINATION:

The City may terminate this Agreement, with or without cause, upon fourteen (14) calendar days prior written notification of the termination to the Consultant. Notification to the Consultant of such termination shall be sent by the City in accordance with Section XII.V.

In the event of termination, the City agrees to pay the Consultant the reasonable value for all work and services performed to the date of termination in accordance with the Section entitled "Compensation and Terms of Payment" of this Agreement.

C. FISCAL FUNDING OUT:

The City reasonably believes that sufficient funds can be obtained to make all payments during the term of this Agreement. Pursuant to NRS Chapter 354, if the City does not allocate funds to continue the function performed by Consultant obtained under this Agreement, this Agreement will be terminated when appropriate funds expire in accordance with Section XII.B.

D. OWNERSHIP OF DOCUMENTS:

All plans, drawings, specifications, reports, photographs, studies, permits, estimates, digital mapping, CAD files, mylar, or other like documents given, prepared or assembled by the Consultant or any subconsultant which are related to the performance of this Agreement are deemed to be the property of the City, except to the extent such is not allowed by the Nevada Administrative Code or the Nevada Revised Statutes.

E. INSURANCE:

Consultant shall procure and maintain, and shall cause each subconsultant to procure and maintain, at its own expense, during the entire term of this Agreement, the following insurances:

1. Workers' Compensation Insurance. Such insurance must be provided by an insurance company authorized to provide workers' compensation insurance in Nevada by the Nevada Department of Business and Industry, Division of Insurance. Such insurance must protect Consultant and City from employee claims based on Project related sickness, disease or accident.
2. Comprehensive General Liability (bodily injury and property damage) insurance with respect to Consultant's agents and vehicles assigned to the prosecution of work under this Agreement in a policy limit of not less than \$1,000,000 for combined single limit per occurrence. Consultant's General Liability insurance policies shall be endorsed as to include the City as an additional insured.

3. Professional Liability insurance, for the protection from claims arising out of performance of professional services caused by a negligent act, error, or omission for which the insured is legally liable; such Professional Liability insurance will provide for coverage in an amount of not less than \$1,000,000 for each occurrence and \$2,000,000 in the aggregate for the period of time covered by this Agreement. Consultant will provide City thirty (30) calendar days' notice in writing of any cancellation of, or material change in, the above described policy.
4. The Consultant's Comprehensive General Liability policy shall automatically include or be endorsed to cover Consultant's contractual liability to the City, to waive subrogation against the City, its officers, agents, servants and employees, and to provide that the City will be given thirty (30) calendar days' notice in writing of any cancellation of, or material change in, the policy.
5. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer and licensed by the State of Nevada. All deductibles and self-insured retentions shall be fully disclosed in the Certificate of Insurance. No deductible or self-insured retention may exceed \$250,000 without the written approval of the City.
6. Certificates indicating that such insurance is in effect shall be delivered to the City before work is begun under this Agreement. If the Consultant is underwritten on a claims-made basis, the retroactive date shall be prior to or coincident with the date of this Agreement, and the Certificate of Insurance shall state that coverage is claims-made and the retroactive date. Consultant shall provide the City annually with a Certificate of Insurance as evidence of such insurance. It is further agreed that the Consultant and/or Insurance Carrier shall provide the City with 30-day advance written notice of policy cancellation of any insurance policy required to be maintained by Consultant.

F. INDEMNITY:

Notwithstanding any of the insurance requirements herein above set forth or limits of liability set forth therein, Consultant shall defend, protect, indemnify and hold harmless the City, its officers, agents and employees from any liabilities, claims, damages, losses, expenses, proceedings, suits, actions, decrees, judgments, reasonable attorney fees, and court costs which the City suffers, and/or its officers or employees suffer, as a result of, or arising out of, the intentional or negligent acts or omissions of the Consultant, its subconsultants, or agents or anyone employed by the Consultant or its subconsultants or agents, in fulfillment or performance of the terms, conditions or covenants of this Agreement. This Section XII.F. shall survive the completion of the Project and the termination or expiration of this Agreement until such time as the applicable statutes of limitation expire.

G. ASSIGNMENT:

This Agreement shall inure to the benefit of, and be binding upon, the Parties hereto and their respective successors and assigns. The Consultant shall not assign, sublet or transfer its interest in this Agreement without the prior written approval of the City representative. Nothing contained herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be a party hereto.

H. WAIVER:

No consent or waiver, express or implied, by either party to this Agreement or of any breach by the other in the performance of any obligations hereunder shall be deemed or construed to be a consent or waiver to or of any other breach by such party hereunder. Failure on the part of any party hereto to complain of any act or failure to act on the other party or to declare that other party in default hereunder, irrespective of how long such failure continues, shall not constitute a waiver of the rights of such party hereunder. Inspection, payment, or tentative approval or acceptance by the City or the failure of the City to perform any inspection hereunder, shall not constitute a final acceptance of the work or any part thereof and shall not release Consultant of any of its obligations hereunder.

I. DESIGNATION OF REPRESENTATIVE:

The Director of Public Works or the Director's authorized representative is hereby designated as the City's representative with respect to the work to be performed under this Agreement. Said representative shall only have the authority to transmit instructions, receive information, and interpret and define the City's policies and decisions with respect to the services of the Consultant.

J. CONSULTANT'S EMPLOYEES:

The Consultant shall be responsible for maintaining satisfactory standards of employee competency, conduct and integrity, and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. In the event that Consultant fails to remove any employee from the contract work whom the City deems incompetent, careless or insubordinate, or whose continued employment on the work is deemed by the City to be contrary to the public interest, the City reserves the right to require such removal as a condition for the continuation of this Agreement.

K. INDEPENDENT CONTRACTOR:

It is hereby expressly agreed and understood that in the performance of the services provided herein, the Consultant and any other person employed by Consultant hereunder shall be deemed to be an independent contractor and not an agent or employee of the City. This Agreement is not intended to create, and

shall not be deemed to create, any partnership, joint venture or other similar business arrangement between City and Consultant.

L. APPLICABLE LAW:

This Agreement shall be construed and interpreted in accordance with the laws of the State of Nevada.

M. COMPLIANCE WITH LAWS:

In connection with the performance of work under this Agreement, the Consultant agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation or age, including, without limitation, with regard to 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, without limitation, apprenticeship.

The Consultant further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

Consultant shall comply with laws, rules, regulations, and ordinances applicable to the work performed by Consultant with respect to the Project, as such laws, rules, regulations and ordinances may be modified, supplemented or amended from time to time.

N. PROHIBITION AGAINST CONTINGENT FEES:

The Consultant warrants that no person or entity has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage or contingent fee. For breach of this warranty, the City shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

O. DISPUTE RESOLUTION:

Disputes concerning standards of performance, time of performance, scope of work, compensation or terms specified in the Agreement shall be resolved in the following manner:

1. The City's representative and the Consultant's Project Manager will endeavor to conduct good faith negotiations in an effort to resolve any and all disputes in a timely manner.
2. If any disputes between the Parties remain unresolved after thirty (30) calendar days, the City's representative and the Consultant's Project

Manager shall, within fourteen (14) calendar days, prepare a brief, concise written report summarizing the:

- (a) basis for the dispute,
- (b) negotiations accomplished and results thereof, and
- (c) current status of all relevant unresolved issues.

Copies of each written summary shall be exchanged between the City's representative and the Consultant's Project Manager, and provided to the City's Public Works Director and the Consultant's Principal-in-Charge. Within thirty (30) calendar days thereafter, the City's Public Works Director, or his designee, and the Consultant's Principal-in-Charge will meet to resolve the dispute. A written record of these negotiations will be made. The record will summarize:

- (a) all issues of dispute,
- (b) the resolutions to resolved issues, and
- (c) unresolved issues, if any.

The written record will be reviewed by the City's Public Works Director or his designee, and the City's Public Works Director or his designee, will render a determination regarding such dispute.

3. If the Consultant disagrees with the determination of the City's Public Works Director, or his designee, the Consultant may only initiate an action in the Eighth Judicial District Court in and for Clark County to resolve such dispute. The City retains the right to all remedies available in law or equity. The Parties agree that no dispute under this Agreement shall be submitted to or resolved through arbitration or mediation.

P. ATTORNEY'S FEES:

In the event any action is commenced by either Party against the other in connection herewith, the prevailing Party shall be entitled to its reasonable costs and expenses, including reasonable attorney's fees, as determined by the court. This Section XII.P shall survive the completion of the Project and the termination or expiration of this Agreement.

Q. SITE INSPECTION:

Consultant represents that Consultant has visited the Project location and is satisfied as to the general condition thereof and that the Consultant's compensation as provided for in the Agreement is just and reasonable compensation for performance hereunder including reasonably foreseen and

foreseeable risks, hazards and difficulties in connection therewith based on such above-ground observations.

R. SEVERABILITY:

In the event that any provision of this Agreement shall be held to be invalid or unenforceable, the remaining provisions of this Agreement shall remain valid and binding on the Parties hereto.

S. AMENDMENTS:

This Agreement may only be modified by a written Amendment that is executed by both Parties hereto.

T. FINAL INTEGRATION:

This Agreement is fully integrated and constitutes the entire Agreement and understanding between the Parties concerning the subject matter of this Agreement. This Agreement supersedes all other oral and written negotiations, Agreements and understandings of any and every kind relating to the subject matter of this Agreement.

U. CONSTRUCTION:

In the event of any dispute regarding any provision of this Agreement, the terms of this Agreement shall not be construed more strongly against or in favor of either party. The parties acknowledge that each has participated equally in the negotiation and drafting of this Agreement.

V. NOTICE:

Any notice required to be given hereunder shall be deemed to have been given when sent to the party to whom it is directed by personal service, hand delivery or U.S. certified mail, return receipt requested, at the following addresses:

To City: Allan Fajardo, P.E., PTOE
City of North Las Vegas
2250 Las Vegas Boulevard North, Suite 610
North Las Vegas, NV 89030

To Consultant: Angela MacKinnon, P.E.
HDR Engineering, Inc.
6750 Via Austi Parkway, Suite 350
Las Vegas, NV 89119

W. HEADINGS:

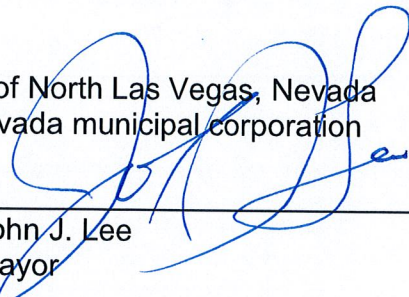
The headings of the various Sections of this Agreement have been inserted only for convenience, and shall not be deemed in any manner to modify or limit any of the provisions of this Agreement, or to be used in any manner in the interpretation of this Agreement.

X. CONFIDENTIALITY:

Consultant shall treat all information relating to the Project and all information supplied to the Consultant by the City as confidential and proprietary information of the City and shall not permit its release by Consultant's employees to other parties or make any public announcement or release without the City's prior written authorization. Consultant shall also require subconsultants and vendors to comply with this requirement.

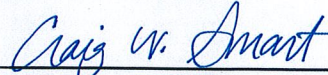
In Witness Whereof, the Parties have caused this Agreement to be executed the day and year first above written.

City of North Las Vegas, Nevada
a Nevada municipal corporation

By: 

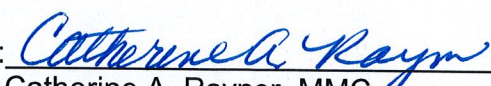
John J. Lee
Mayor

HDR Engineering, Inc.
a Nebraska corporation

By: 

Craig Smart, P.E.
Managing Principal

Attest:

By: 

Catherine A. Raynor, MMC
City Clerk

Approved as to Form:

By: 

Micaela Rustia Moore
City Attorney

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT**

**EXHIBIT "A"
SCOPE OF SERVICES**

INTRODUCTION

The City of North Las Vegas (City) will enhance and upgrade the existing wells at Elstner Estates, Sun Valley, and Silver Mesa. With the exception of the Elstner Estates well, the other two existing well site are currently not operational due to various issues associated with such well sites. City requires assistance from HDR Engineering, Inc. (Consultant) to assess, provide viable and industry standard recommendations, design, assist in soliciting bids, and perform engineering construction management support that will rehabilitate or replace the associated supporting infrastructure (pumps, controls, pipes, etc.) at the well sites as specified herein. The wells will be designed and constructed to provide a long-term reliable water supply with acceptable water quality.

PROJECT DESCRIPTION

The Project includes three well sites: Sun Valley Well (addressed 3532 Valley Dr), Silver Mesa Well (addressed W. Alexander Rd), and Elstner Well (addressed 5311 W. Gowan Rd). The Project plans will include an overall assessment of the site conditions, general notes and drawings, survey, geotechnical, civil, electrical, instrumentation and controls (I&C) drawings, in one construction bid package. The Project is generally described as follows:

- Drilling a new well on the existing sites;
- New well pump, motor and shaft, piping, valving, and connection to the existing water distribution system;
- Abandonment of existing/non-operational wells;
- Installation of new concrete well pad foundation;
- New electrical equipment;
- New chlorination system;
- New instrumentation and controls; and,
- Site restoration to match existing adjacent landscape.

In addition, an independent bid procurement process will be performed that will package the design and specifications needed for the drilling activities prior to the release of the items described above, and as further described in the various Tasks outlined below.

STANDARDS

The Project shall be designed in accordance with the following local, state, and federal adopted standards and procedures, unless indicated otherwise.

- City of North Las Vegas Building Safety Division.

- Nevada Administrative Code (NAC) 445A.
- Nevada Revised Statute 534 – Underground Water and Wells.
- Nevada Division of Water Resources.
- American Water Works Association (AWWA) Standards.
- City of North Las Vegas Water Service District Rules and Regulations, current edition.
- Uniform Design and Construction Standards for Water Distribution Systems, Clark County Nevada, current edition.
- Uniform Standard Specifications for Public Works' Construction Off-site Improvements, Clark County Area, Nevada, current edition.
- Uniform Standard Drawings for Public Works Construction Off-site Improvements, Clark County Area, Nevada, Volume I and Volume II, current editions.
- Hydrologic Criteria and Drainage Design Manual, Clark County Regional Flood Control District, current edition.
- City of North Las Vegas Title 17.

Consultant acknowledges and agrees that the above list of reference materials is not comprehensive and shall verify and add to the list as needed to complete the Project to industry care and standards.

PROJECT ASSUMPTIONS

Project Assumptions relevant to this Scope of Services include:

- The existing well buildings will remain to house the electrical, controls and disinfection equipment.
- The existing well pumps will be removed and wells abandoned per NAC 445A requirements.
- The new well pumps will be outside (without enclosure) with above grade discharge piping and control valves. Pump to waste piping will tie into the existing energy dissipation structures, which flow overland by gravity to storm drain.
- The hypochlorite injection to the new well will either be outside on the above grade piping, or underground in a vault.
- The existing well discharge piping inside and outside of the well buildings will be removed and disposed, or select items may be reused.
- Electrical service capacity at each well is adequate.
- Utility relocations by other Agencies are not required.
- Temporary Construction Easements are not required.
- The City will provide boundary survey and topo for the project, and will prepare and file any required supplemental survey related documents, to generally include easements, and records of survey. City has confirmed that points of diversion surveys will not be required. Survey related services will be performed by the City.
- No drainage study is required, with the sole exception of FEMA site mapping, as may be required, to satisfy the well permit submittal to NDEP. Per NAC 445A.66915, the new well casing must be a minimum of 18-inches above the 100-year flood plain.

- No cultural resource or environmental assessments will be performed under this Scope of Services.
- The opinions of probable construction costs (OPCCs) will be prepared in accordance with AACE International Standards, AWWA Standards, and review of recent bid tabs for similar work in the Las Vegas Valley. Consultant's opinions, recommendations and assessments are limited by a) the accuracy and completeness of information upon which it may reasonably rely, b) schedule constraints or scope limitations, c) unknown or variable site or other conditions, d) other factors beyond Consultant's control. Any estimates as to construction costs are limited by the lack of control over financial and/or market conditions, including the future price of labor, materials, and prospective bidding environments and procedures. Consultant does not warrant the accuracy or completeness of its Services to the extent impacted by these limitations and City should limit its reliance on the Services in like manner.
- Transient pressure surge analysis is not included in this Scope of Services.
- City will provide hydraulic grade information for the water distribution system for the pump design. Network hydraulic modeling is not included in this Scope of Services.
- The new wells are assumed to be in an area of similar geology as the existing wells and the water quality of the aquifer is assumed to be similar to the existing wells. The new wells will be drilled to the same approximate depth as the original well, assuming a production rate of 2,500-2,600 gpm with a maximum to 3,000 gpm and a groundwater level drawdown similar to the existing wells (data provided by City). Scope is based on first drilling and testing wells and then designing supporting infrastructure (pumps, collector pipe, etc.) based on the drawdown and well yield from the installed and tested wells. It is assumed that there is no additional drawdown that will occur from operation of other wells in the project area. It is assumed that pre-design groundwater quality data (pre-treatment) is available to characterize the groundwater quality as necessary for proper well design.
- The Drilling contractor will also be responsible for contracting with soils laboratory and water quality laboratory (samples will be collected and submitted by Consultant).

PURPOSE

The purpose of Exhibit "A" is to establish the scope for the following:

1. Project Management - Services related to managing the project.
2. Preliminary Design Services - Services related to preparation of preliminary design outlining viable options with the costs associated with each option.
3. Final Design Services - Services related to preparation of construction contract and Bid Documents and OPCC for the improvements.
4. Bidding Phase Support Services - Services intended to support the City during public bidding of the improvements.
5. Construction Management Support Services - Services intended to support the City during construction activities to monitor the Contractor's compliance with the construction contract.

SUBCONSULTANTS

The following Subconsultants contracted through the Consultant will be employed for various functions of the Project delivery:

- Electrical and Instrumentation and Controls: TJK Consulting Engineers, Inc.
- Geotechnical Engineer: Ninyo and Moore
- Potholing: KCI Technologies, Inc.

With the City having no contract obligations with the noted subconsultants; the work they perform shall be monitored and reviewed by the Consultant. The sub-consultant's work does not relieve the Consultant of the accuracy, quality, and timeliness in this Agreement.

Consultant shall notify the City five (5) working days noting the reason(s) for removing or replacing one of the named subconsultants. For such replacement requests, Consultant shall submit the qualifications of the alternate company with an understanding that the City may elect not to accept said firm.

SCOPE OF SERVICES

Task 1. PROJECT MANAGEMENT

1.1 Project Management and Coordination

Consultant shall:

- Monitor project status, budget, and scheduling;
- Oversee the work performed by the subconsultants;
- Prepare monthly invoices;
- Schedule progress meetings;
- Perform quality assurance/quality control (QA/QC) activities
- Coordinate Project related issues with City staff; and
- Monitor the work performed to be in compliance with this Agreement.

Deliverables:

- Monthly invoice.
- Monthly Project Status Updates

1.2 Project Management Plan and Kick-off Meeting

Consultant shall:

- Prepare a project management plan (PMP) for distribution to all City and Consultant project team members. The PMP will consist of the project scope, schedule, and deliverables; and list the members of the project team with addresses, telephone numbers, and email addresses.
- Conduct a project kick-off meeting with City staff. The kick-off meeting is intended to introduce key Project personnel, define areas of responsibilities and communication protocols, review the Scope of Services and schedule for the Project, review the timing and intent of Project deliverables, review procedures and schedules, and establish procedures for communicating potential changes in the work or schedule.

Deliverables:

- Kick-off Meeting Agenda and copies for distribution at Kick-off Meetings.
- Kick-off Meeting Minutes.
- One (1) copy of the PMP for each City and Consultant project team member.
- The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting

1.3 Project Monitoring, Administration, and Status Reporting

Consultant shall:

- Establish internal project controls to monitor project status, budget, staffing, and schedule on an on-going basis. Budget and schedule status will be reviewed weekly.
- Prepare monthly status reports (1-2 pages) within five (5) working days after the close of the Consultant's accounting month. The status reports will describe the work completed during the previous month, anticipated work for the following month, current budget and schedule status, and project issues requiring discussion or resolution.
- Prepare monthly invoices to the City and execute and administrate subconsultant contracts.
- The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.

Deliverables:

- Monthly Invoice and monthly Status Report.

1.4 Project Status Meetings

Consultant shall:

- Meet with City staff monthly to review project status. Meetings shall be at the City's office and will be attended by the Consultant's Project Manager, Project Engineer and other key personnel as determined to be necessary.
- Prepare an agenda for each of the progress meetings.
- Prepare meeting minutes (bulleted format) to document key information items and decisions made. An action item list will be generated from each meeting, as required.

A total of seven (7) 1-hour project status meetings over the duration of the project design are assumed for budgeting purposes.

Deliverables:

- Progress Meeting Agenda and copies for distribution at Progress Meetings.
- Progress Meeting Minutes.
- The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.

1.5 Project QA/QC Activities

Consultant shall:

- Perform internal QA/QC activities to obtain expert guidance on project methodology, review project deliverables, and perform checks of engineering calculations and OPCC.

- Form an internal Technical Advisory Committee (TAC) composed of 2 senior level engineers who are not working on the Project and would serve as independent advisors experienced in well design and well infrastructure pumping, piping, treatment and electrical systems. These team members will review project deliverables and provide technical input. The TAC will meet formally at least two (2) times during the course of the project.

1.6 Agency Coordination and Permitting

1.6.1 Utility and Agency Coordination

Consultant shall:

- Coordinate with utilities and agencies having facilities within the limits of or adjacent to the project throughout the duration of the project, this includes attendance to related meetings. Utilities and agencies to be contacted will consist of:
 - City of North Las Vegas departments, including but not limited to Utilities, Public Works, Flood Control, Traffic, Planning, and Real Property;
 - NV Energy;
 - Nevada Division of Environmental Protection;
 - SWG;
 - Sprint;
 - Embarq; and
 - other non-City owned utility agencies that maybe impacted or affected by the Project

Deliverables:

- Project Plans to be sent for review to the Utility Companies at each design level (30%, 90%, and Final Design); and Bid Documents with impacted utilities approval signatures.
- Agenda. The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.

1.6.2 Project Permits

Consultant shall:

- Identify all permits needed for the Project.
- Prepare all correspondences and permit applications for the regulating agencies and assist the City in obtaining required permits. The City shall pay for all permit fees.
- Submit project documents to Nevada Division of Environmental Protection (NDEP) with application for permit to construct as a modification to the existing CNLV community water system.
- Coordinate with NDEP, and will submit plans and design reports to NDEP for review.
- Review existing piping and compare it against current AWWA A100 requirements. If the existing pipes are found to be outside of current requirements but still acceptable for usage in a potable water system, an exception will be prepared for NDEP per NAC 445A.6665.

- Review NAC 445A.66855, and subsequent associated sections, for wells will be constructed in accordance with current configuration and location standards.
- Provide a permit matrix during the design process which will document the permits needed for the Project. A summary matrix of required permits shall be prepared by the Consultant and included in the Preliminary and Final Design Report.

Deliverables:

- Matrix of required permits;
- Correspondence; and
- Preparation of permit applications.

1.6.3 State Revolving Fund (SRF) Loan Coordination

Consultant shall:

- Coordinate and document correspondence about SRF funding with NDEP.
- Review deliverables from the perspective of requirements to comply with SRF conditions. This includes:
 - American Iron and Steel. Project specifications to be developed use iron and steel products that are produced in the United States.
 - Disadvantaged Business Enterprises (DBEs). Good faith efforts to utilize DBEs to meet the goals listed.
 - Project Sign. Additional project sign is required to indicate part of SRF Program.
 - Davis-Bacon Wage Rates. Project specifications to be developed with Prevailing Rates.

Deliverables:

- Correspondence with NDEP;
- Checklist of SRF requirements for Contract documents at key deliverables.

Task 2. PRELIMINARY DESIGN PHASE

The purpose of the preliminary design phase is to review existing data and prepare basemapping, evaluate alternatives, update the preliminary project schedule through construction, prepare the preliminary design for the well drilling and well infrastructure and site design.

2.1 Data Acquisition and Review

Consultant shall:

- Identify pertinent documents and data that provide information required for the Project development. This includes available hydrogeologic data including well logs, pumping records, ground water level and ground water quality monitoring data, aquifer testing information, topographic maps, and regional geologic and hydrogeologic reports. City will supply required information.

The Consultant shall be entitled to reasonably rely upon the information and data provided by the City or obtained from generally accepted sources within the industry without independent verification except to the extent such verification is expressly included in the Scope of Services.

2.2 Site Surveying and Field Investigations

Consultant's subsurface utility investigation subconsultant shall:

- Provide services to locate identify key utilities within the well sites. It is anticipated that 5 potholes will be required on each well site for a total of 15 potholes. Additional potholes may be authorized as part of additional services.
- Conduct one geotechnical boring per site.
- Conduct site visits. It is estimated that there will be 4 meetings in the field with City staff.

The City shall survey each well site and provide the following information to the Consultant:

- Existing building envelopes, fence lines, curb and gutter, utility boxes and valves, above grade piping, concrete structures, drain inlets, electrical transformers, overhead power and communication lines.
- Utility pothole locations, both horizontal and vertical.
- Geotechnical borings.
- Ground shots as directed by Consultant.
- Survey controls (horizontal and vertical).
- Survey CAD files.

2.3 Geotechnical Investigations

Consultant's geotechnical subconsultant shall:

- Provide geotechnical engineering services including exploratory work, laboratory and field testing, and professional guidance in tests to be made at test locations based on preliminary drawings and designs and including professional interpretations of exploratory and test data. The field investigations include performing one boring to a depth of up to fifteen (15) feet and laboratory testing to produce geotechnical design recommendations, which includes providing design recommendations for footings and piping.
- Prepare an initial Geotechnical Data Report (GDR) presenting the data results of the exploratory work, laboratory testing and site conditions found by report research.
- Prepare a Geotechnical Design Memorandum (GDM) containing recommendation and interpretation of data to be used during design.

Deliverables:

- Draft GDR,
- Final GDR,
- Draft GDM, and
- Final GDM.

2.4 Alternatives Evaluations

Consultant shall assess three (3) alternatives for each site outlining the summary of such work in a Technical Memoranda (TM) to include the following:

- TM No. 1: Evaluate Construction Packaging and Well Design Alternatives
- TM No. 2: Evaluate Site Layout Alternatives

- TM No. 3: Evaluate the Reuse of Existing Infrastructure
- TM No. 4: Handling of Wastewater

2.4.1 TM No 1: Evaluate Construction Packaging Alternatives and Well Design Alternatives

Consultant shall:

- Evaluate the construction packaging and well design methods to make the determination of what information to utilize to design the well, well casing materials, project sequencing, and construction procurement method for the well design. The project scope is based on preparing two sets of bid documents. One set of bid documents will be for the well drilling, and another set of bid documents for site infrastructure for all 3 well sites.

2.4.1.1 Well Design Methodology Alternatives

Consultant shall:

- Evaluate following three (3) well design methodology alternatives:
 - Alternative A - Well Design Based on Existing Casing/Screen Logs and Soil Information. Review existing boring logs. Design in Bid Documents is based on the existing casing/screen logs and soils information. This method could only be used if the soils information from the prior well construction methods is available and at the required quality to design the well screen to provide maximum yield without sand production.
 - Alternative B - Drill Small Diameter Pilot Borings to Production Zone Samples as a Pre-Design Task. Drill a pilot boring (5 to 6-inch diameter) to terminal depth early-on to obtain the needed soils information using a (smaller) truck-mounted reverse-rotary drilling rig that can work on either 8 to 12-hour(daytime) shifts to avoid night noise or 20 to 24-hour shifts using sound walls.
 - Alternative C - Obtain Production Zone Soils Information as Part of Production Well Drilling.
 - The first phase of drilling will include a 12 to 16 inch diameter boring to terminal depth using a (larger) flooded-reverse-rotary drilling rig. Production zone samples would be analyzed and a well design developed and advanced to City and drilling contractor for expedited review and approval. The Drilling contractor would then submit a design to a well materials vendor to expedite delivery of the well materials (casing and screen) and start the drilling to ream out the borehole to the full diameter. During the period the well is designed and the well materials are being manufactured the drill rig would have to remain on-site in standby with a crew that ensures the boring remains open.

2.4.2 TM No 2: Evaluate Site Layout Alternatives

Consultant shall:

- Develop up to 2 viable well layout alternatives for each site. This task includes identifying alternatives for the well discharge piping and providing conceptual arrangement of chemical and electrical infrastructure. Alternatives will include comparison of OPCC (Class 5 level) for the key items displayed.

2.4.3 TM No 3: Evaluate the Reuse of Existing Infrastructure

Consultant shall:

- Perform a brief visual assessment at each of the well sites, consisting of one site visit with a civil/mechanical and electrical engineer. A City representative will be present to offer insight as to how equipment is functioning, and the City's potential desire for reuse.

Existing equipment and infrastructure to be evaluated for reuse is expected to include the following:

- a. Chlorination equipment
- b. Well building (to house equipment and electrical)
- c. Discharge valves and piping (to the extent possible)
- d. Electrical and controls equipment including:
 - i. MCC
 - ii. Motors
 - iii. VFD
 - iv. Level controls
 - v. SCADA

2.4.4 TM No. 4: Handling of Wastewater

Consultant shall:

- Prepare a TM to document up to two (2) alternatives for handling of wastewater developed on site (wastewater as will be produced from floor drains in buildings, from well-flushing/maintenance activities, or from chemical injection system flushing/maintenance activities). Alternatives are likely to include an on-site storage tank which could be vacuumpumped out and hauled off-site for treatment, or a permanent connection to an adjacent underground municipal sanitary sewer pipe network.

2.5 Well Drilling Work Plan

2.5.1 Well Drilling Work Plan (Including Field Health and Safety Plan)

Consultant shall:

- Prepare a brief Work Plan that describes the well locations, drilling and construction methods, locations, and a draft detailed work schedule. The intent of the Work Plan is to provide a brief document that describes the proposed project so that there is a written understanding between City and the Consultant that can be used to drive the project workflow. The Work Plan will provide a written understanding of the hydrogeologic and groundwater quality conditions at each site based on existing conditions. The Work Plan will describe:
 - Existing conditions of site layout and infrastructure at the properties.
 - A description and order of proposed drilling operations.
 - A summary of the well drilling and well construction methods.
 - Waste soils and water management procedures.
 - Well abandonment procedures.
 - Details on hours of operation and field oversight.
 - Sound and light restriction requirements.
 - Permits to be acquired.

- Field documentation and other details necessary for planning and execution of the project.
- Developed as a draft, submitted to the City for review and comment, and finalized to reflect comments provided by City. The document will contain the following:
 - Details on the project work (see list above).
 - Field data collection and daily reporting.
 - Management Plan (including contact information for the project manager and field team).
 - The project schedule, showing the schedule for each task.
 - Field health and safety plan.

Deliverables:

- Draft Work Plan
- Final Work Plan

2.5.2 Well Drilling Technical Specification

Consultant shall:

- Prepare a Technical Specification that can be used to solicit cost bids for well drilling/construction, well abandonment and aquifer testing from licensed well drilling firms with experience in large-diameter production wells. The specification will include both pre-design drilling and production well drilling tasks, with assumptions and take-off quantity assumptions provided for well construction materials, and an outlined schedule. The Consultant will review bids and provide input to City on the contractor qualifications and whether the bids were responsive to the specification requirements. The well drilling specification will be prepared as a standalone contract for bids.

The City will provide the boilerplate front end specifications. The Consultant will prepare the special provisions that are supplemented with new technical specifications. The City will advertise and contract with the well drilling contractor.

Deliverables:

- Draft Well Drilling Technical Specification;
- Final Well Drilling Technical Specification; and
- Contractor bid review comments (by email).

2.5.3 Obtain Soils Production Zone Gradation Information for Production Well Design

Consultant shall:

- Obtain Soils Production Zone Gradation Information for Production Well Design. This includes the following elements:
 - Water well screen and gravel pack is designed specifically to match the production zone gradation at various depths to provide maximum yield capacity and maximum well efficiency and minimizing sand entrance into the screen. If detailed soil lithology information is available from the prior well construction reports, this step may be able to be eliminated and it may be possible to proceed directly to well design. If however, this soils information is not available a drilling program will be implemented to obtain soil samples for laboratory analysis of soil gradation.

- Consultant field staff will be present during drilling to coordinate access, observe field conditions, develop daily reports and quantity estimates, collect formation samples and submit them for laboratory grain-size analysis and conduct field logging of the borehole and well construction. Once the borehole is drilled and soil samples are analyzed for grain-size distribution using the ASTM Hydrometer and Sieve method, Consultant will then prepare a well design and cost estimate, submit to City for review and to driller for acceptance and to provide final cost estimating.
- There are two options to obtain the production zone gradation data necessary to design the well screen and sand pack (collect soil samples using pilot borings or collect soil samples during production well drilling). The scope of work and cost estimate assumes soil samples will be collected using pilot borings. Consultant will consult with City and develop an approach that meets with the City project needs.

Deliverables:

- Field observation and quantity reports.

2.6 Preliminary Design

Consultant shall:

- Provide preliminary design services to a 30% Design Level which consist of furnishing plans, preliminary specifications list, OPCC, and a Preliminary Design Report to the City for review, approval and printing. The plans will be based on the survey information compiled under task 2.2.
- Prepare plans based on City CAD standards (provided by the City). The Consultant's drawings standards will be used as supplemental standards where necessary.
- Prepare a preliminary specifications list that includes a list of the City's boilerplate "front ends", general conditions, special conditions and the special provisions which are the technical specifications.
- Prepare an OPCC to a Class 4 level.
- Prepare a Draft Preliminary Design Report (PDR) that includes the following:
 - Executive Summary;
 - Introduction;
 - Summary of data review, site review inventory citing existing utilities, topographic features, geotechnical analysis, site photographs, and a Utility Matrix;
 - Recommendation for construction schedule, phasing, and scheduling;
 - Alternatives Evaluations;
 - Design Criteria;
 - OPCC;
 - Permit matrix;
 - Summary of subsurface utility investigations;
 - Meeting minutes and pertinent correspondence, including coordination with City divisions and other agencies (Appendix);
 - Preliminary specifications list;
 - List of proposed instrumentation and equipment;

- Preliminary SCADA control descriptions;
- Well draw down, hydraulic calculations and other documents used in the development of the PDR; and
- Well Design Work Plan.
- Meeting minutes and pertinent correspondence, including coordination with City and other agencies (Appendix).

Preliminary Design Drawings List, but is not limited to, the following:

General

Cover Sheet
Key Map, Drawing Index, Abbreviations and Symbols
Project Notes

Civil

Site Plan (x3)
Demolition Plan (x3)
Civil Plans (x3)
Grading Plan (x3)
Details

Structural

General Notes and Details
Foundation Plan, and Sections

Electrical

Power Supply Details
Single Line Diagrams
Control System Architecture Details

Instrumentation and Controls

P&IDs

Deliverables:

- Ten (10) hard copies of the Draft PDR.
- One (1) electronic PDF copy of the Draft PDR.
- Plans will be submitted to all non-City owned utility agencies and plans and OPCC shall be submitted to NDEP (along with the State's revolving fund coordinator).

Task 3. DESIGN PHASE

3.1 60% Design

Consultant shall:

- Provide design services to a 60% Design Level which consist of development of plans and specifications for equipping the wells and associated site improvements for each well site, and review during a 60% Design Workshop.
- Address comments received at the Preliminary Design level and will develop the 60% design. The City and Consultant will meet for a 60% Design Workshop to review and discuss progress. The Consultant will conduct an "over-the-shoulder" workshop review to streamline the schedule and to convey to City the status of the design. No formal submittal will be provided for the City to review prior to, or after, the Workshop.

- Prepare meeting minutes that will summarize any design considerations or plan revisions.
- Prepare 60% design drawings in accordance with project standards. The design plans will be set up on a 22" x 34" standard ANSI plan size template with the City's title block.
- Prepare an OPCC to a Class 3 level.

The current version of the "front end" legal and contractual sections including Invitation to Bid, Instruction to Bidders, Bid Form and General Conditions will be provided by the City at the 60% Design Workshop.

Deliverables:

- Responses to Preliminary Design comments;
- Workshop Agenda;
- Workshop Meeting Minutes; and
- The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.

3.2 90% Design

Consultant shall:

- Provide design services to a 90% Design Level which consist of submittal of plans, specifications, and Final Design Report for review and approval.
- Address comments received during the 60% Design Workshop and will develop 90% Design level design documents. The Consultant will submit 90% Design documents and meet with the City during a workshop to review. The Consultant will prepare meeting minutes that will summarize any design considerations or plan revisions.
- Conduct a 90% Design review workshop with the City to discuss the City's review comments. A two (2) hour meeting is budgeted with attendance by the Project Manager, Technical Lead, and Project Engineer.
- Prepare and submit 90% Design drawings in accordance with project standards. The design plans will be set up on a 22" x 34" standard ANSI plan size template with the City's title block.
- Prepare the "front end" contract using the City's standard contract documents and special provisions, to a 90% Design level.
- Prepare an OPCC to a Class 2 level.
- Prepare a Final Design Report that updates the Preliminary Design Report.

Drawing List includes, but is not limited to, the following:

DRAWING LIST

No.	Sheet No.	Description
General		
1	G-01	Cover Sheet, Vicinity Maps, Drawing Index
2	G-02	Abbreviations
3	G-03	General Legend and Symbols
4	G-04	Overall Site Plan/ Key Plan

No.	Sheet No.	Description
Demolition		
5	D-01	Sun Valley Well Demo Plan
6	D-02	Sun Valley Well Demo Sections
7	D-03	Silver Mesa Well Demo Plan
8	D-04	Silver Mesa Well Demo Sections
9	D-05	Elstner Well Demo Plan
10	D-06	Elstner Well Demo Sections
Civil		
11	C-01	Sun Valley Survey & Geotechnical Plan
12	C-02	Sun Valley Grading & Civil Plan
13	C-03	Silver Mesa Survey & Geotechnical Plan
14	C-04	Silver Mesa Grading & Civil Plan
15	C-05	Elstner Survey & Geotechnical Plan
16	C-06	Elstner Grading & Civil Plan
17	C-10	Civil Details
Structural		
18	S-01	General Notes and Special Inspection Notes
19	S-02	Well Foundation Plan and Details
Mechanical		
20	M-01	Sun Valley Well Piping Plan & Section
21	M-02	Sun Valley Disinfection Plan
22	M-03	Silver Mesa Well Piping Plan & Section
23	M-04	Silver Mesa Disinfection Plan
24	M-05	Elstner Well Piping Plan & Section
25	M-06	Elstner Disinfection Plan
26	M-10	Mechanical Details
Electrical		
27	E-01	Legend & Abbreviations - 1
28	E-02	Legend & Abbreviations - 2
29	E-03	Sun Valley Single Line Diagram
30	E-04	Sun Valley Power Plan
31	E-05	Silver Mesa Single Line Diagram
32	E-06	Silver Mesa Power Plan
33	E-07	Elstner Single Line Diagram

No.	Sheet No.	Description
34	E-08	Elstner Power Plan
35	E-10	Details
Instrumentation & Control		
36	I-01	Legend and Abbreviations
37	I-02	Sun Valley Well & Chemical Feed
38	I-03	Silver Mesa Well & Chemical Feed
39	I-04	Elstner Well & Chemical Feed

Deliverables:

- Eight hard copies of the plans in 11"x17" format.
- Two hard copies of the plans in 22"x34" media size.
- Eight hard copies of the specifications.
- Eight hard copies of the OPCC.
- Ten hard copies of the Final Design Report.
- Electronic PDF copies of the complete submittal.
- Responses to PDR comments related.
- Workshop agenda.
- Workshop meeting minutes.
- Agenda. The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.
- Plans will be submitted to all non-City owned utility agencies and plans, specifications and OPCC shall be submitted to NDEP (along with the State's revolving fund coordinator).

3.3 Final Design

Consultant shall:

- Provide design services to a Final Design Level which consist of submittal of plans and specifications for review and approval.
- Respond to and address comments received during the 90% Design review, and will not advance the design beyond that which the comments require. The Consultant will submit the For-Bid Design documents, design drawings (which will be set up on 22"x34" standard ANSI plan size template with the City's title block) and the Bid Documents.
- Address comments to the "front end" documents and the special provisions to generate a For-Bid document set and provide the Bid Documents.
- Prepare an OPCC to a Class 1 level.

- Incorporate all comments on the 100% Design submittal into the final (mylar) submittal. Plan set mylars and copies sealed in accordance with NRS 625, sealed Special Provisions, including Bid Proposal and Class 1 OPCC shall be submitted to the City. The Engineer's Class 1 OPCC broken out by bid item will be submitted as a Microsoft Excel Work Sheet electronic file. The Consultant will coordinate with utility companies and obtain utility signatures on the design plan cover sheet and elsewhere in the plans as required. Consultant shall submit a pre-mylar bond set of the final plans before preparing mylars for this project.

Deliverables:

- Eight hard copies of the plans in 11"x17" format.
- Two hard copies of the plans in 22"x34" format.
- Eight hard copies of the specifications, and preliminary opinion of probable construction cost to the City for review and comment.
- Electronic PDF copies of the complete submittal.
- Schedule and Utility Submittal Matrix Update.
- Responses to PDR comments related to the Plans and Specifications and OPCC.
- One set of full size (22" X 34") mylar plan sheets stamped and signed by a Nevada P.E. which includes the cover sheet containing all approval signatures.
- One (1) set of original Special Provisions (unbound) stamped and signed by a Nevada P.E.; One (1) copy of the Final OPCC in a Bid Schedule Format.
- The Consultant will furnish to the City electronic copies of the plans (AutoCAD Civil 3D version 2016), Special Provisions (Microsoft Word and PDF format), calculations, design worksheets, and other information for the City's files (PDF format). The Engineer's OPCC will be submitted as a Microsoft Excel Work Sheet and PDF electronic file.
- Plans will be submitted to all non-City owned utility agencies and plans, specifications and OPCC shall be submitted to NDEP (along with the State's revolving fund coordinator).

Task 4. BID PERIOD SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform the following tasks to provide bid phase support to the City. The below tasks provides for two (2) separate and independent bid solicitation periods that includes (1) Drilling, and (2) all the other design elements outlined in previous Tasks.

4.1 Pre-Bid Conference

Consultant shall:

- Attend and provide technical support at two pre-bid conferences to be held at the City offices.

4.2 Coordination/Clarifications

Consultant shall:

- Interpret and provide written responses to requests from the City for technical clarifications on construction contract documents during the bid period.

- Assist the City in responding to up to eight (8) questions. This level of effort is based upon the resolution that each issue shall require up to two (2) hours of engineer time to resolve.
- Respond to bidder's questions and the City will review the answers.

4.3 Addenda Preparation

Consultant shall:

- Prepare addenda to the construction documents as requested by the City. The City will sign and issue addenda to the plan holders. Up to three (3) addenda are anticipated.

Error and/or omissions that precipitate issuance of an addendum shall not be charged to the City whereby compensation will not be provided, and does not count toward the number of addenda budgeted for.

4.4 Conformed Plans and Specifications

Consultant shall:

- Prepare a conformed set of drawings and specifications for convenience of use during construction phase incorporating all addenda and changes addressed during the Bidding Phase and provide reproducible copies to the City.

Deliverables:

- Submit two (2) copies of full scale plans (22" x 34") and one (1) electronic copy (PDF).

Task 5. CONSTRUCTION MANAGEMENT SUPPORT SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform the following subtasks. The objective of this task is to provide description of the services that the Consultant shall provide during the construction phase. The scope is based upon a 20-month project schedule to complete the construction.

5.1 Project Management

Consultant shall:

- Establish internal project controls to monitor project status, budget, staffing, and schedule on an on-going basis. Budget and schedule status will be reviewed weekly.

5.2 Preconstruction Meeting

Consultant shall:

- Attend and provide technical support at one (1) pre-construction conference to be held at the City offices. Two (2) team staff shall be in attendance at the meeting.

5.3 Construction Progress Meetings

Consultant shall:

- Provide a Nevada-registered professional engineer having substantial responsibility with respect to the design and preparation of the plans and specifications for the project to attend weekly construction progress meetings during the proposed 20-month duration of construction. This level of effort is based upon a maximum of 48 construction progress meetings with up to two (2) hours for each meeting.
- Provide answers to technical questions related to the Consultant's design and construction documents from the City's staff.

5.4 Shop Drawing Review

Consultant shall:

- Review shop drawings necessary to assure the Contractor is providing materials in general conformed to the Contract Documents and understands the design intent.
- Review technical submittals, re-submittals, and samples provided by the Contractor during construction, at which submittals shall be marked (all copies), tracked in a submittal log, and promptly returned to the City's Construction Manager. This level of effort is based upon a maximum of fifty (50) shop drawings including re-submittals.
- Present written recommendations with respect to items submitted by the City for evaluation under a "substitution clause" of the construction contract, evaluate the items and revise the plans and specifications accordingly. This level of effort is based upon a maximum of three (3) "substitution clause" items.

5.5 Coordination/Clarifications

Consultant shall:

- Provide written responses to requests from the City for technical clarifications and information during construction of the project when such clarifications and needs for technical information are not the result of error or omission on the part of the Consultant.
- Assist the City in responding to Contractor's request for clarification and construction issues during the course of construction up to one issue per month.
- Prepare drawings, details, specifications, and cost estimates as required to support a maximum of six (6) construction change orders.

5.6 Well Drilling and Construction and Aquifer and Water Quality Testing

5.6.1 Well Drilling and Construction

Consultant shall:

- Provide a field geologist or engineer to observe the following construction activities:
 - Meeting driller during initial mobilization of equipment.
 - Check of contractor setup of drilling and noise control equipment.
 - Installation of conductor.
 - Observing drilling and logging the borehole soil samples through the screened interval only.
 - Observing casing and screen installation and gravel pack and cement placement.

- Checking daily during well development and confirming that development water quality meets the specification requirements.
- Casing alignment survey and final color well video.
- Abandonment of existing well.
- While onsite for designated activities, prepare (from resident field geologist or engineer) a daily log of construction activities to include construction quantities completed, personnel present, and other pertinent information.

Field geologist or engineer will not be present during these activities:

- Drilling/reaming of production well borehole above the screened interval which is assumed to require 5 days on 24-hour day shifts. Driller will communicate with HDR staff to advise of progress and Consultant will be present to log the borehole through the screened interval.

5.6.2 Aquifer Pump Testing and Water Quality Testing

After the well is constructed and developed, an aquifer test will be completed in the production well consisting of an 8-hour step-rate test and a 24 to 48-hour constant-rate pumping test followed by a 24 to 48-hour recovery test (per well). It is assumed that water level drawdown and recovery will be observed in the installed production well by the drilling contractor using electronic pressure transducer recording instruments (provided by the contractor) and also using a hand-held ground water level meter with data recorded manually.

Consultant shall:

- Obtain a water quality sample from the aquifer pump testing discharge water near the end of the test which will be submitted for laboratory analysis for Federal and State Drinking Water parameters. It is assumed that aquifer testing will require 5 days Consultant staff person time for 8-hours per day. Time in excess of these quantities is not included in the cost estimate.
- Analyze the aquifer pump testing data to determine the aquifer hydraulic parameters, well efficiency and specific capacity. The groundwater quality analytical results will be tabulated and summarized.

5.6.3 Well Drilling, Construction and Testing Report Preparation

Consultant shall:

- Prepare a report that describes the results of the tasks described above including pilot drilling, soil sampling and grain-size laboratory analysis, production well design and installation, aquifer pump testing and water quality sampling and analysis. The report will include a site plan layout showing well locations, boring log, well construction diagram, aquifer testing data and drawdown and recovery graph, aquifer hydraulic testing analytical results and summary table, soils laboratory analytical data summary table, water quality analytical data and summary table, depth to groundwater information. Recommendations will be provided detailing the well pumping rate, pump size, pump intake set depth and operation.

Deliverables:

- Draft and Final Report for Task 6.6 (electronic submittal).

5.7 Site Visits

When requested by the City, the Consultant shall:

- Perform site visits to observe the progress and general quality of the work. The level of effort is based upon up to twelve (12) requests for site visits.
- Provide brief written summaries of observations to the Construction Manager. This subtask shall not be construed to include the services of a Resident Project Engineer. The intent of these visits is to provide the City greater assurance that the work when completed shall be in general conformance with the construction documents prepared by the Consultant.

5.8 Pre-Final Inspection/Punch List

Consultant shall:

- Participate in conducting a pre-final inspection conducted by the City inspector and City Construction Manager to identify construction deficiencies for resolution by the Contractor. The Consultant shall prepare a list of construction deficiencies for resolution by the Contractor.

5.9 Final Inspection

Consultant shall:

- Participate in a final inspection conducted by the City inspector to determine that construction deficiencies noted on the punch list from subtask 8.7 have been corrected.
- Recommend to City whether issuance of certificate of substantial completion is appropriate at the time.

5.10 Record Drawings

Following completion of project construction and within sixty (60) days of receipt of all hard copy record drawing markups from the Contractor, the Consultant shall:

- Furnish to the City full size drawings, and a CD with all drawing files in Civil 3D ".dwg" format incorporating all addenda, substitutions, change orders, field changes and all deviations from the original Contract Documents identified during construction and as requested by the City.
- These documents shall constitute the "Record" contract documents. Each drawing sheet shall be dated and stamped to indicate "Record Drawings". The marked-up drawings, project files and documents shall be returned to the City along with one set of reproducible drawings.
- Furnish to the City a CD containing the imaged as-built "Record Drawings" for the project, imaged preliminary or final design reports, if applicable, and other imaged documents as requested by the City. The format for imaged files shall be Class IV, single image, 200 dpi tagged image file format (".tiff") or other format acceptable to the City. An index of all files shall also be provided.
- Provide up to 80 hours of engineers time to assist the City during the 12-month warranty period if corrective work is required.

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT**

**EXHIBIT "A-1"
SUPPLEMENTAL SERVICES**

HDR Engineering, Inc. (Consultant) shall provide Supplemental Services directly related to the Project when requested and authorized in writing to do so by the City. Compensation for Supplemental Services shall be made pursuant to Section VIII, B.1 (b). The Fee Schedule included as Exhibit "B" shall be in effect for the duration of the Project. Supplemental Services of the Consultant may include, but are not limited to the following:

SS 1.0 ADDITIONAL PROJECT MANAGEMENT SERVICES

Consultant shall:

- Provide additional project management services that were not identified in Exhibit "A". This work could include additional project management time, meetings, or agency coordination or permitting.

SS 2.0 ADDITIONAL ENGINEERING SERVICES

Consultant shall:

- Provide analysis and recommendations for elements not outlined in Exhibit "A", but is requested for by the City. Prepare Plans, Specs, and Engineer's Cost Estimate for items not outlined in Exhibit "A", but is requested for by the City. Coordinate and submit to all stakeholders for any work performed under this purview, not outlined in Exhibit "A", but is requested for by the City.

SS 3.0 ADDITIONAL BIDDING PHASE SUPPORT SERVICES

Consultant shall:

- Provide additional Bidding Phase Support Services in excess of those specified in Exhibit "A".

SS 4.0 ADDITIONAL CONSTRUCTION MANAGEMENT SUPPORT SERVICES

Consultant shall:

- Provide additional Construction Management Support Services in excess of those specified in Exhibit "A".

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT**

**EXHIBIT "B"
FEE SCHEDULE**

BASIC SERVICES FEE SCHEDULE

The fee for the Scope of Services to be provided by HDR Engineering, Inc. (Consultant) to the City is \$1,392,770.00 and is presented in Table 2. Tasks 1-4 will be billed on a lump sum basis and Task 5 will be billed on a time and materials basis.

Table 2 – Fee Breakdown

Task No.	Task	Fee
1	Project Management	\$ 116,130.00
2	Preliminary Design Phase	\$ 391,120.00
3	Design Phase	\$ 319,340.00
4	Bid Period Services	\$ 25,230.00
	Lump Sum Fee	\$ 851,820.00
5	Construction Management Services	\$ 340,950.00
	Time and Materials Fee	\$ 340,950.00
	Subtotal	\$ 1,192,770.00
	Supplemental Services	\$ 200,000.00
	Total	\$ 1,392,770.00

SUPPLEMENTAL SERVICES HOURLY RATES

HDR Engineering, Inc	
Classification	Hourly Rate (\$/Hour)
Technical Advisor	\$ 220.00
Project Manager	\$ 220.00
Technical Lead	\$ 210.00
Civil Engineer	\$ 185.00
Professional	\$ 160.00
Technician	\$ 125.00
Hydrogeologist Lead	\$ 160.00
Hydrogeologist	\$ 130.00
Project Controller	\$ 120.00
Administrator	\$ 90.00

TJK Consulting Engineers	
Classification	Hourly Rate (\$/Hour)
Principal Engineer	\$225.00
Director of Engineering	\$150.00
Project Director	\$135.00
Designer III	\$135.00
Designer II	\$100.00
Designer I	\$80.00
Drafter	\$55.00
Administration	\$50.00
Principal	\$200.00
Principal Engineer	\$225.00

Ninyo & Moore	
Classification	Hourly Rate (\$/Hour)
Principal Engineer/Geologist/Environmental Scientist/Certified Industrial Hygienist	\$165.00
Senior Engineer/Geologist/Environmental Scientist	\$150.00
Senior Project Engineer/Geologist/Environmental Scientist	\$145.00
Certified Asbestos Consultant, Lead Inspector/Assessor, Lead Project Monitor	\$145.00
Project Engineer/Geologist/Environmental Scientist	\$140.00
Senior Staff Engineer/Geologist/Environmental Scientist	\$125.00
Staff Engineer/Geologist/Environmental Scientist	\$120.00
Special Inspector (Concrete, Masonry, Structural Steel, Welding, and Fireproofing)	\$95.00
Grading Inspector (NICET/NAQTC)	\$90.00
Senior Field/Laboratory/Environmental Technician	\$80.00
Field/Laboratory Technician	\$76.00
Technical Illustrator/CAD Operator	\$70.00
Geotechnical/Environmental/Laboratory Assistant	\$60.00
Information Specialist	\$60.00
Data Processing, Technical Editing, or Reproduction	\$60.00
Rebar Locator (Micro Covermeter/Pachometer)	\$160/day
Concrete Coring Equipment (includes technician)	\$120/day
Water Level Meter Usage	\$40/day

KCI Technologies	
Classification	Hourly Rate (\$/Hour)
Test Hole – non paved surface	\$500.00 per test hole
Test Hole – paved surface	\$650.00 per test hole
Test Hole in excess of 7 feet (depth)	\$90.00 per additional foot
Utility Designating & Investigation (QL-B)	\$0.90 per linear foot
Utility Designating & Investigation (QL-C & D)	\$0.45 per linear foot
Utility Designating Overhead	\$0.45 per linear foot
Utility Designating 2 Man Crew, Truck & Equipment	\$275
Utility Designating 1 Man Crew, Truck & Equipment	\$225
Project Engineer	\$198
Project Manager	\$165
Field Technician V	\$102
Field Technician IV	\$87
Field Technician III	\$72
Field Technician II	\$48
Field Technician I	\$45
Encroachment Permits (varies by entity)	Actual Cost plus PM time
Subcontractors (survey, traffic control)	Cost Plus 12%
Flowable Backfill – (CLSM)	Cost plus 12%

DIRECT EXPENSES

Direct Expenses	
Description	Rate
Mileage	\$0.56/mile
Reproduction	At Cost
Permit Fees	At Cost
Other Direct Costs	At Cost

Direct expenses (non-salary costs) shall be billed at actual cost without markup, as verified by receipt, invoice or other documentation acceptable to the City.

These hourly billing rates for the Consultant and Subconsultants shall remain in effect for the duration of the Agreement and include direct salaries, overhead and profit.

PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT
EXHIBIT "C"
PRELIMINARY PROJECT SCHEDULE

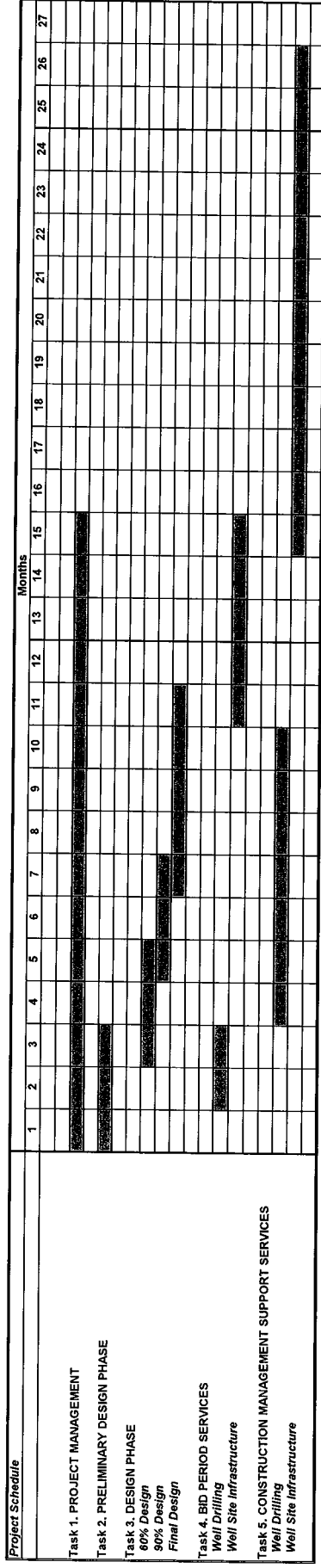


EXHIBIT B

First Amendment

Please see the attached page(s).

A: CIPW0069-ADWSRF (\$114,436.67)

CIPW0069-CDWSRF (\$114,436.67)

CIPW0069-DDWSRF (\$114,436.66)

E: 450450

O: UD-CIP Design/Const Mgt

AMENDMENT NO. 1**TO THE****PROFESSIONAL ENGINEERING SERVICES AGREEMENT****FOR THE****WELL REHABILITATION/IMPROVEMENT PROJECT**

This Amendment No. 1, made and entered into effective September 7, 2022, by and between the City of North Las Vegas, a Nevada municipal corporation, (the "City"), and HDR Engineering, Inc. a Nebraska corporation (hereinafter referred to as "Consultant"), amends the Professional Engineering Services Agreement, hereinafter referred to as "Agreement" for the Well Rehabilitation/Improvement Project (hereinafter referred to as "Project"), for the services and fees as hereinafter described.

W I T N E S S E T H:

Whereas, on October 3, 2018, the City and Consultant entered into the Agreement for the Project; and

Whereas, the City and Consultant desire to amend the Agreement with Amendment No. 1 to include additional compensation for additional Construction Management Support Services for the Project.

Now, therefore, in consideration of the promises and terms contained herein, the parties agree to amend the Agreement as follows:

- 1) Section VIII Subsection A of the Agreement shall be deleted in its entirety and replaced with the following:

A. TOTAL COMPENSATION

1. The City shall pay the Consultant an amount for each of the tasks described in Exhibit "A" as follows:

Basic Services**Lump Sum Amount**

1. Project Management	Not to exceed	\$116,130.00
2. Preliminary Design Services	Not to exceed	\$391,120.00
3. Final Design Services	Not to exceed	\$319,340.00
4. Bid Phase Support	Not to exceed	\$25,320.00

Time & Materials Amount

5. Construction Management Support Services	\$340,950.00
Subtotal	\$1,192,770.00

Time & Materials Amount

Supplemental Services	Not-to-exceed	\$200,000.00
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Time & Materials Amount

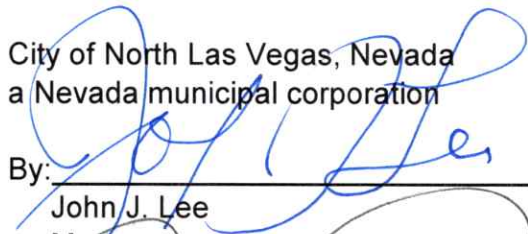
6. Additional Construction Management Support Not to exceed	\$343,310.00
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<u>Grand Total Not-to-Exceed</u>	\$1,736,080.00
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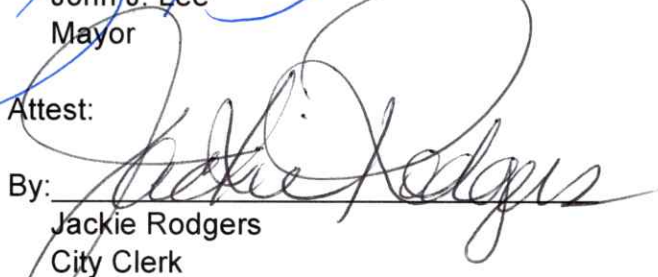
- 2) In all other respects, the parties confirm and re-affirm the terms and provisions of the Agreement.

In Witness Whereof, this Amendment No. 1 is hereby executed as of the date first above set forth.


City of North Las Vegas, Nevada
a Nevada municipal corporation

By: 
John J. Lee
Mayor

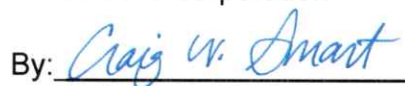
Attest:

By: 
Jackie Rodgers
City Clerk

Approved as to Form:

By: 
Micaela Rustia Moore
City Attorney

HDR Engineering, Inc.
a Nebraska corporation

By:  8/1/2022
Craig Smart, P.E.
Managing Principal
Associate Vice President



Scope of Work for Construction Management Services, Wells Rehabilitation Project.

Tasks include:

- Review the progress schedule, schedule of shop drawing submissions, submittal lists and schedule of values prepared by the Contractor.
- Prepare agendas for and manage meetings as required for the project. Meetings to include preconstruction conferences, progress meetings, job conferences, and other Project related meetings with stakeholders. Take and distribute minutes of all such meetings.
- Monitor submittals as sent to the City or the design professional, as appropriate, which require review and/or approval.
- Review Requests for Information, consolidate input from engineer or City as appropriate.
- Evaluate requests for change by the Contractor and make recommendations concerning each to the City.
- Evaluate pay applications and provide recommendations.
- Establish and implement a quality assurance program to monitor the Contractor's work. Schedule inspections and sampling and testing per specification requirements.
- Keep and provide logs of submittals, RFI's, and change orders.
- Inspections and testing will be performed by City of North Las Vegas.

Services to be provide for duration of project, with construction beginning in August of 2022 and a duration of approximately 12 months. Services should be full-time through initial project start-up, and then part-time for duration of project. Consultant to invoice monthly for services provided on an hourly basis.

Table of Hourly Rates:

Classification	Rates
Senior Construction Manager	\$255.60
Assistant Construction Manager	\$135.00
Project Administration	\$90.00
Project Controller	\$120.00

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT**

This Professional Engineering Services Agreement (as such may be modified, amended or supplemented, the "Agreement") is made and entered into as of the 3rd day of October, 2018, by and between the City of North Las Vegas, a Nevada municipal corporation, (the "City"), and HDR Engineering, Inc., a Nebraska corporation, (hereinafter referred to as "Consultant").

RECITALS:

1. The City intends to abandon Silver Mesa Well (APN 139-075-990-01), Sun Valley Well (APN 139-077-010-04), and Elstner Estate Well (APN 138-127-100-02) and construct a replacement production well at each of the respective sites (hereinafter referred to as the "Improvements").
2. The City desires to obtain quality professional services of the Consultant to perform the design, bid support and construction support services for the Well Rehabilitation/Improvement Project as described in Exhibit "A". (hereinafter referred to as the "Project") for construction of the Improvements; and
3. The Consultant's scope of service and compensation have been arrived at after meaningful negotiations between the City and the Consultant.

NOW, THEREFORE, in consideration of the above recitals and mutual promises contained herein, the parties hereto agree to the following terms, conditions and covenants set forth in Sections I through XII hereof.

SECTION I - RESPONSIBILITY OF CONSULTANT

In addition to any other responsibilities of Consultant set forth in this Agreement, Consultant shall have the following responsibilities:

- A. The Consultant shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all services furnished by the Consultant, by Consultant's subconsultants, and by any of the principals, officers, employees and agents of Consultant or any subconsultant under this Agreement. In performing these services, Consultant shall follow practices consistent with generally accepted professional engineering standards of care. The Consultant shall, without additional compensation, promptly correct and revise any errors or deficiencies in its design, drawings, specifications, reports and other services, or in any portion of the Project performed by Consultant's subconsultants. Approval by the City of any products or services furnished by Consultant shall not in any way relieve the Consultant of responsibility for the professional and technical accuracy of its services.

- B. Consultant shall assign Craig Smart, P.E., whose Nevada Professional Engineer license number is 14579 as the Principal-in-Charge ("Principal-in-Charge"), and Angela Mackinnon, P.E. whose Nevada Professional Engineer license number is 18452 as the Project Manager ("Project Manager"). All of the services specified by this Agreement shall be performed by the Project Manager, or by Consultant's associates, employees and subconsultants under the personal supervision of the Project Manager. Should the Principal-in-Charge or the Project Manager be unable to complete his or her responsibility for any reason, the Consultant shall notify the City in writing, and within four (4) calendar days thereafter, nominate a replacement for City approval, in its reasonable discretion, who has an equivalent amount of experience performing the same type of services as required for the Project. An approved replacement shall be assigned to the Project within ten (10) calendar days.
- C. In accordance with NRS 338.140, the Consultant shall not produce a design and/or specification for the Project which would limit the bidding, directly or indirectly, to any one specific concern unless a unique or novel product application is required to be used in the public interest, or only one brand or trade name is known to the City. The City shall be notified of and must pre-approve any sole source proposals.
- D. Consultant and any subconsultant shall furnish City with a preliminary draft of any proposed correspondence to any federal, state or other regulatory agency for the City's review and approval at least seven (7) calendar days prior to mailing such correspondence.
- E. The Consultant agrees that its officers, partners, employees, and subconsultants will cooperate with the City in the performance of services under this Agreement and will be available for consultation with City at such reasonable times with advance notice as to not conflict with other responsibilities.

SECTION II - RESPONSIBILITY OF CITY

- A. The City will cooperate with Consultant in the performance of services under this Agreement and will be available for consultation with Consultant at such reasonable times with advance notice as to not conflict with their other responsibilities.
- B. The services to be performed by Consultant under this Agreement are subject to periodic review by the City. For those documents submitted to the City by the Consultant with regard to the Project, the City will examine and respond in writing to the Consultant within twenty-eight (28) calendar days of receipt of such documents. It is understood that City comments upon review of the Consultant's documents do not relieve Consultant from the responsibility for the professional and technical accuracy of all work delivered under this Agreement.

- C. The City shall assemble selected data and information related to the Project and provide same to the Consultant on or prior to the kick-off meeting. The data and information to be provided by the City is identified as follows:

1. Drafting and plan sheet layout standards;
2. Standard "front-end" contract documents and general conditions;
3. Cover sheet format and City logo in AutoCAD Civil 3D format;

The Consultant shall be responsible for updating this data and information during the Project development process, and shall be responsible for acquiring supplemental data and information which the Consultant deems necessary.

- D. The City will be responsible for performing the work noted below and upon completion will provide the results thereof to the Consultant:

1. Obtaining preliminary title reports on those properties involving right-of-way acquisition, permanent easement or temporary construction access;
2. Preparing property acquisition parcel maps, and writing legal descriptions for property and easement acquisition;
3. Preparing right-of-way plans to illustrate the overall property ownership and acquisition aspects of the Improvements;
4. Obtaining right-of-way and easements;
5. Printing of the construction bidding document package;
6. Completing the competitive bidding procedures for public works projects; and
7. Performing construction management, inspection and quality assurance during construction of the Improvements.

SECTION III - SCOPE OF SERVICES

Services to be performed by the Consultant shall consist of the Basic Services described in Exhibit "A", and may consist of those Supplemental Services described in Exhibit "A-1" of this Agreement.

SECTION IV - CHANGES TO SCOPE OF SERVICES

- A. The City may at any time, but only by written order, make changes within the general scope of this Agreement and in the services or work to be performed. If such changes cause a significant increase or decrease in the Consultant's cost or time required for performance of any services under this Agreement, the Parties shall formally amend this Agreement. Any claim of Consultant for adjustment

under this clause must be asserted in writing within thirty (30) calendar days from the date of receipt by the Consultant of notification of changes by the City, or such claim shall be deemed waived by Consultant and Consultant will be deemed to have agreed to the changes without modification of the compensation or time of performance hereunder.

- B. No additional compensation shall be paid, and no increase in the time of performance shall be awarded, to the Consultant for changes in scope of work without the prior written authorization of the City to proceed with such changes.
- C. No additional compensation shall be paid to Consultant for additional costs or delay due to the negligence or intentional acts of Consultant or any subconsultant or any of the officers, employees, or agents of Consultant or any subconsultant.

SECTION V - SUPPLEMENTAL SERVICES OF CONSULTANT

Supplemental Services will be provided only as specifically authorized in writing by the City's representative and may consist of any or all of the work described in Exhibit "A-1". Any other significant change of work determined by the City as essential to efficient and timely completion of the Project shall require a formal Amendment to this Agreement as provided by Section IV of this Agreement.

SECTION VI - SUBCONSULTANTS

Consultant agrees to include in all professional service subcontracts in connection with performance of the terms and obligations imposed under this Agreement provisions in substantially the following form:

- A. Consultant agrees to pay the subconsultant when Consultant is paid for the subconsultant's portion of the work by the City and, upon written request by the City, to obtain and provide to City lien releases from the subconsultant for such payment.
- B. The subconsultant does not have any rights against the City.
- C. The subconsultant agrees to be bound by all terms, conditions and obligations of Consultant under this Agreement. Consultant shall provide a copy of this Agreement to each subconsultant.
- D. City has the right in its reasonable discretion to approve every subconsultant prior to such subconsultant's performance of any portion of the Project.
- E. The term "subconsultant" as used herein, also means a sub-subconsultant.

SECTION VII - TERM OF AGREEMENT

This Agreement commences upon the date this Agreement is approved by the City in a formal City Council proceeding and shall end one (1) year after the date the City makes final payment to the Consultant for services rendered under this Agreement, unless this Agreement is terminated by the City.

SECTION VIII - COMPENSATION AND TERMS OF PAYMENT

A. TOTAL COMPENSATION

1. The City shall pay the Consultant an amount for each of the tasks described in Exhibits "A" and "A-1" as follows:

<u>Basic Services</u>	<u>Lump Sum Amount</u>
1. Project Management	\$ 116,130
2. Preliminary Design Services	\$ 391,120
3. Final Design Services	\$ 319,340
4. Bid Phase Support Services	\$ 25,230

	<u>Time & Materials Amount</u>
5. Construction Management Support Services	\$ 340,950
Subtotal	\$ 1,192,770

	<u>Time & Material Amount</u>
Supplemental Services	Not-to-exceed \$ 200,000
<u>Grand Total Not-to-Exceed</u>	\$ 1,392,770

B. TERMS OF PAYMENT

1. Subject to the City's right to dispute any charges, the City shall make monthly progress payments to the Consultant for services performed as follows:
 - (a) With respect to progress payments for Basic Services completed, the City shall pay that percentage of the lump sum amount for each task (as set forth in Subsection VIII.A.1 above) in direct proportion to the percentage of completion of such task, less amounts paid by the City to Consultant in prior progress payments.

With respect to progress payments for Time & Materials Basic Services completed, the City shall make payments for completed services on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B".

- (b) With respect to Supplemental Services that are authorized in writing by the City's representative, the City shall make progress payments for completed Supplemental Services on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B".

2. Payment to the Consultant under Section VIII.A.1 shall be made within thirty (30) calendar days of the date City receives each invoice provided by the Consultant to the City, provided that such invoice is complete, correct, and undisputed by the City, and that it contains the following information:

- (a) With respect to progress payments for Basic Services, the Consultant shall prepare and submit to the City a written invoice indicating the percentage of completion of each Basic Services task set forth in Section VIII.A.1 during the invoice period. The invoice amount shall be supported with a written summary noting the various tasks worked on during the invoice period.

With respect to progress payments for Time & Materials Basic Services, the Consultant shall prepare and submit to the City a written invoice of costs for the work completed during the invoice period. The invoice amount shall be determined on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B" and shall be supported by backup documentation detailing labor costs and other expenses directly related to the authorized work.

- (b) For payment of Supplemental Services authorized in writing by the City's representative, the Consultant shall prepare and submit to the City a written invoice of costs for the work completed during the invoice period. The invoice amount shall be determined on a Time and Material basis in accordance with the Fee Schedule provided in Exhibit "B", and shall be supported by backup documentation detailing labor costs and other expenses directly related to the authorized work.

3. The City shall have fourteen (14) calendar days after receipt of an invoice to dispute any or all of the charges on the invoice. Undisputed amounts shall be paid to the Consultant within thirty (30) calendar days of the date City receives the invoice. Disputed amounts shall be resolved through the Dispute Resolution mechanism in Section XII.O.

4. If the City fails to pay the Consultant an undisputed amount within thirty (30) calendar days after the date the City receives the invoice, the City may be assessed one-half of one percent ($\frac{1}{2}\%$) of the undisputed amount each month, not to exceed \$1,000 total for the Project.
5. Billings shall be submitted during the first week of each month for work performed during the preceding month. Invoices shall conform to the format provided by the City.

SECTION IX - TIME OF PERFORMANCE

Consultant shall commence work immediately following written notice to proceed by the City. Work shall be completed in accordance with the Project Schedule attached as Exhibit "C", as it may be amended from time to time by written agreement between the Consultant and the City.

If the Consultant's performance of services is delayed, Consultant shall notify the City's representative in writing of the reasons for delay and prepare a revised schedule for performance of services and submit the revised schedule to the City's representative. If the Consultant is delayed, the City shall have the right to retain from monthly payments up to ten percent (10%) of subsequent invoices until such time as the Consultant has complied with the schedule or presented an acceptable plan for compliance with the schedule.

No additional time shall be given to Consultant for delay due to the negligence or intentional acts of Consultant or any subconsultant or any of the officers, employees, or agents of Consultant or any subconsultant.

SECTION X - AUDIT: ACCESS TO RECORDS

- A. The Consultant shall maintain books, records, documents, and other evidence directly pertinent to performance under this Agreement in accordance with generally accepted accounting principles and practices. The Consultant shall also maintain the financial information and data used by the Consultant in the preparation or support of the invoices, and a copy of the cost summaries and invoices submitted to the City. The City, or any of its duly authorized representatives shall have access to such books, records, documents, and other evidence for the purpose of inspection, audit and copying. The Consultant will provide proper facilities for such access and inspection.
- B. Audits conducted pursuant to this provision shall be in accordance with generally accepted auditing standards and established procedures and guidelines for the reviewing or audit agencies.

- C. The Consultant agrees to the disclosure of all information and reports resulting from access to records pursuant to paragraph "A" above, to any Project funding agency provided that the Consultant is afforded the opportunity for an audit exit conference and an opportunity to comment and submit any supporting documentation on the pertinent portions of the draft audit report.
- D. Records pursuant to paragraph "A" above shall be maintained and made available during performance under this Agreement and until three (3) years from date of final payment for the Project. In addition, those records which relate to any dispute resolution, litigation or appeal, or the settlement of claims arising out of such performance, or costs or items to which an audit exception has been taken, shall be maintained and made available until three (3) years after the date of resolution of such dispute, litigation, appeal, claim, or exception. This Section X.D. shall survive the completion of the Project and the termination or expiration of this Agreement.
- E. Public Records Act. Pursuant to NRS 239.010, each and every document provided to the City is a "public record" open to inspection and copying by any person, except for those documents otherwise declared by law to be confidential. The City shall not in any way be liable to Consultant for the disclosure of any public record. In any event the City is required to defend an action with regard to a public records request for documents submitted by Consultant, Consultant agrees to indemnify, hold harmless, and defend the City from all damages, costs, and expenses, including court costs and attorney fees, in any action or liability arising under or because of the Nevada Public Records Act, NRS 239.010. This Section X.E. shall survive the completion of the Project and the termination or expiration of this Agreement.
- F. The Consultant agrees to include language substantially similar to the language of paragraphs "A" through "E" of this section in all Consultant subcontracts directly related to performance of services specified in this Agreement which are in excess of \$10,000.00.

SECTION XI - REPRESENTATIONS AND WARRANTIES

Consultant hereby represents and warrants for the benefit of City, in addition to any other representations and warranties made in this Agreement, with the knowledge and expectation of City's reliance thereon, as follows:

- A. Consultant is a duly formed and validly existing corporation and is in good standing pursuant to the laws of the State of Nevada, and has the full power, authority and legal right to execute, deliver and perform under this Agreement.

- B. The execution and delivery of this Agreement, the consummation of the transactions provided for herein, and the fulfillment of the terms hereof on the part of Consultant will not result in a breach of any instrument to which Consultant is a party or by which Consultant is bound or of any judgment, decree or order of any court or governmental body or any law, rule or regulation applicable to Consultant.
- C. The execution, delivery and performance of this Agreement and the taking of all other lawful actions necessary to consummate the Project contemplated hereunder, by the persons executing, delivering and performing the same on behalf of Consultant, have been duly and validly authorized (and by their execution hereof or of any document delivered in connection with the Project contemplated hereunder such persons individually represent and warrant that they are so authorized), and this Agreement and the other Agreements and instruments contemplated hereby, constitute legal, valid and binding obligations of Consultant, enforceable in accordance with their respective terms.
- D. No consent, approval or authorization of any governmental authority or private party is required in connection with the execution of this Agreement by Consultant.
- E. The Consultant's Project Manager and Principal-in-Charge are each a duly licensed Engineer with the State of Nevada, and each has a license that is in full force and effect. Consultant has obtained any and all licenses, certificates and permits that are required to be obtained by Consultant by the Nevada Revised Statutes and the Nevada Administrative Code, and by any other law, rule, regulation or ordinance applicable to Consultant and to the performance of the Project by Consultant.
- F. Consultant is duly licensed and authorized to do business in the City.
- G. Consultant is a sophisticated and qualified Consultant, whose personnel possess the level of professional expertise and experience that is necessary to properly perform the Project within the required time period, with an appropriate level of diligence, skill and care, and pursuant to the terms, specifications and conditions of this Agreement. Consultant has the necessary personnel, equipment, tools, supplies, materials, and facilities to properly perform the Project within the required time period, with an appropriate level of diligence, skill and care, and pursuant to the terms, specifications and conditions of this Agreement.
- H. Consultant is financially solvent, able to pay its debts as they mature, and possessed of sufficient working capital to complete the Project within the time period required by this Agreement, and to perform its obligations under this Agreement.
- I. Consultant shall require that each subconsultant performing any portion of the Project:

1. Is duly formed, in good standing, and authorized to do business in the State of Nevada;
 2. Is a duly licensed or registered engineer, as the case may be, with the State of Nevada, and such license or certificate of registration is in full force and effect;
 3. Has obtained any and all licenses, certificates and permits that are required to be obtained by subconsultant by the Nevada Revised Statutes and the Nevada Administrative Code, and by any other law, rule, regulation or ordinance applicable to subconsultant and to the performance of any part of the Project by subconsultant;
 4. Is duly licensed and authorized to do business in the City; and
 5. Shall comply with all laws, rules, regulations, and ordinances, as such may be amended, supplemented or modified from time to time, that are applicable to subconsultant and any portion of the Project performed by subconsultant.
- J. This Agreement may be signed in counterparts, each of which shall be deemed to be an original and all such counterparts together shall constitute one and the same original. Facsimile or electronic signatures shall be binding on the parties hereto as if they were original signatures.

The representations and warranties made by Consultant herein shall survive the completion of the Project and the termination or expiration of the Agreement.

SECTION XII - MISCELLANEOUS PROVISIONS

A. SUSPENSION:

City may suspend performance by Consultant under this Agreement for such period of time as City, in its sole discretion may prescribe, by providing written notice to Consultant at least seven (7) calendar days prior to the date on which City wishes to suspend such performance. Upon such suspension, City shall pay Consultant compensation based on percentage of Project completion, earned until the effective date of suspension less all previous payments. Consultant shall not perform further work under this Agreement after the effective date of suspension until receipt of written notice from City to resume performance. In the event that City suspends performance by Consultant for any cause other than the error or omission of the Consultant for an aggregate period in excess of thirty (30) calendar days, Consultant shall be entitled to an equitable adjustment of the compensation payable to Consultant under this Agreement to reimburse Consultant for additional costs occasioned as a result of such suspension of performance by City. In no event will the City be liable to the Consultant for more than \$2,000.00.

B. TERMINATION:

The City may terminate this Agreement, with or without cause, upon fourteen (14) calendar days prior written notification of the termination to the Consultant. Notification to the Consultant of such termination shall be sent by the City in accordance with Section XII.V.

In the event of termination, the City agrees to pay the Consultant the reasonable value for all work and services performed to the date of termination in accordance with the Section entitled "Compensation and Terms of Payment" of this Agreement.

C. FISCAL FUNDING OUT:

The City reasonably believes that sufficient funds can be obtained to make all payments during the term of this Agreement. Pursuant to NRS Chapter 354, if the City does not allocate funds to continue the function performed by Consultant obtained under this Agreement, this Agreement will be terminated when appropriate funds expire in accordance with Section XII.B.

D. OWNERSHIP OF DOCUMENTS:

All plans, drawings, specifications, reports, photographs, studies, permits, estimates, digital mapping, CAD files, mylar, or other like documents given, prepared or assembled by the Consultant or any subconsultant which are related to the performance of this Agreement are deemed to be the property of the City, except to the extent such is not allowed by the Nevada Administrative Code or the Nevada Revised Statutes.

E. INSURANCE:

Consultant shall procure and maintain, and shall cause each subconsultant to procure and maintain, at its own expense, during the entire term of this Agreement, the following insurances:

1. Workers' Compensation Insurance. Such insurance must be provided by an insurance company authorized to provide workers' compensation insurance in Nevada by the Nevada Department of Business and Industry, Division of Insurance. Such insurance must protect Consultant and City from employee claims based on Project related sickness, disease or accident.
2. Comprehensive General Liability (bodily injury and property damage) insurance with respect to Consultant's agents and vehicles assigned to the prosecution of work under this Agreement in a policy limit of not less than \$1,000,000 for combined single limit per occurrence. Consultant's General Liability insurance policies shall be endorsed as to include the City as an additional insured.

3. Professional Liability insurance, for the protection from claims arising out of performance of professional services caused by a negligent act, error, or omission for which the insured is legally liable; such Professional Liability insurance will provide for coverage in an amount of not less than \$1,000,000 for each occurrence and \$2,000,000 in the aggregate for the period of time covered by this Agreement. Consultant will provide City thirty (30) calendar days' notice in writing of any cancellation of, or material change in, the above described policy.
4. The Consultant's Comprehensive General Liability policy shall automatically include or be endorsed to cover Consultant's contractual liability to the City, to waive subrogation against the City, its officers, agents, servants and employees, and to provide that the City will be given thirty (30) calendar days' notice in writing of any cancellation of, or material change in, the policy.
5. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer and licensed by the State of Nevada. All deductibles and self-insured retentions shall be fully disclosed in the Certificate of Insurance. No deductible or self-insured retention may exceed \$250,000 without the written approval of the City.
6. Certificates indicating that such insurance is in effect shall be delivered to the City before work is begun under this Agreement. If the Consultant is underwritten on a claims-made basis, the retroactive date shall be prior to or coincident with the date of this Agreement, and the Certificate of Insurance shall state that coverage is claims-made and the retroactive date. Consultant shall provide the City annually with a Certificate of Insurance as evidence of such insurance. It is further agreed that the Consultant and/or Insurance Carrier shall provide the City with 30-day advance written notice of policy cancellation of any insurance policy required to be maintained by Consultant.

F. INDEMNITY:

Notwithstanding any of the insurance requirements herein above set forth or limits of liability set forth therein, Consultant shall defend, protect, indemnify and hold harmless the City, its officers, agents and employees from any liabilities, claims, damages, losses, expenses, proceedings, suits, actions, decrees, judgments, reasonable attorney fees, and court costs which the City suffers, and/or its officers or employees suffer, as a result of, or arising out of, the intentional or negligent acts or omissions of the Consultant, its subconsultants, or agents or anyone employed by the Consultant or its subconsultants or agents, in fulfillment or performance of the terms, conditions or covenants of this Agreement. This Section XII.F. shall survive the completion of the Project and the termination or expiration of this Agreement until such time as the applicable statutes of limitation expire.

G. ASSIGNMENT:

This Agreement shall inure to the benefit of, and be binding upon, the Parties hereto and their respective successors and assigns. The Consultant shall not assign, sublet or transfer its interest in this Agreement without the prior written approval of the City representative. Nothing contained herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be a party hereto.

H. WAIVER:

No consent or waiver, express or implied, by either party to this Agreement or of any breach by the other in the performance of any obligations hereunder shall be deemed or construed to be a consent or waiver to or of any other breach by such party hereunder. Failure on the part of any party hereto to complain of any act or failure to act on the other party or to declare that other party in default hereunder, irrespective of how long such failure continues, shall not constitute a waiver of the rights of such party hereunder. Inspection, payment, or tentative approval or acceptance by the City or the failure of the City to perform any inspection hereunder, shall not constitute a final acceptance of the work or any part thereof and shall not release Consultant of any of its obligations hereunder.

I. DESIGNATION OF REPRESENTATIVE:

The Director of Public Works or the Director's authorized representative is hereby designated as the City's representative with respect to the work to be performed under this Agreement. Said representative shall only have the authority to transmit instructions, receive information, and interpret and define the City's policies and decisions with respect to the services of the Consultant.

J. CONSULTANT'S EMPLOYEES:

The Consultant shall be responsible for maintaining satisfactory standards of employee competency, conduct and integrity, and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary. In the event that Consultant fails to remove any employee from the contract work whom the City deems incompetent, careless or insubordinate, or whose continued employment on the work is deemed by the City to be contrary to the public interest, the City reserves the right to require such removal as a condition for the continuation of this Agreement.

K. INDEPENDENT CONTRACTOR:

It is hereby expressly agreed and understood that in the performance of the services provided herein, the Consultant and any other person employed by Consultant hereunder shall be deemed to be an independent contractor and not an agent or employee of the City. This Agreement is not intended to create, and

shall not be deemed to create, any partnership, joint venture or other similar business arrangement between City and Consultant.

L. APPLICABLE LAW:

This Agreement shall be construed and interpreted in accordance with the laws of the State of Nevada.

M. COMPLIANCE WITH LAWS:

In connection with the performance of work under this Agreement, the Consultant agrees not to discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, sexual orientation or age, including, without limitation, with regard to 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, without limitation, apprenticeship.

The Consultant further agrees to insert this provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

Consultant shall comply with laws, rules, regulations, and ordinances applicable to the work performed by Consultant with respect to the Project, as such laws, rules, regulations and ordinances may be modified, supplemented or amended from time to time.

N. PROHIBITION AGAINST CONTINGENT FEES:

The Consultant warrants that no person or entity has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage or contingent fee. For breach of this warranty, the City shall have the right to annul this Agreement without liability or, in its discretion, to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

O. DISPUTE RESOLUTION:

Disputes concerning standards of performance, time of performance, scope of work, compensation or terms specified in the Agreement shall be resolved in the following manner:

1. The City's representative and the Consultant's Project Manager will endeavor to conduct good faith negotiations in an effort to resolve any and all disputes in a timely manner.
2. If any disputes between the Parties remain unresolved after thirty (30) calendar days, the City's representative and the Consultant's Project

Manager shall, within fourteen (14) calendar days, prepare a brief, concise written report summarizing the:

- (a) basis for the dispute,
- (b) negotiations accomplished and results thereof, and
- (c) current status of all relevant unresolved issues.

Copies of each written summary shall be exchanged between the City's representative and the Consultant's Project Manager, and provided to the City's Public Works Director and the Consultant's Principal-in-Charge. Within thirty (30) calendar days thereafter, the City's Public Works Director, or his designee, and the Consultant's Principal-in-Charge will meet to resolve the dispute. A written record of these negotiations will be made. The record will summarize:

- (a) all issues of dispute,
- (b) the resolutions to resolved issues, and
- (c) unresolved issues, if any.

The written record will be reviewed by the City's Public Works Director or his designee, and the City's Public Works Director or his designee, will render a determination regarding such dispute.

3. If the Consultant disagrees with the determination of the City's Public Works Director, or his designee, the Consultant may only initiate an action in the Eighth Judicial District Court in and for Clark County to resolve such dispute. The City retains the right to all remedies available in law or equity. The Parties agree that no dispute under this Agreement shall be submitted to or resolved through arbitration or mediation.

P. ATTORNEY'S FEES:

In the event any action is commenced by either Party against the other in connection herewith, the prevailing Party shall be entitled to its reasonable costs and expenses, including reasonable attorney's fees, as determined by the court. This Section XII.P shall survive the completion of the Project and the termination or expiration of this Agreement.

Q. SITE INSPECTION:

Consultant represents that Consultant has visited the Project location and is satisfied as to the general condition thereof and that the Consultant's compensation as provided for in the Agreement is just and reasonable compensation for performance hereunder including reasonably foreseen and

foreseeable risks, hazards and difficulties in connection therewith based on such above-ground observations.

R. SEVERABILITY:

In the event that any provision of this Agreement shall be held to be invalid or unenforceable, the remaining provisions of this Agreement shall remain valid and binding on the Parties hereto.

S. AMENDMENTS:

This Agreement may only be modified by a written Amendment that is executed by both Parties hereto.

T. FINAL INTEGRATION:

This Agreement is fully integrated and constitutes the entire Agreement and understanding between the Parties concerning the subject matter of this Agreement. This Agreement supersedes all other oral and written negotiations, Agreements and understandings of any and every kind relating to the subject matter of this Agreement.

U. CONSTRUCTION:

In the event of any dispute regarding any provision of this Agreement, the terms of this Agreement shall not be construed more strongly against or in favor of either party. The parties acknowledge that each has participated equally in the negotiation and drafting of this Agreement.

V. NOTICE:

Any notice required to be given hereunder shall be deemed to have been given when sent to the party to whom it is directed by personal service, hand delivery or U.S. certified mail, return receipt requested, at the following addresses:

To City: Allan Fajardo, P.E., PTOE
City of North Las Vegas
2250 Las Vegas Boulevard North, Suite 610
North Las Vegas, NV 89030

To Consultant: Angela MacKinnon, P.E.
HDR Engineering, Inc.
6750 Via Austi Parkway, Suite 350
Las Vegas, NV 89119

W. HEADINGS:

The headings of the various Sections of this Agreement have been inserted only for convenience, and shall not be deemed in any manner to modify or limit any of the provisions of this Agreement, or to be used in any manner in the interpretation of this Agreement.

X. CONFIDENTIALITY:

Consultant shall treat all information relating to the Project and all information supplied to the Consultant by the City as confidential and proprietary information of the City and shall not permit its release by Consultant's employees to other parties or make any public announcement or release without the City's prior written authorization. Consultant shall also require subconsultants and vendors to comply with this requirement.

In Witness Whereof, the Parties have caused this Agreement to be executed the day and year first above written.

City of North Las Vegas, Nevada
a Nevada municipal corporation

By: _____

John J. Lee
Mayor

HDR Engineering, Inc.
a Nebraska corporation

By: _____

Craig W. Smart
Craig Smart, P.E.
Managing Principal

Attest:

By: _____

Catherine A. Raynor, MMC
City Clerk

Approved as to Form:

By: _____

Micaela Rustia Moore
City Attorney

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT**

**EXHIBIT "A"
SCOPE OF SERVICES**

INTRODUCTION

The City of North Las Vegas (City) will enhance and upgrade the existing wells at Elstner Estates, Sun Valley, and Silver Mesa. With the exception of the Elstner Estates well, the other two existing well site are currently not operational due to various issues associated with such well sites. City requires assistance from HDR Engineering, Inc. (Consultant) to assess, provide viable and industry standard recommendations, design, assist in soliciting bids, and perform engineering construction management support that will rehabilitate or replace the associated supporting infrastructure (pumps, controls, pipes, etc.) at the well sites as specified herein. The wells will be designed and constructed to provide a long-term reliable water supply with acceptable water quality.

PROJECT DESCRIPTION

The Project includes three well sites: Sun Valley Well (addressed 3532 Valley Dr), Silver Mesa Well (addressed W. Alexander Rd), and Elstner Well (addressed 5311 W. Gowan Rd). The Project plans will include an overall assessment of the site conditions, general notes and drawings, survey, geotechnical, civil, electrical, instrumentation and controls (I&C) drawings, in one construction bid package. The Project is generally described as follows:

- Drilling a new well on the existing sites;
- New well pump, motor and shaft, piping, valving, and connection to the existing water distribution system;
- Abandonment of existing/non-operational wells;
- Installation of new concrete well pad foundation;
- New electrical equipment;
- New chlorination system;
- New instrumentation and controls; and,
- Site restoration to match existing adjacent landscape.

In addition, an independent bid procurement process will be performed that will package the design and specifications needed for the drilling activities prior to the release of the items described above, and as further described in the various Tasks outlined below.

STANDARDS

The Project shall be designed in accordance with the following local, state, and federal adopted standards and procedures, unless indicated otherwise.

- City of North Las Vegas Building Safety Division.

- Nevada Administrative Code (NAC) 445A.
- Nevada Revised Statute 534 – Underground Water and Wells.
- Nevada Division of Water Resources.
- American Water Works Association (AWWA) Standards.
- City of North Las Vegas Water Service District Rules and Regulations, current edition.
- Uniform Design and Construction Standards for Water Distribution Systems, Clark County Nevada, current edition.
- Uniform Standard Specifications for Public Works' Construction Off-site Improvements, Clark County Area, Nevada, current edition.
- Uniform Standard Drawings for Public Works Construction Off-site Improvements, Clark County Area, Nevada, Volume I and Volume II, current editions.
- Hydrologic Criteria and Drainage Design Manual, Clark County Regional Flood Control District, current edition.
- City of North Las Vegas Title 17.

Consultant acknowledges and agrees that the above list of reference materials is not comprehensive and shall verify and add to the list as needed to complete the Project to industry care and standards.

PROJECT ASSUMPTIONS

Project Assumptions relevant to this Scope of Services include:

- The existing well buildings will remain to house the electrical, controls and disinfection equipment.
- The existing well pumps will be removed and wells abandoned per NAC 445A requirements.
- The new well pumps will be outside (without enclosure) with above grade discharge piping and control valves. Pump to waste piping will tie into the existing energy dissipation structures, which flow overland by gravity to storm drain.
- The hypochlorite injection to the new well will either be outside on the above grade piping, or underground in a vault.
- The existing well discharge piping inside and outside of the well buildings will be removed and disposed, or select items may be reused.
- Electrical service capacity at each well is adequate.
- Utility relocations by other Agencies are not required.
- Temporary Construction Easements are not required.
- The City will provide boundary survey and topo for the project, and will prepare and file any required supplemental survey related documents, to generally include easements, and records of survey. City has confirmed that points of diversion surveys will not be required. Survey related services will be performed by the City.
- No drainage study is required, with the sole exception of FEMA site mapping, as may be required, to satisfy the well permit submittal to NDEP. Per NAC 445A.66915, the new well casing must be a minimum of 18-inches above the 100-year flood plain.

- No cultural resource or environmental assessments will be performed under this Scope of Services.
- The opinions of probable construction costs (OPCCs) will be prepared in accordance with AACE International Standards, AWWA Standards, and review of recent bid tabs for similar work in the Las Vegas Valley. Consultant's opinions, recommendations and assessments are limited by a) the accuracy and completeness of information upon which it may reasonably rely, b) schedule constraints or scope limitations, c) unknown or variable site or other conditions, d) other factors beyond Consultant's control. Any estimates as to construction costs are limited by the lack of control over financial and/or market conditions, including the future price of labor, materials, and prospective bidding environments and procedures. Consultant does not warrant the accuracy or completeness of its Services to the extent impacted by these limitations and City should limit its reliance on the Services in like manner.
- Transient pressure surge analysis is not included in this Scope of Services.
- City will provide hydraulic grade information for the water distribution system for the pump design. Network hydraulic modeling is not included in this Scope of Services.
- The new wells are assumed to be in an area of similar geology as the existing wells and the water quality of the aquifer is assumed to be similar to the existing wells. The new wells will be drilled to the same approximate depth as the original well, assuming a production rate of 2,500-2,600 gpm with a maximum to 3,000 gpm and a groundwater level drawdown similar to the existing wells (data provided by City). Scope is based on first drilling and testing wells and then designing supporting infrastructure (pumps, collector pipe, etc.) based on the drawdown and well yield from the installed and tested wells. It is assumed that there is no additional drawdown that will occur from operation of other wells in the project area. It is assumed that pre-design groundwater quality data (pre-treatment) is available to characterize the groundwater quality as necessary for proper well design.
- The Drilling contractor will also be responsible for contracting with soils laboratory and water quality laboratory (samples will be collected and submitted by Consultant).

PURPOSE

The purpose of Exhibit "A" is to establish the scope for the following:

1. Project Management - Services related to managing the project.
2. Preliminary Design Services - Services related to preparation of preliminary design outlining viable options with the costs associated with each option.
3. Final Design Services - Services related to preparation of construction contract and Bid Documents and OPCC for the improvements.
4. Bidding Phase Support Services - Services intended to support the City during public bidding of the improvements.
5. Construction Management Support Services - Services intended to support the City during construction activities to monitor the Contractor's compliance with the construction contract.

SUBCONSULTANTS

The following Subconsultants contracted through the Consultant will be employed for various functions of the Project delivery:

- Electrical and Instrumentation and Controls: TJK Consulting Engineers, Inc.
- Geotechnical Engineer: Ninyo and Moore
- Potholing: KCI Technologies, Inc.

With the City having no contract obligations with the noted subconsultants; the work they perform shall be monitored and reviewed by the Consultant. The sub-consultant's work does not relieve the Consultant of the accuracy, quality, and timeliness in this Agreement.

Consultant shall notify the City five (5) working days noting the reason(s) for removing or replacing one of the named subconsultants. For such replacement requests, Consultant shall submit the qualifications of the alternate company with an understanding that the City may elect not to accept said firm.

SCOPE OF SERVICES

Task 1. PROJECT MANAGEMENT

1.1 Project Management and Coordination

Consultant shall:

- Monitor project status, budget, and scheduling;
- Oversee the work performed by the subconsultants;
- Prepare monthly invoices;
- Schedule progress meetings;
- Perform quality assurance/quality control (QA/QC) activities
- Coordinate Project related issues with City staff; and
- Monitor the work performed to be in compliance with this Agreement.

Deliverables:

- Monthly invoice.
- Monthly Project Status Updates

1.2 Project Management Plan and Kick-off Meeting

Consultant shall:

- Prepare a project management plan (PMP) for distribution to all City and Consultant project team members. The PMP will consist of the project scope, schedule, and deliverables; and list the members of the project team with addresses, telephone numbers, and email addresses.
- Conduct a project kick-off meeting with City staff. The kick-off meeting is intended to introduce key Project personnel, define areas of responsibilities and communication protocols, review the Scope of Services and schedule for the Project, review the timing and intent of Project deliverables, review procedures and schedules, and establish procedures for communicating potential changes in the work or schedule.

Deliverables:

- Kick-off Meeting Agenda and copies for distribution at Kick-off Meetings.
- Kick-off Meeting Minutes.
- One (1) copy of the PMP for each City and Consultant project team member.
- The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting

1.3 Project Monitoring, Administration, and Status Reporting

Consultant shall:

- Establish internal project controls to monitor project status, budget, staffing, and schedule on an on-going basis. Budget and schedule status will be reviewed weekly.
- Prepare monthly status reports (1-2 pages) within five (5) working days after the close of the Consultant's accounting month. The status reports will describe the work completed during the previous month, anticipated work for the following month, current budget and schedule status, and project issues requiring discussion or resolution.
- Prepare monthly invoices to the City and execute and administrate subconsultant contracts.
- The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.

Deliverables:

- Monthly Invoice and monthly Status Report.

1.4 Project Status Meetings

Consultant shall:

- Meet with City staff monthly to review project status. Meetings shall be at the City's office and will be attended by the Consultant's Project Manager, Project Engineer and other key personnel as determined to be necessary.
- Prepare an agenda for each of the progress meetings.
- Prepare meeting minutes (bulleted format) to document key information items and decisions made. An action item list will be generated from each meeting, as required.

A total of seven (7) 1-hour project status meetings over the duration of the project design are assumed for budgeting purposes.

Deliverables:

- Progress Meeting Agenda and copies for distribution at Progress Meetings.
- Progress Meeting Minutes.
- The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.

1.5 Project QA/QC Activities

Consultant shall:

- Perform internal QA/QC activities to obtain expert guidance on project methodology, review project deliverables, and perform checks of engineering calculations and OPCC.

- Form an internal Technical Advisory Committee (TAC) composed of 2 senior level engineers who are not working on the Project and would serve as independent advisors experienced in well design and well infrastructure pumping, piping, treatment and electrical systems. These team members will review project deliverables and provide technical input. The TAC will meet formally at least two (2) times during the course of the project.

1.6 Agency Coordination and Permitting

1.6.1 Utility and Agency Coordination

Consultant shall:

- Coordinate with utilities and agencies having facilities within the limits of or adjacent to the project throughout the duration of the project, this includes attendance to related meetings. Utilities and agencies to be contacted will consist of:
 - City of North Las Vegas departments, including but not limited to Utilities, Public Works, Flood Control, Traffic, Planning, and Real Property;
 - NV Energy;
 - Nevada Division of Environmental Protection;
 - SWG;
 - Sprint;
 - Embarq; and
 - other non-City owned utility agencies that maybe impacted or affected by the Project

Deliverables:

- Project Plans to be sent for review to the Utility Companies at each design level (30%, 90%, and Final Design); and Bid Documents with impacted utilities approval signatures.
- Agenda. The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.

1.6.2 Project Permits

Consultant shall:

- Identify all permits needed for the Project.
- Prepare all correspondences and permit applications for the regulating agencies and assist the City in obtaining required permits. The City shall pay for all permit fees.
- Submit project documents to Nevada Division of Environmental Protection (NDEP) with application for permit to construct as a modification to the existing CNLV community water system.
- Coordinate with NDEP, and will submit plans and design reports to NDEP for review.
- Review existing piping and compare it against current AWWA A100 requirements. If the existing pipes are found to be outside of current requirements but still acceptable for usage in a potable water system, an exception will be prepared for NDEP per NAC 445A.6665.

- Review NAC 445A.66855, and subsequent associated sections, for wells will be constructed in accordance with current configuration and location standards.
- Provide a permit matrix during the design process which will document the permits needed for the Project. A summary matrix of required permits shall be prepared by the Consultant and included in the Preliminary and Final Design Report.

Deliverables:

- Matrix of required permits;
- Correspondence; and
- Preparation of permit applications.

1.6.3 State Revolving Fund (SRF) Loan Coordination

Consultant shall:

- Coordinate and document correspondence about SRF funding with NDEP.
- Review deliverables from the perspective of requirements to comply with SRF conditions. This includes:
 - American Iron and Steel. Project specifications to be developed use iron and steel products that are produced in the United States.
 - Disadvantaged Business Enterprises (DBEs). Good faith efforts to utilize DBEs to meet the goals listed.
 - Project Sign. Additional project sign is required to indicate part of SRF Program.
 - Davis-Bacon Wage Rates. Project specifications to be developed with Prevailing Rates.

Deliverables:

- Correspondence with NDEP;
- Checklist of SRF requirements for Contract documents at key deliverables.

Task 2. PRELIMINARY DESIGN PHASE

The purpose of the preliminary design phase is to review existing data and prepare basemapping, evaluate alternatives, update the preliminary project schedule through construction, prepare the preliminary design for the well drilling and well infrastructure and site design.

2.1 Data Acquisition and Review

Consultant shall:

- Identify pertinent documents and data that provide information required for the Project development. This includes available hydrogeologic data including well logs, pumping records, ground water level and ground water quality monitoring data, aquifer testing information, topographic maps, and regional geologic and hydrogeologic reports. City will supply required information.

The Consultant shall be entitled to reasonably rely upon the information and data provided by the City or obtained from generally accepted sources within the industry without independent verification except to the extent such verification is expressly included in the Scope of Services.

2.2 Site Surveying and Field Investigations

Consultant's subsurface utility investigation subconsultant shall:

- Provide services to locate identify key utilities within the well sites. It is anticipated that 5 potholes will be required on each well site for a total of 15 potholes. Additional potholes may be authorized as part of additional services.
- Conduct one geotechnical boring per site.
- Conduct site visits. It is estimated that there will be 4 meetings in the field with City staff.

The City shall survey each well site and provide the following information to the Consultant:

- Existing building envelopes, fence lines, curb and gutter, utility boxes and valves, above grade piping, concrete structures, drain inlets, electrical transformers, overhead power and communication lines.
- Utility pothole locations, both horizontal and vertical.
- Geotechnical borings.
- Ground shots as directed by Consultant.
- Survey controls (horizontal and vertical).
- Survey CAD files.

2.3 Geotechnical Investigations

Consultant's geotechnical subconsultant shall:

- Provide geotechnical engineering services including exploratory work, laboratory and field testing, and professional guidance in tests to be made at test locations based on preliminary drawings and designs and including professional interpretations of exploratory and test data. The field investigations include performing one boring to a depth of up to fifteen (15) feet and laboratory testing to produce geotechnical design recommendations, which includes providing design recommendations for footings and piping.
- Prepare an initial Geotechnical Data Report (GDR) presenting the data results of the exploratory work, laboratory testing and site conditions found by report research.
- Prepare a Geotechnical Design Memorandum (GDM) containing recommendation and interpretation of data to be used during design.

Deliverables:

- Draft GDR,
- Final GDR,
- Draft GDM, and
- Final GDM.

2.4 Alternatives Evaluations

Consultant shall assess three (3) alternatives for each site outlining the summary of such work in a Technical Memoranda (TM) to include the following:

- TM No. 1: Evaluate Construction Packaging and Well Design Alternatives
- TM No. 2: Evaluate Site Layout Alternatives

- TM No. 3: Evaluate the Reuse of Existing Infrastructure
- TM No. 4: Handling of Wastewater

2.4.1 TM No 1: Evaluate Construction Packaging Alternatives and Well Design Alternatives

Consultant shall:

- Evaluate the construction packaging and well design methods to make the determination of what information to utilize to design the well, well casing materials, project sequencing, and construction procurement method for the well design. The project scope is based on preparing two sets of bid documents. One set of bid documents will be for the well drilling, and another set of bid documents for site infrastructure for all 3 well sites.

2.4.1.1 Well Design Methodology Alternatives

Consultant shall:

- Evaluate following three (3) well design methodology alternatives:
 - Alternative A - Well Design Based on Existing Casing/Screen Logs and Soil Information. Review existing boring logs. Design in Bid Documents is based on the existing casing/screen logs and soils information. This method could only be used if the soils information from the prior well construction methods is available and at the required quality to design the well screen to provide maximum yield without sand production.
 - Alternative B - Drill Small Diameter Pilot Borings to Production Zone Samples as a Pre-Design Task. Drill a pilot boring (5 to 6-inch diameter) to terminal depth early-on to obtain the needed soils information using a (smaller) truck-mounted reverse-rotary drilling rig that can work on either 8 to 12-hour(daytime) shifts to avoid night noise or 20 to 24-hour shifts using sound walls.
 - Alternative C - Obtain Production Zone Soils Information as Part of Production Well Drilling.
 - The first phase of drilling will include a 12 to 16 inch diameter boring to terminal depth using a (larger) flooded-reverse-rotary drilling rig. Production zone samples would be analyzed and a well design developed and advanced to City and drilling contractor for expedited review and approval. The Drilling contractor would then submit a design to a well materials vendor to expedite delivery of the well materials (casing and screen) and start the drilling to ream out the borehole to the full diameter. During the period the well is designed and the well materials are being manufactured the drill rig would have to remain on-site in standby with a crew that ensures the boring remains open.

2.4.2 TM No 2: Evaluate Site Layout Alternatives

Consultant shall:

- Develop up to 2 viable well layout alternatives for each site. This task includes identifying alternatives for the well discharge piping and providing conceptual arrangement of chemical and electrical infrastructure. Alternatives will include comparison of OPCC (Class 5 level) for the key items displayed.

2.4.3 TM No 3: Evaluate the Reuse of Existing Infrastructure

Consultant shall:

- Perform a brief visual assessment at each of the well sites, consisting of one site visit with a civil/mechanical and electrical engineer. A City representative will be present to offer insight as to how equipment is functioning, and the City's potential desire for reuse.

Existing equipment and infrastructure to be evaluated for reuse is expected to include the following:

- a. Chlorination equipment
- b. Well building (to house equipment and electrical)
- c. Discharge valves and piping (to the extent possible)
- d. Electrical and controls equipment including:
 - i. MCC
 - ii. Motors
 - iii. VFD
 - iv. Level controls
 - v. SCADA

2.4.4 TM No. 4: Handling of Wastewater

Consultant shall:

- Prepare a TM to document up to two (2) alternatives for handling of wastewater developed on site (wastewater as will be produced from floor drains in buildings, from well-flushing/maintenance activities, or from chemical injection system flushing/maintenance activities). Alternatives are likely to include an on-site storage tank which could be vacuumpumped out and hauled off-site for treatment, or a permanent connection to an adjacent underground municipal sanitary sewer pipe network.

2.5 Well Drilling Work Plan

2.5.1 Well Drilling Work Plan (Including Field Health and Safety Plan)

Consultant shall:

- Prepare a brief Work Plan that describes the well locations, drilling and construction methods, locations, and a draft detailed work schedule. The intent of the Work Plan is to provide a brief document that describes the proposed project so that there is a written understanding between City and the Consultant that can be used to drive the project workflow. The Work Plan will provide a written understanding of the hydrogeologic and groundwater quality conditions at each site based on existing conditions. The Work Plan will describe:
 - Existing conditions of site layout and infrastructure at the properties.
 - A description and order of proposed drilling operations.
 - A summary of the well drilling and well construction methods.
 - Waste soils and water management procedures.
 - Well abandonment procedures.
 - Details on hours of operation and field oversight.
 - Sound and light restriction requirements.
 - Permits to be acquired.

- Field documentation and other details necessary for planning and execution of the project.
- Developed as a draft, submitted to the City for review and comment, and finalized to reflect comments provided by City. The document will contain the following:
 - Details on the project work (see list above).
 - Field data collection and daily reporting.
 - Management Plan (including contact information for the project manager and field team).
 - The project schedule, showing the schedule for each task.
 - Field health and safety plan.

Deliverables:

- Draft Work Plan
- Final Work Plan

2.5.2 Well Drilling Technical Specification

Consultant shall:

- Prepare a Technical Specification that can be used to solicit cost bids for well drilling/construction, well abandonment and aquifer testing from licensed well drilling firms with experience in large-diameter production wells. The specification will include both pre-design drilling and production well drilling tasks, with assumptions and take-off quantity assumptions provided for well construction materials, and an outlined schedule. The Consultant will review bids and provide input to City on the contractor qualifications and whether the bids were responsive to the specification requirements. The well drilling specification will be prepared as a standalone contract for bids.

The City will provide the boilerplate front end specifications. The Consultant will prepare the special provisions that are supplemented with new technical specifications. The City will advertise and contract with the well drilling contractor.

Deliverables:

- Draft Well Drilling Technical Specification;
- Final Well Drilling Technical Specification; and
- Contractor bid review comments (by email).

2.5.3 Obtain Soils Production Zone Gradation Information for Production Well Design

Consultant shall:

- Obtain Soils Production Zone Gradation Information for Production Well Design. This includes the following elements:
 - Water well screen and gravel pack is designed specifically to match the production zone gradation at various depths to provide maximum yield capacity and maximum well efficiency and minimizing sand entrance into the screen. If detailed soil lithology information is available from the prior well construction reports, this step may be able to be eliminated and it may be possible to proceed directly to well design. If however, this soils information is not available a drilling program will be implemented to obtain soil samples for laboratory analysis of soil gradation.

- Consultant field staff will be present during drilling to coordinate access, observe field conditions, develop daily reports and quantity estimates, collect formation samples and submit them for laboratory grain-size analysis and conduct field logging of the borehole and well construction. Once the borehole is drilled and soil samples are analyzed for grain-size distribution using the ASTM Hydrometer and Sieve method, Consultant will then prepare a well design and cost estimate, submit to City for review and to driller for acceptance and to provide final cost estimating.
- There are two options to obtain the production zone gradation data necessary to design the well screen and sand pack (collect soil samples using pilot borings or collect soil samples during production well drilling). The scope of work and cost estimate assumes soil samples will be collected using pilot borings. Consultant will consult with City and develop an approach that meets with the City project needs.

Deliverables:

- Field observation and quantity reports.

2.6 Preliminary Design

Consultant shall:

- Provide preliminary design services to a 30% Design Level which consist of furnishing plans, preliminary specifications list, OPCC, and a Preliminary Design Report to the City for review, approval and printing. The plans will be based on the survey information compiled under task 2.2.
- Prepare plans based on City CAD standards (provided by the City). The Consultant's drawings standards will be used as supplemental standards where necessary.
- Prepare a preliminary specifications list that includes a list of the City's boilerplate "front ends", general conditions, special conditions and the special provisions which are the technical specifications.
- Prepare an OPCC to a Class 4 level.
- Prepare a Draft Preliminary Design Report (PDR) that includes the following:
 - Executive Summary;
 - Introduction;
 - Summary of data review, site review inventory citing existing utilities, topographic features, geotechnical analysis, site photographs, and a Utility Matrix;
 - Recommendation for construction schedule, phasing, and scheduling;
 - Alternatives Evaluations;
 - Design Criteria;
 - OPCC;
 - Permit matrix;
 - Summary of subsurface utility investigations;
 - Meeting minutes and pertinent correspondence, including coordination with City divisions and other agencies (Appendix);
 - Preliminary specifications list;
 - List of proposed instrumentation and equipment;

- Preliminary SCADA control descriptions;
- Well draw down, hydraulic calculations and other documents used in the development of the PDR; and
- Well Design Work Plan.
- Meeting minutes and pertinent correspondence, including coordination with City and other agencies (Appendix).

Preliminary Design Drawings List, but is not limited to, the following:

General

Cover Sheet
Key Map, Drawing Index, Abbreviations and Symbols
Project Notes

Civil

Site Plan (x3)
Demolition Plan (x3)
Civil Plans (x3)
Grading Plan (x3)
Details

Structural

General Notes and Details
Foundation Plan, and Sections

Electrical

Power Supply Details
Single Line Diagrams
Control System Architecture Details

Instrumentation and Controls

P&IDs

Deliverables:

- Ten (10) hard copies of the Draft PDR.
- One (1) electronic PDF copy of the Draft PDR.
- Plans will be submitted to all non-City owned utility agencies and plans and OPCC shall be submitted to NDEP (along with the State's revolving fund coordinator).

Task 3. DESIGN PHASE

3.1 60% Design

Consultant shall:

- Provide design services to a 60% Design Level which consist of development of plans and specifications for equipping the wells and associated site improvements for each well site, and review during a 60% Design Workshop.
- Address comments received at the Preliminary Design level and will develop the 60% design. The City and Consultant will meet for a 60% Design Workshop to review and discuss progress. The Consultant will conduct an "over-the-shoulder" workshop review to streamline the schedule and to convey to City the status of the design. No formal submittal will be provided for the City to review prior to, or after, the Workshop.

- Prepare meeting minutes that will summarize any design considerations or plan revisions.
- Prepare 60% design drawings in accordance with project standards. The design plans will be set up on a 22" x 34" standard ANSI plan size template with the City's title block.
- Prepare an OPCC to a Class 3 level.

The current version of the "front end" legal and contractual sections including Invitation to Bid, Instruction to Bidders, Bid Form and General Conditions will be provided by the City at the 60% Design Workshop.

Deliverables:

- Responses to Preliminary Design comments;
- Workshop Agenda;
- Workshop Meeting Minutes; and
- The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.

3.2 90% Design

Consultant shall:

- Provide design services to a 90% Design Level which consist of submittal of plans, specifications, and Final Design Report for review and approval.
- Address comments received during the 60% Design Workshop and will develop 90% Design level design documents. The Consultant will submit 90% Design documents and meet with the City during a workshop to review. The Consultant will prepare meeting minutes that will summarize any design considerations or plan revisions.
- Conduct a 90% Design review workshop with the City to discuss the City's review comments. A two (2) hour meeting is budgeted with attendance by the Project Manager, Technical Lead, and Project Engineer.
- Prepare and submit 90% Design drawings in accordance with project standards. The design plans will be set up on a 22" x 34" standard ANSI plan size template with the City's title block.
- Prepare the "front end" contract using the City's standard contract documents and special provisions, to a 90% Design level.
- Prepare an OPCC to a Class 2 level.
- Prepare a Final Design Report that updates the Preliminary Design Report.

Drawing List includes, but is not limited to, the following:

DRAWING LIST

No.	Sheet No.	Description
General		
1	G-01	Cover Sheet, Vicinity Maps, Drawing Index
2	G-02	Abbreviations
3	G-03	General Legend and Symbols
4	G-04	Overall Site Plan/ Key Plan

No.	Sheet No.	Description
Demolition		
5	D-01	Sun Valley Well Demo Plan
6	D-02	Sun Valley Well Demo Sections
7	D-03	Silver Mesa Well Demo Plan
8	D-04	Silver Mesa Well Demo Sections
9	D-05	Elstner Well Demo Plan
10	D-06	Elstner Well Demo Sections
Civil		
11	C-01	Sun Valley Survey & Geotechnical Plan
12	C-02	Sun Valley Grading & Civil Plan
13	C-03	Silver Mesa Survey & Geotechnical Plan
14	C-04	Silver Mesa Grading & Civil Plan
15	C-05	Elstner Survey & Geotechnical Plan
16	C-06	Elstner Grading & Civil Plan
17	C-10	Civil Details
Structural		
18	S-01	General Notes and Special Inspection Notes
19	S-02	Well Foundation Plan and Details
Mechanical		
20	M-01	Sun Valley Well Piping Plan & Section
21	M-02	Sun Valley Disinfection Plan
22	M-03	Silver Mesa Well Piping Plan & Section
23	M-04	Silver Mesa Disinfection Plan
24	M-05	Elstner Well Piping Plan & Section
25	M-06	Elstner Disinfection Plan
26	M-10	Mechanical Details
Electrical		
27	E-01	Legend & Abbreviations - 1
28	E-02	Legend & Abbreviations - 2
29	E-03	Sun Valley Single Line Diagram
30	E-04	Sun Valley Power Plan
31	E-05	Silver Mesa Single Line Diagram
32	E-06	Silver Mesa Power Plan
33	E-07	Elstner Single Line Diagram

No.	Sheet No.	Description
34	E-08	Elstner Power Plan
35	E-10	Details
Instrumentation & Control		
36	I-01	Legend and Abbreviations
37	I-02	Sun Valley Well & Chemical Feed
38	I-03	Silver Mesa Well & Chemical Feed
39	I-04	Elstner Well & Chemical Feed

Deliverables:

- Eight hard copies of the plans in 11"x17" format.
- Two hard copies of the plans in 22"x34" media size.
- Eight hard copies of the specifications.
- Eight hard copies of the OPCC.
- Ten hard copies of the Final Design Report.
- Electronic PDF copies of the complete submittal.
- Responses to PDR comments related.
- Workshop agenda.
- Workshop meeting minutes.
- Agenda. The agenda will be provided to the City two (2) days in advance of the scheduled meeting with the meeting minutes released three (3) working days from said meeting.
- Plans will be submitted to all non-City owned utility agencies and plans, specifications and OPCC shall be submitted to NDEP (along with the State's revolving fund coordinator).

3.3 Final Design

Consultant shall:

- Provide design services to a Final Design Level which consist of submittal of plans and specifications for review and approval.
- Respond to and address comments received during the 90% Design review, and will not advance the design beyond that which the comments require. The Consultant will submit the For-Bid Design documents, design drawings (which will be set up on 22"x34" standard ANSI plan size template with the City's title block) and the Bid Documents.
- Address comments to the "front end" documents and the special provisions to generate a For-Bid document set and provide the Bid Documents.
- Prepare an OPCC to a Class 1 level.

- Incorporate all comments on the 100% Design submittal into the final (mylar) submittal. Plan set mylars and copies sealed in accordance with NRS 625, sealed Special Provisions, including Bid Proposal and Class 1 OPCC shall be submitted to the City. The Engineer's Class 1 OPCC broken out by bid item will be submitted as a Microsoft Excel Work Sheet electronic file. The Consultant will coordinate with utility companies and obtain utility signatures on the design plan cover sheet and elsewhere in the plans as required. Consultant shall submit a pre-mylar bond set of the final plans before preparing mylars for this project.

Deliverables:

- Eight hard copies of the plans in 11"x17" format.
- Two hard copies of the plans in 22"x34" format.
- Eight hard copies of the specifications, and preliminary opinion of probable construction cost to the City for review and comment.
- Electronic PDF copies of the complete submittal.
- Schedule and Utility Submittal Matrix Update.
- Responses to PDR comments related to the Plans and Specifications and OPCC.
- One set of full size (22" X 34") mylar plan sheets stamped and signed by a Nevada P.E. which includes the cover sheet containing all approval signatures.
- One (1) set of original Special Provisions (unbound) stamped and signed by a Nevada P.E.; One (1) copy of the Final OPCC in a Bid Schedule Format.
- The Consultant will furnish to the City electronic copies of the plans (AutoCAD Civil 3D version 2016), Special Provisions (Microsoft Word and PDF format), calculations, design worksheets, and other information for the City's files (PDF format). The Engineer's OPCC will be submitted as a Microsoft Excel Work Sheet and PDF electronic file.
- Plans will be submitted to all non-City owned utility agencies and plans, specifications and OPCC shall be submitted to NDEP (along with the State's revolving fund coordinator).

Task 4. BID PERIOD SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform the following tasks to provide bid phase support to the City. The below tasks provides for two (2) separate and independent bid solicitation periods that includes (1) Drilling, and (2) all the other design elements outlined in previous Tasks.

4.1 Pre-Bid Conference

Consultant shall:

- Attend and provide technical support at two pre-bid conferences to be held at the City offices.

4.2 Coordination/Clarifications

Consultant shall:

- Interpret and provide written responses to requests from the City for technical clarifications on construction contract documents during the bid period.

- Assist the City in responding to up to eight (8) questions. This level of effort is based upon the resolution that each issue shall require up to two (2) hours of engineer time to resolve.
- Respond to bidder's questions and the City will review the answers.

4.3 Addenda Preparation

Consultant shall:

- Prepare addenda to the construction documents as requested by the City. The City will sign and issue addenda to the plan holders. Up to three (3) addenda are anticipated.

Error and/or omissions that precipitate issuance of an addendum shall not be charged to the City whereby compensation will not be provided, and does not count toward the number of addenda budgeted for.

4.4 Conformed Plans and Specifications

Consultant shall:

- Prepare a conformed set of drawings and specifications for convenience of use during construction phase incorporating all addenda and changes addressed during the Bidding Phase and provide reproducible copies to the City.

Deliverables:

- Submit two (2) copies of full scale plans (22" x 34") and one (1) electronic copy (PDF).

Task 5. CONSTRUCTION MANAGEMENT SUPPORT SERVICES

Upon receipt of written authorization by the City, the Consultant shall perform the following subtasks. The objective of this task is to provide description of the services that the Consultant shall provide during the construction phase. The scope is based upon a 20-month project schedule to complete the construction.

5.1 Project Management

Consultant shall:

- Establish internal project controls to monitor project status, budget, staffing, and schedule on an on-going basis. Budget and schedule status will be reviewed weekly.

5.2 Preconstruction Meeting

Consultant shall:

- Attend and provide technical support at one (1) pre-construction conference to be held at the City offices. Two (2) team staff shall be in attendance at the meeting.

5.3 Construction Progress Meetings

Consultant shall:

- Provide a Nevada-registered professional engineer having substantial responsibility with respect to the design and preparation of the plans and specifications for the project to attend weekly construction progress meetings during the proposed 20-month duration of construction. This level of effort is based upon a maximum of 48 construction progress meetings with up to two (2) hours for each meeting.
- Provide answers to technical questions related to the Consultant's design and construction documents from the City's staff.

5.4 Shop Drawing Review

Consultant shall:

- Review shop drawings necessary to assure the Contractor is providing materials in general conformed to the Contract Documents and understands the design intent.
- Review technical submittals, re-submittals, and samples provided by the Contractor during construction, at which submittals shall be marked (all copies), tracked in a submittal log, and promptly returned to the City's Construction Manager. This level of effort is based upon a maximum of fifty (50) shop drawings including re-submittals.
- Present written recommendations with respect to items submitted by the City for evaluation under a "substitution clause" of the construction contract, evaluate the items and revise the plans and specifications accordingly. This level of effort is based upon a maximum of three (3) "substitution clause" items.

5.5 Coordination/Clarifications

Consultant shall:

- Provide written responses to requests from the City for technical clarifications and information during construction of the project when such clarifications and needs for technical information are not the result of error or omission on the part of the Consultant.
- Assist the City in responding to Contractor's request for clarification and construction issues during the course of construction up to one issue per month.
- Prepare drawings, details, specifications, and cost estimates as required to support a maximum of six (6) construction change orders.

5.6 Well Drilling and Construction and Aquifer and Water Quality Testing

5.6.1 Well Drilling and Construction

Consultant shall:

- Provide a field geologist or engineer to observe the following construction activities:
 - Meeting driller during initial mobilization of equipment.
 - Check of contractor setup of drilling and noise control equipment.
 - Installation of conductor.
 - Observing drilling and logging the borehole soil samples through the screened interval only.
 - Observing casing and screen installation and gravel pack and cement placement.

- Checking daily during well development and confirming that development water quality meets the specification requirements.
- Casing alignment survey and final color well video.
- Abandonment of existing well.
- While onsite for designated activities, prepare (from resident field geologist or engineer) a daily log of construction activities to include construction quantities completed, personnel present, and other pertinent information.

Field geologist or engineer will not be present during these activities:

- Drilling/reaming of production well borehole above the screened interval which is assumed to require 5 days on 24-hour day shifts. Driller will communicate with HDR staff to advise of progress and Consultant will be present to log the borehole through the screened interval.

5.6.2 Aquifer Pump Testing and Water Quality Testing

After the well is constructed and developed, an aquifer test will be completed in the production well consisting of an 8-hour step-rate test and a 24 to 48-hour constant-rate pumping test followed by a 24 to 48-hour recovery test (per well). It is assumed that water level drawdown and recovery will be observed in the installed production well by the drilling contractor using electronic pressure transducer recording instruments (provided by the contractor) and also using a hand-held ground water level meter with data recorded manually.

Consultant shall:

- Obtain a water quality sample from the aquifer pump testing discharge water near the end of the test which will be submitted for laboratory analysis for Federal and State Drinking Water parameters. It is assumed that aquifer testing will require 5 days Consultant staff person time for 8-hours per day. Time in excess of these quantities is not included in the cost estimate.
- Analyze the aquifer pump testing data to determine the aquifer hydraulic parameters, well efficiency and specific capacity. The groundwater quality analytical results will be tabulated and summarized.

5.6.3 Well Drilling, Construction and Testing Report Preparation

Consultant shall:

- Prepare a report that describes the results of the tasks described above including pilot drilling, soil sampling and grain-size laboratory analysis, production well design and installation, aquifer pump testing and water quality sampling and analysis. The report will include a site plan layout showing well locations, boring log, well construction diagram, aquifer testing data and drawdown and recovery graph, aquifer hydraulic testing analytical results and summary table, soils laboratory analytical data summary table, water quality analytical data and summary table, depth to groundwater information. Recommendations will be provided detailing the well pumping rate, pump size, pump intake set depth and operation.

Deliverables:

- Draft and Final Report for Task 6.6 (electronic submittal).

5.7 Site Visits

When requested by the City, the Consultant shall:

- Perform site visits to observe the progress and general quality of the work. The level of effort is based upon up to twelve (12) requests for site visits.
- Provide brief written summaries of observations to the Construction Manager. This subtask shall not be construed to include the services of a Resident Project Engineer. The intent of these visits is to provide the City greater assurance that the work when completed shall be in general conformance with the construction documents prepared by the Consultant.

5.8 Pre-Final Inspection/Punch List

Consultant shall:

- Participate in conducting a pre-final inspection conducted by the City inspector and City Construction Manager to identify construction deficiencies for resolution by the Contractor. The Consultant shall prepare a list of construction deficiencies for resolution by the Contractor.

5.9 Final Inspection

Consultant shall:

- Participate in a final inspection conducted by the City inspector to determine that construction deficiencies noted on the punch list from subtask 8.7 have been corrected.
- Recommend to City whether issuance of certificate of substantial completion is appropriate at the time.

5.10 Record Drawings

Following completion of project construction and within sixty (60) days of receipt of all hard copy record drawing markups from the Contractor, the Consultant shall:

- Furnish to the City full size drawings, and a CD with all drawing files in Civil 3D ".dwg" format incorporating all addenda, substitutions, change orders, field changes and all deviations from the original Contract Documents identified during construction and as requested by the City.
- These documents shall constitute the "Record" contract documents. Each drawing sheet shall be dated and stamped to indicate "Record Drawings". The marked-up drawings, project files and documents shall be returned to the City along with one set of reproducible drawings.
- Furnish to the City a CD containing the imaged as-built "Record Drawings" for the project, imaged preliminary or final design reports, if applicable, and other imaged documents as requested by the City. The format for imaged files shall be Class IV, single image, 200 dpi tagged image file format (".tiff") or other format acceptable to the City. An index of all files shall also be provided.
- Provide up to 80 hours of engineers time to assist the City during the 12-month warranty period if corrective work is required.

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT**

**EXHIBIT "A-1"
SUPPLEMENTAL SERVICES**

HDR Engineering, Inc. (Consultant) shall provide Supplemental Services directly related to the Project when requested and authorized in writing to do so by the City. Compensation for Supplemental Services shall be made pursuant to Section VIII, B.1 (b). The Fee Schedule included as Exhibit "B" shall be in effect for the duration of the Project. Supplemental Services of the Consultant may include, but are not limited to the following:

SS 1.0 ADDITIONAL PROJECT MANAGEMENT SERVICES

Consultant shall:

- Provide additional project management services that were not identified in Exhibit "A". This work could include additional project management time, meetings, or agency coordination or permitting.

SS 2.0 ADDITIONAL ENGINEERING SERVICES

Consultant shall:

- Provide analysis and recommendations for elements not outlined in Exhibit "A", but is requested for by the City. Prepare Plans, Specs, and Engineer's Cost Estimate for items not outlined in Exhibit "A", but is requested for by the City. Coordinate and submit to all stakeholders for any work performed under this purview, not outlined in Exhibit "A", but is requested for by the City.

SS 3.0 ADDITIONAL BIDDING PHASE SUPPORT SERVICES

Consultant shall:

- Provide additional Bidding Phase Support Services in excess of those specified in Exhibit "A".

SS 4.0 ADDITIONAL CONSTRUCTION MANAGEMENT SUPPORT SERVICES

Consultant shall:

- Provide additional Construction Management Support Services in excess of those specified in Exhibit "A".

**PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT**

**EXHIBIT "B"
FEE SCHEDULE**

BASIC SERVICES FEE SCHEDULE

The fee for the Scope of Services to be provided by HDR Engineering, Inc. (Consultant) to the City is \$1,392,770.00 and is presented in Table 2. Tasks 1-4 will be billed on a lump sum basis and Task 5 will be billed on a time and materials basis.

Table 2 – Fee Breakdown

Task No.	Task	Fee
1	Project Management	\$ 116,130.00
2	Preliminary Design Phase	\$ 391,120.00
3	Design Phase	\$ 319,340.00
4	Bid Period Services	\$ 25,230.00
	Lump Sum Fee	\$ 851,820.00
5	Construction Management Services	\$ 340,950.00
	Time and Materials Fee	\$ 340,950.00
	Subtotal	\$ 1,192,770.00
	Supplemental Services	\$ 200,000.00
	Total	\$ 1,392,770.00

SUPPLEMENTAL SERVICES HOURLY RATES

HDR Engineering, Inc	
Classification	Hourly Rate (\$/Hour)
Technical Advisor	\$ 220.00
Project Manager	\$ 220.00
Technical Lead	\$ 210.00
Civil Engineer	\$ 185.00
Professional	\$ 160.00
Technician	\$ 125.00
Hydrogeologist Lead	\$ 160.00
Hydrogeologist	\$ 130.00
Project Controller	\$ 120.00
Administrator	\$ 90.00

TJK Consulting Engineers	
Classification	Hourly Rate (\$/Hour)
Principal Engineer	\$225.00
Director of Engineering	\$150.00
Project Director	\$135.00
Designer III	\$135.00
Designer II	\$100.00
Designer I	\$80.00
Drafter	\$55.00
Administration	\$50.00
Principal	\$200.00
Principal Engineer	\$225.00

Ninyo & Moore	
Classification	Hourly Rate (\$/Hour)
Principal Engineer/Geologist/Environmental Scientist/Certified Industrial Hygienist	\$165.00
Senior Engineer/Geologist/Environmental Scientist	\$150.00
Senior Project Engineer/Geologist/Environmental Scientist	\$145.00
Certified Asbestos Consultant, Lead Inspector/Assessor, Lead Project Monitor	\$145.00
Project Engineer/Geologist/Environmental Scientist	\$140.00
Senior Staff Engineer/Geologist/Environmental Scientist	\$125.00
Staff Engineer/Geologist/Environmental Scientist	\$120.00
Special Inspector (Concrete, Masonry, Structural Steel, Welding, and Fireproofing)	\$95.00
Grading Inspector (NICET/NAQTC)	\$90.00
Senior Field/Laboratory/Environmental Technician	\$80.00
Field/Laboratory Technician	\$76.00
Technical Illustrator/CAD Operator	\$70.00
Geotechnical/Environmental/Laboratory Assistant	\$60.00
Information Specialist	\$60.00
Data Processing, Technical Editing, or Reproduction	\$60.00
Rebar Locator (Micro Covermeter/Pachometer)	\$160/day
Concrete Coring Equipment (includes technician)	\$120/day
Water Level Meter Usage	\$40/day

KCI Technologies	
Classification	Hourly Rate (\$/Hour)
Test Hole – non paved surface	\$500.00 per test hole
Test Hole – paved surface	\$650.00 per test hole
Test Hole in excess of 7 feet (depth)	\$90.00 per additional foot
Utility Designating & Investigation (QL-B)	\$0.90 per linear foot
Utility Designating & Investigation (QL-C & D)	\$0.45 per linear foot
Utility Designating Overhead	\$0.45 per linear foot
Utility Designating 2 Man Crew, Truck & Equipment	\$275
Utility Designating 1 Man Crew, Truck & Equipment	\$225
Project Engineer	\$198
Project Manager	\$165
Field Technician V	\$102
Field Technician IV	\$87
Field Technician III	\$72
Field Technician II	\$48
Field Technician I	\$45
Encroachment Permits (varies by entity)	Actual Cost plus PM time
Subcontractors (survey, traffic control)	Cost Plus 12%
Flowable Backfill – (CLSM)	Cost plus 12%

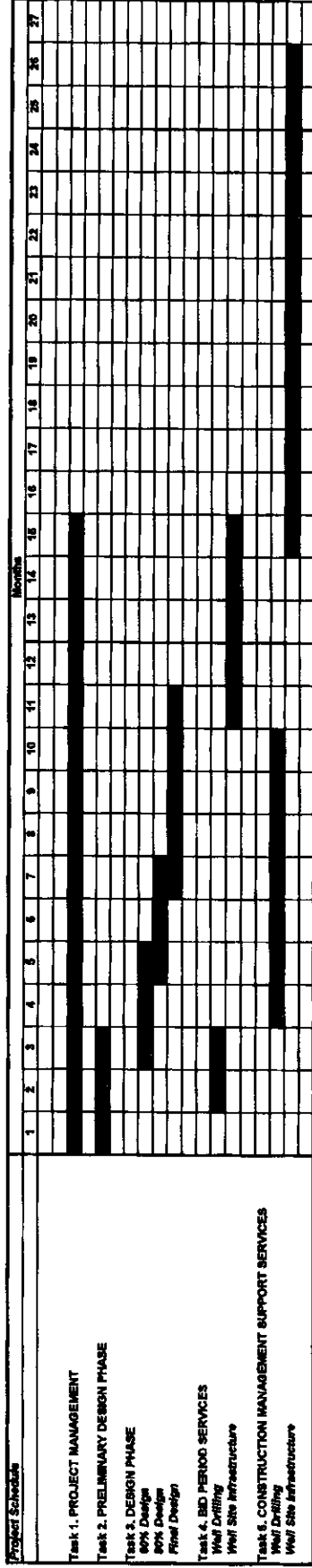
DIRECT EXPENSES

Direct Expenses	
Description	Rate
Mileage	\$0.56/mile
Reproduction	At Cost
Permit Fees	At Cost
Other Direct Costs	At Cost

Direct expenses (non-salary costs) shall be billed at actual cost without markup, as verified by receipt, invoice or other documentation acceptable to the City.

These hourly billing rates for the Consultant and Subconsultants shall remain in effect for the duration of the Agreement and include direct salaries, overhead and profit.

PROFESSIONAL ENGINEERING SERVICES AGREEMENT
FOR THE
WELL REHABILITATION/IMPROVEMENT PROJECT
EXHIBIT "C"
PRELIMINARY PROJECT SCHEDULE



BUSINESS LICENSE

City of North Las Vegas
2250 Las Vegas Blvd. North, Suite 110
North Las Vegas, NV 89030

Mailing Address:

HDR ENGINEERING, INC.
1917 S 67TH ST
OMAHA, NE 68106

In conformity with and subject to the provisions of the Ordinances of the City of North Las Vegas and the laws of the State of Nevada, license is hereby granted to operate the business described hereon:

License Number: **PROS-000768-2020** Expiration Date: **11/30/2024**


Type of License: **PROFESSIONALS**

Classification: **PRO SERVICES - LAND DEVELOPMENT**

Business Location: **HDR ENGINEERING, INC.**
1917 S 67TH ST
OMAHA, NE 68106

Owner/Principal(s): **HDR ENGINEERING, INC.**

CITY OF
NORTH LAS VEGAS



Alfredo Melesio
Director of Land Development & Community
Services

This license is not transferable
POST IN A CONSPICUOUS PLACE



CERTIFICATE OF LIABILITY INSURANCE

Page 1 of 2

DATE (MM/DD/YYYY)

05/09/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Willis Towers Watson Midwest, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA	CONTACT NAME: WTW Certificate Center PHONE (A/C No. Ext): 1-877-945-7378 E-MAIL ADDRESS: certificates@wtwco.com FAX (A/C No): 1-888-467-2378																					
INSURED HDR Engineering, Inc. 1917 South 67th Street Omaha, NE 68106	<table><tr><th colspan="2">INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr><tr><td>INSURER A:</td><td>Liberty Mutual Fire Insurance Company</td><td>23035</td></tr><tr><td>INSURER B:</td><td>Ohio Casualty Insurance Company</td><td>24074</td></tr><tr><td>INSURER C:</td><td>Liberty Insurance Corporation</td><td>42404</td></tr><tr><td>INSURER D:</td><td></td><td></td></tr><tr><td>INSURER E:</td><td></td><td></td></tr><tr><td>INSURER F:</td><td></td><td></td></tr></table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A:	Liberty Mutual Fire Insurance Company	23035	INSURER B:	Ohio Casualty Insurance Company	24074	INSURER C:	Liberty Insurance Corporation	42404	INSURER D:			INSURER E:			INSURER F:		
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INSURER C:	Liberty Insurance Corporation	42404																				
INSURER D:																						
INSURER E:																						
INSURER F:																						

COVERAGES**CERTIFICATE NUMBER:** W33526048**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE \$ 2,000,000
	<input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000
	<input checked="" type="checkbox"/> Contractual Liability	Y	Y	TB2-641-444950-034	06/01/2024	06/01/2025	MED EXP (Any one person) \$ 10,000
	GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER:						PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 4,000,000 PRODUCTS - COMP/OP AGG \$ 4,000,000 \$
A	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident) \$ 2,000,000
	<input checked="" type="checkbox"/> ANY AUTO						BODILY INJURY (Per person) \$
	<input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS NON-OWNED AUTOS ONLY	Y	Y	AS2-641-444950-044	06/01/2024	06/01/2025	BODILY INJURY (Per accident) \$
	<input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/>						PROPERTY DAMAGE (Per accident) \$
B	<input type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> EXCESS LIAB						EACH OCCURRENCE \$ 5,000,000
	<input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE	Y	Y	EUO(25)57919363	06/01/2024	06/01/2025	AGGREGATE \$ 5,000,000
	DED <input checked="" type="checkbox"/> RETENTION \$ 0						\$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y/N					E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below	No	N/A	WA7-64D-444950-014	06/01/2024	06/01/2025	E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Certificate Holder is named as Additional Insured on General Liability, Automobile Liability and Umbrella/Excess Liability on a Primary, Non-contributory basis where required by written contract. Waiver of Subrogation applies on General Liability, Automobile Liability, Umbrella/Excess Liability and Workers Compensation where required by written contract and as permitted by law. Umbrella/Excess policy is follow form over General Liability, Auto Liability and Employers Liability.

CERTIFICATE HOLDER**CANCELLATION**

City of North Las Vegas 2250 Las Vegas Boulevard North, Suite 610 North Las Vegas, NV 89030	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE
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ACORD 25 (2016/03)

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SR ID: 25830812

BATCH: 3454790

AGENCY CUSTOMER ID: _____

LOC #: _____



ADDITIONAL REMARKS SCHEDULE

Page 2 of 2

AGENCY Willis Towers Watson Midwest, Inc.		NAMED INSURED HDR Engineering, Inc. 1917 South 67th Street Omaha, NE 68106	
POLICY NUMBER See Page 1		EFFECTIVE DATE: See Page 1	
CARRIER See Page 1	NAIC CODE See Page 1		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: 25 **FORM TITLE:** Certificate of Liability Insurance

Re: CNLV Wells Rehabilitation Improvement Project

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED LOCATION(S) GENERAL AGGREGATE LIMIT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Location(s): All locations owned by or rented to the Named Insured
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

- A.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage **A**, and for all medical expenses caused by accidents under Section I – Coverage **C**, which can be attributed only to operations at a single designated "location" shown in the Schedule above:
1. A separate Designated Location General Aggregate Limit applies to each designated "location", and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 2. The Designated Location General Aggregate Limit is the most we will pay for the sum of all damages under Coverage **A**, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard", and for medical expenses under Coverage **C** regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
 3. Any payments made under Coverage **A** for damages or under Coverage **C** for medical expenses shall reduce the Designated Location General Aggregate Limit for that designated "location". Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Location General Aggregate Limit for any other designated "location" shown in the Schedule above.
 4. The limits shown in the Declarations for Each Occurrence, Damage To Premises Rented To You and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Location General Aggregate Limit.

- B.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section **I** – Coverage **A**, and for all medical expenses caused by accidents under Section **I** – Coverage **C**, which cannot be attributed only to operations at a single designated "location" shown in the Schedule above:
1. Any payments made under Coverage **A** for damages or under Coverage **C** for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-completed Operations Aggregate Limit, whichever is applicable; and
 2. Such payments shall not reduce any Designated Location General Aggregate Limit.
- C.** When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Location General Aggregate Limit.
- D.** For the purposes of this endorsement, the **Definitions** Section is amended by the addition of the following definition:
- "Location" means premises involving the same or connecting lots, or premises whose connection is interrupted only by a street, roadway, waterway or right-of-way of a railroad.
- E.** The provisions of Section **III** – Limits Of Insurance not otherwise modified by this endorsement shall continue to apply as stipulated.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED CONSTRUCTION PROJECT(S) GENERAL AGGREGATE LIMIT

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Designated Construction Project(s):

All construction projects not located at premises owned, leased or rented by a Named Insured

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

- A.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage **A**, and for all medical expenses caused by accidents under Section I – Coverage **C**, which can be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
1. A separate Designated Construction Project General Aggregate Limit applies to each designated construction project, and that limit is equal to the amount of the General Aggregate Limit shown in the Declarations.
 2. The Designated Construction Project General Aggregate Limit is the most we will pay for the sum of all damages under Coverage **A**, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard", and for medical expenses under Coverage **C** regardless of the number of:
 - a. Insureds;
 - b. Claims made or "suits" brought; or
 - c. Persons or organizations making claims or bringing "suits".
 3. Any payments made under Coverage **A** for damages or under Coverage **C** for medical expenses shall reduce the Designated Construction Project General Aggregate Limit for that designated construction project. Such payments shall not reduce the General Aggregate Limit shown in the Declarations nor shall they reduce any other Designated Construction Project General Aggregate Limit for any other designated construction project shown in the Schedule above.
 4. The limits shown in the Declarations for Each Occurrence, Damage To Premises Rented To You and Medical Expense continue to apply. However, instead of being subject to the General Aggregate Limit shown in the Declarations, such limits will be subject to the applicable Designated Construction Project General Aggregate Limit.

- B.** For all sums which the insured becomes legally obligated to pay as damages caused by "occurrences" under Section I – Coverage **A**, and for all medical expenses caused by accidents under Section I – Coverage **C**, which cannot be attributed only to ongoing operations at a single designated construction project shown in the Schedule above:
- 1.** Any payments made under Coverage **A** for damages or under Coverage **C** for medical expenses shall reduce the amount available under the General Aggregate Limit or the Products-completed Operations Aggregate Limit, whichever is applicable; and
 - 2.** Such payments shall not reduce any Designated Construction Project General Aggregate Limit.
- C.** When coverage for liability arising out of the "products-completed operations hazard" is provided, any payments for damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard" will reduce the Products-completed Operations Aggregate Limit, and not reduce the General Aggregate Limit nor the Designated Construction Project General Aggregate Limit.
- D.** If the applicable designated construction project has been abandoned, delayed, or abandoned and then restarted, or if the authorized contracting parties deviate from plans, blueprints, designs, specifications or timetables, the project will still be deemed to be the same construction project.
- E.** The provisions of Section III – Limits Of Insurance not otherwise modified by this endorsement shall continue to apply as stipulated.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable limits of insurance;

whichever is less.

This endorsement shall not increase the applicable limits of insurance.

SCHEDULE

Name Of Additional Insured Person(s)
Or Organization(s):

Location(s) Of Covered Operations

Any person or organization with whom you have agreed through written contract, agreement or permit to provide additional insured coverage

All locations as required by a written contract or agreement entered into prior to an "occurrence" or offense

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

- A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".
- However:
1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.
- B. With respect to the insurance afforded to these additional insureds, the following is added to Section III – Limits Of Insurance:
- If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:
1. Required by the contract or agreement; or
 2. Available under the applicable limits of insurance;
- whichever is less.
- This endorsement shall not increase the applicable limits of insurance.

SCHEDULE

Name Of Additional Insured Person(s)
Or Organization(s):

Any person or organization to whom or to which you are required to provide additional insured status in a written contract, agreement or permit except where such contract or agreement is prohibited.

Location And Description Of Completed Operations

Any location where you have agreed, through written, contract, agreement, or permit, to provide additional insured coverage for completed operations

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
ELECTRONIC DATA LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
POLLUTION LIABILITY COVERAGE PART DESIGNATED SITES
POLLUTION LIABILITY LIMITED COVERAGE PART DESIGNATED SITES
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
RAILROAD PROTECTIVE LIABILITY COVERAGE PART
UNDERGROUND STORAGE TANK POLICY DESIGNATED TANKS

SCHEDULE

Name Of Person(s) Or Organization(s):

As required by written contract or agreement.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions**:

We waive any right of recovery against the person(s) or organization(s) shown in the Schedule above because of payments we make under this Coverage Part. Such waiver by us applies only to the extent that the insured has waived its right of recovery against such person(s) or organization(s) prior to loss. This endorsement applies only to the person(s) or organization(s) shown in the Schedule above.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**PRIMARY AND NONCONTRIBUTORY –
OTHER INSURANCE CONDITION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to Section IV – Conditions 4. Other Insurance and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

- (1) The additional insured is a Named Insured under such other insurance; and
- (2) You have agreed prior to a loss, that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.
- (3) This insurance is excess over any other insurance available to the additional insured for which it is also covered as an additional insured by attachment of an endorsement to another policy providing coverage for the same "occurrence", claim or "suit".

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED INSURED FOR COVERED AUTOS LIABILITY COVERAGE

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" for Covered Autos Liability Coverage under the Who Is An Insured provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage Form.

SCHEDULE

Name Of Person(s) Or Organization(s):
As required by written contract
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

Each person or organization shown in the Schedule is an "insured" for Covered Autos Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in Paragraph **A.1.** of Section **II** – Covered Autos Liability Coverage in the Business Auto and Motor Carrier Coverage Forms and Paragraph **D.2.** of Section **I** – Covered Autos Coverages of the Auto Dealers Coverage Form.

Policy Number: AS2-641-444950-044
Issued by: Liberty Mutual Fire Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

DESIGNATED INSURED - NONCONTRIBUTING

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM
GARAGE COVERAGE FORM
MOTOR CARRIERS COVERAGE FORM
TRUCKERS COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by this endorsement.

This endorsement identifies person(s) or organization(s) who are "insureds" under the Who Is An Insured Provision of the Coverage Form. This endorsement does not alter coverage provided in the Coverage form.

Schedule

Name of Person(s) or Organizations(s):

Any person or organization where the Named Insured has agreed by written contract to include such person or organization

Regarding Designated Contract or Project:

Any

Each person or organization shown in the Schedule of this endorsement is an "insured" for Liability Coverage, but only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured Provision contained in Section II of the Coverage Form.

The following is added to the **Other Insurance Condition:**

If you have agreed in a written agreement that this policy will be primary and without right of contribution from any insurance in force for an Additional Insured for liability arising out of your operations, and the agreement was executed prior to the "bodily injury" or "property damage", then this insurance will be primary and we will not seek contribution from such insurance.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

SCHEDULE

Name(s) Of Person(s) Or Organization(s):

Any person or organization for whom you perform work under a written contract of the contract requires you to obtain this agreement from us but only if the contract is executed prior to the injury or damage occurring.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The **Transfer Of Rights Of Recovery Against Others To Us** condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

Where required by contract or written agreement prior to loss.

Issued by:Liberty Insurance Corporation

For attachment to Policy No WA7-64D-444950-014
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Effective Date 06/01/2024

Premium

Issued to:HDR Engineering, Inc.

Policy Number TB2-641-444950-034
Issued by Liberty Mutual Fire Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NOTICE OF CANCELLATION OR MATERIAL REDUCTION IN COVERAGE TO THIRD PARTIES

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE PART
MOTOR CARRIER COVERAGE PART
GARAGE COVERAGE PART
TRUCKERS COVERAGE PART
EXCESS AUTOMOBILE LIABILITY INDEMNITY COVERAGE PART
SELF-INSURED TRUCKER EXCESS LIABILITY COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
EXCESS COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
COMMERCIAL LIABILITY – UMBRELLA COVERAGE FORM

Schedule		
Name of Other Person(s) / Organization(s):	Email Address or mailing address:	Number Days Notice:
As required by written contract or written agreement	As required by written contract or written agreement	30

- A. If we cancel this policy for any reason other than nonpayment of premium, or make a material reduction in coverage, we will notify the persons or organizations shown in the Schedule above. We will send notice to the email or mailing address listed above at least 10 days, or the number of days listed above, if any, before the cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B. This advance notification of a pending cancellation or material reduction of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

All other terms and conditions of this policy remain unchanged.

Policy Number AS2-641-444950-044
Issued by Liberty Mutual Fire Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

NOTICE OF CANCELLATION OR MATERIAL REDUCTION IN COVERAGE TO THIRD PARTIES

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE PART
MOTOR CARRIER COVERAGE PART
GARAGE COVERAGE PART
TRUCKERS COVERAGE PART
EXCESS AUTOMOBILE LIABILITY INDEMNITY COVERAGE PART
SELF-INSURED TRUCKER EXCESS LIABILITY COVERAGE PART
COMMERCIAL GENERAL LIABILITY COVERAGE PART
EXCESS COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART
LIQUOR LIABILITY COVERAGE PART
COMMERCIAL LIABILITY – UMBRELLA COVERAGE FORM

Schedule		
Name of Other Person(s) / Organization(s):	Email Address or mailing address:	Number Days Notice:
As required by written contract or written agreement		30

- A. If we cancel this policy for any reason other than nonpayment of premium, or make a material reduction in coverage, we will notify the persons or organizations shown in the Schedule above. We will send notice to the email or mailing address listed above at least 10 days, or the number of days listed above, if any, before the cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B. This advance notification of a pending cancellation or material reduction of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

All other terms and conditions of this policy remain unchanged.

NOTICE OF CANCELLATION TO THIRD PARTIES

- A.** If we cancel this policy for any reason other than nonpayment of premium, we will notify the persons or organizations shown in the Schedule below. We will send notice to the email or mailing address listed below at least 10 days, or the number of days listed below, if any, before cancellation becomes effective. In no event does the notice to the third party exceed the notice to the first named insured.
- B.** This advance notification of a pending cancellation of coverage is intended as a courtesy only. Our failure to provide such advance notification will not extend the policy cancellation date nor negate cancellation of the policy.

Schedule

Name of Other Person(s) / Organization(s):	Email Address or mailing address:	Number Days Notice:
As required by written contract or agreement		30

All other terms and conditions of this policy remain unchanged.

Issued by Liberty Insurance Corporation

For attachment to Policy No. WA7-64D-444950-014 Effective Date 06/01/2024

Premium \$

Issued to HDR Engineering, Inc.

Endorsement

No.