



WASHOE COUNTY

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Finance DN
DA ✓
Risk Mgt. DK
HR N/A
Comptroller CK

STAFF REPORT

BOARD MEETING DATE: April 12, 2016

DATE: March 8, 2016
TO: Board of County Commissioners
FROM: Alan Jones, P.E., Sr. Licensed Engineer, Engineering & Capital Projects, Community Services Department, 954-4651, ajones@washoecounty.us
THROUGH: Dwayne Smith, P.E., Division Director, Engineering & Capital Projects, Community Services Department, 328-2043, desmith@washoecounty.us
SUBJECT: Recommendation to approve an Agreement for Professional Consulting Services between Washoe County and Farr West Engineering, Inc. to provide planning and engineering services for the Cold Springs Water Reclamation Facility 2016 Plan Update Project [\$322,300.00]. (Commission District 5.)

SUMMARY

The Community Services Department (CSD) is requesting approval of a professional services agreement with Farr West Engineering, Inc. (Farr West) to provide planning and engineering services for the Cold Springs Water Reclamation Facility (CSWRF) 2016 Facility Plan Update Project.

The outcome of the work will be a facility plan document, which creates the framework to plan CSWRF's infrastructure investment requirements for a 20-year planning horizon. Facility planning is a critical step to assure future rehabilitation and expansion work is thoughtfully planned and implemented on-schedule and within budget.

In 2016, staff conducted a qualifications-based selection process for an engineering consultant team to conduct this work. Farr West teamed with Ch2M and as a team has extensive wastewater treatment facility engineering expertise and was ranked highest among several other highly qualified regional engineering firms.

Washoe County Strategic Objective supported by this item: Safe, secure and healthy communities.

PREVIOUS ACTION

No Previous Actions

BACKGROUND

Washoe County owns and operates the Cold Springs Water Reclamation Facility which provides sewer treatment to approximately 2083 homes and businesses within northern Washoe County. The facility was commissioned in 1997 and expanded in 2003.

CSWRF is presently configured to treat up to 0.7 million gallons of sewage per day. Wastewater influent flows to CSWRF are presently 0.35 million gallons per day.

Since the Cold Springs area is beginning to see development interest, Staff determined that it was important to provide facility planning for the area now.

The professional service agreement being considered at this time supports several engineering tasks related to: land use planning; population projections; regulatory forecast; collection system assessment; establishing water quality objectives and treatment goals; permitting needs; existing infrastructure condition assessments; operational optimization; near-term repair and rehabilitation needs; identifying infrastructure needs for future customers; and, estimating future capital investment requirements and operating costs.

The following table lists the focus areas for the facility planning work.

Task	Description	Estimated Fee
1	Existing Sewer Flows, Future Sewer Flows, and Potential Reuse Demands (TM#1)	\$34,100
2	Infrastructure Condition Assessment (TM#2)	\$48,500
3	Hydraulic Model Development and Collection System Assessment (TM#3)	\$55,000
4	Treatment Plant Capacity Analysis and Operational Assessment (TM#4)	\$66,400
5	Treatment Plan Expansion Alternatives (TM#5)	\$47,300
6	Effluent Management Alternatives (TM#6)	\$24,300
7	Facility Plan	\$21,200
8	Project Management	\$15,500
9	Alternatives Analysis (if needed)	\$10,000
Total		\$322,300

FISCAL IMPACT

This project was identified and recommended for approval by the Board in the 2015-2016 Capital Improvement Program. Sufficient funds and budget authority exist in cost center 668800, account 710100. Revenues in support of this project are provided from developer sewer connection fees.

RECOMMENDATION

It is recommended that the Board of County Commissioners approve an Agreement for Professional Consulting Services between Washoe County and Farr West Engineering, Inc. to provide planning and engineering services for the Cold Springs Water Reclamation Facility 2016 Plan Update Project [\$322,300.00].

POSSIBLE MOTION

Should the Board agree with staff's recommendation, a possible motion would be "Move to approve an Agreement for Professional Consulting Services between Washoe County and Farr West Engineering, Inc. to provide planning and engineering services for the Cold Springs Water Reclamation Facility 2016 Plan Update Project [\$322,300.00]"

AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES

THIS AGREEMENT is entered into between Washoe County, a political subdivision of the State of Nevada ("County") and Farr West Engineering ("Consultant"), collectively (the "Parties").

WITNESSETH:

WHEREAS, County desires to engage Consultant to render certain consulting services in Support of the "Scope of Work for Washoe County Community Services Cold Springs Water Reclamation Facility Plan Project" (the "Project"); and

WHEREAS, County requires certain professional services in connection with the Project, as described in **Exhibit "A", Scope of Work** (the "Services"); and

WHEREAS, Consultant represents that it is duly qualified, ready, willing and able to provide the Services by virtue of its education, training and experience; and

NOW, THEREFORE, in consideration of the mutual promises contained herein, the Parties agree as follows:

ARTICLE 1 - EFFECTIVE DATE

The effective date of this Agreement shall be April 12, 2016.

CONSULTANT shall begin performance of services as provided herein upon notice to proceed and shall complete all Services identified in Exhibit A, Scope of Work in accordance with the Standard of Care as set forth in Article 5 herein no later than December 12, 2016, unless this Agreement is terminated sooner in accordance with its terms.

ARTICLE 2 - SERVICES TO BE PERFORMED BY CONSULTANT

Consultant agrees to perform and complete all Services identified in Exhibit A, Scope of Work under this Agreement, and any amendment thereto in accordance with the Standard of Care as set forth in Article 5 herein. Consultant shall be responsible for the quality, technical accuracy, completeness and coordination of all reports, information, specifications and other items and services furnished under this Agreement and any amendments hereto. County reserves the right to inspect, comment on, and request revision of, all Services identified in Exhibit A and any amendments thereto performed by Consultant prior to acceptance, and Consultant warrants that such Services shall be fit and sufficient for the purposes expressed in, or reasonably inferred from, this Agreement and any amendments hereto.

Failure to provide major deliverables, including, but not limited to, Services identified in Exhibit A, Scope of Work, shall constitute a material breach of this Agreement, unless waived in writing by the County.

ARTICLE 3 - COMPENSATION

3.1 Compensation for Services

For Services defined in Section 1 above, Consultant's compensation shall be determined on a time and material basis, in accordance with the **Fee Schedule described in Exhibit "B"**, which is attached hereto and incorporated by reference as part of the Agreement, and shall not exceed the sum of **\$322,300.00**. Consultant shall satisfy its obligations hereunder without additional cost or

expense to County during the term of this Agreement other than the heretofore stated compensation and the fee schedule described in Exhibit B. The Fee Schedule may be renegotiated at the end of one (1) year upon request by either the County or the Consultant. Renegotiated fees are subject to approval by County's Board of County Commissioners. The actual costs charged for the work by Consultant in accordance with this provision shall be full compensation to Consultant for all Services and duties required by the Scope of Work, including, but not limited to: costs of supplies, facilities and equipment; costs of labor and services of employees, consultants and sub-consultants engaged by Consultant; travel expenses, telephone charges, typing, duplicating, costs of insurance, and all items of general overhead. Consultant shall submit billings on a monthly basis.

3.2 Compensation for Additional Services

If County requests Consultant to perform additional services, other than those required to be performed under Services identified in Exhibit A, Scope of Work, the cost of such additional services shall be determined prior to commencing additional work. All additional services and amount of payment must be authorized in writing by County prior to commencing any work for such services.

3.3 Methods and Times of Payment

Consultant shall submit to County monthly progress invoices indicating the number of hours each employee provided services and other allowed direct expenses. Payment to Consultant for work on the Project shall be made within forty-five (45) days after receipt and approval of Consultant's invoice, said approval not to be unreasonably withheld. Payment by County of invoices or requests for payment shall not constitute acceptance by County of work performed on the Project by Consultant. No penalty shall be imposed upon the County for payment(s) received by Consultant after forty-five days.

3.4 Dispute of Work

County shall notify Consultant in writing within thirty (30) days of receipt of the work, or portion of work, which is not approved. For work, or portions of the work, which are unapproved, the County and Consultant shall develop a mutually acceptable method to resolve the dispute within thirty (30) days of receipt by the Consultant of notice from the County. If the County and Consultant cannot reasonably agree to remedy the dispute of unapproved work within the thirty-day period, the work shall be terminated or suspended per Article 12.

ARTICLE 4 - TIME SCHEDULE FOR COMPLETION

The Services identified in Exhibit A, Scope of Work on the Project shall be diligently performed and be completed no later than December 12, 2016. Consultant shall be granted time extensions for items within the phases of the Project in writing by County if the time schedules cannot be met because of delays beyond Consultant's reasonable control, including, but not limited to, County's failure to furnish information, or to approve or disapprove Consultant's work promptly. Consultant will provide to County a monthly report including a schedule identifying progress or work completed, problems or difficulties being encountered, work to be initiated during the following month and other useful information. This report will be submitted on the first day of each month and will be in a format suitable for submittal to other interested agencies. Consultant's failure to submit promptly the monthly progress report may cause delay in payment from the County.

ARTICLE 5 - STANDARD OF CARE

Consultant shall exercise the same degree of care, skill, and diligence in the performance of the Services as is ordinarily provided under similar circumstances and Consultant shall, at no cost to County, re-perform services which fail to satisfy the foregoing standard of care provided that Consultant is notified in writing by County of the deficiency within six (6) months of performance of the deficient Services. Such re-performed Services may include, but not be limited to, correcting errors and omissions, or any other deficiencies in designs, drawings, specifications and reports. County reserves the right to inspect, comment on, and request revision of, all Services performed by Consultant prior to acceptance, and Consultant warrants that Services shall be fit and sufficient for the purposes expressed in and intended by this Agreement and any amendments thereto. Failure to provide Services or re-performed Services in accordance with the foregoing standard of care shall constitute a material breach of this Agreement unless waived by the County. Review and approvals by County do not relieve Consultant of its responsibilities under this Article. Except as is otherwise provided for in this Article, the re-performance of Services is the Consultant's entire responsibility and the County's exclusive remedy for Services rendered or to be rendered hereunder, and no additional warranties, guarantees or obligations are to be implied.

ARTICLE 6 - LIMITATIONS OF RESPONSIBILITY

Consultant shall not be responsible for construction means, methods, techniques, sequences, procedures, or safety precautions and programs in connection with the Project. In addition, Consultant shall not be responsible for the failure of any other consultant, subcontractor, vendor, or other project participant to fulfill contractual or other responsibilities to County or to comply with federal, state, or local laws, ordinances, regulations, rules, codes, orders, criteria, or standards. Consultant shall notify County of any apparent unsafe conditions, methods or procedures that the Consultant may observe at the project site.

ARTICLE 7 - OPINIONS OF COST AND SCHEDULE

Since Consultant has no control over the cost of labor, materials, equipment or services furnished by others, including over any other consultants', subcontractors', or vendors' methods of determining prices, or over competitive bidding or market conditions, Consultant's cost estimates shall be made on the basis of qualification and experience.

Since Consultant has no control over the resources provided by others to meet contract schedules, Consultant's forecast schedules for completion of Services shall be established based on generally acceptable schedules for and performance standards of similarly situated professionals qualified and experienced to perform the Services. Consultant cannot and does not guarantee that proposals, bids or actual project costs will not vary from its cost estimates or that actual schedules will not vary from its forecast schedules.

ARTICLE 8 - INDEPENDENT CONTRACTOR

Consultant undertakes performance of the Services as an independent contractor and shall be wholly responsible for the methods of performance. County shall have no right to supervise the methods used by Consultant. County shall have the right to observe such performance. Consultant shall work closely with County in performing Services under this Agreement.

ARTICLE 9 - PERMITS AND LICENSES

Consultant shall procure the permits, certificates, and licenses necessary to allow Consultant to perform the Services. Consultant shall not be responsible for procuring permits, certificates, and licenses required for any construction unless such responsibilities are specifically assigned to Consultant in Exhibit A, Scope of Services.

ARTICLE 10 - COUNTY'S RESPONSIBILITY

County shall provide any information authorized by law in its possession that is requested by Consultant and is necessary to complete the Project. County shall assist Consultant in obtaining access to public and private lands so Consultant can perform the Services. County shall examine all studies, reports, sketches, estimates, specifications, drawings, proposals, and other documents presented by Consultant and shall render decisions pertaining thereto within a reasonable time so as not to delay the work of Consultant.

ARTICLE 11 - REUSE OF DOCUMENTS

All documents, including computer files, drawings, specifications, and computer software, prepared by Consultant pursuant to this Agreement are instruments of service in respect to the Project. They are not intended or represented to be suitable for reuse by County or others on extensions of the Project or on any other project. Any reuse without written verification or adaptation by Consultant for the specific purpose intended will be at County's sole risk and without liability or legal exposure to Consultant; and County shall indemnify and hold harmless Consultant against all claims, damages, losses, and expenses including attorneys' fees arising out of or resulting from such reuse. Any such verification or adaptation will entitle Consultant to further compensation at rates to be agreed upon by County and Consultant.

Copies of all documents, including reports, computer files, drawings, specifications, and computer software, prepared by Consultant pursuant to this agreement will be provided to the County in electronic format accompanied by the appropriate documentation necessary to catalog them in the context of this project.

When transferring data in electronic media format, Consultant makes no representation as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by Consultant at the beginning of the Project.

Because the data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the party delivering the electronic files. Consultant shall not be responsible to maintain documents stored in electronic media format after acceptance by County.

ARTICLE 12 - TERMINATION OR EXTENSION OF CONTRACT

Either Party may terminate this Agreement by written notice to the other Party if the other Party is in material breach or default of any provision of this Agreement and does not remedy such breach or default, or provide satisfactory evidence that such default will be

expeditiously remedied, within thirty (30) days after being given such notice. In the event of such termination, County shall pay Consultant for all Services satisfactorily performed to the date of termination.

County, in its sole discretion, shall have the right to terminate this Agreement or suspend performance thereof for County's convenience upon written notice to Consultant, and Consultant shall terminate or suspend performance of services within thirty (30) days on a schedule acceptable to County. In the event of termination or suspension for County's convenience, County shall pay Consultant for all Services performed in accordance with the terms of this Agreement.

In the event that the County's governing body fails to appropriate or budget funds for the purposes specified in this Agreement, or that the County's governing body has been required, in its sole judgment, to amend previous appropriations or budgeted amounts to eliminate or reduce funding for the purposes of this Agreement, this Agreement shall be terminated without penalty, charge, or sanction.

ARTICLE 13 - NONDISCLOSURE OF PROPRIETARY INFORMATION

Consultant shall consider all information provided by County to be proprietary unless such information is available from public sources, was known to Consultant prior to the execution of this Agreement, was received by Consultant from a third-party source not under any obligation of confidentiality to the County, or is required by law or ordered to be disclosed in a regulatory or judicial proceeding. Consultant shall not publish or disclose proprietary information for any purpose other than the performance of the Services without the prior written authorization of County or in response to legal process or as required by the regulations of public entities.

ARTICLE 14 - NOTICE

Any notice, demand, or request required by or made pursuant to this Agreement shall be deemed properly made if personally delivered in writing or deposited in the United States mail, postage prepaid, to the address specified below:

To County:	To Consultant:
David Solaro, Director	Brent Farr, P.E., President
Washoe County Community Services	Farr West Engineering
1001 East 9 th Street	5442 Longley Lane, Suite A
Reno, NV 89512	Reno, NV 89511

Nothing contained in this Article shall be construed to restrict the transmission of routine communications between representatives of Consultant and County.

ARTICLE 15 - UNCONTROLLABLE FORCES

Neither County nor Consultant shall be considered to be in default of this Agreement if delays in or failure of performance shall be due to uncontrollable forces the effect of which, by the exercise of reasonable diligence, the non-performing party could not avoid and is not reasonably foreseeable at the time of entering into this Agreement. The term "uncontrollable forces" shall mean any event which results in the prevention or delay of performance by a party of its obligations

under this Agreement and which is beyond the control of the non-performing party. It includes, but is not limited to, fire, flood, earthquakes, storms, lightning, epidemic, war, riot, civil disturbance, sabotage, inability to procure permits, licenses, or authorizations from any state, local, or federal agency or person for any of the supplies, materials, accesses, or services required to be provided by either County or Consultant under this Agreement, strikes, work slowdowns or other labor disturbances, and judicial restraint. Consultant shall be paid for services performed prior to the delay plus related costs incurred attributable to the delay.

Neither Party shall, however, be excused from performance if nonperformance is due to uncontrollable forces which are removable or remediable nor which the non-performing Party could have, with reasonable dispatch removed or remedied. The provisions of this Article shall not be interpreted or construed to require Consultant or County to prevent, settle, or otherwise avoid a strike, work slowdown, or other labor action. The non-performing Party shall upon being prevented or delayed from performance by an uncontrollable force, immediately give written notice to the other Party describing the circumstances and uncontrollable forces preventing continued performance of the obligations of this Agreement.

ARTICLE 16 - GOVERNING LAW-VENUE

This Agreement shall be governed by the laws of the State of Nevada, and venue for any action shall be solely in state district court for Washoe County, Nevada.

ARTICLE 17 - MISCELLANEOUS

17.1 Nonwaiver

A waiver by either County or Consultant of any breach of this Agreement shall not be binding upon the waiving Party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach.

17.2 Severability

The invalidity, illegality, or unenforceability of any provision of this Agreement, or the occurrence of any event rendering any portion or provision of this Agreement void, shall in no way affect the validity or enforceability of any other portion or provision of the Agreement. Any void provision shall be deemed severed from the Agreement and the balance of the Agreement shall be construed and enforced as if the Agreement did not contain the particular portion or provision held to be void. The Parties further agree to reform the Agreement to replace any stricken provision with a valid provision that comes as close as possible to the intent of the stricken provision.

17.3 Attorney Fees

The prevailing party in any dispute arising out this Agreement or Consultant's work described in Exhibit A – Scope of Work, is entitled to reasonable costs and attorneys' fees.

ARTICLE 18 - INTEGRATION AND MODIFICATION

This Agreement represents the entire and integrated agreement between the Parties and supersedes all prior negotiations, representations, or agreements, either written or oral. This Agreement may be amended only by a written instrument signed by each of the Parties. Unless

otherwise specified in writing, if there is any inconsistency between the terms of this Agreement and any other agreement between the Parties, the terms of this Agreement shall control.

ARTICLE 19 - SUCCESSORS AND ASSIGNS

County and Consultant each binds itself and its directors, officers, partners, successors, executors, administrators, assigns and legal representatives to the other party to this Agreement and to the partners, successors, executors, administrators, assigns, and legal representatives of such other party, in respect to all covenants, agreements, and obligations of this Agreement.

ARTICLE 20 - ASSIGNMENT

Neither County nor Consultant shall assign, sublet, or transfer any rights under or interest in (including, but without limitation, monies that may become due or monies that are due) this Agreement without the written consent of the other, except to the extent that the effect of this limitation may be restricted by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement. Nothing contained in this paragraph shall prevent Consultant from employing such independent consultants, associates, and subcontractors, as he may deem appropriate to assist him in the performance of the Services hereunder.

ARTICLE 21 - THIRD PARTY RIGHTS

Nothing herein shall be construed to give any rights or benefits to anyone other than County and Consultant.

ARTICLE 22 – INDEMNIFICATION AND INSURANCE

Washoe County has established specific indemnification and insurance requirements for agreements/contracts with consultants, engineers, and architects to help assure that reasonable insurance coverage is maintained. Indemnification and hold harmless clauses are intended to assure that consultants accept and are able to pay for the loss or liability related to their activities. **Exhibit “C” Insurance Specifications** is included by reference. All conditions and requirements identified in this exhibit shall be completed prior to the commencement of any work under this Agreement.

ARTICLE 23 – LIMITED LIABILITY

County will not waive and intends to assert available defenses and limitations contained in Chapter 41 of the Nevada Revised Statutes. Contract liability of both parties shall not be subject to punitive damages. Actual damages for the County’s breach of this Agreement shall never exceed the amount of funds that have been appropriated for payment under this Agreement, but not yet paid, for the fiscal year budget in existence at the time of the breach.

Consultant agrees to indemnify, hold harmless and defend County and the employees, officers and agents of County from any liabilities, damages, losses, claims, actions or proceedings, including, without limitation, reasonable attorneys’ fees and costs, to the extent that such liabilities, damages, losses, claims, actions or proceedings are caused by the negligence, errors, omissions, recklessness or intentional misconduct of Consultant or the employees or agents of the Consultant (1) in the performance of the contract, or (2) which are, or are not, based upon or arising out of the professional services of Consultant, to the full extent allowed by law.

More specifically and without limitation to the foregoing, in recognition of the limitations provided in NRS 338.155, Consultant is not required to defend County and the employees, officers and agents of the County with respect to the liabilities, damages, losses, claims, actions or proceedings caused by the negligence, errors, omissions, recklessness or intentional misconduct of Consultant or the employees or agents of Consultant which are based upon or arising out of the professional services of Consultant. However, if Consultant is adjudicated to be liable by a trier of fact, the trier of fact shall award reasonable attorney's fees and costs to be paid to the County, as reimbursement for the attorney's fees and costs incurred by County in defending the action, by Consultant in an amount which is proportionate to the liability of Consultant.

ARTICLE 24 - ORGANIZATION'S CERTIFICATION

Consultant, its principals and agents, to the best of its knowledge and belief:

- a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal or state department or agency;
- b) Have not within a three year period preceding this Agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in (ii) above;
- d) Have not within a three-year period preceding this Agreement had one or more public transactions (Federal, State, or local) terminated for cause or default; and
- e) Understand that a false statement on this certification may be grounds for rejection or termination of this Agreement. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

IN WITNESS WHEREOF, the parties have executed this Agreement.

WASHOE COUNTY:

CONSULTANT:

Dated this ___ day of _____, 2016

Dated this ___ day of _____, 2016

By _____
Kitty K. Jung, Chair,
Washoe County Commission

By _____
Brent Farr, P.E., President
Farr West Engineering

FARR WEST
ENGINEERING

March 7, 2016

Alan Jones, P.E.
Senior Licensed Engineer
Washoe County Community Services Department
1001 E. Ninth Street
Reno, NV 89512

RE: Scope of Work for WCCSD Cold Springs Water Reclamation Facility Plan

Dear Alan,

Farr West Engineering (Farr West) and our teaming partner, CH2M, appreciate the opportunity to present this scope of work (SOW) to the Washoe County Community Services Department (WCCSD).

Cold Springs Water Reclamation Facility Plan

Our approach to the Facility Plan includes preparation of a series of technical memorandums (TMs) to address the major components of the project. The TMs will be packaged together with an executive summary, a phased capital improvement plan and a connection fee analysis in the final Facility Plan document.

The Facility Plan will include the following TMs:

- TM #1 – Existing Sewer Flows, Future Sewer Flows, and Potential Reuse Demands
- TM #2 – Infrastructure Condition Assessment
- TM #3 – Hydraulic Model Development and Collection System Assessment
- TM #4 – Treatment Plant Capacity Analysis and Operational Assessment
- TM #5 – Treatment Plant Expansion Alternatives
- TM #6 – Effluent Management Alternatives

The scopes of each TM are presented below.

TM #1 – Existing Sewer Flows, Future Sewer Flows, and Potential Reuse Demands

This memorandum will establish existing and future sewer flows, as well as define potential reuse demands in the Cold Springs basin. Components of this evaluation include:

- Review of existing land use in the Cold Springs service area in order to develop an existing ERU count and present an accounting of previously committed capacity in the Cold Springs system;
- Review of recent flow monitoring data to validate wastewater generation rates;

- Use TMRPA geodatabase and information from area developers to identify a realistic development forecast;
- Summarize existing and future wastewater flows; and
- Develop potential reuse demands based on existing and future levels of development.

In order to develop a future sewer flow estimate, TMRPA's geodatabase will be used to identify the realistic development of vacant land in the future and the appropriate wastewater generation rate will be applied. This process will require collaboration between Farr West and the County to validate the development projections (i.e. Heinz Ranch, Evans Ranch, Silver Star Ranch, etc.). The results of this analysis will be added to the existing sewer flow estimates to provide a buildout sewer flow projection. Farr West will attend up to 3 meetings with the County and potential developers. Future flow estimates will be based on 5, 10, and 20-year timeframes, along with the full buildout scenario.

This TM will evaluate potential reuse opportunities in the basin under both existing and future development scenarios. Traditionally, effluent management has been achieved by the use of rapid infiltration basins (RIBs); however, the ability to provide effluent for non-potable reuse and reduce the demand on potable water sources in the future is important. Farr West will identify existing customers with potential non-potable reuse needs and will quantify potential demands. As a result of the development schedule, Farr West will provide a separate analysis of future developments and estimate the potential non-potable demands for future customers as well. Each of these demand estimates will be used in TM #6 to assess management options, including non-potable reuse distribution system improvements necessary to meet reuse demands.

TM #2 –Infrastructure Condition Assessment

The primary objective of this task is to assess the condition of existing infrastructure located at the Cold Springs WRF and the two lift stations in the Cold Springs collection system.

Subtask 2.1 Site Visits and Assessment

A team of CH2M engineers encompassing the wastewater process, mechanical, electrical, and structural disciplines will make a site visit to the treatment facility and lift stations. The team will assess the mechanical, electrical and structural condition of equipment, structures, piping, instrumentation, etc. at each of the sites. The team's findings will be presented in a memorandum detailing the condition of the plant and both of the area lift stations. At the treatment plant, the team will document the condition of the following:

- Influent Pumps and Pump Station
- Screens
- Grit Chamber and Classifier
- Oxidation Ditch and Brush Aerators
- Secondary Clarifiers
- RAS/WAS Pumps and Pump Station
- In-plant lift station
- Scum pump station
- Aerobic Digesters

- Jet Mixing Pumps
- Digester Blowers
- Dewatering Centrifuge
- Dewatered Sludge Conveyor
- Chlorine Contact Basin
- Chemical Systems
- Chemical Storage and Access
- Electrical Equipment
- Emergency Power Generation
- Transfer Switches
- Site (Truck Access, Constraints/Issues)
- Utility Support Systems
- Odor Complaints/Concerns

At the lift stations, the assessment will include:

- Pumps
- Flow metering
- Valves
- Piping
- Cathodic Protection
- Emergency Power Generation
- Transfer Switches
- Electrical Equipment

Subtask 2.2 Prepare Technical Memorandum

Results of the condition assessment will be presented in a TM that will be discussed in a review meeting with the County (via Skype or GoToMeeting). The TM will summarize the findings of the assessments on each of the unit processes, estimate remaining useful life for the various unit processes at each facility and summarize replacement recommendations for equipment that is at or near the end of its serviceable life. We will update the Draft Technical Memorandum based on feedback from the County’s review and produce a final TM.

TM #3 – Hydraulic Model Development and Collection System Assessment

Our collection system team will construct a hydraulic model using InfoSWMM® by Innovyze® from an existing geodatabase provided by County. The database will contain rim and invert elevations for all manholes, pipe diameters, pipe materials and pipe lengths for all gravity and force mains. Wet well dimensions, invert elevations, and pump curve data for the two lift stations in the Cold Springs system will also be provided by Washoe County. The hydraulic model will be integrated with ArcGIS so that parcel data can be allocated across the model by way of the nearest manhole. The existing demand scenario will be allocated first and the model will be calibrated to existing flow monitoring and operational data. A collection system assessment will be made for any existing system deficiencies, including surcharged manholes and pipes, as well as lift station deficiencies.

Four future flow scenarios will be modeled, including the 5, 10, and 20-year timeframes and at the buildout condition. Sewer flows associated with each of these levels of future development will be

allocated to existing manholes and a subsequent assessment of the existing system infrastructure at each of these levels will be made. The performance of existing system infrastructure will be evaluated against current WCCSD operational criteria. System deficiencies and required improvements will be identified for each level of future development.

The results of the collection system assessments will be used to develop the infrastructure improvement alternatives required to meet the demands of future growth. These alternatives will then be compared using a quantitative and qualitative approach to identify the best alternatives. Non-economic Alternative analysis criteria will be developed with input from the County and the subsequent alternative analysis scoring will be reviewed at a workshop with key County staff.

Planning level construction cost estimates will be generated for each improvement alternative. These cost opinions will be based on information from Farr West's and CH2M's cost estimating databases for northern Nevada, recent bid results and vendor quotations. This memorandum will provide a discussion of economic and non-economic factors for each alternative and will ultimately make a recommendation for the most preferred alternatives at each level of future development. Estimation of future operational and maintenance costs will be provided for alternatives which lend themselves to this type of analysis (e.g. lift station pumps).

This TM will document the development of the hydraulic model and will present the assessment results in a concise, straightforward manner. The alternative analysis process will be documented and the resulting alternatives will be summarized in the capital improvement plan, which will be included separately in the final Facility Plan.

TM #4 – Treatment Plant Capacity Analysis and Operational Assessment

The primary objectives of this task are to determine existing plant capacity and identify components limiting existing plant capacity that will guide subsequent alternatives. Existing plant capacity will be determined based on hydraulic throughput and treatment performance with respect to influent wastewater composition.

Subtask 4.1 Data Acquisition and Analysis

The County has provided much of the information required to complete the Capacity Analysis, including the following:

- 2002 Cold Springs Wastewater Facility Plan
- 2003 Cold Springs WRF Expansion Preliminary Design Report
- 2004 Cold Springs Water Reclamation Facility Expansion Project Manual and As-Built Drawings
- 2012-04-16 Cold Springs WRF Groundwater Discharge Permit
- Regulatory Permits (Air Quality, S.U.P, Solid Waste, OSHA)

A comprehensive evaluation of available records will be completed. CH2M will validate data analysis results with County staff and acquire more detailed information regarding source water and operation of unit processes. Field construction activities that deviated from as-built construction drawings will also be discussed.

Subtask 4.2 Hydraulic Capacity Analysis

CH2M will complete a hydraulic analysis of the existing facilities to establish the baseline hydraulic capacity that will be used to evaluate long-term improvement alternatives. CH2M will use HYDRO and AFT Fathom modeling software to identify hydraulic capacities of individual facility elements and to investigate potential bottlenecks within the system. The hydraulic analyses will be based on County provided survey elevations of critical plant features.

The results of the hydraulic modeling evaluations will be compared to influent sewage flow monitoring data provided by the County and evaluated in TM #1 to determine how much capacity is currently used in each treatment step. This evaluation will also identify the treatment step(s) that limit hydraulic capacity. Results of the hydraulic analyses will be presented in TM #4.

Subtask 4.3 Treatment Capacity Analysis

CH2M will develop a comprehensive full plant mass balance model of the existing Cold Springs WRF to assess existing treatment capacity. Plant simulation modeling will be accomplished using Biowin™ by EnviroSim Associates, and the model output will be provided to the county at the conclusion of the project.

The process model will be used to predict how much additional organic and nutrient load can be received at the Cold Springs WRF before effluent limits are exceeded. As with the hydraulic evaluation, treatment process capacities will be established for each unit process so that the limiting processes can be identified. Unit processes that lack parallel redundancy will also be identified.

Subtask 4.4 Rapid Infiltration Basin Capacity Analysis

The capacity of each of the Rapid Infiltration Basins (RIBs) will be confirmed based upon in-situ analysis to verify infiltration rates at each of the sites and the capacity will be presented in gallons per day in TM #4. Each basin is a different size and different load capacity.

In-situ infiltration testing will be conducted by NewFields, utilizing a double-ring infiltrometer in accordance with ASTM D3385 in all twelve of the existing RIBs. A report by NewFields detailing the testing and results will be included as an appendix to TM #4. Results of the infiltration tests will be reviewed by a CH2M geotechnical engineer with the conclusions reported in TM #4. The review of infiltration rates will be compared to design rate.

Subtask 4.5 Operational Assessment

The facility's current operational practices will be evaluated to determine their impact on effluent quality, nutrient management, and chemical and energy usage. CH2M engineers will meet on site with both contract and County facility operators to understand present operational practices, and will review available data on chemical and energy use to determine and quantify if any present operational practices are using more energy or chemicals than necessary. Recommended operational improvements to reduce operational costs or improve effluent quality will be included in TM #4.

Subtask 4.6 Prepare Technical Memorandum

Results of the capacity analyses will be presented in a TM that will be discussed during a draft TM review meeting. The meeting is intended to facilitate the County's review of the draft TM and to get feedback on the initial findings. The remaining capacity of the plant will also be presented in the form of available Equivalent Dwelling Units (EDUs). CH2M will update the Draft TM based on feedback from the County's review and produce a Final TM.

TM #5 – Treatment Plant Expansion Alternatives

Results from TM #1 and #4 will lead directly into the evaluation of alternatives for improvement of the cold Springs WRF. This task will define and prioritize evaluation criteria and procedures that will be used to identify a preferred alternative that best fits the County's needs based on lifecycle costs and non-monetary evaluation criteria in a credible and defensible manner.

A preferred alternative will be developed using the following steps:

1. Establish water quality objectives
2. Identify improvement alternatives
3. Conduct fatal flaw screening of alternatives
4. Determine relative benefits of options based on non-monetary evaluation criteria
5. Estimate lifecycle costs of alternatives
6. Compare alternatives based on relative lifecycle costs and benefits (i.e., scores from non-monetary evaluation criteria)
7. Develop recommendations for integrated improvements based on the foregoing evaluation of alternatives, including preliminary layout drawings and cost estimates

Subtask 5.1 Establish Water Quality Objectives

CH2M will consult with the County and review current regulatory practice in the State of Nevada to produce a regulatory outlook to aid in establishing water quality objectives for the facility. CH2M will confirm with the County the expected quality of the liquid effluent sent to the RIBs, the quality of any sidestream sent to a separate non-potable reuse system or outside of basin treatment system, and biosolids quality. These objectives will inform the remainder of the memo.

Subtask 5.2 Identify Alternatives

CH2M will identify treatment processes, technologies, and other improvements for headworks, secondary treatment, clarification, tertiary treatment, solids digestion expansion and/or thickening, dewatering and disinfection that are capable of achieving the water quality objectives and capacity requirements developed in TM #1.

Alternatives will balance short term needs with long-term priorities, and will consider how the unit processes can be integrated and optimized to achieve the performance requirements. General background describing each alternative along with relative advantages and disadvantages will be provided. Alternatives may include upgrades to existing facilities as well as replacement of existing facilities. CH2M will evaluate up to four different County approved options for liquid treatment, and up to three options for each of the other processes.

Subtask 5.3 Fatal Flaw Screening

Fatal-flaw screening will be conducted to reduce the number of alternatives identified in subtask 5.1 for detailed evaluation. For example, one criterion for this screening may require that expansion options be modular so that implementation can be phased over time to achieve long-term goals; therefore, options with minimal modularity will be removed from further evaluation. CH2M will work with the County to establish the fatal flaw screening criteria.

Subtask 5.4 Non-Monetary Ranking Evaluation

The screened list of improvement alternatives for liquid stream treatment will then be ranked based on non-monetary evaluation criteria using an objective ranking process. Non-monetary criteria are criteria that are important to the County but are difficult to measure in terms of cost. The list of evaluation

criteria, relative weights, and scoring scales for each criterion will be developed in collaboration with the County to make sure they represent the issues that are most relevant and important. The following list will be used as a starting point to developing the list of non-monetary evaluation criteria:

- Performance: Can the technology reliably achieve the water quality objectives?
- Proven Process: Is the technology well established with consistent performance results? Are there numerous installations operating with consistent results for the described application?
- Reliability: Can the technology effectively operate under a large variation of flow and or loading conditions without risk of upset?
- Operational Flexibility: Is the technology adaptable to various upstream/downstream processes for future implementation?
- Expandability: Can the technology be expanded with relative ease?
- Operational Simplicity: Does the technology require large quantities of time in terms of operator attention? Does it adversely impact upstream or downstream processes resulting in additional operational attention?
- Maintenance requirements: Does the technology require specialized maintenance requirements that cannot be performed in-house, or does it require frequent calibration, cleaning, tuning, etc.? Does it require an ongoing contract for maintenance?
- Odor Concerns: Does the technology result in offensive odors?

CH2M will work with the County staff in developing non-monetary criteria. To reflect the relative importance of these criteria, CH2M will use the pair-wise comparison methodology. This entails comparing the criteria two at a time to arrive at the weighting factors. Based on the results, CH2M and the County will select appropriate technology to move forward for alternative evaluation.

Subtask 5.5 Cost Analysis

Treatment process models used to establish design criteria for options will be incorporated into CH2M's capital and lifecycle cost estimating tool, CPES. CPES will provide a quick, detailed, and defensible estimate of the costs of each alternative.

CH2M will collaborate with the County to develop input values for the capital and lifecycle cost estimates. Capital cost estimates will include an estimate of preconstruction (engineering, permitting, pilot studies, etc.) and construction costs (engineering, inspection, testing, etc.). Lifecycle cost analysis will include capital expenses (assuming the project is funded through a low interest loan), staffing costs, maintenance expenses (short term assets, etc.), project markup fees and the breakdown of operational costs (e.g., power, chemicals, hauling and tipping fees, and projected labor). The cost analysis for the evaluated alternatives along with the results of the non-cost evaluation and fatal flaw screening will be reviewed with the County in a workshop to be attended by at least three CH2M staff members.

Subtask 5.6 Development of Integrated Alternatives

The best alternatives based on relative benefits and lifecycle costs will be integrated into a preferred alternative for improving capacity of the Cold Springs WRF. This preferred alternative will consider the following:

- Improvements to existing liquid stream and sludge facilities
- New liquid stream and sludge facilities required to accommodate projected flows and loads
- New and improved support facilities required to operate and maintain the treatment processes

This task will include development of a conceptual-level layouts, process flow diagrams, narrative descriptions of the improvements, and cost estimates. Implementation strategies to phase improvements will be investigated, in addition to how improvements can be integrated into the existing facility.

Subtask 5.7 Technical Memorandum Development

Results of the alternative analyses will be presented in a draft TM that will be discussed during a review meeting. County feedback from the draft TM will be incorporated into a final TM.

TM #6 – Effluent Management Alternatives

Based on the reuse demands and potential existing and future customers identified in TM #1, this memorandum will address potential effluent management alternatives. One important consideration is whether an effluent reuse system should be developed, or if all water used in the basin should be supplied by the potable system with treated effluent utilized for non-potable reuse, or perhaps for potable reuse.

Alternatives for an effluent reuse system will be developed to include pumping, distribution, and storage infrastructure in addition to the treatment upgrades evaluated in TM #5. Capital and O&M cost estimates will also be completed as part of this TM. A thorough non-economic evaluation of alternatives associated with reuse will not be provided as part of this SOW; rather, a list of pros and cons will be prepared for each alternative. The alternatives for the effluent distribution system will be developed to allow for phased implementation to allow for expansion as development and demands progress.

This task will include a basic water balance analysis of the Cold Springs basin to assist with developing an approach to effluent management. The water balance will identify the approximate time at which the basin may be out of balance. The water balance analysis will consider the following:

- Water demands
- Wastewater flowrates
- Effluent reuse demands
- Importation of potable water
- RIB effluent disposal capacity
- Basin capacity including water rights and coarse level groundwater balance
- Alternative effluent management options
 - Pump effluent out of basin
 - Develop purple pipe system
 - Groundwater recharge

Facility Plan

The project will culminate with the delivery of a Cold Springs Water Reclamation Facility Plan which will combine all of the technical memorandums into a single document. The facility plan will also include a phased capital improvement plan, which will include estimated capital costs and impacts to connection fees. The draft Facility Plan will be presented to County staff in a workshop setting, with the County's review comments to follow. A final Facility Plan will be delivered to the County that incorporates the County's comments.

Treatment Plant Alternative Evaluation - Supplementary Budget

Based on the findings of the treatment plant expansion alternatives (TM #5), additional actions may be recommended, such accompanying County Staff on investigative site visits to other wastewater plants

using recommended equipment/processes, attending marketing equipment presentations with County staff, presentations to stakeholders, etc.

Budget from this task may only be approved for use through written consent from WCCSD. The budget allocated for this task is \$10,000.

Project Management

Project Management

This task includes overall project management throughout the project. Project management tasks include, but are not limited to, coordination with the WCCSD staff, correspondence with other CH2Ms, meeting setup, preparation of monthly status reports, invoices and associated administrative time.

Kickoff Meeting

Farr West, CH2M and WCCSD (and possibly the City of Reno and TMWA) will meet in Reno for a kickoff meeting to set the stage for this project. We will review the scope of work, schedule workshops and meetings, and coordinate data needs.

Stakeholder Meetings

The Project Management task includes meetings with stakeholders such as Utilities, Inc., TMWA, City of Reno, State Engineer, Developers, Regional Planning, etc. that are not already included in other tasks.

Schedule

Preparation of the Facility Plan is expected to take approximately 6 months to complete. Assuming approval of this scope of work by the end of March, work will begin immediately thereafter. The major project milestones include:

- Contract approval by Washoe County – April 12, 2016
- Kickoff Meeting – April 13, 2016
- Tech Memo #1 & #2 – April/May 2016
- Tech Memo #3 & #4, Progress Meeting with County – June/July 2016
- Tech Memo #5 & #6, SCADA Master Plan, Progress Meeting with County – August/Sept. 2016
- Facility Plan – October 2016

Estimated Fee

Our estimated fee is summarized as follows, with detailed backup provided in Exhibit A

TM#1	\$34,100
TM#2	\$48,500
TM#3	\$55,000
TM#4	\$66,400 (includes NewFields)
TM#5	\$47,300
TM#6	\$24,300
Facility Plan	\$21,200
Project Management	\$15,500
Alternative Evaluation	<u>\$10,000</u> (only if authorized by WCCSD)
Facility Plan Total	\$322,300

Farr West Engineering proposes to perform the above scope of services for an estimated fee not to exceed \$322,300. The estimated fee total will not be exceeded without prior authorization. The work will be billed on a time and expense basis according to the fee schedules in Exhibit B. Farr West reserves the right to transfer estimated task subtotals as needed to meet the required workload of the project.

Please contact me at 853-7255 if you have any questions regarding this SOW. We are prepared to commence work immediately upon your authorization.

Sincerely,



Brent Farr, P.E.
Project Manager

Enclosures

Exhibit A – Detailed Fee Breakdowns
Exhibit B – Farr West and CH2M Fee Schedules

**Washoe County Community Services Department
Cold Springs Water Reclamation Facility Planning
Farr West Engineering Task Breakdown and Fee Estimate**

TASKS	Rate (\$/hr)	Principal Engineer - Q/A/QC (Farr West)	Principal Engineer (Farr West)	Br. Project Manager (Farr West)	Project Manager (Farr West)	Project Engineer (Farr West)	GIS Analyst (Farr West)	GIS Technician (Farr West)	Administration (Farr West)	Total Labor		Expenses (a)	TOTAL
		\$135	\$125	\$115	\$105	\$105	\$75	\$80	Hours	(\$)	(\$)	(\$)	
1.0 TM #1 - Existing & Future Flows													
Review Historical Flow Estimates		1		2	4	16				23	\$2,525		\$2,525
Analyze Current Flow Data				2	4	16				22	\$2,390		\$2,390
Develop Existing Sewer Flows				4	4	16				24	\$2,640		\$2,640
Review Existing Land Use & Develop Existing ERU Count		1		4	4	16	16	24		65	\$8,255		\$8,255
Create Development Schedule			6	12	12					32	\$3,960		\$3,960
Calculate Future Flow Estimates (5, 10, 20 year, Buildout)				4	4	16				24	\$2,640		\$2,640
Develop Existing & Future Reuse Demands			4	4	12					20	\$2,420		\$2,420
Assess Basin Capacity & Future Imported Water Supply			4	4	12					20	\$2,420		\$2,420
Draft Memorandum		4		8	16	16			2	46	\$5,180		\$5,180
Final Memorandum		4		4	8	8			2	26	\$2,920		\$2,920
Meetings		2		2	2					6	\$750		\$750
Subtotal		12	16	50	82	104	16	24	4	308	\$34,100	\$0	\$34,100
2.0 TM #2 - Infrastructure Condition Assessment													
Draft Memorandum		4								4	\$540		\$540
Final Memorandum		4								4	\$540		\$540
Meetings		2								2	\$270		\$270
Subtotal		10								10	\$1,350	\$0	\$1,400
3.0 TM #3 - Hydraulic Model, Collection System Assessment													
Build Model from Washoe County GIS Data				8		16	20	24		68	\$8,580		\$8,580
Allocate Existing Sewer Loading				8		16	4	12		40	\$4,000		\$4,000
Calibrate to existing SCADA Data				16	4	16				36	\$4,140		\$4,140
Allocate Future Flow Scenarios (5, 10, 20yr, Buildout)				16		32	6	18		72	\$7,340		\$7,340
Assess System Capacity & Develop Improvement Alternatives			2	16	8	32				58	\$6,550		\$6,550
Non-Economic Evaluation & Workshop		2	8	40	16	16				82	\$9,870		\$9,870
Alternative Cost Estimates			2	4	8	16				30	\$3,370		\$3,370
Draft Memorandum		4		24	8	12	2	4	4	58	\$6,470		\$6,470
Final Memorandum		4		16	8	8	2	4	4	46	\$5,050		\$5,050
Meetings		4		4	2	2	1	1		14	\$1,660		\$1,660
Subtotal		14	12	152	54	168	35	63	8	504	\$55,030	\$0	\$55,000
4.0 TM #4 - CSWRF Capacity Analysis & Operational Assessment													
In-Situ Infiltration Testing (Newfields)										2	\$270	\$24,265	\$24,535
Draft Memorandum										4	\$540		\$540
Final Memorandum										4	\$540		\$540
Meetings										2	\$270		\$270
Subtotal										12	\$1,620	\$24,265	\$25,900
5.0 TM #5 - Treatment Plant Expansion Alt's													
Non-Economic Alternative Evaluation				8						8	\$1,080		\$1,080
Draft Memorandum				4						4	\$540		\$540
Final Memorandum				4						4	\$540		\$540
Meetings & Workshops				2						2	\$270		\$270
Subtotal				18						18	\$2,430	\$0	\$2,430
6.0 TM #6 - Effluent Disposal Alternatives													
Develop Reuse Project Alternatives			4	12	8	2	2	4		32	\$3,680		\$3,680
Provide Basin Water Balance Accounting			4	12	8					24	\$2,960		\$2,960
Discussion of Regional Solutions for Reuse Management			12	12	8					32	\$4,040		\$4,040
Draft Memorandum		4	12	16	8	4	2	2	2	50	\$5,980		\$5,980
Final Memorandum		4	12	8	4	2			2	32	\$3,950		\$3,950
Meetings		2	2	2	2					8	\$1,020		\$1,020
Subtotal		10	46	62	38	8	4	6	4	178	\$21,630	\$0	\$21,600
7.0 Facility Plan													
Executive Summary			4							8	\$1,040		\$1,040
Capital Improvement Plan - 20 year & Buildout Horizons				8	16	8				32	\$3,680		\$3,680
Connection Fee Analysis				16						24	\$3,080		\$3,080
Draft Document				4	4	2			2	20	\$2,370		\$2,370
Presentation of Draft Facility Plan		1	2	2						5	\$655		\$655
Final Document				2	2				2	14	\$1,680		\$1,680
Subtotal		25	6	36	22	10			4	103	\$12,606	\$0	\$12,600
8.0 Project Management													
Kickoff Meeting			2	2	2					6	\$750		\$750
Stakeholder Meetings			16	16						32	\$4,160		\$4,160
Internal Project Team Meetings			14	22	12	22	4	4		78	\$9,050		\$9,050
Invoices, misc. management		2		6					8	16	\$1,500		\$1,500
Subtotal		2	32	46	14	22	4	4	8	132	\$15,460	\$0	\$15,600
TOTAL		103	112	348	210	310	59	97	28	1266	\$144,125	\$24,265	\$168,430

**Cold Springs WRF 2016 Facility Plan Update
CH2M HILL Labor Hour Estimate**

Labor Resource	Hours	Rate	Amount
Task - TM #2			
Dehn, Jerrod W	12	245	2,940.00
Steele, Paul	68	175	11,900.00
Leaf, Bill	4	215	860.00
Howard, Travis	20	175	3,500.00
Riess, Michael	48	175	8,400.00
Vollmers, Kurt	36	175	6,300.00
Randall, Mark	36	215	7,740.00
Cusworth, Craig	4	175	700.00
Cowden, Scott	2	215	430.00
Document Processing	8	80	640.00
Editing	6	80	480.00
Administration	8	80	640.00
Computer Charge	252	6	1,512.00
Markup	963.64	0.1	96.36
Other Expense	0.00	1	0.00
Travel	964	1	963.64
Subtotal for TM #2			47,102.00

Task - TM #4			
Dehn, Jerrod W	8	245	1,960.00
Leaf, Bill	55	215	11,825.00
Steele, Paul	115	175	20,125.00
Twede, Mark	12	195	2,340.00
Document Processing	8	80	640.00
Editing	6	80	480.00
Administration	8	80	640.00
Computer Charge	190	6	1,140.00
Markup	1,200.00	0.1	120.00
Other Expense	0.00	1	0.00
Travel	1200	1	1,200.00
Subtotal for TM #4			40,470.00

Task - TM#5

Dehn, Jerrod W	8	245	1,960.00
Steele, Paul	114	175	19,950.00
Leaf, Bill	60	215	12,900.00
Schimmoller, Larry	8	245	1,960.00
Downing, Leon	8	215	1,720.00
Cave, David	20	143	2,860.00
Document Processing	8	80	640.00
Editing	6	80	480.00
Administration	8	80	640.00
Computer Charge	218	6	1,308.00
Markup	400.00	0.1	40.00
Other Expense	0	1	0.00
Travel	400	1	400.00

Subtotal for TM #5	240		44,858.00
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Task - TM#6

Dehn, Jerrod W	2	245	490.00
Steele, Paul	12	175	2,100.00
Computer Charge	14	6	84.00
Markup	0.00	0.1	0.00
Other Expense	0.00	1	0.00
Travel	0	1	0.00

Subtotal for TM#6	14		2,674.00
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Task - Final Facility Plan

Dehn, Jerrod W	16	245	3,920.00
Steele, Paul	24	175	4,200.00
Computer Charge	40	6	240.00
Markup	300.00	0.1	30.00
Other Expense	0.00	1	0.00
Travel	300	1	300.00

Subtotal for Final Facility Plan	40		8,690.00
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Total for Facility Plan	758		143,794.00
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Exhibit B



2016 RATE SCHEDULE

Title	Hourly Rate	Title	Hourly Rate
Principal Civil Engineer	\$135	Senior Designer	\$95
Senior Project Manager	\$125	GIS Analyst	\$105
Project Manager	\$115	GIS Technician	\$75
Project Engineer	\$105	Water Rights Surveyor	\$125
Engineer in Training	\$90	Water Rights Specialist	\$105
Engineer in Training II	\$80	Water Rights Technician	\$75
Senior Hydrogeologist	\$135	Water Rights Technician II	\$65
Hydrogeologist	\$100	Professional Surveyor	\$125
Hydrogeologist II	\$80	Survey Technician	\$85
Principal Electrical Engineer	\$160	Survey Technician II	\$70
Environmental Scientist	\$105	1 Man Survey Crew	\$125
Construction Inspector	\$95	2 Man Survey Crew	\$165
Senior Administrator	\$75	3 Man Survey Crew	\$240
Project Assistant	\$60	Intern	\$45
Administrator	\$45		

Other Fees and Charges:

1. All direct project expenses, including subconsultants, will be billed at actual cost plus 15%.
2. Vehicles used for travel to meetings, deliveries, etc. will be charged at the current federal reimbursement rate.
3. A daily rate of \$40 will be charged for field personnel staying overnight to cover meals.
4. An overtime surcharge of 25% will be applied to the hourly rates of non-salaried employees for authorized overtime work.
5. Different survey and construction inspection labor rates will apply on prevailing wage projects. Rates for prevailing wage projects will be provided on a case by case basis.

Exhibit B

2016 CH2M HILL Per Diem Rate Schedule for Cold Springs Water Reclamation Facility Facility Plan Hourly Billing Rates

<u>Classification</u>	<u>2016 Rate</u>
Sr. Principal Technologist*/Program Manager	\$245
Principal Technologist*/Principal Project Manager	\$230
Sr. Technologist*/Sr. Project Manager	\$215
Senior Project Engineer*	\$195
Project Engineer*	\$175
Associate Engineer*	\$155
Staff Engineer 2*	\$135
Staff Engineer 1*	\$115
Engineering Tech 5	\$143
Engineering Tech 4	\$126
Engineering Tech 3	\$109
Engineering Tech 2	\$99
Engineering Tech 1	\$89
Office/Clerical/Accounting	\$79

* includes engineering, consulting, planner, and scientist disciplines

Notes:

1. Direct Expenses are those necessary costs and charges incurred for the PROJECT including, but not limited to: (1) the direct costs of transportation, meals and lodging, mail, subcontracts, and outside services; special client-approved PROJECT-specific insurance, letters of credit, bonds, and equipment and supplies; (2) Consultant's charges for direct use of Consultant's vehicles, computing systems, laboratory test and analysis, word processing, printing and reproduction services, and certain field equipment; and (3) Consultant's project charges for special health and safety requirements of Occupational Safety and Health Administration (OSHA) services.
2. Consultant's rates for the following direct expenses shall be: Computer charges of \$6.00 will be applied to all labor hours for office staff. A Health & Safety charge of \$1.75 will be applied to all labor hours of employees who are currently enrolled in the CH2M HILL Comprehensive Health & Safety Program. These rates are subject to change for work performed beyond the work period noted below.
3. A markup of 10% will be applied to all other Direct Costs and Expenses.
4. An additional premium of 25% will be added to the above rates for Expert Witness and Testimonial Services.
5. Rates are applicable for work performed through December 31, 2016. Rate increases will go into effect on January 1, 2017.

EXHIBIT C

INSURANCE, HOLD HARMLESS AND INDEMNIFICATION REQUIREMENTS FOR PUBLIC WORKS CONSULTANT ENGINEERING SERVICES WCCSD COLD SPRINGS WATER RECLAMATION FACILITY PLAN

INDEMNIFICATION

CONSULTANT Liability

As respects acts, errors or omissions in the performance of CONSULTANT services, CONSULTANT agrees to indemnify and hold harmless COUNTY, its officers, agents, employees, and volunteers from and against any and all claims, demands, defense costs, or liability to the extent caused by CONSULTANT'S negligent acts, errors or omissions in the performance of its CONSULTANT services under the terms of this agreement.

CONSULTANT further agrees to defend COUNTY and assume all costs, expenses and liabilities of any nature to which COUNTY may be subjected as a result of any claim, demand, action or cause of action arising out of the negligent acts, errors or omissions of CONSULTANT or its Sub-consultant in the performance of their CONSULTANT services under the Agreement.

General Liability

As respects all acts or omissions which do not arise directly out of the performance of CONSULTANT services, including but not limited to those acts or omissions normally covered by general and automobile liability insurance, CONSULTANT agrees to indemnify, defend (at COUNTY'S option), and hold harmless COUNTY, its officers, agents, employees, and volunteers from and against any and all claims, demands, defense costs, or liability arising out of any acts or omissions of CONSULTANT (or Sub-consultant, if any) while acting under the terms of this agreement; excepting those which arise out of the negligence of COUNTY.

In determining the nature of the claim against COUNTY, the incident underlying the claim shall determine the nature of the claim, notwithstanding the form of the allegations against COUNTY.

GENERAL REQUIREMENTS

COUNTY requires that CONSULTANT purchase Industrial Insurance (Workers' Compensation), General and Auto Liability, and CONSULTANT'S Errors and Omissions Liability Insurance as described below against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work here under by CONSULTANT, its agents, representatives, employees or Sub-consultants. The cost of all such insurance shall be borne by CONSULTANT.

INDUSTRIAL INSURANCE (Workers' Compensation)

It is understood and agreed that there shall be no Industrial Insurance coverage provided for CONSULTANT or any Sub-consultant by COUNTY. CONSULTANT agrees, as a precondition to the performance of any work under this Agreement and as a precondition to any obligation of the COUNTY to make any payment under this Agreement to provide COUNTY with a certificate issued by an insurer in accordance with NRS 616B.627 and NRS 617.210.

If CONSULTANT or Sub-consultant is a sole proprietor, coverage for the sole proprietor must be purchased and evidence of coverage must appear on the Certificate of Insurance. Such requirement may be waived for a sole proprietor who does not use the services of any employees, subcontractors, or independent contractors and completes an Affirmation of Compliance pursuant to NRS 616B627.

Should CONSULTANT be self-funded for Industrial insurance, CONSULTANT shall so notify COUNTY in writing prior to the signing of any agreement. COUNTY reserves the right to approve said retentions and may request additional documentation, financial or otherwise for review prior to the signing of any agreement.

MINIMUM LIMITS OF INSURANCE

CONSULTANT shall maintain coverages and limits no less than:

1. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, the general aggregate limit shall be increased to equal twice the required occurrence limit or revised to apply separately to this project or location.
2. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage. No aggregate limit may apply.
3. CONSULTANT Errors and Omissions Liability: \$1,000,000 per occurrence and as an annual aggregate. Premium costs incurred to increase CONSULTANT'S insurance levels to meet minimum contract limits shall be borne by the CONSULTANT at no cost to the COUNTY.

CONSULTANT will maintain CONSULTANT liability insurance during the term of this Agreement and for a period of three (3) years from the date of substantial completion of the project. In the event that CONSULTANT goes out of business during the term of this Agreement or the three (3) year period described above, CONSULTANT shall purchase Extended Reporting Coverage for claims arising out of CONSULTANT'S negligent acts, errors and omissions committed during the term of the CONSULTANT Liability Policy.

Should COUNTY and CONSULTANT agree that higher CONSULTANT Coverage limits are needed warranting a project policy, project coverage shall be purchased and the premium for limits exceeding the above amount shall be borne by COUNTY. COUNTY retains the option to purchase project insurance through CONSULTANT'S insurer or its own source.

DEDUCTIBLES AND SELF-INSURED RETENTIONS

Any deductibles or self-insured retentions must be declared to and approved by the COUNTY Risk Management Division prior to the start of work under this Agreement. COUNTY reserves the right to request additional documentation, financial or otherwise prior to giving its approval of the deductibles and self-insured retention and prior to executing the underlying agreement. Any changes to the deductibles or self-insured retentions made during the term of this Agreement or during the term of any policy must be approved by the COUNTY Risk Manager prior to the change taking effect.

OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability Coverages
 - a. COUNTY, its officers, agents, employees and volunteers are to be covered as additional insureds as respects: liability arising out of activities performed by or on behalf of CONSULTANT, including the insured's general supervision of CONSULTANT; products and completed operations of CONSULTANT; or premises owned, occupied or used by CONSULTANT. The coverage shall

contain no special limitations on the scope of protection afforded to the additional insureds, nor shall the rights of the additional insured be affected by the insured's duties after an accident or loss.

b. CONSULTANT'S insurance coverage shall be primary insurance as respects COUNTY, its officers, agents, employees and volunteers. Any insurance or self-insurance maintained by COUNTY, its officers, agents, employees or volunteers shall be excess of CONSULTANT'S insurance and shall not contribute with it in any way.

c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to COUNTY, its officers, agents, employees or volunteers.

d. CONSULTANT'S insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

e. CONSULTANT'S insurance coverage shall be endorsed to state that coverage shall not be suspended, voided, canceled or non-renewed by either party, reduced in coverage or in limits except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to COUNTY except for nonpayment of premium.

ACCEPTABILITY OF INSURERS

Insurance is to be placed with insurers with a Best's rating of no less than A-: VII. COUNTY with the approval of the Risk Manager may accept coverage with carriers having lower Best's ratings upon review of financial information concerning CONSULTANT and insurance carrier. COUNTY reserves the right to require that the CONSULTANT'S insurer be a licensed and admitted insurer in the State of Nevada, or on the Insurance Commissioner's approved but not admitted list.

VERIFICATION OF COVERAGE

CONSULTANT shall furnish COUNTY with certificates of insurance and with original endorsements affecting coverage required by this exhibit. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates are to be on forms approved by COUNTY. All certificates and endorsements are to be addressed to the specific COUNTY contracting department and be received and approved by COUNTY before work commences. COUNTY reserves the right to review all required insurance policies, at any time.

SUB-CONSULTANTS

CONSULTANT shall include all Sub-consultants as insureds under its policies or furnish separate certificates and endorsements for each Sub-consultant. Sub-consultant shall be subject to all of the requirements stated herein.

MISCELLANEOUS CONDITIONS

1. CONSULTANT shall be responsible for and remedy all damage or loss to any property, including property of COUNTY, caused in whole or in part by CONSULTANT, any Sub-consultant, or anyone employed, directed or supervised by CONSULTANT.
2. Nothing herein contained shall be construed as limiting in any way the extent to which CONSULTANT may be held responsible for payment of damages to persons or property resulting from its operations or the operations of any Sub-consultants under it.

3. In addition to any other remedies COUNTY may have if CONSULTANT fails to provide or maintain any insurance policies or policy endorsements to the extent and within the time herein required, COUNTY may, at its sole option:
 - a. Order CONSULTANT to stop work under this Agreement and/or withhold any payments which become due CONSULTANT here under until CONSULTANT demonstrates compliance with the requirements hereof;
 - b. Terminate the Agreement.