



WASHOE COUNTY

"Dedicated To Excellence in Public Service"

www.washoecounty.us

CM/ACM	<u>KS</u>
Finance	<u>✓</u>
DA	<u>SH</u>
Risk Mgt.	<u>DC</u>
HR	<u>N/A</u>
Comptroller	<u>CH</u>

STAFF REPORT

BOARD MEETING DATE: November 15, 2016

DATE: October 5, 2016

TO: Board of County Commissioners

FROM: Rick Warner, P.E., Sr. Licensed Engineer, Engineering & Capital Projects, Community Services Department, 954-4651, rwarnert@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 Carollo Engineers, Inc. to provide engineering design and construction management services for the South Truckee Meadows Water Reclamation Facility Chemical Storage Building Rehabilitation [\$298,329.00]. (Commission District 2.)

SUMMARY

The Community Services Department (CSD) is requesting approval of a professional services agreement with Carollo Engineers, Inc. (Carollo) to provide engineering design and construction management services for the South Truckee Meadows Water Reclamation Facility *Chemical Storage Building Rehabilitation Project*. The chemical storage building is utilized to store bulk water treatment chemicals utilized in the various treatment processes at the facility.

This contract supports the specialized engineering design tasks to address the following project elements: replacement of the chemical storage tanks, replacement of all chemical delivery pumps and piping; additional safety platforms and railing around the chemical storage tank area to enhance operator safety; structural improvements to enhance chemical spill containment areas, and improvements to the outdoor chemical delivery area.

Previous engineering work established the basis of design and preliminary design phases. This contract phase includes fees for all remaining final design work, construction management, and engineering services necessary during the construction phase. The estimated construction cost for these improvements is \$1,600,000.

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

AGENDA ITEM # 11

PREVIOUS ACTION

On February 11, 2014, Washoe County approved an agreement for consulting engineering services with Carollo Engineers Inc., in the amount of \$25,575, to provide a physical condition and code-compliance assessment for the South Truckee Meadows Water Reclamation Facility Chemical Storage Building’s chemical storage and delivery systems.

On October 13, 2015, Washoe County approved an agreement for consulting engineering services with Carollo Engineers Inc., in the amount of \$131,719, to provide design engineering services for the South Truckee Meadows Water Reclamation Facility Chemical Storage Building’s chemical storage and delivery systems.

BACKGROUND

Washoe County owns and operates the South Truckee Meadows Water Reclamation Facility (STMWRF), which provides sewer treatment to approximately 13,000 homes and businesses within southern Washoe County, including portions of the City of Reno. The facility was commissioned in 1990 and expanded in 2003. Approximately \$50 million in infrastructure improvements are planned over the next several years at STMWRF, which will enhance treatment performance, maintain existing infrastructure in reliable condition, and provide future wastewater treatment capacity.

On May 28, 2014, Washoe County received a report prepared by Carollo titled “South Truckee Meadows Reclamation Facility Chemical Storage Building Rehabilitation Evaluation” (Report). The Report provided an assessment of the building’s condition and functionality relating to: fire and building code compliance; operator safety, structural and mechanical integrity, and operating reliability of the chemical storage and delivery mechanical systems. The Report cited several areas within the building needing improvement.

The contract proposed at this time supports the engineering design tasks to address the following project elements: replacement of the chemical storage tanks, replacement of all chemical delivery pumps and piping; additional safety platforms and railing around the chemical storage tank area to enhance operator safety; structural improvements to enhance chemical spill containment areas, and improvements to the outdoor chemical delivery area. The contract proposed at this time supports the final engineering design and construction management tasks. The estimated construction cost for the improvements is \$1,600,000, with construction expected to occur in 2017.

Construction contracts resulting from this engineering design work will be publically bid and brought before the Board of County Commissioners (Board) for consideration and possible award. The following table lists the focus areas for the engineering and construction management services.

Task	Description	Estimated Fee
1	Final Design Services	\$54,477
2	Construction Bid Services	\$30,234
3	Construction Management Services	\$107,540
4	Engineering Services During Construction	\$83,206
5	Process Control Programming Support	\$22,872
Total		\$298,329

FISCAL IMPACT

This project was identified and recommended for approval by the Board in the 2016-2017 Capital Improvement Program. Sufficient funds and budget authority exists in Fund 566, project number WR495120, account 781080. Revenues in support of this project are provided from monthly sewer rate charges.

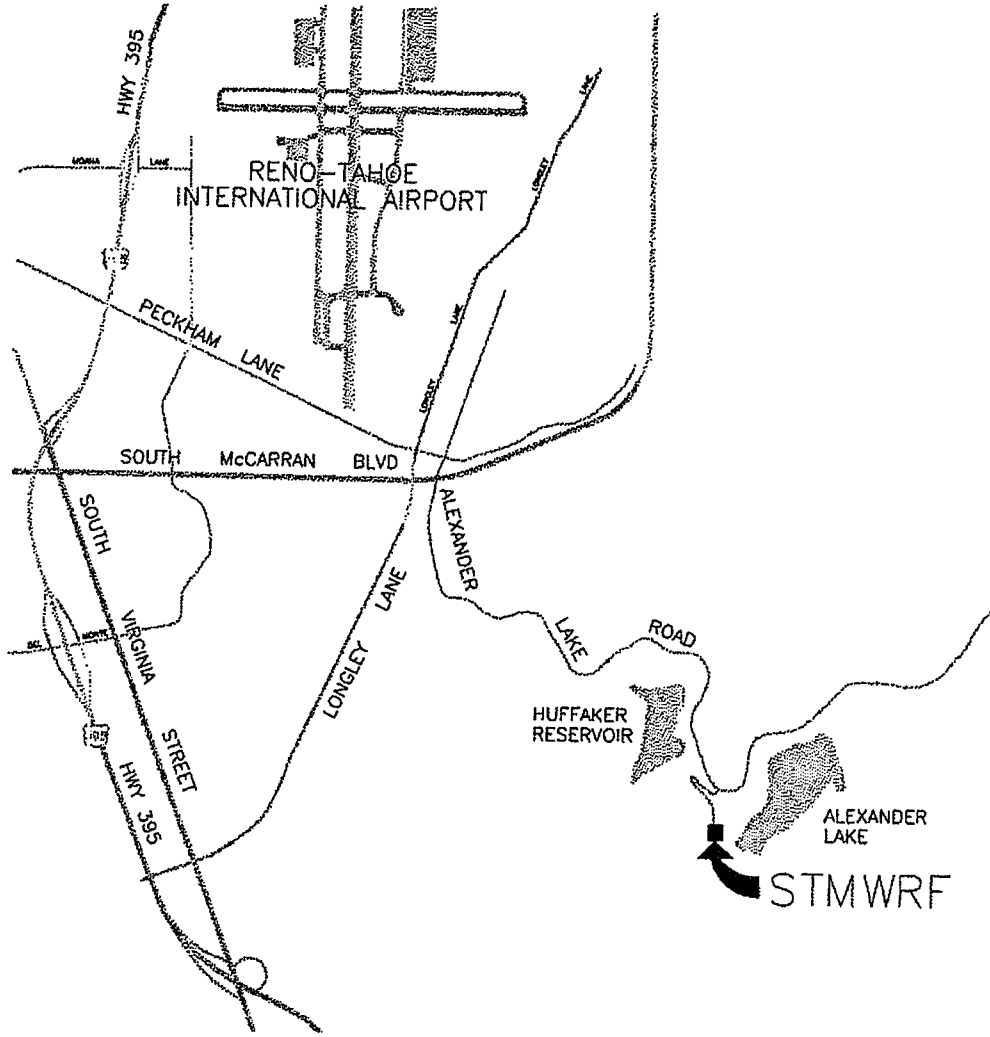
RECOMMENDATION

It is recommended that the Board of County Commissioners approve an Agreement for Professional Consulting Services between Washoe County and Carollo Engineers, Inc. to provide engineering design and construction management services for the South Truckee Meadows Water Reclamation Facility Chemical Storage Building Rehabilitation [\$298,329.00].

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 Carollo Engineers, Inc. to provide engineering design and construction management services for the South Truckee Meadows Water Reclamation Facility Chemical Storage Building Rehabilitation [\$298,329.00]."

South Truckee Meadows Water Reclamation Facility



LOCATION MAP
NTS



AGREEMENT FOR PROFESSIONAL CONSULTING SERVICES

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

WITNESSETH:

WHEREAS, County desires to engage Consultant to render certain consulting services in Support of the "South Truckee Meadows Water Reclamation Facility Chemical Storage Building 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 November 1, 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 April 30, 2018, 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 **\$298,329**. 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 April 30, 2018. 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:

David Solaro, Director
Washoe County Community Services
1001 East 9th Street
Reno, NV 89512

To Consultant:

Keli, Callahan, Office Manager
Carollo Engineers
376 East Warm Springs Road, Suite 250
Las Vegas, Nevada 89119

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:

Dated this ___ day of _____, 2016

CONSULTANT:

Dated this 21st day of September, 2016

By _____
Kitty K. Jung,
Washoe County Commission

By Keli Callahan
Keli Callahan, Office Manager VICE PRESIDENT
Carollo Engineers

**EXHIBIT A
WASHOE COUNTY, NEVADA**

**SOUTH TRUCKEE MEADOWS WATER RECLAMATION FACILITY
CHEMICAL STORAGE BUILDING REHABILITATION PHASE 1
BID SERVICES, CONSTRUCTION MANAGEMENT SERVICES
AND ENGINEERING SERVICES DURING CONSTRUCTION**

SCOPE OF SERVICES

PROJECT BACKGROUND

The South Truckee Meadows Water Reclamation Facility (STMWRF) was originally constructed in 1991 and is a secondary treatment facility with tertiary filtration. STMWRF is owned by Washoe County (COUNTY) and managed by the Washoe County Department of Water Resources (WCDWR). In 2000, the plant capacity was expanded through the addition of a new oxidation ditch, four secondary clarifiers, tertiary filters, and associated appurtenant structures and equipment, including a new chemical building. WCDWR staff is responsible for preparing and maintaining a comprehensive Capital Improvement Program and has been proactive in identifying the need for evaluation of the chemical facilities at STMWRF. Carollo Engineers, Inc. (CONSULTANT) was retained to provide engineering design services for the Chemical Storage Building Rehabilitation Phase 1 project (Project).

In May 2014, CONSULTANT completed an evaluation of the existing Chemical Storage Building (CSB) and recommended rehabilitation and replacement of several elements, including the bulk delivery area, chemical storage tanks and secondary containment, chemical piping (inside and outside the building), chemical delivery pumps, and chemical sumps and sump discharge lines.

In October 2015, CONSULTANT began detailed design services to implement the recommendations made in the May 2014 evaluation. This Project provides final design, bid period assistance, and engineering services during construction for the implementation of the CSB improvements.

PURPOSE

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

1. Final Design Services – Services related to preparation of construction Contract Documents and cost estimates for the Project.
2. Bid Services – Services intended to support the COUNTY during public bidding of the Project.
3. Construction Management Services – Services to provide construction management and inspection services during construction of the Project.
4. Engineering Services during Construction – Services intended to support the COUNTY during construction of the Project.

SCOPE OF SERVICES

TASK 1 – FINAL DESIGN SERVICES

The intent of Final Design Services is to prepare a biddable set of plans, technical specifications, and Contract Documents based on the design concepts and criteria developed in the Basis of Design Letter Memorandum. The deliverables associated with this work will be final contract documents suitable for obtaining bids from qualified Construction Contractors. Tasks include:

Task 101 – Design Refresh Workshop

CONSULTANT prepare for and conduct a workshop to restart the design effort. This four (4) hour workshop will review the design elements of the project and engage the attendees to discuss decisions made, confirm the project elements moving forward, and kick off the final design services task. For budget purposes, a full day requiring travel is assumed for up to two (2) team members.

Task 102 – 90 Percent Plans and Specifications

CONSULTANT will incorporate the COUNTY's Front End Documents into the 90 percent technical specifications and submit the 90 Percent detailed design drawings and technical specifications (CSI 50 Division Master Format) for review by the COUNTY.

Deliverable(s):

- *90 Percent Contract Documents – one (1) electronic PDF copy of half-sized (11 x 17) drawings and technical specifications (8-1/2 x 11) submitted to COUNTY electronically.*

Task 103 – Final Bid Package Plans and Specifications

CONSULTANT will prepare contract documents for the Chemical Storage Building Rehabilitation Phase 1 project: Final Bid Package – 100 Percent Drawings and Technical Specifications.

CONSULTANT will address the COUNTY's review comments on the 90 Percent Contract Documents and will incorporate adopted comments into the Final Bid Package. CONSULTANT will prepare Final Bid Package detailed design drawings and technical specifications (CSI 50 Division Master Format) for bidding.

Deliverable(s):

- *Final Bid Package Contract Documents*
 - *One (1) hard copy set of 100 percent bid documents, including half-size (11 x 17) construction drawings and technical specifications (8-1/2 x 11) submitted to COUNTY.*
 - *One (1) CD containing technical specifications, full- and half-size construction drawings in Adobe Acrobat .PDF file format.*

- *One (1) hard copy set of 100 percent bid documents, including half-size (11 x 17) construction drawings and technical specifications (8-1/2 x 11) submitted to COUNTY for submission to NDEP.*

Task 104 – Opinion of Probable Construction Cost

CONSULTANT will submit an AACE International Class 3 cost estimate of probable construction cost at the 90 Percent IDS submittal. CONSULTANT will prepare a Class 1 cost estimate of probable construction cost at the 100 Percent IDS submittal.

Deliverable(s):

- *90 Percent Construction Cost Estimate – one (1) electronic (PDF) copy submitted to COUNTY electronically.*
- *100 Percent Construction Cost Estimate – one (1) electronic (PDF) copy submitted to COUNTY electronically.*

Task 105 – Permits and Approvals

CONSULTANT will provide in the specifications a list of permits which must be obtained by the construction contractor. CONSULTANT will coordinate and obtain necessary local, State, and Federal permits required for Project. Effort will include preparation of applications, exhibits, drawings, and specifications as necessary for COUNTY's execution and submittal to the Washoe County Building Department and Truckee Meadows Fire Protection District. In addition, CONSULTANT will coordinate input/review from other stakeholders beyond the COUNTY's core project team, as well as prepare/file applications and pay fees for permits and licenses required by local, State, and Federal authorities. As requested, CONSULTANT will furnish additional information about the Project design as required for permit approvals.

Deliverable(s):

- *Permit Matrix.*
- *Construction Contractor Permit List (to be delivered as a part of the specifications at each design, bidding, and construction submittal).*
- *Submittals to agencies and stakeholders.*

Task 106 – Project Management

The CONSULTANT will provide the COUNTY with brief monthly Project status reports (1 to 2 page document) that will include descriptions of work that took place during the past month and a one month look-ahead schedule. The monthly project report will accompany the CONSULTANT's monthly invoice. These reports will be prepared during Final Design and Bid Services tasks. Project management tasks during construction are included in Task 4. Project documentation shall be the responsibility of the CONSULTANT. Meeting agendas and decision/action item logs, notes, design calculations, and reports all constitute project documentation that may be required to be delivered to the COUNTY.

Deliverable(s):

- *Monthly Project Status Report – submitted to COUNTY electronically with invoice.*

TASK 2 – BID SERVICES

The intent of the Bid Services phase of this project is to provide engineering services to the COUNTY to advertise, obtain bids, and award a contract to a construction Contractor. The CONSULTANT will assist the COUNTY in technical aspects of bidding and award. Specific services to be provided are as follows:

Task 201 – Distribution of Contract Documents

COUNTY will place a Notice Inviting Bids in local newspapers. CONSULTANT will make Contract Documents available to prospective bidders on compact disc (CD) and will act as administrator in selling Contract Documents to prospective bidders. Contract Documents on CD will be made available for Industry plan rooms, upon request.

Task 202 – Response to Bid Period Questions

CONSULTANT will answer questions and provide overall support to the COUNTY during the bidding period. Questions will be documented and answered in writing on a standard Project Information Request Form. These forms will be forwarded to the COUNTY for review, and, upon COUNTY approval, will be forwarded to all parties on the Plan Holders List. For budgeting purposes, ten (10) questions are estimated and two (2) hours to respond to each question is assumed.

Deliverable(s):

- *Bid Question Draft Responses – submitted to COUNTY electronically.*
- *Final Bid Question Responses – submitted to Plan Holders by fax or CD, depending on size.*

Task 203 – Pre-Bid Conference

CONSULTANT will assist the COUNTY in the preparation of an agenda and attend a pre-bid conference. The notice for the pre-bid conference will be included in the Contract Documents. Following the conference, the CONSULTANT will prepare minutes of the meeting. The meeting minutes will be forwarded to the COUNTY, for review and approval prior to distribution, and will be forwarded to all parties on the Plan Holders List. For budgeting purposes, a full day requiring travel is assumed for up to two (2) team members.

Deliverable(s):

- *Agenda and Draft Minutes – submitted to COUNTY electronically.*
- *Final Minutes - submitted to Plan Holders by fax or CD, depending on size.*

Task 204 – Addenda

CONSULTANT will prepare addenda to the Contract Documents for issue during bidding period. A week prior to the issue of any addenda, the CONSULTANT will forward a copy of the addenda for the COUNTY's review. For budget purposes, the number of addenda is assumed to be two (2), at an average of eight (8) hours for an engineer, six (6) hours for CAD/Technician and four (4) hours administrative support. Upon COUNTY approval, the addenda will be issued to all parties on the Plan Holders List.

Deliverable(s):

- *Draft Addenda – submitted to COUNTY electronically.*
- *Final Addenda – issued to Plan Holders by fax or CD, depending on size.*

Task 205 – Bid Review

CONSULTANT will review bidders' responsiveness and provide recommendations based upon technical compliance with bid requirements.

Deliverable(s): *Bid Review Memorandum – submitted to COUNTY electronically.***Task 206 – Conformed Documents**

After award of the Construction Contract, CONSULTANT will prepare Conformed Plans and Specifications, incorporating items added or modified by addendum during the bidding period. This work will be accomplished on the electronic files. For budget purposes, the level of effort is estimated at eight (8) hours for an engineer, twenty eight (28) hours for CAD/Technician and twelve (12) hours administrative support. The following is a list of the Conformed Documents that will be distributed:

Deliverable(s):

- *COUNTY Engineering:*
 - *Hard Copy Half-Size Drawings: Ten (10) sets*
 - *Hard Copy Full-Size Drawings: Two (2) sets*
 - *Hard Copy Specifications: Three (3) sets of screw post*
 - *Electronic Copy: PDF and CAD for drawings, Microsoft Word for specifications.*
- *Contractor:*
 - *Hard Copy Full Size Drawings: Three (3) sets*
 - *Hard Copy Half-Size Drawings: Five (5) sets*
 - *Hard Copy Specifications: Three (3) sets of 3-ring binders, Five (5) sets of screw post*

- o *Electronic Copy: PDF and CAD for drawings.*

TASK 3 – CONSTRUCTION MANAGEMENT SERVICES

CONSULTANT will provide services to assist in coordinating the site activities and administering the construction contract, monitor the Contractor's performance, inspect the Contractor's work, provide clarifications of design documents, and review and respond to submittals. The overall construction schedule for the Chemical Storage Building Rehabilitation Phase 1 Project is anticipated to be from April 2017 through March 2018 (12 months). CONSULTANT will provide a Construction Manager (CM) who will be on-site part time to perform periodic inspections and coordinate the activities included in this Task. Tasks include:

Task 301 – Project Management

CONSULTANT will provide the appropriate level of project management and administration for this project. CONSULTANT will also prepare a brief monthly progress summary letter report for attachment to the monthly invoice to track status of budget expenditures and key work activities completed during the billing period.

Task 302 – Pre-Construction Conference

CONSULTANT, in collaboration with the COUNTY, will coordinate and attend Pre-Construction Conference with the Contractor for the Chemical Storage Building Rehabilitation Phase 1 Project. The purpose of the conference is to review Project communication, coordination, and other procedures; discuss the requirements of contract documents, plans, and specifications; and examine the Contractor's construction schedule. CONSULTANT will record and distribute meeting minutes within ten (10) days of the meeting.

Task 303 – Progress Meetings

CONSULTANT will conduct Weekly Progress Meetings with the Contractor, provide an agenda, and distribute copies of the agenda. CONSULTANT will record and distribute meeting minutes within seven (7) days of the meeting.

Task 304 – Construction Management Planning and Documentation

CONSULTANT will prepare a project specific Construction Manual for the project to establish project protocols, communications, and procedures. This task includes establishing an electronic file management system to track correspondence, submittals, RFIs, and other field related documents.

CONSULTANT will implement and maintain regular communications with the Contractor, CONSULTANT, and COUNTY during construction. CONSULTANT will receive and log communications from the Contractor and coordinate communications between the COUNTY and the Contractor. CONSULTANT will prepare written communications to the Contractor and provide recommendations to the COUNTY for written communications between the COUNTY and the Contractor. CONSULTANT will also coordinate with STMWRF Operations personnel prior to process shutdowns or taking existing units out of service.

Task 305 – On-Site Resident Engineering and Inspection

CONSULTANT will provide on-site part-time resident engineering and inspection during the course of the construction project. The CONSULTANT is planned to be on site an average of ten (10) hours per week during the construction period. CONSULTANT staff will occupy the field office provided by the Contractor.

This task may include, but are not limited to, the following:

- Document existing site conditions with Contractor prior to start of construction using a combination of video and photographic documentation.
- Review construction schedules (initial baseline schedule and schedule updates).
- Conduct periodic onsite inspections of the Contractor's work to determine if the work generally conforms to the contract documents and that the integrity of the design concept as reflected in the contract documents has been implemented and preserved by the Contractor.
 - Prepare inspection reports for days on site to summarize daily field activities by the Contractor.
 - Prepare monthly inspection reports to summarize the status of the construction schedule, date of completion, contract price, retention, pending changes to the contract price or completion date, and other outstanding issues related to the Project.
- Review the Contractor's monthly Progress Payment Estimate (PPE). Determine whether the amount requested reflects the progress of the Contractor's work and is in accordance with the contract documents, and provide recommendations to the COUNTY as to the acceptability of the requests. Recommendations to the COUNTY for payment will be based on CONSULTANT inspection of the work and selected sampling to determine that the work has progressed to the extent indicated.
- Coordinate and manage the shop drawing submittal review process.
- Coordinate and manage the requests for information review process.
- Prepare field memos and clarifications.
- Coordinate and manage warranties, guarantees, and lien releases. Coordinate with the Contractor to submit required warranties, guarantees, lien releases, and other similar documents as required by the contract documents, and advise the COUNTY as to the acceptability and compliance of these documents with the contract documents.
- In coordination with the COUNTY, authorize minor variations in the work (Field Order) that do not involve an adjustment in the Contractor's contract price or working days and are consistent with the intent of the contract documents.
- Review change order requests, coordinate with the design office and make recommendations to the COUNTY regarding the acceptability of the Contractor's request and, upon approval of the COUNTY, assist the COUNTY in negotiations regarding the requested change. Review information submitted by the Contractor regarding the effect of proposed or issued change orders on the construction schedule, working days,

milestones, and completion date. Advise the COUNTY of the potential impact of proposed change orders and, if necessary, assist the COUNTY in discussions with the Contractor concerning the potential impact of proposed or issued change orders. Updates on Change Proposal Requests (CPRs) and Contract Change Orders (CCOs) will be included as an agenda item in the Weekly Progress Meetings.

- Receive, log, and notify the COUNTY about letters and notices from the Contractor concerning claims or disputes between the Contractor and COUNTY pertaining to the acceptability of the work or the interpretation of the requirements of the contract documents. Assist the COUNTY in discussions with the Contractor to resolve claims and disputes.
- Assist the COUNTY in issuing documents for Substantial Completion and acceptance of the work. Perform a site inspection with the Contractor and COUNTY to determine whether all facilities are ready for their intended use and operation. Once warranted, provide, in writing, a Notice of Substantial Completion and generate a punch list of items requiring completion or correction.
- Receive and review the Contractor's request for Notice of Final Completion, and perform a final site inspection with the Contractor and COUNTY to determine whether punch list items have been resolved by the Contractor and that the Contractor's work is in accordance with the contract documents.
- Monitor Contractor's recording and maintenance of field changes and markup of the record drawings.

Task 306 – Startup, Testing, and Training

CONSULTANT will oversee facilities acceptance testing and startup in cooperation with the Contractor and COUNTY staff.

Task 307 – Field Inspections

CONSULTANT will prepare the Washoe County Special Inspection and Testing Agreement (SITA) document covering construction of the Project, but will not provide Materials Testing services for the Project. CONSULTANT will use the SITA document to contract with a qualified 3rd party to provide the Building Code required Materials Testing services (assumed budget of \$10,000) for the Project. CONSULTANT will perform Special Inspections required for the Project and will coordinate acquisition of supporting documentation, obtain necessary signatures, and transmit the executed SITA to the Washoe County Department of Building and Safety.

CONSULTANT will prepare and execute the Washoe County Structural Observation Agreement (SOA) for the Project, and provide the required Structural Professional Observation services during the site visits described in Task 4. CONSULTANT will sign the SOA and transmit it to the Washoe County Department of Building and Safety. Special Inspections anticipated for the construction project are:

1. Concrete
2. Bolts installed in concrete

3. Welding

Deliverable(s):

- *Monthly Progress Report*
- *Agenda and Minutes of Preconstruction Conference*
- *Agenda and Minutes of Monthly Progress Meetings*
- *Construction Manual*
- *Inspection Reports*
- *Field Memos and Clarifications*
- *Notices of deficient or non-conforming work*
- *Monthly Contractor's PPE*
- *Field Orders, CPR and CCO Log updates, Contractor Claims*
- *Agenda and Minutes for Weekly Site Progress Meetings with COUNTY and Contractor*
- *Notice of Substantial Completion*
- *Project Construction Records*
- *SITA, SOA documents and Materials Testing documentation*
- *Other deliverables, as requested*

TASK 4 – ENGINEERING SERVICES DURING CONSTRUCTION

The intent of the Engineering Services During Construction phase of this project is to provide overview of design intent, interpretation of the plans and specifications, and support of the COUNTY's construction management staff. This effort includes office engineering services and field support services. All services will be provided at the direction of COUNTY staff, based on available budget. Tasks include:

Task 401 – Coordination

CONSULTANT will manage and coordinate Design Team engineering support during construction. This task includes management activities and meetings, submittal of Project status reports (1 to 2 page document summarizing current effort and one month look-ahead schedule) and invoice, and overall coordination and assistance. The CONSULTANT will prepare for and attend three (3) periodic progress meetings, and when possible, scheduled in coordination with design team visits (Task 408). For budget purposes, a full day requiring travel is assumed for the PM. The Project Engineer will attend each meeting by teleconference. Additional periodic progress meetings, if needed, will be teleconference meetings. Project documentation shall be

the responsibility of the CONSULTANT. Meeting agendas and decision/action item logs, notes, design calculations, and reports all constitute project documentation that may be required to be delivered to the COUNTY.

Task 402 – Pre-Construction Conference

The CONSULTANT will attend a Pre-Construction Conference. The purpose of the conference will be to review procedures for the processing of Contractor's Request For Information (RFIs), overall Change Order policy, shop drawing submittals, monthly progress payments, field quality control procedures, protocol for resolution of field discrepancies, inspection reports, job site safety, and other specification requirements. For budget purposes, a full day requiring travel is assumed for up to two (2) team members.

Task 403 – Submittal Review

The CONSULTANT will review, approve (or reject as necessary) and document / log contractor technical submittals and/or shop drawings for compliance with the Contract Documents. Review procedures will be as specified in the Contract Documents and as directed by the COUNTY. This review does not relieve the contractor from specification requirements. Contractor is expected to provide complete submittals. The CONSULTANT will anticipate two (2) review cycles for all submittals. Additional reviews will be considered an extra scope item. The CONSULTANT will track the budget expended for submittal review beyond two submittals for reimbursement by COUNTY and Contractor. Non-critical submittals will be reviewed and returned within 21 calendar days, unless additional time is specifically requested. Critical submittals will be reviewed and returned within 10 days, unless additional time is specifically requested. Some special submittals may require additional time. For budget purposes, the number of submittals is assumed to be fifty (50), with fifteen (15) resubmittals. It is assumed that on average, a submittal will require two (2) hours to review and respond.

Task 404 – Requests for Information

The CONSULTANT will interpret the technical content of drawings and specifications with respect to requests for information from the Contractor. CONSULTANT will review, document, recommend specific action, and respond to all requests for information. For budget purposes, the number of RFIs is assumed to be twenty-five (25) and it is assumed that on average an RFI will require four (4) hours to review and respond.

Task 405 – Work Change Requests

CONSULTANT will review Contractor requested changes to the construction documents. Upon agreement and approval, CONSULTANT will prepare final Contract Change Order (CCO) documents. For budget purposes, the number of requests is assumed to be four (4), at an average of four (4) hours for an engineer, four (4) hours for CAD/Technician, and two (2) hours administrative support.

Task 406 – Change Proposal Request Assistance

The CONSULTANT will provide engineering services to prepare drawings / sketches, specifications, and calculations with input from the COUNTY. For budget purposes, the number

of requests is assumed to be four (4), at an average of eight (8) hours for an engineer, four (4) hours for a technician, and two (2) hours administrative support.

Task 407 – Record Drawings

At the completion of the project, the CONSULTANT will prepare record drawings that incorporate the following:

1. Addenda
2. Contract Clarifications
3. Field Changes
4. Change Orders

The changes will be made on the conformed design drawings. For budget purposes, the number sheets requiring changes will be sixteen (16), at an average of two (2) hours per sheet for CAD/Technician. Sixteen (16) hours of coordination is assumed for an engineer. The electronic files will be modified to show the final format of the work, and will not reflect the mechanism for the changes (change order numbers and other project changes).

Task 408 – Design Team Visits

CONSULTANT will perform visits to the site by design team and technical specialists to review progress and quality of the work. The visits will observe the general quality of the work at the time of the visit and review any specific items of work that are brought to the attention of the design team members by the COUNTY. For budget purposes, a total of two (2) full day site visits requiring travel are anticipated for up to two (2) team members per visit.

Task 4 Deliverable(s):

- *Monthly Project Status Report and Invoice*
- *Submittal and RFI responses*
- *Final CCOs and associated drawings, sketches, etc.*
- *Design Team Visit trip reports*
- *Record Drawings: One digital set of contract documents on CD in CAD format along with TIF files and half-size and full-size PDFs, will be submitted to the COUNTY*

TASK 5 – PROGRAMMING SUPPORT

CONSULTANT will assist COUNTY with development of SCADA screens and software programming for the new chemical storage building equipment. For budget purposes, one hundred twenty (120) hours plus two (2) trips requiring travel is assumed. Assistance required may include:

1. Control strategies review with Water Resources and STMWRF operations staff.
2. On-site installation and testing of new HMI and PLC programs.
3. Training of Water Resources and STMWRF operations staff covering control and monitoring of new equipment.
4. Review proposed updates by third party to existing HMI screens to ensure consistency with existing county HMI standards.
5. Review new equipment I/O and develop plan to ensure consistency with existing tag naming schemes.
6. Supervise deployment of new HMI screens and updates to the galaxy and historian servers.
7. Review new PLC programming to ensure consistency with existing programming standards.
8. Ensure existing Win911 Alarm application is updated with new alarms and tested prior to start-up.
9. Provide Washoe County with updated drawings of control system (special attention to cabinet in chemical building)

TASK 6 – ADDITIONAL SERVICES

Upon written approval of the COUNTY, the CONSULTANT will provide additional services that may be required during completion of the project, but not included under the Basic Services of this Agreement, and outside the budgetary limits of this Agreement. Prior to beginning work on any supplemental services tasks, the CONSULTANT will review the scope of work, budget estimate and time of performance for each task with the COUNTY. Upon approval of the scope and budget by the COUNTY, the COUNTY will issue a notice to proceed with work.

Additional services may include, but are not be limited to:

1. Additional meetings and workshops related to the final design phase of the project
2. Additional coordination with agencies
3. Attend Bid opening
4. Bid award/rejection coordination
5. Bid protests
6. Additional engineering during construction services
7. Value Engineering or similar value analysis studies

8. Development, coordination, or participation in partnering program
9. Services related to training of County or Plant operations personnel
10. Preparation of Operations and Maintenance manuals
11. Other unforeseen services, as required

ESTIMATED MAN-HOURS AND COSTS

The Estimate of Man-hours and Costs associated with completion of the Scope of Work is provided in *Exhibit B-1*.

PROJECT SCHEDULE

The Project is expected to have a duration of eighteen (18) months. The Preliminary Schedule associated with completion of the Scope of Work is provided in *Exhibit B-2*.

PROJECT ASSUMPTIONS

1. COUNTY will provide front end documents for incorporation into the contract documents.
2. COUNTY will provide information and contract with subconsultants necessary for the project. Anticipated subconsultant work includes, but is not limited to, surveying and potholing.
3. COUNTY will furnish copies of drawings and other pertinent information related to Tasks included herein.
4. COUNTY will participate in project workshops and provide input & review comments Project deliverables / recommendations.
5. COUNTY will prepare notices and pay fees for Advertisements for Bids.
6. Integration and programming will not be a requirement of the Contract Documents. COUNTY will procure third-party integrator.

STANDARD OF CARE

Carollo Engineers shall be responsible to the level of competency and standard of care presently maintained by other practicing Professional Engineers performing the same or similar type of work at the time notice to proceed is issued. Carollo and the COUNTY mutually agree that standard of care, as applied to design professionals, shall be defined as the ordinary and reasonable care required and established by expert testimony of what a reasonable and prudent professional would have done under the same or similar circumstances.

Carollo shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by contractors or the safety precautions and programs incidental to the work of contractors and will not be responsible for Contractor's failure to carry out work in accordance with the Contract Documents.

Carollo has no control over the cost of labor, materials, equipment, or services furnished by others, or over Contractor's methods of determining prices, or other competitive bidding or

market conditions, practices, or bidding strategies. Cost estimates are based on the Carollo's opinion based on experience and judgment. Carollo cannot and does not guarantee that proposals, bids, or actual project construction costs will not vary from cost estimates prepared by the Carollo.

EXHIBIT B-1A
WASHOE COUNTY, NEVADA

SOUTH TRUCKEE MEADOWS WATER RECLAMATION FACILITY
CHEMICAL STORAGE BUILDING REHABILITATION PHASE 1
BID SERVICES, CONSTRUCTION MANAGEMENT SERVICES
AND ENGINEERING SERVICES DURING CONSTRUCTION

SUMMARY OF PROFESSIONAL SERVICES

<u>Work Elements</u>	<u>Estimated Fee</u>
Task 1 – Final Design Services	\$54,477
Task 2 – Bid Services	\$30,234
Task 3 – Construction Management Services	\$107,540
Task 4 – Engineering Services During Construction	\$83,206
Task 5 – Programming Support	\$22,872
Task 6 – Additional Services	\$0
TOTAL AMOUNT	\$298,329

Exhibit B-1B: Labor Hour Breakdown and Fee Estimate
 STWRF Chemical Storage Building Rehabilitation Phase 1
 Bid Services, Construction Management Services, and Engineering Services During Construction
 Washoe County Department of Water Resources



FINAL

Task	Subtask	Activity Description	Labor Category							Total Hours	Labor Cost	Other Direct Cost (ODC) Details			Total ODC's	Subconsultants	Subconsultants Markup (5%)	Total Project Budget
			Senior Professional \$245	Lead Project Professional \$253	Project Professional \$212	Professional \$180	Assistant Professional \$142	Senior Technician \$136	DP/Clerical \$93			Travel and Subsistence	Mileage	Printing				
1.0	Final Design Services		42	0	0	8	186	72	51	359	\$ 62,677	\$ 1,800	\$ -	\$ -	\$ 1,800	\$ -	\$ -	\$ 64,477
	101	Design Refresh Workshop	16				12			28	\$ 6,824	\$ 1,200			\$ 1,200			\$ 8,024
	102	90 Percent Plans and Specifications	12				126	46	24	212	\$ 20,876				\$ -			\$ 20,876
	103	Final Bid Package Plans and Specifications	4			8	12	16	12	52	\$ 7,416				\$ -			\$ 7,416
	104	Opinion of Probable Construction Cost	2				10		4	16	\$ 2,282				\$ -			\$ 2,282
	105	Permits and Approvals	2				24		8	34	\$ 5,730	\$ 600			\$ 600			\$ 6,330
	106	Project Management	6						3	9	\$ 1,749				\$ -			\$ 1,749
2.0	Bid Services		24	2	0	8	60	40	56	190	\$ 25,634	\$ 1,200	\$ -	\$ 3,500	\$ 4,700	\$ -	\$ -	\$ 30,234
	201	Distribution of Contract Documents	2				10		26	40	\$ 4,514				\$ -			\$ 4,514
	202	Response to Bid Period Questions	2	2		6	6		4	20	\$ 3,200				\$ -			\$ 3,200
	203	Pre-Bid Conference	12				16		2	30	\$ 5,388	\$ 1,200			\$ 1,200			\$ 6,588
	204	Addenda	2			2	12		12	36	\$ 4,930		\$ 500		\$ 500			\$ 5,430
	205	Bid Review	4						2	6	\$ 1,166				\$ -			\$ 1,166
	206	Conformed Documents	2				6	26	12	46	\$ 6,266			\$ 3,000	\$ 3,000			\$ 9,266
3.0	Construction Management Services		16	0	0	0	12	0	12	40	\$ 6,740	\$ -	\$ -	\$ -	\$ -	\$ 96,000	\$ 4,800	\$ 107,540
	301	Project Management	12						12	24	\$ 4,056				\$ -	\$ 6,500	\$ 325	\$ 10,881
	302	Pre-Construction Conference								0	\$ -				\$ -	\$ 2,000	\$ 100	\$ 2,100
	303	Progress Meetings								0	\$ -				\$ -	\$ 7,200	\$ 360	\$ 7,560
	304	Construction Management Planning and Documentation								0	\$ -				\$ -	\$ 32,400	\$ 1,620	\$ 34,020
	305	On-site Resident Engineering and Inspection								0	\$ -				\$ -	\$ 5,500	\$ 275	\$ 5,775
	306	Startup, Testing, and Training								0	\$ -				\$ -	\$ 10,000	\$ 500	\$ 10,500
	307	Field Inspections	4				12			16	\$ 2,684				\$ -	\$ -		\$ 2,684
4.0	Engineering Services During Construction		2	110	0	32	206	64	90	504	\$ 76,206	\$ 4,800	\$ -	\$ 200	\$ 5,000	\$ -	\$ -	\$ 83,206
	401	Coordination	50				12			74	\$ 14,470	\$ 1,200			\$ 1,200			\$ 16,670
	402	Pre-Construction Conference	12							24	\$ 4,500	\$ 1,200			\$ 1,200			\$ 6,900
	403	Submittal Review	8			24	64		34	130	\$ 18,434				\$ -			\$ 18,434
	404	Requests for Information	4			8	60		28	100	\$ 13,495				\$ -			\$ 13,495
	405	Work Change Requests	4			12	16		8	40	\$ 5,556				\$ -			\$ 5,556
	406	Change Proposal Request Assistance	4			12	16		8	40	\$ 5,556				\$ -			\$ 5,556
	407	Record Drawings	2	4		10	32		32	48	\$ 7,194		\$ 200		\$ 200			\$ 7,394
	408	Design Team Visits		24			24			48	\$ 9,000	\$ 2,400			\$ 2,400			\$ 11,400
5.0	Programming Support		0	24	0	96	0	0	0	120	\$ 22,872	\$ 1,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,072
	501	Programming Support		24		96				120	\$ 22,872	\$ 1,200			\$ -			\$ 24,072
6.0	Additional Services		0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Project Totals			84	136	0	144	454	176	209	1,203	186,029	9,000	0	3,700	11,500	96,000	4,800	288,329

EXHIBIT B-2A
WASHOE COUNTY, NEVADA

SOUTH TRUCKEE MEADOWS WATER RECLAMATION FACILITY
CHEMICAL STORAGE BUILDING REHABILITATION PHASE 1
BID SERVICES, CONSTRUCTION MANAGEMENT SERVICES
AND ENGINEERING SERVICES DURING CONSTRUCTION

SUMMARY OF PROJECT SCHEDULE

<u>Work Elements</u>	<u>Target Completion</u>
Notice to Proceed	October 2016
Task 1 – Final Design Services	December 2016
Task 2 – Bid Services	March 2017
Task 3 – Construction Management Services	March 2018
Task 4 – Engineering Services During Construction	March 2018
Task 5 – Programming Support	March 2018
Task 6 – Additional Services	March 2018
Project Closeout and Completion	April 2018

Exhibit B-2B
Preliminary Schedule

Months	2016			2017				2018		
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	=====>	March	April
Task										
1. Final Design Services										
2. Bid Services										
3. Construction Management Services										
4. Engineering Services During Construction										
5. Programming Support										
6. Additional Services (TBD)										
Project Closeout and Completion										

Exhibit C

INSURANCE, HOLD HARMLESS AND INDEMNIFICATION REQUIREMENTS FOR PROFESSIONAL ENGINEERING SERVICES SOUTH TRUCKEE MEADOWS WATER RECLAMATION FACILITY CHEMICAL STORAGE BUILDING PROJECT

INDEMNIFICATION

ENGINEER Liability

As respects acts, errors or omissions in the performance of ENGINEER services, ENGINEER 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 ENGINEER'S negligent acts, errors or omissions in the performance of its ENGINEER services under the terms of this agreement.

ENGINEER 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 to the extent arising out of the negligent acts, errors or omissions of ENGINEER or its Sub-ENGINEER in the performance of their ENGINEER services under the Agreement.

General Liability

As respects all acts or omissions which do not arise directly out of the performance of ENGINEER services, including but not limited to those acts or omissions normally covered by general and automobile liability insurance, ENGINEER 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 ENGINEER 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 ENGINEER purchase Industrial Insurance (Workers' Compensation), General and Auto Liability, and ENGINEER'S Professional 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 ENGINEER, its agents, representatives, employees or Sub-ENGINEERS. The cost of all such insurance shall be borne by ENGINEER.

INDUSTRIAL INSURANCE

It is understood and agreed that there shall be no Industrial Insurance coverage provided for ENGINEER or any Sub-ENGINEER by COUNTY. ENGINEER 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 ENGINEER or Sub-ENGINEER 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 ENGINEER be self-funded for Industrial insurance, ENGINEER 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

ENGINEER 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. ENGINEER Professional Liability: \$1,000,000 per claim and as an annual aggregate. Premium costs incurred to increase ENGINEER'S insurance levels to meet minimum contract limits shall be borne by the ENGINEER at no cost to the COUNTY.

ENGINEER will maintain professional 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 ENGINEER goes out of business during the term of this Agreement or the three (3) year period described above, ENGINEER shall purchase Extended Reporting Coverage for claims arising out of ENGINEER'S negligent acts, errors and omissions committed during the term of the Professional Liability Policy.

Should COUNTY and ENGINEER agree that higher ENGINEER 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 ENGINEER'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 ENGINEER, including the insured's general supervision of ENGINEER; products and completed operations of ENGINEER; or premises owned, occupied or used by ENGINEER. 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. ENGINEER'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 ENGINEER'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. ENGINEER'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. ENGINEER'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 below that specified herein 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 ENGINEER and insurance carrier. COUNTY reserves the right to require that the ENGINEER'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

ENGINEER 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 require complete, certified copies of all required insurance policies, at any time.

SUB-ENGINEERS

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

MISCELLANEOUS CONDITIONS

1. ENGINEER shall be responsible for and remedy all damage or loss to any property, including property of COUNTY, caused in whole or in part by ENGINEER, any Sub-ENGINEER, or anyone employed, directed or supervised by ENGINEER.
2. Nothing herein contained shall be construed as limiting in any way the extent to which ENGINEER may be held responsible for payment of damages to persons or property resulting from its operations or the operations of any Sub-ENGINEERS under it.
3. In addition to any other remedies COUNTY may have if ENGINEER 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 ENGINEER to stop work under this Agreement and/or withhold any payments which become due ENGINEER here under until ENGINEER demonstrates compliance with the requirements hereof;
- b. Purchase such insurance to cover any risk for which COUNTY may be liable through the operations of ENGINEER under this Agreement if ENGINEER is unable to comply with the insurance requirements, and deduct or retain the amount of the premiums for such insurance from any sums due under the Agreement;
- c. Terminate the Agreement.

ARBITRATION

Any litigation arising out of this Agreement shall be governed by the Nevada Rules of Arbitration as delineated in part V(A) of the Nevada Supreme Court Rules. Both COUNTY and ENGINEER retain the right to bring the other in as a party to any arbitration or litigation arising out of the work performed under this Agreement.

COUNTY shall have the right to bring ENGINEER in as a party to any arbitration begun by a contractor or COUNTY under a construction contract relating to this project if COUNTY believes ENGINEER may be responsible in full or in part for the matter giving rise to the arbitration.

COUNTY shall not be liable to pay ENGINEER for any time spent by ENGINEER in such arbitration unless and until an award of costs is made to ENGINEER.