

## CITY OF SANTA FE

## PROFESSIONAL SERVICES CONTRACT

THIS AGREEMENT is made and entered into by and between the City of Santa Fe, New Mexico, hereinafter referred to as the "City," and **Carollo Engineers, Inc.** hereinafter referred to as the "Consultant," and is effective as of the date set forth below upon which it is executed by the Parties.

## IT IS AGREED BETWEEN THE PARTIES:

**1. Scope of Work.**

A. The Consultant shall perform Engineering Design and Consulting Services related to the Canyon Road Water Treatment Plant as described described in Exhibit "A" attached hereto.

**2. Compensation.**

A. The City shall pay to the Consultant in full payment for services rendered, a sum not to exceed four hundred seventy-seven thousand two hundred eighty two dollars (\$477,282.), plus applicable gross receipts taxes as described in Exhibit "B" attached hereto. **This amount is a maximum and not a guarantee that the work assigned to be performed by Consultant under this Agreement shall equal the amount stated herein. The parties do not intend for the Consultant to continue to provide services without compensation when the total compensation amount is reached. Consultant is responsible for notifying the City when the services provided under this Agreement reach the total compensation amount. In no event will the Consultant be paid for services provided in excess of the total compensation amount without this Agreement being amended in writing prior to those services in excess of the total compensation amount being provided.**

B. Payment is subject to availability of funds pursuant to the Appropriations Paragraph set forth below and to any negotiations between the parties from year to year pursuant to Paragraph 1, Scope of Work, and to approval by the City. All invoices **MUST BE** received by the City no later than thirty (30) days after the termination of the Fiscal Year in which the services were delivered. Invoices received after such date **WILL NOT BE PAID.**

C. Consultant must submit a detailed statement accounting for all services performed and expenses incurred. If the City finds that the services are not acceptable, within thirty days after the date of receipt of written notice from the Consultant that payment is requested, it shall provide the Consultant a letter of exception explaining the defect or objection to the services, and outlining steps the Consultant may take to provide remedial action. Upon certification by the City that the services have been received and accepted, payment shall be tendered to the Consultant within thirty days after the date of acceptance. If payment is made by mail, the payment shall be deemed tendered on the date it is postmarked. However, the City shall not incur late charges, interest, or penalties for failure to make payment within the time specified herein.

3. **Term.**

THIS AGREEMENT SHALL NOT BECOME EFFECTIVE UNTIL APPROVED BY THE DFA. This Agreement shall terminate on **December 31, 2020** unless terminated pursuant to paragraph 4 (Termination), or paragraph 5 (Appropriations). In accordance with Section 13-1-150 NMSA 1978, no contract term for a professional services contract, including extensions and renewals, shall exceed four years, except as set forth in Section 13-1-150 NMSA 1978.

4. **Termination.**

A. **Termination.** This Agreement may be terminated by either of the parties hereto upon written notice delivered to the other party at least thirty (30) days prior to the intended date of termination. Except as otherwise allowed or provided under this Agreement, the City's sole liability upon such termination shall be to pay for acceptable work performed prior to the Consultant's receipt of the notice of termination, if the City is the terminating party, or the Consultant's sending of the notice of termination, if the Consultant is the terminating party; provided, however, that a notice of termination shall not nullify or otherwise affect either party's liability for pre-termination defaults under or breaches of this Agreement. The Consultant shall submit an invoice for such work within thirty (30) days of receiving or sending the notice of termination. Notwithstanding the foregoing, this Agreement may be terminated immediately upon written notice to the Consultant if the Consultant becomes unable to perform the services contracted for, as determined by the City or if, during the term of this Agreement, the Consultant or any of its officers, employees or agents is indicted for fraud, embezzlement or other crime due to misuse of state funds or due to the Appropriations paragraph herein. **THIS PROVISION IS NOT EXCLUSIVE AND DOES NOT WAIVE THE City's OTHER LEGAL RIGHTS AND REMEDIES CAUSED BY THE CONSULTANT'S DEFAULT/BREACH OF THIS AGREEMENT.**

B. **Termination Management.** Immediately upon receipt by either the City or the Consultant of notice of termination of this Agreement, the Consultant shall: 1) not incur any further obligations for salaries, services or any other expenditure of funds under this Agreement without written approval of the City; 2) comply with all directives issued by the City in the notice of termination as to the performance of work under this Agreement; and 3) take such action as the City shall direct for the protection, preservation, retention or transfer of all property titled to the City and records generated under this Agreement. Any non-expendable personal property or equipment provided to or purchased by the Consultant with contract funds shall become property of the City upon termination and shall be submitted to the City as soon as practicable.

5. **Appropriations.**

The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the City Council for the performance of this Agreement. If sufficient appropriations and authorization are not made by the City Council, this Agreement shall terminate immediately upon written notice being given by the City to the Consultant. The City's decision as to whether sufficient appropriations are available shall be accepted by the Consultant and shall be final. If the City proposes an amendment to the Agreement to unilaterally reduce funding, the Consultant shall have the option to terminate the Agreement or to agree to the reduced funding, within thirty (30) days of receipt of the proposed amendment.

6. **Status of Consultant.**

The Consultant and its agents and employees are independent Consultants performing professional services for the City and are not employees of the City of Santa Fe. The Consultant and its agents and employees shall not accrue leave, retirement, insurance, bonding, use of state vehicles, or any other benefits afforded to employees of the City Council as a result of this Agreement. The Consultant acknowledges that all sums received hereunder are reportable by the Consultant for tax purposes, including without limitation, self-employment and business income tax. The Consultant agrees not to purport to bind the City unless the Consultant has express written authority to do so, and then only within the strict limits of that authority.

7. **Assignment.**

The Consultant shall not assign or transfer any interest in this Agreement or assign any claims for money due or to become due under this Agreement without the prior written approval of the City.

8. **Subcontracting.**

The Consultant shall not subcontract any portion of the services to be performed under this Agreement without the prior written approval of the City. No such subcontract shall relieve the primary Consultant from its obligations and liabilities under this Agreement, nor shall any subcontract obligate direct payment from the City.

9. **Release.**

Final payment of the amounts due under this Agreement shall operate as a release of the City, its officers and employees, and the City from all liabilities, claims and obligations whatsoever arising from or under this Agreement.

10. **Confidentiality.**

Any confidential information provided to or developed by the Consultant in the performance of this Agreement shall be kept confidential and shall not be made available to any individual or organization by the Consultant without the prior written approval of the City.

11. **Product of Service -- Copyright.**

All materials developed or acquired by the Consultant under this Agreement shall become the property of the City and shall be delivered to the City no later than the termination date of this Agreement. Nothing developed or produced, in whole or in part, by the Consultant under this Agreement shall be the subject of an application for copyright or other claim of ownership by or on behalf of the Consultant. Documents, including drawings and specifications, prepared by the Consultant pursuant to this Agreement are not intended or represented to be suitable for reuse by the City or others for this Project or on any other project. Any reuse of completed documents or use of partially completed documents without written verification or concurrence by the Consultant for the specific purpose intended will be at the City's sole risk and without liability or legal exposure to the Consultant.

12. **Conflict of Interest; Governmental Conduct Act.**

A. The Consultant represents and warrants that it presently has no interest and, during the term of this Agreement, shall not acquire any interest, direct or indirect, which would conflict in any

manner or degree with the performance or services required under the Agreement.

B. The Consultant further represents and warrants that it has complied with, and, during the term of this Agreement, will continue to comply with, and that this Agreement complies with all applicable provisions of the Governmental Conduct Act, Chapter 10, Article 16 NMSA 1978.

C. Consultant's representations and warranties in Paragraphs A and B of this Article 12 are material representations of fact upon which the City relied when this Agreement was entered into by the parties. Consultant shall provide immediate written notice to the City if, at any time during the term of this Agreement, Consultant learns that Consultant's representations and warranties in Paragraphs A and B of this Article 12 were erroneous on the effective date of this Agreement or have become erroneous by reason of new or changed circumstances. If it is later determined that Consultant's representations and warranties in Paragraphs A and B of this Article 12 were erroneous on the effective date of this Agreement or have become erroneous by reason of new or changed circumstances, in addition to other remedies available to the City and notwithstanding anything in the Agreement to the contrary, the City may immediately terminate the Agreement.

D. All terms defined in the Governmental Conduct Act have the same meaning in this section.

**13. Amendment.**

A. This Agreement shall not be altered, changed or amended except by instrument in writing executed by the parties hereto and all other required signatories.

B. If the City proposes an amendment to the Agreement to unilaterally reduce funding due to budget or other considerations, the Consultant shall, within thirty (30) days of receipt of the proposed Amendment, have the option to terminate the Agreement, pursuant to the termination provisions as set forth in Article 4 herein, or to agree to the reduced funding.

**14. Merger.**

This Agreement incorporates all the Agreements, covenants and understandings between the parties hereto concerning the subject matter hereof, and all such covenants, Agreements and understandings have been merged into this written Agreement. No prior Agreement or understanding, oral or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this Agreement.

**15. Penalties for violation of law.**

The Procurement Code, Sections 13-1-28 through 13-1-199, NMSA 1978, imposes civil and criminal penalties for its violation. In addition, the New Mexico criminal statutes impose felony penalties for illegal bribes, gratuities and kickbacks.

**16. Equal Opportunity Compliance.**

The Consultant agrees to abide by all federal and state laws and rules and regulations of the Santa Fe City Code, pertaining to equal employment opportunity. In accordance with all such laws of the State of New Mexico, the Consultant assures that no person in the United States shall, on the

grounds of race, religion, color, national origin, ancestry, sex, age, physical or mental handicap, or serious medical condition, spousal affiliation, sexual orientation or gender identity, be excluded from employment with or participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity performed under this Agreement. If Consultant is found not to be in compliance with these requirements during the life of this Agreement, Consultant agrees to take appropriate steps to correct these deficiencies.

**17. Applicable Law.**

The laws of the City of Santa Fe shall govern this Agreement, without giving effect to its choice of law provisions. Venue shall be proper only in a New Mexico court of competent jurisdiction in accordance with Section 38-3-1 (G) NMSA 1978. By execution of this Agreement, Consultant acknowledges and agrees to the jurisdiction of the courts of the State of New Mexico over any and all lawsuits arising under or out of any term of this Agreement.

**18. Workers Compensation.**

The Consultant agrees to comply with state laws and rules applicable to workers compensation benefits for its employees. If the Consultant fails to comply with the Workers Compensation Act and applicable rules when required to do so, this Agreement may be terminated by the City.

**19. Professional Liability Insurance.** Consultant shall maintain professional liability insurance throughout the term of this Agreement providing a minimum coverage in the amount required under the New Mexico Tort Claims Act. The Consultant shall furnish the City with proof of insurance of Consultant's compliance with the provisions of this section as a condition prior to performing services under this Agreement.

**20. Records and Financial Audit.**

The Consultant shall maintain detailed time and expenditure records that indicate the date; time, nature and cost of services rendered during the Agreement's term and effect and retain them for a period of three (3) years from the date of final payment under this Agreement. The records shall be subject to inspection by the City. The City shall have the right to audit billings both before and after payment. Payment under this Agreement shall not foreclose the right of the City to recover excessive or illegal payments

**21. Indemnification.**

The Consultant shall defend, indemnify and hold harmless the City from all actions, proceeding, claims, demands, costs, damages, attorneys' fees and all other liabilities and expenses of any kind from any source which may arise out of the performance of this Agreement, to the extent caused by the negligent act or failure to act of the Consultant, its officers, employees, servants, subconsultants or agents. In the event that any action, suit or proceeding related to the services performed by the Consultant or any officer, agent, employee, servant or subconsultant under this Agreement is brought against the Consultant, the Consultant shall, as soon as practicable but no later than two (2) days after it receives notice thereof, notify the legal counsel of the City.

The Consultant shall not be responsible for warranties, guarantees, fitness for a particular purpose,

breach of fiduciary duty, loss of anticipated profits or for economic, incidental or consequential damages to the City or any third party arising out of breach of contract, termination, or for professional negligence. Additionally, the Consultant shall not be responsible for acts and decisions of third parties, including governmental agencies, other than the Consultant's subconsultants, that impact project completion and/or success.

**22. New Mexico Tort Claims Act**

Any liability incurred by the City of Santa Fe in connection with this Agreement is subject to the immunities and limitations of the New Mexico Tort Claims Act, Section 41-4-1, et. seq. NMSA 1978, as amended. The City and its "public employees" as defined in the New Mexico Tort Claims Act, do not waive sovereign immunity, do not waive any defense and do not waive any limitation of liability pursuant to law. No provision in this Agreement modifies or waives any provision of the New Mexico Tort Claims Act.

**23. Invalid Term or Condition.**

If any term or condition of this Agreement shall be held invalid or unenforceable, the remainder of this Agreement shall not be affected and shall be valid and enforceable.

**24. Enforcement of Agreement.**

A party's failure to require strict performance of any provision of this Agreement shall not waive or diminish that party's right thereafter to demand strict compliance with that or any other provision. No waiver by a party of any of its rights under this Agreement shall be effective unless express and in writing, and no effective waiver by a party of any of its rights shall be effective to waive any other rights.

**25. Notices.**

Any notice required to be given to either party by this Agreement shall be in writing and shall be delivered in person, by courier service or by U.S. mail, either first class or certified, return receipt requested, postage prepaid, as follows:

To the City:  
Water Division Director  
City of Santa Fe  
801 W. San Mateo  
Santa Fe, New Mexico 87504

To the Consultant:  
Carollo Engineers, Inc.  
6200 Uptown Blvd. NE, Suite 120  
Albuquerque, New Mexico 87110

**26. Authority.**

If Consultant is other than a natural person, the individual(s) signing this Agreement on behalf of Consultant represents and warrants that he or she has the power and authority to bind

Consultant, and that no further action, resolution, or approval from Consultant is necessary to enter into a binding contract.

**27. Standard of Care.**

The Consultant shall complete the services required hereunder in accordance with the prevailing engineering standard of care by exercising the skill and ability ordinarily required of engineers performing the same or similar services, under the same or similar circumstances, in the State of New Mexico.

**28. City-Provided Information and Services.**

The City shall furnish the Consultant available studies, reports and other data pertinent to the Consultant's services; obtain or authorize the Consultant to obtain or provide additional reports and data as required; furnish to the Consultant services of others required for the performance of the Consultant's services hereunder, and the Consultant shall be entitled to use and rely upon all such information and services provided by the City or others in performing the Consultant's services under this Agreement.

**29. Estimates and Projections.**

In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for potential projects, the Consultant has no control over cost or price of labor and material; unknown or latent conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance of third parties; quality, type, management, or direction of operating personnel; and other economic and operational factors that may materially affect the ultimate project cost or schedule. Therefore, the Consultant makes no warranty that the City's actual project costs, financial aspects, economic feasibility, or schedules will not vary from the Consultant's opinions, analyses, projections, or estimates.

**30. Services During Construction.**

The Consultant shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by construction contractors or the safety precautions and programs incident to the work of construction contractors and will not be responsible for construction contractors' failure to carry out work in accordance with the construction documents.

**31. Third Parties.**

The services to be performed by the Consultant are intended solely for the benefit of the City. No person or entity not a signatory to this Agreement shall be entitled to rely on the Consultant's performance of its services hereunder, and no right to assert a claim against the Consultant by assignment of indemnity rights or otherwise shall accrue to a third party as a result of this Agreement or the performance of the Consultant's services hereunder.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date of the signature by the required approval authorities below.

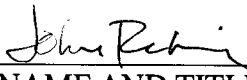
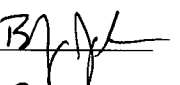
CITY OF SANTA FE:

  
ALAN WEBBER, MAYOR

DATE: 2.7.2019

CONSULTANT:

Carollo Engineers, Inc.

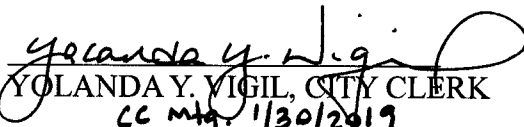
   
NAME AND TITLE  
JOHN REHDING VP Becky Luna VP

DATE: 2.15.19

CRS#03-162628-00-9

Registration # 18-00117760

ATTEST:

  
YOLANDA Y. VIGIL, CITY CLERK  
CC Mfg. 1/30/2019

APPROVED AS TO FORM:

 12/14  
ERIN K. MCSHERRY, CITY ATTORNEY

APPROVED:

  
MARY MCCOY, FINANCE DIRECTOR

52350.572960

Business Unit Line Item



## Exhibit A: Scope of Services

The scope of engineering services for this project consists of a comprehensive performance evaluation and facility optimization evaluation followed by design and construction management of the selected process improvements. Details of the each task included in this scope of work are described herein.

### Task 0 – Project Management

#### Task 0.1 Project Coordination

Consultant's Project Manager (PM) will provide ongoing project coordination for the project throughout all phases of the project. The Consultant PM will maintain ongoing communications with the City and Consultant project team. In addition, Consultant's PM will coordinate financial management and status of the project as well as serving as the primary point of communication with subconsultants and the City's PM. Consultant's PM will assess potential schedule or budget challenges, should they arise, and will pro-actively discuss corrective actions with the City's PM. Consultant will provide monthly invoices to the City.

Consultant will manage the work of subconsultants identified for work associated with the project scope. The subconsultants for this project include:

- Reservoir limnology – to be provided by a subconsultant for this project. Consultant will employ the services of a limnology subconsultant that specializes in the evaluation and interpretation of data in support of the design of in-reservoir improvements.

#### Task 0 Assumptions

- Monthly invoices will be provided to provide documentation for lump sum payment requests.
- The duration of evaluation and design phases of the project will be approximately 9 months.
- The schedule and duration of construction activities are outside of Consultant's control, however 12 months of active project management were assumed for this task.

#### Task 0 Deliverables

- Monthly invoices

### Task 1 – Comprehensive Performance Evaluation (CPE)

#### Task 1.1 Field Investigation

Consultant will conduct a focused site evaluation with up to 4 engineers onsite at the CRWTP for 2 consecutive days to evaluate Priority Processes and solicit operation input on these treatment processes. Priority Processes investigated will include rapid mix, flocculation and sedimentation, filtration, chemical feed systems, residuals handling thickeners and centrifuges, and the CRWTP electrical and control system (including standby generator). Key equipment in the Priority Processes will be evaluated for its probability of failure and consequence of failure based on the visual assessment and judgement of the engineer conducting the assessment at the time of the assessment. Available data will be collected or requested and reviewed as available with the CRWTP staff to understand plant operational concerns and facility limitations. Information will be documented using electronic collection methods.

#### Task 1.2 CPE Report

After the field investigation, Consultant will evaluate limitations of the Priority Processes relative to the New Mexico Environment Department (NMED) design standards and typical industry practice, consistent with the USEPA CPE protocol. Supplemental data needed to support the evaluation will be requested of the City and reviewed, or recommended for collection. The resulting CPE will be documented in a concise report.

Consultant will conduct a workshop with the City to review the draft CPE Report, revise the report to address City comments, and submit a final report.

#### Task 1 Assumptions

- Consultant staff conducting the two-day onsite work will include process engineers, a structural engineer, an electrical/I&C engineer.
- Evaluations will be limited to the Priority Processes.
- One workshop in Santa Fe to review the draft CPE report.

#### Task 1 Deliverables

- Information collected from the onsite assessment will be delivered in an electronic format.
- One draft and one final CPE report will be provided, each submitted in electronic format.

### Task 2 – Facility Optimization Evaluation (FOE)

#### Task 2.1 FOE Capital Analysis

Consultant will identify a list of potential CRWTP improvements based on CPE findings in a Facility Optimization and Evaluation (FOE) plan. Consultant will develop a schematic figure, a cost estimate consistent with an AACE Class 5 estimate, and a one-page summary fact sheet for up to 10 individual capital improvements to support development of a prioritized capital improvement plan (CIP) under Task 2.3. The consulting team will also work with the City to establish finished water quality goals for the CRWTP.

The consulting team will also evaluate the data to determine if reservoir oxygenation may be cost-effective in addressing water quality concerns and reducing water treatment capital and O&M costs. Hypolimnetic oxygenation is one possible in-lake treatment method that could reduce dissolved iron and manganese and provide other water quality benefits such as reducing internal recycling of nutrients that contribute to algae blooms. Since water quality data do not exist, conservative assumptions regarding oxygen demands will be used.

Reservoir temperature and oxygen profiles do not currently exist, and the initial season of data collection will not be available. The existing stage-area-capacity table, bathymetric survey and historical reservoir inflows, releases and water levels will be used to assist in developing estimates of oxygen demands.

The consulting team will compare reservoir oxygenation with treatment processes at the CRWTP to address iron and manganese and other raw water quality concerns.

#### Task 2.2 FOE O&M and Energy Optimization

Consultant will identify potential lower-capital modifications that can improve operations (e.g., gravity thickener and centrifuge operation) and energy optimization opportunities based on the information collected during the CPE field investigation. These items will be documented along with estimates of capital costs (consistent with AACE Class 5) and conceptual-level O&M savings in a tabular summary delivered to the City.

The Consultant will conduct an operator training workshop, at the CRWTP, that will focus on presenting the operational considerations associated with each of the recommended facility optimization recommendations.

The consulting team will conduct a site visit with City staff to review field and laboratory water quality parameters sampling and analysis. This analysis will include recommendations for frequency of monitoring. In addition, recommendations will be provided on use of water quality monitoring equipment anticipated to be purchased by the City (i.e., sonde).

### Task 2.3 Prioritized CRWTP CIP

Consultant will propose a set of evaluation criteria and weighting for the 10 capital projects identified in Task 2.1 for the City's review and editing. Consultant will evaluate the 10 projects against these criteria and use a weighted decision model, with the City's revised criteria and criteria weighting, to prioritize the projects for timing of implementation. The resulting CIP will be presented to the City on a proposed timeline at a workshop in Santa Fe, revised based on comments received at the workshop, and documented in a single version of a technical memorandum that summarizes the Task 2.1 through 2.3 work.

### Task 2 Assumptions

- Capital costs will be developed for up to 10 individual projects consistent with AACE Class 5 estimates.
- Tabular summary of potential operational and energy optimization opportunities.
- In-reservoir water quality data collection and analysis will commence no later than April 2019. After the April to November 2019 monitoring period, the consultant will provide a summary of physical, chemical, and biological parameters from this monitoring period.
- City will provide a single set of edits on proposed criteria and weighting that will be used to determine the prioritized CIP. Consultant will score the CIP projects against the criteria and present weighted criteria decision model results at a single workshop in Santa Fe.
- One workshop in Santa Fe to review proposed CIP prioritization and collect City comments.

### Task 2 Deliverables

- Single version of a technical memorandum summarizing Tasks 2.1 through 2.3, submitted in electronic format.

## Task 3 – Preliminary Engineering Report (PER)

### Task 3.1 System Upgrades, Opinion of Cost, and PER

As directed by the City, Consultant will proceed with some or all of Tasks 3 through 8. Consultant and the City will identify the highest priority upgrades identified in Task 2 for development of a preliminary engineering report (PER) under Task 3 and design and construction under Tasks 4 through 8.

It is assumed that the highest priority projects in Tasks 3 through 8 include the Nichols Reservoir Aeration System, the Filter Influent Chlorine Feed System to address influent water quality, and the Clarifier Tube Settler Replacement. The consulting team will work with a nationally-known supplier of reservoir oxygenation equipment to refine estimates of oxygen requirements and planning-level capital costs. On-site oxygen generation at Nichols Reservoir will be compared to trucking of liquid oxygen and storage at the site.

An implementation plan will be developed for the selected improvements. A succinct draft and final PER following the guidelines of NMED Part 1.1 will be developed for the selected improvements. The PER will include the relevant section outlined in Part 1.2 of the Recommended Standards for Water Supply Systems as well as the finished water quality goals for the CRWTP established in Task 2.1.

### Task 3 Assumptions

- The PER will be developed for Nichols Reservoir Aeration System, Filter Influent Chlorine Feed System, and the Clarifier Tube Settler Replacement.
- No bench or pilot scale testing will be required for any of the selected improvements.
- Update of estimate of capital and O&M costs from Task 2 for the selected improvements.

### Task 3 Deliverables

- Draft and final succinct PER of selected improvements.

**Task 4 – Conceptual Design (30%)****Task 4.1 30% Design - Reservoir Aeration and Filter Influent Chlorine Feed**

Consultant will develop a conceptual design of the Nichols Reservoir Aeration System and Filter Influent Chlorine Feed System. The in-progress design documents will be made available for the City review and will include preliminary layouts, P&IDs, and preliminary equipment and electrical information. In order to meet the project accelerated project schedule, a formal review of the 30 percent documents will not be conducted by the City.

**Task 4.2 30% Design - Clarifier Tube Settler Replacement**

Consultant will develop a conceptual design of the Clarifier Tube Settler Replacement. The in-progress design documents will be made available for the City review and will include preliminary layouts, P&IDs, and preliminary equipment and electrical information. In order to meet the project accelerated project schedule, a formal review of the 30 percent documents will not be conducted by the City.

**4.3 Construction Estimates and Operations Costs**

The previously-developed Class 5 capital cost for the Task 4.1 items will be carried forward for this phase of the project and will not be updated. A Class 5 capital cost will be developed for the Clarifier Tube Settler Replacement.

**Task 4 Assumptions**

- A formal 30 percent submittal and review will not be conducted for the process improvements.
- In-progress design documents will be made available for City review and comments can be provided to the Consultant project team via the Consultant PM at any time during the continuous design development process.
- Survey data for the clarifier structural elements, tube settlers, and launders will be provided by the City.
- Geotechnical information is not necessary for the anticipated process improvements since they do not include new facilities/structures.
- A 1-day operator training will be conducted by Consultant's PM and process lead at the CRWTP.

**Task 4 Deliverables**

- No formal submittal

**Task 5 – Preliminary Design (60%)****Task 5.1 60% Design - Reservoir Aeration and Filter Influent Chlorine Feed**

Consultant will provide preliminary construction plans and a list of anticipated specifications for the Nichols Reservoir Aeration System and Filter Influent Chlorine Feed System improvements. A 60 percent submittal workshop will be held in Santa Fe to review the plans and collect City review comments.

**Task 5.2 60% Design - Clarifier Tube Settler Replacement**

Consultant will provide preliminary construction plans and a list of anticipated specifications for the Clarifier Tube Settler Replacement. City review comments will be collected as part of the Task 5.1 workshop.

**Task 5.3 Cost Estimate Update**

The previously-developed Class 5 capital costs will be updated at this phase of the project to AACE Class 4 level.

#### Task 5 Assumptions

- 60 percent submittal workshop to be held in Santa Fe to review plans and collect City comments.

#### Task 5 Deliverables

- 60 percent drawings (plans and some sections/details for each discipline as well as all P&IDs)
- Key equipment specifications and a list of all anticipated specifications for the project elements
- Updated cost estimate.

#### Task 6 – Final Design (90%)

##### Task 6.1 90% Design Deliverables and Bid Documents - Reservoir Aeration and Filter Influent Chlorine Feed

Consultant will provide 90% documents for final review followed by a complete bid package for the Nichols Reservoir Aeration System and Filter Influent Chlorine Feed System Improvements. A final review meeting of the design documents will be held via remote meeting with City staff and Consultant.

##### Task 6.2 90% Design Deliverables and Bid Documents - Clarifier Tube Settler Replacement

Consultant will provide 90% documents for final review followed by a complete bid package for the Clarifier Tube Settler Replacement. A final review meeting of the design documents will be held via remote meeting with City staff and Consultant.

##### Task 6.3 Summary Design Report and Cost Estimate

Consultant will provide a brief summary design report to accompany the final design documents and will update previous cost estimates to an estimate consistent with an AACE Class 3 estimate.

#### Task 6 Assumptions

- The final review of the design documents will be via a remote meeting with the City staff and Consultant.
- Division 0 and Division 1 specifications will be Consultant's standard documents.

#### Task 6 Deliverables

- Submittal of 90% design documents for the Nichols Reservoir Aeration System and Filter Influent Chlorine Feed System Improvements, and Clarifier Tube Settler Replacement and concrete repair.
  - Approximately 35 design drawings are estimated for the design of these improvements.
  - Specifications and details
- Brief summary design report to accompany the final design documents.
- AACE Class 3 cost estimate for the final design package.

#### Task 7 – Bidding

##### Task 7.1 Bidding Support

Consultant will prepare up to one addendum during the bid phase. Consultant will support the City's review of bids received.

#### Task 7 Assumptions

- The City will manage and conduct the bidding process.
- Services are limited to preparing one addendum and supporting City's review of bids received.
- All project elements will be bid as a single bid package.

#### Task 7 Deliverables

- Up to one addendum, if needed.

## Task 8 – Construction Management

### Task 8.1 Site Visits (Periodic Inspection)

Periodic site visits will be scheduled throughout the construction period to provide support to City inspection. Consultant has assumed 18 full-day site visits by various design engineers during the construction period.

#### Task 8 Assumptions

- Hours for site visits, office support, and construction management are limited to the construction items specifically described in the subtasks above.
- Conducting daily or weekly field observations is not necessary for the types of improvements assumed for this design under Tasks 3-6.
- Routine inspection may also be provided by City staff.
- Consultant inspection will consist of:
  - Eight site visits conducted by discipline engineers (process, structural, or electrical/I&C) coordinated with specific construction activities.
    - These inspections will require out of state travel by these engineers.
  - Ten site visits will be conducted by a civil engineer from Consultant's Albuquerque office. These routine inspections will be coordinated with construction activities to assess the overall progress of the project and general conformance with the design documents.
    - Each day of inspection will be assumed to include 12 hours of labor and round trip mileage from Albuquerque to the CRWTP (approximately 70 miles each way). Mileage will be compensated at the IRS rate.
- A 1-day operator training will be conducted by the Consultant's PM and process lead at the CRWTP.
- Support for pre-conference workshop, progress payments, startup, closeout, training, construction progress meetings, construction reporting and documentation, and other services not specifically listed above will be provided by City staff or accommodated within the hours allocated above.
- Submittals, RFIs, and changes will be tracked by the City.
  - A total of 12 submittals and 6 hours per submittal have been assumed. This includes time to review resubmittals, however if more than two resubmittals are required, Consultant will track the time associated with multiple submittals and may be entitled to additional compensation if excessive submittals are required to achieve approval.
  - A total of 12 RFIs and 4 hours per RFI have been assumed.
  - A total of 2 changes have been assumed with 20 hours associated with developing each change.
- The City's PM will primarily manage document flow between the Contractor and Consultant.
- The City and/or Contractor will schedule and lead all construction meetings.
- Consultant will provide periodic site inspections that coincide with the weekly construction meetings (when possible).
- Consultant will provide additional inspections of key project elements on a limited basis, by select engineering staff.
- Consultant will communicate observed construction deficiencies via the inspection reports as well as directly with the City's PM.
- Consultant will not be responsible for overall construction contract administration for any of the design packages. Consultant will not be responsible for startup or commissioning of equipment or overall processes.
- Consultant will follow site safety procedures established by the Contractor and the City and will provide necessary safety equipment and oversight for Consultant staff.

**Task 8 Deliverables**

- Modifications to drawings, specifications, or details required for changes identified by the City.
- An inspection report to summarize the status of construction observed during each site visit. Each concise inspection report will include photographs of construction activities and a description of specific construction activities observed.

**Project Schedule**

The evaluation and design phases of the project are anticipated to be completed over a 9-month timeframe, starting from formal notice to proceed. An overall project schedule framework is provided below. Detailed project schedules, including milestones for deliverables and key meetings, will be established between the City and Consultant project managers during execution of the project.

<b>Task</b>	<b>Approximate Months from Notice to Proceed</b>
0	1 through 9 (for evaluation and design tasks)
1	1 through 2
2	3
3	4 through 5
4	6
5	7 through 8
6	9
7 and 8	To be determined by City based on construction schedule

EXHIBIT B: CITY OF SANTA FE CANYON ROAD WATER TREATMENT PLANT CPE AND FACILITY OPTIMIZATION PROJECT   NOVEMBER 28, 2018													SUBCONTRACT: DINATALE WATER CONSULTANTS										CAROLLO DIRECT LABOR										CAROLLO DIRECT EXPENSES				
LINE	DESCRIPTION	SENIOR SPECLIST (Hours)	SENIOR PROF (Hours)	PROJECT PROF (Hours)	PROF (Hours)	ASST PROF II (Hours)	ASST PROF I (Hours)	SENIOR TECH (Hours)	TECH (Hours)	DOC PROJ & CLER (Hours)	TOTAL LABOR HOURS	TOTAL LABOR COSTS	SR HOURS	ASSOC. HOURS	OTHER DIRECT COSTS	TOTAL SUB FEES	SUBCONTRACT MARKUP	TRAVEL & OTHER DIRECT COSTS	PERCE ON CAROLLO DL Hrs	ODC's	TOTAL OF																
Task 0 Project Management																																					
0.1	Project Coordination	42	42	0	0	0	0	0	0	0	84	\$18,000																									
SUBTOTAL: COSTS		\$9,828	\$8,776	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$18,000																									
Task 1 - Comprehensive Performance Evaluation (CPE)																																					
1.1	Field Investigation (2 day site visit, process/structural, EISC, PE and prep)	48	24	24	24	0	26	0	0	12	96	\$17,976																									
1.2	CPE Report	24	24	16	24	0	26	0	0	12	102	\$17,870																									
SUBTOTAL: COSTS		\$5,616	\$15,048	\$6,920	\$3,792	\$0	\$3,354	\$0	\$0	\$1,116		\$35,646																									
Task 2 - Facility Optimization Evaluation (FOE)																																					
2.1	FOE Recommendations and Costs	16	28	8			24	16	16	8	100	\$16,900																									
2.2	OGM and Energy Optimization	24	30	4			24	16	80	12	102	\$15,914																									
2.3	Prioritized GRWTP CIP	20	16	14			62	0	16	12	238	\$10,200																									
SUBTOTAL: COSTS		\$9,040	\$15,468	\$2,076	\$0	\$0	\$7,698	\$0	\$2,080	\$1,116		\$42,776																									
Task 3 - Preliminary Engineering Report (PER)																																					
3.1	System Upgrades, Opinion of Cost, and PER	4	36	0	0	0	25	0	0	12	77	\$12,801																									
SUBTOTAL: COSTS		\$936	\$7,524	\$0	\$0	\$0	\$3,225	\$0	\$0	\$1,116		\$12,801																									
Task 4 - Conceptual Design (30%)																																					
4.1	30% Design - Reservoir Aeration and Filler Influent Chlorine Feed	4	8	8	8		26	16	16	62	83,306																										
4.2	30% Design - Clarifier Tube Settler Replacement	12	120	8			60	16	80	8	324	\$53,312																									
4.3	Construction Estimates and Operations Costs	16	168	48	8	0	118	16	96	8	478	\$16,628																									
SUBTOTAL: COSTS		\$3,744	\$35,112	\$8,304	\$1,264	\$0	\$15,222	\$2,192	\$12,480	\$744		\$79,062																									
Task 5 - Preliminary Design (60%)																																					
5.1	60% Design Deliverables - Reservoir Aeration and Filler Influent Chlorine	12	32	12	12		40	12	50	16	174	\$28,472																									
5.2	60% Design Deliverables - Clarifier Tube Settler Replacement	12	68	8			60	16	80	16	262	\$39,224																									
5.3	Cost Estimate Update	2	2	6	6	0	118				8	\$1,368																									
SUBTOTAL: COSTS		\$5,616	\$21,318	\$0	\$2,844	\$0	\$12,900	\$4,508	\$16,800	\$2,976		\$87,082																									
Task 6 - Final Design (90%)																																					
6.1	90% Design Deliverables and Bid Documents - Aeration and Fil Chlorine	0	24		12		40	4	60	16	104	\$25,016																									
6.2	90% Design Deliverables and Bid Documents - Clarifier Tube Settler Replacement	8	48	12			40	4	60	16	178	\$26,008																									
6.3	Design Report and Cost Estimate	8	12				20				56	\$8,598																									
SUBTOTAL: COSTS		\$5,616	\$17,556	\$0	\$1,896	\$0	\$12,900	\$1,288	\$16,120	\$4,092		\$59,468																									
Task 7 - Bidding																																					
7.1	Bidding Support	4	24	0	8	0	16	0	4	4	60	\$10,172																									
SUBTOTAL: COSTS		\$936	\$5,016	\$0	\$1,264	\$0	\$2,064	\$0	\$520	\$372		\$10,172																									
Task 8 - Construction Management																																					
8.1	Site Visits (Periodic Inspection)	16	144	120	40		36	12	8		320	\$50,820																									
8.2	Shop Drawings, Request for Information, and Change Orders	4	60	40			36			8	160	\$27,344																									
8.3	Final Inspection	20	204	172	40	0	36	0	12	8	482	\$2,076																									
SUBTOTAL: COSTS		\$4,680	\$42,636	\$29,756	\$6,320	\$0	\$4,644	\$0	\$1,560	\$744		\$90,340																									
TOTAL SERVICES: LABOR HOURS		218	806	272	110	-	483	52	382	132	2485																										
TOTAL COST OF SERVICES (EXCLUDING NMORT)		\$51,012	\$168,454	\$47,056	\$17,380	\$0	\$82,307	\$7,988	\$49,660	\$12,276		\$416,133																									