ITEM # 18-1065

CITY OF SANTA FE

PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT is made and entered into by and between the City of Santa Fe (the "City") and Carollo Engineers, Inc. (the "Contractor"). The date of this Agreement shall be the date when it is executed by the City and the Contractor, whichever occurs last.

1. SCOPE OF SERVICES

The Contractor shall provide engineering design and consulting services, project management and construction oversight for the City as described in Exhibit "A" and "B" attached hereto.

2. STANDARD OF PERFORMANCE; LICENSES

A. The Contractor represents that it possesses the experience and knowledge necessary to perform the services described under this Agreement.

B. The Contractor agrees to obtain and maintain throughout the term of this Agreement, all applicable professional and business licenses required by law, for itself, its employees, agents, representatives and subcontractors.

C. The Contractor shall perform 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.

3. COMPENSATION

A. The City shall pay to the Contractor in full payment for services

rendered, a sum not to exceed six hundred fifty four thousand ninety seven dollars and 00/100 ($654,097.00), plus applicable gross receipts taxes as described in Exhibit "C" attached hereto

B. The Contractor shall be responsible for payment of gross receipts taxes levied by the State of New Mexico on the sums paid under this Agreement.

C. Payment shall be made upon receipt and approval by the City of detailed statements containing a report of services completed. Compensation shall be paid only for services actually performed and accepted by the City.

4. APPROPRIATIONS

The terms of this Agreement are contingent upon sufficient appropriations and authorization being made by the City for the performance of this Agreement. If sufficient appropriations and authorization are not made by the City, this Agreement shall terminate upon written notice being given by the City to the Contractor. The City's decision as to whether sufficient appropriations are available shall be accepted by the Contractor and shall be final.

5. TERM AND EFFECTIVE DATE

This Agreement shall be effective when signed by the City and terminate on December 31, 2020, unless sooner pursuant to Article 6 below. Contract term may be extended for three (3) additional twelve (12) month terms.

6. TERMINATION

A. This Agreement may be terminated by the City upon 30 days written notice to the Contractor.

(1) The Contractor shall render a final report of the services

performed up to the date of termination and shall turn over to the City original copies of all work product, research or papers prepared under this Agreement.

(2) If compensation is not based upon hourly rates for services rendered, the City shall pay the Contractor for the reasonable value of services satisfactorily performed through the date Contractor receives notice of such termination, and for which compensation has not already been paid.

(3) If compensation is based upon hourly rates and expenses, the Contractor shall be paid for services rendered and expenses incurred through the date Contractor receives notice of such termination.

7. STATUS OF CONTRACTOR; RESPONSIBILITY FOR PAYMENT OF EMPLOYEES AND SUBCONTRACTORS

A. The Contractor and its agents and employees are independent contractors performing professional services for the City and are not employees of the City. The Contractor, and its agents and employees, shall not accrue leave, retirement, insurance, bonding, use of City vehicles, or any other benefits afforded to employees of the City as a result of this Agreement.

B. Contractor shall be solely responsible for payment of wages, salaries and benefits to any and all employees or subcontractors retained by Contractor in the performance of the services under this Agreement.

C. The Contractor shall comply with City of Santa Fe Minimum Wage, Article 28-1-SFCC 1987, as well as any subsequent changes to such article throughout the term of this Agreement.

8. CONFIDENTIALITY

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

9. CONFLICT OF INTEREST

The Contractor warrants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required under this Agreement. Contractor further agrees that in the performance of this Agreement no persons having any such interests shall be employed.

10. ASSIGNMENT; SUBCONTRACTING

The Contractor shall not assign or transfer any rights, privileges, obligations or other interest under this Agreement, including any claims for money due, without the prior written consent of the City. The Contractor shall not subcontract any portion of the services to be performed under this Agreement without the prior written approval of the City.

11. RELEASE

The Contractor, upon acceptance of final payment of the amount due under this Agreement, releases the City, its officers and employees, from all liabilities, claims and obligations whatsoever arising from or under this Agreement. The Contractor agrees not to purport to bind the City to any obligation not assumed herein by the City unless the Contractor has express written authority to do so, and then only within the strict limits of

that authority.

12. INSURANCE

A. The Contractor, at its own cost and expense, shall carry and maintain in full force and effect during the term of this Agreement, comprehensive general liability insurance covering bodily injury and property damage liability, in a form and with an insurance company acceptable to the City, with limits of coverage in the maximum amount which the City could be held liable under the New Mexico Tort Claims Act for each person injured and for each accident resulting in damage to property. Such insurance shall provide that the City is named as an additional insured and that the City is notified no less than 30 days in advance of cancellation for any reason. The Contractor shall furnish the City with a copy of a Certificate of Insurance as a condition prior to performing services under this Agreement.

B. Contractor shall also obtain and maintain Workers' Compensation insurance, required by law, to provide coverage for Contractor's employees throughout the term of this Agreement. Contractor shall provide the City with evidence of its compliance with such requirement.

C. Contractor 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 Contractor shall furnish the City with proof of insurance of Contractor's compliance with the provisions of this section as a condition prior to performing services under this Agreement.

13. INDEMNIFICATION

The Contractor shall indemnify, hold harmless and defend the City from all

losses, damages, claims or judgments, including payments of all attorneys' fees and costs on account of any suit, judgment, execution, claim, action or demand whatsoever to the extent caused by Contractor's negligent performance under this Agreement as well as the performance of Contractor's employees, agents, representatives and subcontractors. The Contractor 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 any other reason whatsoever. Additionally, Contractor shall not be responsible for acts and decisions of third parties, including governmental agencies, other than Contractor's subconsultants, that impact project completion and/or success.

14. 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.

15. THIRD PARTY BENEFICIARIES

By entering into this Agreement, the parties do not intend to create any right, title or interest in or for the benefit of any person other than the City and the Contractor. No person shall claim any right, title or interest under this Agreement or seek to enforce this Agreement as a third party beneficiary of this Agreement.

16. RECORDS AND AUDIT

The Contractor shall maintain, throughout the term of this Agreement and for a period of three years thereafter, detailed records that indicate the date, time and nature of services rendered. These records shall be subject to inspection by the City, the Department of Finance and Administration, and the State Auditor. The City shall have the right to audit the billing both before and after payment. Payment under this Agreement shall not foreclose the right of the City to recover excessive or illegal payments.

17. APPLICABLE LAW; CHOICE OF LAW; VENUE

Contractor shall abide by all applicable federal and state laws and regulations, and all ordinances, rules and regulations of the City of Santa Fe. In any action, suit or legal dispute arising from this Agreement, the Contractor agrees that the laws of the State of New Mexico shall govern. The parties agree that any action or suit arising from this Agreement shall be commenced in a federal or state court of competent jurisdiction in New Mexico. Any action or suit commenced in the courts of the State of New Mexico shall be brought in the First Judicial District Court.

18. AMENDMENT

This Agreement shall not be altered, changed or modified except by an amendment in writing executed by the parties hereto.

19. SCOPE OF AGREEMENT

This Agreement incorporates all the agreements, covenants, and understandings between the parties hereto concerning the services to be performed hereunder, and all such agreements, covenants and understandings have been merged into this Agreement. This Agreement expresses the entire Agreement and understanding

between the parties with respect to said services. No prior agreement or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this Agreement.

20. NON-DISCRIMINATION

During the term of this Agreement, Contractor shall not discriminate against any employee or applicant for an employment position to be used in the performance of services by Contractor hereunder, on the basis of ethnicity, race, age, religion, creed, color, national origin, ancestry, sex, gender, sexual orientation, physical or mental disability, medical condition, or citizenship status.

21. SEVERABILITY

In case any one or more of the provisions contained in this Agreement or any application thereof shall be invalid, illegal or unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions contained herein and any other application thereof shall not in any way be affected or impaired thereby.

22. CITY-PROVIDED INFORMATION AND SERVICES

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

23. DOCUMENT USE AND REUSE

Documents, including drawings and specifications, prepared by Contractor

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 Contractor for the specific purpose intended will be at the City's sole risk and without liability or legal exposure to Contractor.

24. ESTIMATES AND PROJECTIONS

In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for potential projects, Contractor 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, Contractor makes no warranty that the City's actual project costs, financial aspects, economic feasibility, or schedules will not vary from Contractor's opinions, analyses, projections, or estimates.

25. SERVICES DURING CONSTRUCTION

A. Contractor 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.

26. NOTICES

Any notices required to be given under this Agreement shall be in writing and served by personal delivery or by mail, postage prepaid, to the parties at the following addresses:

City of Santa Fe:
Wastewater Management Division
73 Paseo Real
Santa Fe, NM 87507

Carollo Engineers, Inc:
6200 Uptown Blvd. NE, Suite 120
Albuquerque, NM 87110

IN WITNESS WHEREOF, the parties have executed this Agreement on the date set forth below.

CITY OF SANTA FE:

ALAN WEBBER, MAYOR

DATE: 10/5/18

CAROLLO ENGINEERS, INC.:

Vice President
NAME & TITLE

DATE: 10-11-18

VICE PRESIDENT
NAME & TITLE
DATE: 10.11.18

CRS #: 03-162628-00-9
Business Registration #: 18-00117760

ATTEST:

YOLANDA Y. VIGIL, CITY CLERK
CC mtg. 9/26/18

APPROVED AS TO FORM:

8/21
ERIN K. MCSHERRY, CITY ATTORNEY

APPROVED:

10/3
MARY MCCOY, FINANCE DIRECTOR

52468.572960
Business Unit Line Item

EXHIBIT "A"

CITY OF SANTA FE (CITY)

WASTEWATER TREATMENT PLANT AERATION SYSTEM IMPROVEMENTS

SCOPE OF WORK FOR CAROLLO ENGINEERS, INC. (CONTRACTOR)

Task 0 - Project Management

0.1 Project Management Plan

Prepare the Project Management Plan (PMP) Manual tabbed with the following information: Scope of Work, Schedule, Project Team and Contact List, Project Work Order Numbers and Budget Allocation, Document Templates, Calculations and Documentation Procedures, Quality Management Plan, Drawing List, Specifications List, Checklists for the City and Contractor, Equipment Lists, and Decision Log.

Setup, maintain, and use a SharePoint site for coordination and communication.

0.2 Project Management, Invoicing, Action Item Log, Decision Log

Prepare and submit a written monthly progress report to the City's Project Manager that will show the percentage of work completed and the percentage of contract billed, summarize the work completed during the month, and the work to be completed during the following month. Schedule or budget challenges will be discussed if necessary and corrective actions identified.

Maintain a decision log throughout the project to record the decisions made by the project team during site visits, workshops, and project meetings, as well as during telephone conversations or by email.

0.3 Not Used

0.4 Kick-off Meeting

Conduct a kick-off meeting with City staff in Santa Fe to review the scope of work and schedule for this Project, as well as discuss the roles and responsibilities of all participating stakeholders. A draft copy of the PMP will be submitted to the City's Project Manager in advance of the meeting. During the kick-off meeting, discuss the direction of the project and roles and responsibilities.

Deliverables: Monthly invoice and progress report and an updated decision log (presented with meeting notes).

Phase 1 Pre-Design and 30% Drawings

Phase 1 consists of the following tasks and subtasks:

Task 1 Basis of Design Definition

Definition of Design Criteria, Filtrate EQ Tank Sizing and Siting

These tasks involve developing the alternative evaluation and conceptual design for process modifications. A brief description for each area follows.

Aeration System Design For the aeration system conceptual design, undertake the following tasks:

1. Justify design influent flows and loads.

2. Quantify minimum, average, and maximum design air requirements.
3. Evaluate diffuser layout and improvement alternatives through process modeling.
4. Define the blower sizing criteria and solicit preliminary blower design and budget quotes.

Since the City is undertaking significant aeration system revisions in this project, replacing the remaining diffusers with new disc membranes will save energy. In this analysis, evaluate the following:

1. Is the number of diffusers in each zone adequate, or how many diffusers should be capped off in each zone to satisfy near-term air demand lows?
2. Confirm diffuser grids appropriate spacing. For example, would SNDN process control be better in the second half of the basin with only one active grid in the C pass, but one additional small grid in the D pass?

The final diffuser modifications will impact the minimum and maximum air demand in the near-term and in the future. Therefore, this analysis will be conducted first, before the future blower system is sized and designed.

Blower Design Discuss acceptable blower alternatives with the City during the kick off meeting. As a preliminary selection, include the following high-efficiency blower alternatives in this evaluation:

Sulzer
Neuros
Turblex

Evaluate the following alternatives for their technical and economic benefit, listed here in order of increasing capital costs:

- **Hoffman Solution:** Equip the Hoffmans with VFDs and use them as lead blowers for the aeration basins.
- **Hybrid Solution:** Equip one or two of the Hoffmans with VFDs and take credit for these units to cover a portion of your air demand.
- **Turbo Solution:** Continue to use the Hoffmans as a backup system while investing into replacing the existing Turblex units with likely two new units and one future blower.

Aeration Control Valves and Aeration Control Automation

In addition to assessing the aeration diffusers and blower system, the system will be modeled in SIMBA, a software that focuses on aeration system and control process modeling. This model builds onto the Biowin model that was calibrated for your process in the 2018 nutrient planning study. SIMBA will allow verification of the adequate control valve sizing to each grid zone, and testing of the process benefits of alternative aeration control logics.

Scum and Foam Control

Evaluate the various options for better managing scum and foam in the selectors and aeration basins, along with the preliminary cost estimates for associated modifications. It is anticipated that the following alternatives will be considered, listed here in order of increasing capital investments:

1. Assessing (and possibly testing) operational strategies with plant staff for removing scum in the aeration basins, thereby "outselecting" filaments continuously.
2. Repairing the existing surface wasting and pumping system in the selectors and aeration basins.
3. Installing a dedicated surface wasting system in the aeration basins to best protect the secondary clarifiers, tertiary filters, UV system, and effluent quality.

Filtrate Equalization (EQ) Tank

For the conceptual design of the filtrate EQ tank, the foremost five aspects should be refined:

. 1. Sizing of the tank: Assess current filtrate flows, and consider future filtration operation strategy and schedule. Redundancy: Design the filtrate tank as two chambers to simplify periodic cleaning and maintenance of the mixing system.
. 2. Site location of the tank: Accommodate possible future expansion.
. 3. Location of filtrate return to mainstream treatment: Evaluate the pros and cons of routing the filtrate back to the primary clarifiers or directly to the aeration basins.
. 4. Filtrate recycle control: Consider options of flow based, load based, inverse to influent flow. Control for recycle from the EQ tank to the main stream process.
. 5. Evaluate the benefits of load based recycle control. Regardless of phosphorus and ammonia concentration in the filtrate, this will allow the City to recycle steady nutrient loads to the aeration basins.

Site Utilities and EI&C

Develop conceptual design solutions to integrate the secondary treatment improvements into the SCADA overall architecture. EI&C needs supporting the design improvements will be identified. This task will be led by Contractor's EI&C group.

Drain Pumping

Review the existing drain pumps and aeration drain valves and make recommendations that will be included into the Final design.

Deliverables:

TM 1: Diffuser System and Aeration Control
TM 2: Blower Alternative Evaluation
TM 3: Scum Management
TM 4: Site, Civil, and Survey
TM 5: Filtrate EQ Tank and Pumping Sizing
TM 6: Plant Drain
TM 7: EI&C Evaluation

Task 2 (Not Used)

Task 3 Permitting (SUPPLEMENTAL SERVICES Tasks 3.1 – Permitting Coordination and 3.2 – NMED Coordination)

It is not anticipated that permitting will require significant time resources for this project. The State of New Mexico does not require approval of wastewater modifications unless the project is co-funded with state funds. Funds are reserved in this task if the City needs support for any outreach communication during or following the construction project related to regulators, other approval agencies, the City Council, or the general public.

Task 4 Technical Workshops

In the workshops, Contractor will spend time with City staff to summarize and discuss the essentials of each TM developed in Task 1, and review the respective drawing sets to solicit feedback from City staff.

Provide materials for each workshop no less than one week before each workshop to City participants. Discuss agenda and informational highlights with the City project manager in advance.

Provide O&M staff with a suggested checklist to guide their review and feedback.
Any feedback and review comments provided by the City will be incorporated into the Preliminary Design Report and drawing sets within two weeks following the meetings. Consolidate the project design elements into the following three workshops:

4.1 Aeration System & Controls and Scum Management Workshop (Workshop 1)

Workshop 1 will determine the design criteria of the blowers, aeration, control description, and scum removal alternatives. Decisions made through this workshop include blower selection, blower electrical demands, aeration control and scum removal strategies.

4.2 Filtrate EQ Tank Siting/Facility layout Workshop (Workshop 2)

Workshop 2 will provide the necessary engineering and cost analysis to help City participants make a decision on sizing, site location, mixing, and pump system for the filtrate EQ tank. The process modeling completed to date will save time to quantify projected filtrate flows and drain back control alternatives.

The final location of the Filtrate EQ Tank and Pumping System will be determined by the existing survey data provided by the City and existing record drawings that show the utilities (electrical, yard piping, etc)

Also prepare a preliminary site plan of where future side stream treatment facilities for phosphorus and nitrogen removal may be placed to reserve sufficient flexibility.

4.3 Site Utilities/Electrical/Instrumentation Workshop (Workshop 3)

In workshop 3, facilitate City decisions on necessary upgrades for the plant drain system and any other ancillary improvements that may be identified. Also discuss the Site Utilities/Electrical/ Instrumentation and determine the location and sizing of any new required utilities (electrical, yard piping) to accommodate the new design elements. This will include an evaluation of the ability to supply electrical service from the existing blower building switchgear. The workshop will also determine the site layout for all utilities.

At each workshop, the findings from the recommended layouts, design criteria, and preliminary control philosophies will be presented and discussed. All review comments and decisions made (in either verbal or written form) will be documented and incorporated into the Preliminary Design Report (PDR) summarized in Task 5.

Deliverables: Pre-meeting review materials, decision logs, meeting notes.

Task 5 Pre-Design Documentation

5.1 Preliminary Design Report (PDR) and 30% Design Drawings

In this task, consolidate the design definition from the TMs and drawings as the basis for Design Development Phase and Contract Document Phase. Selected layouts, design criteria, and preliminary control philosophies will be summarized and included in the PDR. Where necessary, additional engineering evaluations will be conducted based on input received from the City during the workshops in Task 4. This may include alternative layouts, costs analysis, site visits, and refined design criteria. The information presented at the workshops and the workshop meeting notes will be combined into one PDR containing information and recommendations that will serve as the basis for final design.

The PDR will consist of an executive summary and a collection of TMs as described above. A draft and final draft PDR will be provided to the City. City staff shall review a draft report and comments will be incorporated into the final PDR. The PDR will include 30 percent drawings and outline specifications as appendices.

Deliverables: Preliminary List of Drawings and Specifications; 30% Drawing Package (including Preliminary PI&D, Structural, Mechanical, Architectural Drawings); Summary Design Report

5.2 Preliminary Construction Sequencing Plan

It is assumed that the ongoing solids treatment and SCADA improvements will be installed and operable by the end of the design of this project. A Maintenance of Plant Operations (MOPOs) schedule will be included in the contract documents for this project detailing the blower shutdown and start-up procedures, and allowable construction sequences for the construction contractor, based on City inputs. The MOPO will address procedural steps, time and scheduling constraints, and plant interface issues that will aid the construction contractor in developing the sequence of work in order to minimize interferences and maintain continuous operation of the plant.

Deliverables: Preliminary Construction Sequencing Plan

5.3 Budgetary Cost Estimate and Probable Annual O&M Costs

Provide preliminary basis of cost, as well as construction and project cost estimates. The updated basis of cost will be used in all cost estimates prepared during the preliminary design phase.

Deliverables: Cost estimate (Class 3, Budgetary Cost Estimate, Probable Annual O&M Costs)

Phase 2 Design Development

Phase 2 consists of the following tasks and subtasks:

Task 6 Design Development and Workshops

6.1 SUPPLEMENTAL SERVICE TASK - Progress Meetings

Host three progress meetings during design development. Along with City staff, focus on the detailed plans and specifications prepared with emphasis on the facilities' layout, design details, and EI&C. Submit and discuss detailed plans and specifications at least one week ahead of the meetings. This will provide the Contractor initial feedback prior to the meeting to make any necessary adjustments, give the City the opportunity to decide who is essential to have in the meeting from the City, and to facilitate likely comments or concerns of City staff during the meeting. The three meetings are:

1. Filtrate EQ Tank Siting/Facility Layout Meeting
2. Aeration System & Controls and Scum Control Meeting

3. Site Utilities/Electrical/Instrumentation Meeting

Deliverables: (Minimum) 60% draft drawings

6.2 Design Development Review Workshop

Hold one workshop to present the 60 % level drawings and specifications.

Conduct a final internal Quality Control review of the drawings and specs prior to submitting any deliverables to the City.

Task 7 Design Development Documentation

7.1 Drawings and Specifications

The PDR developed in Task 5 will be the basis for the design development documents. The design development documents will include preliminary facility layouts, equipment configurations, major equipment technology selection, major process piping, process schematics, draft P&IDs, preliminary electrical load lists, electrical single-line diagrams, location/dimensions of major structures, and a complete specification list.

Plans will be prepared using the City's standards and title block. All drawings will be prepared using AutoCAD or MicroStation, and Contractor will prepare the General Conditions and Special Conditions using the City's standard documents.

Prepare the technical specifications using Contractor's standard detailed specifications. Contractor's construction drawings will include general, architectural, mechanical, structural, civil, electrical, and instrumentation drawings. Coordinate drawing organization closely with City staff to provide that this deliverable reflects City preferences and remains user friendly during the construction.

Deliverables: 60% design drawings and specifications.

7.2 Design Development Cost Estimate

Provide an updated basis of cost, as well as construction and project cost estimates. The updated basis of cost will be used in all cost estimates prepared during the design (Design Development Phase) portion of this work.

Deliverables: Cost Estimate (Class 2)

7.3 Refine Construction Sequencing Plan

The MOPO schedule established in Task 5.2 will be updated based on the 60% design drawings and specifications.

Deliverables: Refined Construction Sequencing Plan

Phase 3 Contract Documents

Phase 3 consists of the following tasks and subtasks:

Task 8 Final Design Workshops

8.1 Progress Meetings

Contractor will participate in two final design progress meetings with the City to be scheduled at a mutually-agreeable time. Brief meeting minutes will be provided to the City's project manager.

8.2 Final Design Review Workshop

Contractor will conduct a final design review workshop with the City to review final design features and receive City input. Contractor will provide a meeting agenda and minutes for the workshop.

Deliverables: Final design progress meeting minutes for two meetings; final design workshop agenda and minutes.

Task 9 Final Design Documentation

9.1 Construction Document Drawings and Specifications

Prepare the technical drawings and specifications to the 90% design level. Receive City comments on the 90% design package and prepare bid-ready (100%) design documents.

9.2 Construction Document Cost Estimate (Class 1)

Provide an updated cost construction cost estimate consistent with an AACE Class 1 estimate.

Deliverables: 90/100 % design drawings and specifications; final schedule of quantities and construction cost review.

Phase 4 Bidding Phase

Phase 4 consists of the following tasks and subtasks:

Task 10 Bid Support

10.1 Pre-Bid Conference

Prepare and help the City conduct the pre-bid conference.

10.2 Addenda Preparation Provide written responses to bidders' inquiries and assist the City in the preparation of addenda.

10.3 Bid Opening, Bid Evaluation, Recommendation Review the bid results and provide recommendations on the award of the construction contract.

10.4 Conformed Drawings and Specifications

Following bidding, provide conformed drawings, including all comments and changes made by Addenda.

Deliverables: Addenda; Recommendation on award; Conformed design drawings.

Phase 5 Construction Management

Phase 5 consists of the following tasks and subtasks:

Task 11 Construction Administration and Inspection

11.1 Pre-Construction Conference

Schedule, coordinate, and conduct a pre-construction conference. This will include preparing an agenda in advance to notify attendee of key items of discussion and preparation of meeting minutes.

11.2 Construction Inspection, Special Inspections, Progress Payments

Site visits will consist of on-site construction inspection for an average of 2 days per week for up to an 18-month construction period, or an equivalent amount of onsite time. Review and monitor the construction contractor's work against the contract documents to ensure compliance. During the course of the work, arrange and coordinate special inspections for structural, mechanical, and electrical work. Review progress payment submitted from the construction contractor and provide the City comments on the construction contractor progress.

11.3 Shop Drawings, Request for Information, Design and City Related Change Orders

Review submitted items (e.g., shop drawings, requests for information, and completion of construction) for conformance to the intent of the plans and specifications. Level of effort based on 80 submittals. Review and respond to design-related requests for clarifications, information, and proposals. Level of effort based on 100 construction contractor-initiated design-related requests.

11.4 Construction Progress Meetings

Participate in weekly on-site construction progress meetings. Meetings to occur during one of the days designated for on-site construction inspection.

11.5 Final Inspection

Schedule and conduct a final inspection of the completed work and issue punch lists of uncompleted items, where necessary. Assist the City in negotiation of unsettled changes or disputes associated with these inspections. Once the final punch list items have been completed, recommend acceptance to the City.

11.6 Start-Up Services

Oversee facilities acceptance testing and startup in cooperation with the construction contractor and the City. Startup and testing service will include assistance with comprehensive testing of functional equipment and the secondary treatment process.

11.7 Training

Provide system training on the design and operation of equipment related to this work. Training material will address the design intent, and operations and maintenance associated with the equipment for this work.

11.8 One year Warranty Inspection

Provide services after completion of the construction phase, to include inspection 1 year from substantial completion. The services include reporting discrepancies under guarantees in the construction contract documents.

Deliverables: Construction documents and documentation

Task 12 Construction Documentation

12.1 Field Observations

Prepare daily reports prepared for each day of on-site inspection.

12.2 Progress Meetings

Prepare meeting minutes for the weekly construction progress meetings.

12.3 Monthly Progress Report

Prepare a monthly progress report detailing the status of the project relative activities performed during the month, anticipated activities during the coming month, and actual budget expenditures versus as - planned expenditures.

12.4 Training, Start up and Testing Plan
Provide two (2) classroom and on-site training sessions to assist City personnel in fine-tuning the new processes of the new facilities.

12.5 O&M Manual Prepare an electronic O&M manual for all new facilities designed under the project.

12.6 Contract Record Drawings Prepare record drawings will be in electronic format ("pdf" and "dwg") produced from the AutoCAD or MicroStation file updated with as-built information provided by the construction contractor, assuming 80 drawings.

12.7 One-year Inspection Closeout Report

Prepare report on finding and observations during one-year project inspection.

Deliverables:

Progress meeting minutes
Monthly progress reports
Training Materials
Start-up testing Plan
Electronic O&M manual.
AutoCAD or MicroStation files of Contract Record Drawings
One-year inspection closeout report

EXHIBIT B – SCHEDULE
City of Santa Fe Wastewater Treatment Facility Aeration System Improvements

The scope of services described in Exhibit A will be completed based on the following anticipated schedule after receiving Notice to Proceed from the City.

PHASE	SCHEDULE (working days)	*ESTIMATED COMPLETION DATE
1. Pre-Design and 30%	60	2/1/19
2. Design Development (60%)	60	5/1/19
3. Contract Documents (90 and 100%)	40	7/1/19
4. Bid Support	60	10/1/19
5. Construction Management	200	9/1/20

*Estimated completion dates are based on assumed Notice to Proceed dates of **11/1/18** for design and **10/1/19** for construction. Estimated completion dates will be adjusted based on actual Notice to Proceed dates. The total duration of the project is anticipated to be 21 months including design and construction.

EXHIBIT C – Fee Schedule
City of Santa Fe Wastewater Treatment Facility
Aeration System Improvements

The scope of services described in Exhibit A will be completed for a fixed price fee as summarized in the following table.

Task Number	Task Description	Cost
Task 0	Project Management	$10,893
Phase 1	**Pre-Design and 30% Drawings**	
Task 1	Basis of Design Definition	13,683
Task 3	Permitting	6,296
Task 4	Technical Workshops	11.186
Task 5	Pre-Design Documentation	133,894
Phase 2	**Design Development**	
Task 6	Design Development Workshops	22,139
Task 7	Design Development Documentation	102,585
Phase 3	**Contract Documents**	
Task 8	Final Design Workshops	12,693
Task 9	Final Design Documentation	34,421
Phase 4	**Bidding Support**	
Task 10	Bid Support	18,168
Phase 5	**Construction Management**	
Task 11	Construction Administration and Inspection	244,621
Task 12	Construction Related Documentation	43,528
	Total Excluding NMGRT	**$654,097**

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