

08/04/2023

EXHIBIT A**CITY OF FAIR OAKS RANCH**
WASTEWATER TREATMENT PLANT – PHASE 1 EXPANSION (30% PHASE)
SCOPE OF SERVICES**Project Understanding**

Kimley-Horn and Associates, Inc. (the Professional or Consultant) understands that the City of Fair Oaks Ranch (the City) wishes to construct multiple improvements to the Wastewater Treatment Plant (the Project). The Wastewater Treatment Plant (WWTP) is an activated sludge plant that is permitted for an average daily flow of 0.5 million gallons per day (MGD). This project will include the following potential improvements:

- Effluent pump station capacity upgrades
- Offsite effluent water main upsizing to storage ponds
- Influent lift station capacity and condition upgrades
- Odor control system at the headworks

Scope of Services

The Consultant will in accordance with the terms and conditions of the Contract provide project management and preliminary design services for the project.

Task 1 – Project Management**1.1 – Project Schedule**

Consultant will prepare and submit project schedule in Microsoft Project, for review and approval by City. The schedule will reflect the agreements made during the scoping meeting and subsequent negotiations. An updated project schedule will be maintained and submitted with each invoice to reflect City approved changes/delays in the project.

Deliverable – One (1) Microsoft Project Schedule in PDF.

1.2 – Sub-Consultant Management

Consultant will manage, coordinate, and be responsible for all efforts of its sub-consultants participating in the project. This includes, but is not limited to, distribution and coordination of work among the sub-consultants, review and payment of monthly progress and billing, quality assurance and control of the work and submittals by the sub-consultants.

1.3 – Quality Assurance and Control Reviews

Consultant will manage and be responsible for the quality of all its deliverables, which includes following an established QA/QC program comprised of high-level staff. The program will include reviews at each

milestone along with discipline coordination, constructability reviews, and interim reviews by project staff.

1.4 – Project Meetings

Consultant will conduct two (2) monthly virtual coordination calls with City staff. Consultant will prepare agendas and necessary documents and exhibits to present project status and discuss design details. Meeting notes will be prepared and sent out to all attendees for review and approval. Minutes and meeting notes will confirm discussions and decisions made at each meeting.

Deliverable – Meeting Agenda and Meeting notes in PDF.

Task 2 – 30% Design Phase

City will provide the Consultant with written Notice to Proceed (NTP) at which time the work for the 30% Design Phase shall be initiated.

The Consultant will perform the following professional services for this project phase:

2.1 – Project Kick-off Meeting

Consultant will conduct an in-person project kick-off meeting with City staff to discuss project schedule, establish lines of communication, and other items related to the project.

Deliverable – Meeting Agenda, Sign-in Sheet, and Meeting notes in PDF.

2.2 – Data Collection / Existing Information/ Utility Coordination

Consultant will perform up to two (2) site visits to the Project for preliminary measurements, photos, and other data collection purposes. Consultant will obtain existing background information, including utility maps and records drawings on existing utilities and infrastructure for the Project. Consultant will coordinate with the following:

- a. City Staff
- b. Texas Commission on Environmental Quality (TCEQ)
- c. Franchise Utilities (gas, phone, electric)
- d. Kendall County
- e. Private Property Owners (only if necessary)

2.3 – Preliminary Engineering Analyses

Consultant will perform the following analyses associated with the Project:

- a. Effluent Pump Station / Offsite Effluent Water Mains
 - 1. Perform hydraulic analysis to confirm required pump conditions and offsite main sizing to pump effluent directly to the Blackjack and/or Live Oak storage ponds
 - 2. Perform preliminary pump sizing evaluation

3. Evaluate capacity of existing wet well, discharge piping, and pump vault to accommodate proposed pumps
 4. Evaluate feasibility of remote-actuated valves to direct flow to either or both storage ponds
 5. Assess electrical, controls, and instrumentation associated with proposed pump station recommendations
 6. Perform preliminary alignment analysis of proposed treated effluent mains to determine any easement needs or potential realignment concerns. For the purposes of this scope, it is assumed that the proposed upsized mains will generally be offset from the existing mains within the same permanent easement.
- b. Water Balance Study – Perform water balance in accordance with Texas Administrative Code (TAC) Chapters 217 and 309, including an assessment of hydraulic application rates of the effluent to determine necessary pond storage capacities.
- c. Influent (Bottom of Hill) Lift Station
1. Perform hydraulic analysis to confirm required pump conditions to increase pumping capacity to the WWTP headworks
 2. Perform preliminary pump sizing evaluation, including the use of variable frequency drives (VFDs)
 3. Evaluate condition and capacity of existing wet well and discharge piping
 4. Evaluate up to three (3) potential options for the removal/reduction of rags, wipes, and similar obstructions. Evaluation of each option will include the development of a preliminary opinion of probable construction cost. Options may include the following:
 - i. Auger screen system
 - ii. Wastewater grinder system
 - iii. Alternative solids-handling pumps
 5. Assess electrical, controls, and instrumentation associated with proposed lift station recommendations
- d. Headworks Odor Control
1. Evaluate up to three (3) potential options for odor control systems for the WWTP headworks, including enclosure of the existing channel and screen. Evaluation of each option will include the development of a preliminary opinion of probable construction cost
 2. Odor control system options will consider both existing headworks facilities as well as future improvements
 3. Assess electrical, controls, and instrumentation associated with proposed odor control recommendations

2.4 – Permitting/Approval Identification

Consultant will identify stakeholders (cities, counties, agencies, utilities, etc.) that are anticipated to require a permit or other approval for the Project and will capture these in a permitting/approval log.

The permitting assessment will include an evaluation of any TCEQ requirements, such as potential modifications or amendments to existing permits.

2.5 – Technical Memorandum

Consultant will develop a technical memorandum (TM) that summarizes analyses and findings during the 30% design phase. This TM will provide recommendations for the proposed WWTP Improvements.

Deliverable

- ❖ *One (1) electronic copy of Draft Technical Memorandum.*
- ❖ *One (1) electronic copy of Final Technical Memorandum.*

Technical Memorandum will include the following sections:

- Executive Summary
- Introduction
 - Project Background
 - Scope of work
- Technical Analyses
 - Effluent Pump Station / Offsite Effluent Water Mains
 - Water Balance Study
 - Influent (Bottom of Hill) Lift Station
 - Headworks Odor Control
- Permitting/Approvals
- Opinions of Probable Construction Costs
- Conclusion and Recommendations

2.6 – 30% Design Workshop

Consultant will conduct an in-person 30% design review workshop for the City staff following the completion of the City's review of the 30% design submittal. This workshop will be tailored to review, discuss, and finalize specific aspects of the design criteria and concepts and to discuss City's review comments.

Deliverable – Meeting Agenda, Sign-in Sheet, Meeting Notes and Comment Responses in PDF.

Prepare written response to comments based on City's comments to 30% Design and submit to City in electronic format. Finalize TM to address City's comments.

Services/Deliverables provided by City for Task 2:

- City will perform coordination needed to facilitate access to Consultant for site visits and surveying, to the extent required by master scope/contract with the City as well as facilitate access that may be needed by other team members for such activities as environmental assessments or project reconnaissance.
- A copy of any reports or analyses associated with the WWTP.
- Copies of record drawings for existing infrastructure.

- Review and comment on the 30% Design Phase submittals.
- Attend the draft review workshop.

Task 3 – Supplemental

Supplemental Services shall only be performed by Consultant upon written authorization from City, which may require an amended professional services agreement for approval. Subject to the City's approval, all unused supplemental services funds can be reallocated to other tasks depending on actual project needs.

3.1 – General Engineering

This scope is intended to encompass the design associated with items that were not clearly defined at the time of scoping and fee development. Items in this task may include, but are not limited to, evaluation of additional WWTP components, site work, and other items that may be preferred for the operations and improvement/expansion of the WWTP.

3.2 – Environmental Compliance Review

Stantec Consulting Services Inc. (subconsultant to the Professional) will prepare a desktop and field analysis on the recommended alignment corridor to determine federal permitting requirements. This work will include gathering available information on the proposed project site, coordinating the proposed alignment with project engineers, producing figures, conducting field work including threatened and endangered species (T&E) habitat assessments and waters and wetland delineations, and preparing a technical memorandum with findings and permitting recommendations, if any.

This task includes field reconnaissance of the site to determine the extent of potentially jurisdictional wetlands and other waters of the U.S. that may be subject to Section 401/404 of the Clean Water Act. Preliminary review of the site indicates that construction activities may include the placement of fill materials into on-site aquatic features. These activities could be subject to Section 401/404 of the Clean Water Act. The following tasks are presented to address these potential requirements:

The WOUS Delineation/Determination will be performed by qualified wetland scientists. The WOUS Delineation/Determination will be based on the professional judgment of the Consultant, its use of the USACE 1987 Wetland Delineation Manual (as modified by the appropriate Regional Supplement), and it is understood that final authority over the delineation of waters of the U.S. lies with the appropriate federal agency. The Consultant does not anticipate the need to flag or survey aquatic features. If this is required, it can be performed as an additional service under a separate scope of work.

This task will also include field investigations by qualified biologists to describe the biological resources, including vegetation communities and wildlife habitat present on the site. Ecologically sensitive resources, including potential threatened or endangered species habitat, will be identified and their potential to be affected by project construction and operation will be assessed and described in the summary Technical Report. This work will also include limited coordination required for wildlife, such as a determination of potential impacts and recommended mitigation measures for compliance with the

Migratory Bird Treaty Act. This task does not include consultation with the USFWS or preparation of a Habitat Conservation Management Plan.

3.3 – Archaeological Survey

Stantec Consulting Services Inc. (subconsultant to the Professional) will perform the services under this task. The proposed project is owned and funded by the City of Fair Oaks Ranch, a sub-entity of the State of Texas. Therefore, the Antiquities Code of Texas applies. Given the project's location adjacent to a USACE jurisdictional water resource, there is potential for the project to also fall under the jurisdiction of USACE review. In the event that this occurs, USACE-oversight would also trigger compliance with Section 106 of the National Historic Preservation Act, as amended.

Although the project location will follow existing infrastructure, preliminary research indicates that the project will intersect known site 41BX1614, a prehistoric site of unknown National Register of Historic Places (NRHP)-eligibility status. Based upon Consultant's experience with the Texas Historical Commission (THC) and USACE regulatory archeologists, it is anticipated that a cultural resources survey would be necessary, at least in proximity to the known site.

Prior to any fieldwork, the Consultant will conduct research that will summarize the review of the THC's Archeological Sites Atlas and other data sources to identify previously documented archeological sites, cemeteries, historical markers, properties and districts listed in the NRHP, and State Antiquities Landmarks (SAL) as well as provide a guide for the potential for finding archeological deposits in the project area of potential effects (APE). This data will be integrated with soil information, topographic maps, aerial photographs, and other pertinent data to prepare an Antiquities Permit application on behalf of the City of Fair Oaks and submit it to THC for approval.

Once a valid permit number has been obtained, the Consultant will conduct an intensive archeological survey that will comply with the guidelines developed by the Council of Texas Archeologists (CTA). All resources encountered would be assessed for their NRHP eligibility.

Due to the location of the project adjacent to existing infrastructure, the Consultant assumes that fieldwork will only be necessary within and adjacent to the boundaries of known site 41BX614. Fieldwork will consist of pedestrian survey in this location augmented by the excavation of 25 shovel tests. Shovel tests will be placed where ground surface visibility is below 30 percent, soils appear to be of sufficient depth to contain subsurface cultural materials, and/or previous disturbance appears minimal. All shovel tests will be excavated in natural levels to subsoil or 80 centimeters, whichever is encountered first. Excavated matrix will be screened through ¼-inch hardware cloth as allowed by moisture and clay content, which may require that the removed sediment be crumbled/sorted by hand, trowel, and/or shovel point. Deposits will be described using conventional texture classifications and Munsell color designations.

The potential for deeply buried sites in this environment is considered moderate; however, due to the project's location adjacent to existing buried pipelines and the likelihood that intact cultural resources are not present, no mechanical excavation is proposed. Should THC require such mechanical excavation, they can be provided under a separate scope and fee.

The Consultant assumes that no new archaeological sites will be identified during the survey and that only 41BX1614 will be revisited. A Texas Archeological Site Update Form will be prepared for this site following survey and will be submitted to the Texas Archeological Research Laboratory in Austin, the state repository for site trinomials.

The Consultant will keep a complete record of field notes supplemented by digital photographs, with observations including (but not limited to) identified cultural materials and sites, contextual integrity, estimated time periods of occupations, vegetation, topography, hydrology, land use, soil exposures, general conditions at the time of the survey, and field techniques employed.

A draft report of all results and preliminary NRHP evaluations and recommendations will be submitted to THC for review. A final report will be submitted once concurrence is achieved. Materials collected or generated from this project will be prepared for final curation at the Center for Archaeological Studies at Southwest Texas State University as per the requirements of the approved Antiquities Permit.

3.4 – City Council / Public Outreach

Consultant will coordinate and prepare for up to two (2) community workshops and/or City Council briefings.

Deliverable – Update power point presentation, Meeting Agenda, Sign-in Sheet, Meeting Notes and one (1) exhibit (24"x36") per meeting.

Additional Services

Services requested by the City outside of the Basic Services scope will be authorized based on negotiated contract amendments. Additional Services shall require independent and specific not-to-exceed authorizations. Additional Services may include:

- A. Final design services.
- B. Topographical survey.
- C. Obtaining rights-of-entry for any required field work.
- D. Preparation of permit applications.
- E. Accompanying City when meeting with the TCEQ, U.S. Environmental Protection Agency, or other regulatory agencies during the course of the Project, beyond those meetings identified above. The Consultant will assist City on an as-needed basis in preparing compliance schedules, progress reports, and providing general technical support for City's compliance efforts.

- F. Sampling, testing, or analyses beyond that specifically included in the Scope of Services referenced herein above.
- G. Preparing applications and supporting documents for government grants, loans, or planning advances, and providing data for detailed applications.
- H. Appearing before regulatory agencies or courts as an expert witness in any litigation with third parties or condemnation proceedings arising from the development or construction of the Project, including the preparation of engineering data and reports for assistance to City.
- I. Additional meetings beyond those identified in the Scope of Services.
- J. Any services not listed in the Scope of Services.

FEE AND EXPENSES

Basic Services

Kimley-Horn will perform the services in Tasks 1 - 2 for the total lump sum fee below. Individual task amounts are informational only. All permitting, application, and similar project fees will be paid directly by the Client.

Task 1 Project Management	\$ 10,305.00
Task 2 30% Design Phase	\$124,826.00

<u>Total Lump Sum Fee</u>	<u>\$135,131.00</u>
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Supplemental Services

Kimley-Horn will perform the Supplemental Services in the tasks below on a time and materials basis per task. Supplemental Services shall only be performed by Consultant upon written authorization from City, which may require an amended professional services agreement for approval. All permitting, application, and similar project fees will be paid directly by the Client.

Task 3.1 General Engineering	\$16,025.00
Task 3.2 Environmental Compliance Review	\$ 9,167.00
Task 3.3 Archaeological Survey	\$15,985.00
Task 3.4 City Council / Public Outreach	\$ 7,600.00