February 21, 2024

CITY OF MONTGOMERY

Statement of Qualifications

Professional Engineering Services for the Town Creek Wastewater Treatment Plant Expansion to 0.3 MGD

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Office of the City Secretary
City of Montgomery City Hall
101 Old Plantersville Rd.
Montgomery, TX 77316

February 21, 2024

RE: Professional Engineering Services for the Town Creek Wastewater Treatment Plant Expansion to 0.3 MGD

Dear Members of the Evaluation Committee:

Halff appreciates the opportunity to present our qualifications for the Town Creek Wastewater Treatment Plant (WWTP) Expansion project. Halff is a Texas-registered professional design firm with more than 70 years of experience in the engineering field working directly for municipal governments and agencies across Texas and the U.S.

Our proposed team is perfectly suited to be your partner for this effort. In the attached Statement of Qualifications, we demonstrate our ability to confidently deliver the proposed WWTP design. As you review our submission, please consider the following:

Similar WWTP Experience. Our Project Manager, Preston Dillard, and our Technical Design Lead, Mike Marlar, have designed treatment facilities of both similar size and scope to the Town Creek plant. They have over 75 years of combined knowledge and experience and have worked on modifications/rehabilitations/reconstructions of WWTPs in this size range. This gives them the insight to provide the City with a plant that is custom designed to fit your needs and wants and backed with proven engineering for practical functionality.

Local Commitment. With offices in both Conroe and Houston, and employees who live in Montgomery County and even call the City of Montgomery home, Halff has a vested interest in the growth and success of your community. Our Principal-in-Charge, Lance McLeod is a native of the Houston region with a long history of serving municipalities and agencies in Montgomery County well. Because of our local presence, we are passionately and personally committed to bringing solutions for this project to the City that benefit your citizens. Our Project Team members further have additional dedicated local staff available as resources when needed and are committed to continuing our history of quality and effective service to you.

One-Team Advantage. We believe fostering strong relationships built on trust and transparency is the key to our proven track record of successful project delivery. This is true both with our clients and within the firm itself. Our corporate philosophy builds on this trust to actively and readily share work as needed amongst our offices across Texas and the U.S. This “one-team” approach provides Halff with both the flexibility and potential deep bench of industry professionals to give our clients exceptional service specifically tailored to their needs and those of the project. Our Project Team reflects this advantage to deliver a WWTP for the City that you can be confident in and proud of once in operation.

We are committed to being responsive and proactive to your needs and serving as your partner and advocate. **We encourage you to contact the references listed in our qualifications about our dedication, responsiveness, and client care.** As the primary contact for these services, I am authorized to commit Halff to a contractual agreement. If you have any questions, please feel free to contact me at 817.764.7504 or by email at pdillard@halff.com. Likewise, you may also contact our Principal-in-Charge, Lance McLeod, PE, PMP, at 713.829.4785 or lmcleod@halff.com. We are excited for this opportunity and look forward to working with you.

Sincerely,

Preston Dillard, PE
Project Manager

Lance McLeod, PE, PMP
Principal-in-Charge

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Item 1: Qualifications and Availability

a. Company Information

Legal name of firm: Halff Associates, Inc.

Location of office conducting the work: 100 I-45 North, Suite 260, Conroe, TX 77301

Contact person: Preston Dillard, PE will serve as the Project Manager and primary point of contact for the City of Montgomery.

Date of Firm Formation: Halff was founded in 1950.

Legal Business Description: Texas Corporation

b. Availability and Commitment, Reporting Responsibilities and Interfacing with the City

Halff operates as a one-team family of professionals-not only across Texas, but across the U.S. as well. That represents a potential resource pool of over 1,400 employees readily available to assist on any particular project. The Halff team assembled for this effort is poised and ready to work on this project at your earliest convenience. The Principal-in-Charge, Lance McLeod, has the full backing of the firm to commit the resources needed so that our Project Manager, Preston Dillard, is able to provide the City with services throughout design and construction to keep the project on schedule and on budget.

All personnel listed on the organizational chart are available and committed to work on this project for its duration through construction.

As Project Manager, Preston will serve as the City's primary contact for the plant expansion, with Lance and the lead technical designer, Mike Marlar, available to interface with the City as well at your discretion. All members of the team will report to Preston for direction and coordination. Preston, Mike, and other support staff as necessary, will meet with the City virtually as often as you require to keep the project on track. Scheduled in-person meetings can also be conducted with Preston and staff when needed, and it is recommended that such meetings occur at project milestones as a minimum.

c. Statement of Interest

With local offices in Conroe and Houston, and Floodplain Assessment/Modeling Lead, Ryan Londeen, a resident citizen of the City of Montgomery, Halff has a vested interest in supporting the City with our services to help you achieve the positive growth, quality of life, resiliency, and sustainability of your community and the region as a whole. We are very active in Montgomery County, working for multiple public entities, agencies and municipalities within the county on infrastructure projects that enhance the lives of residents throughout.

Halff has successfully designed treatment plant expansions that are nearly identical to the size, character, and needs of your Town Creek wastewater treatment plant project. Adding to our local presence and specifically applicable wastewater treatment plant experience is our further ability to readily obtain design and construction resources from across the firm to support the project. This combination of firm traits make us uniquely qualified to deliver the Town Creek Wastewater Treatment Plant Expansion successfully in partnership with the City.

Item 2: Proposed Staff

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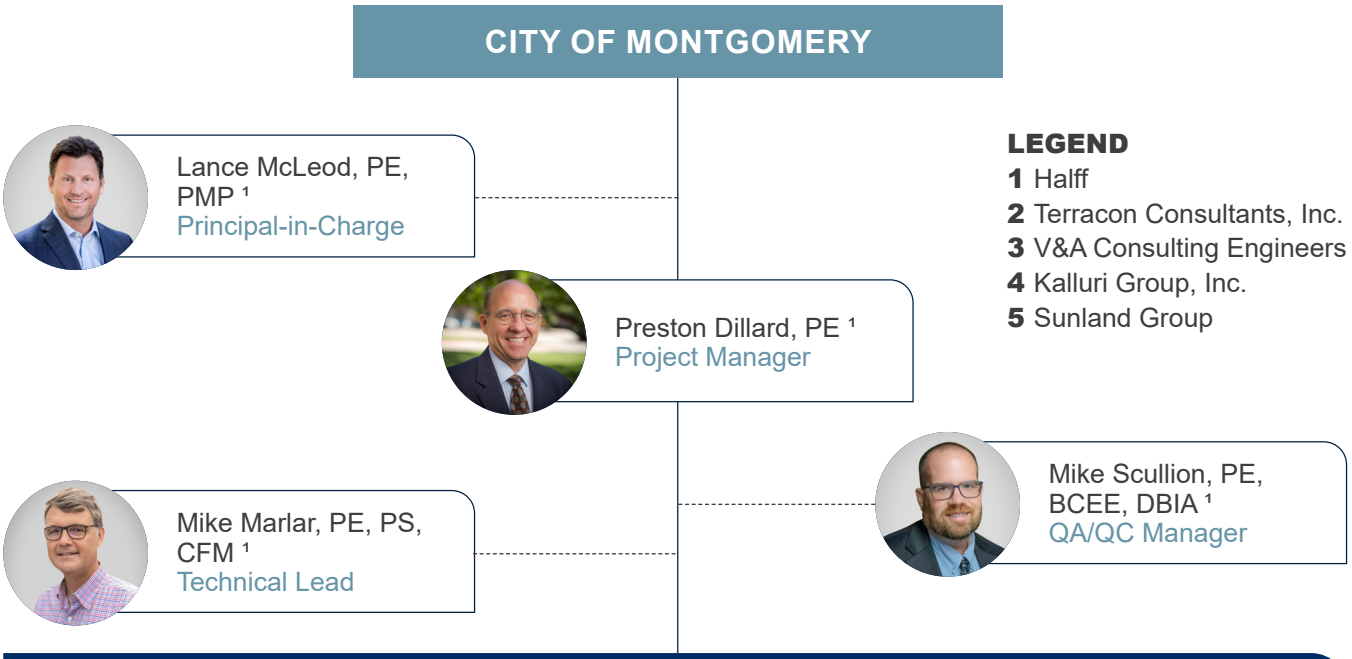
Item 2: Proposed Staff

a. Organizational Chart

The Halff team is composed of talented and experienced professionals who share a common vision for quality, aesthetics and economy. Each team member's specific role in this project is identified in the organization chart below and detailed professional experience for each team member is presented on the pages that follow.



Technical Staff

Floodplain Assessment/Modeling
Ryan Londeen, PE, CFM[1]

Survey
Malcolm Martin, RPLS[1]

Funding Specialist
Elizabeth Range-Pendel[1]

Structural
Jim Miller, PE[1]

Environmental/Permitting
Richard (Rick) Howard, PWS[1]

Construction Services Administration
Jim Bielstein, PE[1]

Geotechnical Engineering
Rebecca Rice, PE[2]

Odor Control
Vaughan Harshman, PE[3]

Corrosion Protection
Christopher Sheldon, PE, CP4[3]

Electrical
Stacy Jordan, PE[4]

Cost Estimation
Stuart Hoevelman, CPE[5]

b. Key Personnel and their Primary Offices

At Halff, we believe in a culture based on teamwork, which is why we have enabled a robust and successful work-share process that allows for personnel from several offices to work together on projects, regardless of location. **Our team personnel resumes, beginning on the following page, provide the office location in which our team personnel operate out of.**

c. Resumes

Preston Dillard, PE

Preston has extensive experience including master planning, asset management, program management, water and wastewater conveyance, treatment planning, and design. He has provided facility master plans for treatment facilities; master plans for wastewater collection systems and water distributions systems; asset management plans; prepared regional water plans; conducted reclaimed water studies; prepared design plans, specifications, and cost estimates; and conducted construction administration for a variety of treatment and conveyance infrastructure components. He has completed projects for a multitude of clients across Texas as well as Oklahoma and Florida, including municipalities and river authorities.

ROLE
Project Manager

LOCATION
Fort Worth, TX

EDUCATION
BS, Civil Engineering,
Texas A&M University

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer,
Texas No. 79277

REPRESENTATIVE PROJECT EXPERIENCE

Town of Northlake, Catherine Branch WWTP, Northlake, TX.
Project Manager responsible for designing a 0.25 MGD wastewater water treatment plant (to be accomplished in two, 0.125 MGD phases), a 1.0 MGD lift station, and 250 lf of an 8-inch force main, and 500 lf of a 10-inch effluent outfall. The lift station is located close to Catherine Branch, and will pump wastewater from the interceptor located near the Branch to the WWTP site. The outfall pipeline will convey treated effluent from the WWTP to the Branch. Once sufficient growth occurs in the drainage basin, the WWTP and lift station will be removed/abandoned, and flows routed by gravity via a new interceptor to the TRA Denton Creek WWTP. The preliminary design was sized based upon the service area and flow projections. The design criteria was established, and process calculations and equipment sizing conducted, as well as solids disposal options. Halff is preparing the discharge permit through TCEQ.

Big Fossil Creek Lift Station and Sewer Line, Richland Hills, TX.
Project Manager for this design project. It consisted of a new, 2-MGD lift station (submersible pumps) and 10-inch force main to convey the City's wastewater flows into the Fort Worth collection system. A new, 5,000 lf collection line was also part of the project, to convey flows to the new lift station. Pipeline ranges in sized from 6-inch to 18-inch in diameter. Construction cost for the facility was $2.5 million.

Ten Mile Creek WWTP Improvements, Trinity River Authority of Texas, Ferris, TX.
Project Manager for master plan that assessed the need for plant capacity expansion through the year 2040, identified rehabilitation needs, determined improvements needed for enhancing the plant's ability to process and manage bio-solids, determined procedures for managing wet-weather flows, identified the impacts of increased flows and process modifications on regulatory requirements and evaluated energy recovery opportunities into a CIP. $61 million in improvements were identified and planned for the near term.

Mike Marlar, PE, PS, CFM

ROLE
Technical Lead

LOCATION
North Little Rock, AR

EDUCATION
MS, Civil Engineering, University of Arkansas

BS, Civil Engineering , University of Arkansas

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No.139284

Mike's 41 years of project experience includes the design and construction of major water systems, distribution, master planning, treatment, water supply, wastewater systems, treatment plants and pipeline projects, land developments, land surveying, storm drainage systems and flood plain management, fuel systems, road and street improvement projects.

- **Bull Shoals Treatment Plant Improvement and Collection Rehabilitation, City of Bull Shoals, AR.** Project Manager responsible for assisting the City in acquiring funding, preliminary and final design, bid letting and construction engineering for a $9 million wastewater treatment plant and collection system rehabilitation. The new treatment plant treats 500,000 gallons per day of wastewater and includes mechanical screening, activated sludge process, clarification, secondary clarification, UV disinfection, disc filtration, flow measurement and discharge to the White River below the Bull Shoals Dam. The project also included the rehabilitation of existing sewer collection lines and 16 lift stations.
- **Arkansas Natural Resources Commission, Gravel Ridge WWTP Improvements, Sherwood, AR.** Project Manager responsible for the planning and designing a new treatment system to meet current National Pollutant Discharge Elimination System (NPDES) permit limitations. The new treatment process included mechanical screening, extended aeration/activated sludge process, clarification, UV disinfection, tertiary filtration and flow measurement.

Mike Scullion, PE, BCEE, DBIA

ROLE
QA/QC Manager

LOCATION
Tavares, FL

EDUCATION
MS, Civil and Environmental Engineering, Ohio State University

BS, Civil and Environmental Engineering, Ohio State University

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No.140216

Michael brings extensive wastewater, water utility experience, and grant funding experience to the team. He has more than 18 years of experience in water and wastewater projects, conveyance projects, lift stations, and extensive funding assistance, including state Revolving funds (SRF) for projects.

- **Water & Wastewater System Master Plan, Mount Dora, FL.** Project Manager responsible for preparing water, wastewater, and reclaimed water master plans so that infrastructure is in place to service growth in the City's service area over the next 20 years. Halff analyzed the existing infrastructure, developed 20-year population and flow projections, and prepared a new capital wastewater and reclaimed water line maps.
- **Arbennie Pritchett WRF Expansion, Okaloosa County, FL.** Project Manager for the expansion of the Arbennie Pritchett WRF from 10 to 15 MGD. The expansion consisted of the construction of an oxidation ditch, secondary clarifier, RAS pump station, UV disinfection train, and effluent pump.
- **Garney Companies, Inc., GPU WWTP Phase 2, The Villages, FL.** Project Manager for this project involving design, permitting and construction administration services for a new 2.0 MGD wastewater treatment plant to serve The Villages. The project is being initially constructed as a 2.0 MGD facility with capabilities for expansion to 4.0 MGD to accommodate anticipated future growth in the service area.

Lance McLeod, PE, PMP

ROLE
Principal-in-Charge

LOCATION
Houston, TX

EDUCATION
BS, Bioengineering, Texas A&M University

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No. 85520

Project Management Professional (PMP), Texas No. 1792788

Lance has more than 30 years of engineering and project management experience, which includes water/ wastewater systems design, large-diameter water/ wastewater design, utilities program management, utilities master planning, hydraulic/hydrologic analyses, stormwater facilities design, and civil site design. His responsibilities have included studies, analysis, and design of site and regional sanitary sewer systems, water transmission systems, and site and regional storm drainage systems.

- **San Jacinto River Authority, Integrated Odor Control Plan for Wastewater Treatment Facility No. 1, The Woodlands, TX.** Project Manager responsible for a technical study of odor creation and options for odor containment/suppression at SJRA WWTF No1 and the immediate sanitary collection system adjacent to the plant.
- **San Jacinto River Authority, SJRA Lift Station No. 13 Rehabilitation, The Woodlands, TX.** Project Manager responsible for preliminary design, final design, bidding, and construction phase services for the rehabilitation of SJRA Lift Station No. 13.
- **City of Conroe, Gravity Main Replacement – Upper Stewart Creek Phase 1, Conroe, TX.** Project Manager for the design of approximately 11,000LF of large diameter FRP sanitary sewer to replace aging infrastructure in the upper Stewart Creek basin of the City of Conroe wastewater collection system.

Ryan Londeen, PE, CFM

ROLE
Floodplain Assessment/Modeling

LOCATION
Conroe, TX

EDUCATION
BS, Civil Engineering, Texas A&M University

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No. 127074

Ryan has 11 years of experience in conducting drainage studies and performing complex hydraulic modeling in the region. Through his local experience in Montgomery County, he has developed close ties with local cities and agencies and has a thorough understanding of how to get drainage studies completed and approved in a timely manner. He specializes in FEMA floodplain studies, FEMA map revisions (CLOMR/LOMR), master drainage plans, roadway drainage design, drainage criteria updates, and hydrologic and hydraulic modeling. His hydraulic modeling experience includes water distribution modeling, sewer collection modeling, hydrologic modeling, unsteady 1D/2D riverine modeling, and 1D/2D urban drainage modeling.

- **White Oak Creek Tributary 1 LOMR, Montgomery County, TX.** Project Manager for the H&H analysis of White Oak Creek West Tributary No. 1. The analysis included hydrology for a 0.135 square mile watershed, hydraulic modeling for 1-mile of creek, floodway analysis, and FEMA floodplain map change.
- **MCMUD 24 Drainage Study, Montgomery County, TX.** Project Manager for a drainage impact analysis for a 90-acre residential development in Montgomery County partially located within the floodplain of White Oak Creek. This project included the hydrologic analysis of White Oak Creek's 26-square mile watershed, and a riverine hydraulic analysis to demonstrate no adverse impacts to flood levels due to development in the floodplain.

Malcolm Martin RPLS

ROLE
Survey

LOCATION
Houston, TX

EDUCATION
AS, Geomatics Engineering Technologist, Nova Scotia Community College - Centre of Geographic Science

REGISTRATIONS/ CERTIFICATIONS
Registered Professional Land Surveyor, Texas No. 6962

Malcolm brings extensive experience in survey analyzing, computing, and resolving property boundaries, managing land survey seismic crew equipment, conducting residential surveys such as boundary and topographical, and completing several ALTA/ACSM surveys across Texas, both as the field surveyor and AutoCAD drafter.

- **City of Houston, Storm Water Maintenance Branch, Houston, TX.** Survey Lead responsible for performing technical support services, including a wide variety of services consisting of complex stormwater modeling, development of drainage guidelines and criteria, updating and providing support related to the HouStorm software, staff education, and performing technical reviews.
- **Harris County Flood Control District, Buffalo Speedway-ACPS, Houston, TX.** Survey Lead responsible for surveying tasks associated with the design and reconstruction of the Buffalo Speedway Bridge over Brays Bayou. Survey worked with our Public Works Team to confirm they had the information needed in their design. The intent was to raise the bridge, providing additional capacity to the bayou to help reduce flooding in the area as well as adding a turn lane and wider sidewalks to the bridge structure. The project also included reconstruction of North and South Braeswood near the bridge location to match the proposed width and elevation of the proposed bridge.

Liz Range-Pendel

ROLE
Funding Specialist

LOCATION
Austin, TX

EDUCATION
BS, Public Policy, University of Texas at Austin

Liz began her career in grants consulting at a nonprofit agency and transitioned to a private grant consulting firm specializing in local, state, and federal opportunities for municipalities, counties, councils of government, transportation authorities, and water districts. Liz has extensive knowledge in a broad range of grant programs covering planning, parks, trails/active transportation, water and wastewater infrastructure, conservation, economic development, public health, public safety, hazard mitigation, and more. She works with clients to develop long-term funding strategies for key projects, positioning them desirably with funding agencies and competitive advantages for grant awards.

- **City of Austin, Fallwell Lane BRIC Grant Application and BCA, Austin, TX.** Halff supported the development of the grant application, and developed the benefit cost analysis, cost estimate, and preliminary design plans for the City of Austin's Fallwell Lane project for FEMA's Building Resilient Infrastructure and Communities program. The City requested $50 million to prevent Austin Energy's Sand Hill Energy Center and Austin Water's South Austin Regional WWTP from failure due to a major flood event. The proposed project included multiple complex components that the Team simplified through narrative and exhibits throughout the application, including 1) raising the flood walls/ flood protection levee around the utility plants and extending the levee to SH 130, and 2) mitigation through Onion Creek channel benching, acquiring mitigation drainage easements to allow for flood flows to spread out before breaching the levee, and internal drainage mitigation at the AW-SAR WWTP.

Jim Miller, PE

ROLE
Structural

LOCATION
Houston, TX

EDUCATION
MS, Civil Engineering (Structural), Texas A&M University

BS, Civil Engineering (Structural), Texas A&M University

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No. 113116

Jim has been involved in the design of various structures including bridges, buildings, retaining walls, foundations, and miscellaneous structures. His experience includes reinforced concrete design, prestressed concrete design, and structural steel design. His ability to clearly and thoughtfully present issues and solutions aids clients in decision-making processes.

- **City of Frisco, W Rowlett Creek Wastewater, Frisco, TX.** Structural Engineer responsible for design and construction documents for multilevel tied-back gabion retaining walls. This project included the alignment analysis and schematic design of 18,600 lf of a new 10” through 36” wastewater interceptor.
- **Sardis Water Association, Water Treatment Facility, Mabelvale, AR.** Halff designed a water system that serves more than 5,000 customers in southern Pulaski and eastern Saline County. This project involved a new water treatment facility which included chemical coagulation and mixing, clarification and filtration units, new wells and service pumps. The design of this project included two deep wells, pumping to an aerator with detention tank, high service pumps, pressure filters, filter backwash settling ponds, various chemical applications, and piping to the existing distribution system.

Richard (Rick) Howard, PWS

ROLE
Environmental/Permitting

LOCATION
Houston, TX

EDUCATION
MA, Biology, Baylor University

BS, Biology, Baylor University

REGISTRATIONS/ CERTIFICATIONS
Professional Wetland Scientist, No. 2792

Rick has a rich education in basic and applied ecology, including population and landscape ecology, remote sensing, and organismal biology. He has supported a number of business lines including mitigation, transmission, commercial and residential land development, oil and gas, and state and local government organizations.

- **Dow Chemical Company, Harris Reservoir Expansion Environmental Impact Statement (EIS), Brazoria County, TX.** Environmental Scientist responsible for supporting EIS assessment services to determine the degree to which the project’s proponent is abiding by applicable regulatory requirements. This work involves reviewing previously completed work on behalf of USACE, developing supplemental data including stream assessments, and aiding in the development of decision documents for USACE.
- **Harris County Engineering Department, Market Street Fish Relocation, Harris County, TX.** Environmental Scientist responsible for flood damage to the Market Street bridge over the Lake Sandy inlet during Hurricane Harvey. He assisted in removing excess sediments and performing bridge repairs and led a team in identifying and relocating fish from the waterbody following the installation coff er dams. Work was completed under guidance from TPWD.

Jim Bielstein, PE

ROLE
Construction Services Administration

LOCATION
Conroe, TX

EDUCATION
BS, Mechanical Engineering, Texas Tech University

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No. 87630

Jim brings experience in planning and designing municipal utility systems for multiple municipalities throughout the region. His experience includes planning-to-construction project management, design and management of design and project rep teams, proposal, subcontracting, scope development, risk assessment, and the development of bid-ready plans and specifications.

- **City of Conroe, American Rescue Plan, Conroe, TX.** Team Leader responsible for the planning and design for the replacement of 15- to 18-inch sanitary sewers in the Silverdale Creek area. This project involved upsizing the sanitary sewers to 18- to 21-inches using trenchless methods due to access and requires coordination with City Engineering and Operational staff, Entergy (transmission corridor), multiple pipeline companies (easement), TxDOT and UPRR.
- **City of Huntsville, Sanitary Sewer Rehabilitation Huntsville, TX.** Halff was contracted by the City of Huntsville to perform all civil and environmental services for this project to replace or upsize sanitary sewers in 8 separate locations throughout the City, totaling almost 5,200 linear feet. These sewers ranged in size from 6- to 12-inches and experienced numerous flow obstructions due to damaged joints, tree roots, service connection failures, etc. Halff had to coordinate closely with the City, the Texas Department of Criminal Justice, and TXDOT on many of the sewer lines.

Rebecca Rice, PE

ROLE
Geotechnical

LOCATION
Houston, TX

EDUCATION
Master of Engineering, Civil Engineering, Texas A&M University

BS, Civil Engineering, Texas A&M University

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No. 132914

Rebecca serves as a Geotechnical Engineer in Terracon's Houston office and is the geotechnical lead for public entities. Her responsibilities include developing field programs and coordinating with field personnel in the implementation of soil boring programs. She is responsible for developing laboratory testing programs, evaluating laboratory and field data, and providing recommendations for design and construction. Recommendations based on test data include site grading, foundations, and pavements.

- **MC MUD 119 1.08 MGD Replacement – Montgomery County, TX.**
- **Huntsville McGary Creek Lift Station – Huntsville, TX.**
- **MC MUD 88 Wastewater Treatment Plant Improvements,Montgomery County, TX.**

TERRACON is a 100 percent employee-owned consulting engineering firm providing quality services to clients. Since 1965, Terracon has evolved into a successful multidiscipline firm specializing in Environmental, Facilities, Geotechnical Engineering and Materials Testing. Terracon currently has more than 5,000 employees in more than 175 locations and 42 states nationwide.

Vaughan Harshman, PE

ROLE
Odor Control

LOCATION
Houston, TX

EDUCATION
BS, Chemical Engineering, University of South Florida

MBA, University of Florida

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No. 52651

With over 38 years of working in the wastewater industry, Vaughan has worked on a wide variety of projects, all focused on improving infrastructure and mitigating the effects of odor. Vaughan's broad project experience ranges from field investigation to detailed design to complete program management. He believes in a comprehensive approach to wastewater odor management and has managed system-wide programs with dozens of odor and corrosion control locations and as many as ten different technologies. Vaughan serves on the WEF and FWEA Air Quality and Odor Control Committees and has served as chair of both.

- **City of Kyle Wastewater Treatment Plant Expansion Phase 2, Kyle, TX.**
- **City of Sugar Land CCW2311 Lift Station Odor Control Study, Sugar Land, TX.**
- **City of Austin Westbank Lift Station Odor Control Facility Assessment, Austin, TX.**

Christopher Sheldon, PE, CP4

ROLE
Corrosion Protection

LOCATION
Houston, TX

EDUCATION
BS, Structural Design and Engineering Technology, Pennsylvania State University

AAS, Civil Technology, State University of New York, Delhi

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No. 112184

Chris has over 35 years of experience, specifically 25 of those in the area of corrosion control relating to cathodic protection. He has exceptional leadership skills with an extensive knowledge of utility corrosion control, including engineering design, construction, and project management. Proven technical support skills managing a wide variety of groups and teams while developing best practices. Dedicated to providing high quality results and meeting schedules at the lowest cost.

- **City of Houston above Grade Crossings Small Diameter Waterline Coating System Management. Houston, TX.**
- **West Harris County Regional Water Authority Surface Water Supply Project (SWSP) Cathodic Protection. Houston, TX.**
- **West Harris County Reginal Water Authority Cathodic Protection Survey and Monitoring. Houston, TX.**

V&A CONSULTING ENGINEERS, INC. (V&A) is a consulting firm founded upon corrosion engineering as a core discipline by Jose Villalobos in May of 1979. V&A has over 43 years of corrosion engineering experience, including cathodic protection (CP), and specializing in evaluating, rehabilitating, and preserving municipal infrastructure. V&A delivers engineering services for projects involving corrosion engineering, condition assessment, coating system management, civil/ environmental engineering, construction engineering and inspection, data science, flow monitoring, odor control, and surveying and mapping.

Stacy Jordan, PE

ROLE
Electrical

LOCATION
Houston, TX

EDUCATION
BS, Electrical Engineering, Texas A&M University, College Station

REGISTRATIONS/ CERTIFICATIONS
Professional Engineer, Texas No. 148233

Master Electrician, Texas No. 459442

Stacy has more than 21 years of experience in electrical, instrumentation and control systems. Responsible for various aspects of design, coordination, integration, implementation, and troubleshooting. Drawing from the construction experiences as an electrician and as a project manager to make sound design, feasibility, scheduling, and sequencing decisions. Experience with coordinating and performing electrical/control system upgrades and replacements with minimal impacts on active process facilities. Merging these qualifications to place an emphasis on a complete and working system for the overall project.

- **SJRA Wastewater Treatment Plant Improvement Projects, The Woodlands, TX.**
- **SJRA Woodlands Wastewater Consolidation Study, The Woodlands, TX.**
- **City of Houston 69th Street WWTP, Houston, TX.**

KALLURI GROUP, INC. (KGI) is one of the few small MBE engineering consulting companies based in Houston that specializes exclusively in the design of water and wastewater treatment plants. KGI designed process, mechanical, piping, electrical, instrumentation, controls, SCADA, Safety/Security elements for more than 100 major water and wastewater treatment facilities in and around City of Houston.

Stuart Hoevelman, CPE

ROLE
Cost Estimation

LOCATION
Houston, TX

EDUCATION
BS, Construction Management Technology, University of Houston

REGISTRATION
Certified Professional Estimator, 1.4-000208-1217

Stuart is the Project Controls Manager of Sunland Group, Inc. (Sunland) with more than 20 years in the construction industry. Stuart's experience lies in estimating, preconstruction management, and project management. Stuart's vast knowledge and experience have equipped him with the unique ability to prepare conceptual and competitive estimates that set the gold standard in the industry. His acumen extends to developing and estimating the scope of work for change orders, so that even unforeseen alterations are handled with precision. His excellence is further solidified by his certification as a Certified Professional Estimator (CPE) recognized by the American Society of Professional Estimators (ASPE).

- **San Jacinto River Authority, Lake Conroe Operations and Maintenance Facility, Conroe, TX.**
- **City of Austin, Austin Energy New Downtown District Cooling Plant #3, Austin, TX.**

SUNLAND GROUP, INC. (SUNLAND) is a woman-owned, A/E/C multidisciplinary firm offering a range of design, management, development, and digital consulting services. Our mission is to create incomparable value for our clients in the planning, management, design, and construction of projects. We complete our work with a level of knowledge, integrity, quality, and commitment to exceed client expectations.

d. Staffing by Area of Expertise

Halff is a full-service engineering firm designed, engineered, planned, constructed – and purposed – for people. Since 1950, we've been creating smart solutions that improve lives and communities by turning ideas into reality. The firm provides services throughout the Southeast from 32 offices in Texas, Arkansas, Oklahoma, Louisiana and Florida. **The firm's staff of 1,400 includes engineers, planners, scientists, and surveyors.** Halff is ranked #85 in Engineering News-Record magazine's list of the top 500 design firms in the United States. The firm was founded in Dallas in 1950 by Albert H. Halff, PhD-Eng., PE. Today, Halff preserves Dr. Halff's legacy of integrity, dedication to client service, and commitment to quality. Halff develops smarter solutions for a variety of market sectors. No matter the size or scope of the project, every one of our solutions is designed with a single purpose: our client's success.

PRACTICE AREA	NUMBER OF STAFF FIRM-WIDE
Civil Engineer	445
Water Resources Engineer	72
Planner: Urban/ Regional	33
Environmental Scientist	40
Structural Engineer	16
Construction Services	45
Landscape Architect	50
Land Surveyor	151
Electrical Engineer	14
Mechanical Engineer	21
Transportation Engineer	72
Geologist	7
CADD Technician	87
Geographic Information Systems	44
Administrative	187
Other	143
Total Count	**1,427**

e. Current Workload of the Firm

We have reviewed our workload and specifically the current workloads of the personnel proposed for this project. The proposed personnel are finishing current assignments and are prepared to dedicate their efforts to this project. Halff has more than enough capacity to perform the tasks required to complete this project for the City of Montgomery in a timely and efficient manner. The general anticipated availability of the key staff members is shown in the table below.

f. Staff Availability to Perform

Halff's personnel are committed to the successful completion of this project. We will be ready to begin service within 24 hours of the NTP. Additionally, our main office is located within 16 miles of the wastewater treatment plant, and our staff can be on project location within 30 minutes of notification.

PROJECT TEAM AVAILABILITY		
Personnel	**Nature/Role**	**Available**
Preston Dillard, PE	Project Manager	60%
Lance McLeod, PE, PMP	Principal-in-Charge	35%
Mike Scullion, PE, BCEE, DBIA	QA/QC Manager	45%
Mike Marlar, PS, CFM	Technical Lead	50%
Ryan Londeen, PE, CFM	Floodplain Assessment/ Modeling	40%
Malcolm Martin, RPLS	Survey	25%
Elizabeth Range-Pendel	Funding Specialist	20%
Jim Miller, PE	Structural	20%
Richard (Rick) Howard, PWS	Environmental/ Permitting	20%
Jim Bielstein, PE	Construction Services Administration	35%
Rebecca Rice, PE	Geotechnical	30%
Vaughan Harshman, PE	Odor Control	30%
Christopher Sheldon, PE, CP4	Corrosion Protection	30%
Stacy Jordan, PE	Electrical	25%
Stuart Hoevelman, CPE	Cost Estimation	30%

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Item 3: Project Experience

a. Company Profile

Halff is a full-service engineering firm designed, engineered, planned, constructed – and purposed – for people. Since 1950, we've been creating smart solutions that improve lives and communities by turning ideas into reality. The firm provides services throughout the Southeast from 32 offices in Texas, Arkansas, Oklahoma, Louisiana and Florida. The firm's staff of 1,400 includes engineers, planners, scientists, and surveyors. Halff is ranked #85 in *Engineering News-Record* magazine's list of the top 500 design firms in the United States. The firm was founded in Dallas in 1950 by Albert H. Halff, PhD-Eng., PE. Today, Halff preserves Dr. Halff's legacy of integrity, dedication to client service, and commitment to quality. Halff develops smarter solutions for a variety of market sectors. No matter the size or scope of the project, every one of our solutions is designed with a single purpose: our client's success.

Halff was founded on a core tenet: Focus on people, treat them well and success will follow. It's no wonder, then, that our employees, and the culture they create, define us. We are members of a company built on integrity, technical knowledge and commitment to client service.

HALFF'S UNIQUE QUALIFICATIONS

Halff understands there are many important qualifications to selecting a qualified engineering firm. Halff has assembled a highly-qualified team with a proven history of working together and specialized experience in all aspects of the anticipated project. Our team is committed to the success of the project and will apply our knowledge and experience to:

- Be available and immediately responsive.
- Listen to and understand your objectives, goals and constraints
- Understand the regulatory and permitting requirements associated with the project
- Provide varying options for each design problem to enable selection of solutions which best fit your needs

These factors will contribute to a successful project that meets your needs, goals, milestones, budget and schedule.

HALFF BY THE NUMBERS

ESTABLISHED -1950-

32 OFFICES

1,400 EMPLOYEES

b. Similar Projects

Bull Shoals Treatment Plant Improvement and Collection Rehabilitation - 16 Pump Stations

City of Bull Shoals | Bulls Shoals, AR

Halff worked with the City of Bull Shoals to replace the existing Wastewater Treatment Plant and upgrade the existing collection system. **The firm assisted the City of Bull Shoals secure $9 million in grants and loans to fund the project.** Four million dollars of the funding is being provided through a USDA grant. Halff developed a comprehensive preliminary engineering report (PER) for the project for the City to use in pursuing project funding. The PER included an assessment of the project options' environmental impact and preliminary cost estimations. The design of the projects was completed in Spring 2018. Attention to detail was imperative during this design process. Developing a grading plan that conformed to the rugged terrain and making sure the adjacent White River was protected during construction were the primary goals of the design team in developing construction drawings and planning the construction phasing. The new plant has been designed so the existing plant can stay in service until the new plant was activated. The existing collection system's rehabilitation includes open-trench replacement of over 1.5 miles of existing sewer mains. The mains selected for replacement follow the alignment of valley streams that drain to the White River—decades of erosion resulted in shallow, exposed, and susceptible to inflow and infiltration (I&I). The new lines were designed with adequate cover and watertight manholes to reduce the City of Bull Shoals I&I issues. Our firm assisted the City of Bull Shoals with construction and contract management after the groundbreaking. Halff prepared project reports, pay requests, change orders, and close-out documents. The firm also provided full-time construction observation throughout the project.

Services Provided: Wastewater Treatment Plant Design, Cost Estimating, Environmental, Permitting, and Construction Administration

Reference
David Nixon
Mayor
870.421.8783
dnixon@cityofbullshoals.org

Winner of the 2021 ACEC Arkansas Engineering Excellence Award

Gravel Ridge Wastewater Treatment Plant Improvements

Arkansas Natural Resources Commission | Sherwood, AR

The Gravel Ridge Sewer Improvement District (SID) No. 213 of Pulaski County provides wastewater service to more than 1,500 customers in northern Pulaski County and treats its wastewater with facultative lagoons. The Arkansas Department of Environmental Quality (ADEQ) permits this facility, and the current treatment process is out of compliance. SID No. 213 retained Halff to plan and design a new treatment system to meet current National Pollutant Discharge Elimination System (NPDES) permit limitations. An integral part of the new treatment plant design included a new 1.5 MGD plant influent lift station. The lift station was a submersible (wet well) design and included an integral valve vault to house fittings, valves, and flow monitoring equipment. The station was designed to have the capability of either discharging to the head of the treatment process or an equalization basin during times of increased flow. Automated control valves and SCADA integration allow for remote control of the station flow and discharge location. The new treatment will include mechanical screening, extended aeration/activated sludge process, clarification, UV disinfection, tertiary filtration, and flow measurement for $5 million. Halff assisted with the application of funds through the Arkansas Department of Agriculture Natural Resources Division (NRD) Revolving Loan Fund Program. To stay in compliance with grant requirements, Halff staff members documented the American Iron and Steel (AIS) and Davis-Bacon compliance as required by the Environmental Protection Agency. We will maintain the records for the AIS and Davis-Bacon programs on the construction site for review by ANRC. Construction phase services included an on-site resident project representative to provide daily site visits for at least 3 hours per day during the project's construction.

Services Provided: Wastewater Treatment Plant Design, Environmental, Permitting, and Construction Administration

Reference

Dan Bernal
Sewer Improvement District No. 213
501.392.6108
grsid213@gmail.com

Catherine Branch Wastewater Treatment Plant, Lift Station and 15- to 21-Inch Trunk Line

Town of Northlake | Northlake, TX

Halff is designing a 0.25 MGD wastewater water treatment plant (to be accomplished in two 0.125 MGD phases), a 1.0 MGD lift station, 250 lf of an 8-inch force main, and 500 lf of a 10-inch effluent outfall. The lift station is close to Catherine Branch and will pump wastewater from the interceptor near the Branch to the WWTP site. The outfall pipeline will convey treated effluent from the WWTP to the Branch. Once sufficient growth occurs in the drainage basin, the WWTP and lift station will be removed/abandoned and flows routed by gravity via a new interceptor to the TRA Denton Creek WWTP. The preliminary design was sized based on the service area and flow projections. The design criteria was established, and process calculations, equipment sizing, and solids disposal options were conducted. Halff also prepared the discharge permit through TCEQ.

Additionally, Halff performed a route study for the Town of Northlake to determine the best alignment for a wastewater interceptor along Catherine Branch. Three alignments were evaluated based on impacts on land use, permitting requirements, conflicts with existing utilities, environmental concerns, number of easements and cost, and construction cost. The Town selected the recommended alignment, and the preliminary design is underway. This project includes traditional survey, drone survey, railroad and TxDOT permitting, easement preparation, easement acquisition, environmental engineering, geotechnical engineering, and subsurface utility engineering. The interceptor ranges from 15- to 21-inch and is 12,000 lf.

Services Provided: Wastewater Treatment Plant Design, Survey, Environmental, SUE, Permitting, Geotechnical Engineering, and Construction Administration

Reference

Drew Corn
Town of Northlake
(940) 648-3290
DCorn@town.northlake.tx.us

halff

Item 4: Project Approach

a. Designing the Project

This project involves the planning and design of improvements to the existing wastewater treatment plant known as the Montgomery Town Creek WWTP. The following are initial preliminary design considerations and potential issues that may need to be addressed. It is noted that additional design considerations will be developed after meeting with the treatment plant operations personnel and other city officials.

DESIGN CONSIDERATIONS

1. Consider current and future design flows to the WWTP. Currently, the design flow is estimated at 0.30 million gallons per day (MGD) with a maximum future expansion to 0.60 MGD. We recommend acquiring three years of flow data to verify design and future maximum flows.

2. Preliminarily, it would be in the City's best interest to consider constructing a new wastewater treatment facility to replace the existing one. In the past three (3) years, Halff hasengineered two Wastewater Treatment Plants (WWTP) rated at 0.50 MGD that involved implementing a new facility while keeping the existing WWTP in operation until the new Plant was online. Afterward, the existing facility was demolished. Both of these facilities have been in compliance with NPDES permit limitations since start up. We are currently designing a third WWTP rated at 0.75 MGD that will involve demolishing the existing facility. This plant is scheduled to go online in February, 2025.

3. We recommend wastewater quality testing of the influent raw wastewater for BOD, TSS and Ammonia Nitrogen to verify the strength of the wastewater rather than simply estimating it. It has been our experience that identifying the actual quality of the wastewater will enhance design and the treatment process.

4. The existing pump (lift) station can be utilized but will need to be modified and resized in order to serve as the influent lift station into the new treatment units and to enable the WWTP to better handle wet weather flows.

5. We recommend the structures to handle the treatment processes be concrete basins which will enhance to design life of the facility (also in line with City preference).

6. Involvement of the treatment plant operator during thr design process and receiving his/her recommendations will aid in development of the plant to enhance its overall performance. On all of our WWTP project, we interact with the Operator as an important team member which will result in a better final product.

7. If some form of SCADA system is considered, Halff has experience with SCADA implementation. We have designed computer monitoring and automation systems at all of our recent WWTPs. We will work with the City and operations staff to design the level of electronic instrumentation, SCADA and/or other technologies desired.

8. Halff has significant experience assisting clients with government funding for water and wastewater projects. We helped our most recent WWTP projects receive funding from the following sources:

   - City of Bull Shoals, Arkansas WWTP 0.50 MGD
     - $ 7.5 million project
     - $ 5 million in grant USDA Rural Development
     - $ 1.5 million in grant EDA; $ Remaining in loan from USDA Rural Development

- Gravel Ridge SID 213, Pulaski County, Arkansas 0.50 MGD
  - $ 8.5 million project
  - Arkansas Dept. of Agriculture, Natural Resources Div. Loan

9. Halff will conduct a preliminary design meeting with City staff and the Operator to discuss design considerations, funding, site conditions, TCEQ permitting , other permitting, bidding process, and other items of interest related to the project.

10. At a minimum, Halff will conduct additional design meetings with City staff and the Operator at designated deliverable milestones for the project. Milestone deliverables will be provided at City discretion, but we recommend at least two (60% and 90%) prior to finalizing the plan set.

11. All final plans and bid documents will be submitted to appropriate reviewing agencies and the Texas Commission of Environmental Quality (TCEQ) for final review and approval. Documents will be submitted to any funding agencies that provide funding for the project.

12. Halff will assist the City in the advertisement, bid process, receipt of construction bids, and recommendation of award at the discretion of the City.

13. Halff will conduct a preconstruction conference with the City and contractor.

14. Halff will provide Construction Administration and Observation during the project and will conduct construction progress review meetings on a monthly basis with the City and contractor.

15. At a minimum, Halff will conduct substantial completion and final completion walkthroughs of the contractor's efforts and create final record drawings from the contractor as-built information.

16. Halff will conduct post construction services for the client, if requested to follow up on the performance of the WWTP and project.

b. Potential Issues and Resolutions

Issues related to a WWTP project can vary, but certain critical items should be identified in order to provide a positive outcome. Additional items will be added to this list after meeting with the client include:

1. Verification of the design and peak sewer flows. Acquiring the most recent annual data related to sewer flows (summer time dry weather and inclement weather flows) are necessary to achieve a successful treatment process.

2. Verification of the strength of the wastewater quality for BOD, TSS, Ammonia Nitrogen and possibly a few other parameters are important to determine the actual characteristics of the wastewater to be treated. Often, this in not conducted, but estimated and from our experience estimates can be significantly out of range, causing problems later in the treatment process.

3. Halff will provide Technical Design Memorandums identifying the optimum sizing of units of treatment, especially the activated sludge process basin.

4. Identification of wet weather flows and how those flows can be handled without initially going through the treatment process by holding wet flows in an equalization basin, if possible. This may not be necessary if the wet weather flows are not significant.

5. Hydraulic flow analysis – Verify all units of treatment are at elevations adequate to allow the maximum peak flow to flow through the process without impeding flow or backing water up. A hydraulic flow diagram will be provided as part of the construction plans.

6. Provision of Auxiliary power to enable the WWTP to operate during power outages. We understand the City has a preference for a natural gas generator to serve this purpose.

7. Good drainage design and site planning. Often, a WWTP can operate and treat efficiently but not paying attention to other design consideration such are grading, erosion control and drainage can cause other problems such as water ponding issues.

8. Provide a geotechnical study and report to identify subsurface soil conditions and any subsurface issues for all structural foundations that may need to be addressed during design.

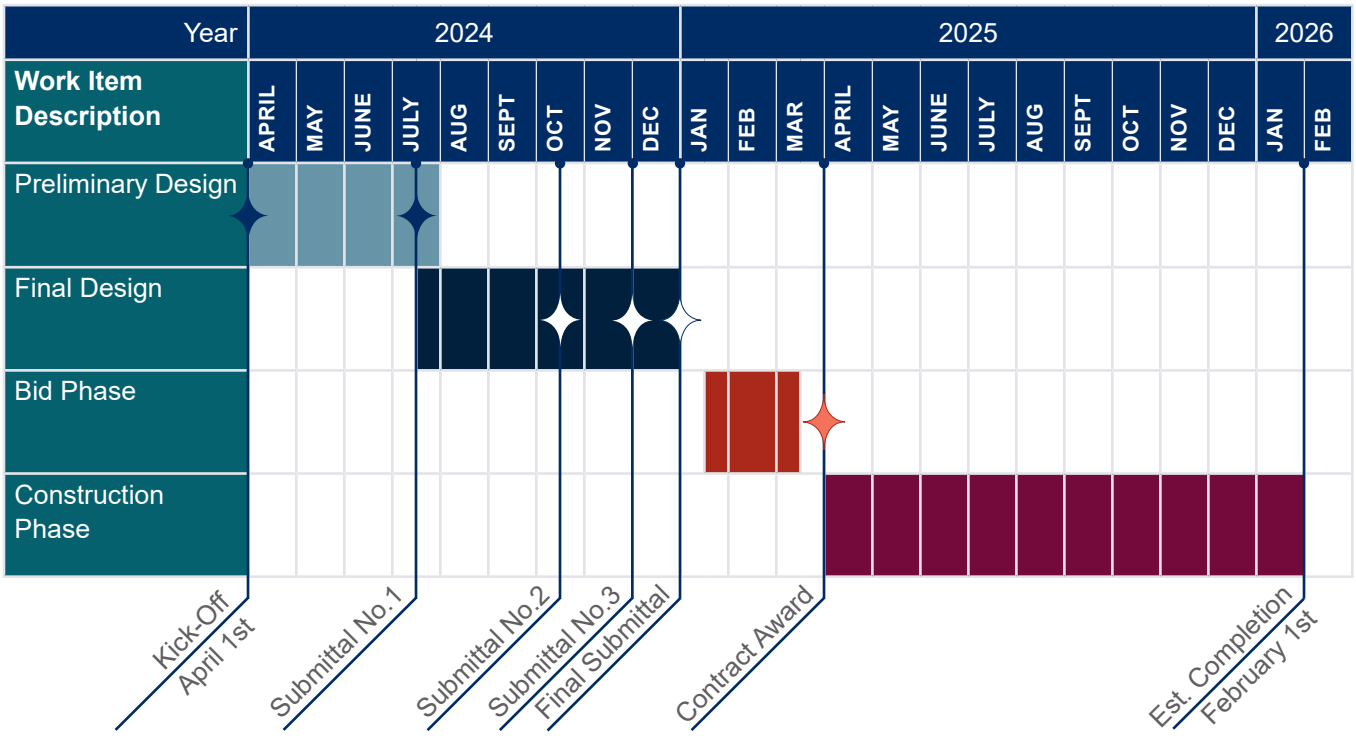
c. Project Leadership and Reporting Responsibilities

Leadership for this effort consists of the Project Principal in Charge, Lance McLeod and the Project Manager Preston Dillard. Primary support for Preston will come from Mike Marlar as the lead technical designer, and Mike Scullion as QA/QC Manager. The other technical leads on the project are identified for City review in the organizational chart on Page 3 of this SOQ.

As previously mentioned in this SOQ, Preston will serve as the City's primary contact for the plant expansion, with Lance and the lead technical designer, Mike Marlar, available to interface with the City as well at your discretion. All members of the team will report to Preston for direction and coordination. Preston, Mike, and other support staff as necessary, will meet with the City virtually as often as you require to keep the project on track. Scheduled in-person meetings can also be conducted with Preston and staff when needed, and it is recommended that such meetings occur at project milestones as a minimum.

CITY OF MONTGOMERY: TOWN CREEK WWTP ANTICIPATED SCHEDULE

(Note: All dates are projected and based on estimate of Notice to Proceed of approximately April 1, 2024)



d. Construction Phase Services and Interface

During the construction phase of the project, our proposed PM, Preston, will remain integral to the project as the Engineer of Record to maintain continuity until construction of the facilities through initial start up is complete. Working in concert with the Halff Team's construction services administrator, Jim Bielstein, Preston will oversee Halff's involvement with construction observations, and responses to Requests for Information (RFIs), Construction Submittals, and any Change Order requests.

Halff recommends that the City receives such communications from the construction contractor either directly, or in tandem with Halff to make sure the City is at least aware that such corrspondense has taken place (City discretion). In the former case of direct City receipt, the City has the option to either review the communication themselves first, or simply pass the information along to the Halff Project Team. Regardless of the City's preference here, the Halff Project Team will take the lead on responding to these contractor communications, with the recommended responses being sent first to the City for approval by staff before final routing to the contractor (again, either forwarded directly from the City, or from the Halff Team with the City copied, at City's discretion). Halff will keep a log of all such communications to be made part of the permanent official project record upon completion.

Lastly, Halff will conduct formal walk-throughs during any designated partial completion milestones agreed upon with the City, and for both substantial and final completion of construction. At those sessions, Halff will note any issues or concerns to be conveyed to the contractor to be addressed for City acceptance of the facilities. Halff will then take the as-built information from the contractor to provide the City with a final set of record drawings for your records and use.

Our ultimate goal is to deliver a product that will improve the quality of life for the citizens of the City of Montgomery and exceed your expectations. We will sincerely work to achieve that outcome.

We improve lives and communities
by turning ideas into reality.

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