









Statement of Qualifications



RFQ 2020-010 Engineering Services for the Colorado Acres RO Water Treatment Plant Renovations Project

May 22, 2020



402 Cedar Abilene, Texas 79601 325.698.5560 tel 325.690.3240 fax www.e-ht.com

> PE Firm Registration No. 1151 PG Firm Registration No. 50103 RPLS Firm Registration No. 10011900



May 22, 2020

Webb County Purchasing Department 1110 Washington Street, Suite 101 Laredo, Texas 78040

Re: RFQ 2020-010 Engineering Services for the Colorado Acres RO Water Treatment Plant

Renovations Project

To Whom It May Concern:

Enprotec / Hibbs & Todd, Inc. (eHT) is pleased to submit the qualifications of our firm to Webb County for consideration to provide professional engineering services for the proposed Colorado Acres Reverse Osmosis (RO) Water Treatment Plant Renovations Project. eHT has provided engineering services related to water and wastewater treatment for over 30 years.

eHT has experience designing water treatment plants across the State of Texas. We designed the largest surface water desalination facility in Texas and the first submerged membrane facility in Texas. Our design experience includes plants ranging in size from 0.5 MGD to 75.0 MGD. It should also be noted that eHT has successfully completed over \$550 million in water and wastewater projects using various types of county, state and/or federal funding, including more than 60 various projects using either Texas Water Development Board (TWDB) DWSRF, CWSRF, EDAP, or a combination of program funds from other sources such as CDBG and USDA-RD.

We feel that our Team is best suited to assist Webb County. I will be the main point of contact and can be reached at 402 Cedar Street, Abilene, Texas 79601; by phone at (325) 698-5560; or by email at jordan.hibbs@e-ht.com. Should additional information be desired, please don't hesitate to contact me.

Sincerely,

Enprotec / Hibbs & Todd, Inc.

Jordan S. Hibbs, PE Vice President

Environmental, Civil & Geotechnical Engineers

FIRM PROFILE

Enprotec / Hibbs & Todd, Inc. (eHT)



Enprotec / Hibbs & Todd, Inc. (eHT) is a civil, municipal, environmental and geotechnical engineering firm with offices in Abilene, Granbury and Lubbock in the State of Texas. Our staff consists of engineers, surveyors, geologists,

scientists, construction material lab technicians and field operations professionals. Despite our office locations, eHT works on projects throughout Texas, ranging east toward Tyler and Houston, north to Lubbock and Wichita Falls, west toward El Paso, and south throughout the Rio Grande Valley.

For over 30 years, eHT has provided clients with exceptional service and projects. We feel that in order to take care of our clients, we must understand their priorities and goals. We realize that we are working for you, and for the citizens you serve.

Our success is based on enduring partnerships with our clients. eHT professionals bring a solid foundation of expertise and innovation to each client's project.

eHT is a forward-thinking and progressive team of engineers and scientists with deep industry expertise, knowledge and resources. We understand the importance of being a consulting firm that clients can depend on for knowledge and expertise.

Water Engineering

The quality and quantity of water supplies are becoming increasingly important to the well-being of communities throughout Texas. The eHT Team's water resource experience is focused in Texas and our staff has strong experience in all aspects of water system planning, design, construction and optimization. Because our firm has civil, environmental and geotechnical engineering divisions, our water resource experience includes a wide spectrum of projects, both in size and scope.

We have completed planning, design, construction and operations services on regional water supply systems for large municipalities; and we have also had many prime opportunities to work with smaller communities in meeting their challenges to develop cost effective solutions for their population's water supply needs.

Our water resource services include:

- Water Supply Planning and Development of Water Supplies
- Water Transmission / Distribution and Treatment
- Elevated / Ground Storage
- Pump Station Design and Improvements
- Innovative Technologies such as RO treatment, membrane filtration, MBR wastewater treatment, and radionuclides removal
- Water Reuse

Regulatory Compliance

eHT helps clients develop short- and long-term strategies for regulatory compliance. This pro-active approach allows clients to deal successfully with compliance issues today and down the road. With our expertise, we combine proven technologies with emerging, innovative solutions to meet regulatory compliance challenges. Projects may include the preparation of a comprehensive plant manual for a process safety management program, an inventory of air emission sources for a Title V air permit, or an entire facility audit to detect environmental deficiencies and recommend corrective action strategies. Our regulatory compliance services include:

- Process Safety Management and Risk Management Plans
- Compliance Audits and Sara Title III Compliance
- Regulatory Agency Interface
- NEPA Environmental Documents
- Concentration-time (CT) Studies
- Water Corrosivity Studies
- Disinfection byproduct (DBP) Optimization Studies

Operations Support

Unlike "purely" design engineering firms, eHT has "handson" engineering and operations staff with experience in both conventional and advanced water and wastewater treatment technologies. We have linked our in-house design, construction support and operations functions to provide a comprehensive, "user-friendly" service to our clients. eHT has licensed operators on staff. These specialists complement our team of professionals. We provide a variety of services to assist with the successful start-up and continued function of systems.





FIRM PROFILE

WATER TREATMENT PLANT PROJECTS	CAPACITY (MGD)	WATER SOURCE	SUPPLY WELLS	INTAKE STRUCTURE	RAW WATER PUMPING	RAW WATER STORAGE	RAW WATER DISINFECTION	COAGULATION/ RAPID MIXING	FLOCCULATION	SEDIMENTATION/ CLARIFICATION	GRANULAR MEDIA FILTRATION	MEMBRANE FILTRATION	RO/EDR/IX TREATMENT	FINAL DISINFECTION	FINISHED WATER STORAGE	FINISHED WATER PUMPING
Rolling Hills Water Supply	0.1	GW														
Skidmore WSC	0.1	GW														
City of Mertzon	0.2	GW														
Pecos County	0.2	GW														
City of San Angelo TDSHS Carlsbad DADS Facility	0.25	GW														
TTU Junction	0.2	GW														
Lake Palo Pinto Area WSC	0.45	SW														
City of Roscoe	0.5	GW														
City of Seminole	0.7	GW														
City of Lyford	1.0	SW														
City of Midland	1.0	GW														
City of Eden	1.1	GW														
Possum Kingdom WSC	2.0	SW														
City of Cisco	2.0	SW														
City of Mason	2.0	GW														
City of Richmond (Phase I)	2.0	SW														
City of Roma	2.0	SW														
City of Stamford	2.0	SW														
City of Winters	2.0	SW														
Parker County SUD	2.0	SW														
City of Albany	2.5	SW														
City of Ballinger	2.5	SW														
City of Granbury	2.5	SW														
City of Brady	5.0	SW/ GW														
City of Granbury	5.0	SW														
Eastland County WSD	6.0	SW														
City of Midlothian	6.0	SW														
City of Sweetwater	6.0	GW														
City of Beeville	7.0	SW														
City of Sweetwater	8.0	SW														
Community Water System	9.0	SW														
City of Missouri City (Phase I)	10.0	SW														





FIRM PROFILE

WATER TREATMENT PLANT PROJECTS	CAPACITY (MGD)	WATER SOURCE	SUPPLY WELLS	INTAKE STRUCTURE	RAW WATER PUMPING	RAW WATER STORAGE	RAW WATER DISINFECTION	COAGULATION/ RAPID MIXING	FLOCCULATION	SEDIMENTATION/ CLARIFICATION	GRANULAR MEDIA FILTRATION	MEMBRANE FILTRATION	RO/EDR/IX TREATMENT	FINAL DISINFECTION	FINISHED WATER STORAGE	FINISHED WATER PUMPING
Upper Leon River MWD	10.5	sw														
City of Midlothian	12.0	sw														
City of San Angelo	12.0	GW														
Brazos Regional PUA	13.0	sw														
City of Abilene Hargesheimer	15.0	SW														
City of Lubbock Southside	15.0	SW														
City of Abilene PK	16.75	SW														
City of Missouri City (Phase II)	20.0	sw														
City of Abilene Grimes	23.5	SW														
City of Abilene Northeast	23.5	SW														
City of Tyler Golden Road	30.0	sw														
City of Midland	35.0	GW /SW														
City of San Angelo	35.0	SW														
City of Tyler Lake Palestine	60.0	SW														
City of Lubbock Northwest	70.0	SW														





EXPERIENCE

Hargesheimer Water Treatment Plant Expansion (12 MGD) — City of Abilene



Surface Water and Treatment System — Brazos Regional Public Utility Agency (BRPUA)



eHT was selected to provide planning, piloting, procurement, design and construction services to expand the City of Abilene's Hargesheimer Water Treatment Plant from 8 MGD to 12 MGD. The Hargesheimer WTP was one of the first membrane plants in the State of Texas and the original design utilized direct filtration without any pretreatment. The expansion project included the following components: new pretreatment structure with cascade aeration, 3-stage flocculation, sedimentation via inclined plate settlers, sludge removal, and membrane feed pump station; new sludge holding tank with intermittent large bubble aeration; new solids handling building with 2 meter belt filter press and associated polymer feed system; addition of a second backwash recovery basin; upgrades to chemical feed facilities; two new membrane filter racks; a new, third-stage RO train to enhance recovery; 10 evaporators for concentrate disposal; and miscellaneous other electrical/ control/SCADA improvements. The improvements came online in late 2016 and have already proven to provide much greater removal efficiency of the taste and odor compounds that have historically plagued this plant. The project grants the City of Abilene flexibility in water sources by allowing the City to utilize more water out of the O.H. Ivie Reservoir.

ENTITY: Public SIZE: 117,063 DATE: 2015

COST: \$15.9 Million ARCHITECT: N/A

CONTRACTOR: Cardinal

KEY PERSONNEL: Jordan Hibbs, Scott Hibbs, Joshua

Berryhill

The Brazos Regional Public Utility Agency (BRPUA) selected eHT to provide a detailed evaluation of the SWATS Water Treatment Plant (WTP). The SWATS WTP is currently rated to treat approximately 13.0 MGD through two parallel treatment trains. Each treatment trains utilizes a different process methodology. The original treatment train (rated for 8 MGD when operated only, or 5.5 MGD when operated in parallel with the newer train) is based upon conventional treatment technology which utilizes a rapid mix system for coagulation, upflow solids contact clarifiers for flocculation and sedimentation, and dual media filters for filtration. The newer treatment train (rated for 7.5 MGD) incorporates membrane technology. This train utilizes a rapid mix system for coagulation, an upflow solids contact clarifier for flocculation and sedimentation, a pressurefed ultrafiltration (UF) membrane filtration system, and a reverse osmosis (RO) membrane system. The SWATS WTP has had multiple challenges over the years in consistently maintaining compliance with secondary standards, due to limitations in balancing flow between the two treatment trains. BRPUA selected eHT to evaluate each process within each treatment train and provide recommendations on system upgrades to enhance overall treatment consistency, as well as address current hydraulic bottlenecks, membrane oxidation issues, membrane fiber breakage issues, and operational flexibility for the existing UF and RO systems.

eHT took a multi-tiered approach for the evaluation of this facility. The initial step in the preparation of this Master Plan was to perform an extensive evaluation of the performance and condition of the existing treatment processes and equipment.





This portion of the evaluation included the review of existing records and documentation, review of previous operational data, capacity analysis of each treatment system, review of historical demands, and review of current and anticipated demands on the system. Following the completion of the evaluation, Operational Round Table meetings were held to present the findings of the evaluation, receive feedback from all parties, and develop a prioritized list of processes in need of repair or modification. A Technical Memorandum (TM) was developed to summarize the findings the results of the Operational Round Table meetings. The prioritized list was used to conduct a Treatment Process Evaluation. This evaluation included the identification of any recommended treatment system modifications, upgrades and/or replacements as well as the evaluation of alternative treatment processes including impacts on the existing system, capital cost for the improvements or modifications, and anticipated operation and maintenance costs for the alternatives investigated. A final TM was developed to summarize the findings for each of the treatment processes and alternatives investigated. Those TMs were presented to the Owners, Operators, and Staff and were discussed at the Final Operational Round Table meeting.

Key challenges associated with this project included the following.

- Maximizing the use of conventional and advanced treatment processes in parallel;
- Coordination among multiple stakeholders and competing priorities; and,
- In-depth analysis of operational issues associated with the first Membrane and RO facility in Texas.

ENTITY: Public SIZE: 23,147 DATE: 2017 COST: \$1 million ARCHITECT: N/A CONTRACTOR: N/A

KEY PERSONNEL: Colden Rich, Joshua Berryhill

Surface Water Treatment Plant Expansion — City of Granbury



eHT is providing planning, procurement, design and construction services for the City of Granbury's surface water treatment plant (SWTP) expansion increasing the finished water capacity from 2.5 to 5.0 million gallons per day (MGD). Due to increased demands in the service area, it was necessary for the City to expand to the Phase II capacity in order to maintain compliance with TCEQ regulations and given the City's number of connections, as well as future population projections. The expansion includes the addition of a floating raw water pump barge on Lake Granbury; two trains of flocculation and plate settler sedimentation; one microfiltration (MF) feed pump; complete module buildout on the existing MF skids; one MF skid with 100% module capacity buildout; one MF blending pump; one 6,500 gallon aluminum chlorohydrate (ACH) tank and chemical system improvements; upsizing the low pressure reverse osmosis (RO) feed pumps; two new, twostage RO trains; one high service pump; one 1 million gallon (MG) clearwell tank; and, one maintenance building covering the high service pump station. The Phase II expansion utilizes much of the existing WTP footprint.

ENTITY: Public SIZE: 100,215 DATE: 2019

COST: \$11.7 Million ARCHITECT: N/A

CONTRACTOR: PLW Weber

KEY PERSONNEL: Jordan Hibbs, Joshua Berryhill





Water Treatment Plant and System Improvements — City of Roscoe



eHT provided professional planning, procurement, piloting, design, and construction services for the City of Roscoe for groundwater treatment plant improvements, including construction of a 0.5 MGD (350 gpm) groundwater treatment plant. The City utilized groundwater as its only water supply source. The City's groundwater is high in nitrate, exceeding the EPA's maximum contaminant limit for nitrate, resulting in noncompliance with state and federal drinking water regulations. While nitrate can be easily removed via a low capital and O&M cost intensive treatment technology such as ion exchange, the City's groundwater also has high hardness, which results in an overall lower cost of treatment for an RO system. Since the groundwater has low concentrations of other foulants, an RO system could be constructed with little more than cartridge filtration for pretreatment. RO treatment is still considered an innovative treatment technology by the TCEQ, and site-specific performance pilot testing is required. However, due to the need to accelerate the project schedule and place the RO system online as soon as possible, eHT coordinated with the TCEQ to obtain approval for full-scale performance testing for one of the first RO systems tested in this manner in Texas. The project provided improved finished water quality from the City's existing wells that is compliant with both state and federal drinking water standards. In this project, an industrial discharge permit was not required, as the City's wastewater treatment facility has sufficient capacity to accept daily GWTP wastewater flows.

ENTITY: Public SIZE: 1,388 DATE: 2016

COST: \$1,286,000 ARCHITECT: N/A CONTRACTOR: ACP

KEY PERSONNEL: Joshua Berryhill

Phase I Surface Water Treatment Plant — City of Granbury



eHT provided planning, piloting, procurement, design and construction services for the City of Granbury for surface water treatment plant (SWTP) improvements, including construction of the first 2.5 MGD phase of an ultimate designed 7.5 MGD SWTP. The project will replace the City's existing SWTP with a new facility that is compliant with both state and federal primary and secondary drinking water standards. The proposed project will include innovative treatment technologies to adequately treat brackish water from Lake Granbury, including a plate settler pretreatment system, a microfiltration membrane filtration system, and a reverse osmosis (RO) membrane system. The project included preliminary and final design, piloting and discharge permitting. eHT will also be providing bidding, construction phase services, and post-construction services for the proposed facilities.

eHT utilized both traditional and non-traditional piloting approaches, to first obtain TCEQ approval of pilot study results, and later to modify the TCEQ's approved RO system design parameters through computer modeling via a full-scale challenge testing approach. Following completion of the plant construction, eHT will also assist the City in the performance of full-scale challenge testing of the plate settler pretreatment system to validate performance for log removal disinfection credits for plant concentration-time (CT).

Key challenges associated with this project included the following:

- The site is very limited at only 105 feet wide eHT was able to fit all of the advanced treatment components and keep the existing SWTP in operation;
- The use of traditional and non-traditional piloting approaches to modify the RO system design parameters;





- The project included coordination with the TCEQ and the Brazos River Authority for the raw water intake and discharge line to Lake Granbury; and,
- eHT assisted the City in obtaining Texas Water Development Drinking Water State Revolving Funds for construction that provided over \$3 million in savings from the lower interest rate.

ENTITY: Public SIZE: 11,300 DATE: 2017

COST: \$14.5 Million

ARCHITECT: Tim McClarty, AIA

CONTRACTOR: Gracon

KEY PERSONNEL: Scott Hibbs, Jordan Hibbs

Water Treatment Plant Improvements — Possum Kingdom Water Supply Corporation



eHT provided planning, piloting, procurement, design and construction services for expansion of the existing surface water treatment plant (WTP), including addition of a second RO system consisting of two trains with a total capacity of 600 gpm. The RO system permeate was blended with the pretreated effluent from the Intermediate Pump Station. Treated water from the RO membrane unit was combined with pretreated effluent, disinfected, stored, and pumped to the existing distribution system.

ENTITY: Public SIZE: 5,400 DATE: 2011

COST: \$2.7 Million ARCHITECT: N/A

CONTRACTOR: JR Sheldon

KEY PERSONNEL: Scott Hibbs, Jordan Hibbs, Joshua

Berryhill

Second Stage Drought Response Project — City of Abilene



eHT provided planning, procurement, design, permitting, project management, construction management, resident inspection and O&M services for this project valued at \$105 million. The Hamby Indirect Reuse Project augmented the City's raw water supply in Lake Fort Phantom Hill; however, the raw water augmentation only offset approximately 25 percent of the City's daily water demands. The need for a second stage drought response strategy was recognized by City leadership. eHT was tasked to identify and develop the design for necessary improvements to utilize brackish raw water from Possum Kingdom (PK) Lake and desalinate the PK raw water to a sufficient level to match raw water quality from Hubbard Creek Reservoir (Hubbard). Since the City had been forced to reduce raw water usage from Hubbard due to the ongoing drought, the water from PK could be used instead. The project goals included upgrading the existing PK Intake Pump Station owned by the Brazos River Authority, construction of approximately 42 miles of raw water, product water and concentrate pipelines, and the construction of a Raw Water Roughing Facility (RWRF), designed to desalinate raw PK water prior to being sent to Abilene for final, conventional water treatment. Abilene's RWRF needed to be capable of meeting "product water" goals to provide water quality consistent with current Hubbard raw water quality, at varying flow rates and seasonal impacts. Modular system design, enhanced system redundancy, implementation of an automated SCADA system, enhanced energy efficiency and maximized water recovery efficiency were all key components for successfully meeting the objectives of the project. eHT based the project on advanced desalination and pretreatment processes including a 12 MGD pressure-fed microfiltration (MF) membrane filtration system and a new three-stage RO system rated for up to 11 MGD in order to meet the City's PK water supply goals.





Multiple significant challenges had to be overcome for successful completion of the project, including time, water availability, site footprint, and waste handling requirements. eHT determined that the only potentially feasible approach to meeting the highly aggressive schedule was to fast-track design as well as an alternative delivery method for construction using a Construction Manager at Risk (CMAR) approach.

To address water availability challenges, eHT implemented two enhanced recovery components within the overall project design. The first component included the addition of a tertiary recovery MF system installed parallel to the primary recovery MF system. Normal backwash waste from the primary recovery MF system was further processed by the tertiary recovery system to maintain a net MF system recovery of more than 99% recovery. In addition, the RO system design incorporated a three-stage design approach, as well as adjustable recovery to maximize net RO system recovery to 90% or greater during the warmest nine months of the year, reducing down to 85% recovery during the three coldest months of the year. Most RO systems in Texas are only designed around a two-stage approach, which normally only results in a 75% recovery.

The RWRF site is located adjacent to the City of Breckenridge's WTP. The site is very limited in space, especially considering the footprint required for treatment buildings, pump stations, and associated bulk chemical and water storage tanks and clearwells. To make the most effective use of site space, the RWRF was designed using a 3-D drafting format to determine piping and structure collision detection issues in real-time during design, as well as to expedite overall construction. Completion of the design in 3-D also facilitated enhanced coordination between design disciplines to further expedite the design phase.

Waste handling was another critical issue faced in this project. When operated at full capacity, the RWRF can produce several millions of gallons of RO concentrate per day. Multiple concentrate handling and disposal alternatives were evaluated, including nearby discharge to the City of Breckenridge's wastewater collection system, disposal into an offsite evaporation basin, discharge into a nearby receiving stream, deep well injection, as well as the identification and evaluation of multiple zero liquid discharge (ZLD) technologies. The concentrate waste handling alternative ultimately selected was to construct a 26-mile pipeline from the RWRF to Possum Kingdom Reservoir for ultimate disposal.

The treatment systems ultimately selected were based on required construction footprint, capital and O&M cost, operational flexibility, lead time for construction and capability of meeting treatment goals for TDS, chloride, sulfate and hardness. The City's RWRF includes raw water pumping, transmission and storage, a new pretreatment MF system to protect the new RO system, a tertiary recovery MF system to enhance net MF recovery, RO treatment for dissolved mineral reduction, chloramine disinfection to maintain positive bio-fouling control, product water storage, pumping and transmission and RO concentrate waste transmission and disposal. Also included in the scope of the project was a TPDES discharge permit for the City for a new permitted discharge to Possum Kingdom Reservoir for disposal of the RO concentrate stream and a comprehensive Operations and Maintenance Manual.

Critical challenges that were successfully met during the design and construction of this project include the following:

- Design of advanced treatment systems to significantly enhance recovery of treated water;
- Coordination with the Brazos River Authority along the pipeline route;
- Acquisition of private property under easements or fee simple title;
- Fast-track design and construction of one of the largest RO system in Texas;
- Identification of discharge method to allow the disposal of a large amount of highly brackish reject water; and,
- Fitting the advanced treatment technologies and associated improvements within a limited site.

ENTITY: Public SIZE: 117,063 DATE: 2017 COST: \$105 Million

ARCHITECT: Tim Rice McClarty, AIA CONTRACTOR: Pepper Lawson, LLC

KEY PERSONNEL: Scott Hibbs, Joshua Berryhill, Colden

Rich





Hamby Water Reclamation Facility and Indirect Reuse Project — City of Abilene



eHT provided planning, procurement, design, permitting, project management, construction management, inspection and O&M services for this project, valued at \$82 million. The WWTP serving the City of Abilene was originally constructed in 1956. The City's WWTP was expanded and upgraded several times over the past 50-plus years to its current capacity of 22 MGD. Having exceeded the service life for the treatment units, eHT designed a new treatment facility, with construction completed to allow indirect reuse of advanced treated wastewater in less than 12 months as a critical drought response project for Abilene.

Abilene's WRF must be capable of meeting requirements for indirect potable reuse and Type I reuse. Improved system redundancy, implementation of an automated SCADA system, enhanced energy efficiency and biological and chemical nutrient removal capability are all key components for successfully meeting these treatment objectives. eHT based the project on processes including Biological Nutrient Removal (BNR), Membrane Bioreactor (MBR), Reverse Osmosis (RO), Ozone and Biologically Active Contactors (BAC) technologies in order to meet the City's project goals.

The treatment systems ultimately selected were based on required construction footprint, repurposing of existing structures as a budget control measure, capital and operational cost, operational flexibility, lead time for construction and capability of meeting treatment goals for BOD, TSS, ammonia, total phosphorus, TDS, chloride, sulfate and emerging constituents of concern. The City's upgraded WRF includes both coarse and fine mechanical screens, coarse and fine grit removal systems, an influent wastewater pump station, flow equalization systems, a secondary BNR process designed for

biological phosphorus removal, enhanced energy recovery and tertiary filtration using MBR membrane filters, RO treatment, Ozone treatment, BAC filtration, chlorine disinfection and aerobic solids storage and disposal. Also included in the scope of the project is the major amendment of the City's TPDES discharge permit for a new permitted discharge to one of the City's surface water reservoirs and a comprehensive Operations and Maintenance Manual.

eHT worked with Abilene leadership to select a Construction Manager at Risk (CMAR) using a 2-step selection process. eHT initiated preliminary design in May, 2013. CMAR selection was completed in September, 2013. Field construction started on January 25, 2014 and reclaimed water was sent to Lake Fort Phantom on January 7, 2015, less than 12 months from the first concrete pour.

In order to minimize the lead time for operators to obtain training on the new processes, eHT conducted operator training sessions with the WRF operations staff on a biweekly basis throughout planning, design and into construction.

The project received the 2016 Project of the Year from the WateReuse Association, the Environmental Project of the Year from ENR-Texas/Louisiana and the 2017 American Waterworks Association, Texas Section, Large Utility Indirect and Bob Derrington Reuse Award. The successes of the project are many and several are highlighted below.

- Largest MBR facility in the State of Texas (currently);
- One of the largest advanced treatment indirect reuse systems in operation;
- No interruptions to operations and treatment over the entire construction period;
- Maximum use of the existing plant site by re-purposing as many existing structures as possible;
- Provides an additional 7.0 MGD of water supply through indirect reuse; and,
- \$82 million in design and construction with discharge of advanced treated reclaimed water in less than 12 months.

ENTITY: Public SIZE: 117,063 DATE: 2015 COST: \$82 Million

ARCHITECT: HDR Engineering CONTRACTOR: Pepper Lawson

KEY PERSONNEL: Scott Hibbs, Jordan Hibbs, Joshua





Berryhill

Phase I Water Treatment Plant Improvements



— Parker County Special Utility District

eHT provided a multiapproach phased resolving current plant challenges, including the following improvements: Replacement of existing simplex intake pump station with a duplex intake pump Replacement of the raw water transfer pump station with a floating pump station

at the WTP raw water reservoir; Addition of a new membrane feed pump station; Addition of two (2) trains of plate settler pretreatment equipment (as a bid alternate); Addition of a chlorine dioxide chemical pretreatment system; Addition of a chloramine feed system in pretreatment to minimize biofouling in the pretreatment, MF, and RO systems; Rehabilitation of the existing RO train, replacement of the RO permeate tank, installation of a second 0.6 mgd RO train (with a shelf spare low-pressure RO pump and high-pressure RO pump), and installation of a second MF/RO splitter structure; Upgrade of the heating, ventilation, and air conditioning (HVAC) system for the treatment building to eliminate overheating of existing panels; Replacement of the chlorinator system and additional coagulant bulk storage, day storage and feed system; Addition of a high service pump and upgrade of the existing high service pumps to increase finished water pumping capacity; Replacement of the WTP's manual transfer switch with an automatic transfer switch; Addition of a single waste holding tank and waste transfer pump system; and, Addition of on-site land application irrigation system and necessary equipment.

ENTITY: Public SIZE: 4,113 DATE: 2019 COST: \$13 Million ARCHITECT: N/A CONTRACTOR: Felix

KEY PERSONNEL: Joshua Berryhill



Water Treatment Plant — City of Ballinger

eHT completed the design of a 0.50 MGD (350 gpm) capacity RO system that is being integrated into the existing City of Ballinger water treatment plant. The City's two sources, O.H. Ivie Reservoir and Lake Ballinger, have varying levels of TDS, chloride and sulfate which are not removed by the existing conventional treatment/filtration process. A detailed analysis was performed on raw water data from both sources to establish the design flow and solids balance utilizing filtrate from the existing WTP as feed to the RO system. The proposed RO system capacity in conjunction with the existing WTP will provide a net WTP production rate of 1,620 gpm, or 2.33 MGD.

ENTITY: Public SIZE: 3,767 DATE: 2012 COST: \$1.8 Million ARCHITECT: N/A CONTRACTOR: ACP

KEY PERSONNEL: Scott Hibbs, Jordan Hibbs

1.6 MGD Water Treatment Plant — Corix Utilities

eHT developed a conceptual scope and cost development for a multi-source water system project including both 6 MGD of primary and tertiary recovery MF and RO systems to supply a proposed natural gas power plant. The scope included documentation of the existing wastewater treatment plant (WWTP) capacity, quality and daily production and documentation of existing groundwater supply capacity, quality and production. The scope included conceptual evaluation of a proposed power plant facility including water capacity and water quality needs.





The conceptual evaluation included alternatives to maximize use of WWTP effluent to strategically meet seasonal water demands at the proposed power plant facility and included alternatives to expand the existing groundwater system with regard to maximizing long-term longevity of the groundwater source, as well as strategically meeting seasonal water demands at the proposed power plant facility. The evaluation included potential reuse water supply through internal recycling of waste flow streams from the proposed power plant facility and identification and conceptual evaluation of alternatives to capture, blend, store, and treat varying ratios of WWTP effluent, groundwater and reuse water to meet daily power plant water demands.

Treatment alternatives were identified to determine viable methods for maximizing water use efficiency as compared to maximizing treatment robustness and resiliency and waste disposal alternatives, including but not limited to permitted discharge, evaporative disposal, and zero liquid discharge (ZLD) were identified. The proposed improvements include primary and tertiary MF systems to obtain a 99% recovery efficiency of filtered water, with primary and tertiary RO systems to obtain a 90-95% recovery of RO treated water as well.

ENTITY: Public SIZE: N/A DATE: 2019 COST: \$55 Million ARCHITECT: N/A CONTRACTOR: TBD

KEY PERSONNEL: Joshua Berryhill

Reclaimed Water Feasibility Study — City of San Angelo

In 2014, the City of San Angelo contracted with Plummer to build on work from the 2006 reclaimed water study and further develop alternatives for beneficially using the City's reclaimed water. eHT was a subconsultant to Plummer. In the follow-on study, eHT and Plummer evaluated options for potable reuse of the City's water, including discharge to Twin Buttes Reservoir or Lake Nasworthy and direct potable reuse. Water quality models developed in the 2006 study were updated and used to evaluate blend ratios, detention times and impacts on TDS and other constituents. Water rights and contractual obligations were also considered and were an important component of the feasibility evaluation. Opportunities for nonpotable reuse were also explored.

A matrix decision tool was used to rank alternatives based on both cost and non-cost factors. The top-ranked alternative was to further evaluate direct potable reuse. eHT and Plummer conducted pilot testing at the San Angelo wastewater treatment plant to establish design parameters for direct potable reuse. Additionally, the eHT/Plummer team developed an implementation plan which included recommendations for permitting, public outreach, and long-term quality monitoring.

ENTITY: Public SIZE: 100,215 DATE: 2015 COST: \$2.5 Million ARCHITECT: N/A CONTRACTOR: Purcell

KEY PERSONNEL: Scott Hibbs, Joshua Berryhill

Nanofiltration System, DADS Project — Texas Health and Human Services

eHT provided technical design support for the design of a nanofiltration (NF) system at the Texas Health and Human Services (THHS) Carlsbad State Assisted Living Center. The project included the design of a nanofiltration system to reduce hardness in the facility's groundwater, allowing THHS to eliminate the existing failed ion exchange softening system. The project included the construction of a new nanofiltration high pressure membrane treatment system, storage, chemical clean-in-place (CIP) systems, and a membrane flushing system. The project also required coordination with TCEQ via its two-step NF/RO approval process with the TCEQ's Technical Review Team.

ENTITY: Public SIZE: N/A DATE: 2018 COST: \$1.2 Million ARCHITECT: N/A

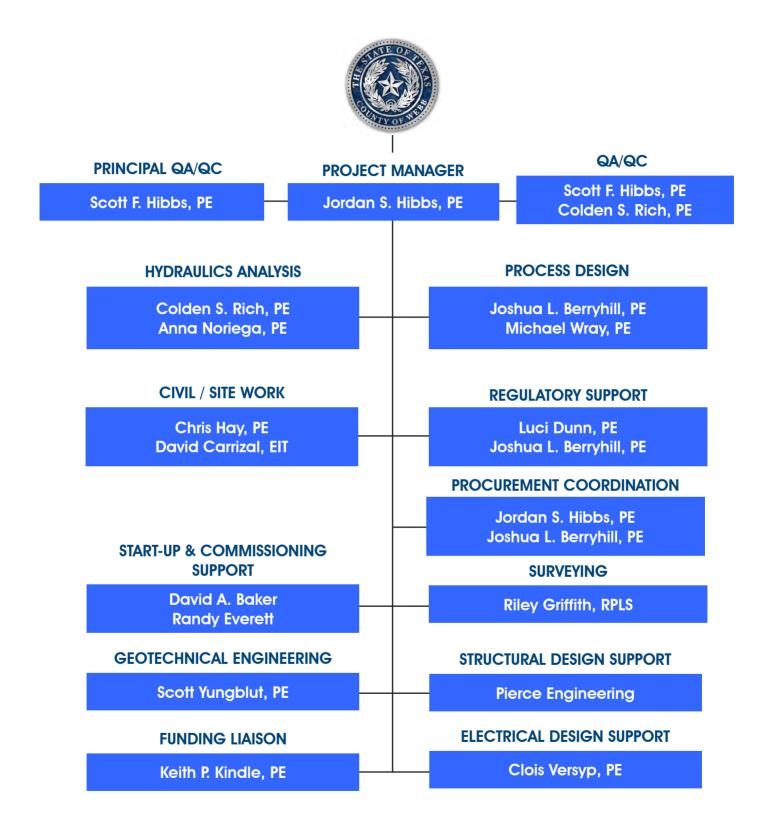
CONTRACTOR: Texas Water & Soil

KEY PERSONNEL: Jordan Hibbs, Joshua Berryhill





KEY PERSONNEL







Scott Hibbs, PE Principal-in-Charge



EDUCATION

Bachelor of Science,
Civil Engineering
Texas Tech University, 1982

REGISTRATIONS

Registered Professional Engineer – Texas #63462, 1987 LPST Corrective Action Project Manager #930

PROFESSIONAL /CIVIC ORGANIZATIONS

American Society of Civil Engineers National Society of Professional Engineers

Water Environment Federation
American Water Works Association
South Central Membrane
Association

Texas Water Conservation Association

Abilene Chamber of Commerce, Board Chair, 2017-2018

Abilene Industrial Foundation, Board Chair, 2015-2017

Community Foundation of Abilene, Board Chair, 2016-2018

Hendrick Health System Board of Trustees: 1992-2012;

2014-current

Chairman: 1998-2001; 2004-2006; 2014-2016; 2019-current

PROFESSIONAL EXPERIENCE

Mr. Hibbs, President of Enprotec / Hibbs & Todd, Inc., has over 36 years of experience as a water resources consultant for many governmental entities in Texas. He directs multi-discipline and multi-organizational teams for regional water and wastewater projects, in addition to overseeing construction management and providing hands-on training for operations and maintenance personnel.

Mr. Hibbs is recognized as a highly respected water resources consultant with experience analyzing and developing resource alternatives for vital water supply, treatment, storage and distribution projects. His experience encompasses water feasibility studies, including both well field and surface water alternatives, with planning experience in master plans, facility plans and preliminary engineering studies. He manages large water feasibility, water distribution and well field development projects.

- Second Stage Drought Response Project-Raw Water Roughing Facility, City of Abilene: Principal-in-Charge and Project Manager for the planning, design, permitting, construction and inspection of advanced treatment systems to significantly enhance recovery of brackish raw water for one of the largest MF and RO systems in Texas valued at \$105 million. The project goals included upgrading the existing Possum Kingdom (PK) intake pump station, construction of approximately 42 miles of raw water, product water and concentrate pipelines and the construction of a raw water roughing facility, designed to desalinate raw PK water prior to being sent to Abilene for final, conventional water treatment. Modular system design, enhanced system redundancy, implementation of an automated SCADA system, enhanced energy efficiency and maximized water recovery efficiency are key components for meeting the objectives of the project. The project is based on advanced desalination and pretreatment processes including a 12 MGD pressure-fed MF membrane filtration system and a new three-stage RO system rated for up to 11 MGD in order to meet the City's PK water supply goals.
- Hamby Water Reclamation Facility and Indirect Reuse Project, City of Abilene: Principal-in-Charge and Project Manager for the largest MBR facility in Texas and one of the largest advanced treatment indirect reuse system (7 MGD) in operation. The project included the design of upgraded treatment processes, the addition of treatment processes including a 22 MGD BNR system, a MBR system rated for 24 MGD maximum flow, a new three-stage RO system rated for up to 5 MGD and new Ozone and BAC systems rated for up to 4 MGD to meet project goals. The construction of this \$82 million project to initiate indirect reuse was completed in less than 12 months. The project received the 2016 Project of the Year from the WateReuse Association and the Environmental Project of the Year from ENR-Texas/Louisiana.
- Regional Water Treatment Plant, City of Missouri City: Principal-in-Charge for the
 design, piloting and construction of a new regional surface water treatment plant to
 meet Fort Bend Subsidence District groundwater conversion requirements. The first
 10 MGD phase included membrane filtration and a design that allows the plant to meet
 its second phase capacity of 20 MGD without constructing any major new structures.





KEY PERSONNEL

Scott Hibbs, PE Principal-in-Charge

PROFESSIONAL /CIVIC ORGANIZATIONS (CONT.)

Hendrick Medical Center Foundation Board of Trustees, 1994 - 2006

American Hospital Association Regional Policy Board (Region 7), Trustee Representative

Pioneer Drive Baptist Church, Past Chairman of Finance and Personnel Committees

CERTIFICATIONS / EDUCATION

HEC – 2 Short Course, Texas Tech University

Unsteady Flow Modeling Short Course, University of Texas

Landfill Design, University of Wisconsin

Implementing UV Disinfection Short Course, AWWA Annual Conference

Evaluating Water Quality Impacts on Coagulation Efficiency Short Course, AWWA Annual Conference

Various business and technical development courses with emphasis on water and wastewater treatment

PUBLICATIONS / PRESENTATIONS

Presenter, "Sharing Our Resources - How Abilene Priced its Newest Service," Texas Water Conference, 2018

Presenter, "Drought Response and Water Supply Diversity," Central West Texas Regional School, Abilene, 2018

Presenter, "Enhanced Coagulation and UF Technology Resolve Compliance Issues for Sweetwater, Texas," American Water Works Association (AWWA) National Membrane Technology Conference, 2003 Cost saving features included separate construction contracts for site preparation and finished water storage, elimination of a disinfectant contact chamber, high rate clarifiers, equipment pre-purchasing for membrane and sodium hypochlorite generation equipment and selection fo aluminum chlorohydrate as the coagulant to minimize chemical costs and reduce solids handling requirements. *The project received the Environmental Project of the Year award from the Texas Chapter of the APWA and the Small Membrane Plant of the Year from SCMA*.

- Lake Alan Henry Quality Control and Technical Review, City of Lubbock: Quality
 Control Project Manager for the review of engineering design of water treatment facility
 improvements associated with Lake Alan Henry for the City of Lubbock. The overall
 project included technical review and quality control of engineering design for a 50-mile
 raw water pipeline, two booster pump stations, a future third pump station site, a 15
 MGD water treatment plant and terminal storage and 15 miles of distribution pipeline.
- Water Treatment Plant and Well Field Development, City of Sweetwater: Principal-in-Charge for the first enhanced coagulation and ultra-filtration system in Texas. UF membrane systems were selected for the plant. THM and HAA compliance was achieved using a combination of chlorine dioxide and chloramination. SCADA-integrated process controls allowed treatment from four different water sources. The project and pilot study were presented at the national AWWA Membrane Convention in 2003 and at the Texas Water Conference in 2004.
- Water Treatment Plant, City of Richmond: Principal-in-Charge for the piloting, design
 and construction of a new surface water treatment plant to meet Fort Bend Subsidence
 District groundwater conversion requirements. The long-term conversion plan is for
 an ultimate plant capacity of 4 MGD constructed in two phases. Cost saving features
 include separate construction contracts for site preparation, groundwater well, high
 service pump station and finished water storage, elimination of a disinfectant contact
 chamber, high rate clarifiers, equipment pre-purchasing for membrane equipment and
 selection of aluminum chlorohydrate as the coagulant to minimize chemical costs and
 reduce solids handling requirements.
- Water Master Plan and Water Treatment Plant, City of Granbury: Principal-in-Charge for the planning, piloting, design and construction for surface water treatment plant improvements, including construction of the first phase 2.5 MGD of an ultimate designed 7.5 MGD SWTP. The project replaced the City's existing SWTP with a new facility that is compliant with state and federal primary and secondary drinking water standards. The project included innovative treatment technologies to treat brackish water from Lake Granbury, including a plate settler pretreatment system, a microfiltration membrane filtration system and a RO membrane system. Both traditional and non-traditional piloting approaches were used to obtain TCEQ approval and to modify the TCEQ's approved RO system design parameters through computer modeling via a full-scale challenge testing approach. Following plant construction, the project also included full-scale challenge testing of the plate settler pretreatment system to validate performance for log removal disinfection credits for plant CT.





KEY PERSONNEL

Scott Hibbs, PE Principal-in-Charge

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. President Abilene, Texas 1990 - present

Jacob & Martin, Inc. Chief Design Engineer Abilene, Texas 1983 - 1989

- Treatment Technology Pilot Studies for 8.0 MGD Water Treatment Plant, Lonoke and White Counties: Principal-in-Charge for pilot studies initiated for a new 8.0 MGD water treatment plant, expandable to 16.0 MGD, serving Lonoke and White Counties in North-Central Arkansas. Conventional treatment was piloted against membrane technology to develop a strategy that was both viable and cost effective for treatment of the source water located in Greers Ferry Lake.
- Water Treatment Plant, Possum Kingdom WSC (PKWSC): Principal-in-Charge for the planning and design of a \$12 million regional water treatment plant and distribution system for potable water to serve the PKWSC. The PKWSC had multiple noncompliant, private, small systems without disinfection using Possum Kingdom Lake water that contained high levels of chlorides, sulfates and TDS. PKWSC consolidated the small systems and constructed a new water intake, water filtration plant and distribution system to remove chlorides, sulfates and TDS. Funding was provided by Rural Development and the TWDB DWSRF Program. The project received the US EPA's 2006 DWSRF Award for Sustainable Public Health Protection.
- Reclaimed Water Study, City of San Angelo: Principal-in-Charge supporting Alan Plummer Associates to build on work from the 2006 reclaimed water study and further develop alternatives for beneficially using the City's reclaimed water. In the follow-on study, Mr. Hibbs and APAI evaluated options for potable reuse of the City's water, including discharge to Twin Buttes Reservoir or Lake Nasworthy and direct potable reuse. Water quality models developed in the 2006 study were updated and used to evaluate blend ratios, detention times and impacts on TDS and other constituents. Water rights and contractual obligations were also considered and were an important component of the feasibility evaluation. Opportunities for nonpotable reuse were also explored.
- Water Treatment Plant Upgrades, City of Abilene: Principal-in-Charge for the expansion of the City of Abilene's Hargesheimer Water Treatment Plant from 8 MGD to 12 MGD. The expansion project included the following components: new pretreatment structure with cascade aeration, 3-stage flocculation, sedimentation via inclined plate settlers, sludge removal, and membrane feed pump station; new sludge holding tank with intermittent large bubble aeration; new solids handling building with 2 meter belt filter press and associated polymer feed system; addition of a second backwash recovery basin; upgrades to chemical feed facilities; two new membrane filter racks; a new, third-stage RO train to enhance recovery; 10 evaporators for concentrate disposal; and miscellaneous other electrical/control/SCADA improvements.
- Grimes Water Treatment Plant Improvements, City of Abilene: Principal-in-Charge
 for improving reliability of plant processes to comply with TCEQ requirements through
 enhancing filtration and chemical feed systems. Services include replacing filter media
 in gravity filters and modifying filter-to-waste piping. Process improvements include
 the installation of a new Ferrous Chloride bulk storage tank; new fiberglass building;
 day tank, transfer pump and metering pumps; and new electric and control wiring and
 programming modifications.





Jordan S. Hibbs, PE Project Manager



EDUCATION

Master of Science, Engineering and Technology Management, Colorado School of Mines, 2008

Bachelor of Science, Civil Engineering, Colorado School of Mines, 2008

REGISTRATIONS

Registered Professional Engineer – Texas #115729; Oklahoma #30274

PROFESSIONAL/CIVIC ORGANIZATIONS

American Water Works Association
Water Environment Federation

Abilene Heritage Square, Board Member, 2018-present

Abilene Airport Development, Board Member, 2019-present

United Way of Abilene, Loaned Executive, 2015

Leadership Abilene, 2014

Fairway Oaks Homeowner's Association, Former President, 2014-2016

eHT Leadership Development Program, 2013

PUBLICATIONS/PRESENTATIONS

The Cisco Disaster Recovery Project, What to Do When your Only Water Plant is Completely Flooded, SCMA Annual Conference, 2018

PROFESSIONAL EXPERIENCE

Mr. Hibbs has over 10 years of experience in the design and management of water, wastewater, drainage and site development projects for municipal clients. He has experience designing and evaluating water treatment plants, water distribution systems, wastewater treatment plants, wastewater collection systems and storm drainage systems. Mr. Hibbs regularly coordinates with state and federal agencies for various projects. Mr. Hibbs currently serves as the Vice President of eHT managing many of the daily operations of the firm.

- Surface Water Treatment Plant, Phase I and II, City of Granbury: Project Engineer
 for the planning, piloting, design and construction of the City's surface water treatment
 plant improvements, including construction of the first phase (2.5 MGD) and second
 phase (7.5 MGD). The project included innovative treatment technologies to adequately
 treat brackish water from Lake Granbury including a plate settler pretreatment system,
 microfiltration membrane filtration system and a reverse osmosis membrane system.
- Hargesheimer Water Treatment Plant Expansion (12 MGD), City of Abilene: Mr. Hibbs managed the design and construction management of water treatment plant improvements, including the following components: new pretreatment structure with cascade aeration, 3-stage flocculation, sedimentation via inclined plate settlers, sludge removal, and membrane feed pump station; new sludge holding tank with intermittent large bubble aeration; new solids handling building with 2 meter belt filter press and associated polymer feed system; addition of a second backwash recovery basin; upgrades to chemical feed facilities; two new membrane filter racks; a new, third-stage RO train to enhance recovery; 10 evaporators for concentrate disposal; and miscellaneous other electrical/control/SCADA improvements.
- Hamby Water Reclamation Facility and Indirect Reuse Project, City of Abilene: Project Engineer for the planning, piloting, design, permitting and construction of this \$82 million project which included a 22 MGD BNR system, MBR system rated for 24 MGD maximum flow, a new three-stage RO system rated for up to 5.0 MGD and new Ozone and BAC systems rated for up to 4.0 MGD.
- 20.0 MGD Water Treatment Plant Expansion, City of Missouri City: Project Manager for the expansion of the City's surface water treatment plant to meet the Fort Bend Subsidence District groundwater conversion requirements. The long-term conversion plan is for an ultimate plant capacity of 33 MGD constructed in three phases with this 20 MGD project being the second phase. The first phase, managed by Mr. Hibbs, was a 10 MGD facility and included features incorporated into the planning and design that allowed the plant to meet its second phase capacity of 20 MGD without constructing any major new structures. Increasing capacity to 20 MGD required the addition of a new raw water pump, additional membrane modules and a new high service pump all to be located in Phase I structures without expansion. Phase II is currently beginning construction and should be complete during the third quarter of 2020.





Jordan S. Hibbs, PE Project Manager

PUBLICATIONS/PRESENTATIONS (CONT.)

Drought Response and Water Supply Diversity, Central West Texas Regional School, 2018

Expanding the Water Supply Portfolio in Abilene, Texas Water Conference, 2016

City of Missouri City, Regional Surface Water Treatment Plant, AMTA/SCMA Workshop, 2016

Importance of Planning Before, During and After Construction Projects, CWTWUA, 2015

Inherently Safer Technologies, AWWA Webcast, 2014

Removal of Contaminants with Reverse Osmosis using the TCEQ's New Modeling and Challenge Testing Approach, SCMA Conference, 2014

Sizing Criteria for Inclined Plate Settlers. Theory, Current TCEQ Rules and Full-Scale Operating Data, Texas Water, 2014

The Ground is Sinking! Missouri City's Approach to Reduce the Use of Groundwater, AMTA, 2013

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. Vice President Abilene, Texas 2009 - present

HDR Engineering, Inc. Engineering Intern Denver, Colorado 2007 - 2008

- 10.0 MGD Water Treatment Plant, City of Missouri City: Design Engineer for design
 and construction of a new regional surface water treatment plant to meet Fort Bend
 Subsidence District groundwater conversion requirements. The first 10 MGD phase
 included membrane filtration and a design that allows the plant to meet its second
 phase capacity of 20 MGD without constructing any major new structures. The project
 received the Environmental Project of the Year award from the Texas Chapter of
 the APWA and the Small Membrane Plan tof the Year from SCMA.
- 2.0 MGD Water Treatment Plant Expansion, Possum Kingdom WSC: Project Engineer for the planning, piloting, design and construction of a new master-planned regional water treatment plant utilizing RO technology for brackish surface water desalination.
- Grimes 24.0 MGD Water Treatment Plant Improvements, City of Abilene: Project Engineer for this project to improve reliability of plant processes, and comply with TCEQ requirements, through enhancing filtration and chemical feed systems. Services include replacing filter media in gravity filters and modifying filter-to-waste piping. Process improvements include the installation of a new Ferrous Chloride bulk storage tank; new fiberglass building; day tank, transfer pump, and metering pumps; and new electric and control wiring and programming modifications.
- AJ Brown Wastewater Treatment Plant Improvements, City of Huntsville: Project
 Manager for improvements to the City's AJ Brown Wastewater Treatment Plant including
 pretreatment, secondary treatment, post-treatment, solids handling, electrical, SCADA
 and support systems, as well as a secondary treatment process. The project is
 an estimated \$20.5 million and will improve the consistency of plant performance,
 efficiency of overall plant performance and the effluent quality for discharge into a local
 creek, Parker Creek.
- Emergency Water Treatment Plant, City of Cisco: Recently, the City of Cisco experienced devastating flooding that ultimately saw its entire water plant submerged under approximately 28-feet of water for several hours. Mr. Hibbs worked with City staff to first restore temporary treatment capabilities at the WTP through a massive 72-hour effort that included transport and installation of a temporary treatment membrane trailer and temporary power capabilities and is designing a new WTP for the City.
- Water Treatment Plant and Master Plan, City of Richmond: Project Manager for the planning, design and piloting services for a new surface water treatment plant to meet Fort Bend Subsidence District groundwater conversion requirements. It was determined that membrane filtration would provide the highest quality, efficiency and consistency of finished water quality in comparison to more conventional technologies. A piloting program was completed to satisfy regulatory requirements and to provide the City with sufficient operating time to become familiar with membrane filtration. The long-term conversion plan is for an ultimate plant capacity of 10 MGD constructed in two phases. Increasing the capacity from 5 MGD to 10 MGD will require the addition of a new raw water pump, additional membrane modules and a new high service pump, all to be located in Phase I structures without expansion. Additional components such as a raw water storage reservoir will be constructed in the final phase.





Joshua L. Berryhill, PE Process Design & Regulatory Support



EDUCATION

Bachelor of Science, Environmental Engineering Texas Tech University, 2005 Master of Science, Environmental Engineering Texas Tech University, 2005

REGISTRATIONS

Licensed Professional Engineer, Texas #100323

PROFESSIONAL/CIVIC ORGANIZATIONS

American Membrane Technology Association

American Water Works Association Water Environment Federation South Central Membrane

Association
Texas Society of Professional
Engineers, Abilene Chapter,

President
Texas American Waterworks

Association

Water Environment Association of Texas

CERTIFICATIONS/EDUCATION

eHT Leadership Development Program

Wastewater Process and Product Application Seminar, Aqua Aerobics, Rockford, IL

PROFESSIONAL EXPERIENCE

Mr. Berryhill has over 17 years of experience in the design, operation and analysis of water and wastewater treatment systems. He has experience in the piloting, design, construction and operation of water treatment plants, including reverse osmosis systems for groundwater and seawater, chemical feed systems, sedimentation, microfiltration, dual-and tri-media filtration, clear wells and plant water and high service pumping systems. He also has experience in the design, construction and operation of wastewater treatment plants, including pump stations, preliminary screening, extended aeration basins, activated sludge aeration basins, biological nutrient removal systems, sequencing batch reactors, clarification, tertiary filtration, chemical and UV disinfection, anaerobic digestion systems, plant water and reuse systems.

Mr. Berryhill's experience also includes the development of master plans for single- and multiple-plant systems and the condition assessment or process efficiency analysis of various water and wastewater treatment plants. He also has experience in the development of preliminary engineering plans, facility plans and environmental information documents as required for various local, state and federal funding agency programs. His funding experience includes coordinating with the Texas Water Development Board (TWDB), the Environmental Protection Agency (EPA), the North American Development Bank (NADBank), the United States Department of Agriculture (USDA) and the Rural Development (RD) program, the Community Development Block Grant (CDBG) program and the Border Environment Cooperation Commission (BECC).

Mr. Berryhill also has extensive experience in the development of permit amendment and renewal applications for the Texas Commission on Environmental Quality (TCEQ). He has completed the application process for both municipal and industrial entities and for water and wastewater treatment systems.

- Hargesheimer Water Treatment Plant Rehabilitation, City of Abilene: Mr. Berryhill assisted with the design and construction management of water treatment plant improvements. The expansion project included the following components: new pretreatment structure with cascade aeration, 3-stage flocculation, sedimentation via inclined plate settlers, sludge removal, and membrane feed pump station; new sludge holding tank with intermittent large bubble aeration; new solids handling building with 2 meter belt filter press and associated polymer feed system; addition of a second backwash recovery basin; upgrades to chemical feed facilities; two new membrane filter racks; a new, third-stage RO train to enhance recovery; 10 evaporators for concentrate disposal; and miscellaneous other electrical/control/SCADA improvements.
- Grimes Water Treatment Plant Improvements, City of Abilene: Mr. Berryhill
 provided design for replacing filter media in gravity filters, modifying filter-to-waste
 piping, adding surface wash capabilities to the filters and miscellaneous other
 improvements. Process improvements include the installation of a new Ferrous
 Chloride bulk storage tank; new fiberglass building; day tank, transfer pump and
 metering pumps; and new electric and control wiring and programming modifications.





Joshua L. Berryhill, PE Process Design & Regulatory Support

PUBLICATIONS/PRESENTATIONS

Tapping in MBR, WEFTEC, 2018
Tapping into MBR-The Hamby WRF
Indirect Potable Reuse Project,
WateReuse Symposium, 2018

Tap into MBR, AMTA Membrane Technology Conference, 2018

Treatment Processes for Corrosive Water, Central West Texas Regional School, 2018

Is It Time for MBR, Texas Water, 2018

Membrane Troubleshooting and Replacement at BRPUA SWTP, SCMA Training Workshop, 2018

A Tale of Two Waters, Texas Water, 2017

SWATS Guide to a Membrane Filtration System Open Platform Retrofit, Texas Water, 2016

Lessons Learned from a Decade of Experience of Membrane Filtration in Texas, SCMA Conference, 2014

Is it Time for MBR - A Comparison of MBR vs. Traditional Wastewater Treatment Technologies, SCMA Conference, 2014

Upgrading to Add Biological Nutrient Removal: The Denton Creek Regional Wastewater System Experience, Texas Water 2010, Corpus Christi

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. Associate Vice President and Technical Director Abilene, Texas 2010 - present

Alan Plummer Associates, Inc. Project Engineer Fort Worth, Texas 2008 - 2010

- Phase I Water Treatment Plant Improvements, Parker County Special Utility District: Project Manager for a multi-phased approach to resolving current plant challenges, including the following improvements: Replacement of the existing simplex intake pump station with a duplex intake pump station; Replacement of the raw water transfer pump station with a floating pump station at the WTP raw water reservoir; Addition of a new membrane feed pump station; Addition of two (2) trains of plate settler pretreatment equipment (as a bid alternate); Addition of a chlorine dioxide chemical pretreatment system; Addition of a chloramine feed system in pretreatment to minimize biofouling in the pretreatment, MF, and RO systems; Rehabilitation of the existing RO train, replacement of the RO permeate tank, installation of a second 0.6 mgd RO train (with a shelf spare low-pressure RO pump and high-pressure RO pump), and installation of a second MF/RO splitter structure; Upgrade of the heating, ventilation, and air conditioning (HVAC) system for the treatment building to eliminate overheating of existing panels; Replacement of the chlorinator system and additional coagulant bulk storage, day storage and feed system; Addition of a high service pump and upgrade of the existing high service pumps to increase finished water pumping capacity; Replacement of the WTP's manual transfer switch with an automatic transfer switch; Addition of a single waste holding tank and waste transfer pump system; and, Addition of on-site land application irrigation system and necessary equipment.
- Water Treatment Plant Improvements, Eastland County Water Supply District: Project Engineer for water treatment plant improvements, including replacement of the existing 6 MGD granular media filtration system with a new ultrafiltration (UF) membrane filter system; sedimentation basin improvements; upgrade of the existing chemical feed systems; upgrade of the existing high service pump station; conversion of existing plant structures to a new solids handling system; upgrade of the existing ground storage tanks; and multiple distribution/transmission system improvements. Because membrane filtration is still considered an innovative technology by the TCEQ, site-specific performance pilot testing was required, and was completed by eHT, including evaluation of a Pall pressure membrane filtration system (microfiltration) and one of the first tests in Texas of a GE pressure filter system (ultrafiltration). The project will improve the reliability of the District's water treatment plant to consistently provide quality water to its customers and comply with TCEQ requirements.
- Groundwater Supply Expansion, City of San Angelo: Mr. Berryhill assisted with the implementation of Phase II of the Hickory Groundwater Supply Project, which will bring the available supply up to a reliable 12 MGD. Once on-line, new groundwater wells and an expanded groundwater treatment plant designed to remove radionuclides will allow the City to maximize aquifer production to meet potable water demands. In addition to the new groundwater wells and expanded treatment facility, other critical elements of the project include: replacement of an existing clearwell at the City's water treatment plant; residuals management for waste produced during the groundwater treatment process; wellfield collection and transmission system expansion and improvements; and, SCADA system improvements.





KEY PERSONNEL

Joshua L. Berryhill, PE Process Design & Regulatory Support

PROFESSIONAL ENDEAVORS (CONT.)

Brownsville Public Utilities Board Senior Engineering Coordinator Brownsville, Texas 2007

Halff Associates, Inc. Graduate Engineer McAllen, Texas 2004 - 2007

- Water Treatment Plant Improvements, Upper Leon River Municipal Water District: Mr. Berryhill provided design and managed the incorporation of membrane filtration to the water treatment plant to enhance TOC removal prior to disinfection, thereby significantly reducing THM formation. In addition, the project included a new plate settler pretreatment system which utilized enhanced coagulation, which further reduced THM formation. In addition to pretreatment and filtration system improvements, the chemical feed system at the water treatment plant was upgraded to more closely dose and flow pace with daily treatment demands, further minimizing formation of THMs. ULRMWD's aging pump stations and residuals handling system were rehabilitated and upgraded as well.
- Water Treatment Plant Improvements, City of Breckenridge: Mr. Berryhill
 provided planning, design and construction services for improvements to the City of
 Breckenridge's 3.4 MGD surface water treatment plant. The improvements included
 raw water piping, pretreatment units, clarifiers, filters, pump stations, chemical feed
 systems, and electrical and controls systems.
- Surface Water and Treatment System Facility Master Plan, Brazos Regional PUA: Mr. Berryhill assisted with the evaluation of this facility including an extensive evaluation of the performance and condition of existing treatment processes and equipment at the water treatment facility. Key areas of focus for Mr. Berryhill included troubleshooting and optimizing the existing 7.5 MGD UF and RO systems at the SWATS facility, which is one of the first advanced water treatment facilities in the State of Texas.
- Second Stage Drought Response Project-Raw Water Roughing Facility, City of Abilene: Mr. Berryhill provided planning, design, construction management, operational commissioning and startup assistance of advanced treatment systems to maximize net recovery of brackish raw surface water for one of the largest MF and RO (12.0 MGD MF and 11.0 MGD RO) systems in Texas valued at \$105 million. As well as completing design and construction administration services, Mr. Berryhill worked with City operators on a monthly basis to implement systems operation and optimization training sessions prior to completion of the facility improvements.
- Hamby Water Reclamation Facility and Indirect Reuse Project, City of Abilene: Mr. Berryhill provided design for what is now the largest MBR facility in Texas. The improvements were implemented, as well as incorporation of membrane bioreactor (MBR) technology, followed by utilization of RO, ozone and biologically active contactor (BAC) filtration systems to support the City's need to implement indirect potable reuse. As well as completing design and construction administration services, Mr. Berryhill is working with facility operators on a bi-monthly basis to implement systems operation and optimization training sessions prior to completion of the facility improvements. The design and construction of this \$82 million project was completed in less than 12 months.





Colden S. Rich, PE QA/QC & Hydraulics Analysis



EDUCATION

Bachelor of Science, Civil Engineering Texas A&M University, 2007

REGISTRATIONS

Licensed Professional Engineer, Texas #110231, 2011; OK #30632, 2018

PROFESSIONAL/CIVIC ORGANIZATIONS

American Society of Civil Engineers
Texas Society of Professional
Engineers

Water Environment Association of Texas

Chi Epsilon, National Civil Engineering Honor Society

CERTIFICATIONS/EDUCATION

eHT Leadership Development Program, 2013

PUBLICATIONS/PRESENTATIONS

Presentations for Texas Water, TWUA and SCMA

Authored or Co-authored papers for Texas Water Conference

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. Project Manager Abilene, Texas 2013 - present

PROFESSIONAL EXPERIENCE

Mr. Rich has 13 years of experience in the analysis, design, and management of water, wastewater, roadway, drainage, and site development projects for both municipal and industrial sector clients. He has experience evaluating and analyzing water treatment plants, water distribution systems, wastewater treatment plants, wastewater collection systems and storm drainage systems.

Mr. Rich regularly coordinates with state agencies in the development and review of wastewater discharge permits, water treatment and wastewater treatment sludge management permits, and CCN amendments. He has worked closely with both funding and regulatory agencies including TxDOT, TCEQ, GLO, USDA and TWDB.

He develops engineering reports including documentation of results and recommendations, preparation of cost estimates and construction schedules and management of designers/drafters in preparation of associated exhibits.

- SWATS Water Treatment Plant Evaluation, Brazos Regional Public Utility Agency (BRPUA): Project Manager for the evaluation of the SWATS water treatment plant, which is currently rated to treat approximately 13.0 MGD through two parallel treatment trains. Each train utilizes a different process methodology. The original treatment train is based upon conventional treatment technology which utilizes a rapid mix system for flocculation, upflow solids contact clarifiers for flocculation and sedimentation and dual media filters for filtration. The second treatment train incorporates membrane filtration technology. This train utilizes a rapid mix system for flocculation, upflow solids contact clarifiers for flocculation and sedimentation, a pressure membrane UF system and a RO membrane filtration system.
- Second Stage Drought Response Project Raw Water Roughing Facility, City
 of Abilene: Project Engineer for the planning, design, permitting and construction
 of the indirect reuse project to augment the City's existing raw water supply in Lake
 Fort Phantom Hill.
- Water System Improvements, Upper Leon River Municipal Water District: Project Manager for the design and management of the incorporation of membrane filtration to the water treatment plant to enhance TOC removal prior to disinfection, thereby significantly reducing THM formation. In addition, the project included a new plate settler pretreatment system which utilized enhanced coagulation, which further reduced THM formation. In addition to pretreatment and filtration system improvements, the chemical feed system at the water treatment plant was upgraded to more closely dose and flow pace with daily treatment demands, further minimizing formation of THMs. ULRMWD's aging pump stations and residuals handling system were rehabilitated and upgraded as well.





KEY PERSONNEL

Colden S. Rich, PE QA/QC & Hydraulics Analysis

PROFESSIONAL ENDEAVORS (CONT.)

KSA Engineers, Inc. Project Engineer Longview, Texas 2006 - 2013

- Northwest Water Reclamation Plant (NWWRP) Outfall Line, City of Lubbock: Project Engineer supporting the design and construction of the Lubbock NWWRP and providing process and mechanical design of a 3 MGD preliminary treatment unit with provision for future expansion to 18 MGD along with the design of the grading and drainage for the entire site. The preliminary treatment unit design included open-channel flow metering, coarse screening, fine screening, washing and compaction of screenings, grit removal, grit processing, overflow protections, lift station, and flow controls, all housed within a common two-floor building. Additionally, Mr. Rich designed the outfall line for discharge from the NWWRP.
- TWDB DWSRF Water Treatment Plant Pretreatment Improvements, Phase
 I 3.5 MGD, City of Beeville: Project Manager for a new pretreatment basin,
 including flocculation and sedimentation, clarifier rehabilitation and chemical system
 improvements at the Morrill Water Treatment Plant along with installation of a
 chloramine boosting station at the Clareville Booster Pump Station.
- Water Treatment Plant Improvements, City of Breckenridge: Project Manager for the design of surface water treatment plant improvements including clarifier improvements with the addition of plate settlers, dual media filter improvements, clearwell and pumping facility improvements, chemical facilities and SCADA improvements.
- Water Treatment Plant Improvements, Lake Palo Pinto Area WSC: Project Manager for the evaluation and design of surface water treatment plant improvements.
 Mr. Rich performed a condition and capacity analysis of each of the process areas to determine condition and capacity of each treatment unit. The project increased clarifier capacity by 40%. The project included additional dual media filters, clearwell improvements, pumping facilities, chemical facilities, sludge handling facilities and SCADA improvements.
- Water System Improvements, City of Stamford: eHT is providing project management and design for a \$20 million water system improvement project for the City of Stamford utilizing funding through the TWDB DWSRF. The City's existing raw water system consisted of a raw water pump station and transmission pipeline dating back to the original water treatment plant (WTP) construction. The project includes replacement and rehabilitation of a 15-mile-long, 18-inch diameter raw water transmission main from Lake Stamford to the water treatment plant and replacement of deteriorated distribution system to address water losses. Future improvements will include enhancements to the raw water pump station and water treatment plant. The water treatment plant project will include construction of a new pre-treatment system, a complete membrane filtration system, a new high service pump station, electrical, controls, and rehabilitation and upgrades to additional components at the plant. The City's elevated storage tank is also proposed to be replaced.





Michael Wray, PE Process Design



EDUCATION

Master of Science, Engineering and Technology Management, Colorado School of Mines, 2016

Bachelor of Science, Chemical Engineering, Colorado School of Mines, 2008

REGISTRATIONS

Registered Professional Engineer – Texas #129846, Colorado #0050649

PROFESSIONAL/CIVIC ORGANIZATIONS

Abilene Young Professionals Association

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc.
Project Engineer
Abilene, Texas
2018 - present
Hazen Research, Inc.
Senior Project Engineer
Golden, Colorado
2011 - 2018

Freeport-McMoRan Copper and Gold Metallurgist I Morenci, Arizona 2008 - 2011

PROFESSIONAL EXPERIENCE

Mr. Wray has over 10 years of combined experience in the Water and Wastewater and Mining and Mineral Processing industries. His experience includes technical engineering design and management of water and wastewater projects, as well as technical engineering roles in the Mining and Mineral Processing industry. He has a solid understanding of project management, engineering principals, process optimization and construction management. As a Project Engineer with the water and wastewater eHT process group, Mr. Wray prepares engineering feasibility reports, basis of design reports and regional planning reports. He coordinates design efforts for municipal water and wastewater treatment projects as well as private water treatment projects.

- 4.3 MGD Water Treatment Plant, City of Pearland: Mr. Wray aided with the planning, design and construction phases for an improvements project at the City's existing Bailey Water Treatment Plant. The project consisted of several components including a 1.0 MG prestressed concrete ground storage tank, groundwater transmission line and groundwater treatment plant. Construction on the ground storage tank commenced ahead of the groundwater transmission line and treatment facility, which are in the planning and preliminary design stages.
- 1.6 MGD Water Treatment Plant, Corix Utilities, Texas: Mr. Wray developed Technical Memorandums as part of the planning phase for an improvements project for the Lometa Water Treatment Plant. An assessment of the existing treatment facility, including an in-depth analysis of historical operating performance, was prepared and various treatment technologies were evaluated, including Total Organic Carbon reduction using strong oxidants, enhanced coagulation, and membrane filtration. For the membrane filtration process, Corix and eHT evaluated using ceramic membranes. Final recommendations were based on a thorough evaluation of the treatment processes, including capital and operating expenses to develop comparative life cycle cost analyses.
- 2.0 MGD Water Treatment Plant, City of Richmond: Mr. Wray prepared an economic
 assessment and Engineering Report for a proposed solids dewatering project
 at the City's surface water treatment plant. The assessment involved pilot testing
 and preliminary equipment design for several solids dewatering options, including
 capabilities that are necessary to support current operations as well as potential future
 expanded operations at the plant. Capital and operating expenses were examined
 for the various aspects of the dewatering system and used to provide an overall
 recommendation to the City.
- 3.0 MGD Water Treatment Plant, Corix Utilities, Texas: Mr. Wray conducted a
 preliminary feasibility assessment for a water treatment facility to support a regional
 power generation facility. The assessment involved a collaborative effort to develop a
 viable treatment process to provide multiple product water streams for different uses
 at the power generation facility. He prepared mass balances to evaluate production
 scenarios during cyclical demands at the power plant and developed preliminary
 capital costs for the water treatment infrastructure.





- 5.0 MGD Water Treatment Plant, City of Granbury: Mr. Wray assisted with the planning, design and construction phases of the project which consisted of expanding the City's advanced microfiltration (MF) and reverse osmosis (RO) water treatment plant from 2.5 to 5.0 MGD. A Construction Manager at Risk (CMAR) approach was used to help expedite completion of the project. Although much of the existing pretreatment plate clarification, MF and RO infrastructure was expanded, an additional sludge dewatering system and 1.0 MG prestressed concrete ground storage tank was constructed at the water treatment plant site adding a level of complexity to the project which was constrained for space prior to expansion.
- 12 MGD Water Treatment Plant, City of San Angelo: Mr. Wray assembled the Preliminary Engineering Feasibility, Engineering Feasibility and Basis of Design Reports for the preliminary planning and funding application portions of the project. He assisted with design of the Phase II groundwater treatment facility expansion which utilizes water from the Hickory Aquifer. The project involved coordination between two subconsultants to ensure the groundwater wells, collection and transmission system and treatment infrastructure met the Client's treatment objectives and capacity requirements. Unique challenges associated with the project involved treatment technologies for the removal of elevated concentrations of iron and radionuclides commonly encountered in groundwater from the Hickory Aquifer.
- Wastewater Master Plan and 2.0 MGD and 1.0 MGD Wastewater Treatment Plants, City of Granbury: Mr. Wray assisted in the preparation of the Preliminary Engineering Feasibility and Engineering Feasibility Reports for the planning portion of the project and assisted with initial design stages. He prepared a Wastewater Master Plan Study in conjunction with the project to help evaluate and identify appropriate strategies to address treatment requirements in a rapidly growing community. The study included modeling of the wastewater collection system, population and demand projections, evaluation of available treatment processes, examining strategic locations for expanding and adding treatment infrastructure across the service area and considerations for future infrastructure contingent upon the location and rate of development in the City.
- Water Treatment Plant Master Plan, City of Abilene: Mr. Wray prepared a Master Plan Report to evaluate the existing water treatment plant infrastructure and future treatment needs for the Client. Mr. Wray coordinated preparing population and water demand projections, as well as an assessment of the expansive raw water delivery systems infrastructure.
- Hazen Research Inc., Golden, Colorado: Mr. Wray was the Senior Project Engineer
 that led and managed multi-disciplinary teams and successfully met client objectives
 on over 40 projects utilizing thermal, chemical, energy and mineral processing
 technologies. His management experience spanned budgets up to \$4 Million.
- Freeport-McMoRan Copper and Gold, Morenci, Arizona: Mr. Wray was the Technical engineer for solvent extraction (SX) and electrowinning (EW) facilities performing economic analyses for capital improvements and served as the Safety Coordinator for the Technical Services group.





Anna Noriega, PE Hydraulics Analysis



EDUCATION Bachelor of Science, Civil Engineering

REGISTRATIONS

Clemson University

Licensed Professional Engineer, Texas #137519

CERTIFICATIONS/EDUCATION

Basic Terramodel/Field Survey Training OSHA Safety Training PLS CAD Training

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. Staff Engineer Abilene, Texas 2015 - present Flour Construction Engineer I

POWER Engineers Design Engineer I Ft. Mill, South Carolina 2011 - 2012

Springfield, Virginia

2012 - 2015

PROFESSIONAL EXPERIENCE

Mrs. Noriega has over 8 years of professional experience in civil engineering including construction administration and support, project planning and design, quality assurance and control of engineering documents, field quantity verification and coordination, and electrical infrastructure modeling.

PROJECT EXPERIENCE

During her time at eHT, Mrs. Noriega has been involved in the planning, design, and construction phases of multiple water, wastewater, and highway projects and currently serves as a Staff Engineer. Notable projects are listed below:

- Water Treatment Plant Pretreatment Improvements, Phase I 3.5 MGD, City of Beeville: This project involved the addition of a redundant plate settler basin and chemical system modifications at the City's water treatment plant along with the installation of a chloramine boosting station at the City's Clareville Booster Pump Station. The City was struggling to meet turbidity limits in their filter effluent and maintain acceptable chlorine and total trihalomethane levels in their distribution system which are regulated by the Texas Commission on Environmental Quality. Mrs. Noriega assisted in the development of the projects' Engineering Feasibility Report, as well as design plans and specifications. She was also involved in the construction phase of the project and was responsible for construction coordination, construction submittal review and inspection.
- Water Treatment Plant Improvements, Phase I 2.5 MGD, City of Granbury: This project involved the replacement of the City's current water treatment plant and included the installation of innovative treatment technologies such as plate settlers, microfiltration and reverse osmosis to adequately treat brackish water from Lake Granbury. Mrs. Noriega assisted with the construction phase of the project by reviewing contractor submittals and requests for information, maintaining submittal and requests for information logs, attending monthly construction status meetings and coordinating with both the construction contractor and subcontract engineering firms including structural and architectural.
- Water System Improvements for County Road 257 and Farm-to-Market 707, View Caps Water Supply Corporation: This project involved the installation of 6-inch and 8-inch DR-18 C-900 water lines consisting of approximately 4.5 miles along County Road 257 and Farm-to-Market 707 in Abilene. Mrs. Noriega assisted with the development of final design plans which included two notable water line crossings; one under a BNSF railroad and one under several large diameter utility lines. She coordinated with eHT's survey crew, multiple utility locators, and BNSF personal to ensure crossings were installed in accordance with the affected utility standards.
- Wastewater Collection System Pipe Bursting Improvements, City of Glen Rose: This project involved the replacement of existing 6-inch sewer lines via open cut trenching and pipe bursting with new 8-inch SDR-35 PVC and DR-21 HDPE sewer lines and was comprised of four major segments which totaled approximately 2,650feet. Mrs. Noriega assisted in the development of design plans and specifications. She was also responsible for reviewing and approving construction submittals.





Chris Hay, PE
Civil / Site Work

KEY PERSONNEL



EDUCATION

Bachelor of Science, Civil Engineering, Texas A&M University, 2007

REGISTRATIONS

Registered Professional Engineer

— Texas #111453, 2012

PROFESSIONAL/CIVIC ORGANIZATIONS

American Waterworks Association, Texas Branch

CERTIFICATIONS/EDUCATION

InfoSWMM Sewer System Modeling H2OMap Water Distribution Modeling

H2OSurge Transient Modeling

Site Engineering and Land Development Software

eHT Leadership Development Program

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. Associate Vice President Granbury, Texas 2013 - present

Johnson and Pace, Inc. Project Manager Tyler, Texas 2012 - 2013

Adams Engineering Land Development Tyler, Texas 2007 - 2012

PROFESSIONAL EXPERIENCE

Mr. Hay has 12 years of experience with a particular focus on civil and municipal projects. His experience includes planning, design and project management in the areas of water distribution and transmission, wastewater collection and conveyance, roadway and drainage improvements and various park and recreational improvements including multipurpose trails. He has worked with various funding agencies on different projects including the Texas Water Development Board, Texas Department of Agriculture, Texas Parks and Wildlife Department and United States Department of Agriculture.

- Engineer of Record, City of Glen Rose
- Engineer of Record, City of Granbury
- Engineer of Record, Acton Municipal Water District
- Alexander Place Assisted Living Center, Stephenville
- South Second Avenue, City of Stephenville
- · Bridgeport Animal Hospital, Bridgeport
- Valley View Estates, Granbury
- Nancy Drive Drainage, City of Glen Rose
- Opera House Paving and Drainage, Granbury
- Water Transmission and Distribution CMAR Improvements, City of Granbury
- PK Roughing Facility Pipeline Project, City of Abilene
- Water Meter Replacement Project, City of Granbury
- · Boy Scout Park, City of Valley Mills
- CDBG Wastewater System Improvements, AMUD
- Improvements to Stoneview and Grand Avenue Lift Stations, City of Glen Rose
- Water System Improvements, City of Evant
- Rucker Street Bridge, City of Granbury
- · Lakeview Street Reconstruction, City of Glen Rose
- Water System Improvements, Upper Leon River MWD
- Safe Routes to School Sidewalk Project, City of Covington
- Water Distribution Improvements, Green Springs WSC
- SCADA Improvements, AMUD
- Port Ridglea East Low Pressure Sewer Improvements, AMUD
- Lift Station 1 Improvements Project, AMUD
- Earl Campbell Parkway and Old Noonday Road Improvements, City of Tyler
- Moments in Time Trail, City of Granbury
- Firefighter's Park Addition, City of Granbury





David Carrizal, EIT Civil / Site Work



EDUCATION

Bachelor of Science, General Engineering, Abilene Christian University, 2018

REGISTRATIONS

2018 - 2019

Engineer-in-Training

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. Staff Engineer Abilene, Texas 2019 - present Frank Dale Construction Project Engineer Southlake, Texas

PROFESSIONAL EXPERIENCE

Mr. Carrizal is an experienced project design professional with a background in general engineering. He is capable of solving problems and managing details in large-scale projects. He has worked with project managers, superintendents, and subcontractors on various construction projects from pre-construction to completion. Mr. Carrizal has experience with Environmental Site Assessments and site and grading plans. He provides engineering design for flood studies and downstream assessments.

- ACU Barret-Dillard Hall Parking Lot: Designed parking lot layout and created paving and demolition plans for the project.
- Hamilton Hospital Parking Lots: Designed parking lot layouts for two lots and created paving and demolition plans for each.
- Buffalo Ridge Apartments Phase III: Compiled a downstream assessment report for the property. Designed utility layout and grading plan. Performed a Phase I study on the property. Work included a site inspection, site research, interviews with associated persons, and compiling a report summarizing the findings.
- Chad Davis Trucking: Performed a Phase I study on a former used car lot property. Work
 included a site inspection, site research, interviews with associated persons, and compiling
 a report summarizing the findings.
- Brownwood Phase I: Performed a Phase I study on rural vacant property. Work included site research and compiling a report summarizing the findings.
- Highland ISD Water Well Replacement: Designed a 260-foot-deep water well for Highland ISD. Work included sizing a pump and calculating pipe sizes
- Quela Street Lift Station Replacement, City of Monahans: Designed a 20-foot-deep wet well for the City of Monahans to replace an existing lift station. Work included calculating the force main size, wetwell diameter, sewer pipes, and selecting a pump.
- Dyess Elementary School: Worked on the grading and roof drain plans for the project.
 Performed a Drainage Assessment on the property to determine detention pond size and placement.





Luci Dunn, PE Regulatory Support



EDUCATION

Master of Science, Chemical Engineering Texas Tech University, 1987 Bachelor of Science, Chemical Engineering Texas Tech University, 1986

REGISTRATIONS

Registered Professional Engineer – Texas #73943, 1993

PROFESSIONAL/CIVIC ORGANIZATIONS

Brazos G Regional Water Planning Group, Voting Member Society of Women Engineers Texas Society of Professional Engineers

CERTIFICATIONS/EDUCATION

AWWA Utility Risk & Resilience Certified, 2019

Certified Nutrient Management Specialist, Texas A&M AgriLife, 2013

Applied Groundwater Statistics Short Course, Intelligent Decision Technologies, Inc., 2002

Construction QA/QC for Geosynthetic Installations Short Course, TRI/Environmental, Inc., 2001

Vadose Monitoring / EPA, Oklahoma, 1995

PROFESSIONAL EXPERIENCE

Ms. Dunn has 32 years of experience in regulatory compliance with respect to water systems. Having worked as an EPA Region VI staff member, she possesses valuable insights to help client's obtain appropriate permits from regulatory agencies. Her expertise is applied to planning regional water and wastewater systems.

PROJECT EXPERIENCE

Planning/Design

Ms. Dunn prepares Preliminary Engineering Reports, including evaluation of water treatment systems, as well as preliminary design for wastewater collection and treatment systems with supporting cost estimates. She prepared required easement documentation for the Possum Kingdom Regional Water System, coordinating with the Brazos River Authority, Rural Development, residential and commercial property owners and property developers.

Water

As a project engineer, Ms. Dunn prepares disinfection protocol studies for water treatment plants in compliance with the Long-term 2 Enhanced Surface Water Treatment Rule and Stage 2 DBP Rule. Contact times are established to ensure proper disinfection is provided at the plant prior to distribution. She also prepares Preliminary Engineering Reports including evaluation of water treatment systems. Ms. Dunn developed the first watershed program for EPA Region 6. She provided technical oversight for the watershed project and acted as a regional liaison on watershed issues. The program's framework included integration of non-point source and point source priorities.

Regulatory Compliance

Ms. Dunn assists facilities in the negotiation of Agreed Orders, and Notice of Violations for water, wastewater, solid waste and hazardous waste enforcement issues, as well as negotiation of supplemental environmental projects in lieu of penalty payments. Typically, this work includes preparing all required documentation to maintain compliance with Agreed Orders and Notices of Violation. Ms. Dunn prepares Subtitle D permits for landfills and prepares and implements groundwater statistical plans for analysis of detection monitoring analytical data.

Ms. Dunn is proficient in interpreting Resource Conservation and Recovery Act regulations and technical information relating to toxic chemicals and their impacts on the environment. She has conducted EPA RCRA compliance inspections and has prepared enforcement documentation including 3008 (a) compliance orders, notice of violations and warning letters.

Ms. Dunn prepares a variety of plans, including stormwater management plans, pollution prevention plans, spill prevention control and countermeasures, facility closure plans, hazardous waste management and groundwater sampling and analysis.





KEY PERSONNEL

Luci Dunn, PE Regulatory Support

CERTIFICATIONS/EDUCATION (CONT.)

Basic RCRA Inspector Training Course / EPA, Dallas, Texas, 1994

Applied Fluvial Geomorphology, Wildlance Hydrology Consultants / EPA, Dallas, Texas, 1994

Air Surveillance for Hazardous Materials / EPA, Phoenix, Arizona, 1991

Statistics, Data Analysis and Designed Experiments, 3M, Brownwood, Texas, 1990

PUBLICATIONS/PRESENTATIONS

Brine Disposal, Texas Water Conservation Association Conference, 2015

Disinfection ByProduct, Texas Water Utilities Seminar, 2004

Cell 9 Brownwood Landfill Construction Presentation and Field Trip, St. John's Episcopal School, 2000

Engineering Career Day Presentation, Girl Scouts (Tejas Council), 1998

Earth Day Presentations, Middle Schools, Abilene, Texas, 1993 -1995

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. Senior Project Manager Abilene, Texas 1998 - present

Regulatory Compliance Services Chemical Engineer Rockwall, Texas 1997 - 1998

Environmental Protection Agency Hazardous Waste Enforcement Officer Dallas, Texas 1994 - 1995 Ms. Dunn has experience preparing the following permit types:

- · Wastewater Discharge
- Sludge Beneficial Use
- · Municipal Solid Waste
- · Hazardous Waste Storage
- Disposal Units
- Stormwater

Ms. Dunn has conducted RCRA compliance inspections and prepared enforcement documentation and she creates plans to meet RCRA and Clean Water Act requirements.

Management

Ms. Dunn develops Management Plans for organizations. She served as the first Watershed Coordinator for EPA-Region 6 and developed the Regional Management Plan prototype for the Program. She gathers data from personnel in various government agencies/departments in order to develop program mission statements, prepare organization charts, establish lines of responsibility and define roles with a Management Plan structure. She develops position descriptions, pay scales and written operating and administrative policies.

Her experience includes testing product quality and improving profitability through decreased production time.

Notable Projects

- Risk Management Plans, Brazos Regional PUA, Upper Leon River MWD, City of Abilene, City of Cisco, White River MWD
- Air Permit-by-Rule Documentation, City of Abilene, City of Brownwood, AES Wind Generation Facility
- Wastewater Discharge Permit Applications, Various municipal clients over the past 15 years
- Compliance assistance with Notice of Violations, Agreed Orders and Supplemental Environmental projects for wastewater, water, air and solid waste issues, Various municipal clients over the past 10 years
- Disinfection protocols for water treatment plants
- Industrial stormwater pollution prevention plans for wastewater treatment plant with flow of >1 MGD, landfills, and industrial facilities
- Spill prevention control and countermeasure plans, municipal airports, service centers, landfills and industrial facilities
- Facility engineering plans, regional water and wastewater system improvements, Rio WSC







EDUCATION

Master of Public Administration American Military University, 2009

Bachelor of Science, Fisheries Management, University of Wyoming, 1995

Associate of Applied Science, Water Utility Operation, New Mexico State University, 1989

REGISTRATIONS

Class A Wastewater Operator, TCEQ, State of Texas, 1999

PROFESSIONAL / CIVIC ORGANIZATIONS

American Waterworks Association (AWWA), Treatment Plant O&M Committee

Texas AWWA

PUBLICATIONS/PRESENTATIONS

What Do You Mean my Membranes are Obsolete? Opportunities and Observations in Replacing 1st Generation Membranes at the Sweetwater WTP, SCMA Annual Conference, 2018

CERTIFICATIONS/EDUCATION

eHT Leadership Development Program, 2013

Advanced Waste Treatment, California State University, 2011, 2003

PROFESSIONAL EXPERIENCE

Mr. Baker has 30 years of experience in the water and wastewater utility industry. He has been a licensed wastewater treatment plant operator since 1989 in New Mexico, Colorado, Wyoming and Texas. He has been a licensed "A" wastewater operator in the State of Texas since 2000. For more than a decade he enjoyed the opportunity to operate municipal treatment plants ranging in size from package plants to a 110 MGD advanced activated sludge nutrient removal plant (Dallas Southside). After joining eHT in January 2000, he has been heavily involved in a wide array of water, wastewater and reuse projects. Mr. Baker assists water and wastewater treatment utilities with gaining approval for and coordinating pilot studies, facility startup services, regulatory compliance, process troubleshooting, operator training, production of facility O&M manuals, production of facility monitoring plans, biosolids handling and disposal compliance, disinfection by-product reduction measures and production of water conservation and drought contingency plans. With a background focusing on operation and maintenance of water treatment and distribution systems, and wastewater collection, treatment and reuse systems, Mr. Baker is an invaluable resource to our clients.

PROJECT EXPERIENCE

Water/Wastewater Operations

Mr. Baker has over 11 years of progressive hands-on operational experience as a wastewater operator at municipal facilities ranging in size from 4.0 MGD to 110 MGD. He has an additional 19 years of experience as an Operations Specialist with water and wastewater treatment systems. He has extensive knowledge relating to the treatment and production of surface water via both conventional and membrane treatment systems, as well as groundwater systems. Mr. Baker offers specialized expertise with DBP reduction measures, monitoring and control of chloramine systems, and treatment of iron and manganese in potable water sources. His wastewater treatment experience includes a strong emphasis on biological process control, data management, and laboratory procedures. Mr. Baker plans and implements facility pilot studies including preparation of the sampling plan protocol and collecting the necessary samples. His operational experience includes operation of grit removal units, anoxic basins, chlorination systems, sand drying beds, DAF units, aeration basins, anaerobic digesters, sludge injection units, primary clarifiers, secondary clarifiers, sand filters, centrifuges, belt presses and influent and effluent pump stations. Mr. Baker has been involved as a key operations specialist for a variety of water and wastewater treatment projects.

Specific areas of expertise include:

- Pilot Study Planning and Implementation
- Operator Training Programs
- Production of Water and Wastewater Treatment Plant Operations and Maintenance Manuals
- Production of Water Treatment Plant Monitoring Plans
- Production of Nitrification Action Plans
- Plant Process Troubleshooting





David A. Baker Start-Up and Commissioning Support

KEY PERSONNEL

CERTIFICATIONS/EDUCATION (CONT.)

Pretreatment Facility Inspection, California State University, 2010

Small Wastewater System Operation and Maintenance, California State University, 2006

Operation of Wastewater Treatment Plants, Volume II, California State University, 2004

Zenon's ZeeWeed Operator Training Program, 2003

Gravity Filter Surveillance, AWWA Short Course, Fort Worth, Texas, 2003

Water Treatment Plant Operation, Volume II, California State University, 2002

Hazardous Waste Operator Training, 40-Hr., ENPROTEC, Inc., Lubbock, Texas, 2001

Water Treatment Plant Operation, Volume I, California State University, 2000

Wastewater Collection, 1989

Basic Wastewater Operations, 1989

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. **Operations Specialist** Abilene, Texas 2000 - present

City of Cheyenne, Cheyenne Board of Public Utilities Wastewater Operator IV - Dry Creek and Crow Creek WWTPs Cheyenne, Wyoming 1992 - 1999

City of Santa Fe Senior Wastewater Operator IV -Airport Road WWTP Santa Fe, New Mexico 1990 - 1992

City of Dallas Wastewater Operator - Southside WWTP Dallas, Texas 1989 - 1990

- Water Treatment Plant Regulatory Compliance
- Wastewater Treatment Plant Regulatory Compliance
- Sludge Handling and Disposal Compliance
- Beneficial Biosolids Reuse Permitting
- Disinfection By-Product Reduction
- Water Conservation/Drought Contingency Planning
- Sanitary Sewer Overflow Abatement Planning
- Risk Management Planning.

He has designed and implemented staff operator training programs, operating protocol and standard operating procedures for all tasks performed at water and wastewater treatment plants. He has also designed and implemented data tracking process control spreadsheet systems to optimize plant operations. He has conducted multiple training sessions at the West Central Texas Regional School, and recently at the South Central Membrane Association Conference held in San Antonio in August of 2018.

Operations Support Services

Mr. Baker provided operations support services to City operational staff during water or wastewater treatment plant expansions or modifications for the following:

- City of Abilene
- City of Albany
- City of Ballinger
- City of Breckenridge
- City of Coleman
- City of Granbury
- LPPA WSC
- City of Robert Lee
- City of Roma
- City of Stamford
- ULRMWD

- · Acton MUD
- · City of Aspermont
- · City of Big Lake
- · City of Cisco
- · City of De Leon
- · City of Missouri City
- Possum Kingdom WSC
- City of Rochester
- City of Rule
- · City of Sweetwater
- · White River MWD

Plant Operations and Maintenance Manuals

Mr. Baker has produced plant operations and maintenance manuals for:

- · City of Ballinger, WTP
- City of Roma, WTP
- City of Roma, WWTP
- City of De Leon, WWTP
- City of Loraine, WWTP
- Possum Kingdom WSC, WTP
- City of Breckenridge, WTP
- Staff WSC, Water Production & Delivery
- · City of Roscoe, WWTP
- · City of Sweetwater, WWTP
- City of Sweetwater, WTP City of Eastland, Water Production & Delivery







EDUCATION

Tarleton State University

US Army, Communications

REGISTRATIONS

Class B Water Operator, TCEQ, TX Class C Wastewater Operator, TCEQ, TX

PROFESSIONAL/CIVIC ORGANIZATIONS

American Water Works Association Texas AWWA Texas Water Utility Association

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc.
Operations Specialist
Abilene, Texas
2020 - present
City of Ballinger
Operator
Ballinger, Texas
1989 - 2019

PROFESSIONAL EXPERIENCE

Mr. Everett has 30 years of experience in the water and wastewater industry. His main work experience has been in the water treatment industry but he also has experience with distribution, as well as wastewater. He has been involved in water and wastewater since 1989 working mainly with municipalities.

Mr. Everett has been a licensed water and wastewater operator since 1989 in the state of Texas. He holds a Class B operator license in water and a Class C operator license in wastewater. For over 30 years, he operated a municipal treatment plant that was not only a conventional plant but also consisted of a reverse osmosis (RO) system. Mr. Everett joined eHT in 2020 as an Operations Specialist. His main job function is to help operators with problems they may encounter in their day to day operations. He has extensive experience working with smaller systems and assisting their personnel achieve their goals of operating an efficient system. He not only has experience with the operations side of the industry but also has experience with operation functions. Previously, Mr. Everett served as an Interim City Manager for a municipality running their day to day operations.







EDUCATION

Bachelor of Science, Horticulture Texas A&M University, 1993

REGISTRATIONS

Registered Professional Land Surveyor – Texas #4683, 2006; OK #1662

PROFESSIONAL/CIVIC ORGANIZATIONS

Texas Society of Professional Surveyors

California Land Surveyors Association

Oklahoma Society of Land Surveyors

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. Survey Department Manager Abilene, Texas 2017 - present RG Surveying, Inc. Owner

West Company of Abilene Land Surveying Managing RPLS 2006 - 2015

PROFESSIONAL EXPERIENCE

Mr. Griffith is the Survey Department Manager of Enprotec / Hibbs & Todd, Inc., and has 20 years experience in the field of land surveying. He has worked on residential and commercial land development projects; ALTA surveys; wind farms; oil and gas pipelines; oil field projects; water and sewer projects; a flood control dam; TxDOT ROW projects; Patent Surveys for the GLO; residential, commercial, and farm and ranch surveys. He has experience with pipeline route surveys, construction staking and ALTA surveys across West Texas, including boundary and topographic surveys; elevation certificates; ground bed surveys in Texas and Oklahoma; subdivision platting; and, oil well location staking.

PROJECT EXPERIENCE

- Abilene Central Business District Street Repair
- Abilene Convention Center Renovations
- Abilene Fire Training Facility
- Midland Northeast Water Line Project
- Ballinger Memorial Hospital District
- Hendrick South Medical Buildings
- Dyess Air Force Base Hospital Facilities, SES Construction and Fuel Services, LLC
- Stonewall County Nursing Facility
- · Rehabilitation of Hospital of Abilene, Med Properties
- Fire Station #7, City of Abilene
- · Abilene Law Enforcement Center, City of Abilene
- Tuscany Ridge Development
- ACU Irrigation Pump Station
- Hampton Hills Development
- Water System Improvements, City of Stamford
- Wylie ISD New Elementary School
- San Angelo College Hills Boulevard Rehabilitation Project
- Hardin-Simmons University Moody Center and Behrens Auditorium
- Highway 18/36 Development, Development Corporation of Abilene
- Antilley Road Subdivision
- Taylor County Exposition Center Improvements
- · Water System Improvements, City of Loraine
- Water System Improvements, City of Sweetwater
- Eastland Business Park Development



2015 - 2017



Scott Yungblut, PE Geotechnical Engineering



EDUCATION

Bachelor of Science, Civil Engineering University of Texas at Arlington, 1993

REGISTRATIONS

Registered Professional Engineer – Texas #85640, 1999

CERTIFICATIONS/EDUCATION

Concrete Evaluation and Repair I & II, 2011

Retaining Wall Design, 2010

Shrink Swell Soils, Texas A&M

Forensics Engineering Conference, 2007

Texas Accessibility Academy, 2005

TxDOT HotMix (HMACP) Inspector, 2003

ParSales Training, 1996

Dale Carnegie Leadership Course, 1995

PROFESSIONAL ENDEAVORS

Enprotec / Hibbs & Todd, Inc. Vice President Abilene, Texas 2000 - present

Giles Engineering Associates Project Engineer Dallas, Texas 1997 - 2000

PROFESSIONAL EXPERIENCE

Mr. Yungblut has 25 years of experience in performing engineering analysis and design on geotechnical and construction materials testing projects throughout Texas, Louisiana, Arkansas and Oklahoma. He supervises and manages eHT's soil and materials testing laboratory responsibilities including proposal preparation, field investigation, field and laboratory analysis, report preparation and construction quality assurance and quality control.

The eHT laboratory staff utilizes state-of-the-art equipment and instrumentation. eHT procedures and methodologies conform to federal and/or state standards such as American Standards and Testing Methods (ASTM), TxDOT and American Concrete Institute (ACI).

PROJECT EXPERIENCE

Geotechnical Expertise

Mr. Yungblut's geotechnical expertise includes:

- Subsurface Exploration
- Soil Property Evaluations
- Shallow and Deep Foundation Design Recommendations
- Foundations on Expansive Soils
- · Pavement Design and Evaluation
- · Roadway and Parking Lot Upgrades
- Airfield Pavements

Water and Wastewater Projects

- Bailey County WTP
- City of Lubbock WTP
- TPWD Lake Arrowhead State Park WWTP
- City of Stamford WTP
- Acton Municipal Utility District WWTP
- City of Ozona WWTP
- City of Mason WTP
- Parker County SUD WTP
- Midland Northeast Water System Improvements
- City of Eden Water Lines
- · City of Midland Airport Lift Station
- Wadley Elevated Storage Tank
- City of Midland Louisiana Street Waterline Improvements
- City of Midland Northeast Elevated Storage Tank
- City of Midland Water Treatment Plant Improvements
- City of Brady Radium Reduction Water Treatment Project





Funding Liaison



EDUCATION

Bachelor of Science, Civil Engineering Texas A&M University, 1991 Bachelor of Science, Range Science Texas A&M University, 1983

REGISTRATIONS

Registered Professional Engineer -Texas #87779

PROFESSIONAL/CIVIC **ORGANIZATIONS**

American Society of Civil Engineers National Society of Professional Engineers

American Waterworks Association

CERTIFICATIONS/EDUCATION

TCB Senior Leadership Development Program, 2006 Texas-CEC Leadership Executive Program, 2003

ASCE National Pipeline Installation and Testing Handbook Update, 1999 National Committee Member

International Irrigation and Water Conservation Workshop, Bureau of Reclamation, Phoenix, Arizona, 1999

PSMJ Resources, Inc., Project Management Bootcamp, 1998

PROFESSIONAL EXPERIENCE

Mr. Kindle has 27 years of experience managing large public works programs. He has in-depth experience in project management including planning, design and construction management for water supply, treatment and distribution projects and wastewater treatment and collection projects. He has extensive experience with the Texas Water Development Board Economically Distressed Areas Program, CWSRF and DWSRF; Border Environment Cooperation Commission; North American Development Bank; Texas Department of Housing and Community Affairs; and US Department of Agriculture's Rural Development funding applications for planning, design and construction of public works improvement projects. He has provided program management for projects totaling over \$1.5 billion in infrastructure improvements. Notable accomplishments include the \$600 million Houston Ship Channel Widening and Deepening and the Texas Water Development Board City of Roma Infrastructure Improvements Project. Numerous projects that Mr. Kindle has served as the Program Manager have received engineering excellence awards on both a state and national level.

PROJECT EXPERIENCE

- Program Management, City of Granbury DWSRF Water Improvements: Mr. Kindle served as the Program Manager for the City of Granbury \$35 million DWSRF Water Improvements Projects that included a 2.5 MGD Membrane/Reverse Osmosis Surface Water Treatment Plant, 12 miles of water transmission lines varying in size from 12-inches to 20-inches, a 250,000-gallon elevated storage tank and an AMI system and meter replacement program. Key challenges that were successfully overcome included the hydraulic modeling to incorporate the City's 19 existing groundwater wells with the proposed surface treatment plant and the expedited schedule for the water transmission line and storage improvements that resulted in design and construction of improvements in less than one year using the CMAR delivery system.
- Improvement Projects, City of Roma: Mr. Kindle served as the Program Manager for the City of Roma for over 14 years and was responsible for developing the following solutions and best practices: Master Project Schedule and Program Procedures for procurement, contracting, planning, design, construction and closeout phases; Procedures and processes for compliance with SMWBE and Davis-Bacon requirements; Excel financial project ledger for tracking and monitoring over 12 different accounts and four agency finance requirements for Program Cash Flow; Standardized contracts and procurement procedures for consultant and construction services; Internal and external communication protocols among project team; Public and internal project management and communication with project consultants; Monthly reporting forms and criteria for City Council, TWDB and other stakeholders; and, integrated budgeting and scheduling system to track project completion versus schedule and budget for overall program and individual projects. To date, the Program Management structure has allowed the expenditure of approximately \$65 million in grant and loan funds, including over \$40 million from the TWDB EDAP,





Keith Kindle, PE Funding Liaison

CERTIFICATIONS/EDUCATION (CONT.)

Texas Water Development Board, Financial Assistance Programs Seminar, 1997

New Hydraulic/Hydrologic Programs by the Texas Department of Transportation, Texas Section of American Society of Civil Engineers, 1996

2nd Lower Rio Grande Irrigation Conference and 4th Seminar on Water Rights and Public Policy: Water Rights and Allocations in the Lower Rio Grande, Texas Agricultural Extension Service and Lower Rio Grande Valley Irrigation District Managers' Association, 1996

Floodplain Management Workshop, Texas Natural Resource Conservation Commission, 1995

PROFFSSIONAL ENDFAVORS

Enprotec / Hibbs & Todd, Inc. COO Granbury, Texas 2009 - present

AECOM, formerly TCB, Inc., formerly Turner, Collie & Brayden Vice President, Public Works San Antonio, Texas 2006 - 2008 Associate Vice President and Public Works Director San Antonio, Texas 2005 - 2006 Officer in Charge of Rio Grande Valley Pharr, Texas 1996 - 2005 Senior Project Manager Houston, Texas 1992 - 1995

DWSRF and CWSRF programs. More importantly, all 68 colonias and the 20,000 residents received adequate water and sewer service. The City met the regulatory deadlines and avoided the punitive fines while staying on schedule and within budget. Additionally, the Program has been audited numerous times by the US EPA, TWDB and NadBank and passed with flying colors.

- Radium Reduction Project, City of Brady: Mr. Kindle serves as the Project Director for the project that included GIS development and water modeling for the City's water distribution and transmission systems. The modeling effort examined 24 potential distribution/transmission system alternatives to identify the most effective option to adequately distribute the treated water and address the existing deficiencies in the City's system. The modeling effort included GIS mapping of the existing system, examination of existing and future demands, modeling of the system pumping and storage facilities and fire flows.
- Engineer-of-Record, City of Glen Rose: Mr. Kindle serves as Project Manager for a variety of projects for the City of Glen Rose, including development review, capital improvement planning, drainage studies, lift stations, utility easements, sanitary sewer and water line installation, GIS mapping, utility location surveying, water conservation planning and street reconstruction. Mr. Kindle works closely with City staff to ensure on-going projects coincide with planned future improvements and that projects are developed in accordance with established City standards.
- Statewide Water and Wastewater Needs Assessment Study, TWDB: Mr. Kindle
 was the Project Coordinator for the state-wide study to determine the water and
 wastewater needs throughout the State of Texas, excluding the EDAP-eligible
 counties.
- \$550 Million Flood Control Program, Bexar County: Mr. Kindle was the Program Director for a multi-year contract to provide program management and project management for over 60 flood control projects within Bexar County. The program is the largest and most ambitious program ever in the history of Bexar County. The Program Management Plan included: Development of 10-year, 1-year and monthly Master Project Schedules; Program Cash Flow for soft and hard costs; Standardized contracts and procurement procedures; Internal and external communication protocols; and, Web-based program management web site; Monthly reporting forms and criteria. At the end of the first year, over 25 consultants were procured with design and construction started and simultaneous installation of all program management protocols.
- Houston-Galveston Navigation Channels, Port of Houston Authority: Mr. Kindle was the Program Coordinator providing a range of services to assist the Port of Houston Authority in monitoring, evaluation and development activities related to the Houston-Galveston Navigation Channels. These services included engineering, economic and environmental analysis and planning. The project was successful in obtaining environmental clearance and funding for over \$600 million in channel improvements. The project was the first in the United States to utilize the Interagency Coordination Team method for numerous federal and state regulatory agencies, the Port of Houston Authority and the US Army Corps of Engineers.





REFERENCES

City of Abilene

Tommy O'Brien, PE
Director of Water Resource Planning
PO Box 60
Abilene, Texas 79604
(325) 676-6416
Tommy.OBrien@abilenetx.com

City of Granbury

Rick Crownover Public Works Director 116 W Bridge Street Granbury, Texas 76048 (817) 573-7030 rcrownover@granbury.org

City of Roscoe

Cody Thompson City Manager PO Box 340 Roscoe, Texas 79545-0340 (325) 766-3871 codymt81@hotmail.com

Possum Kingdom Water Supply Corporation

Jeremiah Gore General Manager 1170 Willow Road Graford, Texas 76449 (940) 779-3100 jeremiah@pkwsc.com

Parker County Special Utility District

Derrad Dickson General Manager 500 Brock Spur Millsap, Texas 76066 (817) 594-2900 derrad@parkercountywater.com





Project Understanding

Webb County (County) has requested engineering services to support a needed upgrade to the County's Colorado Acres Reverse Osmosis (RO) Water Treatment Plant (WTP), that was previously constructed approximately ten years ago to provide water to multiple colonias in the eastern boundaries of the Webb County community called Las Lomas. The original Colorado Acres RO WTP facility included only one groundwater well located within the boundaries of the existing WTP facility. The production specifications of the original facility were designed for approximately 50,000 gallons per day (gpd) of potable water under the registered Texas Commission on Environmental Quality (TCEQ) approved Public Water System Identification (PWSID) Number TX2400029. Per the County, the proposed new WTP capacity expectation is to handle 75,000 gpd.

After approximately ten years of operation, the production capacity was significantly reduced to a maximum production of 15,000 gpd due to limitations in both the well production and WTP treatment capacity (anecdotally due to limited maintenance and unspecified equipment failures). Furthermore in 2015, the well failed due to casing and pumping disrepair and the WTP was shutdown to conduct needed repairs.

After a series of water quality investigations performed by firms (contracted by the County), those firms determined that the recently observed water quality issues were likely the "new normal" for the water produced from the existing well; this includes elevated total dissolved solids (TDS) and sulfide. In order to address these issues of membrane fouling, improve plant functionality, and accommodate for possible new water sources the County plans to acquire the services of a professional engineer to assist the County in restoring plant production while also improving performance, reliability and efficiency.

Anticipated Critical Issues

While the use of membrane treatment technologies like RO are considered to be a straightforward or easily understood process, eHT's lessons learned in piloting, designing, commissioning and troubleshooting various RO installations throughout Texas over the past two decades have revealed that RO treatment can frequently be anything but straightforward.

Critical issues anticipated by eHT in developing a successful RO facility include, but are not limited to the following bullet points:

- Determining the appropriate level of pretreatment for an RO system is the most critical approach to minimizing fouling of the membranes. The necessary level of pretreatment is dependent upon source water quality, consistency of quality (i.e. how often are there spikes in suspended contaminants such as iron or manganese), and accessibility of operators. Pretreatment can vary between added levels of oxidation and filtration to handle suspended solids and/or advanced chemical pretreatment (to reduce scale formation or to address biological fouling that can feed off of sulfides in the feed water).
- Determining the appropriate level of membrane cleaning is the second most critical goal to minimize membrane fouling. While pretreatment serves as a prevention method to reduce the formation of membrane surface fouling, good pretreatment is balanced by effective cleaning. Staying on top of feed water quality ensures that the appropriate cleaning chemicals/recipes are used to ensure that foulants do not stay on the membrane surface long enough to cause "irreversible fouling". While some RO system suppliers will offer to handle cleaning on a contract basis, eHT has learned over the years that providing onsite cleaning equipment and properly training the plant operators to clean the membranes themselves can result in better longevity of the membranes, better sustained production, and more cost-effective operation. As an example, one of eHT's operator specialists, Randy Everett, previously managed the City of Ballinger's RO plant (that eHT designed in 2010), and because the City was new to RO treatment, the City decided to utilize a "contract cleaning" approach; after observing the cleaning efforts several times, Randy recommended that the City purchase their own cleaning equipment, and Randy and his operators handled cleaning on their own, extending the life of their RO membranes, maintaining maximum production, while reducing their annual membrane cleaning costs by more than 50%!
- Another critical component of effective RO operations is the need for adequate data collection from the plant's supervisory control and data acquisition (SCADA) system, to ensure that enough data is collected sand trended to provide useful trending information to the plant operators.





Proper SCADA data collection ensures that the operators have the right information to make "proactive" changes to plant/RO operations in a timely manner, rather than operating in a "reactive" manner, which can create the risk of system failure if an operator does not catch a data issue in time.

- Finished water stabilization is another major issue. Following the media firestorm surrounding lead and copper risks from places like Flint, Michigan in 2016, the TCEQ and Environmental Protection Agency (EPA) tend to focus on desalination projects "with a magnifying glass", due to the potential for producing "too pure" of a finished water, resulting in a somewhat corrosive water. Common approaches to addressing this concern include blending of RO permeate with a portion of water bypassed around the RO unit, chemical addition to the blended water to raise pH and increase alkalinity, and to "degasify" RO permeate to reduce dissolved carbon dioxide (which can also raise pH). There is no "one size fits all" approach for producing stable finished water from an RO facility, appropriate water stabilization needs to be customized for each specific water utility and service area; this can further become an issue if the finished water from an RO facility has the potential to be mixed with other finished water sources in distribution.
- Having an appropriate method for concentrate disposal is yet another critical issue. This needs to be evaluated from both a permitting standpoint as well as an operational feasibility standpoint.

Path Forward

With these goals in mind, the County anticipates tasks necessary to complete conceptual and final design, pilot testing (if required), construction and commissioning support, as well as operator training to complete the proposed RO WTP facility upgrade and expansion. The eHT Team has an in-depth understanding of the challenges and opportunities associated with the proposed project. Issues that are anticipated to be critical to the success of the project include the following:

 Coordination with TCEQ to obtain exception approval for the proposed RO improvements (anticipated use of the TCEQ's Step 1 / Step 2 RO approval process that eHT worked with TCEQ to develop in 2013).

- Depending on the completion documentation for the existing well, it may be necessary to obtain concentrationtime (CT) credit for the well. If required, coordination with TCEQ to support CT study approval, as TCEQ may delay the CT approval process as their normal policy for CT studies is to approve once the actual mechanical improvements have already been constructed.
- Depending on the funding source for the project, it may be necessary to obtain some level of environmental clearance for the project to allow construction to proceed. The completion of environmental clearance can frequently delay release of design and/or construction funding. Likewise, the recent dissolution of the United States Army Corps of Engineers (USACE) Nationwide 12 permit via a court decision in April 2020 has further impacts on environmental compliance review (USACE coordination is one of several agency coordination requirements required for many funding program environmental compliance review efforts). Therefore, depending on the funding source, to keep the project on schedule with the planned timing for planning and design efforts, eHT recommends that the environmental clearance effort (if required) begin as soon as possible in parallel to planning and design to ensure that environmental clearance does not delay release of funding for construction.

It should be noted that eHT has successfully completed over \$550 million in water and wastewater projects using various types of county, state and/or federal funding, including more than 60 various projects using either Texas Water Development Board DWSRF, CWSRF, EDAP or a combination of program funds from other sources such as CDBG and USDA-RD.

The following section describes the various considerations in our approach to the planning of the proposed Colorado Acres RO WTP improvements which are currently anticipated.

Project Approach

Agency Involvement. Our engineers will work closely with client representatives during the entire project. Clear communication and close coordination during the project will be critical for its success. We use several methods for establishing strong communication including established communications procedures, specific funding protocols and a Strategic Decision Group.





Strategic Decision Group. We have informally implemented a Strategic Decision Group on each of our county, state and federally funded projects. The Client, Financial Advisor, Bond Counsel, and Engineer have worked together to keep the projects free of "snags".

This decision-making group will anticipate any inefficiencies in the project and resolve major problems that may arise. This will help avoid long periods of downtime that often result because of lengthy negotiations and ineffective decision-making. This group's purpose is to keep the project on target.

Stakeholder Input. We advocate incorporating input from the Client on important project decisions and options. Our experience indicates that this level of communication helps to provide a project that will meet the County's objectives and needs. We feel Client leadership helps to shape the outcome of the project. We can accomplish this by:

- Providing frequent technical briefings regarding the details of the project.
- Providing field tours for Client representatives to view proposed equipment and processes.
- Ensuring critical project decisions are made by the Client and implemented by the design team.
- As your consulting partner, the first step will be to meet with your staff and review the objectives for your project. The County's needs and desires must be integrated into the project from the start. Input concerning functional issues during planning and design phases will ultimately result in a more "user-friendly" system following construction. Our staff will maintain constant communication, focusing on sensitive issues and potential roadblocks to success.

Proposed Methodology

Each team member's responsibilities are detailed in the organizational chart and resumes.

Task 1: Project Management

Strong project management is one of the most important factors governing the successful outcome of a project. As a result, we believe that the first task should be focused on project management. Our project management will be centralized from our Abilene office with the ability to promptly respond to meetings with the County in an economical manner.

Mr. Hibbs and Mr. Berryhill and the other senior members of the project team all have extensive experience in working on RO projects with the TCEQ and various funding agencies to develop efficient and cost-effective projects that "get it right the first time." In order to foster constant communication during the project, a kickoff meeting, milestone meetings, and a final presentation will be arranged with County staff, the funding agency (if utilized) and other appropriate stakeholders.

Task 1.1: Initial Kickoff Meeting with County Staff

eHT will initiate a meeting with County Staff and the funding agency (if required) before the project is commenced. During the meeting, the project manager, team leaders and key engineering staff will set project goals and the scope of work will be reviewed, clarified and modified, as necessary. Lines of communication with the County and the funding agency (if required) will be established. County and funding agency input regarding critical project guidelines and resources will be solicited.

Task 2: Preliminary Engineering

- A. Consult with the County to determine the specific needs and requirements for the project. Establish criteria for prioritizing improvements to maximize the number of improvements accomplished within the proposed funds.
- B. Prepare a Preliminary Engineering Feasibility Report (PEFR) to support the funding application (and an Engineering Feasibility Report [EFR] depending on funding agency requirements) to complete the planning phase for the project in sufficient detail to indicate clearly the problems involved and the alternate solutions available to the County, to include schematic layouts and sketches, general cost projection for the Project, and a schedule to set forth the Engineer's recommendations.
- C. Assist in the preparation or review of environmental assessments and impact statements as necessary for funding.
- D. Assist the County in coordinating with TCEQ to determine the documentation required for exception approval from the TCEQ's Technical Review and Oversight Team (TROT), which is required prior to submittal and approval of the final design plans and specifications for the Colorado Acres RO WTP facility improvements by the TCEQ's Plan Review Team (PRT).
- E. Complete all necessary preliminary design support tasks.





Task 2.1: Engineering Feasibility Report

- A. The primary goal of Task 2.1 is to develop and produce an engineering feasibility report (EFR) if required for a funding agency, detailing the recommended scope of improvements necessary for increasing the efficiency and capacity of the County's Colorado Acres RO WTP facility.
- B. Consult with the County to determine specific needs and requirements. Prepare an EFR and report on the project in sufficient detail to indicate problems involved and the alternate solutions available to the County, to include schematic layouts and sketches, conceptual cost projection for the Project and a schedule to set forth the Engineer's recommendations.
- C. Following completion of internal review and coordination with the County to incorporate EFR review comments, the EFR will be finalized, which will include, but not be limited to, technical descriptions of civil, electrical, instrumentation, mechanical and structural components that can be reasonably expected to be necessary to implement the proposed Colorado Acres RO WTP facility improvements in this project.
- D. Make any necessary surveys of existing topography, utilities, or other field data required for proper design of the project.

Task 3: Develop Plans and Specifications

Our team will utilize specialists from eHT to develop plans and specifications for the selected project that best serve the County. Our team will also design with respect to enhancing, not detracting, automation of control technologies for the Colorado Acres RO WTP facility, which will improve County operating staff's capabilities to perform preventive maintenance.

A. A procurement approach gaining popularity in the industry is to pre-procure critical equipment during design phase. The traditional approach has been to "lay out" a general piece of equipment in the drawings and then see which manufacturers submit an equipment bid to the general contractors. To capture benefits of competition while ensuring performance requirements are maintained, pre-procurement of equipment during design ensures that the County can realize cost savings from bidding competition, while also expediting completion of final design.

Task 4: Final Review Phase

- A. Review final design documents with the County to ensure conformance with goals for the project.
- B. Coordinate with the funding agency (if required) for a review of final design documents to complete requirements for eligibility of funding for construction, including meeting state and federal guidelines for specific minority-owned and womenowned business enterprises (MBE/WBE) in the contract documents, as well as for meeting current state and federal American Iron and Steel (AIS) requirements.
- C. Coordinate with TCEQ for a review of final design documents to ensure conformance with TCEQ design criteria.

Task 5: Bid Phase

- A. Prepare Bid Packet/Contract Documents or prepare alternate contract packages if utilizing an alternative delivery method.
- B. Conduct a Pre-Bid (or Pre-Proposal for alternative delivery methods) Conference to discuss project scope and answer contractor questions as needed to provide a clear and concise understanding of the project.
- C. Issue addenda for any necessary clarification of bid documents, including incorporation of any wage rate modifications (if applicable).
- D. Open bids or proposals (bid opening to be held at least four (4) weeks from publication date of first advertisement).
- E. Tabulate bids or proposals (include completeness and eligibility screening).
- F. Announce lowest and best bid (or proposal), if applicable (at bid opening). If required, issue a rejection of all bids and re-advertise bids.
- G. Conduct construction contractor eligibility verification.
- H. Submit all necessary awarded contractor documentation to the funding agency (if required) in accordance with request of approval and release of funding for construction.
- I. Approve contract award by local governing body.

Task 6: Construction Administration and Oversight

A. Conduct a Pre-Construction Conference with the County, the funding agency (if required) and the Construction Contractor to identify specific project requirements, documentation needed and guidelines for costs, change orders and outlays.





- B. Issue Notice to Proceed to awarded Construction Contractor.
- C. Establish Progress Payment Schedule and Construction Contractor's submittal of cost estimates.
- D. Advise the County during construction of any potential change orders. Process and submit Change Orders to the County and the funding agency (if required).
- E. Perform inspections of the construction project.
- F. Conduct monthly Project Status Meetings with the County, the funding agency (if required) and the Contractor to review monthly project status, outlays, development of Contractor drawing markups (as-built drawings).
- G. Check samples, catalog data, shop drawings, laboratory and mill tests of materials and equipment and other data which the Contractor is required to submit, only for the conformance with the design concept of the Project and compliance with the information given by the plans, specifications and contract documents.
- H. Based on the Consultant's onsite observations as an experienced and qualified design professional, and on the Consultant's review of the Contractor's Applications for Payment, determine the amount owed to the Contractor in such amounts.
- I. Provide operator training of the County's WTP operators in conjunction with specific equipment training provided by the selected RO system supplier.
- J. Develop a Plan of Operations for the proposed Colorado Acres RO WTP facility improvements, including providing the Plan of Operations to the County's operators to utilize the Plan as a living document, to be updated as needed as the operators' experience grows with the new facility.
- I. Conduct, in company with County representative(s), a final inspection of the Project for conformance with the design concept of the Project, and compliance with the plans, specifications and contract documents, and recommend in writing, final payment to the Contractor.
- K. Make an inspection of the Project within one month of expiration of the warranty period and report observed discrepancies under warranty provided by the construction contract.

- L. Furnish the County a set of record prints of drawings and addendum drawings showing those changes made during the construction period, based upon the marked up prints, drawing and other data furnished by the Contractor which Consultant considers to be significant.
- M. Prepare Certificate of Construction Completion.





DOCUMENTATION & SOFTWARE

Documentation

Our engineers will work closely with client representatives during the entire project. Clear communication and close coordination during the project will be critical for its success. We use several methods for establishing strong communication including established communications procedures and specific funding protocols.

Electronic Capabilities

eHTs offices are equipped with the latest versions of communications software and devices. Both in-house and remote capabilities exist for electronic media transmission and data access. All persons have individual access and e-mail accounts for direct personnel contact. Our offices operate on a Microsoft Windows platform for communications, documentation, modeling and reporting functions using industry standard programs. eHT maintains the latest Windows operating system environment.

All of our employees can access project files regardless of location and we utilize web-based project management tools to facilitate document sharing and communication between project team members. We utilize conference calls and on-site meetings for frequent project team coordination.

Our offices utilize the Microsoft Office Suite including Word, Excel and PowerPoint for data analysis, word processing and presentation, Surfer and AutoCad 3-D for surface analysis, and AutoCAD and ArcGIS drafting software for mapping and graphics. Industry specific modeling programs for groundwater analysis include Groundwater Vistas, Agtesolve, Aguifer Test Pro, Modflo, and the RBCA Toolkit. Industry specific modeling programs used for surface drainage design and hydrologic/ hydraulic analysis include Bentley System's FlowMaster and PondPack, as well as US Corp of Engineers HEC-RAS and HEC-HMS programs. Industry specific modeling programs used for water and wastewater system analysis include Bentley System's WaterCad (Version 8i), Innovyze's H2OMAP Water GIS Pro Suite (Version 8) & Innovyze's H2OMAP SWMM.

Project Status Example



Monthly Project Update

PCSUD Phase I Water System Improvements (7184) Thursday, January 16, 2020

Derrad Dickson, General Manager	FROM: Josh Berryhill, PE	
Parker County Special Utility District	eHT- Enprotec, Hibbs &	Todd
e-mail: derrad@parkercountywater.com	e-mail: joshua.berryhill@	e-ht.com
Phone: 817-594-2900	Phone: 325-698-5560	

The intent of this update is to enhance our team's communication. The following provides a brief list of our needs from you and upcoming events and issues we consider important. Please call me if you have any questions.

- . Funding Status Financial application status is complete.
- Water Conservation Plan Status TWDB has reviewed the District's water conservation plan (WCP).
 - . eHT will assist the District in completing any requested edits to the existing WCP based on TWDB review comments. If no edits are needed, eHT will not charge for water conservation plan services.

 No needs from the District at this time for the water conservation plan.
- ntal Clearance Status The environmental clearance effort is still ongoing
 - . TWDB issued the Categorical Exclusion (for onsite plant improvements) for publication on August 12, 2019. Thisi
 - The final EID document was submitted to TWDB on October 15, 2019.
 - The FID is still in review gueue at TWDB. Following approval of the FID document by TWDB, the TWDB. will publish a Finding of No Significant Impact (FNSI) for 30 days prior to issuance to the District, which will then allow for release of funding for EID-based (offsite) project elements.
- . Planning Phase Status The planning phase effort is still ongoing
 - TWDB issued approval of the Engineering Feasibility Reports (EFR) on October 21, 2019.
 - eHT has identified an opportunity to upgrade the membrane filtration system which could allow for eliminating. the proposed plate settler prefreatment system improvements from the Phase I project, by converting to a ceramic filter technology that could also meet both the current Phase I flow requirements, as well as meeting the flow requirements for the future Phase II WTP project.
 - The potential for this new technology will be vetted through financial analysis, inspection of other representative facilities in Texas, onsite pilot testing, coordination with the Texas Commission on Environmental Quality (TCEQ), and ultimate full-scale pricing evaluation. The implementation of this technology has the potential of saving several million dollars within the Phase I project.

C:\Users\jessica.owen\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.Outlook\OL7DAGUP\PCSUD - Project Status Report - January 2020.docx





REGISTRATIONS







LITIGATION

Litigation

There are no past or pending litigation or claims filed against eHT that would affect our performance on this project.

eHT has had no history of claims, litigations, arbitration or termination for a cause associated with any work contracted on any project.

eHT has not had a contract terminated for default.

eHT has not filed lawsuits, requested arbitration, or been involved in any litigation concerning a contract.

eHT has no judgments, claims, arbitration proceedings or lawsuits pending.

eHT has not filed for bankruptcies.

eHT has no current litigation pending.

eHT has no history of litigations, claims or disputes.



THIS FORM MUST BE INCLUDED WITH RFQ PACKAGE; PLEASE CHECK OFF EACH ITEM INCLUDED WITH RFQ PACKAGE AND SIGN BELOW TO COMFIRM SUBMITTAL OF EACH REQUIRED ITEM.

RFQ 2020-010 "Engineering Services for the Colorado Acres RO Water Treatment Plant Renovations Project"

☑ Proposer Information
☑A minimum of five (5) references with whom the firm has performed substantially similar services described in this document.
☑Conflict of Interest form (Form CIQ)
☑Certification regarding Debarment (Form H2048)
☑Certification regarding Federal lobbying (Form 2049)
☑Code of Ethics Affidavit
☑Proof of No Delinquent Tax Owed to Webb County
Signature of person authorized to sign RFQ May 18, 2020 Date



Proposer Information

Name of Company:	Enprotec / Hibbs & Todd, Inc.		
	402 Codor Stroot		
City and State	Abilene, Texas 79601		
Phone:	(325) 698-5560		
Email Address:	jordan.hibbs@e-ht.com		
Signature of Person Authorized to Sign:			
	Signature		
	Jordan Hibbs		
	Print Name		
	Vice President		
	Title		
Indicate status as to "Partners	ship", "Corporation", "Land Owner", etc.		
	Corporation		
	May 18, 2020		
	(Date)		

MINIMUM INSURANCE REQUIREMENTS

During the term of the Contract, the Contractor at its sole cost and expense shall provide primary commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Contractor shall provide and maintain the following coverage and limits:

Workers Compensation, as required by the laws of Texas, and Employers' Liability, as well as All States, USL&H and other endorsements if applicable to the project, and in accordance with state law. Employers' Liability

Each Accident: \$1,000,000 Disease – Each Employee: \$1,000,000 Policy Limit:

\$1,000,000

Commercial General Liability, including but not limited to the coverage indicated below. Coverage shall not exclude or limit Products/Completed Operations, Contractual Liability, or Cross Liability. Webb County shall be named Additional Insured on primary/non-contributory basis.

Each Occurrence: \$1,000,000

Personal and Advertising Injury: \$1,000,000 Products/Completed Operations: \$1,000,000 General Aggregate (per project): \$2,000,000

Automobile Liability, including coverage for all owned, hired, and non-owned vehicles used in connection with the contract. Webb County shall be named Additional Insured on primary/non-contributory basis.

Combined Single Limit-Each Accident: \$1,000,000

Umbrella/Excess Liability (Webb County shall be named Additional Insured on primary/non-contributory

basis) Each Occurrence/Aggregate: \$1,000,000

Professional/Errors & Omissions Liability (if

applicable) Each Occurrence/Aggregate: \$1,000,000

Policies of insurance required by the contract shall waive all rights of subrogation against the County, its officers, employees and agents. If any applicable insurance policies are cancelled, materially changed, or non-renewed, contractor shall give written notice to the County at least 30 days prior to such effective date and within 30 days thereafter, shall provide evidence of suitable replacement policies. Failure to keep in force the required insurance coverage may result in termination of the contract. Upon request, certified copies of original insurance policies shall be furnished to the County.

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects cha	inges made to the law by H.B. 23, 8	34th Leg., Regular Session.	OFFICE USE ONLY	
This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).				
than the 7th business day after the	By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.			
A vendor commits an offense if the offense under this section is a misc	e vendor knowingly violates Section 176	.006, Local Government Code. An		
-1	business relationship with local g	overnmental entity.		
Enprotec / Hibbs & 7		,		
completed questionna	are filing an update to a previously ire with the appropriate filing author at the originally filed questionnaire	ity not later than the 7th busines		
Name of local government	officer about whom the informatio	n is being disclosed.		
	N/A			
,=	Name of Office	er		
officer, as described by Sec Complete subparts A and B CIQ as necessary. A. Is the local other than investigation of the local government local government.	Yes No	ibe any family relationship with relationship described. Attack the relationship described in the relationship described.	n the local government officer. In additional pages to this Form Rely to receive taxable income, income, from or at the direction income is not received from the	
Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.				
	e vendor has given the local governrection 176.003(a)(2)(B), excluding g		ŭ l	
I Poeler 2	I. Hill	May 18	, 2020	
Signature of yendor do	oing business with the governmental er	ntity Da	te	

CONFLICT OF INTEREST QUESTIONNAIRE

For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

<u>Local Government Code § 176.001(1-a)</u>: "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

Local Government Code § 176.003(a)(2)(A) and (B):

- (a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:
 - (2) the vendor:
 - (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that
 - (i) a contract between the local governmental entity and vendor has been executed; or
 - (ii) the local governmental entity is considering entering into a contract with the vendor:
 - (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:
 - (i) a contract between the local governmental entity and vendor has been executed; or
 - (ii) the local governmental entity is considering entering into a contract with the vendor.

Local Government Code § 176.006(a) and (a-1)

- (a) A vendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:
 - (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
 - (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
 - (3) has a family relationship with a local government officer of that local governmental entity.
- (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:
 - (1) the date that the vendor:
 - (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
 - (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or
 - (2) the date the vendor becomes aware:
 - (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
 - (B) that the vendor has given one or more gifts described by Subsection (a); or
 - (C) of a family relationship with a local government officer.

CERTIFICATION

REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION FOR COVERED CONTRACTS

PART A.

Federal Executive Orders 12549 and 12689 require the Texas Department of Agriculture (TDA) to screen each covered potential contractor to determine whether each has a right to obtain a contract in accordance with federal regulations on debarment, suspension, ineligibility, and voluntary exclusion. Each covered contractor must also screen each of its covered subcontractors.

In this certification "contractor" refers to both contractor and subcontractor; "contract" refers to both contract and subcontract.

By signing and submitting this certification the potential contractor accepts the following terms:

- 1. The certification herein below is a material representation of fact upon which reliance was placed when this contract was entered into. If it is later determined that the potential contractor knowingly rendered an erroneous certification, in addition to other remedies available to the federal government, the Department of Health and Human Services, United States Department of Agriculture or other federal department or agency, or the TDA may pursue available remedies, including suspension and/or debarment.
- 2. The potential contractor will provide immediate written notice to the person to which this certification is submitted if at any time the potential contractor learns that the certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 3. The words "covered contract", "debarred", "suspended", "ineligible", "participant", "person", "principal", "proposal", and "voluntarily excluded", as used in this certification have meanings based upon materials in the Definitions and Coverage sections of federal rules implementing Executive Order 12549. Usage is as defined in the attachment.
- 4. The potential contractor agrees by submitting this certification that, should the proposed covered contract be entered into, it will not knowingly enter into any subcontract with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the Department of Health and Human Services, United States Department of Agriculture or other federal department or agency, and/or the TDA, as applicable.

Do you have or do you anticipate having subcontractors under this proposed contract?

- 5. The potential contractor further agrees by submitting this certification that it will include this certification titled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion for Covered Contracts" without modification, in all covered subcontracts and in solicitations for all covered subcontracts.
- 6. A contractor may rely upon a certification of a potential subcontractor that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered contract, unless it knows that the certification is erroneous. A contractor must, at a minimum, obtain certifications from its covered subcontractors upon each subcontract's initiation and upon each renewal.
- 7. Nothing contained in all the foregoing will be construed to require establishment of a system of records in order to render in good faith the certification required by this certification document. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 8. Except for contracts authorized under paragraph 4 of these terms, if a contractor in a covered contract knowingly enters into a covered subcontract with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the federal government, Department of Health and Human Services, United States Department of Agriculture, or other federal department or agency, as applicable, and/or the TDA may pursue available remedies, including suspension and/or debarment.

PART B. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION FOR COVERED CONTRACTS

Indicate in the appropriate box which statement applies to the covered potential contractor:

\square	The potential contractor certifies, by submission of this certification, that neither it
	nor its principals is presently debarred, suspended, proposed for debarment, declared
	ineligible, or voluntarily excluded form participation in this contract by any federal
	department or agency or by the State of Texas.

The potential contractor is unable to certify to one or more of the terms in this
certification. In this instance, the potential contractor must attach an explanation for
each of the above terms to which he is unable to make certification. Attach the
explanation(s) to this certification.

Name of Contractor Enprotec / Hibbs & Todd, Inc.	Vendor ID No. or Social Security No. 75 2258 512	Program No.
Goelan S. Hill	N	lay 18, 2020
Signature of Authorized Representative		Date

Jordan Hibbs, PE, Vice President

Printed/Typed Name and Title of Authorized Representative

CERTIFICATION REGARDING FEDERAL LOBBYING (Certification for Contracts, Grants, Loans, and Cooperative Agreements)

PART A. PREAMBLE

Federal legislation, Section 319 of Public Law 101-121 generally prohibits entities from using federally appropriated funds to lobby the executive or legislative branches of the federal government. Section 319 specifically requires disclosure of certain lobbying activities. A federal government-wide rule, "New Restrictions on Lobbying", published in the Federal Register, February 26, 1990, requires certification and disclosure in specific instances.

PART B. CERTIFICATION

This certification applies only to the instant federal action for which the certification is being obtained and is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$100,000 for each such failure.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- 1. No federally appropriated funds have peen paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- 2. If any funds other than federally appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with these federally funded contract, subcontract, subgrant, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions. (If needed, contact the Texas Department of Agriculture to obtain a copy of Standard Form-LLL.)

sclose acco	ordingly.	
e naving c	overed subawards under th	is transaction:
Vendor ID No. or Social Security No. 75 2258 512		Program No.
Name of Authorized Representative Jordan Hibbs		
atatlua	May 18, 2020	ate
	Vendor I	75 2258 512 Title Vice President May 18, 2020

3. The undersigned shall require that the language of this certification be included in the award documents for all covered subawards at all tiers (including subcontracts, subgrants,

WEBB COUNTY PURCHASING DEPT. QUALIFIED PARTICIPATING VENDOR CODE OF ETHICS AFFIDAVIT FORM

STATE OF TEXAS	*			
COLDIEN OF WEDD	*	KNOW ALL	L MEN BY THESI	E PRESENTS:
COUNTY OF WEBB	*			
BEFORE ME the under	signed Notary Pul	olic appeared	Jordan Hibbs	
the herein-named "A				County, State
				and/or behalf of their
respective company/enti-				
statements, matters, and				
knowledge.	0.0			
	0 TA	In a		
I personally, and/or in m	v respective author	ity/capacity or	n behalf of my com	pany/entity do hereby
confirm that I have review	ewed and agree to	fully comply v	with all the terms,	duties, ethical policy
obligations and/or cone	litions as required	to be a qua	lified participating	vendor with Webb
County, Texas as set for				
following address: http://	www.webbcountyt	x.gov/Purchas	ingAgent/Purchas	ingEthicsPolicy.pdf
	111/	ALC: UNKNOWN	-, 111	1.
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Texas on any active solid				
comply with the Code of				
debarment or make void				
to communicate with the				
regarding this policy to				
via telephone at (956)		-mail to the	Webb County 1	urchasing Agent to
joel@webbcountytx.gov	(S.)	(ABA)		/.
· W				*
Executed and dated this	18 day of Ma	v	. 2020 .	
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Signature of Affiant	-	CHE WILL		
Signature of Afriant	A 4			
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Jordan Hibbs, Enprotec	·	C.		
Printed Name of Affiant	Company/Entity			
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	sion Exp 06-09-22			
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PROOF OF NO DELINQUENT TAXES OWED TO WEBB COUNTY

Name Enprotec / Hibbs & Todd, Inc	owes no delinquent property taxes to Webb
County.	
Enprotec / Hibbs & Todd, Inc. (Business Name)	owes no property taxes as a business in Webb County.
(Dusiness Name)	
Scott Hibbs	owes no property taxes as a resident of Webb County.
(Business Owner)	
Gochu S. Hill	
Person who can attest to the above infor	mation
* SIGNED NOTORIZED DOCUME! WEBB COUNTY.	NT AND PROOF OF NO DELINQUENT TAXES TO
The State of Texas	
me (or proved to me on the oath of	personally appeared <u>Jordan 5. Hibbs</u> , know to to be the person whose name and acknowledged to me that he executed the same for the ssed.
Given under my hand and seal of office	this 18 day of May 20 20.
Notary Public, State of Texas NOTARY ID # 12571697-4 My Commission Exp 06-09-22	Judy Durrior
My commission expires theday o	(Print name of Notary Public here)

PUBLIC NOTICE ADDENDUM NO. 1

WEBB COUNTY PURCHASING DEPARTMENT 1110 Washington, Suite 101 Laredo, Texas 78040 (956) 523-4125 (956) 523-5010

RFQ 2020-010 "Engineering Services for the Colorado Acres RO Water Treatment Plant Renovations Project"

To: All Interested Proposers From: Joe A. Lopez III, CTPM

Webb County Purchasing Agent

Date: April 29, 2020

This Public Notice – Addendum No. 1 is to inform all interested parties and the public in general of the following modification to the Request for Qualifications (RFQ) 2020-010 posted in the Webb County eBid site on Monday April 27, 2020.

The following language on page 4, Section 1. Background is being amended as follows:

Original language:

1. Background

The Colorado Acres Reverse Osmosis Water Plant came about as a solution to providing water to multiple colonias in the eastern boundaries of Webb County community called Las Lomas. The facility includes only one (1) groundwater well located in the boundaries of the existing facility. The production specifications of the original facility was designed for approximately 50,000 gallons per day of potable water under the registered TCEQ approved Public Water System 2400029. New capacity expectation is to handle 60,000 gallons per day.

Modification to language:

1. Background

The Colorado Acres Reverse Osmosis Water Plant came about as a solution to providing water to multiple colonias in the eastern boundaries of Webb County community called Las Lomas. The facility includes only one (1) groundwater well located in the boundaries of the existing facility. The production specifications of the original facility was designed for approximately 50,000 gallons per day of potable water under the registered TCEQ approved Public Water System 2400029. *New capacity expectation is to handle up to 75,000 gallons per day.*

Goehar S. Hill

PUBLIC NOTICE ADDENDUM NO. 2

WEBB COUNTY PURCHASING DEPARTMENT 1110 Washington, Suite 101 Laredo, Texas 78040 (956) 523-4125 (956) 523-5010

RFQ 2020-010 "Engineering Services for the Colorado Acres RO Water Treatment Plant Renovations Project"

To: All Interested Proposers

From: Joe A. Lopez III, CTPM

Webb County Purchasing Agent

Date: May 14, 2020

This Public Notice – Addendum No. 2 is to inform all interested parties and the public in general of the following modification to the Request for Qualifications (RFQ) 2020-010 posted in the Webb County eBid site on Monday April 27, 2020.

The following language on page 1, cover page is being amended as follows:

Original language:

Cover Page

Notice is hereby given that, Webb County is seeking formal Requests for Qualifications from qualified Professional Engineers to provide concept and design phase services to provide accurate drawings, specifications and other design documentation for this project. Preparation of construction documentation is required to assist with the bidding process utilizing any permitted procurement delivery method approved by Webb County Commissioners Court and in accordance with State procurement rules, in order to promote cost effective procurement, efficient construction, streamlined commissioning and start-up, and efficient operations of the Colorado Acres Reverse Osmosis (RO) Water Treatment Plant. Successful firm selected by Webb County must provide construction management and operational phase services throughout the duration of this project in order to provide a timely and efficient start-up, support a safe, eco-friendly, and efficient operation with maximum lifetime facility performance. Firms must assist Webb County with all TCEQ regulatory guidance and compliance, assist Webb County in securing the necessary permits and establish any operational/procedural manuals required to run a Public Water System as per State and Local rules and regulations. This solicitation is in accordance with the Government Code; Chapter 2254 (Professional and Consulting Services) (Professional Services Act).

Modification to language:

Notice is hereby given that Webb County is seeking formal Qualifications from qualified Professional Engineers to provide assistance to Webb County in developing Requests for Proposals (or other procurement method, as determined by the Commissioners Court) and reviewing Responses to the Request for Proposals as to specifications and other design elements for this project so that Webb County may determine which Proposal provides the best value to Webb County including the efficiency and regulatory compliance of the Proposed system. The services to be rendered by the

selected Professional Engineer include, but are not limited to, assistance in developing scoring criteria, the review of specifications, compliance with regulatory requirements, efficiencies and analysis of submissions for the submitted proposals, in order to promote cost effective procurement, efficient construction, streamlined commissioning and start-up, and efficient operations of the Colorado Acres Reverse Osmosis (RO) Water Treatment Plant. The firm selected may additionally be requested to provide construction management and operational phase services throughout the duration of this project in order to provide a timely and efficient start-up, support a safe, eco-friendly, and efficient operation with maximum lifetime facility performance. Firms will assist Webb County to ensure all TCEQ regulatory guidance and compliance are met, ensure that the necessary permits and any operational/procedural manuals required to run a Public Water System as per State and Local rules and regulations are included and correct. This solicitation is in accordance with the Government Code; Chapter 2254 (Professional and Consulting Services) (Professional Services Act).

• The following language on page 4, section 3. Scope of Services is being amended as follows:

Original language:

3. Scope of Services

Selected Engineering firm will be required to provide concept and design phase services to provide accurate drawings, specifications and other design documentation for this project and not limited to the scope of services identified in this solicitation document. Preparation of construction documentation is also required to assist with the bidding process utilizing any permitted procurement delivery method approved by Webb County Commissioners Court and in accordance with State procurement rules, in order to promote cost effective procurement, efficient construction, streamlined commissioning and start up, and efficient operations of the Colorado Acres RO Water Treatment Plant. Successful firm selected by Webb County must provide construction management and operational phase services throughout the duration of this project in order to provide a timely and efficient start-up, support a safe, eco friendly, and efficient operation with maximum lifetime facility performance. Firms must assist Webb County with all TCEQ regulatory guidance and compliance, assist Webb County in securing the necessary permits and establish any operational/procedural manuals required to run a Public Water System as per State and Local rules and regulations.

Modification to language:

3. Scope of Services

The selected Engineering firm will provide assistance to Webb County in developing Requests for Proposals (or other procurement method, as determined by the Commissioners Court) and reviewing Responses to the Request for Proposals as to specifications and other design elements for this project so that Webb County may determine which Proposal provides the best value to Webb County including the efficiency and regulatory compliance of the Proposed system. The services to be rendered by the selected Professional Engineer include, but are not limited to, assistance in developing scoring criteria, the review of specifications, compliance with regulatory requirements, efficiencies and analysis of submissions for the submitted proposals, in order to promote cost effective procurement, efficient construction, streamlined commissioning and start-up, and efficient operations of the Colorado Acres Reverse Osmosis (RO) Water Treatment Plant. The firm selected may additionally be requested to provide construction management and operational phase services throughout the duration of this project in order to provide a timely and efficient start-up, support a safe, eco-friendly, and efficient operation with maximum lifetime facility performance. Firms will assist Webb County to ensure all TCEQ regulatory guidance and compliance are met, ensure that the necessary permits and any operational/procedural manuals required to run a Public Water System as per State and Local rules and regulations are included and correct.

Godin S. Hill