

Response to: RFP 21-R00077/PH

Design-Build of Lockhart Water Treatment Plant Expansion Project

Technical Proposal



Submitted to:

Hernando County
Purchasing & Contracts Dept.
15470 Flight Path Drive
Brooksville, FL 34604

Submitted by:

Archer Western Construction, LLC
4343 Anchor Plaza Pkwy, Suite 155
Tampa, FL 33634
813.849.7500 | www.walshgroup.com

Submitted as:

**Archer Western/Wade Trim
Design-Build Team**





#1 Builder of Water Treatment
Plants in U.S.

ARCHER WESTERN CONSTRUCTION, LLC

February 23, 2022

Toni Brady, Chief Procurement Officer
Purchasing & Contracts, Hernando County
15470 Flight Path Drive, Brooksville, FL 34604

RE: RFP 21-R00077/PH | Design-Build of Lockhart Water Treatment Plant Expansion Project

Dear Selection Committee Members:

Thank you for the opportunity to submit this proposal on the Lockhart Water Treatment Plant (WTP) fixed-price design-build expansion project. This important project will support Hernando County's growth in the region and offer additional resiliency. Archer Western Construction (Archer Western) has assembled a best-in-class team of local professionals to work with the County to achieve its goal—on time and on budget. Our team features Wade Trim, Inc. a long-time trusted partner of Archer Western, as the lead designer. The Archer Western/Wade Trim Design-Build Team is ready to hit the ground running to deliver this important project.

Archer Western is uniquely qualified for the lead role on this project based on our vast experience, available resources, and capabilities in the water sector. In the last four years alone, Archer Western has delivered or is delivering \$625 million in progressive design-build water/wastewater infrastructure projects. We have completed 300-plus design-build projects totaling more than \$20 billion and are consistently ranked as one of the largest design-build firms by Engineering-News Record. Our experienced design partner, Wade Trim, has completed \$1.2 billion in collaborative delivery projects and has a reputation for water infrastructure innovation.

Our companies share a commitment to maximizing the value of our clients' infrastructure investment. **The Archer Western/Wade Trim Design-Build Team's approach for this project incorporates an innovative solution to meet Hernando County's schedule, budget, and functionality demands.** The installation of a prefabricated high-service pump station will meet all building design requirements and reduce costs. This construction method will provide an unsurpassed schedule solution, cost-effective value, and reduced safety and quality risks for the project team.

Please accept the following change to the proposed Design-Build Team: Loderic Rose of Archer Western will be fulfilling the responsibilities for Schedule & Cost Controls (lrose@walshgroup.com; 404.569.4008; 4343 Anchor Plaza Parkway #155, Tampa, FL 33634). As a scheduler and assistant project manager for Archer Western with 8 years of experience, Loderic develops, oversees, updates, and communicates the project schedule to keep the design-build team on-track and apprised of any changes in the schedule.

Hernando County has the commitment of the entire team for the duration of this project—from selection to final commissioning of the improvements. The Archer Western/Wade Trim Design-Build Team is looking forward to partnering with Hernando County on this important project. We thank you again for the opportunity to improve the community while collaborating with the County on its first design-build.

Respectfully,

Duane Petersen, Vice President
Archer Western Construction
623.703.1362 | dpetersen@walshgroup.com

Thomas S. Brzezinski, PE, Executive VP
Wade Trim, Inc.
813.480.9000 | tbrzezinski@wadetrim.com

TABLE OF CONTENTS

- 3.4.1 OVERALL MANAGEMENT APPROACH 1**
 - Benefits of Our Approach 1
 - Understanding the County’s Goals and Objectives 1
 - Key Challenges 1
 - Case Study | Cosme WTP Lime Sludge Lagoon Improvements 2
 - Unique Resources 3
- 3.4.2 SUBCONTRACTOR PROCUREMENT APPROACH 3**
 - Approach to Challenges of Procuring Subcontractors and Subconsultants 3
 - Early Subcontractor Involvement 4
- 3.4.3 QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) 4**
 - Culture of Quality 4
 - Design Quality Assurance 4
 - Construction Quality Control 5
 - Four-Step Quality Program to Facilitate QA/QC 5
- 3.4.4 COMMITMENT TO SAFETY 6**
 - Culture of Safety Innovation 6
 - Case Study | Archer Western Safety Awards 6
- 3.5 PROJECT CONTROLS AND COST TRACKING 7**
 - Monitoring, Reporting, and Managing Cost 7
 - Change Control Processes 8
 - Risk Management Processes 8
 - Cash Flow and Billing Processes 8
 - Document Control System 9
 - Addressing the Challenges 9
- 3.6 COLLABORATION AND INTEGRATION 9**
 - Approach to a Collaborative Environment 9
 - Final Documents 10
 - Tools for Collaboration and Integration 10
 - Approach to Conflict Resolution 10
- 3.7 DESIGN DEVELOPMENT AND MANAGEMENT 11**
 - Design Management 11
 - Design Development Challenges 12
 - Value Engineering 13
 - Additional Value Engineering 13
 - Defining and Obtaining Design Commitment 15
 - Quality Control 15
 - Excellence in Design 15
 - Design Tools 16
 - Permitting Process 17
- 3.8 PROJECT SEQUENCING AND SCHEDULING 17**
 - Sequencing of Major Project Elements 18
 - Addressing the Challenges 19
 - Tools and Methods 19
- APPENDIX 21**
 - Attachment C - Proposal Form
 - Signed Addenda Nos. 1, 2, 3

TABLE OF CONTENTS continued

EXHIBITS

EXHIBIT 1 Long-Term Hernando County Goals to Consider	1
EXHIBIT 2 Strategies to Mitigate the Potential Negative Impacts of the Identified Challenges	2
EXHIBIT 3 Steps to Subcontractor Selection Process	3
EXHIBIT 4 Archer Western/Wade Trim Design-Build Team's QA/QC Reporting Relationships	5
EXHIBIT 5 Archer Western/Wade Trim Design-Build Team's Construction QA/QC Process	6
EXHIBIT 6 Archer Western/Wade Trim Design-Build Team's Safety Program	7
EXHIBIT 7 Archer Western/Wade Trim Design-Build Team's Reporting Processes	8
EXHIBIT 8 Benefits of the Archer Western/Wade Trim Team's Design-Build Experience	10
EXHIBIT 9 Plans and Process for Project Control	11
EXHIBIT 10 Archer Western/Wade Trim Design-Build Team's Collaborative Design Approach	12
EXHIBIT 11 Design QA/QC Control Process	14
EXHIBIT 12 List of Required Permits	17
EXHIBIT 13 Archer Western/Wade Trim Design-Build Team's Critical Path Methodology	19
EXHIBIT 14 Preliminary Project Schedule	20

3.4.1 OVERALL MANAGEMENT APPROACH

Hernando County is experiencing rapid growth. This forecasted growth requires new water sources for the eastern part of the water supply system, which is already

BENEFITS OF OUR APPROACH

- Speed (schedule)
- Cost-effectiveness
- Improved safety
- Improved quality
- Operational efficiency

feeling demand from various new developments, such as Trilby Crossing. In an effort to regionalize the County’s water supply and meet the future demands of this growing region, the Lockhart Water Treatment Plant (WTP) is a critical component to the County’s

Water Master Plan. After expansion, the Lockhart WTP will provide most of the supply for the eastern system.

Understanding the County’s Goals and Objectives

Understanding the County’s vision and objectives is imperative to project success. The design-build (DB) team must share this vision to develop the best plan. For this reason, our team includes Kris Samples, PE, as an advisor to provide critical insight into the decisions that were made during the conception of this project. Kris helped



Kris Samples, PE

develop the current Water Master Plan and understands the long-term goals for this facility, Exhibit 1. As Project Manager for the Design Criteria Professional, he worked directly with Hernando County staff to develop this project from conception and is committed to see it to completion if our team is selected.

Having Kris on our team eliminates the learning curve regarding the County’s long-term plans and allows us to move forward without a delay to learn the project background and history.

Our team will engage with County staff upon Notice of Award for feedback on the preliminary design included in this proposal. With this early feedback, we can quickly progress from conceptual to 60% for a delivery of the draft to the County at the Kickoff Meeting.

Key Challenges

To deliver this important project, we are committing a team of experts that combines nationally ranked technical knowledge with a superior understanding of both the DB delivery method and the County’s expectations. Exhibit 2 lists some of our proposed strategies to mitigate these key challenges. Although there are many aspects to a project of

EXHIBIT 1 Long-Term Hernando County Goals to Consider

In addition to current demand, the Lockhart WTP must meet the needs of future system modifications identified in the current water master plan.

2025

- + **TRILBY CROSSING TRANSMISSION MAIN** (in progress)
- + **I-75 CROSSING, TRILBY TO KETTERING ROAD TRANSMISSION MAIN** | I-75 crossing and extensions to Kettering Road to eliminate the Ridge Manor EST and north to Cracker Crossing for looping; 10,800 LF of 12-inch water main
- + **CORTEZ BOULEVARD WATER MAIN IMPROVEMENTS** (in progress)
- + **RIDGE MANOR WEST WTP IMPROVEMENTS** | Complete well RM-W2R as a back-up for the WTP, including 350-GPM well pump, well house, and standby power generator

2030

- + **I-75/SR 50 PLANNED DEVELOPMENT DISTRICT LOOPING** | Includes 13,800 LF of 16-inch water main
- + **RIVER CROSSING TRANSMISSION MAIN** | River crossing redundancy; 17,600 LF of 12-inch water main
- + **SUNRISE WATER TREATMENT PLANT** | New 0.5-MGD WTP including a 16-inch-diameter well with a 350-GPM well pump, hydro-pneumatic tank, chemical feed system for disinfection, site work, electrical and instrumentation systems, and yard piping. Location of the Sunrise WTP will need to be coordinated with the proposed Sunrise Development.

2035

- + **LOCKHART ROAD TRANSMISSION MAIN SOUTH** | 10,600 LF of 12-inch water main

this complexity, we have identified three critical elements.

Mitigate Change Orders and Maintain Project Budget

In a market saturated with cost increases, our team is committed to delivering this project within the established budget set by the County, which is reflected in our fixed-price proposal (provided separately). We have identified several cost-saving and innovative options to reduce project costs, improve safety conditions, expedite schedule, and mitigate future potential change orders. The options are described in detail in our design approach, page 12.

In addition to the opportunities specific to this project, Archer Western uses a variety of reporting processes, as described in Project Controls & Cost Tracking, page 7. This is further supported by Design-Build Manager Bob Bruner, who has completed more than 50 design-build projects within the last 20-plus years and has a reputation for delivering within established project budgets.

Project Timeline and Schedule

The Lockhart WTP facility expansion must be online by 2025 to comply with the current Water Master Plan, which includes operation of this facility and the decommissioning of the Ridge Manor facility by 2025. It's the DB team's responsibility to have the Lockhart WTP facility online to meet this deadline. As discussed in this approach and shown in our proposed schedule, the Archer Western/Wade Trim Design-Build Team proposes the following methods to meet the aggressive design schedule.

Engage in Design Upon Notice of Award | According to the RFP schedule, this would increase our design development duration by approximately 65 days. This plan includes delivering a draft 60% design package at the project kickoff meeting, days after Notice to Proceed (NTP).

Prefabricated Components | Our innovative approach also includes providing a fully prefabricated high-service pump

EXHIBIT 2 Strategies to Mitigate the Potential Negative Impacts of the Identified Challenges

- + **NO CHANGE ORDERS** | Once our team is selected, we will request a scope meeting to ensure complete alignment with the County and evaluate value engineering opportunities to improve the overall benefits of the project.
- + **MAINTAIN BUDGET** | The biggest risk to budget will depend upon the existing soil conditions and if the ground storage tank requires deep foundations or soil improvements. The County has elected to carry contingency for this item. A geotechnical investigation will be conducted to confirm the County's assumption that improvements are not required upon Notice to Proceed.
- + **TIMELINE/SCHEDULE** | Our team has a dedicated controls/schedule manager, Loderic Rose, who will monitor and challenge the team from day one.
- + **TIMELINE/SCHEDULE** | Prior to contract, we will negotiate terms and conditions for all long-lead items to ensure our schedule is achieved.
- + **COUNTY'S FIRST DESIGN-BUILD PROJECT** | We will build on our team's long history of DB delivery and our team members experience working together to coach the County on best practices and expectations throughout the process, starting with our initial Kickoff Workshop.

station and Well #3 buildings to successfully deliver this project within the demanding timeframe. Early engagement with stakeholders will allow the design and fabrication of these facilities to be accelerated while other components progress in a timely fashion.

Project Delivery and Availability

We understand this is the County's first design-build project and we are committed to its success. This project is an opportunity for Hernando County to experience the DB



CASE STUDY | COSME WTP LIME SLUDGE LAGOON IMPROVEMENTS

Archer Western supported the City of St. Petersburg in disposing of lime sludge from three existing lime sludge lagoons at the Cosme Water Treatment Plant while incurring **no change orders**. The scope of work included removal and disposal of 85,000+/- CY of the lime sludge, reshaping and adding slope protection, removal and replacement of two concrete outfall structures per lagoon (6 total), installation of 6-inch inlet piping and concrete pads, cleaning of outfall ditch, cleaning of existing filter lagoons, and various other improvements. The project also included addition of a protection berm along the perimeter of the northeast sludge lagoon.

“Archer Western has done an outstanding job on our Sludge Lagoon Rehabilitation Project. They have been flexible, responsive, communicative, and quality conscious. They are now my go-to contractor.”

—Victor A. Gregory Jr, Cosme WTP Maintenance Supervisor, Water Resources Department, City of St. Petersburg

process and build knowledge for future projects. Our team members have a combined total of 100-plus DB projects, many with municipalities executing their first design-build.

Our team's successful track record together dates back 20 years and includes current design-build projects such as Lift Station 87 for the City of St. Petersburg. This lift station project is also a recent example of successful collaboration between team members Archer Western, Wade Trim, and Mead & Hunt.

Our delivery approach will include opportunities to collaborate with the County to ensure guidance and insight every step of the way. Workshops focusing on collaboration and timely decisions include 1) Kickoff and Alignment Workshop at NTP, 2) Prefabricated High-Service Pump Station Design Review, 3) 60% Design Review, and 4) 90% Design Review.

Team availability is always an important component of a project's success. Our team is dedicated to serve the County in the capacity illustrated on our organization structure. We are the only team that offers direct experience without any active contracts with the County. We commit our resources to this project for its duration.

Unique Resources

In addition to the County Master Plan knowledge Kris Samples brings to our team, we have recent relative experience on similar projects that makes our design team uniquely qualified for this project. Our recent work for the Seminole Tribe of Florida chemical facility, the Cosme WTP high-service pump station and chemical facility, the FGUA Plantation Bay nano-filtration and chemical facility improvements, and our long history of water treatment infrastructure projects in Florida give us the knowledge and creative experience to assist the County in achieving its goals. Lastly, as one of the industry's leading design-build teams, we have the knowledge and experience to assist the County in completing its first DB project successfully.

3.4.2 SUBCONTRACTOR PROCUREMENT APPROACH

The Archer Western/Wade Trim Design-Build Team members have long-standing working relationships with subcontractors and subconsultants in the region. Our approach includes conducting a thorough prequalification process during procurement, elimination of scope gaps through clear documentation, and establishing accurate schedule requirements and concise bid package formats that promote competitive bids. This begins with breaking down the scope of work into bid packages to expand potential contractor participation. Next we will identify the most qualified subcontractors to perform the work. These bid package opportunities will provide Hernando County with the best value while maximizing subconsultant participation.

Approach to Challenges of Procuring Subcontractors and Subconsultants

Our team includes subconsultants strategically selected to provide necessary expertise, as shown in our qualifications submittal. In addition, our team has added essential subcontractors to the team during the RFP process. These subcontractors are supporting our fixed price development, which improves our design in the proposal process. These subcontractors will cover critical scopes such as pre-stressed concrete ground storage tank, electrical, and I&C. Additional subcontractors will need to be selected at different phases of the project based on project needs.

Current market conditions make selecting a subcontractor more challenging on most projects across the Tampa Bay Region. A hot construction market, labor shortages, and supply chain issues due to the Covid pandemic have placed a great deal of stress on subcontractors. As we discuss in our approach, our strategy to install a pre-fabricated precast high-service pump station will significantly reduce the challenge of subcontracting with a variety of building trades, an area that has seen the biggest challenges due to Covid impacts. Additionally, the availability of Archer

EXHIBIT 3 Steps to Subcontractor Selection Process

PREQUALIFICATION

- + Safety record
- + Past performance
- + Quality and reputation
- + Claims history
- + Solvency
- + Bonding capacity

BIDDING

- + Invite 3-5 bidders
- + Provide bid docs
- + Verify full scope capture
- + Interview qualified subs
- + Receive team input
- + Award sub

POST-AWARD

- + Verify quality daily
- + Monitor safety protocol
- + Track schedule
- + Grade performance
- + Review results
- + Hold accountable

CONTINUE ASSISTANCE AND MENTORING

- + Make timely payments
- + Provide eng/tech assistance

Report progress to Hernando County

Western's 350-plus craft personnel in the Tampa Bay region and our relationships with local workforces offers assurance to the County of our ability to overcome these challenges and meet the project schedule.

All subcontractors proposed for this project will be prequalified, selected, and under contract prior to the NTP. We will begin subcontracting efforts as soon as the Archer Western/Wade Trim Design-Build Team is selected by the County for this project. Early negotiations and alignment with all subcontractors will position us to exceed your schedule expectations. Exhibit 3 shows an overview of our subcontractor procurement process.

Early Subcontractor Involvement

Our proposal unquestionably leverages the benefits of design-build/design-assist subcontractors—schedule, safety, quality, and cost—to you, the client. The following are three major scopes of work where we propose driving the benefits and value of the design-build delivery method:

2MG Ground Storage Tank | We propose a design-build subcontract for a pre-stressed concrete tank. Using a specialty firm to take the storage tank design parameters and deliver a turn-key design-installation increases our team's resources, which translates to efficiency and reduced cost to the client.

Pre-Fabricated Pre-Cast High-Service Pump Station | This scope includes a design-assist vendor to provide a completely functional pump station that meets all the requirements of the DCP. The pump station will be constructed in a controlled environment and delivered to the project site ready for installation. As part of our proposal efforts, we have completed approximately 40% design of this system. Design progression of the high-service pump station will be swift once all stakeholders have provided input and comments during our kickoff and high-service pump station design review workshops. Taking this recommendation will result in early approval and release of this critical scope component, which ultimately accelerates the schedule and saves money.

Electrical | We have engaged a strategic partner to support the design and electrical installation for a more cost-effective solution. Miller Electric will ensure the new generator/automatic-transfer-switch package is released and delivered as needed to meet the schedule.

We are familiar with the proposed methods and will leverage effective processes for integrating these critical project partners into our design-build team. To ensure effective communication among all team members, we will use virtual communication and document-sharing platforms such as a SharePoint during design to share files

and facilitate/document comments. In developing AutoCAD and other drawings, Wade Trim will utilize a secure cloud-based CAD/BIM storage and access system to share documents with the team. The design team will conduct weekly meetings to coordinate needs among disciplines and keep everyone focused on quality deliverables and the overall project goals.

3.4.3 QUALITY ASSURANCE/ QUALITY CONTROL (QA/QC)

Culture of Quality

Both leading member firms of the Archer Western/Wade Trim Design-Build Team have cultures of quality that will be consciously upheld on this contract. The result of our QA/QC measures will be a complete facility that not only meets budgetary goals but also provides value in length of reliable service and a sustainable and functional safe working environment. By establishing effective quality controls, employing a quality assurance process for design deliverables that includes a rigorous review process (the right reviewers at the right time), and following through with timely and appropriate quality checks and inspections, we will exceed your performance expectations as well as meet the goal of ZERO CHANGE ORDERS for this project.



Design Quality Assurance

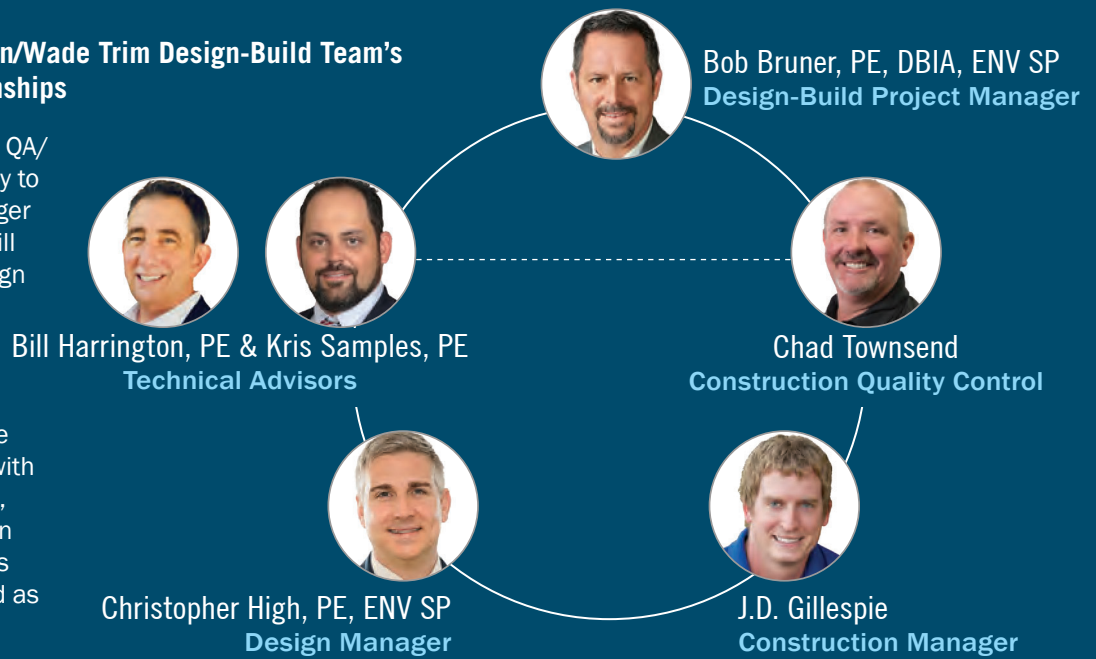
The design QA/QC process will be centered around the overall Quality Control Plan (QCP). The QCP includes a robust process with internal quality processes for each design task. We offer more details on our design QA/QC process in section 3.7 Design Development and Management, page 14.

Our overall approach for managing design quality is strengthened by our two Technical Advisors, Bill Harrington of Wade Trim and Kris Samples of Mead & Hunt. Bill and Kris will be actively involved in the design quality assurance process, providing guidance to the design-build team on the County's goals for the Lockhart WTP in terms of operational efficiency and sustainability.

Bill Harrington is a seasoned leader of design teams engaged in providing solutions for facilities like the Lockhart WTP. He will provide expert direction and assurance of resources to the design team during every phase of project planning and design. Kris Samples was DCP Manager for the Lockhart WTP while at McKim & Creed. His knowledge of the facility and relationship with the County's O&M staff is unmatched. He brings valuable insight into the Lockhart plant's operations

EXHIBIT 4 Archer Western/Wade Trim Design-Build Team's QA/QC Reporting Relationships

Chad, Bill, and Kris are our QA/QC leads and report directly to Design-Build Project Manager Bob Bruner. Bill and Kris will work closely with both design and construction staff to ensure the plan details are accurate and documented. Bill, Kris, and Chad will communicate with each other and work with Chris High and JD Gillespie, our design and construction managers, to ensure issues are discussed and resolved as needed.



and understanding of Hernando County's standards and expectations, as well as more than a decade of designing systems for similar facilities.

Construction Quality Control

Construction Quality Control Manager Chad Townsend will work closely with design QA leaders Bill and Kris and our Design-Build Team leaders (Project Manager, Design Manager, and Construction Manager) during project planning and design to develop and integrate a plan for managing quality throughout construction. Chad will develop the project-specific Quality Control Plan (QCP) and oversee compliance with the plan during every project phase. Our QCP will address all elements to achieve Hernando County's requirements, codes, standards, and objectives that are applicable to this project.

As shown in Exhibit 4, Chad reports to Archer Western's Florida Water Business Group Leader, Bob Bruner, empowering him to oversee the quality control process for the entire project. Chad has the authority to enact all quality control procedures and issue stop-work orders if required. He is a senior level professional who collaborates with the Design-Build Project Manager, Design Manager, and Construction Manager to oversee and direct all aspects of the project. Relying on his 16 years of construction experience and USACE certification in quality management, Chad will coordinate inspections, testing, and other QC tasks with the County and plant staff. He will ensure the work is performed in accordance with the plans and specifications and to the County's satisfaction.

Four-Step Quality Program to Facilitate QA/QC

Based on successful experience with this approach, the Archer Western/Wade Trim Design-Build Team will employ

a Four-Step Quality Program for the project. This program provides a structure for addressing all design, construction, and operations elements relative to the Lockhart WTP Expansion. Exhibit 5 illustrates the four steps of the program. As a design-build team, we work closely together throughout the overall project to ensure a comprehensive approach that is of high quality, operable, maintainable, constructible, and within budget. Our program includes:

- Clearly defining and establishing a plan that lists QA/QC procedures to meet project requirements, and documenting in the Quality Control Plan how work will be performed for all individual work elements
- Providing high-level independent technical reviews
- Monitoring QCP delivery and making adjustments as requirements change
- Complying with the County's requirements and expeditiously addressing any non-compliance concerns
- Checking and reviewing all work products in a systematic way
- Obtaining and addressing satisfaction feedback from the County, and delivering on any requested improvements

Our team will conduct early and effective planning to foster on-time completion and meet the County's goals. We will develop a project-specific Quality Control Plan defining QA/QC procedures, responsibilities, responsibilities, and milestones based on the County's process and standards. The QCP will be prepared by our team's Quality Control Managers, DB Project Manager, Design Manager, Construction Manager, and the key technical staff leading each scope of work assignment. **Our team will implement three levels of continual quality control—preparatory, initial, and follow-up.**

Preparatory | With the County, the design discipline engineers, consultants and subcontractors, and construction work leaders, we will confirm quality standards, identify materials and equipment requirements, complete shop drawings, and develop the work plan and testing components.

Initial Inspection | We will conduct an initial facility inspection and establish a standard of workmanship for the project while defining each individual work component. We will meet, test, inspect, and communicate the expectations with the construction team and the subcontractors.

Follow-up | Our dedicated Quality Control Manager and project leaders will verify completion and integration of all elements gained through the preparatory and initial inspection phases. Our design-build team leaders meet with all project staff, including subcontractors, to mentor and train them on our quality control processes.

In accordance with the accepted QCP, all deliverables will be subject to our rigorous internal quality review/audit procedures. After internal review procedures are complete, the project management team will submit all deliverables in draft/final format to allow the County to review and comment on the work products. We will tabulate and track all review comments and define a resolution for each before final submittal of the deliverables.

Quality is a core value at Archer Western and our client's projects are our legacy. We take pride in our work and will take steps to deliver a quality product for Hernando County.

EXHIBIT 5 Archer Western/Wade Trim Design-Build Team's Construction QA/QC Process



3.4.4 SAFETY

Safety is fundamental to everything we do. Protecting the lives of our clients, employees, subcontractors, and the public is a value that guides our design-build team's philosophy. Our project leaders recognize their responsibility to establish and maintain an exceptionally safe worksite for Hernando County staff and stakeholders, plant operators, our work crews, our subcontractors' crews, and all visitors to the Lockhart WTP. Our team's commitment to safety is based on Archer Western's thorough safety management program and simple safety credo: No One Gets Hurt. An overview of our company safety management program is illustrated in Exhibit 6.

We will bring this culture of safety to the Lockhart WTP Expansion Project through dedicated safety oversight, a clear and documented safety plan, training for all team members and work crews, constant reviews of safety protocols and work practices through regular meetings and onsite toolbox talks, and diligent tracking and reporting of the team's performance against mandated safety procedures. **Our safety plan will be specific to this project and apply to ALL project team members.**

Culture of Safety Innovation

Stretch and Flex | Every craftsperson on our project starts the day with a 15-minute group stretch-and-flex activity. The simple act of stretching tight muscles and joints prior to work has a dramatic reduction in jobsite injuries due to activity. Flexibility improves safety and production.

Craft Leadership in Safety (CLS) | All jobs, big or small, will implement a version of this frontline communication tool. Volunteer CLS members will meet weekly with the PM to voice anonymous concerns of fellow craft persons. The PM

CASE STUDY | ARCHER WESTERN SAFETY AWARDS

- + BEST PROJECTS OF 2021, Water & Wastes Digest | J.E. Quarles WTP Plant 1 Replacement, Marietta, GA
- + 2021 WATER TREATMENT PROJECT OF THE YEAR, Arizona Water Association | Thomas Groundwater Treatment Facility, Scottsdale, AZ
- + 2020 BEST INTERSTATE PROJECT, Florida Transportation Builders' Association | I-95 Rigid Pavement Reconstruction, Miami, FL
- + 2018 ENR REGIONAL BEST PROJECT-WATER/ ENVIRONMENT AWARD OF MERIT, ENR Southeast Region | South Cobb Emergency Services Contract (Tunnel Pump Station), Austell, GA
- + 2019 DBIA NATIONAL AWARD OF MERIT | Northwest Corridor Express Lanes, Atlanta, GA
- + 2018 ENR REGIONAL BEST PROJECTS, ENR Southeast Region | Miller Pump Station/Picayune Strand Restoration, Naples, FL
- + 2019 BEST IN CONSTRUCTION AWARD, Florida Transportation Builders' Association | Miami Tamiami Canal Bridge Replacement, Miami, FL

will be responsible for addressing each item and additional action when needed.

Safety Awareness Week | Archer Western, along with more than 40 other national contractors, co-sponsor an industry-wide construction Safety Week in May every year. During that week, every one of our projects participate in activities to raise safety awareness. When everyone on the project is committed to safety, the opportunity for success increases. Safety Week creates ways that leadership can celebrate safety performance and celebrate workers. This partnership shows the true spirit for which we all believe in safety and support for the health and well-being of our industries work force. Ownership and the business group leaders are truly excited about this national effort to increase safety awareness and actively caring across the entire footprint of the Walsh Group.

Review Employee's Actions & Performance (REAP) | Archer Western created this review process to support the philosophy that safety is never sacrificed for production or cost savings. Rather, we approach safety as a vital part of our overall operations. REAP empowers supervisory personnel to actively lead our safety initiatives. Each of our supervisors attend a REAP training program, where they learn and develop the necessary communication skills to manage the jobsite Safety Program. REAP training teaches how to focus our supervisory skills on the unsafe acts (employee behaviors), and safety conditions (job conditions) that prevent us from reaching our shared goal of working injury and incident free. This focus reinforces safe behaviors and conditions and leads to eliminating and preventing the re-occurrence of unsafe acts and conditions.

Prefabricated Pump Station | Not only does this innovative idea improve the overall schedule, quality, and cost of this project, it also enhances safety on the site. Having the high-service pump station facility constructed in a remote, controlled environment dramatically reduces the safety risks associated with constructing a station on site.

3.5 PROJECT CONTROLS AND COST TRACKING

Monitoring, Reporting, and Managing Cost

Rapidly advancing information technology continues to change the way water treatment facilities are designed and built. Our suite of tools fully integrates Building Information Modeling (BIM: technology used to create 3D design models) with construction schedule and cost data to create a fully virtual environment. Beginning at project planning, the project model is created from existing conditions with design information and related schedule and cost data.

EXHIBIT 6 Archer Western/Wade Trim Design-Build Team's Safety Program



Educate

- + Safety orientation
- + Safety huddles/toolbox talks
- + Core safety training
- + Certifications
- + Mandatory management training

- + Project Management, Superintendents, and Foreman Construction Training: OSHA 30-hour, CPR/BBP/FA, and Crane Awareness
- + O+M Staff Training: OSHA 10-hour, OPR/BBP/FA, Competent Person, and Defensive Driving



Plan

- + Job Hazard Analysis
- + Design alternatives/engineering solutions
- + Supplemental safety plans
- + Site assessment utility locating



Implement

- + Task Hazard Analysis
- + Stop, Think, Assess, Review, Talk (START)
- + Personal Protective Equipment
- + Pre-activity checklist equipment, hoisting, excavation)



Monitor

- + Review Employee Action and Performance (REAP) program
- + Safety audits
- + Safety committee
- + New employees (blue hardhat, one-on-one orientation)



Review

- + Documentation/trend analysis
- + Safety audits
- + Post-incident investigation
- + Lessons learned

Our EMR rating is among the best in the industry

2021 EMR

0.60

As design alternatives are developed and evaluated, the overall project cost and construction schedule implications can also be assessed. As design progresses, the cost and schedule data in the model are likewise developed in detail and tied to each project element.

From the moment we begin building our estimate of construction costs to support early decision making, cost data will be fully integrated with our design in the integrated model. We will use the forecasting and cost capture functions to produce costs to date and forecast remaining costs. We will provide the County with the financial status of the project at regular reporting intervals throughout design and construction phases. Several of our controls tools are shown in Exhibit 7.

Change Control Processes

Our team’s approach identifies issues, assesses impact, and facilitates decision making to make sure work efforts are coordinated and schedules remain up to date. Potential problems will be identified early, discussed, and resolved in a timely fashion. Because the success of this project hinges on early understanding of the potential for long lead procurement equipment, the Archer Western/Wade Trim DB team has begun to develop a plan for long lead equipment and their schedule impact in relation to labor resources and subcontracting efforts, ancillary material needs, and operations impacts during construction and potential maintenance of operations tie-ins. The plan will be further developed to incorporate project cost, quality, operating cost, and maintainability through our team’s interactive decision process. From this evaluation, an early procurement strategy is developed and executed. The project schedule is developed and maintained as the project roadmap, progress compared to baseline and adjustments made as needed and at the appropriate time, so that milestone dates are completed without delay.

Because of our extensive history delivering collaborative projects, our project team offers relevant experience in schedule development, maintenance, communication and control. Our approach to project schedule and critical path management is the application of the following tools:

- Primavera P6 software for creation and maintenance of project schedules
- Face-to-face and virtual planning meetings
- Plan-of-the-Day and Three-Week look-ahead schedules
- BIM360 software will be used for document control to track project costs, technical inquiries, submittals, subcontracts, purchase orders, NCRs, RFIs, and other correspondence
- Value engineering workshops during project planning

Our scheduling procedures are innovative and integrated,

EXHIBIT 7 Archer Western/Wade Trim Design-Build Team’s Reporting Processes



Cost reports indicate actual and estimated costs compared to GMP



Cash flow reports forecast anticipated monthly invoices to final completion



Production trend charts compare planned actual rate of work



Contract/scope review confirms performance expectations



Daily quantity reporting with cost tracking assess productivity



Detailed payment applications by subcontractors confirm delivery of contracted scope

centrally linking every aspect of the work from quality to communications, and from safety to risk management.

Risk Management Processes

Early identification and resolution of risks during planning and design stages is essential to mitigating conflict during construction. Our process will include:

- Collaborating with the County and advisors
- Identifying key risk factors
- Developing a Risk Register (managed by Construction Manager JD Gillespie)
- Documenting the process for managing and preventing conflicts for duration of the project and including this in our project work plan

It is critical for the project team to identify potential risks and develop a strategy to eliminate or reduce the impact to the project if risk becomes reality. Identified risks must be communicated to the client so that collaborative and effective solutions can be implemented. An example of risk management is the unknown soil condition for the ground storage tank. The County understands that they are best suited to manage this risk.

Cash Flow and Billing Processes

Once awarded the project, our Project Manager will develop an acceptable schedule of value (SOV) to assist with measuring progress of the work activities and invoicing

the County. The SOV will be a detailed breakdown of the project, including all design, permitting, procurement and construction activities. Our Project Manager will review progress billings monthly to ensure alignment and verify cash flow remains on target.

Document Control System

We use the powerful tool BIM360 for all our document control needs, software to track project costs, technical inquiries, submittals, subcontracts, purchase orders, NCRs, RFIs and other correspondence. It also allows instant access to updated documents to our entire team, which allows them access with smart phones, tablets, and other portable devices. This software keeps all parties connected and up to date, making life much easier when managing swift moving design build projects.

Addressing the Challenges

Project Controls and Cost Tracking present their own unique challenges. The Archer Western/Wade Trim Design-Build Team has successfully addressed these challenges for two decades on similar projects across the country, constantly improving our methods. This experience has created a strong partnership that will bolster communications throughout the project. Our Project Controls Plan (PCP) addresses the challenges from multiple angles.

Our team includes **full-time Controls Manager** Loderic Rose as a dedicated resource for managing, monitoring, and updating the budget and schedule to keep the project on track. Loderic's primary responsibility to the team is managing and tracking project costs and projections, as well as continuously managing the schedule to assist the team in meeting the goals. He will be an indispensable part of the team, ensuring we harness the power of the P6 scheduling software as well as driving the accountability of decisions that impact the schedule. He will work with the other design-build team leaders to confirm and update the accuracy of the project schedule, provide weekly schedule updates to the team, provide progress reports to stakeholders, assist with day-to-day scheduling, and alerting the team immediately of any schedule slippage.

- **Timely procurement and release of long-lead equipment**, including the prefabricated high-service pump station, is critical to project success. Our design team, working collaboratively with Archer Western and the County, will focus design efforts to ensure critical manufactured equipment can be procured as soon as possible.
- **The vendor submittal process will be collaborative and accelerated.** The project schedule does not afford the team the typical 21-day timeframe for the designer to review and respond with comments on submittals. We will have submittal workshops, including the vendor,

during the heart of the procurement process to ensure submittals can be moved to "approved" swiftly, saving valuable time.

- **Planning for maintenance of operations and tie-ins** to ensure system operations are continuous and any impacts during construction are minimized to not delay the project.
- **Our team is committed to avoiding change orders.** We are experienced with and understand this is a fixed-price proposal. The County can be assured that we will not seek change orders for the scope and schedule as defined in this RFP.

Our team's approach to developing and implementing the budget and schedule for the project is founded on close communication between the County, your advisors, and our entire design-build team.

3.6 COLLABORATION AND INTEGRATION

Approach to a Collaborative Environment

We have assembled a seasoned, experienced, and integrated team to partner with Hernando County to deliver the project as described and meet the desired goals. **Throughout the design process, our staff will frame the relevant information and collaborate with you and all other stakeholders to allow the team to make important informed decisions effectively, efficiently, and TOGETHER.** We are committed to the collaborative, open, transparent environment the County has included as a primary goal.

Our team includes people who understand and have experienced the value, synergy, and benefits of a cohesive team. **The team and stakeholders associated with this project are a valuable resource and our goal is to integrate them every step of the way, including water treatment SMEs, construction professionals, funding experts, permitting experts, and operations staff.**

Archer Western's in-depth experience has taught us that communication and teamwork are the cornerstones to making the design build process highly collaborative and ultimately successful. To establish and maintain a collaborative atmosphere and relationship, there must be a foundation of trust, communication, and transparency. Our team will work in partnership with the County to foster these items throughout the project. Exhibit 8 illustrates several of the ways our experience can benefit the County.

It is essential to engage all stakeholders and decision makers early in the collaborative process. We have a

EXHIBIT 8 Benefits of the Archer Western/Wade Trim Team’s Design-Build Experience



Timely
Reviews



Clear
Communication



Schedule
Certainty



Budget
Certainty



Maximize
Value



Reduced
Risk



Improved
Quality



Deliver
Project Goals

defined plan to engage and incorporate all stakeholders throughout the project. Our process includes:

Kickoff Meeting & Alignment Workshop | Our team needs to fully appreciate each stakeholder’s expectations and drivers for this project. This kickoff session will include the Archer Western/Wade Trim Design-Build Team, the County, and other stakeholders (i.e., permit agencies), allowing us to get to know each other, discuss and buy in on the overall goals of the project, gain a level of understanding and respect, and promote candid dialogue. This session will lay the foundation for building trust and establishing open honest lines of communication and developing transparency with all team members.

Design Workshops | Gathering all the stakeholders in a room for face-to-face discussions regarding the operational and functional needs of the facility, will harness the collective knowledge and collaborative power of the team, while keeping everyone’s goals in alignment. The following design workshops are strongly suggested, and we will work with Hernando County and the County’s team to develop the final list of workshops.

- Kickoff Workshop (Conceptual Design & Schedule Review)
- Prefabricated High-Service Pump Station Design Review
- 60% Design & Schedule Review
- 90% Design & Schedule Review

Weekly Meetings | Based on our experiences on fast paced projects, weekly virtual coordination meetings during design development promotes team accountability, efficiencies and innovation, swift adaptation to changes, and early solutions to anticipated challenges. These well-defined agenda-driven meetings provide tremendous benefit to achieving the overall project goals.

All team members will be engaged from project kickoff through project closeout. Continuous involvement of team members results in a reliable, cost-effective project that meets the County’s needs. Our process ensures the County remains in the driver’s seat throughout the design-build process, deciding the project’s specific priorities. As the County’s partner in this process, we will make each priority successful while maintaining the right balance between value, performance, and cost.

Final Documents

On completion of the Lockhart WTP Expansion Project, our team will update the County’s GIS system and hydraulic model with the locations of the horizontal and vertical assets using GPS coordinates recorded during construction for as-built development. This will include all pertinent asset information such as valve and equipment ID tags, material, size, O&M recommendations, and manufacturer cutsheets. **Incorporating this information into the County’s GIS system will improve record-keeping and streamline future O&M activities for operators.**

Tools for Collaboration and Integration

With the effects of Covid, teams have become more comfortable sharing information using Microsoft Teams and other sharing sites, in addition to Bluebeam and Sharepoint, which were already commonly used. However, when acceptable, we will meet to collaborate in person.

Approach to Conflict Resolution

By establishing a collaborative atmosphere, in which Trust, Communication and Transparency are the foundation of the relationship, conflict resolution becomes part of the team dynamic. In every project, there will be differences of opinions, challenges to the plan and/or issues that must be addressed to enable the team to move forward. With the foundation in place, the approach becomes quite simple—when a conflict arises, address the issue directly with the appropriate stakeholders by sharing all relevant information transparently. Typically, swift resolution to the issue can be achieved when remaining focused on the common goals of the project.

If issues remain unresolved, we promote the one-week rule. If there does not appear to be a pathway to resolution after one-week of working collectively, openly, and diligently to solve, then the issue should be elevated to the next level of project leadership for each stakeholder. The one-week rule shall apply until a pathway to resolution is achieved.

3.7 DESIGN DEVELOPMENT AND MANAGEMENT

The development of the design sets the stage for a successful project. During the design phase, our team will facilitate critical input from all stakeholders, including our construction team partners, Hernando County staff, and the agencies issuing the permits. The input and dialogue from each stakeholder will be unique and it's important our team address each appropriately to ensure a final design product that meets the Owner's expectations.

Our team includes Meade & Hunt staff who have previously worked with the County on the project's original scope development. We will leverage their hands-on knowledge and working relationships for a quick start to the design process. As shown in our design documents (submitted separately), our team has conceptually advanced the design to demonstrate our strong understanding of the project and existing conditions.

Design Management

The Archer Western/Wade Trim Design-Build Team will develop a project management work plan that identifies the design objectives, task details, and key elements of our project controls system. These items will help us define schedule/milestones, team member responsibilities, document control and communications protocols, QA/QC requirements, and a risk management plan and risk-register. We will identify, document, communicate, and measure Hernando County's desired outcomes in weekly meetings with the County's project team. Our team will use the project control process in Exhibit 9 to effectively monitor, track, and clearly communicate the project design progress to Hernando County to allow for effective decision making.

While working to progress the design, the Archer Western/Wade Trim Design-Build Team will continue to engage Hernando County to receive full input and understand comments and expectations. All comments on each design milestone deliverable will be collected and documented during review workshops to minimize the chances of miscommunication and maximize the opportunity to communicate expectations. We will use a Comment Resolution Report (CRR) to document and track all comments and resolutions and verify each of the County's comments are addressed. An overview of our design process is shown in Exhibit 10.

Field Investigations/Survey

As part of the early design development, our team will gather existing facility information. We will utilize the design information compiled as part of our proposal efforts and

EXHIBIT 9 Plans and Process for Project Control



Document Control Plan (DCP) will address documents using an internal and external web portal for ease of transferring, reviewing, and storing information



Project Schedule using Primavera 6.0 schedule software will be updated monthly to track Phase I design resources, deliverables, and the status of action items (a preliminary project schedule is included at the end of Section 3.8)



Project Communications Plan will detail all communication protocols



Monthly Reports accompanying our invoice will be the primary tool for tracking and communicating project progress and critical design issues



QA/QC Program will ensure an effective quality control program to assist all team members in producing quality design deliverables

discuss the various proposed project details with Hernando County and McKim & Creed (Design Criteria Professional) being sure to engage operations and maintenance staff. We will discuss the logistics of operating the distribution system during construction and the short outages required to add new connections and systems. We will work with Hernando County to evaluate potential construction sequencing and techniques, including any advantages and disadvantages as they may apply to the project.

Detailed Design - 60%

Our team will be ready to advance our proposed design concept to 60% immediately. This approach will afford input from the County, Value Engineering considerations, and a draft 60% design development prior to NTP. Our team will deliver a draft 60% design package to the County as part of our project kickoff meetings. The County staff will have a minimum of one week to review, provide comments, and ask for clarifications. Each deliverable will be followed by a design review workshop and every review comment and proposed resolution will be documented in the CRR.

During 60% design development, we will refine any design calculations, update data sheets and design

EXHIBIT 10 Archer Western/Wade Trim Design-Build Team's Collaborative Design Approach



deliverable schedules, and discuss construction sequencing requirements and operation and maintenance considerations. Our QA/QC process will engage our construction team during each iteration so that constructability reviews are documented and the cost model can be further established. We will also engage Hernando County (and McKim & Creed, as necessary), the permitting agencies, and any other key project stakeholders so that the final design represents the county's intent and operational preferences and meets permitting agencies local interests. Permit applications will be finalized and submitted to the appropriate reviewing agencies once the design is complete.

Final Design (90% and 100%)

The final design phase includes 90% and 100% design. Through these iterations, Wade Trim will continue to coordinate closely with Hernando County and respond to the County's comments and expectations. The 90% and 100% deliverables will include front end documents, drawings, specifications, cost estimates, construction schedules, permits, staging drawings, and O&M manual requirements. The enhanced specifications will include requirements to allow for acceptable suppliers/manufacturers identified in the RFP and/or proposal documents to facilitate a efficient construction process that will ensure value for the County during the construction phase. Each comment will be collected and discussed during review workshops to minimize the chances of miscommunication and maximize the opportunity to communicate expectations. As with previous meetings, the CRR will be used to document all comments and final resolutions. We will progress the design from 60% to 90%; once 90% is accepted, final design will proceed.

All permit applications will be finalized and submitted to each permitting agency concurrent with the delivery of the 90% to the County. As with the County's comments, all comments and communication from the permitting agencies will be documented and tracked.

Design Development Challenges

Although this project is relatively straight forward technically, there are several design challenges to address.

1 First and most important is the County's desire for "no change orders" to go to the Board of County Commissioners on this project. We understand this goal and have developed strategies to mitigate potential change orders prior to commencing the design activities and setting the project fixed-price proposal. First, we would like to meet with the County prior to completion and approval of the final purchase order to discuss the County's full objectives for this project and conduct our Value Engineering session to tightly define the project scope before we finalize the fixed-price proposal and go to contract. Second, as we have done on previous design-build projects with other owners, we suggest including an Owner's Allowance for unforeseen items and owner-directed changes that can be authorized by County staff as needed for completion of the project.

2 The second design development challenge is the aggressive schedule requested in the DCP. The Archer Western/Wade Trim Design-Build Team understands the driving force behind this schedule and is fully committed to meeting this project goal. A project of this magnitude would normally take approximately six months for preliminary engineering services, final design, and permitting. However, as experienced design-builders, our team has incorporated several approaches to help expedite the design process. Archer Western and Wade-Trim will have our professional engineering sub-contract prepared and ready for execution as soon as we are selected for the project, allowing us to commence preliminary engineering work in part at our team's own risk prior to final authorization from the County.

As noted above, we would like to meet with the County to discuss the design prior to execution of the contract to better define the scope of the work and vet potential VE items the County may want to include. This will ensure the product being developed is aligned with and encompasses

all of the County's project goals and allow us to move forward with final design activities.

3 Next, the DCP does not define the project design milestones. With the direction received at the pre-contract VE meeting and in the interest of time, we recommend milestone reviews by the County at 60% within 30 days of NTP and 90% at 60 days from NTP, allowing for permit submittal just two months into the project and allowing two months for permit processing, approvals, and construction plan completion.

To further expedite the design and construction activities, the Archer Western/Wade Trim Design-Build Team is recommending a pre-assembled High-Service Pump Station Skid incorporating a prefabricated precast building with split-face block facade per the DCP, the new jockey and duty pumps with room for future expansion, an overhead bridge crane, and a controlled space for electrical and control components. The same prefabricated building will be used for Well #3 for consistency and aesthetics. This approach will cut weeks or even months off the design and construction time required to design and assemble all the equipment for this project while maintaining a higher level of quality by pre-assembling and testing the equipment in a controlled environment and then delivering direct to the site for simple placement and connection.

4 The fourth is supply chain delays and the delivery times of major equipment. During the design process Archer Western and Wade Trim will work closely together to expedite the selection, design and early release of the major equipment and key materials, including; pipes, valves, pumps, precast concrete buildings, generator and chemical skid, so these can be released for scheduling and manufacturing as soon as possible. **Archer Western and Wade Trim recently worked together to overcome supply chain challenges on the critical LS87 fast-tracked design-build project for the City of St. Petersburg.**

Value Engineering

Through the Archer Western/Wade Trim Design-Build Team's extensive design-build and water treatment plant design experience, we have identified several opportunities to reduce project costs or enhance system operation to improve the overall projects value. Items that meet the DCP requirements have already been incorporated into our design approach; other items will be discussed with the County at a pre-contract Value Engineering (VE) meeting and incorporated as desired by the County. Some of the enhancements already included in our design include:

Prefabricated High-Service Pump Station

As mentioned above, we are going to enhance the project quality and reduce construction time with the use of a



Pre-cast buildings can have a similar aesthetic to building on-site, as shown by the example in this photo.

preassembled high-service pump station that meets or exceeds all the DCP requirements.

Preassembled Building for Pump #3 Well House

Demand is currently high for trades, making it difficult to schedule this work. In lieu of sourcing multiple trades to erect the building, including masonry, roofing, stucco, painters, electrical, integrator, and HVAC, we propose a single preassembled building that will be tied into those services.

Reusing Well #2 Generator for Well #3

New Well #3 will require standby power to meet Class I Reliability and DCP requirements. Well #2 was just outfitted with a new 150kW Blue Star standby generator with Class 3 residential grade enclosure and 73dB output that can fully support Well #3 requirements. After reviewing the existing equipment, DCP, and Addenda #2, our team concluded the benefits of relocating the Well #2 generator to the Well #3 site far outweigh purchasing another generator for Well #3. These benefits include reduced maintenance, reduced fuel storage on site, simpler controls, simpler operation, and lower cost. Our team proposes upsizing the new on-site standby generator located by the new high-service pump station to a 450kW with 72-hour belly tank and residential grade enclosure (see cut sheet) and relocating the 150kW Well #2 generator to the Well #3 site. This approach meets the DCP requirements while providing the County with the most cost-effective solution and simplest operation and maintenance.

Reuse Well House #1 for New Chemical Feed System

After removing the existing generator and chemical feed systems from the existing Well #1 building, there will be sufficient room to repurpose this facility to accommodate the new chemical feed system. Please see our Proposed Design for more details (included separately).

EXHIBIT 11 Design QA/QC Control Process



Reuse Well #2 Piping

Well #2 currently has 10-inch piping for a 600-GPM pump which is slightly oversized and provides us capacity to intertie the new Well #3 8-inch raw water main to it to feed the tanks thus saving us additional pipe costs and reducing potential supply issues.

Additional Value Engineering

The following are additional items not required by the DCP and not currently included in our proposal that we suggest the County consider for this project to provide added operational and long-term financial benefit.

Recirculation Piping

The 2MG tank is somewhat oversized and may experience longer than desired idle times, resulting in longer water age and decreased or no chlorine residuals in the tank. To resolve this concern and provide enhanced operational flexibility, a short 16-inch pipeline could be connected from the high-service pump station discharge line to the tank influent line so that rechlorinated water could be introduced to the tank. This will provide the ability to boost the chlorine residual in the tanks and eliminate the potential for algae or red worms in the storage tank.

Tank Size/Configuration

The DCP currently calls for a 105-foot by 30-foot, 11-inch ground storage tank. This is an efficient design, but a taller, smaller-diameter tank may be more cost effective if zoning restrictions will permit it or a variance can be obtained. This will also free up more usable site for future stormwater requirements when the second tank is added. In addition, the added head will move the existing well pumps further back towards the design point on the curves.

Reconfiguring Well Pump #1 & #2

The shop drawing and hydrogeological construction report

for Well #2 was reviewed to determine the impact of changing from a hydro-pneumatic tank to the new ground storage tank. Although pump #2 will run out on its curve to approximately 850 GPM, it will still remain on its curve and should not cavitate from speed. In addition, there was sufficient drawdown built into the design to accommodate the increased flow. However, it will be approaching the limit during drought conditions. No data was received on Well #1 and an analysis could not be performed at this time, but a similar situation is anticipated. Since there is no requirement in the DCP to modify these pumps and they seem to be operational, no changes are required. However, this project will place additional stress on the well and pumping system. We suggest removing one bowl from each pump and downsizing the motors to improve efficiency and overall operation of the well.

Ground Storage Tank Overflow

The DCP currently requires a 12-inch overflow pipe discharging to the stormwater collection system. This pipe provides an additional access point into the tank where vectors can enter the water supply and potentially contaminate it and incur additional capital construction costs. Our team has designed and permitted potable water storage tanks that discharge the excess water through the vents on the top of the tank. This alternative provides a visual indicator that the tank is overflowing in case of a failed high water alarm. In conjunction with this approach, concrete splash pads at the bottom of the tank at each vent will help prevent erosion of the soils in that area. The water would drain naturally across the site to the stormwater collection swale and treatment area. This approach will reduce penetration into the tank, provide a visual indicator of an overflow condition, and reduce the cost and carbon footprint of the project.

Defining and Obtaining Design Commitment

Our approach to defining and obtaining design commitment starts with a thorough review and understanding of the DCP, the project documents already provided to date, and readily available industry information. We will meet with the County's team to review the design presented in this proposal and discuss the desired project scope and goals, as well as potential VE items. That meeting will give the Archer Western/Wade Trim Design-Build Team a thorough understanding of the design objectives and alignment with the County and the DCP Engineer. With this clear path forward for the design, we will maintain that buy-in and focus through weekly status meetings and milestone reviews.

Quality Control

As discussed in Section 3.4.3, Technical Advisors Bill Harrington and Kris Samples will work with Design Manager Chris High to review and coordinate all phases of the design documents. Exhibit 11 illustrates the process we have will use to successfully manage quality assurance and quality control during the design process on this project.

Excellence in Design

The Archer Western/Wade Trim Design-Build Team's has a commitment to design excellence and creativity. Our recent experience on water treatment and pumping systems projects includes a multi-component chemical feed system for the Seminole Tribe of Florida's 3MG Big Cypress Reverse Osmosis Water Treatment Plant, a new 59-MGD high-service pump station and multi-component chemical feed facility for the City of St. Petersburg's 68-MGD Water Treatment Plant, a new nano-filtration system for Florida Government Utility Authority's Plantation Bay Water Treatment Plant, and extensive rehabilitation and treatment improvements at the City of Palm Bay's North Regional Water Treatment Facility.

After reviewing the DCP and project requirements, we leaned on our team's extensive relevant experience to develop a approach that will be cost effective, meets the schedule, and provides a high-quality product as required in the DCP. These creative approaches are also designed to simplify utilities operation and address infrastructure needs.

High-Service Pump Station | To meet the aggressive schedule and increase on-site safety, we investigated the option of a pre-manufactured and assembled high-service pump station and electrical room that arrives complete and operational with two new 100hp duty pumps; 150hp jockey pump; all associated piping, valves, and ancillary equipment; a bridge crane; lighting; electrical equipment;

and HVAC systems. This approach provides the County with the preferred equipment identified in the DCP and allows it to be assembled and tested in a factory for improved quality control prior to shipping. It will be shipped to the project site already assembled, placed on a concrete pad, and connected to the adjoining source water, finished water, and electrical components. This greatly simplifies the design and construction efforts, allowing our team to meet the target schedule while increasing safety and provides additional potential cost savings to the County.

Well #1 Pump House | The interior walls within Well #1 Pump House chemical room are in poor condition but can be easily removed without significant structural modifications. Once they are removed and the existing generator has been decommissioned, there will be sufficient room to re-construct the new chemical feed room while providing sufficient space for the facility's future needs. We will construct a framed wall between the pump room and chemical room to isolate the corrosive chemicals from the well pumping and electrical equipment. The chemical room will be lined with cement board so that the air space can be sealed from the pump room and painted with a corrosion-resistant paint. This room will be equipped with a 6-by-8-foot roll-up door to remove the tanks, and a remote NaOCL fill station at the front of the building will provide easy access for chemical deliveries. The chemical room will also have its own mini-split system to condition the air space and reduce the corrosive effects of the sodium hypochlorite. This approach eliminates the additional time and cost to construct an additional building on-site. In addition, the current building is centrally located and provides the optimal location for the sampling and dosing of the raw and final water streams. Our team delivers these types of cost and time saving measures through value engineering and years of lessons learned.

Generator | Well #2 is currently being constructed and will have a 150kW generator. Since this well will be connected to the new water treatment site standby generator, we are proposing to relocate the 150kW generator to Well #3. This generator has sufficient capacity to support this 75hp well pump. With the current state of the Country's supply chain, generators can have extended delivery times—this approach eliminates that potential project risk.

Tank Mixing | The DCP calls for a standard 2MG prestressed concrete tank. Our years of water treatment experience has shown that this can result in short-circuiting and poor Log 4 compliance. As part of our preparation for this proposal, we evaluated the Log 4 vector removal for this facility and found that the tanks will provide sufficient time as long as the minimum fill level is maintained at approximately 400,000 gallons or 6 feet of water in the tank, so we have incorporated a standpipe with duckbill



A Revit rendering of the proposed final project site plan provides an accurate representation of the final product.

valves to better direct the influent stream to generate improved tank mixing. This also forces the influent flow to enter the tank high and exit low to provide constant head to the well pumps while maximizing retention time and reducing suction lift for the high-service pump station. We will complete a computational fluid dynamic model during design to test for proper mixing and retention time with our arrangement.

Recirculation Loop | As an added value to the County, we have identified a potential constraint within the proposed storage tank related to its ability to recirculate water during low demand periods. Based on our experience, all municipalities experience seasonal variations as well as daily diurnal changes that can result in low chlorine residual in the tank, potentially stemming algae and parasite generation inside the tank. This leads to increased dosing prior to storage and additional chemical costs. Incorporating a recirculation loop to the system allows the County’s operators to provide the appropriate dose to the tank influent, recirculate, and re-dose if the tank chlorine levels get below desired levels. A simple modification to our site layout and connectivity—the addition of a short 20-foot section of pipe from the high-service pump station discharge to the raw water line, two additional isolation valves, a check valve, a pressure reducing valve, and a flow meter—will add maximum operational flexibility, increase water quality and reliability, and incur minimal costs.

Design Tools

The era we live in provides us a myriad of tools to improve our designs with more efficiency. The Archer Wester/Wade Trim Design-Build Team maximizes the use of these tools to deliver you a high-quality product in a timely manner. Numerous calculations, evaluations, and graphics are developed throughout the design process. For this

project, we will use many of our daily tools as well as a few specialty ones.

AFT Fathom® | We will evaluate the pipe and pumping hydraulics with AFT Fathom, a fluid dynamic simulation software used to calculate pressure drop and flow distribution in a fluid or gas system. This tool will help us better define our pumping characteristics and pressure influences. For example, if the County elects to include the recirculation loop, AFT Fathom will help us set the operating pressure on the backpressure-sustaining, pressure-reducing valve so we don’t negatively impact the distribution pressure or well operation.

Computational Fluid Dynamic (CFD) Modeling | CFD modeling provides insight into flow patterns and vanes within a tank system to ensure good mixing or laminar flow. For this project, we will evaluate the ground storage tanks.

BoreAid® | Although we anticipate open-cutting Old Trilby Road to install the new 8-inch raw water main from Well #3, we will use BoreAid and sound geotechnical information if we need to horizontally directionally drill this line to ensure sufficient cover (overburden) with the native soils to prevent hydrofracture or subsidence.

Autodesk Civil 3D® | Once pipeline design is complete, we will create a representation using Civil 3D. Showing the existing and new utilities in 3D is a better representation of the actual below-grade conditions. This software also simplifies revisions to alignments and sections by cutting new sections versus re-calculating for the new location.

Autodesk® Revit® | The latest tool in our industry is Revit. With Revit, we can build the system and buildings in 3D models. Building the model is a time-consuming effort, but these models allow the user to easily cut plans, sections,

and details and generate plans and enhanced 3D images. Revit can also provide a full take-off of the materials and help identify potential conflicts between disciplines. Lastly, this program can be used during construction to identify field conflicts and create changes when necessary through the use of its sister program Building Information Modeling (BIM).

Bluebeam® | Bluebeam has become our design-tracking software. This tool allows us to communicate design concepts, resolve issues, and track quality review comments. We use this tool on a daily basis to review as-builts, discuss the design, scale items, and more.

Google Earth® | This application is the next best thing to visiting the site. Google Earth gives us the ability to see the overall site and its surrounding conditions, walk the project corridor, look back in time, create a profile, and generate a plan sheet background.

These comprise some of the regular and specialty tools we use to develop a design. There are numerous other references and tools we use to generate and validate design, including but not limited to HEC-2, FDEP Contamination Sites, FEMA Flood Maps, Hurricane Evacuation Zones, USGS, FCIT Sinkhole Maps, Florida Building Code (FBC), National Electric Code (NEC), and more. We are always looking for ways to improve and expedite our design efforts.

Permitting Process

Our team has identified and will confirm each permit that will be required for the project and engage the appropriate authorities early in the initial stages of design. Engaging early allows us to introduce the agency to the project, gather important feedback during design development, and facilitate an expeditious permitting application and approval process. The design-build team will have permit application meetings with regulatory agencies while developing the design prior to application submittal. Required permits for this project are listed in Exhibit 12.

Once project details are agreed upon, early communication with regulatory and permitting agencies results in

smooth processing of necessary permits. We anticipate several meetings and/or phone conferences with the permit agencies and stakeholders during the 60% design phase of the project. These meetings will provide background information about the project, the reasoning behind various decisions, and a forum for questions and answers. This will also assist with reducing or eliminating any request for additional information from permitting agencies. This process will continue through the design phase development (60% and 90%) into the final design permit and approval process with each permitting agency. This will be especially important for permits with historically long lead times, such as the Florida Department of Environmental Protection (FDEP) Environmental Resource Permit (ERP). Our recent experience suggests the FDEP ERP permit approval process takes approximately 3 months. Therefore, we plan to submit the FDEP ERP permit application at the completion of 90% design.

Please note that a wastewater permit is not required for the project unless the County decides to add a restroom facility. Also, it was noted in the DCP that gopher tortoises may be onsite and will require relocation. If gopher tortoises are present, we will pursue a Florida Fish and Wildlife Conservation Commission (FWC) Recipient Site Permit.

3.8 PROJECT SEQUENCING AND SCHEDULING

The obvious challenge on this important design-build project is the timeframe for going online with the improvements and capacity upgrades. The Archer Western/Wade Trim Design-Build Team has invested a significant effort to understand the overall schedule demands and have developed a strategy to meet your schedule goals. Our team is experienced in delivering projects under constrained timeframes and will leverage the advantages that the design-build process provides the team. The power of the team's partnership, collaboration, communication, and cooperation will be the foundation of delivering on this project's required schedule. **Our approach to this project is designed for speed.**

Per the Request for Proposal, the anticipated Notice to Proceed will be issued to the successful design-builder on June 15, 2022, and all systems shall achieve Substantial Completion within 410 calendar days. Based on the timeline provided in the RFP, the partnership between Hernando County, the design-builder and all other stakeholders will be afforded approximately 13 ½ months to design, permit, procure, construct and commission all components noted in the DCP package at the Lockhart

EXHIBIT 12 List of Required Permits

- + FDEP Application for a Specific Permit to Construct PWS Components, Form 62-555.900(1)
- + FDEP ERP
- + FDEP Fuel Tank Registry
- + Hernando County Building Permit
- + Hernando County Right-of-Way Use Permit
- + SWFWMD Water Use Permit (WUP)
- + FWC Recipient Site Permit (to be determined)

WTP. This is an aggressive schedule that will require a true commitment of partnership by all parties.

The Archer Western/Wade Trim Design-Build Team has developed a detailed preliminary critical path methodology (CPM) schedule, Exhibit 14 on page 20. To meet the challenge, your design build team must be experienced in leveraging creative strategies to reduce time and streamline the processes allowing construction to be completed efficiently and safely. Our team has evaluated the overall scope of design, permitting, procurement and construction for this project and the below narrative describes our approach to completing this project with the prescribed timeline.

Sequencing of Major Project Elements

Preconstruction Phase (120 days from NTP)

Immediately upon the County's selection of their design-build partner, it will be essential for Hernando County and the Archer Western/Wade Trim Design-Build Team team to engage in a kickoff workshop. Our team wants detailed feedback from the County on the design concepts we present in this proposal to validate the anticipated project scope and price. Our team may need clarifications and/or adjustments to the project scope due to cost, schedule or operational concerns. Addressing these items early will allow the stakeholders to develop a consensus on all contractual scope and requirements before going to the BOCC for approval, thus allowing the project team to accelerate the design process once Notice to Proceed is provided. It is our team's approach to deliver the draft 60% design at the Kickoff Meeting.

Another critical item is the procurement and delivery of the stand-by generator. We will leverage our firm's buying power to negotiate a delivery date that meets the project schedule. Early procurement and release of this vital component will be essential. Our schedule manager will oversee the timeliness of all procurement and submittals to confirm accurate delivery of long lead items.

In our approach, design of the prefabricated high-service pump station will be delegated and conducted concurrently with the balance of the project design. Early alignment on the details or proposed improvements to the high-service pump station allows our partner, Patterson, to accelerate the design and obtain approval from all parties to begin fabrication. Delegating design of the ground storage tank also supports progress. Both of these elements are on the critical path of the project and our strategy saves significant time on the schedule.

By incorporating virtual weekly update meetings during the design phase, the County's personnel will be fully engaged and aware of progress. This results in the team being

nimble, issues addressed timely and reduced timeframes for owner submittal reviews. Ultimately, we are able to move into the field quickly.

Regulatory and Stakeholder Approval

The Archer Western/Wade Trim Design-Build Team will meet with the County, regulatory agencies, and stakeholders during 60% design development to gather important feedback. Immediately following the design kickoff meeting, the team will request permit application meetings with regulatory agencies. Our goal is to submit the permit applications directly after 90% design submittal to the County. Our expectation is that the permit approval process will take two to three months depending on the application and required follow-up with the permitting agencies. If we receive questions, our design tasks leads will review and respond as soon as possible.

Construction Phase (410 days from NTP)

Taking a high-level look at our attached proposed schedule, Exhibit 14 on page 20, you will notice that there are multiple critical paths. However, the true critical path is constructing the 2MG ground storage tank and the installation of the prefabricated high-service pump station. The secondary critical path is the installation of the generator for the high-service pump station. This is due to the long lead time associated with procurement and delivery of generators in this marketplace.

We will begin installing the 2MG ground storage tank as early as possible, as this has the longest timeframe to construct and place into service. Once construction begins, we will start the foundations for the high-service pump station and install all remaining yard piping and electrical infrastructure. When the prefabricated high-service pump station arrives, it will essentially be lifted off a truck and anchored on the foundations. After several mechanical piping and electrical connections, the high-service pump station will be ready for testing. The County will realize significant time and cost savings from the prefabrication of the pump station off site in Georgia by Patterson. With fewer manhours on site, both safety and quality risk are also reduced.

Once both the high-service pump station and the ground storage tank are ready and placed into service, we can make modifications to the existing Well #1 system. Removal of the existing storage tank, removal of the existing generator and building modifications for the new chemical feed room can be completed quickly. This allows the remaining site work (stormwater system, new security fencing, final grading and access drives) to be completed.

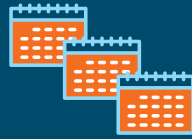
You will notice that Well #3 is not on the critical path but a sense of urgency will be needed to obtain the long lead

EXHIBIT 13 The Archer Western/Wade Trim Design-Build Team's Critical Path Methodology



CPM Project Schedule

Fully integrated schedule includes activities for all design elements, permitting, submittals, procurement, construction, startup, and commissioning



90-Day

Includes activities occurring over the next 3 months; the team member responsible for each portion of work schedules the pertinent activities; recovery schedule developed if indicated



4-Week Look-Ahead

Emphasizes next week's work, detailing activities, resources required and available, and impact of each item on the CPM schedule; bar chart format with a one-week look back and a two-week look ahead



Play-of-the-Day

Identifies means and methods to perform the day's work activities, including crew and equipment resources; reveals conflicts such as overlapping of resources

Regular interactions facilitate collaboration and decision making to maintain budget and schedule.

pump and electrical equipment. Once this building is ready, we will relocate the existing Well #2 generator and begin start-up, testing, and disinfection activities.

Addressing the Challenges

The schedule is one of the biggest challenges. Our approach to prefabricate the high-service pump station eliminates it as a schedule risk, however, we still must construct the new 2MG ground storage tank contractor on-site early in the project. It is assumed that there will be no deep foundation or soil improvements required for the 2MG ground storage tank, and this will be confirmed with a geotechnical investigation. The ground storage tank contractor can complete their design quickly once the geotechnical investigation confirms this assumption. Furthermore, the ground storage tank contractor has reviewed the schedule and already committed a crew for Archer Western and Hernando County.

Another scheduling concern is early release of materials. Because of the limited timeframe for this project and current marketplace conditions, it's essential the design-builder release materials as early as possible to eliminate potential delays from supply chain issues. This is not only a concern for long-lead items such as pumps, generators and valves, but the concern continues with commodity items such as PVC pipe, copper wire and other basic building materials. This will be a strong and continued focus for the Archer Western/Wade Trim Design-Build Team until all materials are delivered to the site.

Tools and Methods

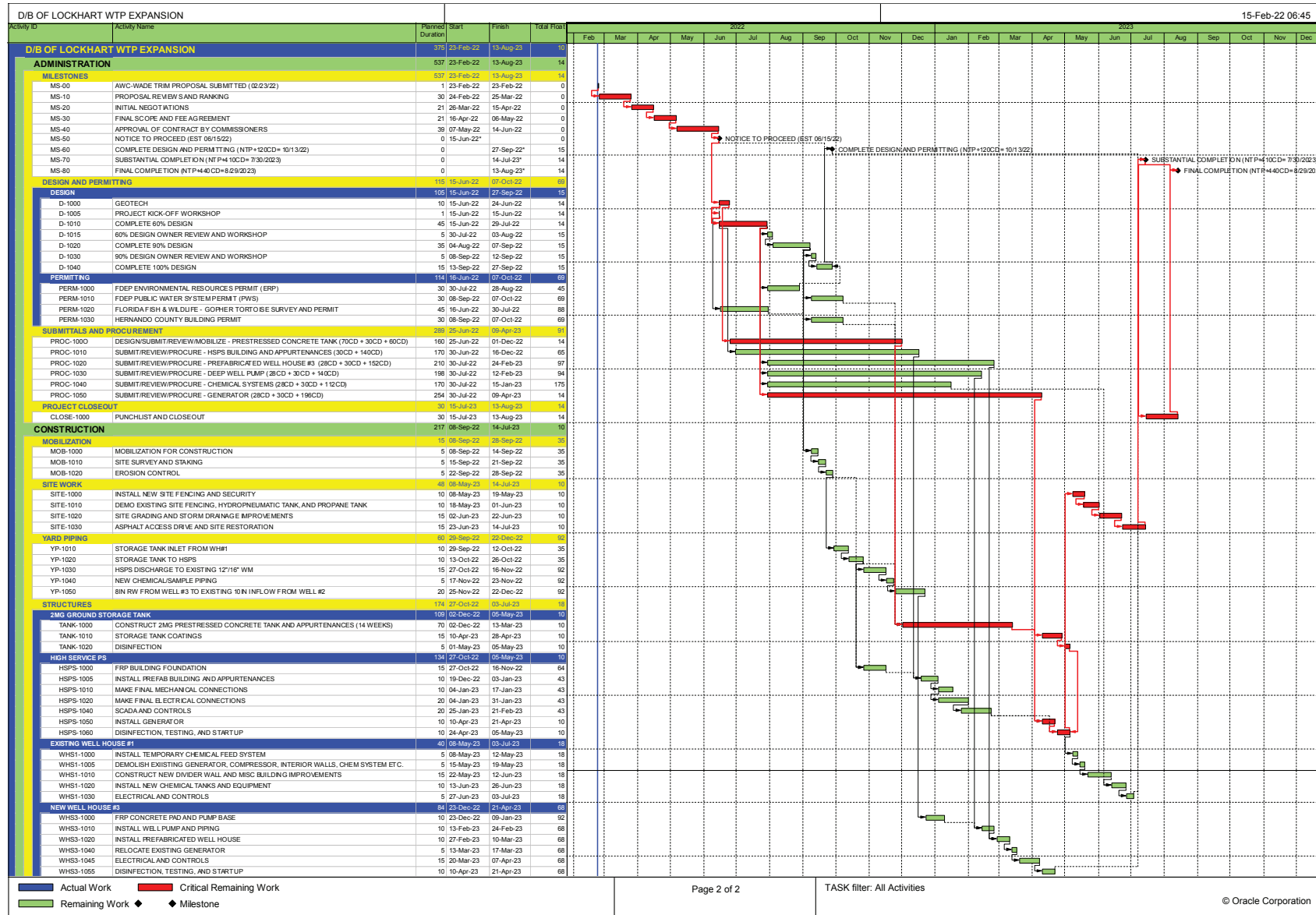
Schedule is one of the greatest concerns. Our project team staff includes Controls Manager Loderic Rose to support delivery of this project within the prescribed schedule. Loderic will be an indispensable component to our team.

Our team will provide schedule certainty through a combination of established tools and processes, technical expertise, and ample resources. Our proposed CPM baseline schedule, developed in Primavera P6, will be further detailed, updated, and continually refined throughout the life of the project using a collaborative, integrated, and iterative approach. The project manager, design manager, and general and discipline superintendents will contribute to schedule updates at our weekly schedule meetings.

Our scheduling procedures are innovative and integrated, centrally linking every aspect of the work from quality to communications, safety, and risk management. To achieve the project milestones and required delivery dates, our engineering team has a multi-tiered approach that includes Primavera P6 software and 90-day look-ahead, 4-week look-ahead, and Plan of the Day (POD) schedules, as shown in Exhibit 13. All of our schedules (engineering, procurement, construction, startup and commissioning, and testing) are linked by key activities that align with milestone commitments.

Our team will update the schedule weekly using real-time progress information directly from those overseeing the work. Our project schedule includes inputs for man-hours, crews, major equipment, engineering, and commodities, which gives us the ability to track resource curves. These curves will be updated and reviewed monthly to verify and plan upcoming resource needs. The executive management team tracks trends against critical milestone dates with particular attention to recovery efforts for any items that may fall behind.

EXHIBIT 14 Preliminary Project Schedule



**Attachment C - Proposal Form
21-R00077/PH**

Design Build Services for the Lockhart Water Treatment Plant (WTP) Expansion

COMPANY INFORMATION:

COMPANY NAME: Archer Western Construction, LLC
BUSINESS ADDRESS: 4343 Anchor Plaza Parkway, Suite 155
CITY, STATE, ZIP CODE: Tampa FL 33634
TELEPHONE: 813-849-7500
FAX: 813-579-4076
EMAIL OF CONTACT: rbruner@walshgroup.com

The Company shall submit one (1) original Proposal, four (4) copies (hardcopies), and one (1) CD or flash drive. If there is a discrepancy between the electronic copy and hard copy, the hard copy will prevail. Hernando County will not accept Proposals transmitted via email.

DP (Initials) I have read and understood the Sunshine Law/Public Records clauses contained within this solicitation. I understand that in the absence of a redacted copy my proposal will be disclosed to the public "as-is".

Company's Certification

By submitting this Proposal, the Proposer certifies that it has read and reviewed all of the documents pertaining to this RFP and agrees to abide by the terms and conditions set forth therein, that the person signing below is an authorized representative of the company, that the company is legally authorized to do business in the State of Florida, and that the company maintains in active status an appropriate license for the work. The company certifies that its recent, current, and projected workload will not interfere with the company's ability to Work in a professional, diligent and timely manner.

The Proposer certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds, and other credentials required by law, contract or practice to perform the Work. The Proposer also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Company shall immediately notify Hernando County of status change.

We have received addenda 1 through 3


Signature of Authorize Officer of Company or Agent

2/7/22
Date

Duane Petersen, Vice President

404-495-8700

Printed Name & Title

Phone Number

ADDENDUM NO. ONE (1)

TO
THE CONTRACT DOCUMENTS FOR

DESIGN-BUILD OF LOCKHART WATER TREATMENT PLANT RFP

IN
HERNANDO COUNTY, FLORIDA
SOLICITATION NO. 21-R00077/PH

PROPOSERS ARE REQUIRED TO ACKNOWLEDGE RECEIPT OF
THIS ADDENDUM BY SIGNATURE AT THE BOTTOM OF
THIS ADDENDUM IN THE SPACE PROVIDED AND
RETURNED AT THE TIME OF THE PROPOSAL DUE DATE.

TO ALL PLANHOLDERS:

The following changes, additions and/or deletions are hereby made a part of the Contract Documents for **DESIGN-BUILD OF LOCKHART WATER TREATMENT PLANT RFP** located in Hernando County, as fully and completely as if the same were fully set forth therein:

A Non-Mandatory site visit will be held on Friday, January 14, 2022 from 2:00 – 3:00 PM at the Lockhart Water Treatment Plant located at 5427 Lockhart Road, Brooksville, FL 34602.

CAD drawings have been sent to the short-listed firms via e-mail.

BOARD OF COUNTY COMMISSIONERS
HERNANDO COUNTY



Acknowledged



Patty Hall
Purchasing Coordinator

Issued: January 11, 2022

ADDENDUM NO. TWO (2)
TO
THE CONTRACT DOCUMENTS FOR
DESIGN-BUILD OF LOCKHART WATER TREATMENT PLANT RFP
IN
HERNANDO COUNTY, FLORIDA
SOLICITATION NO. 21-R00077/PH

PROPOSERS ARE REQUIRED TO ACKNOWLEDGE RECEIPT OF
THIS ADDENDUM BY SIGNATURE AT THE BOTTOM OF
THIS ADDENDUM IN THE SPACE PROVIDED AND
RETURNED AT THE TIME OF THE PROPOSAL DUE DATE.

TO ALL PLANHOLDERS:

The following changes, additions and/or deletions are hereby made a part of the Contract Documents for **DESIGN-BUILD OF LOCKHART WATER TREATMENT PLANT RFP** located in Hernando County, as fully and completely as if the same were fully set forth therein:

QUESTIONS AND ANSWERS

1. Question: Are we to submit only that page of the contract with our proposal or the entire contract document with price component filled in? Is this pricing page(s) to be submitted separately from the proposal documents (sealed) or included as part of the proposal?

Answer: Per RFQ document 21-R00076/PH, Section 3.3.2, Page 51, pricing should be in a separate, sealed envelope. Please include the entire contract document with the price component filled in.

2. Question: In reviewing the requirements, Section 3.4 Technical Proposal (page 11 of the RFP) states the technical proposal may not be longer than 20 pages (excluding the plan sheets). It then lists numbers 3.4.1 through 3.4.5.3 detailing some of the info that should be addressed in the Technical Proposal. However, the RFP goes on to detail more info -- sections 3.5 through 3.8. I'm unclear on if these sections are separate (because they aren't under number 3.4) or are a part of the 20-page technical limit. Can you clarify which numbered items (from 3.4 to 3.9) in the RFP are to be included within the 20-page Technical Proposal?

Answer: Items 3.4 through 3.9 are included in the 20-page Technical Proposal.

3. Question: We have the following question associate with the RFP noted above:

The RFP documents requires the construction of a 2MG finished water storage tank but does not include any previous or current data related to geotechnical conditions for the site. Can the county provide the soil data / investigative reports utilized to design Well #1 or Well #2 at the site to allow the DB team to evaluate the need for soil improvements or deep foundations for the 2MG storage tank? Without any previous geotechnical exploration of the site, the owner or DB contractor takes on a great level of risk associated with the potential need for soil improvements or deep foundations to support the 2MG storage tank. If no data is available, we

respectfully request that the County provide direction to the DB teams on who shall take the risk associated with any potential soil improvements for this tank. We suggest that the owner

carries a contingency for this risk item so that the DB teams do not include unneeded costs in the fixed price proposal. If the geotechnical investigation conducted by the Design-Builder indicates improvements, only then would the contingency be used. Please advise.

Answer: Well construction reports for Lockhart Well #2 & #3 attached. Geotech data for well #1 is not available. HCUD agrees that a contingency shall be carried for this risk item so that the DB teams do not include unneeded costs in the fixed price proposal. If the geotechnical investigation conducted by the Design-Builder indicates improvements, only then would the contingency be used.

4. Question: We respectfully submit the following questions in regards to Step 2 of the Design-Build of Lockhart WTP Expansion, RFP No. 21-R00077/PH:
- Our team would like to request a site visit sometime in December, if possible.
 - A non-mandatory site visit to the Lockhart WTP and well site #3 was completed on 1/14/22.
 - Are we to submit a Payment and Performance Bond with our proposals?
 - A payment & performance bond will only be required from the selected DB team, thus bond submittal is not necessary during the proposal phase.
 - Can we get the following documents and files from the M&C 30% Design:
 - Site survey files in CAD
 - Site survey files are not available in CAD format. PDF format attached.
 - CAD drawings of site, civil, mechanical and electrical
 - Site, civil, mechanical and electrical CAD drawings are not available. PDF format attached.
 - Geotechnical Report and site boring logs
 - Construction report for Well #2 attached. No boring logs available.
 - 30% - Preliminary Engineering Report (PER)
 - No Preliminary Engineering Report is available.
 - Can we get the following documents for Existing Well No. 1 and No. 2 and WTP Water Quality Data
 - Well Completion Reports – Well No. 1 and No. 2
 - Raw Water Quality Data – pH, Iron, hydrogen sulfide, TOC, Total Alkalinity
 - WTP DMRs – Average Daily Flow, Peak Day Flow, Total Chlorine Residual, Sodium Hypochlorite daily feed rate (gph) and use in gallons per day.
 - High-Service Pump Station - Current Operating Pressure (low and high pressure range)

Requested Docs for well #1 & #2

- a. Well completion report not available for well #1. Well construction report attached for well #2, in addition to most recent specific capacity test. Construction report also attached for well #3.
- b. Lockhart WTP 2017 & 2018 Water Quality Reports attached.
- c. Lockhart WTP 2021 MORs attached.
- d. The Lockhart WTP currently operates in conjunction with the Ridge Manor West WTP according to the water level elevation at the Ridge Manor Elevated Storage Tank (Lead On – 125 ft, Lag On – 120, Off – 135 ft). The plant operates on local pressure settings

as a backup only in the event there is a communication or other issue with the EST (On – 29 PSI, Off – 50 PSI). The existing plant control strategy is included below for reference. Please note, with the completion of this project, the Lockhart WTP will no longer operate based upon the EST levels. Instead, it shall operate solely based upon local pressure settings. For purposes of the GMP submittals, Data Flow Systems (DFS) has been made aware of HCUD's requirements for this project and will supply identical quote packages to all proposers for the necessary SCADA components and required programming. Please allow 2-3 weeks for those documents to be completed. The DFS contact will be Randy Wyatt. Once a DB team has been selected, they will be responsible for obtaining from DFS any necessary design drawings to incorporate into the final engineering plans, in addition to shop drawings during the construction phase.

EXISTING LOCKHART WTP CONTROL STRATEGY

Overview

The Elevated Storage Tank (EST) site consists of an RTU; there are no automated controls at this site. The RTU reads the tank level and transmits the signal, via telemetry, to Ridge Manor West #1 and Lockhart Well. Both the well sites consist of an RTU containing a Programmable Logic Controller (PLC). The automated controls at both these sites are identical and the PLCs are interchangeable. A logic control is placed in the HyperTACII computer that tells the Lockhart PLC whether it is in Lead or Lag position with respect to Ridge Manor West #1. Should Ridge Manor stop functioning, Lockhart will stay in the last position and continue to operate in that condition. Each PLC will be independent of the other PLC for general pump operation. Should either of the local PLCs recognize a loss of communication or remote transducer fault, the pump will run according to the local pressure settings. Monitoring functions will be Pump Run, Local PSI, Local/Remote and Phase Monitor if available. No additional instrumentation other than pressure transducers are added. Should the PLC fail, the Lockhart well will continue to try to maintain the tank level based on the existing

controller at the well. Should the tank signal fail, a local transducer at Ridge Manor will take over as the PLCs primary signal source for tank level and continue with the set point alternations.

Sample Sequence

Ridge Manor West #1 will be Lead and will start the pump according to the Lead set points. When the EST level falls to the Lag start set point, the Lockhart Well will be started, and both pumps will continue to pump until the tank level has reached the stop level. After the Lead pump is stopped, the PLC in Ridge Manor will alternate to the Lag position and send a signal that it is in the Lag position prompting Lockhart PLC to assume Lead. The Ridge Manor PLC will monitor the Lockhart pump-running command and will reset to Lead after the Lockhart well pump has cycled. The pumps will continue to operate in this fashion following a Lead / Lag last run alternation.

Additional HCUD Comment:

Section 1.4.3.6 of the DCP includes the following requirements for Well #3:

- Provide a single-mode fiber optic cable from Well No. 3 to the main WTP. Install the cable in conduit within the same trench as the raw water main
- Provide single-mode to multi-mode fiber optic cable converters to facilitate connection to the DFS system

These requirements shall be replaced with the following:

- Per section 11.2.3 of the HCUD Specifications Manual, provide a telemetry antenna tower and associated equipment necessary to communicate with the Lockhart WTP RTU. Required tower height shall be as determined by Data Flow Systems.

Additional HCUD Comment:

Clarification regarding the generator for well #3. It was discussed during the recent site visit that HCUD wishes to determine if the existing well #2 generator can be repurposed for well #3.

HCUD requests the DB teams submit 2 (two) GMP variations, as follows below:

1. GMP Variation #1: This variation assumes the existing generator for well #2 will NOT be sufficient for well #3. Include the electrical design cost to size the generator for well #3. Include the cost to purchase and install a new generator at the well #3 site per the sizing requirements.
2. GMP Variation #2: This variation assumes the existing generator for well #2 WILL be sufficient for well #3. Include the electrical design cost to size the generator for well #3. Include the cost to move and install the existing well #2 generator at the well #3 site.

Well #2 generator shop drawing attached.

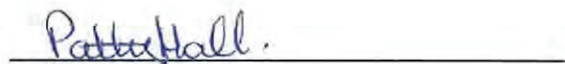
Additional HCUD Comment:

The existing well house surrounding well #1 shall remain as-is, with the exceptions of certain components being removed per the DCP. To clarify, there will be no rehab work required for the interior or exterior of the existing well house.

BOARD OF COUNTY COMMISSIONERS
HERNANDO COUNTY



Acknowledged



Patty Hall
Purchasing Coordinator

Issued: February 2, 2022

ADDENDUM NO. THREE (3)

TO
THE CONTRACT DOCUMENTS FOR

DESIGN-BUILD OF LOCKHART WATER TREATMENT PLANT RFP

IN
HERNANDO COUNTY, FLORIDA
SOLICITATION NO. 21-R00077/PH

PROPOSERS ARE REQUIRED TO ACKNOWLEDGE RECEIPT OF
THIS ADDENDUM BY SIGNATURE AT THE BOTTOM OF
THIS ADDENDUM IN THE SPACE PROVIDED AND
RETURNED AT THE TIME OF THE PROPOSAL DUE DATE.

TO ALL PLANHOLDERS:

The following changes, additions and/or deletions are hereby made a part of the Contract Documents for **DESIGN-BUILD OF LOCKHART WATER TREATMENT PLANT RFP** located in Hernando County, as fully and completely as if the same were fully set forth therein:

QUESTIONS AND ANSWERS

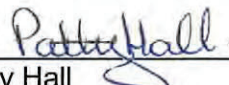
1. Question: After reviewing the documents, we have noticed there is no statement on percentage for the bid bond. What percentage should the bid bond be?

Answer: The bid bond should be for five (5) percent.

BOARD OF COUNTY COMMISSIONERS
HERNANDO COUNTY



Acknowledged



Patty Hall
Purchasing Coordinator

Issued: February 16, 2022

Archer Western/Wade Trim
Design-Build Team



4343 Anchor Plaza Pkwy, Suite 155
Tampa, Florida 33634
813.849.7500
www.walshgroup.com