Charlotte County Board of County Commissioners

RFP NO. 20250608

DESIGN SERVICES

2025 LIFT STATION REPLACEMENTS

Submitted to:
Charlotte County
Purchasing Division
18500 Murdock Circle, Suite 344
Port Charlotte, Florida 33948-1094

Submitted by:

GWE
Giffels-Webster
Engineers, Inc.

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Contact: Jonathan H. Cole, P.E.
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September 25, 2025
GWE: 2025.44

CHARLOTTE COUNTY - RFP NO. 20250608

DESIGN SERVICES – 2025 LIFT STATION REPLACEMENTS

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GWE GIFFELS-WEBSTER ENGINEERS, INC.

September 25, 2025 **REF: 2025.44**

Senior Division Manager – Purchasing
Charlotte County Administration Complex
18500 Murdock Circle, Suite 344
Port Charlotte, FL 33948-1094

RE: RFP NO. 20250608 – DESIGN SERVICES - 2025 LIFT STATION REPLACEMENTS

Giffels-Webster Engineers, Inc. (GWE) is pleased to submit this proposal to provide professional engineering services for the above-referenced RFP. GWE has extensive experience in the design of wastewater collection and pumping facilities, including lift station replacements, force mains, gravity sewer, and related infrastructure. We are very interested in providing Charlotte County with planning, utility design, structural, SCADA/controls, permitting, funding assistance, and construction-phase support services for the replacement of Lift Stations #1, #7, #303, #816, and #817.

Our main office is in Englewood, less than 20 miles from the project site. This close proximity allows for efficient site visits, timely coordination with CCU staff, and rapid response during design and construction. In addition, we maintain dedicated workspace that can accommodate CCU staff, supporting a cooperative work program throughout project delivery.

Projects that involve demolition, relocation, and replacement of wastewater lift stations within developed neighborhoods require careful planning, permitting, and stakeholder coordination, precisely the types of projects we specialize in. For more than 40 years, GWE has successfully delivered utility and wastewater projects for Charlotte County Utilities, Sarasota County, Hillsborough County, and the Englewood Water District. Our local engineers, technicians, and inspectors have a proven track record of partnering with CCU to provide cost-effective solutions, always “going the extra mile” to deliver reliable infrastructure on schedule and without claims for extras.

Our experience, as outlined in this proposal, demonstrates deep expertise in pump station design and appurtenance, SCADA integration, force main and gravity sewer design, and construction administration—directly aligned with the scope of services in this RFP.

As requested by the RFP, I certify that this proposal is made without collusion with any other person or entity submitting a proposal. I further confirm that I, Dennis Croyle, as an authorized officer of Giffels-Webster Engineers, Inc., am empowered to make representations on behalf of the firm.

Enclosed please find our complete electronic proposal package submitted via the Charlotte County Purchasing Division’s online portal in accordance with the instructions provided. We thank the County for the opportunity to continue serving as a trusted partner in improving Charlotte County’s wastewater infrastructure.

Respectfully submitted,
Giffels-Webster Engineers, Inc.

Dennis Croyle, P.E., Vice President

SECTION I:
TEAM PROPOSED FOR THIS PROJECT

SECTION I: TEAM PROPOSED FOR THIS PROJECT

A. Background of the personnel

Our proposed project team has direct experience with Charlotte County Utilities on major wastewater infrastructure programs and is equally experienced in lift station design, SCADA integration, and force/gravity main improvements. The same core personnel worked on the East/West Spring Lake and Phase II Ackerman Countryman Wastewater Expansion Program (currently under construction) and are now leading the Lake View/Midway project under design. Our team understands the constraints, permitting requirements, County personnel, and project background. Pursuant to RP-25C, Mr. Dennis Croyle, P.E. (Project Manager and Lead Designer), within the prime firm will not be substituted without the express permission of the County.

1. Project Management

Dennis J. Croyle, P.E., Project Manager / Engineer-of-Record (Lead Designer)

Mr. Croyle will serve as the Project Manager and Engineer of Record (Lead Designer) for this project. He is Vice President of Giffels-Webster Engineers and a graduate of the University of Florida with a Bachelor of Science in Civil Engineering.

Mr. Croyle has served in lead design roles on all Charlotte County Utilities vacuum sewer projects, including Spring Lake Contracts A, B, C, and D; Ackerman/Countryman; El Jobean; and Lake View/Midway, as well as numerous wastewater infrastructure projects throughout Florida for Martin County, the City of Port St. Lucie, the City of North Port, Hillsborough County, the Englewood Water District, and Sarasota County. His background reflects extensive experience with vacuum sewer, force main, gravity sewer, and lift station design, permitting, and construction administration.

- Project Manager for the large Charlotte County East/West Spring Lake program.
- Engineer of Record and Lead Designer for the Phase II Ackerman Countryman Wastewater Expansion Program (currently under construction) and the Lake View/Midway project (ongoing design).
- Experienced with preliminary engineering, zoning requirements, hydraulic modeling, plan production, FDEP permitting, SRF funding assistance, and building permit coordination.
- Skilled in construction administration, shop drawing review, and resolution of field issues to ensure projects are delivered on schedule and within budget.

Mr. Croyle understands the complexities of designing and delivering large-scale wastewater projects and is adept at coordinating with multiple County departments, permitting agencies, and contractors. For this RFP, he will provide leadership from project initiation through start-up, ensuring that each lift station replacement meets CCU standards, SCADA compliance requirements, and long-term operational needs.

2. Other Key Personnel

The following staff will support Mr. Croyle:

Jonathan H. Cole, P.E., Principal-in-Charge

The President of Giffels-Webster Engineers, Inc. and the Principal-in-Charge for the project will be Mr. Jonathan H. Cole, P.E. Mr. Cole has over 40 years of municipal design experience for large utility projects.

Mr. Cole is a Professional Engineer registered in the States of Florida, Connecticut, New Hampshire, Kansas, and Nebraska. He graduated from the University of Connecticut in 1979 with a Bachelor of Science (B.S.) Degree in Civil Engineering and was formerly the County Engineer of Charlotte County, Florida. Mr. Cole is the President of Giffels-Webster Engineers, Inc., a Florida corporation.

- Mr. Cole has been the Principal-in-Charge on over two dozen large septic to sewer projects over the last 25 years for the Englewood Water District, the Counties of Charlotte, Sarasota, Martin, and Hillsborough.
- Mr. Cole has been the EOR for Charlotte County's Spring Lake Contract A-D and El Jobean vacuum systems.
- He has expertise in Master Planning and Design/Contract Administration for large-scale utility projects.
- Utility Infrastructure Design/FDOT Utility JPA plans for utility replacement for road projects.
- SRF Financial Support for large scale utility projects.
- Expert Witness for private or municipal civil, utility system, and construction projects.

Kendra Kotlarski, P.E., Design Engineer

Ms. Kendra Kotlarski is a graduate of Florida Gulf Coast University in Fort Myers, Florida, where she earned a Bachelor of Science in Civil and Environmental Engineering. She is a licensed Professional Engineer. During her studies, Kendra interned with Charlotte County Utilities, gaining valuable experience in utilities, hydraulics, water resources, permitting, and design.

As an Engineer at Giffels-Webster Engineers (GWE), Kendra has made significant contributions to numerous utility projects, with a focus on preliminary engineering, master planning, and designing septic-to-sewer conversions. Her technical knowledge and skills have been vital to the success of several key projects.

Notable projects Kendra has worked on include:

- Charrlotte County Harborview Road Planning
- Charlotte County Ackerman Countryman Wastewater Expansion
- Charlotte County Lake View/Midway Water Quality Improvements
- Hillsborough County Ruskin and Wimauma Septic to Sewer Conversion Program
- City of Venice Bay Indies Utility Relocations Phases 1 and 2
- City of Punta Gorda: Charlotte Park Septic to Sewer Project
- Martin County Port Salerno New Monrovia Vacuum Sewer Project
- Martin County Rocky Point Project

Kendra is responsible for a wide range of tasks, including project management support, client coordination, plan production review, vacuum modeling, site development, and permitting. Her dedication and growing expertise make her an asset to the GWE team as she continues to advance toward becoming a licensed Professional Engineer.

Kevin E. Furniss, Senior Designer

Mr. Kevin Furniss is a Senior Designer with 34 years of experience in civil and utility design, and he serves as the lead designer for all projects at Giffels-Webster Engineers Inc. (GWE). His extensive experience includes plan production, complex design, conflict resolution, and drafting, with a focus on large septic-to-sewer conversion projects for over 25 years. Since the mid-1990s, Kevin has been the lead designer for all GWE's major septic-to-sewer projects, including the Charlotte County East/West Spring Lake project and the Ackerman project.

In addition to his work in Charlotte County, Kevin has been instrumental in leading the design for numerous Englewood Water District projects, Martin County, Sarasota County, and Hillsborough County. His work includes complex utility system designs for significant projects such as the Midway Widening and Olean Boulevard improvements in Charlotte County, as well as numerous successful projects across the region.

Kevin's vast knowledge of utility design and his attention to detail make him an invaluable resource for GWE and its clients. His leadership on these projects ensures that every design meets the highest technical standards while adhering to local regulations and environmental considerations. With decades of experience and a hands-on approach to every project, Kevin continues to play a critical role in GWE's success, delivering reliable, high-quality design solutions across multiple counties. His expertise in large-scale infrastructure design ensures that every project benefits from his deep industry knowledge and technical proficiency.

Christopher Orren, Senior Designer

Mr. Christopher Orren brings over 27 years of experience as a Utility Designer/Draftsman to his role at Giffels-Webster Engineers, Inc. (GWE). His extensive knowledge spans multiple disciplines, including utility design, field surveys, data collection, and drafting for both public and private sector projects. His proficiency in leading design software platforms such as AutoCAD®, Civil 3D, and ESRI ArcGIS, as well as Civil Surveying & Aerial Imaging Programs, EPIC-2D/3D, and HULL Finite Element Analysis (FEA), allows him to deliver precise and innovative design solutions.

Throughout his career, Christopher has played a key role in a variety of complex projects, offering technical expertise in Maintenance of Traffic (MOT) and the implementation of Best Management Practices (BMP). His experience includes not only technical design but also critical on-site coordination, ensuring that projects are executed efficiently and meet all regulatory requirements.

Christopher's comprehensive skill set, and years of experience make him a valuable asset to GWE and its clients, consistently contributing to the successful delivery of infrastructure projects across multiple sectors. His attention to detail and ability to manage complex technical requirements ensure that all designs are executed to the highest standards.

Timothy Morrow, Senior Designer

Mr. Timothy Morrow is a Senior Designer at Giffels-Webster Engineers, Inc. (GWE), where he has over 20 years of experience in civil engineering and utility design. Throughout his career, Timothy has specialized in the design and implementation of large-scale infrastructure projects, including water and sewer systems, roadway improvements, and stormwater management. His expertise lies in complex plan production, conflict resolution, and detailed drafting, ensuring that each project is completed with precision and efficiency.

Timothy's deep knowledge of utility systems, coupled with his proficiency in AutoCAD® and Civil 3D, makes him an integral member of the GWE team. He has contributed to a wide array of successful projects, consistently providing high-quality design solutions that meet client needs and regulatory requirements. His dedication to his work and attention to detail have earned him a reputation as a reliable and skilled designer within the industry.

Thomas L. Shaw, Structural Designer – Structural Design

Mr. Shaw has more than 35 years of experience designing and constructing residential, light commercial, and utility-related projects in Southwest Florida. As a licensed contractor and structural designer, he is well versed in all phases of building design and construction, including compliance with Florida Building Code and local requirements. For this project, Mr. Shaw will prepare structural plans for lift station slabs, hatches, support systems, driveways, fencing, and other site improvements. He has designed more than a dozen pump and lift stations and is thoroughly familiar with the specialized structural requirements needed for wet wells, equipment pads, and site access structures.

Frank Ochoa, Project Administrator

Mr. Ochoa leads construction administration services with a focus on contract compliance, field coordination, and timely project documentation. He will serve as the primary liaison between the design team, Charlotte County Utilities staff, and the contractor during construction. His responsibilities will include responding to RFIs, processing submittals, coordinating with permitting agencies, and supporting CCU staff through start-up and closeout.

Jeff Cornish, Hernan Duarte, and Al Kuni - Field Inspection Team

This experienced inspection team will provide on-site oversight of construction activities to ensure compliance with contract documents, specifications, and Charlotte County standards. Their duties will include monitoring workmanship and materials, coordinating with CCU staff, verifying safety and environmental compliance, and preparing daily reports. Their diligence and responsiveness will be central to ensuring that lift station replacements and site improvements are delivered on time, within budget, and in full conformance with project requirements.

3. Consultants

SURVEY - Meridian Group of South Florida, Inc.

Joseph E. Trott, P.S.M., Project Manager/Principal

Mr. Joe Trott is the owner/president of Meridian Group of South Florida, Inc., and is a Florida licensed surveyor and mapper. He has over forty-five (45+) years of survey project management experience for a wide range of projects located in Southwest Florida. Joe is familiar with Charlotte County Utilities' minimum drawing requirements having performed record drawings for all the *septic to sewer* projects. Mr. Trott provides design surveys, control surveys, boundary and topographic surveys, right-of-way surveys, hydrographic surveys, mean high water surveys, route surveys, construction stake out, and as-built surveys.

ELECTRICAL AND I&C DESIGN – C & W Engineering, Inc.

Michael Guida, P.E., Project Manager/Principal

Mr. Guida is a licensed Florida Electrical Engineer with 37 years of experience in power and controls design for water and wastewater infrastructure. He has designed and overseen electrical and instrumentation components for numerous large control systems, including vacuum stations, lift stations, and SCADA-integrated facilities. For this project, Mr. Guida will be responsible for preparing electrical and I&C design drawings, as well as providing oversight and review for power distribution, panelboards, arc-flash studies, standby generators, lighting, alarms, and conduit/cable routing in full compliance with NEC codes.

GEOTECHNICAL - Universal Engineering Sciences

Adam Dornacker, P.E., Geotechnical Department Manager

Mr. Dornacker, Geotechnical Manager at UES Fort Myers, has over eight years of local experience in foundation analysis, installation monitoring, and field/lab testing of soils and concrete. He will manage and coordinate all soil and rock investigation work for this project.

ENVIRONMENTAL AND PROTECTED SPECIES ASSESSMENTS - Suncoast Ecological Services, LLC

Jennifer Krajcir, Project Manager/Principal

Ms. Krajcir specializes in Florida upland and wetland environments. She will evaluate environmental aspects, secure and track permits, perform wetland determinations and protected species assessments, and prepare mitigation, monitoring, and wildlife management plans. She also develops planting and vegetation management plans and conducts field data collection.

ARCHEOLOGICAL, HISTORICAL INVESTIGATIONS, AND CULTURAL REQUIRMENTS – ACI, Inc.

Marion Almy, RPA, Project Manager/Principal

Ms. Almy, founding Principal and President of ACI (a Woman-Owned MBE), has 45 years of cultural resource management experience across Florida. She has managed projects for FDOT, Water Management Districts, counties, and private corporations, and represents clients before state, federal, and tribal regulatory agencies.

LANDSCAPING – Terrescape, Inc.

Yvonne R. Hall, RLA, Project Manager/Principal

Ms. Hall, principal of Terrescape, has 30 years of experience in landscape architecture and design in West Florida. She specializes in site analysis, interdisciplinary coordination, and providing design solutions with construction supervision expertise.

SUBSURFACE UTILITY EXPLORATION (SUE) - George F. Young, Inc.

If needed, GFY will oversee all SUE activities. George F. Young, Inc. has extensive experience locating and identifying underground utilities, including phone lines, gas, water, and fiber optics, to support design and construction.

RESUMES

Jonathan H. Cole, P.E.

POSITION:
President/Principal-In-Charge

EDUCATION:
University of Connecticut
Storrs, CT
B.S., Civil Engineering (1979)

YEARS OF EXPERIENCE: 39

LICENSURE/CERTIFICATIONS:
- P.E. #36384, Florida
- P.E. #0013198, Connecticut
- P.E. #06872, New Hampshire
- P.E. #E-17024, Nebraska
- P.E. #27320, Kansas
- FL Advanced Traffic Control
- FDEP Stormwater Erosion and Sediment Inspector

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Mr. Cole is a veteran civil engineer with over 36 years of experience, including 30 years serving Sarasota and Charlotte Counties. As President of Giffels-Webster Engineers, Inc., and former Charlotte County Engineer, Mr. Cole brings unmatched institutional knowledge, having led large-scale public utility infrastructure projects throughout Florida.

His expertise includes complete utility system design, FDOT utility relocation planning (JPA), permitting, and construction services. Mr. Cole has served as Principal-in-Charge for dozens of complex wastewater and water infrastructure projects across densely developed urban and coastal areas.

He also provides expert witness services on civil infrastructure and utility disputes and leads subsurface utility investigations using ground-penetrating radar to support project risk mitigation.

Core Competencies
- Contract administration & construction-phase services
- Full utility system design (water, sewer, reclaimed)
- FDOT JPA coordination & relocation design
- Permitting (FDEP, SWFWMD, local)
- Expert testimony on civil/utility systems
- Subsurface utility detection using GPR

Representative Projects

Sarasota County
- Phillippi Creek Septic System Replacement Program: Areas C, E, F, I, J, K East & West, M-West, N Phases I & II, N-3, O & P
- Complete utility and septic-to-sewer conversion design for neighborhoods with constrained access and aging infrastructure.

Charlotte County Utilities
- East/West Spring Lake Wastewater Expansion Project
- Principal-in-Charge for vacuum sewer system conversion in developed subdivisions.
- Multiple Utility Projects – oversight of lift stations, mains, and system rehabilitation efforts

Englewood Water District
- Sewer Collection System & Water Distribution Projects (V-1 to V-9)
- Led design and oversight of system-wide sewer expansions and water infrastructure improvements.

Martin County Utilities
- Seagate Harbor & Lighthouse Point Sewer Expansion
- North River Shores Phases 1 & 2 Sewer Expansion
- Golden Gate Sewer Expansion

Hillsborough County
- Ruskin and Wimauma Septic-to-Sewer Conversion Program
- Complete septic and low pressure conversion design for a vacuum sewer collection system

Dennis J. Croyle, P.E.

POSITION:
Project Engineer

EDUCATION:
University of Florida
Gainesville, FL
B.S., Civil Engineering (2011)

YEARS OF EXPERIENCE: 12

LICENSURE/CERTIFICATIONS:
- P.E. #82287, Florida
- FL Advanced Traffic Control
- FDEP Stormwater Erosion and Sediment Inspector

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Mr. Dennis J. Croyle is a Professional Engineer registered in the State of Florida. Mr. Croyle worked in the construction industry where he gained valuable knowledge through work experience in civil construction. He earned a Bachelor's of Science in Civil Engineering (2011) from the University of Florida. Mr. Croyle has been a Project Manager for GWE since early 2014 specializing in the planning, design and construction of utility infrastructure projects throughout the State of Florida.

As a Project Engineer, Dennis Croyle manages and designs water and wastewater projects, including but not limited to wastewater collection and water supply. Mr. Croyle has over 10 years of engineering and project management experience encompassing hydraulics, water and wastewater facilities, design, permitting, and construction services.

Sarasota County:
- Hillview (Shamrock Boulevard) Force Main Extension
- Midnight Pass Water Main Replacement
- Phillippi Creek Septic System Replacement Program: Area I & J; Area N-3; Area O & P; Area M-West

Charlotte County Utilities:
- Wastewater Expansion Vacuum Sewer, Phase 2
- Myakka Booster and El Jobean Vacuum Pump Station
- East/West Spring Lake Vacuum Sewer Expansion Program
- Utility Adjustment/Relocation Design, Midway Boulevard Widening, Phase 2

Englewood Water District:
- V9-B & V9-C Vacuum Sewer Design

Martin County Utilities:
- North River Shores, Phase 2: Vacuum Sewer Collection System
- Golden Gate: Vacuum Sewer Collection System
- Old Palm City: Vacuum Sewer Collection System

City of Port St. Lucie:
- Southport Unit 5: Vacuum Sewer Collection System

Kendra Kotlarski, EI

POSITION:

Design Engineer

EDUCATION:

Florida Gulf Coast University

Fort Myers, FL

B.S., Civil and Environmental Engineering (2020)

YEARS OF EXPERIENCE: 5

LICENSURE/CERTIFICATIONS:

- P.E. #101039, Florida
- FL Advanced Traffic Control

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Ms. Kotlarski is a licensed Professional Engineer in the State of Florida with strong technical expertise in utility planning and design. She has contributed to multiple municipal utility infrastructure projects, including septic-to-sewer conversions, vacuum sewer system design, and utility relocation projects throughout Florida.

Kendra brings a practical understanding of water resources, hydraulics, permitting, and utility modeling. Since joining GWE, she has supported the full project lifecycle—planning, permitting, design, and construction support—on projects ranging in size and complexity for counties and municipalities.

Core Competencies

- Utility infrastructure design (sewer, water, reuse)
- Vacuum sewer system layout & modeling
- Septic-to-sewer conversion programs
- Regulatory permitting (FDEP, FDOT, SWFWMD)
- AutoCAD Civil 3D, GIS, and hydraulic modeling software
- Construction document preparation and review

Representative Projects

Sarasota County

- Pump Stations 1 & 4 Upgrades
- Supported design improvements, coordination, and permitting for pump station rehabilitation and system upgrades.

Ruskin and Wimauma Septic-to-Sewer Conversion Program

- Contributed to utility layout, design calculations, and permitting exhibits.

City of Venice

- Bay Indies Utility Relocations – Phases 1 & 2

City of Punta Gorda

- Charlotte Park Septic-to-Sewer Conversion Project

Charlotte County Utilities

- Ackerman–Countryman Phase 2 Sewer Expansion

Martin County Utilities

- Port Salerno / New Monrovia Vacuum Sewer Design

Kevin E. Furniss

POSITION:
Senior Designer

YEARS OF EXPERIENCE: 34

LICENSURE/CERTIFICATIONS:
- Certified Technician Level III

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Mr. Furniss has been with Giffels-Webster Engineers, Inc. (GWE) since 1989. He is a 1986 graduate from Lemon Bay High School in Englewood with years of drafting experience, including mechanical and architectural drawings. His background education includes various computer courses, blueprint reading and architectural drawings through Manatee Community College (State College of Florida) and Charlotte Vocational-Technical School.

Mr. Furniss has held the position of senior designer and AutoCAD® Technician with GWE. His background, training and experience include AutoCAD® drafting, engineering project designs, and assisting in the capacity of construction inspector.

He is directly responsible for the accuracy and deliverables of the record/as-built drawings for virtually all of GWE construction projects, and in particular, Sarasota County and Englewood Water District Expansion Projects. Below are some of the projects he has worked on.

Charlotte County:
- Burnt Store Road Improvements, Army Corp of Engineers Permitting Assistance
- Midway Boulevard, Phase II-Roadway Design and Drainage Project, Port Charlotte
- East/West Spring Lake Wastewater Expansion Project, Port Charlotte

Sarasota County:
- Phillippi Creek Septic System Replacement Program, Vacuum Sewers: Area A; Area C; Area D; Area E, Area F; Area K, East and West; Area N-Phases I & II; Area O & P
- Center Road Utility Relocation, as-built drawings, Venice
- U.S. 41 & Pump Station 25, including both 16” and 18” Force Mains

City of Punta Gorda:
- Burnt Store Road Utility Improvements, Phase I
- Piper Road Improvements – including 16” pressure mains

Englewood Water District:
- All EWD Vacuum Sewer projects
- EWD/FDOT JPA Water Main Relocation Projects along S.R. 776, Sarasota/Charlotte Counties
- EWD Force Main Interconnect, Sarasota County
- Manasota Key Sanitary Sewer Collection Systems, Charlotte County
- Lemon Bay Reuse Force Main, Charlotte County
- Winchester Boulevard Force Mains, Charlotte County
- EWD’s On-Going Phased Vacuum Sewer Expansion Project

City of Venice:
- Center Rd. Roadway Plans & ICPR’s

Christopher V. Orren

POSITION:
Utility Designer/Draftsperson

EDUCATION:
Florida Institute of Technology
B.S., Space Sciences (1985)

YEARS OF EXPERIENCE: 38

LICENSURE/CERTIFICATIONS:
- Certified Technician Level III

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Mr. Orren has over 27 years of experience as a Designer/Draftsman. He also has an additional 8 years experience as a Senior Engineer in the field of Mechanical Analysis Ordnance Engineering for Martin Marietta in Orlando.

He received a Bachelor of Science in Space Sciences and a minor in Physics at the Florida Institute of Technology in 1985. He joined Giffels-Webster Engineers in 2001 and is proficient in AutoCAD®, Civil 3D, ESRI ArcGIS, Civil Surveying & Aerial Imaging Programs, EPIC-2D/3D, and HULL Finite Element Analysis (FEA).

Mr. Orren is a certified Technician Level III as both a Chief Computer Operator and a Chief Drafter by the National Society of Professional Surveyors and the American Congress on Surveying and Mapping (NSPS-ACSM). Since joining Giffels-Webster Engineers, Mr. Orren has been involved in field survey and data collection, drafting, and design including Utility Projects, Maintenance of Traffic (MOT) and Best Management Practices (BMP) of numerous public and private sector projects, including:

Charlotte County:
- Burnt Store Road Improvements, Army Corp of Engineers Permitting Assistance
- Veterans Boulevard Phases II & III, Port Charlotte
- Fire Station No. 13, San Casa Boulevard, Englewood
- WO #22-Design/Drainage/Paving at Various Location (Tringali Park, Englewood Annex, Mid-Century Library, Punta Gorda Library and Harold Avenue Park)
- WO #61-Design/Permitting of Water Control Structure crossing in the Pompano Waterways at Elkcam and Fordham Boulevard at U.S. 41 (micro-tunnels), Port Charlotte
- Midway Boulevard, Phase II-Roadway Design and Drainage Project, Port Charlotte
- Placida Road Utility Improvements, Cape Haze
- East/West Spring Lake Wastewater Expansion Project, Port Charlotte

Sarasota County:
- Brookhaven Force Main Design, Sarasota

City of Punta Gorda:
- Bal Harbor Boulevard, 16” Water Main Design

Englewood Water District:
- Area V9-B & C Vacuum Sewer Expansion Project, including preparation of sketches for utility easements
- Reclamation Facility Odor Control Master Plan Project, Englewood
- Winchester Boulevard South, Utilities Relocation Project, Englewood

City of Venice:
- Center Road Roadway Plans & ICPR’s

Thomas L. Shaw

POSITION:
Senior Structural Designer

YEARS OF EXPERIENCE: 46

LICENSURE/CERTIFICATIONS:
- Certified Plans Examiner
- Certified Inspector
- Certified Building Contractor

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Mr. Thomas Shaw has over 33 years of experience in designing and building residential and light commercial projects in Southwest Florida. As a licensed contractor, he is experienced in all phases of building design and construction. In addition to his contracting background, he also holds the following certificates: Building Inspector, Coastal Construction Inspector, One and Two Family Dwelling Inspector, and Building Plans Examiner.

Prior to joining our staff, Mr. Shaw worked for both Charlotte and Sarasota Counties as a Certified Plans Examiner. With years of plan review experience, Mr. Shaw is very familiar with the internal permitting process and local and state building ordinances.

His primary responsibilities include project management, code analysis, and client interface. Since joining GWE in 2000, he has worked in the capacity of lead designer and project manager for numerous residential and commercial design and construction projects.

To maintain his licenses, he continually updates his CEU's and has completed the following courses:

Management Information Services Department courses in Excel and Customer Service Professional.

The Southern Building Code Congress International courses: Building Code 1 Inspectors Course; Fire Resistance & Egress for Building Inspectors; Fire Protection Course; Non-structural Plan Review; Florida Principles & Practice; Florida Accessibility Code for Building Construction; Means of Egress; Residential Electrical Principles & Code Applications.

Florida Wood Council "Use of the Guide to Wood Construction in High Winds"; Manufactured/Mobile Homes Installation Standards License Course; Simpson Strong-Tie Workshop; Building Code Officials Construction Seminar, Design/Inspection of Light Gauge Steel Framed Buildings.

Charlotte County:
- East/West Spring Lake Wastewater Expansion Project Vacuum Station
- Five-story County Administration Building window replacement project
- El Jobean Pump Station Design

Sarasota County:
- Phillippi Creek Septic System Replacement Program, Multiple Vacuum Stations

Martin County:
- Seagate Harbor/Lighthouse Point Pump Station Design
- North River Shores, Phase 1 & 2 Vacuum Station Design

Englewood Area Chamber of Commerce:
- Structural design and administration services for the Chamber of Commerce Building in Englewood in Sarasota County

Education
BS in Electrical Engineering, 1993
Florida Atlantic University

FL Registration:
PE No. 60755

Professional Associations:
Florida Engineering Society (FES)
Florida Institute of Consulting Engineers (FICE)

Michael A. Guida, P.E.

C&W Engineering, Inc. - President/Electrical Engineer

Professional Employment History

Michael has over 28 years of proven experience in commercial, industrial, health care, educational, residential and photovoltaic designs for construction. His experience includes electrical engineering design and project management of various municipal, commercial, industrial, educational and health care facilities. He has project managed and coordinated/designed projects with Electrical, HVAC, Plumbing and Fire Protection systems through to completed construction. He has a firm knowledge of FFPC, NFPA codes, Florida Building Code and of course NEC.

Representative Projects

Palm Beach County Lift Station Rehabilitation Project B, Bid Pkg. 2
Work Included new service wires, conduit, main service, control panel; sizing for pumps and voltages.

Okeechobee Deep Well Injection System
Designed two new deep injection wells including power and control systems monitored remotely through SCADA.

Okeechobee Utility Authority Water Treatment Plant – High Service and other Plant improvements
The work included filter effluent transfer pump rehabilitation and provided server improvements to the ground storage tank, a new sludge thickener, including new high service pump station, modifications to the existing electrical system and a new main breaker.

Martin County Golden Gate Vacuum Sewer Pump Station
The project included conversion of septic to vacuum sewer including a new pump station building with VFD equipment, generator, ATS switch, building lighting and miscellaneous field instruments.

West Palm Beach ECR Water Reclamation Facility
The project included GBT building, HVAC evaluation and design, electrical and HVAC load calculations, design.

Palm Beach A-7 Pump Station
Upsizing of pumps to 12HP, reuse the power service, reuse and modify control panel, wet well level control system, RTU points.

Palm Beach E-3 and G-9 Sanitary Pump Station Improvements
The work included Electrical Engineering and design of new control panels, conduits, service conductors, main breakers. New RTU system, as needed. New remote telemetry system.

Pembroke Pines WWTP Rehabilitation, Phase 1
The project included Electrical Engineering and design of new control panels, conduits, service conductors, main breakers. RTU system, as needed and new remote telemetry system.

C&W Engineering, Inc.
6903 Vista Parkway North, Suite 10
West Palm Beach, FL 33411
561-642-5333

SECTION II:
PROPOSED MANAGEMENT PLAN

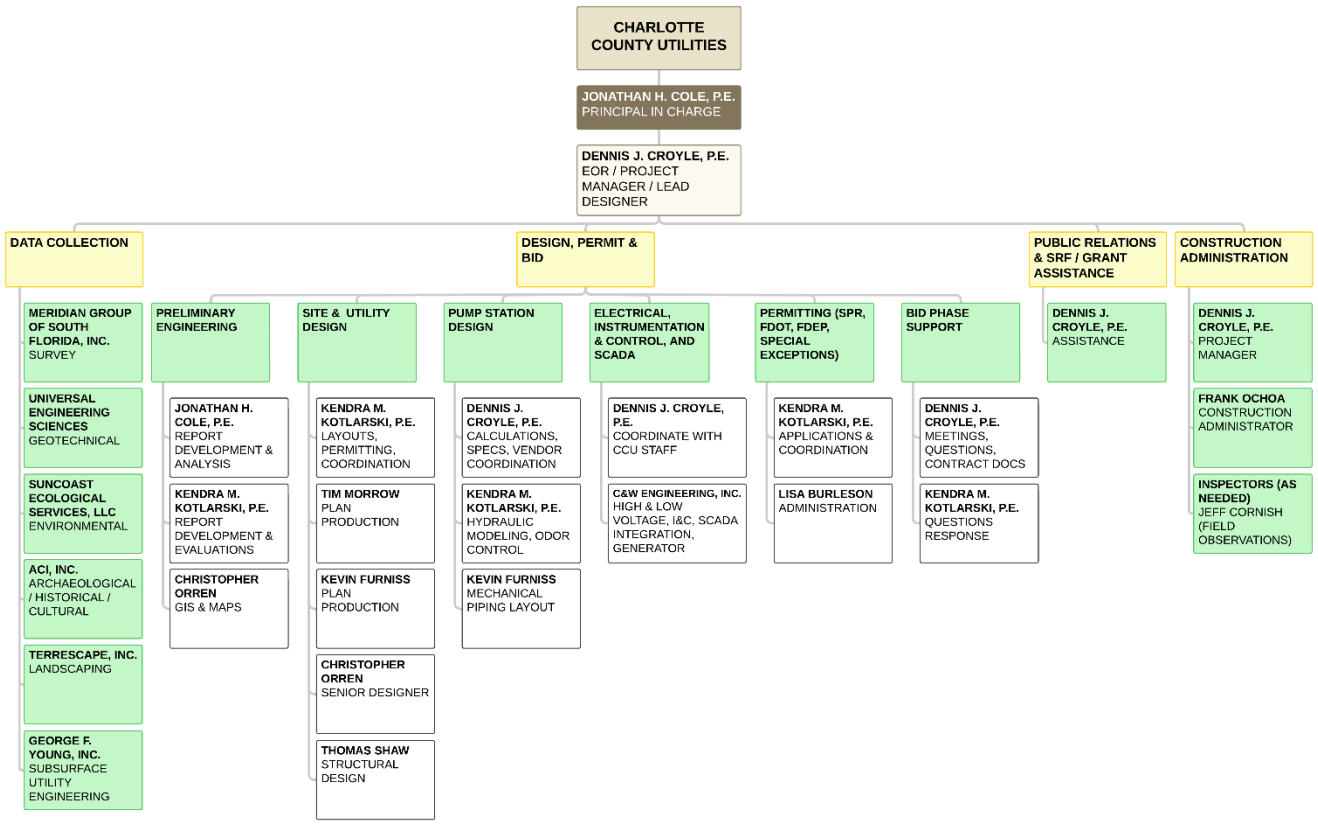
SECTION II: PROPOSED MANAGEMENT PLAN

A. Team Organization

The Giffels-Webster Engineers, Inc. (GWE) team is led by senior principals who will actively oversee and monitor the design and construction support services from start to finish, ensuring Charlotte County Utilities receives continuity, accountability, and proven experience necessary for the successful delivery of these critical lift station replacements.

Our team is composed of knowledgeable local experts organized efficiently to handle every stage of the project, including preliminary engineering reports, permitting, design development, bid-phase services, and construction administration. Dennis J. Croyle, P.E. will serve as the Project Manager throughout the duration of this project, providing a single point of contact for CCU and ensuring timely coordination and quality assurance.

The organizational chart (included below) identifies the leadership and management structure that GWE will dedicate to Charlotte County Utilities. It highlights the Project Manager, Lead Designer, technical specialists, and sub-consultants who will contribute during both the design and construction phases. Together, this team will provide the County with responsive, reliable, and efficient project delivery.



1. Design Phase

Preliminary Engineering Phase

The preliminary engineering phase establishes the foundation for a successful project by identifying site-specific constraints and opportunities at each lift station. This includes evaluation of existing conditions, relocation requirements, hydraulic capacity, and permitting considerations.

Key efforts will include:

- **Hydraulic evaluation** using CCU's Sewer Master Plan and ongoing modeling.
- **Site selection and planning** for stations requiring relocation (LS #303, LS #816, LS #817).
- **Environmental and permitting reviews**, including FDEP Rule 62-604.400 compliance, FDOT coordination, and zoning special exemptions.
- **Operational considerations** such as odor control, SCADA integration, backup power, and access/driveway design.

This phase will be managed by **Dennis J. Croyle, P.E.** as Project Manager, with **Kendra Kotlarski, P.E.** providing direct support in planning, preliminary hydraulics, and early site evaluations. **Jonathan Cole, P.E.** will contribute planning expertise, particularly with long-term system integration and master planning considerations. Together, this team will prepare a **Preliminary Design Report** summarizing constraints, opportunities, and recommendations for CCU review and approval.

Final Design Phase

The design phase converts the findings from the preliminary phase into complete construction documents for bidding. All design elements will be prepared in accordance with **CCU's Design Compliance Standards (2011, as updated)** and **2024 SCADA Standards**.

Roles and responsibilities:

- **Project Manager & Lead Designer – Dennis J. Croyle, P.E.**: Provides overall project oversight, QA/QC, schedule and budget control, and serves as CCU's primary point of contact.
- **Design Engineer – Kendra Kotlarski, P.E.**: Provides technical design development, permitting coordination, and hydraulics support.
- **Electrical + SCADA –** C&W Engineering will provide design, reviews and coordination with CCU staff
- **Planning Support – Jonathan Cole, P.E.**: Assists with site layouts, hydraulics, and integration with CCU's long-term wastewater planning.
- **CAD Production – Kevin Furniss, Chris Orren, and Tim Morrow**: Responsible for preparing detailed plan sheets and incorporating revisions under Dennis's direction.

Design management tasks will include:

- Preparation of full build-out and interim designs.
- Buoyancy calculations and flood protection for wet wells.
- Standardization of pumps, controls, and appurtenances.
- Integration of SCADA, odor control, and generator systems.
- Preparation of bid documents and technical specifications.
- Independent QA/QC reviews prior to submittals.

2. Construction Phase

Construction often presents unforeseen challenges despite thorough planning and design. GWE will provide consistent construction-phase services to support CCU through to completion, ensuring that design intent is maintained and project milestones are achieved.

Construction Administration

- **Dennis J. Croyle, P.E. (Project Manager & Lead Designer)** – serves as CCU's primary point of contact, overseeing construction administration, resolving field issues, reviewing submittals, and providing timely RFI responses. His dual role ensures that both management and design decisions are made efficiently without delays.
- **Kendra Kotlarski, P.E. (Design Engineer)** – provides continued involvement during construction to support submittal reviews, maintain design integrity, and assist with the preparation of startup and O&M documentation.

Inspection Support (As Needed)

While the baseline service anticipates construction administration only, GWE can scale support at CCU's request to include field inspection services.

- **GWE's inspector team** can be deployed to observe critical milestones such as wet well installation, SCADA and electrical integration, generator commissioning, and final site work.
- Inspection reports and documentation can be provided directly to CCU to supplement daily oversight.

This structure provides CCU with the most efficient level of service: **construction administration as the foundation**, with the ability to expand to **inspection coverage** if project complexity or County preference requires additional field presence.

SECTION III:

PREVIOUS EXPERIENCE OF TEAM PROPOSED FOR THIS PROJECT

SECTION III: PREVIOUS EXPERIENCE OF TEAM PROPOSED FOR THIS PROJECT

A. Describe projects - lift station and appurtenances

Giffels-Webster Engineers, Inc. (GWE) is one of the primary engineering firms providing lift station and wastewater infrastructure design services for Charlotte County Utilities (CCU) and other Florida utilities. Our firm has designed, permitted, and provided construction administration services for dozens of lift station and force main projects across the region.

GWE has served as Engineer-of-Record for CCU on numerous wastewater system improvements, including **East/West Spring Lake**, **Ackerman/Countryman**, **Lake View/Midway**, and **El Jobean** projects. Each of these programs required planning, permitting, and design of major pump stations, force mains, and associated SCADA integration.

Our staff has extensive experience with:

- **Lift station replacement and rehabilitation**, including wet well design, pump sizing, and flood elevation protection.
- **Construction-phase support**, including shop drawing review, RFI responses, and startup training.
- **SCADA system integration**, with recent designs incorporating CCU's **2024 SCADA Standards**.
- **Permitting coordination** with FDEP, FDOT, and zoning requirements (including Special Exceptions for pump stations).

The GWE team proposed for this project is the same team that successfully delivered multiple CCU lift station and wastewater expansion projects in the past decade, providing proven continuity and familiarity with County standards.

B. Vendor & Contractor Coordination

GWE has assisted CCU and other Florida utilities with **pump station equipment preselection, contractor coordination, and construction administration support**. Our engineers have worked closely with equipment suppliers to ensure standardization of pumps, generators, and control systems, reducing maintenance costs and improving reliability.

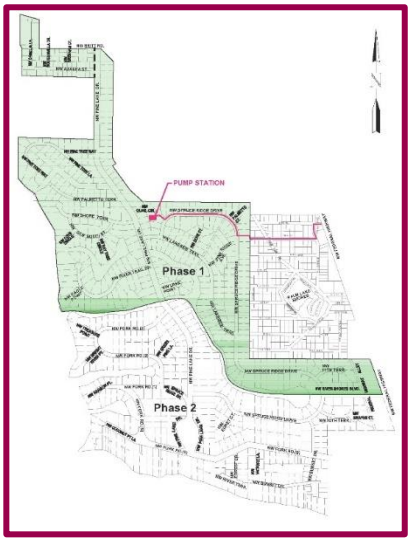
We understand the importance of establishing clear specifications and working directly with contractors and vendors to ensure compliance with CCU requirements. Our approach has eliminated warranty disputes, ensured smoother startups, and allowed CCU operations staff to focus on system performance rather than troubleshooting equipment conflicts.

C. Local Project Experience

Please refer to the attached project experience summary sheets for detailed information on specific projects. Each of these projects demonstrates GWE's ability to manage design complexity, deliver on schedule, and coordinate with County operations staff to ensure successful project completion.

(Project Experience Summary Sheets follow on subsequent pages)

North River Shores, Phase 1, Sewer Expansion Stuart, Florida



Project Description/Nature of Work:
Provide design plans and CEI services for the installation of a vacuum sewer collection system in the North River Shores subdivision located in Martin County, Florida. The project was completed with approximately 650 connections. Included in the scope was construction management, daily inspection, including a resident compliance specialist, field note reports, record drawings, and final certifications.

Year Completed: 2011
Cost: $4.5M
GWE Team: Jonathan H. Cole, P.E., Andrew J. Wickerson, P.E., Thomas Shaw, Randy Blackwell, Kevin Furniss, Chris Orren

Client: Phil Keathley, Chief Project Manager, Martin County Utilities

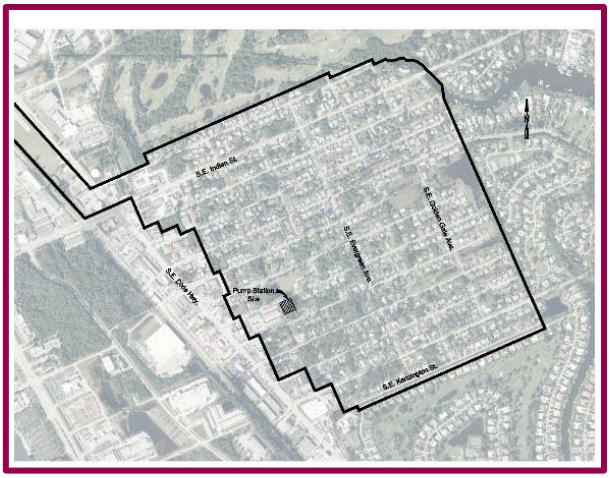
North River Shores, Phase 2, Sewer Expansion - Stuart, Florida

Project Description/Nature of Work:
The North River Shores, Phase 2 Sewer Expansion project involves the design and construction of a centralized vacuum collection sewer system into a highly developed neighborhood located in Stuart, Florida. This project consists of approximately 24,000 feet (4.5 miles) of vacuum pipe, approximately 140 valve pits, a vacuum pump station, and force main serving approximately 300 ERC's.

Year Completed: July 2019
Cost: Vacuum Station $1.5M, Collection Area: $4.5M
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Thomas Shaw, Randy Blackwell, Kevin Furniss, Chris Orren

Client: Phil Keathley, Chief Project Manager, Martin County Utilities

Golden Gate Septic to Sewer Expansion – Stuart, Florida



Project Description/Nature of Work:
The Golden Gate Septic to Sewer project involves the design and construction of a centralized vacuum collection sewer system into a highly developed neighborhood located in Stuart, Florida.

This project consists of approximately 57,000 feet (10.8 miles) of vacuum pipe, approximately 380 valve pits, a vacuum pump station, and force main serving approximately 1,280 ERC's.

Year Completed: Under Construction
Cost: $12.9 M
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Thomas Shaw, Kevin Furniss, Chris Orren

Client: Phil Keathley, Chief Project Manager, Martin County Utilities

Seagate Harbor/Lighthouse Point Sewer Expansion, Martin County, Florida

Project Description/Nature of Work:
Seagate Harbor/Lighthouse Point, consisting of approximately 600 residential connections, was the first of three areas that were designated to receive a centralized vacuum sewer system (AIRVAC). Over 90% of all properties served are waterfront homes with minimum vacant lots priced in excess of $200,000. Construction took place over a twelve month time frame and was completed on time and within the allotted budget. Currently 95% of all residents have been connected.

Year Completed: 2006
Cost: $2.1M funding secured by GWE through SRF
GWE Team: Jonathan H. Cole, P.E., Kevin Furniss, Chris Orren

Client: Phil Keathley, Project Manager - Martin County Utilities

Southport Unit 5 Vacuum Sewer Design, Port St. Lucie, Florida

Project Description/Nature of Work:
The Southport Unit 5 Vacuum Sewer Design project involves the design of a centralized vacuum collection sewer system into a highly developed neighborhood located in Port St. Lucie, Florida. This project involves the planning and design of approximately 11,000 feet of vacuum pipe, 12 buffer tanks, a vacuum pump station, and force main serving approximately 427 ERC's. Moreover, it utilizes buffer tanks that will replace existing lift stations so that all the primary gravity collection system can remain in place.

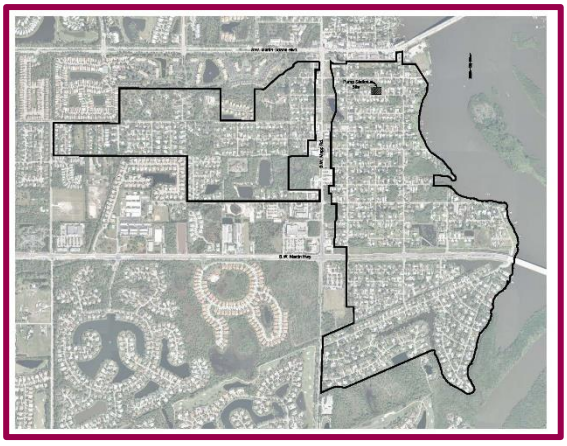
Year Completed: 2021
Cost: Vacuum Station: $1.5M, Collection Area: $2.5M
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Kevin Furniss, Chris Orren, Thomas Shaw

Client: Laney Southerly, P.E., Utility Engineering Manager, City of Port St. Lucie Utility Systems Dept.

Old Palm City Vacuum Sewer and Water Main Extension, Martin County, Florida

Project Description/Nature of Work:
Old Palm City Sewer and Water Main Extension project involves the design and construction of a centralized vacuum collection sewer system into a highly developed neighborhood located in Stuart, Florida.

This project consists of approximately 75,600 feet (14.3 miles) of vacuum pipe, approximately 439 valve pits, a vacuum pump station, and force main serving approximately 1,072 ERC's.



Year Completed: Design Complete August 2021
Cost: $15M (Est.)
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Kevin Furniss, Chris Orren

Client: Phil Keathley, Project Manager, Martin County Utilities

El Jobean Vacuum Pump Station Project, El Jobean, Florida

Project Description/Nature of Work:
GWE is the EOR for the El Jobean Vacuum Station project that involves the design of a booster pump station and a centralized sewer station serving an older low lying, densely developed neighborhood located in El Jobean, Florida. In addition to the pump station design, GWE provided the system hydraulics and the QA/QC of the collection system, consisting of approximately 25,000 feet of main line pipe, approximately 114 valve pits, in two phases eventually serving about 612 ERC's.

Year Completed: 2021
Cost: $2M
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Andrew J. Wickerson, P.E., Kevin Furniss, Chris Orren

Client: Bruce R. Bullert P.E., Engineering Services Manager, Charlotte County Utilities Department

Wastewater Expansion Phase 2 Project (Ackerman/Countryman), Port Charlotte, Florida

Project Description/Nature of Work:
The Wastewater Expansion-Phase 2 (Ackerman/Countryman) Vacuum Sewer project involves the design of a centralized vacuum sewer collection system, vacuum station, and force main into a highly developed neighborhood located in Port Charlotte, Florida. This project involves the planning and design of approximately 17 miles of vacuum pipe, approximately 1,000 valve pits serving approximately 3,340 ERC's.

Year Completed: 2021
Cost Collection System: $14M, Vacuum Station: $1.5M (to date)
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E.,
Andrew J. Wickerson, P.E., Kevin Furniss, Chris Orren, Thomas Shaw

Client: Bruce R. Bullert, P.E., Engineering Services Manager, Charlotte County Utilities Department

East/West Spring Lake Wastewater Expansion Contract A, Port Charlotte, Florida

Project Description/Nature of Work:
The East/West Spring Lake Wastewater Expansion project involved the design and construction of a centralized vacuum collection sewer station located in the Spring Lake subdivision on Azaela Drive. This project involved the planning and design of approximately masonry concrete building, cast in place concrete vault, generator, vacuum equipment, and site work. The station serves vacuum sewer collection contract B and C.

Year Completed: Spring of 2016
Cost: Vacuum Station: $1.5M
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E. ,
Kevin Furniss, Chris Orren

Client: Bruce R. Bullert, P.E., Engineering Service Manager – Charlotte County Utilities Department

East/West Spring Lake Wastewater Expansion Contract B, Port Charlotte, Florida

Project Description/Nature of Work:
The East/West Spring Lake Wastewater Expansion project involved the design and construction of a centralized vacuum collection sewer system, water lines and reuse mains into highly developed neighborhoods located in the Spring Lake subdivision. This project involved the planning and design of approximately 68,300 feet of sewer mains, approximately 262 valve pits, water distribution lines, a central pump station, reuse and force main serving approximately 1,386 ERC's.

Year Completed: Spring of 2018
Cost: Vacuum Station: $1.5M, Collection Area B: $8.6M
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Kevin Furniss, Chris Orren

Client: Bruce R. Bullert, P.E., Engineering Services Manager, Charlotte County Utilities Department

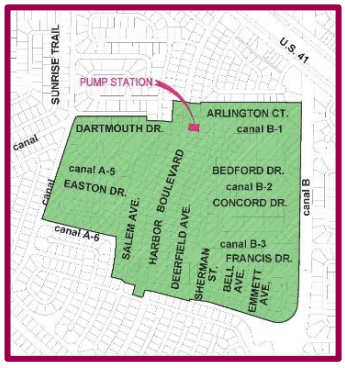
East/West Spring Lake Wastewater Expansion Contract C, Port Charlotte, Florida

Project Description/Nature of Work:
The East/West Spring Lake Wastewater Expansion project involved the design and construction of a centralized collection sewer system into highly developed neighborhoods located in the Spring Lake subdivision. This project involved the planning and design of approximately 44,000 feet of vacuum, approximately 343 valve pits, water distribution lines, serving approximately 809 ERC's.

Cost: Collection Area $5.8M
Year Completed: July 2017
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Kevin Furniss, Chris Orren

Client: Bruce R. Bullert, P.E., Engineering Services Manager, Charlotte County Utilities Department

East/West Spring Lake Wastewater Expansion Contract D, Port Charlotte, Florida



Project Description/Nature of Work:
The East/West Spring Lake Wastewater Expansion, Contract D project involved the design and construction of a centralized vacuum collection sewer system, a vacuum station and water main replacement for "Zones 11 and 12" in the Spring Lake subdivision.

This project involved the planning and design of approximately 22,200 feet of vacuum, approximately 168 valve pits, water distribution lines, a vacuum pump station, and force main serving approximately 381 ERC's.

Cost: Vacuum Station: $1.4M, Collection Area D $5.3M
Year Completed: Spring 2018
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Thomas Shaw, Kevin Furniss, Chris Orren

Client: Bruce R. Bullert, P.E., Engineering Services Manager, Charlotte County Utilities Department

Midway Boulevard Road Widening Project, Port Charlotte, Florida

Project Description/Nature of Work:

Charlotte County Public Works retained GWE as the prime design consultant for the Midway Boulevard Road Widening Project, a high-priority east-west arterial transportation corridor connecting U.S. 41 and Kings Highway within Port Charlotte. GWE provided all design and engineering for the project. The design fundamentally was for a two-lane collector to be widened to a four-lane roadway with four 12' wide travel lanes; 4' wide paved shoulders; grassed median, intersection turn lanes, 6' wide sidewalks, including crosswalks at side streets and lighting design. The project also included major upgrades to Charlotte County Utilities infrastructure including 4' diameter gravity sewer trunk main and primary water transmission systems. Stormwater modeling for the design of both dry and wet detention systems including large diameter conveyance pipes and culverts permitted through SWFWMD, was a major aspect of this project.

Year Completed: 2019
Cost: $1.4M
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Andrew J. Wickerson P.E., Kevin Furniss, Chris Orren

Client: Jeffrey A. Keyser, Project Manager, - Charlotte County Public Works

Cape Haze Drive Reclaimed Main and Forcemain Design, Englewood, Florida

Project Description/Nature of Work:

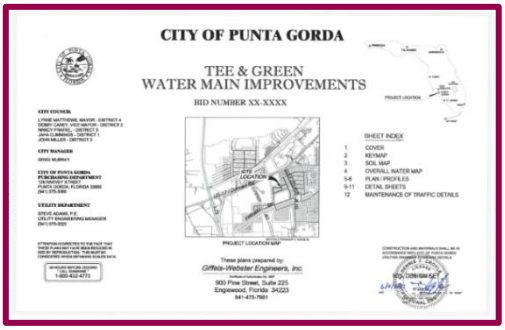
Reclaimed Water Main & Sewer Force Main. 16" reclaimed water main along Cape Haze Drive from Placida Road to the CCU Rotonda WRF for a total distance of approximately 8,000 LF. 12" sewer force main along Cape Haze Drive from Placida Road to the CCU Rotonda WRF for a total distance of approximately 6,750 LF. (GWE) served as the Engineer-of-Record on this project, which was designed in-house

Year Completed: 2020
Cost: Professional Fees: $170K, Construction Cost: $2.1M
GWE Team: Jonathan H. Cole, P.E., Dennis J. Croyle, P.E., Andrew J. Wickerson, P.E., Kevin Furniss, Chris Orren, Thomas Shaw

Client: Thomas Dunn, P.E., Engineering IV, - Charlotte County Utilities Department

Tee & Green Water Main Improvements, City of Punta Gorda, Florida

Project Description/Nature of Work:

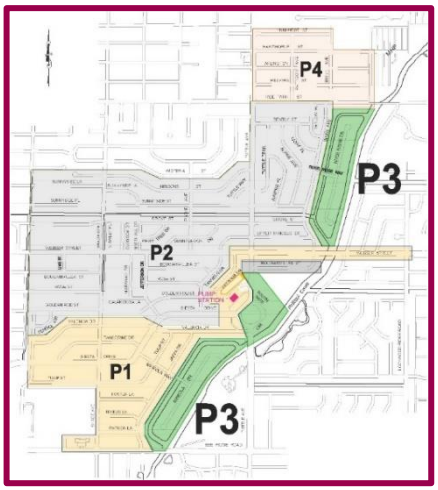


The project involves the planning, design and FDEP permitting of 4 and 6-inch diameter potable water main and associated appurtenances. Although the project is for the City, the work takes place within Charlotte County rights of ways. As a result, coordinating with separate entities to facilitate road crossing pavement restoration and asphalt overlay standards was necessary. GWE serves as the EOR on this project, which was designed in-house. This project will provide potable water service to over 60 residences in the Tee and Green Estates subdivision located just east of I-75.

Year Completed: April 2022
Cost: Engineer's Estimate: $342,000
GWE Team: Dennis J. Croyle, P.E., Mateusz Kalamon, EI, Kevin Furniss

Client: Steve Adams, P.E., Utility Engineering Manager, City of Punta Gorda

Phillippi Creek Septic System Replacement Program Area D, Phase 3, Sarasota, Florida



Project Description/Nature of Work:
The Phillippi Creek Septic System Replacement Program (PCSSRP) involves the design and construction of a centralized collection sewer system into highly developed neighborhoods located in the Phillippi Creek Drainage Basin.

Area D, Phase 3 involves the planning and design of a *low pressure system* servicing isolated areas that pump to a master pump station in Area D, Phase 1.

Year Completed: 2012
Cost: $8.9M (Phase 1, 2 and 3)
GWE Team: Jonathan H. Cole, P.E., Randy Blackwell, Kevin Furniss, Chris Orren

Client: John J. Saputo, IV, Project Manager, Sarasota County Public Works

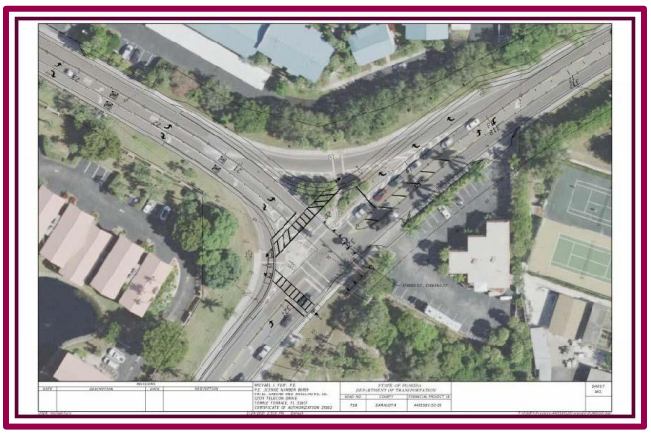
Phillippi Creek Septic System Replacement Program Area O & P, Sarasota, Florida

Project Description/Nature of Work:
This project involved the design and inspection services of a centralized *vacuum sewer* collection system, vacuum station, and water line replacement into a highly developed neighborhood located in Sarasota, Florida, between Clark Road, to the south, and Proctor Road to the north, and U.S. 41 to the west and Beneva Road to the east. This project involved the planning and design of approximately 12.9 miles of vacuum pipe, and 570 valve pits serving approximately 1,247 ERC's.

Year Completed: 2017
Cost: Collection system: $6.4M, Vacuum Station: $1M, Water Main: $4M, Total: $16.5M
GWE Team: Jonathan H. Cole, P.E., Andrew J. Wickerson, P.E., Kevin Furniss, Chris Orren, Thomas Shaw, Randy Blackwell, Dennis J. Croyle

Client: John J. Saputo, IV, Project Manager, Sarasota County Public Works

Sarasota County Midnight Pass 10" and 16" Water Main – Sarasota, Florida



Project Description/Nature of Work:
The project work consists of the construction of approximately 1,000 linear feet of ten through sixteen (10-16) diameter ductile iron water main installed by direct bury methods within FDOT rights of way in Siesta Key, FL. The proposed water main will be replacing the existing asbestos cement water main infrastructure. The existing pipe will be abandoned and removed or grouted in accordance with the drawings. Water services will be re-connected to the proposed main.

Year Completed: 2020
Cost: Professional Fees: $150K, Construction Cost: $600K
GWE Team: Dennis J. Croyle, P.E., Kevin Furniss, Randy Blackwell

Client: John J. Saputo, IV, Project Manager, Sarasota County Public Works

SECTION IV:
PROJECT CONTROL

SECTION IV: PROJECT CONTROL

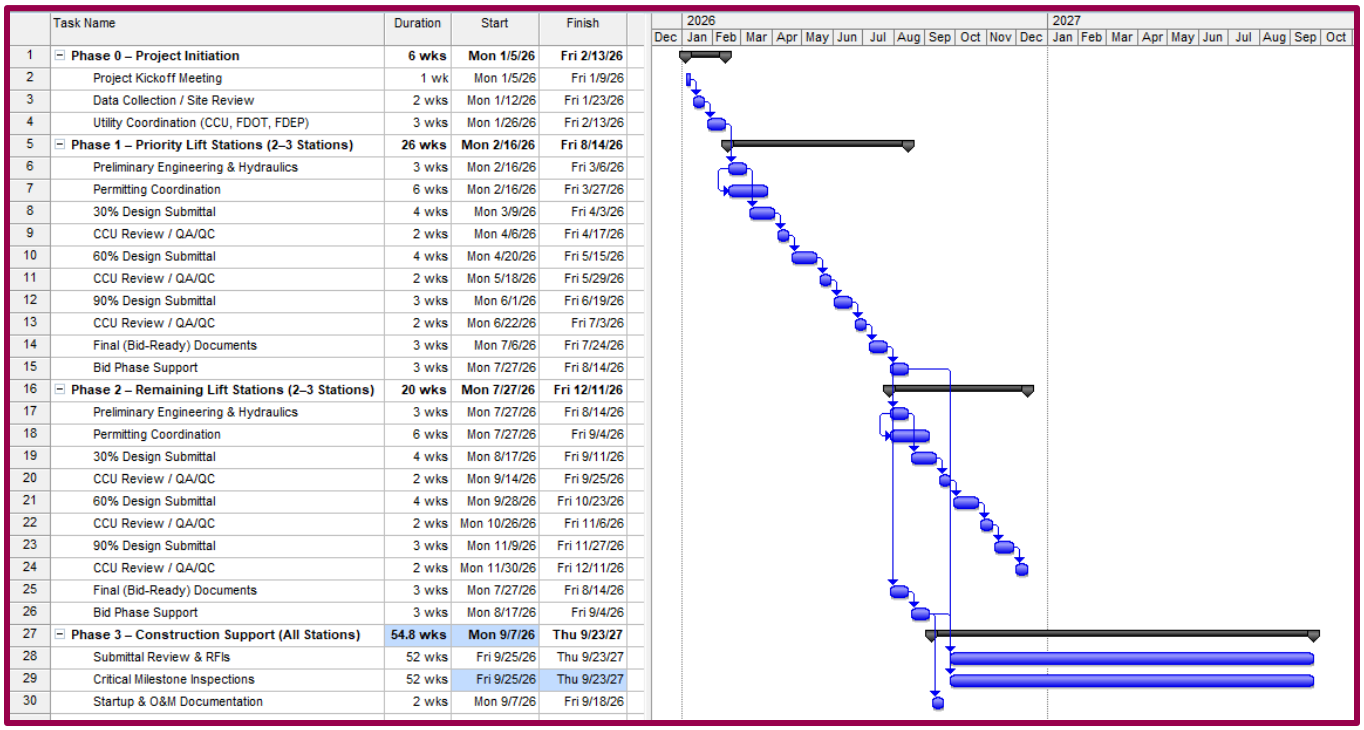
A. Schedule

1. Techniques to Assure Schedule Compliance

Historically, delays in project completion have created undue hardship and inconvenience for the County and, more importantly, for the residents who would most benefit from the improvements. When projects run late, residents live without the needed upgrades and endure extended disruption from construction activities that continue beyond the planned schedule.

To prevent these outcomes, GWE employs a combination of critical path scheduling, milestone tracking, and QA/QC deadlines to keep projects on time. A detailed project schedule has been prepared and is included as Figure 1 – Project Schedule. This schedule aligns with CCU's required 220-day design duration and reflects the sequencing clarified in Addendum #1: CCU intends to finalize the top two to three lift stations first, then proceed with the remaining stations after those are bid and awarded

Our preliminary approach divides the design into sub-phases, allowing construction to commence on completed stations while design progresses on the later ones.



	Task Name	Duration	Start	Finish
1	**Phase 0 – Project Initiation**	**6 wks**	**Mon 1/5/26**	**Fri 2/13/26**
2	Project Kickoff Meeting	1 wk	Mon 1/5/26	Fri 1/9/26
3	Data Collection / Site Review	2 wks	Mon 1/12/26	Fri 1/23/26
4	Utility Coordination (CCU, FDOT, FDEP)	3 wks	Mon 1/26/26	Fri 2/13/26
5	**Phase 1 – Priority Lift Stations (2–3 Stations)**	**26 wks**	**Mon 2/16/26**	**Fri 8/14/26**
6	Preliminary Engineering & Hydraulics	3 wks	Mon 2/16/26	Fri 3/6/26
7	Permitting Coordination	6 wks	Mon 2/16/26	Fri 3/27/26
8	30% Design Submittal	4 wks	Mon 3/9/26	Fri 4/3/26
9	CCU Review / QA/QC	2 wks	Mon 4/6/26	Fri 4/17/26
10	60% Design Submittal	4 wks	Mon 4/20/26	Fri 5/15/26
11	CCU Review / QA/QC	2 wks	Mon 5/18/26	Fri 5/29/26
12	90% Design Submittal	3 wks	Mon 6/1/26	Fri 6/19/26
13	CCU Review / QA/QC	2 wks	Mon 6/22/26	Fri 7/3/26
14	Final (Bid-Ready) Documents	3 wks	Mon 7/6/26	Fri 7/24/26
15	Bid Phase Support	3 wks	Mon 7/27/26	Fri 8/14/26
16	**Phase 2 – Remaining Lift Stations (2–3 Stations)**	**20 wks**	**Mon 7/27/26**	**Fri 12/11/26**
17	Preliminary Engineering & Hydraulics	3 wks	Mon 7/27/26	Fri 8/14/26
18	Permitting Coordination	6 wks	Mon 7/27/26	Fri 9/4/26
19	30% Design Submittal	4 wks	Mon 8/17/26	Fri 9/11/26
20	CCU Review / QA/QC	2 wks	Mon 9/14/26	Fri 9/25/26
21	60% Design Submittal	4 wks	Mon 9/28/26	Fri 10/23/26
22	CCU Review / QA/QC	2 wks	Mon 10/26/26	Fri 11/6/26
23	90% Design Submittal	3 wks	Mon 11/9/26	Fri 11/27/26
24	CCU Review / QA/QC	2 wks	Mon 11/30/26	Fri 12/11/26
25	Final (Bid-Ready) Documents	3 wks	Mon 7/27/26	Fri 8/14/26
26	Bid Phase Support	3 wks	Mon 8/17/26	Fri 9/4/26
27	**Phase 3 – Construction Support (All Stations)**	**54.8 wks**	**Mon 9/7/26**	**Thu 9/23/27**
28	Submittal Review & RFIs	52 wks	Fri 9/25/26	Thu 9/23/27
29	Critical Milestone Inspections	52 wks	Fri 9/25/26	Thu 9/23/27
30	Startup & O&M Documentation	2 wks	Mon 9/7/26	Fri 9/18/26

Figure 1 Project Schedule

Techniques GWE will implement include:

- Continuous review of design and permitting progress, monitoring how each component affects the overall schedule, and promptly resolving any issues that threaten timely completion.
- Critical path adjustments in the event of delays, including task duration revisions and mitigation steps to reduce impacts from factors beyond our control. Progress reports will identify upcoming activities, responsible parties, and any required inputs to remain on schedule.
- Subconsultant accountability, with schedules tied to their contracts and payment withheld in cases of tardiness or non-performance until deficiencies are corrected.
- Construction contract requirements, mandating contractor-prepared schedules before work begins, monthly updates during construction, and inclusion of liquidated damages provisions to protect the County.
- Proactive contractor coordination, with regular meetings to uncover potential delays early. GWE will provide immediate responses to RFIs, design clarifications, or conflicts during construction to keep work moving.

Our goal is to deliver a quality project on time and within budget — ensuring residents realize the benefits of system improvements without extended disruption and giving CCU confidence in both schedule compliance and responsiveness.

2. Responsibility

Dennis J. Croyle, P.E. (Project Manager & Lead Designer) is directly responsible for schedule compliance. He will coordinate staff assignments, monitor progress against milestones, and report schedule status to CCU.

B. Cost

1. Cost Control Techniques

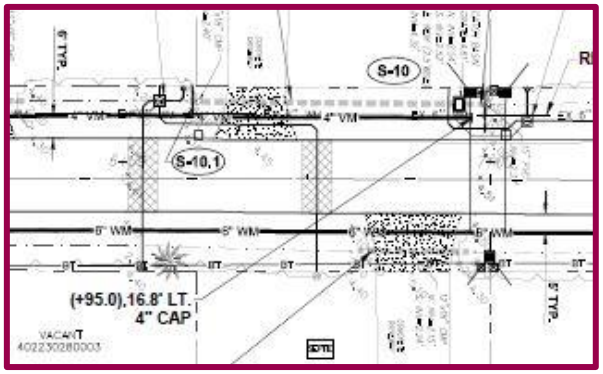
The most effective method to control costs for design and permitting is to negotiate a lump sum contract based on a clearly defined scope of services. By establishing the scope “up front,” both CCU and GWE are protected—ensuring that work considered “in-scope” is delivered without the risk of additional charges.

To address unforeseen conditions, GWE recommends the use of separately authorized task allowances tied to pre-established hourly rates. This maintains cost accountability while giving the County flexibility to add services on a case-by-case basis without renegotiating the entire contract. Similarly, unit price line items can be included in the contract for optional tasks such as additional drainage coordination, architectural enhancements, or site improvements. These allow the County to control budget exposure while avoiding delays caused by contract amendments.

Construction Cost Control:

The GWE team will work closely with CCU to identify cost drivers within each lift station design, evaluate alternatives, and implement strategies that reduce overall costs without compromising quality or maintainability. Typical examples include:

- Standardizing design elements across stations to reduce equipment variability and spare parts inventory.
- Evaluating site layouts for constructability to minimize dewatering and restoration costs.
- Integrating odor control, SCADA, and backup power systems in a way that optimizes long-term O&M.
- Considering future capacity needs during design to avoid costly retrofits.



Since construction costs can fluctuate with market conditions, contractor availability, fuel and material prices, and economic cycles—GWE continuously monitors recent bid results from similar projects. This real-time benchmarking ensures our engineer's estimates reflect true market conditions.

At each design milestone (30%, 60%, 90%, Final), GWE will provide updated quantity-based cost estimates. These estimates will use recent unit prices and CCU's historical bid data to produce realistic projections. By applying a design-to-budget approach, we ensure that alternatives considered are financially feasible within the County's funding allocations.

Bid-Phase Cost Control:
Clear, concise bid and contract documents are a cornerstone of cost control. Vague or incomplete plans can lead to widely varying bids and inflated contractor pricing to cover unknowns. GWE's commitment is to deliver complete bid packages with accurate quantities, reducing bid spreads and minimizing the risk of costly change orders during construction.

Summary of Cost Control Measures:

- Lump sum design contracts with well-defined scope.
- Separate allowances for unforeseen tasks, tied to pre-set hourly rates.
- Optional unit price items for tasks that may or may not be required.
- Design-to-budget approach, aligning alternatives to CCU's funding levels.
- Value engineering reviews at milestones for constructability and efficiency.
- Continuous monitoring of regional bids to keep estimates market-based.
- Clear, accurate bid documents to minimize contractor contingencies and change orders.

2. Demonstrated Ability

GWE has a long history of delivering projects within or under budget by preparing accurate take-offs, applying a design-to-budget approach, and maintaining tight scope control. Once the scope of services has been defined, GWE has never requested additional funds for in-scope engineering services. This track record underscores the strength of using a lump sum contract to maintain cost certainty for both the County and the consultant.

Charlotte County Examples:

- **Midway Boulevard Phase 1:** Delivered with a $4.5 million contract amount versus a $6.2 million budget.
- **Midway Boulevard Box Culverts:** Delivered with a $1.9 million contract amount versus a $2.3 million budget.

Cost Optimization Through Planning:
On large wastewater expansion programs, GWE has demonstrated the ability to realign service areas and facility placement to significantly reduce capital costs. By re-evaluating station layouts and leveraging existing infrastructure, GWE has reduced the number of required facilities, generating millions of dollars in savings while maintaining service reliability and capacity.

Coordination to Avoid Redundant Costs:
We actively coordinate with FDOT and County roadway agencies to time utility improvements with planned roadway projects. This avoids costly and duplicative asphalt restoration, minimizes disruption to the traveling public, and provides savings to the County. Our approach ensures that utility construction and roadway improvements complement one another, rather than conflict.

Practical Solutions for Smaller Projects:
GWE also applies cost control on smaller, community-focused utility projects. For example, on the El Jobean Fishing Pier Replacement (Pre-hurricane Charlotte County), our team reviewed the scope and identified opportunities to reuse select components and optimize the structure rather than pursuing a complete rebuild. This approach preserved reliability and extended service life while avoiding unnecessary construction costs. By tailoring the solution to the County's needs, GWE delivered a practical, budget-sensitive design that kept the project on schedule and within funding limits.

Summary:
From major wastewater expansions to targeted local repairs, GWE consistently delivers projects within budget, with innovative cost-saving strategies, and without in-scope change orders.

3. Responsibility

Dennis J. Croyle, P.E. will be responsible for cost control. As Project Manager, he will approve budgets, review estimates, and coordinate with CCU staff to ensure fiscal accountability at each milestone.

C. Recent, Current, and Projected Workload

GWE maintains sufficient staff capacity to deliver this project without delay. Our current workload includes major Charlotte County assignments such as Lake View/Midway Water Quality Improvements, along with several smaller sewer and water main replacement projects. Each is staffed with dedicated teams, ensuring resources are not overextended and schedules remain on track.

Looking forward, GWE's workload remains balanced. With nine full-time employees in our Englewood office, supported by inspection personnel, we have the flexibility to absorb new County assignments while continuing to meet existing commitments. Our private sector workload is minimal, providing strong availability for public-sector projects such as the 2025 Lift Station Replacements. Given our staffing availability, the GWE team will have no difficulty meeting any reasonable schedule.

Key project personnel and their anticipated time commitments are shown below:

Team Member	Role	Committed	Available
Jonathan H. Cole, P.E.	Planning Support	40%	60%
Dennis J. Croyle, P.E.	Project Manager / Lead Designer	40%	60%
Kendra Kotlarski, P.E.	Design Engineer	30%	70%
Timothy Morrow	CAD / Technical Support	10%	90%
Kevin Furniss	CAD / Technical Support	40%	60%
Chris Orren	CAD / Technical Support	40%	60%
Thomas Shaw	CAD / Technical Support	30%	70%
Frank Ochoa	Construction Administration	60%	40%
Inspection Staff	Field Inspection Support	40%	60%
Sub: C&W Engineering	Electrical, I&C, + SCADA	50%	50%

SECTION V:
PRESENT PROPOSED DESIGN APPROACH FOR THIS PROJECT

SECTION V: PRESENT PROPOSED DESIGN APPROACH FOR THIS PROJECT

A. Describe Proposed Design Philosophy

Site Evaluation & Compatibility
Each site will be thoroughly evaluated for hydraulic performance, constructability, zoning, and neighborhood compatibility. A structured site selection matrix will balance operational efficiency, access, and long-term maintenance. Buffering, landscaping, and architectural treatments will be incorporated where appropriate to ensure community acceptance.

Operational Efficiency & Maintenance
Design decisions emphasize long-term maintainability. Standardized pumps, valves, and appurtenances reduce spare parts and simplify training. Wet wells will be sized for efficient pump cycling, and layouts will prioritize safe access, quick service, and reduced operator time on site.

System Resiliency & Reliability
Mechanical, electrical, and structural systems will be designed for redundancy and storm resilience. Wet wells and slabs will address buoyancy and high groundwater, with waterproofing measures included. Surge and lightning protection, motor control centers, and backup power provisions will ensure continuous service even during storm events.

SCADA Integration & Controls
Stations will be fully integrated with CCU's 2024 SCADA Standards for seamless monitoring and control. Instrumentation and telemetry will be designed for compatibility with existing systems, providing real-time status, alarms, and operational flexibility without costly rework.

Risk Reduction & Early Coordination
Geotechnical investigations and Subsurface Utility Exploration (SUE) will be performed early to identify soil conditions, groundwater, and utility conflicts. Easements and utility coordination will be addressed at the start of design to avoid construction delays.

Cost Management & Value Engineering
Updated construction cost estimates will be provided at 30%, 60%, and 90% design milestones. Alternatives will be continuously evaluated for cost effectiveness, including energy-efficient pumps, optimized wet well sizing, and standardized equipment. This process keeps projects within CCU's design and construction budgets.

Community Coordination & Communication
Stations are often located in visible community areas. GWE will support CCU with public notices, graphics, and technical input at meetings to minimize concerns. Design elements such as odor control, noise mitigation, and landscape buffering will be included to reduce community impacts.

Summary
GWE's design philosophy is straightforward and proven thorough site evaluation, designs centered on operations and resiliency, seamless SCADA integration, disciplined cost control, and proactive community coordination. Applied to the five lift station replacements, this approach ensures Charlotte County receives durable, efficient, and community-sensitive infrastructure that will serve reliably for decades.

B. What Problems Do You Anticipate and How Do You Propose to Solve Them?

At this stage, our intent is not to fully resolve every design or construction challenge, but rather to demonstrate foresight by identifying potential issues unique to each lift station site. By flagging these concerns early and pairing them with practical solution paths, GWE shows how we anticipate risks and position projects for smoother delivery. The following scenarios reflect challenges we expect may arise during design and construction, along with approaches we would consider to address them.

LS #1 – Community Center (3725 Easy Street)

1. Outdated Suction-Lift Configuration

Problem: Built in the 1970s, the suction-lift setup is obsolete and difficult to maintain.

Solution: Replace with a duplex submersible pump station to meet CCU standards, improve reliability, and simplify O&M.

2. Site and Easement Constraints

Problem: Limited easement area could restrict a full wet well replacement.

Solution: Evaluate retrofit versus replacement alternatives to maximize space efficiency with minimal property impacts.

3. FEMA Flood Resiliency

Problem: Located in a FEMA flood zone, critical equipment is at risk of inundation.

Solution: Elevate slabs and controls above base flood elevation, waterproof structures, and provide portable generator connections.

4. Community Visibility

Problem: Highly visible site raises aesthetic and neighborhood compatibility concerns.

Solution: Install screening walls, fencing, and landscaping effective at higher FEMA elevations.

5. Zoning Incompatibility

Problem: Existing site location is incompatible with County zoning requirements.

Solution: Apply for a variance or assess relocation options.

6. Construction Staging Limitations

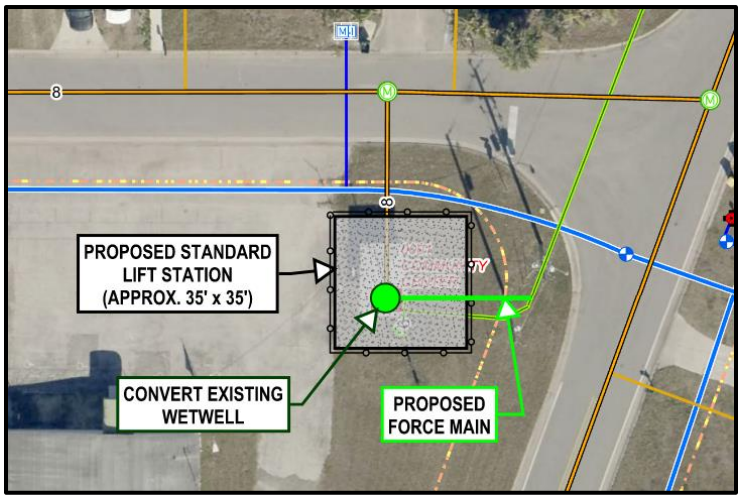
Problem: Tight sites restrict space for equipment, materials storage, and safe work zones.

Solution: Identify temporary staging areas nearby. Phase work to limit on-site equipment.

7. Business/Organization Impacts

Problem: Construction on private property with an existing business/organization will be disruptive. Activities may impede normal operations.

Solution: Schedule disruptive work during non-peak hours. Maintain safe access to the property.



LS #7 – Pure Oil (3666 Tamiami Trail)

1. Outdated Suction-Lift Configuration

Problem: Built in the 1970s, the suction-lift setup is obsolete and difficult to maintain.

Solution: Replace with a duplex submersible pump station to meet CCU standards, improve reliability, and simplify O&M.

2. Constrained Site Behind Commercial Use

Problem: Current site behind a gas station is undersized for modern design and safe access.

Solution: Option 1 - Relocate alongside canal which has adequate space for equipment and access however standards site requirements may not be met. Option 2 – shift the site adjacent to the existing site and meet current requirements however this space may be difficult to acquire.

3. Traffic and FDOT ROW Constraints

Problem: Station sits along US-41, creating MOT and traffic safety concerns.

Solution: Coordinate with FDOT, implement off-peak construction, and develop a MOT plan.

4. Groundwater and Flooding Risks

Problem: Shallow groundwater increases buoyancy and infiltration concerns.

Solution: Use geotechnical data to design waterproofed wet wells with anti-flotation measures.

5. Limited Maintenance Access

Problem: The current driveway access is insufficient for large service vehicles.

Solution: Redesign the driveway to provide adequate width and turning radii for utility trucks.

6. Zoning Incompatibility

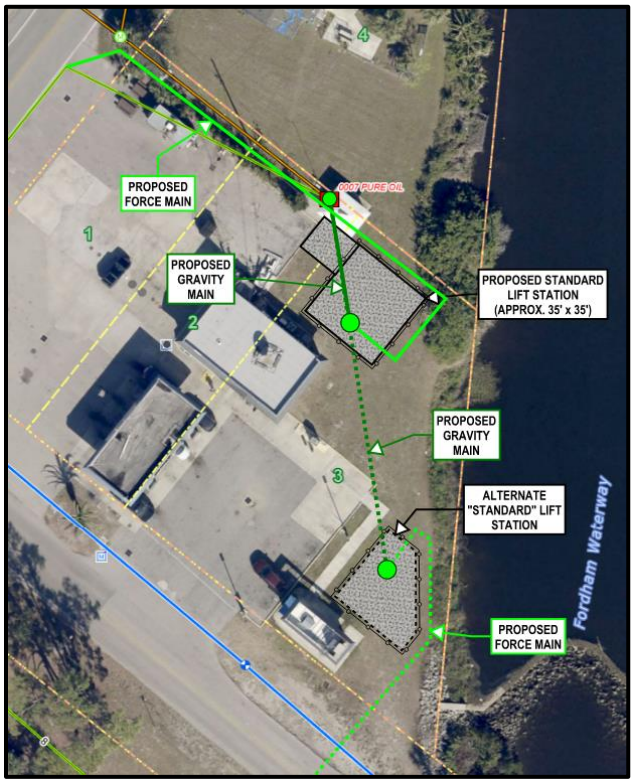
Problem: Existing site location is incompatible with County zoning requirements. Relocation on site may still be incompatible.

Solution: Apply for a variance, assess relocation options, or consider non-standard shape/size lift station.

7. Construction Staging Limitations

Problem: Tight sites restrict space for equipment, materials storage, and safe work zones.

Solution: Identify temporary staging areas nearby. Phase work to limit on-site equipment.



LS #303 – Constantine (2460 Aden Way)

1. Aging Station Near Residences

Problem: Odor and noise affect nearby residential community.

Solution: Replace with modern duplex submersible station using low-noise equipment and odor control.

2. Easement and Access Constraints

Problem: Existing location limits safe equipment access.

Solution: Relocate to nearby County-owned property for improved accessibility.

3. Driveway Alignment

Problem: Should the driveway entrance be placed on Aden Way or Constantine Avenue?

Solution: Locate the driveway entrance on Constantine Avenue to align with neighboring residential driveways and maintain consistent neighborhood access patterns.

4. Utility Conflicts

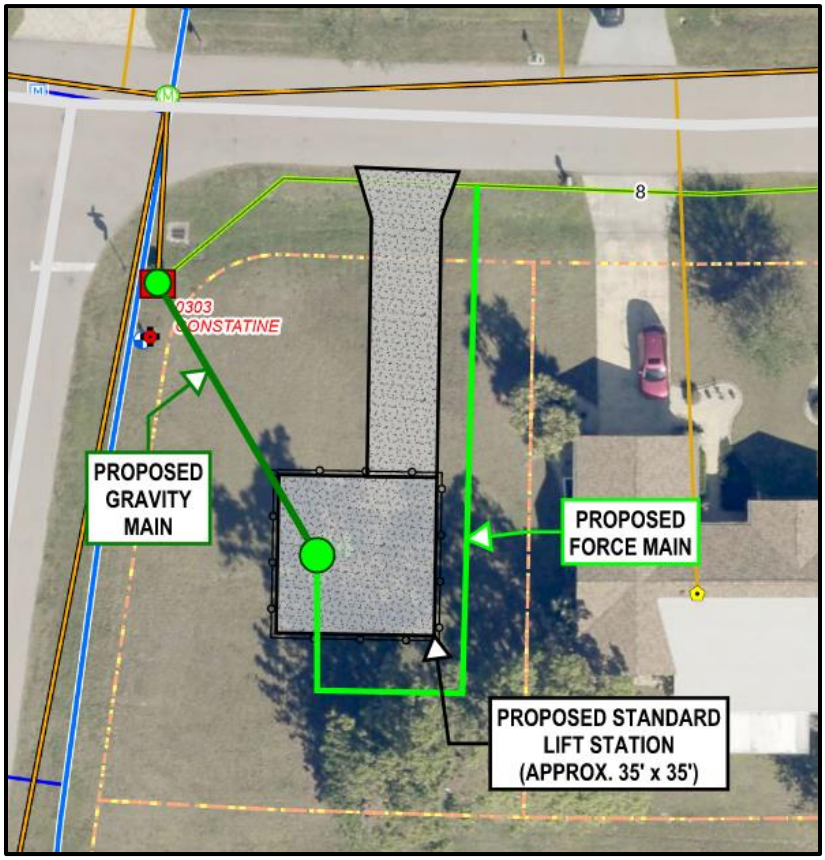
Problem: Proximity to other buried utilities complicates construction.

Solution: Perform SUE (Subsurface Utility Engineering) and adjust layout to minimize conflicts.

5. Neighborhood Visibility

Problem: Highly visible site with a larger footprint raises aesthetic and neighborhood compatibility concerns.

Solution: Install screening walls, fencing, and landscaping effective at higher FEMA elevations.



LS #816 – Rotonda Blvd. West (213 Boundary Blvd.)

1. Heavy Corrosion and Hydraulic Demand

Problem: Existing equipment is undersized for flow conditions.

Solution: Replace with new station sized for projected flows.

2. Accessibility and Visibility

Problem: Located in a residential area with community sensitivity.

Solution: Provide screened fencing and landscaping compatible with FEMA elevations.

3. Flooding and Surge Exposure

Problem: Located in a surge-prone area, exposing infrastructure to flood risk.

Solution: Raise slabs and equipment above BFE, waterproof wet well, and provide permanent generator.

4. Construction Impacts

Problem: Phasing may affect local residents and traffic.

Solution: Use phased construction and MOT plans to minimize disruption.

5. Gravity grade conflict to the new site

Problem: Existing mains slope toward the current station. Relocating the master station "upstream" disrupts gravity flow.

Solutions:

- *Add a short collector mains with drop manholes or localized deepening only where slopes fail.*
- *Use HDD/jack-and-bore crossings to avoid open cuts at constrained or high-traffic segments.*
- *Keep new runs within public ROW where possible; use temporary construction easements if needed*

6. Cutover and basin service continuity

Problem: Converting flow from the old basin to the new station risks system-wide outages.

Solutions:

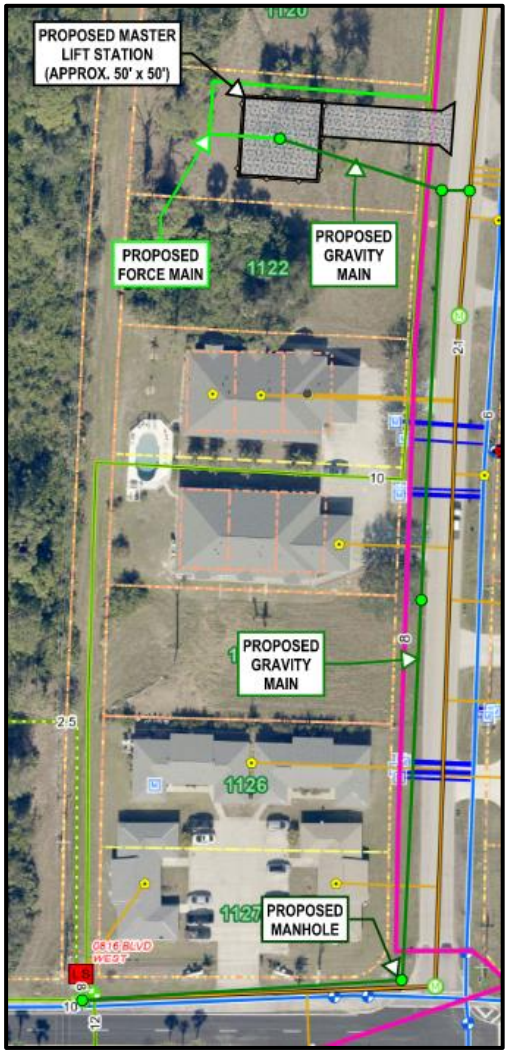
- *Develop a bypass pumping and night tie-in plan with prefabricated stub-outs to limit outages to short windows.*
- *Use staged flow diversions so one leg remains live while the other is connected; pre-notify customers with door hangers.*

7. Reconnecting Existing Service Laterals

Problem: Many service laterals cannot directly tie into the relocated main, creating constructability and service risks.

Solutions:

- *Install shallow collector runs with drop manholes to consolidate laterals and step flows into the new main.*
- *Where grades permit, reconnect directly with new wyes or saddles.*
- *Reroute short laterals within ROW/easements as needed.*
- *Sequence tie-ins with temporary service bypass at the individual connection level.*



LS #817 – Bunker Road (66 Bunker Rd.)

1. Outdated and Undersized Facility

Problem: Existing facility cannot handle current and future demand.

Solution: Replace with larger submersible station with expansion capacity.

2. Easement and Space Limitations

Problem: Current parcel is too constrained for modern upgrades.

Solution: Relocate to a nearby County-owned site with better layout flexibility.

3. Floodplain Exposure

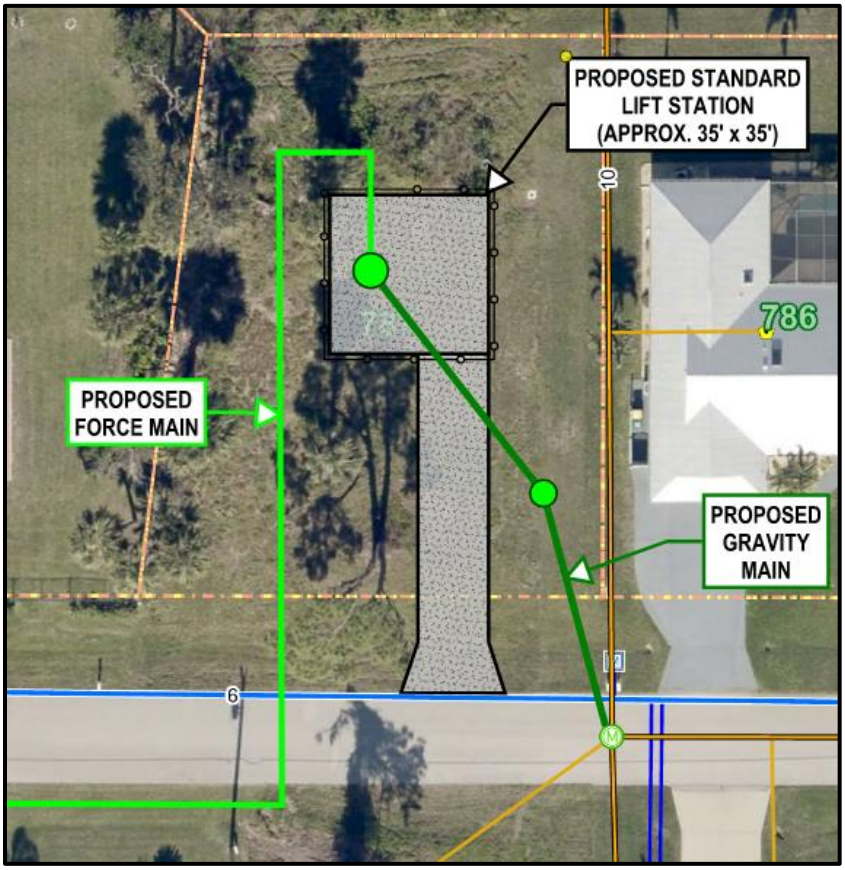
Problem: FEMA flood zone risk places controls and equipment at risk.

Solution: Elevate equipment and slabs, waterproof structures, and install permanent generator.

4. Community and Environmental Interface

Problem: Proximity to residential and natural areas requires careful design.

Solution: Include odor control, noise-dampening equipment, and native landscaping for compatibility.



C. Describe Probable Energy Savings Applications

Construction projects are costly and energy-intensive, particularly when multiple utilities perform overlapping work. GWE's design philosophy incorporates energy savings by reducing redundant construction activity wherever possible. We coordinate early with other utilities and Public Works departments to integrate improvements into our lift station projects so that neighborhoods are only disturbed once. For example, we have aligned sewer and water main replacements with road resurfacing schedules, allowing the County to delay paving overlays until after utility installation. This coordination not only saves direct construction energy but also reduces equipment usage, hauling, and fuel consumption while minimizing disruption to residents.

Operational Energy Savings:
Lift stations consume energy continuously through their pumping systems. GWE incorporates proven energy-efficient design measures to reduce operational demand and life-cycle costs. These include:

- **Pump Selection:** Specifying high-efficiency pumps.
- **Electrical Systems:** Designing for modern motor controls.
- **Site Design:** Incorporating shading and landscaping buffers that reduce heat gain on structures, lowering cooling requirements.
- **SCADA Integration:** Leveraging CCU's SCADA standards to optimize pump run-time sequencing and reduce unnecessary motor cycling.

Construction-Phase Energy Awareness:
Problems in the field are inevitable, but how they are resolved has a direct impact on energy consumption. GWE prides itself on responding with a sense of urgency, reducing idle time for crews and heavy equipment. Our proactive field support prevents extended delays, which translates into fewer wasted labor hours, reduced equipment usage, and measurable energy savings.

Through this three-tiered approach—coordination with other agencies, energy-efficient lift station design, and rapid construction support—GWE helps Charlotte County Utilities minimize both construction and operational energy expenditures, while delivering reliable infrastructure improvements.

D. Describe Innovative Approaches in Production and Design

GWE consistently seeks practical innovations that improve project outcomes, reduce costs, and build trust with the community.

One concept we pioneered for septic-to-sewer conversions was the resident septic tank location form. By mailing these forms to homeowners and asking them to indicate septic locations and preferred connection points, we secured resident input early in design. This not only improved accuracy but also created homeowner "buy-in," reducing disputes and minimizing construction conflicts. We will apply the same philosophy to lift station replacements by engaging neighborhoods in discussions about site access, aesthetics, and buffering so concerns are addressed before construction begins.

We have also applied phased project delivery to manage costs and minimize disruption. For example, in Englewood's Area V-9 project, major infrastructure was designed for ultimate build-out, but pumps and supporting equipment were installed in phases tied to funding and service area expansion. A similar phased approach will be applied to the 2025 Lift Station Replacement Program, where CCU has already identified completing two to three stations first before advancing the remaining stations. This allows design and bidding to remain flexible while still controlling cost.

Another innovation is splitting project elements to leverage contractor expertise. In Martin County, we separated vertical station construction from underground utility work. This allowed underground utility contractors and vertical builders to bid within their strengths, resulting in more competitive bids and stronger participation. For lift station replacements, this same principle can be applied by packaging site work, structural rehabilitation, and electrical/SCADA integration in ways that maximize competition and lower cost.

Our construction-phase innovation is equally impactful. In Sarasota County, where we provided CEI services, GWE identified value-engineering opportunities and field adjustments that reduced costs by more than $1 million. We also re-designed two poorly performing pump stations originally designed by others, saving over $250,000 from the initial bid price. That same value-engineering mindset will be carried into these lift station replacements, ensuring Charlotte County benefits from practical savings wherever possible.

Overall, GWE's innovative techniques—community engagement, phased design, packaging work for competitive bidding, and proactive field value engineering—have saved utilities several million dollars while delivering reliable, cost-effective infrastructure. This experience positions us to streamline layouts, improve constructability, and keep costs tightly aligned with CCU's budget and schedule goals.

SECTION VI:

PRESENT EXAMPLES OF RECENTLY ACCOMPLISHED SIMILAR PROJECTS

SECTION VI: PRESENT EXAMPLES OF RECENTLY ACCOMPLISHED SIMILAR PROJECTS

A. Describe the Projects to Demonstrate

1. Schedule Control

Once the funding is in place for a large-scale project, it's imperative that the project *moves*, and doesn't get bogged down because if it does, that delay is expensive and attracts negative publicity for the County. The GWE team is very aware of this and prides itself on keeping projects *moving.*

Example 1:

East/West Spring Lake Wastewater Expansion Project, Port Charlotte, Florida:

Charlotte County's first vacuum pilot project was designed by the same GWE team. Initially the vacuum project was bid as one large system, combined with areas adjacent to Edgewater Drive which was initially a gravity system design. The first bids came in high, especially for the gravity portion of the project. The GWE team repackaged the project into three separate projects, as well as redesigned the former gravity section, converting it to vacuum. To do that meant rerunning vacuum hydraulics and upsizing some mains.

That redesign and repackaging was conducted in a compressed time frame and resulted in rebidding and awarding the project successfully meeting the overall CCU time frames and budget.

Examples 2 through 10:

All the large Englewood Water District Vacuum projects, Englewood, Florida - V-1, V-2, V-3, V-4, V-5, V-6, V-7, V-8 and V-9.

Examples of schedule control include *every single vacuum sewer project* we have designed and managed for the Englewood Water District. We encourage you to contact the EWD for confirmation.

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In addition to the "normal" scheduling issues, as the EWD Program progressed, Englewood was experiencing an above average growth as FDOT, Sarasota and Charlotte Counties were proposing major road improvements. GWE monitored these road projects then adjusted the scheduling and timing of the EWD vacuum construction to meet the road widening schedules.

By reacting and adjusting our design plans to match the schedule of the road projects as well as public input and financial considerations, we were able to install important utility infrastructure to prevent delay and save thousands of dollars.

Example 11:

Martin County Wastewater Expansion Project, Phase I, Seagate Harbor/Lighthouse Point Sewer Expansion, Stuart, Florida

Consisting of approximately 600 residential connections, is the first of three areas designated to receive a centralized vacuum sewer system. Over 90% of all properties to be served are waterfront homes with minimum vacant lots priced more than $200,000. Due to limited and high-cost real estate in surrounding neighborhoods, a minimal footprint size was designed for the vacuum station.

The vacuum station was constructed on a nonconforming residential lot owned by Martin County. Construction of the Seagate Harbor/Lighthouse Point Sewer Expansion Project took place over a compressed time frame and was completed on time and within the allotted budget.

Example 12:

City of Punta Gorda – Tee & Green Water Main Improvements, Punta Gorda, Florida

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On March 5, 2021, GWE was issued a purchase order by the City of Punta Gorda to design and permit 3,000 feet of main water improvements for the Tee and Green estates subdivision.

The agreement stipulated a project delivery date of August 31, 2021. GWE exceeded the deadline by nearly a month having received FDEP permits on August 6, 2021.

Our approach to this project was structured in a way that is simple to understand. We offered a "tried-and-true" multi-tasked approach that has been developed through years of similar project experience and refining processes for schedule development. The most crucial part of any schedule is the proper development of the work breakdown structures, logic and durations. Once the schedule was complete, we analyzed the critical path avoiding constraints. For this project and like many others, obtaining the survey through our subconsultant was the longest duration. In fact, it took longer than anticipated. Once the survey was received with some tuning of resources and durations on our end, we began developing the various design stages to coincide with FDEP permitting and ultimately providing comprehensive plans and specs to be used for contractor procurement. Since we do all the design work in house, we pride ourselves on the ability to tweak or tune the schedule to stay within the critical path.

2. Cost Control

Many times, we have been able to reduce costs in vacuum sewer projects saving hundreds of thousands of dollars. For example, realizing that the configuration of servicing lots for sewer service and the primary vacuum station placement was an important factor in the cost of service connections, GWE re-defined the service areas of the EWD Master Plan.

This resulted in reducing the number of vacuum/sewage pump stations from the original number of nine to six, *saving over a million dollars* in costs. This also enhanced the potential of a phased construction plan allowing customer connections in an orderly manner while providing revenue to the owner.

A good example of construction cost control also took place with one of our Martin County vacuum projects at Seagate Harbor/Lighthouse Point. The first bids came in way over the budget. GWE analyzed the line items and realized that some obscure (yet significant) restoration costs were contained in that pay item. Specifically, Martin County required that all lawn sprinkler systems be operational regardless of their existing condition, which was expensive for the contractors since the conditions were unknown. The restoration line items also included all the sod, paver brick driveways and landscaping restoration.

GWE realized that the cost to repave the road was less than all the restoration costs and suggested to the County that the vacuum line be moved into the street. GWE took the extra effort to redesign a large portion of the main line, shifting it into the street under the asphalt and re-bid the entire project. We did this at *no additional cost to the County* and the result was that the bids and the final project came in under budget.

Another example of cost savings was realized due to GWE's coordination with FDOT, Charlotte and Sarasota County for the installation of miles of force main and collection mains. The Englewood Water District Utility Expansion Program was coordinated with the paving programs to avoid public relation nightmares of installing utilities after paving was completed, saving hundreds of thousands of dollars associated with repairing new asphalt.

One of the biggest factors contributing to higher construction costs via change orders are a "vague" or inaccurate set of construction documents. In addition, if the quantities in the bid set are incorrect and the ultimate project "overruns" the engineer's estimate of materials, the final project cost will escalate, requiring change orders that generally reflect poorly on the project.

Our method to help control construction costs is to provide clear, concise plans and accurate quantity "take-offs" for incorporation into the project's bid set. The GWE team prepares bid and contract documents while working closely with County staff to make sure those project packages produced are comprehensible to the bidding contractors.

To help control cost, we realize that what appears to *work on paper* may not be the most cost effective to build. For this reason, many times GWE solicits the expertise of local contractors experienced in the construction of vacuum sewers to do a quasi-peer review of the design plans versus their experience with actual field conditions.

PROJECT EXAMPLES OF "COST CONTROL"

Example 1:

East/ West Spring Lake Wastewater Expansion Project:
Charlotte County's first vacuum project was designed by the same GWE team. The team designed the collection area and vacuum station initially as one large system. The initial bids came in high, especially for the gravity portion of the project.

The GWE team successfully repackaged the entire project into three separate projects, as well as redesigned the former gravity section, converting it to a vacuum. Based on the initial bids, GWE *analyzed the valve pit to lateral unit costs* and redesigned much of the systems valve pits and laterals resulting in a lower overall price when rebid.

Additionally, the GWE team was able to re-calculate the vacuum hydraulics and upsize some main vacuum lines which resulted in significant savings for the benefit of Charlotte County because former gravity sections could be eliminated.

That redesign and repackaging saved significant County funds on several fronts:

1. Conversion of former gravity design to vacuum design in the "Zone 10 area saving road restoration costs and elimination of a lift station.
2. Conversion of former gravity areas to vacuum in "Contract C" saving restoration costs.
3. Elimination of the Edgewater Drive (EP2) lift station and gravity system.
4. Changing valve pit depths and lateral lengths saving significant dollars.

Examples 2 through 10:

EWD Vacuum projects - V-1, V-2, V-3, V-4, V-5, V-6, V-7, V-8, and V-9.
As the EWD Wastewater Expansion Project approaches completion, we are proud to report that through the team effort of the staff of EWD, Sarasota and Charlotte Counties, and GWE acting as project manager, the following has taken place:

- The number of "vacuum stations" originally planned was reduced from 9 to 6;
- The number of service areas that were originally thought to be outside the reach of the vacuum system alternative systems was reduced from 16 to 11;
- The number of customers that were to be served by the vacuum system was increased by 10% due to growth and by serving areas that were originally thought to be outside the reach of vacuum systems and commercial rezones;
- Wherever possible, existing lift stations were taken out of service and the flow going to these stations was introduced into the vacuum systems;
- 20 of the 23 package plants listed on the original Master Plan were taken offline and the wastewater flow was introduced into the "vacuum system" or into the force main system. The remaining three will be phased out within the next three years.

Example 11:

Midway Boulevard: Utilities at Box Culverts - Utility Relocation Design:
GWE was retained by Charlotte County Utilities to provide engineering design services for the utility relocations required for the installation of four box culverts along Midway Boulevard.

Charlotte County Utilities
25550 Harbor View Rd., Unit 1
Port Charlotte, FL 33980
(941) 764-4364

The plans for the Fordham Waterway crossing included both water and sewer changes. Sanitary sewer gravity lines were re-routed in the area, and a new pump station was designed for existing and future use by Charlotte County Utilities. This project was successfully completed within budget.

Example 12:

Veterans II and III Roadway Improvement Projects, Port Charlotte, Florida
GWE was retained by Charlotte County Utilities to provide road plans and the installation of a new primary water main, necessitated because of the Veterans II and III Roadway Improvement Projects.

Capital Projects Engineer
Charlotte Co. Community Dev/Engineering Division
410 Taylor St., Unit #104
Punta Gorda, FL 33950
(941) 575-3612

GWE provided the design and permitting of the 2.1 miles of 4-lane roadway improvements, in addition to the design of a 24-inch water transmission main line for a distance of 3,300 L.F. Close coordination was critical between all project participants, while making the protection of the County's interests a priority. This project was successfully completed within budget.

Example 13:

Midway Boulevard Road Widening Project – Phase I and II, Port Charlotte, Florida
Charlotte County Public Works retained GWE as the prime design consultant for the Midway Boulevard Road Widening Project, a high-priority east-west arterial transportation corridor connecting U.S. 41 and Kings Highway. GWE designed the 2-lane to 4-lane widening of this roadway segment that included large diameter gravity sewer segments

GWE provided all design and engineering for the project. Stormwater Infrastructure expertise is demonstrated in the drainage design and stormwater analysis to include County Watershed Master Plan, storm water technical review and SWFWMD construction phase permitting, flood protection, and ICPR stormwater modeling. In combination with the U.S. 41 Culvert Project, this overall project is considered the most complex engineering project Public Works has had to date. Despite numerous obstacles, including storm water model tail water elevations, multiple permitting entities, and significant utilities, it was completed under budget.

3. Construction Problems and Means Taken to Solve Them

Quick and Dedicated input for Utility Conflicts
Underground utility projects must inherently rely on other utility record drawings and interpretations. Some of those "as-builts" are marginal or even nonexistent. Since we cannot locate every single possible utility, and even the best of plans will have unknowns, problems will inevitability come up during construction no matter how good the plans are.

Many times, the key is not so much what problems arise; but rather, how timely the problem can be resolved. GWE prides itself on handling field issues rapidly and being able to shift our mains or adjust the conflict to minimize delays and cost.

For example, CCU is currently working with Guymann Construction on the Ackerman vacuum station. Shop drawings, minor revisions, and clarifications from GWE are needed throughout the construction process to resolve questions or problems.

We pride ourselves in getting back to the contractor with answers as soon as possible to not hold up their schedule. One of the beauties of vacuum sewer (as opposed to gravity) is that it is flexible; that is, we can shift our main lines in the field and add "lifts" in many cases to go over a conflict. A recent example of this was El Jobean where an old, large diameter storm drain was discovered in the area.

This pipe was in direct conflict with the vacuum main. Our designers worked with the CCU Inspectors and re-calculated the hydraulic losses to see if an additional "lift" could be installed in addition we evaluated how the line could be extended and possibly re-routed. Indeed, it could, and the contractor installed a "lift" going up and over and around the large storm pipe, completely avoiding the conflict.

Maintenance of Traffic
Another problem frequently encountered for projects this size is maintaining vehicular and pedestrian flow safely throughout the work zone. For example, many streets in the Seagate Harbor/Lighthouse Point service area were cul-de-sacs. Although not heavily traveled, allowing the passage of essential services and emergency vehicles were critical. GWE implemented a street-by-street customer awareness program to allow contractors to adapt their schedules to minimize inconveniences. This extra effort resulted in a favorable acceptance of a major utility project.

Storage Sites

Storage sites for construction materials and construction debris is another significant issue. Being a highly developed area, there are minimal vacant lots and minimal rights-of-way for use. GWE helped develop a schedule for the transfer of material from an offsite storage yard that avoided heavy traffic periods and school bus schedules.

Existing Landscaping and Decorative Driveways

A common concern for residents and a challenge for designers involves the encroachment of planters, trees, irrigation systems, specialty driveways and other amenities into the rights-of-way.

Property owners with such encroachments are extremely concerned with potential impacts a new sewer would have in these areas. When and wherever possible during the design process, we attempt to *avoid or minimize impacts* to these areas that are significant, solving problems in several ways including:

- Deflecting the vacuum main around the object
- Finding alternate methods or routing of the mains and service laterals
- Carefully designing to reduce the impact to brick and specialty driveways

Working with the homeowner and contractor to ensure landscape materials are carefully removed, stored, and replaced is something that our GWE designers and field personnel do to minimize and reduce problems.

Engineering inspections for specialized designs

Many times, vacuum stations require inspections that are outside the realm of typical inspectors' capacities that are experienced in underground utility installations. Recently on the Ackerman vacuum station, thick layers of clay were observed while the contractor was excavating. This clay layer was planned for in the specialized structural design which relied on geotechnical borings and an envelope of stone to bridge the foundation and the clay. Our team met in the field with CCU inspectors to provide guidance on the extent of dewatering required to perform the work. In addition, we offered input on over excavation and backfill with the stone to ensure we stabilized the stone prior to concrete placement.

4. Any Additional Construction Costs Caused by Design Deficiencies, Not Program Changes

Any design firm that has not had design problems during construction has either been *extremely lucky* or has not designed many large-scale projects. Firms that have designed hundreds of projects understand that mistakes are bound to happen from time-to-time, and we certainly are not perfect. While unfortunate, in most cases it's not the mistake *per se* that's the issue; but rather*, it's how the firm addresses and resolves the problem.*

For example, a firm can put up its defenses and fight every claim, or it can work as part of the team in resolving the problem. GWE prides itself in being available to work out problems promptly during construction, regardless of if we are under contract or not; because we know that down time is expensive. Should there be an error; GWE promptly redesigns the error to minimize those down time costs.

Most of the time the issue can be worked out *if it's caught* prior to any significant expenditure of funds. Sometimes, it's not clear exactly who is "at fault" and, conversely, sometimes everyone is a part of the issue. For example, the information may be on the plan, but perhaps additional interpolation is necessary.

This happened in one area of intersecting street along the Midway (Phase I) Road Widening Project. A part of the sidewalk was poured incorrectly at a wrong interpolated elevation between two given elevations on the plans. GWE came to the site and helped investigate and clarify the issue.

Moreover, rather than get into a squabble with the contractor and the County over cost to resolve the problem; GWE opted to directly fund the fix, not only with design clarifications and field time to meet and go over the problem, but also paying the contractor directly for a portion of the repair, splitting the costs. By so doing, we maintained amicable relations and the balance of the project went smoothly resulting in a beautiful roadway that we are proud of as the design engineers.

Another example where GWE went the "extra mile" had to do with the resolution of an issue that involved Charlotte County and the Southwest Florida Water Management District (SWFWMD). A complaint was received from a resident who was trying to repair a septic system; but due to the construction of a new retention pond necessary for road drainage, the code separation distance for septic to the new "open water" restricted the area for expansion. The resident had to seek a variance from the state and was requesting fees for her costs.

The SWFWMD personnel called GWE administration and discussed the problem. Even though the design was perfectly acceptable and permitted through the agencies, GWE offered to directly fund the resident's fees, to put this issue to rest.

Again, these types of things are bound to happen from time to time, especially with large scale projects. We stive to be fair, reasonable, and responsive dealing with design issues to resolve the problem.

5. Pertinent to Lift Stations Designs and Appurtenances

GWE has direct experience designing **non-standard lift station solutions** under Sarasota County's Phillippi Creek Septic System Replacement Program (PCSSRP), specifically the **Area N3 Project**. The N3 service area posed major challenges due to dense neighborhoods, limited right-of-way, and sensitive water bodies. Conventional gravity and vacuum systems would have required property acquisition and construction of large above-ground facilities, creating community disruption and excessive cost.
To address these constraints, GWE designed a hybrid gravity collection system incorporating four mini-lift stations strategically located within ROW and easements. Each mini-lift station was designed as an oversized manhole with duplex submersible pumps, redundancy for reliability, and above-grade SCADA/control panels placed discretely between homes. Key features included:

- **Appurtenances for Resiliency:** Each mini-station included dual pumps, high-level alarms, radio notification, and generator receptacles for backup power.
- **Community Compatibility:** Compact footprints allowed stations to blend into neighborhoods without demolishing homes or requiring large parcels.
- **Operational Reliability:** Designs incorporated inherent storage within gravity mains and manholes, ensuring service continuity during peak flows or emergencies.
- **Regulatory Innovation:** Sarasota County amended its Utility Code (Ordinance 2011-044) to adopt hybrid gravity systems after the success of N3, underscoring the precedent-setting nature of this project.

This experience is directly applicable to Charlotte County's lift station replacement program. The **mini-lift / hybrid gravity approach** provides a proven alternative when standard stations cannot fit due to ROW constraints, neighborhood impacts, or FEMA flood elevation requirements. By tailoring station design and appurtenances to the site, GWE can deliver facilities that are cost-effective, reliable, and accepted by the community.

SECTION VII:

DESCRIBE YOUR EXPERIENCE AND CAPABILITIES IN THE FOLLOWING AREAS

SECTION VII: DESCRIBE YOUR EXPERIENCE AND CAPABILITIES IN THE FOLLOWING AREAS:

A. Value Engineering

The value engineering (VE) process began back in the planning phase when vacuum was selected to be used *in general* for the CCU overall wastewater expansion program. We need to continue the process for this *specific* area, because even though vacuum is beneficial in most areas, it doesn't necessarily make sense to use it in *all* areas.

This is where the GWE team experience comes in, because the *name of the game* is to install the most efficient collection system that is tailored for the area. Accordingly, through value engineering, we will identify which sub-area makes the most sense to be served by vacuum and which areas make more sense to be served by either low pressure or gravity.

In addition to providing VE during the design process, we also review the bids and compare the unit prices to our historical database of vacuum components. Once the comparison between budget costs and bid costs has been completed, we make recommendations as to how costs could be lowered further.

Our value engineering process was exemplified when GWE redesigned the East/West Spring Lake project, changing valve pits and laterals based on unit pricing received on the initial bid. Moreover, we changed entire design concepts from gravity used near Edgewater to vacuum which saved thousands of dollars.

Another recent example is when members of the GWE team assessed and offered recommendations for the proposed VE on the El Jobean Vacuum sewer project. The design required several critical vacuum line crossings under SR776. The proposed design approach was jack and bore casings. The contractor proposed to install directional drilled mains at their own risk and proposing to save over $60,000. Since air to liquid ratios are critical for air passage on vacuum sewer, we recommended to upsizing the pipe in the event the pipe was installed with a belly or sag. In addition, we developed a performance testing specification for the proposed pipes that could be used by CCU for acceptance testing. In the end, the contractor was able to successfully install the mains and the County benefitted from the cost savings.

The underground system must meet the minimum FDEP requirements; therefore, there are minimal savings to be found in the pipe. However, the various valve pit depths versus lateral lengths are a good place to look for savings just like we did for the other Charlotte County vacuum projects. An analysis of valve *pit ratio* vs. lateral lengths may not only result in short-term savings, but also long-term O&M savings may be realized.

Finally, the VE process can be applied at the vacuum station. Vacuum stations can be basic functioning structures that just "get the job done," or for not much more money, aesthetic features can be added such as landscaping, perimeter block walls, and roofing which makes the building blend in better with the neighborhood that in the long run helps to garner overall public support.

B. Life Cycle Cost Analysis

Life Cycle Cost is the combined capital and maintenance cost of a capital investment applied to the present value of the asset. Life Cycle Cost Analysis (LCCA) is a method of determining the entire cost of a structure, product, or component over its expected useful life. The LCCA for utility investment decisions identifies alternatives that have the lowest cost over the entire life, not just the lowest initial costs. The cost of operating, maintaining, and using the facility is added to the construction cost price and brought back to current value for an overall complete analysis.

One basic formula used for calculating life cycle cost can be summarized as follows:

Total life cycle cost in present value dollars = Initial Cost + Replacement Value + Residual Value + Energy Costs + Operating & Maintenance + Repair Costs + Miscellaneous Costs

All future costs are brought back into their present value.

There will be several "miscellaneous" costs that some may not realize for a vacuum system that will have to be included such as maintenance of the odor control bed, and maintenance for repair and replacement of vacuum valves, that must be factored in.

Maintenance and operational costs can be significant with this size of a collection system. We understand what it costs, because GWE has designed vacuum stations serving five other utility systems throughout the state. We have (or can get) the data for the monthly electrical costs to run the station, as well as costs to support the system. Using this data and our experience, we can easily run a LCCA to estimate the costs for a new vacuum station for Charlotte County.

GWE recently provided this analysis to the City of Venice providing costs for their first vacuum sewer project comparing it to a gravity system. This analysis is being used to decide to move forward with the entire sewer project. GWE also recently provided similar Life Cycle analysis for vacuum systems in Hillsborough, Martin, and most recently the City of Punta Gorda.

C. Critical Path Method

GWE uses several methods for developing and tracking the project critical tasks. For this project, the critical program task is to address the areas that will take the longest lead time to implement. Specifically, those areas are the acquisition of the vacuum site, ordering the skid units and the purchase of easements that may be required.

Using nationally recognized project management tools such as Primavera or Microsoft Project, members of the GWE team acting in a managerial capacity, have accurately predicted critical components of design and construction on a wide variety of projects. The Critical Path Method allows our management staff to foresee and decide how to manage elements which, when delayed or altered, will affect the finish date for the project.

During the planning phase of the project, a great deal of effort is made to determine all the design and construction components and to assign limitations, resources, control elements, and difficulty factors to determine critical elements. These elements are placed in a schedule designed to emphasize tasks on the critical path as well as tasks with float time, predecessors and successors which may alter the course of the project.

Specifically, we have implemented the CPM / Project Management on virtually all our large projects including Ackerman Countryman, El Jobean Vacuum Station and Midway for Charlotte County, Ruskin Wimauma - Hillsborough County, Areas O&P, N, and Midnight Pass for Sarasota County, Ackerman and utilized the updated schedules to make needed adjustments to stay on task, budget, and schedule.

During the construction process, generally the contractor submits their own CPM schedule that is tracked by GWE staff to ensure schedule compliance or documentation for later use should that schedule slip.

D. Fast-Track Construction

Although the conditions and reasons for developing a fast-track approach may differ, the steps to reaching a fast-tracked project are generally the same. By understanding the factors governing the situation, a program can be tailored to the specific project that will result in a well-executed, fast-tracked project that considers all factors. These include, but are not limited to, the following items:

- Understanding the driving factors behind the need to fast-track
- Understanding the impact to the winter population and working to avoid such impacts
- Understanding school vacations and bus routes
- Understanding surrounding construction projects, such as the Edgewater Drive road project
- Holding pre-application meetings with the regulatory agencies
- Understanding the time necessary to secure the vacuum station site and easements
- Considering pre-purchase of critical lead items
- Considering requiring use of multiple crews and construction phasing

The need for Fast-Track Construction usually implies that *time is money* and completion of construction ahead of schedule, or at least a rapid schedule, will ultimately result in savings through getting the facility up and operating. All of this comes at a cost and will require an analysis of cost versus benefit for implementing a Fast-Track construction schedule.

GWE built into their vacuum construction contracts the need to fast track portions of the construction so as not to conflict (for example) with schools or bus routes that are in the vicinity. A few examples recently include the closure of Wilkinson Road for the “Area N, Phase II” vacuum project in Sarasota to the summer months when the school was closed. This was also coordinated with Midway Blvd to avoid school disruptions with that Charlotte County project. By scheduling and fast-tracking portions of the project, we were able to avoid a negative public relation impact by keeping the active school bus routes clear of construction activities.

E. Energy Conservation

One of the recent energy conservations items we have put into practice for vacuum stations is the use rotary claw style vacuum pump (aka Mink pumps) which are efficient (air delivered versus electrical energy usage) in the operating range of 16-20-in. Hg.) and require less maintenance. They do come with a higher initial cost however the rotary claw operation principle of Mink claw vacuum pumps reduces their energy consumption considerably in comparison with conventional vacuum pumps, so energy costs are reduced. Compared to conventional vacuum pumps, Mink claw vacuum pumps can save up to 60% on energy and operating costs. Due to their near maintenance-free operation, a decrease in operating costs adds to the savings. In addition, to reduce back-pressure on the vacuum pumps, each vacuum pump exhausts are manifolded which conserves energy.

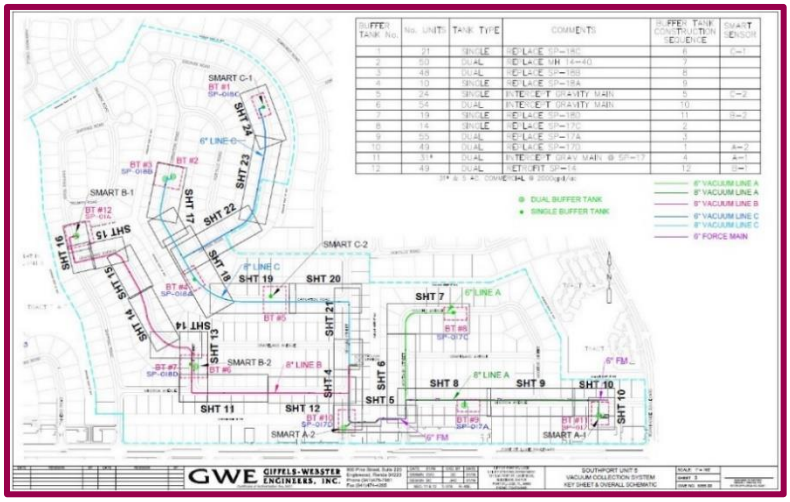
Considering the typical vacuum station house 4-6 vacuum pumps, the opportunity for significant energy conservation versus upfront investment costs is an advantage. We can used solar panels to help run monitoring systems in Port St Lucie and normally incorporate drought tolerant type landscaping to reduce watering needs.

F. New Energy Resources

GWE provided a more efficient "new energy resource" for transporting sewage from an existing lift station by converting to a vacuum buffer tank.

For example, the nursing home on Drury Lane in Englewood previously had an onsite treatment plant with duplex pumps in an existing lift station discharging to a perc pond. GWE was able to remove all the electrical components and convert the existing lift station into "buffer tank" system with vacuum valves that pulled the sewage from their existing system into our new Area V-2 vacuum station.

This source of energy, the vacuum, reduced the need for two power drops and the cost and maintenance for duplex lift stations. It also eliminated the need for long-term maintenance of the treatment system and the perc ponds, as all sewage was shunted to the vacuum station and treated at the regional plant, which is far more efficient. This buffer tank conversion system designed by GWE has been in operation for many years with no reported trouble. We have done this exact thing--that is, using buffer tanks for high volume flows in lieu of duplex stations on many of our subsequent vacuum projects.



Recently GWE designed the very first vacuum system to use *only* buffer tanks designed to remove multiple old lift stations for the City of Port St Lucie. One central station now replaces a dozen former pump stations eliminating multiple power sources with single source.

G. Environmental Assessment

GWE team members have conducted Environmental Assessments working in Florida's upland and wetland environments in Southwest Florida. Ian Vincent has been appointed to multiple Charlotte County Committees ranging from assisting County Staff with the Charlotte County Comprehensive Plan revisions and participating as a board member for the Charlotte County Manatee Advisory Committee to serving as the lone environmental consultant on the committees responsible for creating Charlotte County's Excavation Ordinance and Transfer of Density Unit (TDU) Ordinance.

Our team has the capabilities and experience for tasks that includes virtually all evaluations of environmental aspects for land; procurement of local, state, and federal permits; and permit compliance. These capabilities include performing wetland jurisdictional determinations and protected species, design and preparation of mitigation plans, monitoring plans, wildlife management plans, planting plans, exotic removal plans, and vegetation removal plans.

He also provides the assembly and tracking of wetland permit applications for local, state, and federal agencies; field data collection including mitigation monitoring, water quality monitoring, submerged resource surveys, well and staff gauge readings, seasonal high water determinations, compliance monitoring, protected species assessments, wildlife management plans, mitigation plans, and various analyses relating to the permitting process.

Ian has provided literally hundreds if not thousands of environmental assessments throughout the years. In addition, he has been qualified and accepted as an expert witness to testify before multiple state and local governing bodies in Southwest Florida. Ian will serve as a project manager and primary team liaison between CCU and regulatory agencies. A recent project experience specifically related to a vacuum septic to sewer project is the protected species assessment completed for the Ackerman Countryman project for CCU.

H. Specialized Experience – SCADA

GWE, working with C&W Engineering, has extensive experience designing and integrating SCADA systems for wastewater pump stations. One representative project is the City of Port St. Lucie – Unit 5 Vacuum Pump Station, where GWE served as lead design engineer.

Key Experience & Capabilities:

- **City of Port St. Lucie – Unit 5 Vacuum Pump Station:**
  - Designed a new vacuum pump station with full **SCADA integration**, including pump status, vacuum levels, tank level monitoring, and alarm reporting.
  - C&W Engineering developed **custom HMI screens** for station operators, showing real-time pump performance, alarms, and trending.
  - Integrated SCADA telemetry into the City's **Data Flow Systems (DFS)** network for seamless county-wide monitoring.
  - Coordinated generator status monitoring and remote reset functions, giving operators full visibility during storm events.
- **Screen & Interface Development:** Our team worked closely with operators to build **user-friendly graphics** that simplified monitoring of pumps, vacuum systems, and backup power status. The project also incorporated intuitive alarm prioritization, trending tools, and diagnostics to reduce operator response times.
- **Platform Familiarity:**
  - **Direct-wired fiber optic TCP/IP** systems for primary communications, with cellular or licensed radio as backup.
  - **Data Flow Systems (DFS)** for legacy and current telemetry across Florida utilities.
  - Wonderware (InTouch / System Platform) for advanced graphical HMIs.
  - VT SCADA for scalable, integrated control of distributed lift and vacuum stations.
  - Experience with radio telemetry (licensed and unlicensed) in rural or hard-to-reach service areas.
- **Collaborative Integration:** GWE and C&W Engineering provide coordinated physical, electrical, and control system design. PLC programming and panel layout are tailored to client standards, ensuring seamless integration with existing SCADA master plans.
- **Cybersecurity & Vendor Platform Risks:** Cybersecurity considerations and surge protection are incorporated to safeguard against outages and external threats. GWE cautions against over-reliance on third-party, cloud-hosted, or web-based SCADA platforms, as they can create long-term dependency, recurring subscription costs, and potential security vulnerabilities. Our approach emphasizes systems that remain under the County's control, with local PLC logic and secure, redundant communication pathways, while still allowing integration with broader CCU SCADA standards.

Benefits to CCU:

- Real-time monitoring of pump and generator status, improving operational response.
- Alarm notifications and trending functions that allow CCU staff to predict maintenance needs before failures occur.
- Integration with CCU's 2024 SCADA Standards to ensure consistency across all facilities.
- Reliable controls that enhance resiliency during storm and high-flow events.

By combining station design expertise with specialized SCADA integration, GWE and C&W Engineering deliver systems that are not only structurally sound but also digitally robust, giving operators full confidence in daily performance and emergency readiness.

SECTIONS VIII - XI:
VOLUME OF WORK, LOCATION, LITIGATION, MINORITY BUSINESS

SECTION VIII: VOLUME OF WORK

GWE has successfully designed several large and small scale projects for Charlotte County and the total volume of work contracted within the last twenty-four months exceeds $500,000.00.

SECTION IX: LOCATION

GWE has operated a successful and financially stable engineering business in **Charlotte County, Florida** for over 30 years, providing quality design services throughout the decades to municipalities and private clients.

Our main office has been in Englewood, Florida since 1992, which is less than 10 miles from the project site. This proximity allows us to easily access the project area, meet with stakeholders and government officials, and stay informed about any changes or updates.

Furthermore, our sub-consultants are all local businesses familiar with the site location.

SECTION X: LITIGATION

GWE has not been named as a defendant or co-defendant in any lawsuit in the last five years.

SECTION XI: MINORITY BUSINESS

Giffels-Webster Engineers ***does not hold*** a credited MBE/WBE Certification.

REQUIRED FORMS

PART IV - SUBMITTAL FORMS
PROPOSAL SUBMITTAL SIGNATURE FORM

1. Project Team Name and Title	Years experience	City of office individual will work out of for this project	City individual's office is normally located	City of individual's residence
Jonathan H. Cole, P.E., Principal-in-Charge	40	Englewood	Englewood	Englewood
Dennis Croyle. P.E., Principal, Project Manager, EOR	13	Englewood	Englewood	Port Charlotte
Kendra Kotlarski, P.E., Designer	4	Englewood	Englewood	Englewood
Kevin Furniss, Senior Designer	36	Englewood	Englewood	Englewood
Thomas Shaw, Structural Designer	46	Englewood	Wisconsin	Wisconsin

2. Magnitude of Company Operations	
A) Total professional services fees received within last 24 months:	$ 6.8M
B) Number of similar projects started within last 24 months:	1
C) Largest single project to date:	$ 9.5M

3. Magnitude of Charlotte County Projects	
A) Number of current or scheduled County Projects	7
B) Payments received from the County over the past 24 months (based upon executed contracts with the County).	$ 2.1M

4. Sub-Consultant(s) (if applicable)	Location	% of Work to be Provided	Services to be Provided
Meridan Group of South FL	Port Charlotte	5	Surveying
Suncoast Eco Services	Port Charlotte	<1	Environmental & Protected Species Assessments

5. Disclosure of interest or involvement: List below all private sector clients with whom you have an active pending contract and who have an interest within the areas affected by this project. Also, include any properties or interests held by your firm, or officers of your firm, within the areas affected by this project.

Firm	Address
Phone #	Contact Name
Start Date	Ending Date
Project Name/Description	

NAME OF FIRM Giffels-Webster Engineers, Inc.

(This form must be completed and returned)

6. Minority Business:	**Yes** _____ **No** X
The County will consider the firm's status as an MBE or a certified MBE, and also the status of any sub-contractors or sub-consultants proposed to be utilized by the firm, within the evaluation process.	
Comments or Additional Information:	

The undersigned attests to his/her authority to submit this proposal and to bind the firm herein named to perform as per contract, if the firm is awarded the Contract by the County. The undersigned further certifies that he/she has read the Request for Proposal, Terms and Conditions, Insurance Requirements and any other documentation relating to this request and this proposal is submitted with full knowledge and understanding of the requirements and time constraints noted herein.

By signing this form, the proposer hereby declares that this proposal is made without collusion with any other person or entity submitting a proposal pursuant to this RFP.

In accordance with section 287.135, Florida Statutes, the undersigned certifies that the company is not on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, and does not have business operations in Cuba or Syria (if applicable) or the Scrutinized Companies that Boycott Israel List, or is not participating in a boycott of Israel.

As Addenda are considered binding as if contained in the original specifications, it is critical that the Consultant acknowledge receipt of same. The submittal may be considered void if receipt of an addendum is not acknowledged.

Addendum No. 1 Dated 9/5/2025 Addendum No._____ Dated_____ Addendum No._____ Dated_____

Addendum No._____ Dated_____ Addendum No._____ Dated_____ Addendum No._____ Dated_____

Type of Organization (please check one): INDIVIDUAL (_) PARTNERSHIP (_) CORPORATION (X) JOINT VENTURE (_)

Giffels-Webster Engineers, Inc. — Firm Name

941-475-7981 — Telephone

n/a — Fictitious or d/b/a Name

38-2749086 — Federal Employer Identification Number (FEIN)

900 Pine Street, Suite 225 — Home Office Address

Englewood, FL 34223 — City, State, Zip

40 — Number of Years in Business

n/a — Address: Office Servicing Charlotte County, other than above

Dennis Croyle, P.E., Vice President — Name/Title of your Charlotte County Rep.

941-475-7981 — Telephone

Dennis Croyle, P.E., Vice President — Name/Title of Individual Binding Firm (Please Print)

Signature of Individual Binding Firm

9/23/2025 — Date

dcroyle@gwefl.com — Email Address

(This form must be completed & returned)

DRUG FREE WORKPLACE FORM

The undersigned vendor in accordance with Florida Statute 287.087 hereby certifies that Giffels-Webster Engineers, Inc. does:
(name of business)

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).

4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Proposer's Signature

9/23/2025
Date

NAME OF FIRM Giffels-Webster Engineers, Inc

(This form must be completed and returned)

HUMAN TRAFFICKING AFFIDAVIT
for Nongovernmental Entities Pursuant To FS. §787.06

Charlotte County Contract #20250608

The undersigned on behalf of the entity listed below, (the "Nongovernmental Entity"), hereby attests under penalty of perjury as follows:

1. I am over the age of 18 and I have personal knowledge of the matters set forth except as otherwise set forth herein.

2. I am an officer or representative of the Nongovernmental Entity and authorized to provide this affidavit on the Company's behalf.

3. Nongovernmental Entity does not use coercion for labor or services as defined in Section 787.06, Florida Statutes.

4. This declaration is made pursuant to Section 92.525, Florida Statutes. I understand that making a false statement in this declaration may subject me to criminal penalties.

Under penalties of perjury, I declare that I have read the foregoing Human Trafficking Affidavit and that the facts stated in it are true.

Further Affiant sayeth naught.

Signature

Dennis Croyle, P.E.
Printed Name

Vice President
Title

n/a
Nongovernmental Entity

9/23/2025
Date

END OF PART IV

NAME OF FIRM Giffels-Webster Engineers, Inc.

(This form must be completed and returned)

PURCHASING DIVISION

Charlotte County Administration Center
18500 Murdock Circle, Suite 344
Port Charlotte, Florida 33948-1094

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TO: PROSPECTIVE PROPOSERS

DATE: SEPTEMBER 9, 2025

RE: ADDENDUM #1, RFP NO. 20250608
DESIGN SERVICES – 2025 LIFT STATION REPLACEMENTS

PROPOSAL DUE DATE: 3:00 p.m. (EST), SEPTEMBER 25, 2025

Firms are hereby notified that this addendum shall be made a part of the above-named proposal and contract documents. The following are issued to revise/clarify the proposal and contract documents, and these items shall have the same force and effect as the original proposal and contract documents. Proposals to be submitted on the above-specified date at Purchasing shall conform to the revisions and clarifications as listed herein.

ITEM # 1 QUESTIONS/ANSWERS

Q1: RP-20 SCOPE OF WORK includes assisting Charlotte County with funding applications. Has the County already received funding for this project? What funding does the County anticipate for this project?
A1: At this time, all funding is being provided by CCU funds. No outside funding is anticipated.

Q2: RP-21 BACKGROUND references exhibits #1, #2, #3, #4, #5 & #6, but these exhibits haven't been included in the RFP. Can you please provide these exhibits?
A2: Attached are the exhibits (6 pages).

Q3: RP-25 PROPOSAL REQUIREMENTS, in item B, requests a general schedule to be submitted with the proposal. Is it the intent of the County to perform design on all 5 lift stations at the same time?
A3: No, CCU intends to finalize the top 2 to 3 lift stations first and then after those are bid and awarded work on the remaining lift stations.

Q4: RP-25 PROPOSAL REQUIREMENTS, in item D, requests a reference list for each firm. Does this mean a reference list for all subconsultants? Also, does the reference list have to match the project experience writeups provided as part of Section VI. PRESENT EXAMPLES OF RECENTLY ACCOMPLISHED SIMILAR PROJECTS?
A4: No, just reference list for prime contractor, not subconsultants. Work experience needs to be based upon similar work, lift stations.

Q5: Would the County consider extending the deadline?
A5: The County will extend the proposal due date to **3:00 p.m. (EST), on SEPTEMBER 25, 2025.**

This addendum is binding and is to be considered as if contained within the original proposal documents of RFP No. 20250608. Firms are required to acknowledge receipt of this addendum on their proposal forms.

Kimberly Corbett

Kimberly A. Corbett, C.P.M., CPPB
Senior Division Manager - Purchasing

KAC/cas

cc: Professional Services Committee
Clerk
File

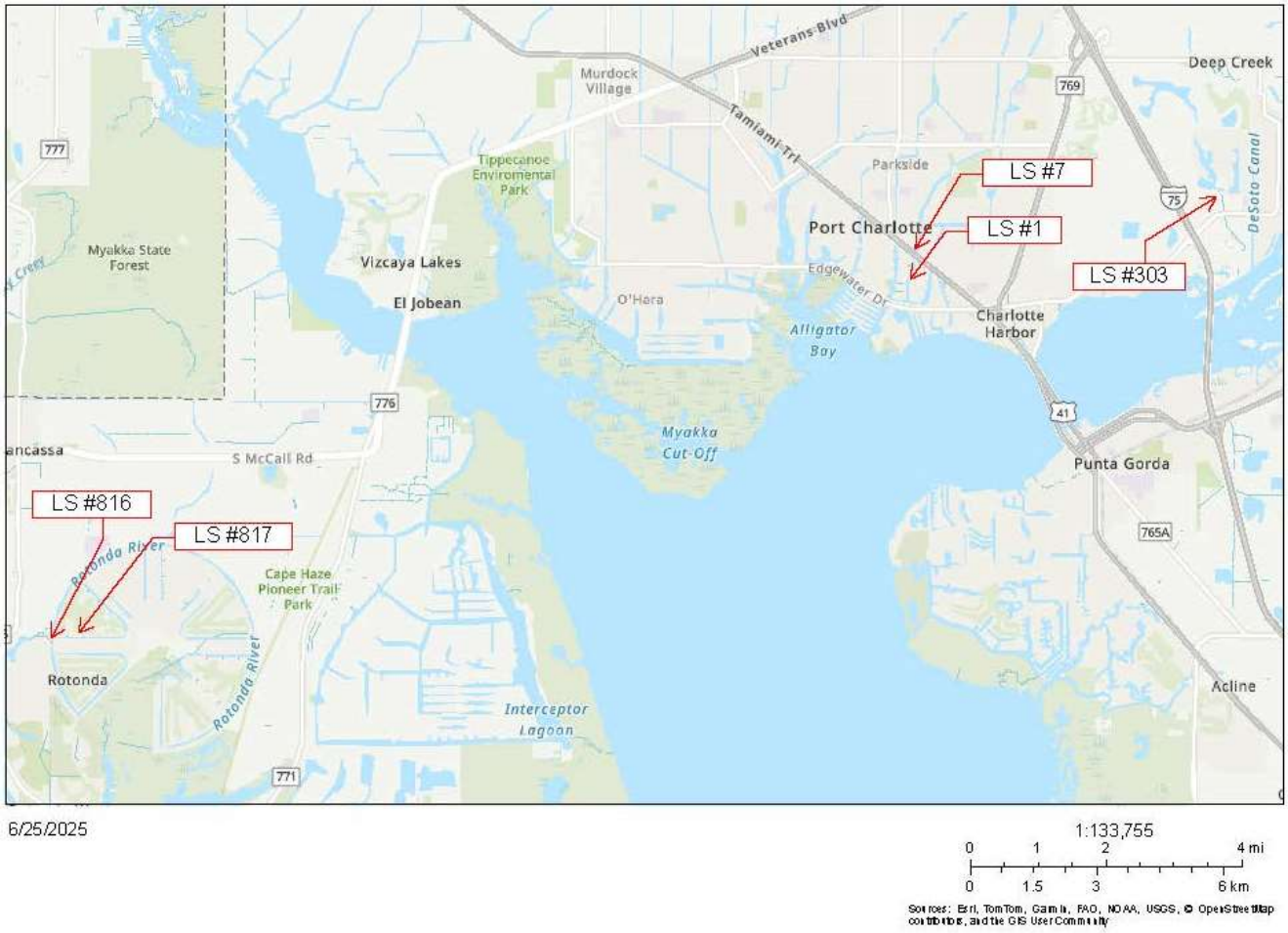

Exhibit Drawing 1. General Location Map

Exhibit Drawing 2. LS# 1 Community Center. Address: 101 Orange St. ZIP-33952

Exhibit Drawing 3. LS# 7 Pure Oil. Address: 3666 Tamiami Trail. ZIP-33952

Exhibit Drawing 4. LS# 303 Constantine. Address: 2460 Aden Way. ZIP-33983

Exhibit Drawing 5. LS# 816 Rotonda Blvd. West, Address: 213 Boundary Blvd. ZIP-33947

Exhibit Drawing 6. LS# 817 Bunker Road. Address: 66 Bunker Rd. ZIP-33947