INSPECTION AND CONDITION ASSESSMENT FOR WASTEWATER SYSTEM PIPELINES, MANHOLES, AND FORCE MAINS

CHARLOTTE COUNTY RFP NO.: 20250188

Respondent:
Mead & Hunt, Inc.
1533 Hendry Street Suite #301, Fort Myers, FL 33901

May 16, 2025

MAY 1, 2025

Charlotte County Procurement Office
18500 Murdock Circle
Port Charlotte, FL 33948

Subject: Proposal for Inspection and Condition Assessment for Wastewater System Pipelines, Manholes, and Force Mains (RFP NO. 20250188)

Dear Selection Committee Members:

Mead & Hunt is pleased to submit the enclosed RFP response for the County's Inspection and Condition Assessment for Wastewater System Pipelines, Manholes, and Force Mains, RFP NO. 20250188. This response package summarizes Mead & Hunt's qualifications to perform the described work and is signed by the Project Manager and Principal-in-Charge who are authorized to negotiate for the respondent. The assembled team has completed numerous similar assignments for other utilities in Florida, and we are excited to continue serving Charlotte County and implement a comprehensive condition assessment of the County's existing infrastructure.

Our approach will leverage our extensive experience and expertise in wastewater system management, particularly in rehabilitation and repair (R&R) work for pipelines, manholes, and lift stations. Throughout the proposal, we emphasize our proven track record in R&R work, our knowledge of NASSCO 8 standards, prioritization, funding compliance, and hydraulic modeling of wastewater systems. By integrating these key elements into our approach, we can provide Charlotte County with a robust and effective solution for managing and improving its wastewater infrastructure.

Mead & Hunt has a locally-based project team leveraging nationally recognized expertise. Our proposed staff includes in-house NASSCO-certified personnel, rehabilitation experts, and a full suite of disciplines providing comprehensive condition assessment and quality deliverables.

We understand the County has allocated $500,000 to complete this program, and we are committed to developing a program that will meet the County's budget and needs. Throughout our approach, we have specified additional value added opportunities that can support this project based on recent similar projects completed. For this reason, we will also offer in-house funding services to support the County in identifying maximum funds for any of the additional value added services proposed for this project at the request of the County.

We look forward to the opportunity to working with Charlotte County and contributing to the continued improvement of your wastewater infrastructure. Please feel free to contact me if you require any additional information or have any questions regarding our proposal.

Sincerely,
Mead & Hunt, Inc.

Carl Albano, PE, PMP
Senior Project Manager

Justin Kise, PE, DBIA
Business Unit Leader, Vice President

CONTENTS

TEAM PROPOSED FOR THIS PROJECT

BACKGROUND OF TEAM, PROJECT MANAGER, AND OTHER KEY PERSONNEL

TEAM QUALIFICATIONS

Mead & Hunt is an engineering and consulting firm empowered to **take care of people, do the right thing, and do what makes sense.** Our company and our world are made better when we put people first. This includes our clients, our employees, and our communities. We are entirely employee-owned and have one of the lowest turnover rates in the industry. Some of our close client relationships extend back to the 1920s. Putting people first has allowed us to successfully serve our communities for over a century.

Mead & Hunt has specialized in professional engineering services for municipalities and clients throughout the United States since 1900 and for municipal clients in Florida since 1964. Our team has an extensive history of successfully serving Florida municipalities and meeting their unique needs and challenges. We guide our municipal clients through challenges such as limited funding, competing priorities, natural disasters, unfunded mandates, and changing regulations, and we pride ourselves on being flexible in navigating these challenges with them.

Engineers who have served the County and neighboring local municipalities for decades anchor our team of design professionals. This team also includes new talent who will expand our capabilities and continue the tradition of excellence that our predecessors began over 120 years ago.

WHAT WE DO BEST

Our **in-house capabilities** listed below will reduce the need for added coordination with outside resources and will save the County time and money.

- Rehabilitation and repair (R&R) investigations and design
- Construction engineering and inspection (CEI)
- Gravity and pressure pipeline design
- Grants and funding
- Condition assessment and planning
- Inflow & infiltration (I&I) study
- Hydraulic modeling
- 7 in-house NASSCO certified team members

PROJECT MANAGER AND OTHER KEY PERSONNEL

PROPOSED TEAM LEADERS

Mead & Hunt assembled this team to meet the goals and objectives specified in the request for proposal.

Your Project Manager and team lead for Program Management and CIP Development, Carl Albano, PE, PMP, recently worked on the County's Lift Station 815 Rehabilitation project and is familiar with all aspects of the utility infrastructure, staff, and operations. Carl will manage this team of design professionals and specialists who have extensive local expertise.

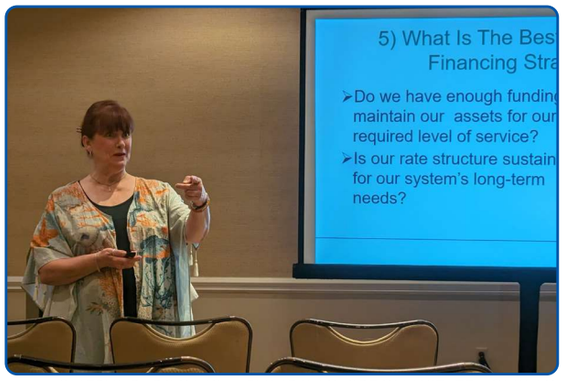
Your Principal-in-Charge and Quality Control Manager, Justin Kise, PE, DBIA, will confirm that all strategic objectives are met. Justin will provide strategic oversight that aligns the project with the County's goals and requirements. His role includes facilitating communication between the County and the project team and maintaining that all deliverables meet the expected standards.

R&R Specialist and Condition Assessment Lead, Kris Samples, PE, DBIA and his team of specialists will manage the R&R program, which spans from manhole inspections to smoke testing and closed circuit television (CCTV). Our team has decades of experience providing these services and can manage the program as an extension of staff on the County's behalf.

We understand the County's need for a trusted partner to manage this essential program. The proposed investigations will drive the recommendations to reduce I&I in the most effective manner. This will require a hybrid approach that includes manhole rehabilitation, cured-in-place pipe (CIPP), and lateral lining. After completing the investigations and recommending capital projects, we will help the County engage contractors to perform the required work and will prepare contractual services acquisition documents that enable 'turn-key' project implementation.

IN-HOUSE FUNDING SERVICES

Mead & Hunt's funding support services consistently exceed our client's expectations. Our staff includes funding specialists who obtain funding approvals and prepare the grant and loan application documents to secure money for projects. The team also includes compliance specialists who have worked in neighboring municipalities for decades to successfully administer numerous state revolving fund (SRF) loans and grants.



SHERYL PARSONS – FUNDING SPECIALIST, TEACHING ASSET MANAGEMENT AT FWRC

SHERYL PARSONS – FUNDING SPECIALIST AND RYAN ECKDALE-DUDLEY – GIS DASHBOARD AND ASSET MANAGEMENT INTEGRATION

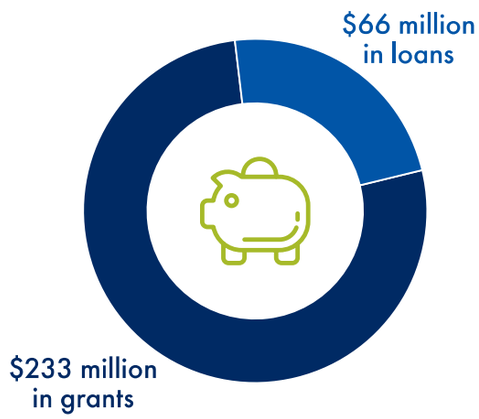
FUNDING SUPPORT SERVICES

Making The Process As Seamless As Possible
Mead & Hunt has an entire team dedicated to obtaining grant and loan funding and maintaining compliance with funding provisions. Funding expert **Sheryl Parsons** brings years of funding experience with a funded amount of more than $20 billion in loans through the SRF with EPA and $297 million in grants and loans in the last two years.

Sheryl has extensive knowledge and experience with federal, state, regional, and local funding programs, as well as long-standing professional relationships with the staff who manage these programs. Sheryl also brings 12 years of experience training states and cities in Davis-Bacon and American Iron and Steel compliance, as well as fraud prevention during construction.

We provide complete funding and compliance services including planning, application, reimbursement requests, reporting, and other compliance support duties that can expedite expended fund reimbursements and provide a clean project audit. **Our team of specialists will leverage their extensive experience performing compliance responsibilities, saving the County time and money.**

$297 MILLION IN FUNDING ACQUIRED FOR CLIENTS IN THE PAST TWO YEARS



FUNDING EXPERTISE

FUNDING HIGHLIGHTS

- ✓ Over 30 years of expertise in government funding
- ✓ Funding specialist, Sheryl Parsons, helped communities get $20 billion in funding while she worked with the EPA
- ✓ Helped clients get over $297 million in the past two years, including:
  - $233 million in grants
  - $66 million in loans

SERVICES PROVIDED

- ✓ Identify financing alternatives
- ✓ Coordinate with agencies
- ✓ Comply with funding requirements
- ✓ Present briefings and trainings

Mead & Hunt is a proven winning team with organization, skill, expertise, and talent. We have managed projects funded from multiple sources and have the expertise to leverage available funding sources. Our team will assemble a schedule that melds the construction and funding milestones to provide funding advantages for the County.

COMPLIANCE SUPPORT

- Davis-Bacon payroll review and verification
- American Iron and Steel material verifications or BABA compliance, as required
- EEO/MBE/WBE utilization verification
- E-Verify monitoring
- On-the-job training monitoring

Through our extensive careers, we have streamlined the funding process, making it appear effortless and seamless. We partner with local municipalities to manage funding compliance, keeping the money and the projects moving.

PROPOSED SUBCONSULTANTS

Along with our in-house team members, Mead & Hunt has positive working relationships with all of our subconsultant team members and will maintain clear lines of coordination and communication throughout the project. Each of the firms below brings unique skills and understanding to our team and have experience working with Mead & Hunt and our team members on recent projects. Our firms have a history of successfully completing projects together and have worked locally providing similar services.

Gulf Coast Underground (GCU)

CCTV | With over 20 years of experience in their field, GCU has a well-earned reputation as a top-tier general utility contractor. Their primary focus is on investigating and rehabilitating aging storm and sanitary infrastructure through trenchless rehabilitation methods using both proven and cutting-edge technologies. GCU has an outstanding team with an exceptional track record of successfully delivering our services to private, municipal, and industrial clients throughout the southeast. In Florida alone over the past three years GCU has managed more than 300 projects covering their full suite of services, including but not limited to SSES services, mainline and lateral lining and grouting, manhole and wet-well rehabilitation, and lining, pipe-bursting, and excavation.

Quest Corp. of America (Quest)

PUBLIC OUTREACH | Founded in 1995, Quest is a woman-owned firm known for serving public-sector clients throughout Florida. As a DBE/WMBE certified firm, Quest provides full-service communications and public outreach services for projects from planning through construction and has an award-winning creative design and innovative technologies team. Quest has spearheaded public and stakeholder involvement for many municipal, transportation, utility, transit, and aviation projects throughout Florida. Quest is experienced providing communications and community outreach tasks for projects throughout Florida. With associates throughout the Charlotte County region, Quest's public involvement and multimedia teams can quickly mobilize to support projects both large and small.

Hyatt Survey Services, Inc. (Hyatt Survey)

SURVEY | Hyatt Survey is a full-service surveying and mapping company with a professional staff combining over 70 years of extensive professional experience in a variety of project areas. With their Florida headquarters located in Manatee County, Hyatt Survey has convenient access to a broad geographic area and has provided professional surveying services throughout Florida on federal, state, and local public and private projects. Hyatt Survey has extensive experience working with Charlotte County on previous projects.

PROPOSED MANAGEMENT PLAN

TEAM ORGANIZATION, MANAGEMENT, AND GENERAL QUALIFICATIONS

Mead & Hunt is proud to present an exceptionally qualified team whose roles and responsibilities are clearly defined to provide seamless project execution for Charlotte County.

The Mead & Hunt team has a robust management structure designed to optimize efficiency and communication. **Carl Albano**, as Project Manager, will be the primary point of contact, while **Justin Kise**, as Principal-in-Charge and Quality Control Manager, will maintain that all strategic objectives are met. Our R&R Specialist, **Kris Samples**, will work with his team to implement the most effective R&R solutions for the County on this project. This team has a proven track record in similar projects, bringing both experience and innovation to the table.

CARL ALBANO – PROJECT MANAGER | As Project Manager, **Carl Albano** will oversee all aspects of this inspection and condition assessment project. Carl brings extensive expertise in managing similar projects, providing timely delivery and adherence to high standards of quality and safety.

JUSTIN KISE – PRINCIPAL-IN-CHARGE AND QUALITY CONTROL MANAGER | **Justin Kise** will serve as the Principal-in-Charge, providing strategic oversight that aligns the project with the County's goals and requirements. His role includes facilitating communication between the County and the project team and maintaining that all deliverables meet the expected standards.

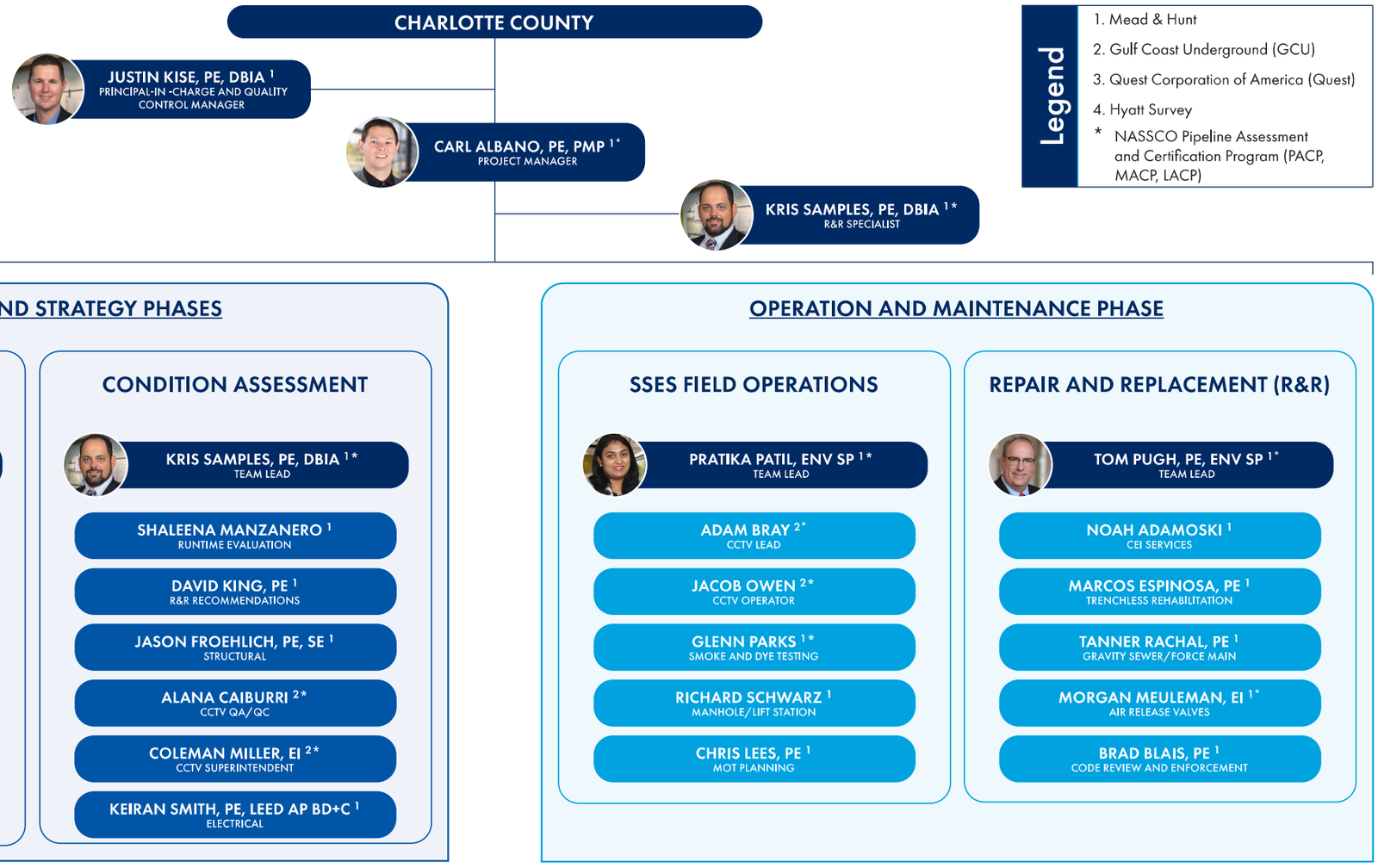
KRIS SAMPLES – R&R SPECIALIST | **Kris Samples**, our R&R Specialist, brings extensive experience in the area of rehabilitation and repair of wastewater systems. Kris's deep knowledge and experience in the field will be instrumental in identifying and implementing the most effective solutions for this project.

With extensive experience in similar projects, the Mead & Hunt team is well-equipped to handle the complexities of inspecting and assessing wastewater system pipelines, manholes, and force mains. Our commitment to excellence guarantees that we will deliver results that meet the highest standards of quality and reliability for the County.

Charlotte County can rest assured that Carl, Justin, and Kris will remain integral to the project unless a substitution is deemed necessary by the County and approved expressly by County authorities. **Mead & Hunt will not substitute personnel assigned to this project without the express permission of the County.**

Our team's organizational chart is included on the following page. Resumes demonstrating experience with previous similar projects are included in Section III.

ORGANIZATIONAL CHART



PREVIOUS EXPERIENCE OF TEAM PROPOSED FOR THIS PROJECT

PERSONNEL PROPOSED AND QUALIFICATIONS

We have specifically assembled our team to meet **each of the County's needs** as described in the RFP, along with **value-added support roles we will leverage as needed for additional resources and specialty project expertise.** Each team member brings extensive experience in their respective fields, as well as a proven ability to work together seamlessly as a cohesive and integrated unit.

Qualification highlights of our management team have been provided below and resumes for all team members are included in this section.

Projects similar to those outlined in the RFP that team members have or are currently working on are included in the resumes in this section. **Mead & Hunt will not substitute personnel assigned to this project without the express permission of the County.**

Management Team Qualification Highlights		
	**Carl Albano, PE, PMP** Project Manager/ Program Management and CIP Development Team Lead	• Experience leading and designing water and wastewater engineering projects, including lift stations, distribution/conveyance systems, sewer rehabilitation, and construction administration • Experience working on projects with Charlotte County's wastewater system • Certified through National Association of Sewer Service Companies (NASSCO), providing additional expertise with engineering R&R-focused projects
	**Justin Kise, PE, DBIA** Principal-in-Charge/ Quality Control Manager	• 16 years of experience as lead pipeline designer for water and force mains from 6 to 42 inches in diameter • Extensive experience in managing the design, permitting, and construction of HDDs, jack and bore and open cut construction, including expertise in subaqueous/water crossing pipelines
	**Kris Samples, PE, DBIA** R&R Specialist/Condition Assessment Team Lead	• 16 years of experience in project management, water supply and storage, and pump station design experience up to 78 MGD in capacity • Clear understanding of the County's procedures and processes • Certified through DBIA and NASSCO, providing additional expertise with both collaborative delivery methods and engineering R&R-focused projects
	**Pratika Patil, ENV SP** SSES Field Operations Team Lead	• Successfully manages field operations by collaborating with field crews and GIS staff to ensure accurate integration of inspection results with asset management applications like InfoMaster • Has led numerous I&I, R&R, and SSES programs across Florida, Georgia, and Tennessee • Certified through NASSCO, providing additional expertise with engineering R&R-focused projects
	**Tom Pugh, PE, ENV SP** Rehabilitation and Replacement Lead	• Over 30 years of experience in the rehabilitation and replacement of municipal water and wastewater infrastructure, including Charlotte County Lift Station 815 • Certified through NASSCO, providing additional expertise with engineering R&R-focused projects

RESUMES

Areas of Expertise

- Project management
- Wastewater systems
- Potable water systems
- Project engineering
- Construction management
- Fieldwork
- Data analysis

Education

- MS, Civil Engineer (focus on Water Resources and Treatment, University of Colorado Boulder
- BS, Environmental Engineering (focus on Water Resources and Treatment, University of Colorado Boulder

Registrations/ Certifications

- Licensed Professional Engineer – Florida
- Certified Project Management Professional (PMP)
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Carl Albano, PE, PMP

PROJECT MANAGER | PROGRAM MANAGEMENT AND CIP DEVELOPMENT TEAM LEAD

Carl Albano has eight years of experience leading and designing water and wastewater engineering projects in the public and private sectors. This experience includes small lift stations, master lift stations, distribution/conveyance, sewer rehabilitation, potable and wastewater hydraulic modeling, construction administration, and project management. Known for aligning infrastructure solutions with client goals, including renewal prioritization, system capacity, and regulatory compliance—providing practical, future focused, planning outcomes. He also has prior experience working on projects with Charlotte County's wastewater system.

RELEVANT PROJECT EXPERIENCE

Septic to Sewer Program, Pinellas County, Florida
Project Manager. Mead & Hunt designed the septic to sewer conversion of approximately 150 parcels spanning two separate neighborhoods. The scope involved 18,000 linear feet of gravity main, 5,000 linear feet of force main, and three lift stations. We analyzed and proposed alternative methods and routes to the City and conducted hydraulic modeling to determine pump sizing. The project ties in over 200 private septic tanks to give the residents of Pinellas County a sewer connection.

MPS 6600 Rehabilitation, Lee County, Fort Myers, Florida
Project Engineer. Carl performed a hydraulic analysis to help develop recommendations for addressing lift station overflow concerns. He also participated in designing the lift station improvements, which included a new wet well, pumps, backup pumps, yard piping, and an odor control system. Carl worked on this project before joining Mead & Hunt.

Lift Station 815 Rehabilitation, Charlotte County, Florida
Project Engineer. Carl performed design, cost estimation, and engineering services during construction to abandon and replace Lift Station 815's existing wet well, including gravity appurtenances, influent/discharge piping, and pumps. He also performed permitting and mitigation measures to address on-site endangered species (gopher tortoises). Carl worked on this project before joining Mead & Hunt.

Wastewater Master Plan Development, City of North Port, Florida
Project Manager. Carl led the development of a wastewater master plan for the City. The plan provides a comprehensive framework for wastewater management through 2045 for the water reclamation facilities and collection system. The infrastructure covered by this master plan includes the Pan American Water Reclamation Facility, Southwest Water Reclamation Facility, 131 lift stations, 185 miles of gravity sewer main, 93 miles of force main, and 20 miles of reclaimed water main. Carl worked on this project before joining Mead & Hunt.

Justin Kise, PE, DBIA

PRINCIPAL-IN-CHARGE/QUALITY CONTROL MANAGER

Areas of Expertise

- Water and wastewater collection, conveyance, and treatment
- Pumping systems
- Utility rehabilitation
- Construction management
- Regulatory permitting
- AutoCAD Civil 3D
- Bentley hydraulic modeling

Education

- BS, Civil Engineering specializing in Water Resources, University of Florida

Registrations/ Certifications

- Licensed Professional Engineer – Florida
- Designated Design Build Professional, Design-Build Institute of America (DBIA®)
- CSI Construction Documentation Technician

Justin Kise is a leader in the water and wastewater engineering and construction management field. He specializes in water mains, force mains, and gravity collection systems ranging from 6 to 42 inches in diameter and constructed via traditional open-cut, HDD, and jack and bore methods. His dual experience as a construction manager and professional engineer brings a comprehensive approach to our designs. Justin's other work experience includes extensive design for the modification and improvement of water and wastewater treatment and pumping facilities. He has led multiple successful projects through the project life cycle, including design, permitting, construction, and closeout. Justin's experience with the design-build (DB) delivery process brings added value to the project team.

RELEVANT PROJECT EXPERIENCE

Engineering Services for Water, Wastewater, Reclaimed Water, and Grant-Related Projects, Hernando County, Florida

EOR. Mead & Hunt provided planning, design, and construction phase services for infrastructure improvement projects in Hernando County, funded by the American Rescue Plan Act (ARPA). These projects included upgrades to pump stations and pipelines ranging from 6 inches to 16 inches. Through collaborative planning and design, Mead & Hunt ensured that each project phase met quality and efficiency standards, thereby improving the county's water utility systems and supporting sustainable development within the community. Recently completed projects include:

- Northcliffe Boulevard Force Main Replacement
- Telcom Pumping Station and Force Main
- US41 Force Main Replacement
- State Road 50/Grove Road Force Main

FY 2011 Sanitary Sewer R&R, City of St Petersburg, Florida

Project Manager. Justin played a pivotal role in overseeing the City's $2M sanitary sewer rehabilitation and replacement program. The approach was critical in prioritizing and identifying basins for I&I investigations and CCTV inspections. Through these detailed studies, Justin was able to pinpoint areas in need of urgent attention, efficiently channeling resources to the most critical parts of the City's collection system. The program aimed to utilize the City's budget effectively, maximizing the reduction of I&I within the sewer collection system. Justin's management involved several key activities:

- I&I investigations
- CCTV inspections
- Prioritization of R&R projects
- Manhole linings
- Pipeline cured-in-place linings
- Pipeline replacements

Kris Samples, PE, DBIA

R&R SPECIALIST | CONDITION ASSESSMENT TEAM LEAD

Areas of Expertise

- R&R design
- I&I abatement programs
- SSES planning and program management
- Pump station runtime evaluation
- Gravity sewer, force main, and pump station design
- Hydraulic modeling and master planning

Education

- BS, Environmental Engineering, University of Central Florida
- BS, Civil Engineering, University of Central Florida

Registrations/ Certifications

- Licensed Professional Engineer – Florida
- Designated Design Build Professional, DBIA®
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Kris Samples has executed water and wastewater engineering projects for the past 12 years. He has been a critical team player in engineering R&R services for various projects throughout Florida with collection systems and pressure pipes. Kris specializes in I&I program development to inspect, identify, and repair/ replace defective infrastructure, increasing the overall reliability, capacity, and performance while reducing treatment costs. He has served as the EOR, project manager, and QA/QC reviewer on R&R projects throughout Florida and for 14 utility owners nationwide. These projects have included various services such as flow monitoring, smoke testing, utility hole inspections, night flow isolations, CCTV, and pressure pipe condition assessment.

RELEVANT PROJECT EXPERIENCE

Comprehensive Infrastructure for Tampa's Neighborhoods, City of Tampa, Florida

Project Manager. The evaluation, inspections and design of two of the four neighborhoods water, wastewater and stormwater utilities within this project scope. The overall project value was $200 million and executed as a Progressive DB project that included 81.8 miles of roadway, 464,000 linear feet of water mains, 300,000 linear feet of sewer lines, 1,804 acres evaluated for drainage and water quality. The project also included the design of opencut, trenchless and rehabilitated utility replacement, rebuilding of roads to be milled, overlayed and sealed, new sidewalks, green corridors and multi-modal 10.7 miles of stormwater system improvements.

Hurricane Hermine SSO Evaluation, City of Largo, Florida

Project Manager. Performed assessments of the City's sanitary sewer system to evaluate the impact on the system due to Hurricane Hermine and establish and implement a plan to prevent SSOs from occurring during future wet seasons. Tasks included hydraulic modeling, flow and rainfall monitoring, smoke testing, manhole inspections, CCTV inspections, I&I quantification and abatement, dry and wet weather calibration of the City's InfoWorks model, alternative software evaluation, and identification of system defects and hydraulic deficiencies with recommendations for improvements.

Fort Myers SSES Phase I and II, City of Fort Myers, Florida

Project Manager. Mead & Hunt developed and implemented a comprehensive SSES Program aimed at reducing I&I, preventing SSOs, and improving the reliability of the wastewater collection system. Phase I involved evaluating pump station runtimes and identifying sources of excessive rainfall-driven I&I, while Phase II focused on developing a flow monitoring program, conducting field investigations, and providing recommendations for system improvements and repairs.

Pratika Patil, ENV SP

SSES FIELD OPERATIONS TEAM LEAD

Areas of Expertise

- I&I studies
- Data analysis/data management
- Water/wastewater
- Report writing
- Flow monitoring
- Leadership
- Team management
- Condition assessment

Education

- BS, Environmental Science and Technology
- Master's, Environmental Engineering, University of South Florida, Shivaji University, India

Registrations/ Certifications

- Envision Sustainability Professional (ENV SP)
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Pratika Patil is a detail-oriented engineer with a background in environmental engineering. Pratika has managed field operations, working closely with field crews and GIS staff to interface inspection results with InfoMaster and other asset management applications. She has overseen numerous I&I abatement contracts, including work throughout Florida and Georgia, and SSES data collection projects in Florida, Tennessee, and Georgia. Recently, Pratika was involved in several sewer/rehabilitation assignments using the InfoMaster asset management platform and helped develop R&R programs in Georgia, Tennessee, and Florida.

RELEVANT PROJECT EXPERIENCE

Hurricane Hermine SSO Abatement, City of Largo, Florida

Project Engineer. Pratika assessed the City's sanitary sewer system to evaluate the impact on the system from Hurricane Hermine and establish and implement a plan to prevent SSOs from occurring during future wet seasons. Tasks included hydraulic modeling, flow, and rainfall monitoring, smoke testing, utility hole inspections, CCTV inspections, I&I quantification and abatement, dry and wet weather calibration of the City's InfoWorks model, alternative software evaluation, and identification of system defects and hydraulic deficiencies with recommendations for improvements.

River Oaks WRF I&I Abatement, Hillsborough County, Florida

Project Engineer. This project involved a comprehensive I&I abatement effort in the River Oaks WRF service area to mitigate excessive rainfall-dependent inflow/infiltration (RDII) before closing the WWTP. The River Oaks plant closure was part of a regional wastewater treatment consolidation program. It was determined that significant wet weather flow reductions must be achieved before redirecting the wastewater flow. Phase I included installation, maintenance, monitoring, and hydraulic analysis of 49 open channel flow meters, one side pressure meter, seven rainfall gauges, and 20 groundwater gauges. The results of the Phase 1 efforts were used to recommend the smoke testing of 658,000 linear feet of gravity sewer and performing 1,443 night flow isolations. After completing the night flow isolations, approximately 1,331,000 gallons of groundwater infiltration was identified, and the smoke testing results led to 50 dye tests—of which 37 had positive results. The results of the dye testing activities identified approximately $100,000 in abatement repairs.

Tom Pugh, PE, ENV SP

R&R TEAM LEAD

Areas of Expertise

- Civil/mechanical assessments
- Project and contract management
- Pump stations and lift stations
- Water transmission
- Pipelines (including trenchless methods)
- Wastewater collection and transmission
- Hydraulic modeling
- MOPO during construction
- Permitting
- Environmental sustainability
- R&R

Education

- BS, Civil Engineering, Pennsylvania State University

Registrations/ Certifications

- Licensed Professional Engineer – Florida
- Wastewater Treatment Plant Operator, Class C – Florida
- ENV SP
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Tom Pugh is a senior water/wastewater project manager based in Fort Myers, Florida. With a 35-year engineering career focused on municipal utilities in southwest Florida, Tom has developed extensive expertise in the rehabilitation and renewal of sewer systems. He consults with operations staff on maintenance of plant operations (MOPO), ease of operation and maintenance, and operator safety to encourage an "operator-friendly" environment. His diverse background provides unique abilities for planning and designing facilities that combine efficiency goals with the need for safety and the desire for reliable systems that are easily maintained and operated. Tom's comprehensive experience in sewer system rehabilitation includes performing cleaning, inspections, and assessments using CCTV methods, developing structured cleaning programs, and preparing prioritized rehabilitation programs. His work confirms that the systems are not only efficient but also safe and reliable for long-term operation.

RELEVANT PROJECT EXPERIENCE

SSES Phase I and II, City of Fort Myers, Florida
Project Manager. Mead & Hunt developed and implemented a comprehensive SSES program aimed at reducing I&I quantification, preventing SSOs, and improving the reliability of the wastewater collection system. Phase I involved evaluating pump station runtimes and identifying sources of excessive rainfall-driven I&I, while Phase II focused on developing a flow monitoring program, conducting field investigations, and providing recommendations for system improvements and repairs.

Spanish Wells Community Sewer R&R, Bonita Springs Utilities (BSU), Bonita Springs, Florida
Project Manager. Tom and his team provided design, permitting, bid, and construction administration services for improvements to the wastewater collection system in the Spanish Wells community. Work involved rehabilitating seven lift stations and improving the gravity sewer, which included utility hole and pipe repairs and cleanout installation. Tom worked closely with BSU to develop drawings, technical specifications, and contract documents that could be readily adapted for BSU's future lift station rehabilitation projects, providing consistency during implementation and reducing overall costs. Tom worked on this project before joining Mead & Hunt.

Waterway Estates and Fiesta Village I&I Studies, Lee County Utilities, North Fort Myers, Florida
Project Manager. Tom oversaw the evaluation of approximately 80 miles of gravity wastewater collection piping within the former Florida Cities Water Company system and provided construction management for its rehabilitation to reduce infiltration and inflow. Tom worked on this project before joining Mead & Hunt.

Tanner Rachal, PE

PROJECT ENGINEER | GRAVITY SEWER/FORCE MAIN

Areas of Expertise

- Mechanical engineering design
- Civil engineering design
- Pump stations
- Master plans
- Hydraulic modeling
- Permitting
- Contract administration
- Construction cost estimating
- Bidding services
- Services during construction

Education

- BS, Mechanical Engineering, University of Florida

Registrations/ Certifications

- Licensed Professional Engineer – Florida

Tanner Rachal has a Bachelor's degree in mechanical engineering and is experienced in a variety of water, wastewater, and stormwater projects. Many of his projects involve pump station design, master planning, hydraulic modeling, and permitting. He is also familiar with contract administration and technical services during construction. As a deputy project manager, Tanner assists in all phases of planning, designing, permitting, and implementing water resource projects. His work includes basis-of-design reports, design drawings and specifications, construction cost estimating, permitting, bidding, and technical services during construction.

RELEVANT PROJECT EXPERIENCE

Collection System Assessment and Mapping, City of Daytona Beach Shores, Florida

Field Engineer. The City of Daytona Beach Shores hired Mead & Hunt to update its GIS model and utility mapping for tracking infrastructure assets and capital improvement projects. Mead & Hunt conducted a Level 1 survey to map sanitary sewer manholes and gravity sewer mains using survey-grade GPS. They then performed Level 2 in-manhole inspections with a GoPro and CleverScan equipment to assess conditions and document details like connectivity, size, material, and debris. The findings will be graded per NASSCO MACP guidelines, and recommendations for repairs and further inspections will be made. Additionally, an ESRI ArcGIS geodatabase of the sewer system will be created.

Cocoa Beach Reclaimed Water Main Replacement and Lift Station Force Main Upsize, City of Cocoa Beach, Florida

Engineer Intern. The City of Cocoa Beach needed to replace/upsize approximately 5,000 linear feet of a reclaimed water main and 500 linear feet of a lift station force main. Tanner assisted in the design, generated the specification book, and set up meetings/communicating with the client.

WRF Plan Update, Cocoa Beach, Florida

Engineer Intern. Hurricanes Fiona and Ian and Tropical Storm Nicole significantly impacted the City of Cocoa Beach. Sustained, elevated tides and flooded roadways severely impacted the City's wastewater collection/transmission systems and wastewater treatment facility. The frequency and severity of extreme weather events escalated the incidence of sewage overflows. The Cocoa Beach Water Reclamation Facility Plan Update details recommended improvements for multiple facets of the City's WRF, wastewater collection system, reclaimed water transmission and distribution system, and an I&I abatement study and implementation program.

Ryan Eckdale-Dudley, GISP

GIS DASHBOARD ASSET MANAGEMENT INTEGRATION

Areas of Expertise

- GIS project visioning
- Custom Esri (Environmental Systems Research Institute)-based GIS solutions
- Web and mobile applications
- Dashboard development
- Public-facing applications
- Ongoing GIS support and training

Education

- BA, Biological Aspects of Conservation, University of Wisconsin

Registrations/ Certifications

- Geographic Information Systems Professional (GISP)

Ryan Eckdale-Dudley has more than 23 years of experience providing local governments with strategies and impactful solutions focused on achieving community initiatives. He uses GIS to empower local governments to better manage their information, communicate initiatives, and make data-driven decisions that result in optimal outcomes. Ryan provides powerful results based on his extensive experience working in the public sector with organizations looking to use technology and advocacy to improve outdated, inefficient practices. He identifies opportunities to leverage GIS technology to create solutions that meet communities' needs and support smart government initiatives.

RELEVANT PROJECT EXPERIENCE

Collection System Assessment and Mapping, City of Daytona Beach Shores, Florida

GIS Lead. Mead & Hunt updated the City's GIS model and utility mapping for tracking infrastructure assets and capital improvement projects. We conducted a Level 1 survey to map sanitary sewer manholes and gravity sewer mains using survey-grade GPS. This work ensures that the systems are not only efficient but also safe and reliable for long-term operation. We then performed Level 2 in-manhole inspections with a GoPro and CleverScan equipment to assess conditions and document details like connectivity, size, material, and debris. The findings will be graded per NASSCO MACP guidelines, and recommendations for repairs and further inspections will be made. Additionally, an ESRI ArcGIS geodatabase of the sewer system will be created.

Fort Myers SSES Phase I and II, City of Fort Myers, Florida

GIS Support. Mead & Hunt developed and implemented a comprehensive SSES Program aimed at reducing I&I, preventing SSOs, and improving the reliability of the City's wastewater collection system. Phase I involved evaluating pump station runtimes and identifying sources of excessive rainfall-driven I&I, while Phase II focused on developing a flow monitoring program, conducting field investigations, and providing recommendations for system improvements and repairs.

SRF Sanitary Sewer Rehabilitation Program, City of Cocoa Beach, Florida

GIS Support. Mead & Hunt prepared project plans and specifications illustrating the sewer mains, manholes, and laterals to be lined and repaired. Defects found during the initial investigation included cracks in a sewer pipe, leaking joints, offset joints, protruding laterals, bricks missing in manholes, and bad rings and covers. Approximately 50,00 linear feet of 8-inch gravity sewers and 5,000 linear feet of more than 8-inch sewers were CIPP lines. Additional repairs included lateral lining for over 400 laterals and manhole repairs.

Meifa Chen, PHD, PE

RISK MODELING ANALYSIS AND INTEGRATION

Areas of Expertise

- Project management
- Surface water and stormwater
- Potable water systems
- Wastewater systems
- Hydraulic modeling

Education

- PhD, Applied Fluid Mechanics, Clemson University
- MS, Hydraulics and River Dynamics, China Institute of Water Resources and Hydropower Research
- BS, Water Resources, Wuhan University

Registrations/ Certifications

- Licensed Professional Engineer – Florida

Dr. Meifa Chen is a senior project manager, client manager, and practice leader in multiple practice areas with extensive national and international experience in planning, modeling, designing, and constructing stormwater, potable water, wastewater, and reclaimed water systems. He has substantial design and construction experience with pipelines, pump/lift stations, storage facilities, and intake structures and has successfully managed multi-disciplinary projects and teams of varying sizes. Meifa is a recognized hydraulic modeling and surge modeling expert. He is well versed in InfoWater, WaterGEMS, InforWorks ICM, InfoSWMM, SewerGEMS, PCSSWMM, XPSWMM, MikeUrban, InfoSurge, and Hammer.

RELEVANT PROJECT EXPERIENCE

Collection System Assessment and Mapping, City of Daytona Beach Shores, Florida

Project Manager. This project involved an update to the city's GIS model and utility mapping for tracking infrastructure assets and capital improvement projects. Mead & Hunt conducted a Level 1 survey to map sanitary sewer manholes and gravity sewer mains using survey-grade GPS, then performed Level 2 in-manhole inspections with a GoPro and CleverScan equipment to assess conditions and document details like connectivity, size, material, and debris. We graded the findings per the NASSCO MACP guidelines and recommended repairs and further inspections. Mead & Hunt also created an ESRI ArcGIS geodatabase of the sewer.

Water, Wastewater, and Reclaimed Water Master Plan Updates, City of Casselberry, Florida

Project Engineer. Meifa led the master plan updates to the hydraulic models and reports. Due to the lack of field data, Meifa's team worked closely with system operators to understand existing system conditions, deficiencies, non-capacity-related issues, system expansion plans, and future major reclaimed water users. They also analyzed one-year pump runtime data of the wastewater lift stations to identify lift station issues and confirm them with the operator. Meifa used WaterCAD for water and reclaimed water system modeling and SewerCAD for wastewater system modeling. Meifa worked on this project before joining Mead & Hunt.

Water and Wastewater Master Plan, City of Las Cruces, New Mexico

Project Engineer. Meifa led the InfoWater (water) and InfoSewer (wastewater) model development for the city's wastewater master plan project. This project started with population projection and field flow collection (water and wastewater). The models were calibrated and used to analyze the existing systems and propose improvements and expansions which were phased into different planning years.

Anusha Ravichandran, PE

COST ESTIMATING

Areas of Expertise

- Public involvement
- Project management
- Report writing
- Water/wastewater
- Water modeling

Education

- MS, Environmental Engineering, University of South Florida
- BT, Chemical Engineering, Amrita Vishwa Vidyapeetham, India

Registrations/ Certifications

- Licensed Professional Engineer – Florida

Anusha Ravichandran is a detail-oriented engineer with experience working for municipal organizations. Anusha has been responsible for managing projects as the owner's representative for a water and wastewater utility in Kissimmee, Florida, assisting with budget justification preparations for capital improvement projects and reviewing plans, specifications, bid documents, and addenda. Anusha's experience with the DB delivery process and construction administration brings additional value to the team.

RELEVANT PROJECT EXPERIENCE

Wastewater Master Plan, Toho Water Authority, Kissimmee, Florida
Project Manager. Anusha oversaw the wastewater master planning efforts to evaluate the collection and treatment system's current and future needs, including eight WRFs, 400 lift stations, and associated force mains and gravity mains. The project includes modifying demand projections based on the Central Florida Water Initiative (CFWI) projections and known planned developments, drawdown data collection for 40 lift stations, system-wide hydraulic model update, development and evaluation of alternatives, and development of a 20-year capital improvement plan.

Walnut Water Reclamation Facility Decommissioning, Toho Water Authority, Osceola County, Florida
Project Manager. Anusha performed project management functions for the design phase to decommission a 0.85-MGD water reclamation facility and transfer flows to the Cypress West water reclamation facility. This DB project included converting a sludge holding tank to a flow equalization tank, adding a new master pump station, and improving 14 lift stations and 4,700 feet of force main to facilitate desired hydraulics. Anusha also worked with vendors to owner direct purchase PVC pipes to expedite the project

McKendree Road Force Main Replacement, Pasco County, Florida
Project Engineer. Mead & Hunt provided planning, design, permitting, bidding, and construction services for the replacement of 14,230 linear feet of 12-inch PVC force main to be replaced with 16-inch PVC force main due to hydraulic capacity limitations. The existing 16-inch force main traveled south along McKendree Road from pump station MS-485-01 to connect to the existing 16-inch PVC force main along Boyette Road. This project also included a 1,000 linear foot HDD at a wetland crossing and a jack and bore under a County roadway to minimize impacts to the recently paved road at the connecting pump station.

Sheryl Parsons

FUNDING SPECIALIST

Areas of Expertise

- Funding
- Grant and loan acquisition

Education

- MBA, Management, Georgia State University
- BA, Management, Georgia State University
- AA, Language Arts, Clayton State University

Registrations/ Certifications

- Trainer for Watershed Academy's Water Quality Standards Program (Economics)
- Trainer for Clean Water Act 101, Safe Drinking Water Act 101 and Project Officer Certification
- Certified Instructor for Covey's 7 Habits of Highly Effective People

Having spent 30 years with the U.S. Environmental Protection Agency (EPA) as a senior State Revolving Fund (SRF) program manager, Sheryl Parsons brings extensive funding knowledge and experience creating critical infrastructure finance plans for water and wastewater treatment facilities. Sheryl has co-led national teams in the development of funding guidance documents and the review of SRF programs. She has a history of providing financing alternatives and innovative solutions for complex infrastructure projects and has proved an invaluable resource in identifying projects for funding.

RELEVANT PROJECT EXPERIENCE

SAHFI, City of Cocoa Beach , Florida
Funding Lead. Sheryl obtained $15,024,000 in funding from FDEP in principal forgiveness SAHFI money for performing condition assessment of 1,049 manholes with the primary goal of identifying the structures requiring repair/rehabilitation. This includes smoke testing of all gravity sewers and documenting the defects will allow for the preparation of an implementation plan to complete the necessary rehabilitation efforts and the ability to prioritize the necessary improvements. In addition to the manhole rehabilitations, the City will install liners within 245,022 linear feet of their sanitary sewer system comprised of clay and ductile iron pipe with more than 1,110 service laterals to eliminate the infiltration of groundwater into the system.

SAHFI, Multiple Municipalities, Florida
Funding Lead. This program from FDEP offered principal forgiveness loans for municipalities impacted by Hurricane Ian. The Request for Inclusion period was short, from Nov 30 – Dec 31. Sheryl leveraged her expertise to work with clients and their needs, resulting in eight clients receiving $134 million in funding for water and wastewater improvements.

SAHFI, City of Daytona Beach Shores, Florida
Funding Lead. Sheryl obtained $14,550,000 in funding from FDEP in principal forgiveness SAHFI money for the retrofit of all city owned lift stations to submersible designs and upgrade/ replacement of electrical and control systems to avoid potential for flood or wind damage.

Wiley Nash WWTP, City of Deland, Florida
Funding Lead. Mead & Hunt developed a facilities plan that identified upgrades to the Wiley Nash WWTP to AWT. Sheryl obtained funding from the SRF ($57 million), the Wastewater Grant program ($23 million), and St. Johns River Water Management District (SJWMD) ($3 million) to complete the project with half of the funding from grants.

Greg Myroth, PE

CMOM

Areas of Expertise

- Water distribution and treatment
- Wastewater collection and treatment
- I&I
- Green infrastructure
- Combined sewer overflow (CSO) control
- Long-term control plan (LTCP) implementation
- EPC and design-build project delivery
- Grant/loan applications and administration

Education

- MA, Business Administration, Bradley University
- BS, Civil Engineering, University of Wisconsin

Registrations/ Certifications

- Licensed Professional Engineer – Illinois

For more than 30 years, Greg Myroth has helped large and small governments and industrial/commercial businesses manage water and wastewater collection and treatment projects. On traditional engineering and turnkey engineering, procurement, and construction (EPC) projects, he thinks outside the box and uses sound business management skills to develop cost-effective programs and projects that maximize capital budgets, minimize risk, and meet project scope and schedule targets. He assists in securing grant and loaning for capital improvement projects and also provides strategic and technical guidance to evaluate risk and develop strategies for negotiating settlements with the EPA, Department of Justice, as well as other federal and state agencies and authorities.

RELEVANT PROJECT EXPERIENCE

Lift Station Replacement, City of Clinton, Illinois
Project Manager/EOR. The City of Clinton needed to perform an emergency replacement of the existing Kiwanis Park lift station, as it was not meeting many applicable Illinois Environmental Protection Agency (IEPA) standards and the existing 650-GPM pumps were on the verge of imminent failure. Greg performed a rapid turnaround evaluation of the existing station and designed an aboveground control station with new submersible pumps for this fast-track emergency replacement. He assisted the City in the direct purchase of all equipment, handled selection of the general contractor, and provided construction coordination and oversight.

Storm Sewer Improvements, City of Clinton, Illinois
Project Manager. The City of Clinton needed to make improvements to 3,300 linear feet of storm sewer, ranging in size from 12 to 30 inches. Greg managed the conceptual planning, scheduling, budgeting, and final design of storm sewer improvements. He also provided bidding services, construction administration, and assistance with the Canada Digital Adoption Program (CDAP) grant administration.

Sanitary Sewer System I&I Evaluation, City of Clinton, Illinois
Project Manager. The City of Clinton needed to address sanitary sewer system deficiencies based on current levels of I&I. Greg managed the sanitary sewer system I&I evaluation to identify options for remediation. The team documented the physical condition of selected components. Greg reviewed collected data from temporary continuous recording flow modules installed throughout the City to monitor flows and determine the extent of I&I in each sub-collection system. He delivered a report summarizing the findings and provided recommendations for further field investigations and related sewer improvements in drainage basins exhibiting high levels of I&I.

Areas of Expertise

- Proficient in water treatment process design
- Water treatment process optimization
- Water treatment engineering management
- Wastewater treatment – industrial and municipal
- Water reuse and recycling
- High purity (demineralized) water treatment – power industry
- Remineralization of water

Education

- MS, Environmental Engineering, University of South Florida
- BS, Biomedical Science, University of South Florida

Shaleena Manzanero

RUNTIME EVALUATION

Shaleena Manzanero has 17 years of national and international industry experience in water and wastewater treatment process design. She is proficient in membrane-based technology, including polymeric and ceramic microfiltration/ultrafiltration, reverse osmosis, and electro-deionization. She has worked closely with membranes in brackish/seawater desalination, water recycling, and reuse applications, including ultrafiltration/microfiltration commonly used in membrane bioreactors (MBR). Additional skills include coordinating and managing a multi-disciplinary team during proposal generation and project execution to design and fabricate water treatment systems for the municipal, power, industrial, oil and gas, and petrochemical markets.

RELEVANT PROJECT EXPERIENCE

Lift Station Program, City of Clearwater Utilities, Florida
Project Manager. This project included comprehensive condition assessment of electrical, mechanical, structural, SCADA, and pumping systems for 76 wastewater pump stations. As part of the structural and operational inspections, the pumps, motors, wetwell, equipment, piping, generators, drawdowns, and electrical and SCADA system were all evaluated along with all GIS attributed updated.

Fort Myers SSES Phase I and II, City of Fort Myers, Florida
QA/QC. Mead & Hunt developed and implemented a comprehensive SSES Program aimed at reducing I&I, preventing SSOs, and improving the reliability of the wastewater collection system. Phase I involved evaluating pump station runtimes and identifying sources of excessive rainfall-driven I&I, while Phase II focused on developing a flow monitoring program, conducting field investigations, and providing recommendations for system improvements and repairs.

Wiley M. Nash WRF Expansion and Improvements, City of DeLand, Florida
Project Engineer. As the third and final phase of this significant expansion project, Mead & Hunt provided design, permitting, and bidding assistance to replace the digester blowers, install new air piping and a prefabricated building, demolish the existing blower building, replace the aeration grid, and upgrade electrical components at the Wiley M. Nash WRF. It provides new mechanical, electrical, and structural elements to replace the old blowers and aeration systems

Areas of Expertise

- Quality control
- Project management
- Cost estimating
- Water and wastewater conveyance systems
- New and retrofit stormwater management systems
- Subsurface utility engineering
- Wellfield development and raw water pipelines
- Program management for capital improvement programs

Education

- BS, Civil Engineering, University of Central Florida

Registrations/ Certifications

- Licensed Professional Engineer – Florida

David King, PE

R&R RECOMMENDATIONS

David King provides program management services for many of our clients' CIPs and has helped clients acquire grant funding from FDEP, SJRWMD, EPA, and FEMA. David's reclaimed water experience has included storage projects such as ground storage tanks up to 5 MG, reservoirs up to 175 acres, and aquifer storage and recovery systems. David's pumping and distribution experience includes pump stations up to 150 HP and pipelines up to 24 inches in diameter. David also has experience in augmentation projects, using stormwater and groundwater augmentation sources, using surface water intake systems, underground storage facilities, and horizontal and vertical wells.

RELEVANT PROJECT EXPERIENCE

Morningside Wastewater Collection System Improvements, City of Flagler Beach, Florida
Project Manager/EOR. David provided complete project services including design, permitting, bidding assistance, construction contract administration, and inspection. The scope also included CEI services, public information, coordination directly with property owners, sewer lateral locations/connections, and abandonment of existing septic tanks.

South Beaches Wastewater Collection and Treatment System Infrastructure Asset Evaluation, Brevard County, Florida
Project Manager/EOR. This project involved an evaluation of the aging South Beaches wastewater collection and treatment infrastructure. Mead & Hunt, examined significant utility infrastructure components, facilities, processes and procedures and compiled the findings into an asset evaluation report used to manage the utility assets in a cost-effective manner. A treatment plant capacity analysis was performed for an assessment of the current level of service. Our team examined the significant utility infrastructure components of the wastewater collection system

Wastewater Collection System Rehabilitation/Replacements, Brevard County, Florida
Project Manager/EOR. This project involved the rehabilitation/replacement of various existing pump stations including V-01, V-02, and S-07. Mead & Hunt provided engineering, design, permitting assistance, bidding assistance and construction phase services. Mead & Hunt rehabilitated the existing wetwell structures. The V-01 was converted to a submersible pump station within the adjacent N. Banana River Drive right-of-way, on nearby County owned vacant property northwest of the former station. The V-02 was replaced on County-owned property directly adjacent to the former station. The S-07 wastewater pump station replaced the severely deteriorated structure. Mead & Hunt replaced the station with a standard duplex submersible type station.

Jason Froehlich, PE, SE

STRUCTURAL

Areas of Expertise

- Structural engineering and engineering services during construction (ESDC)
- Biosolids facilities
- Wastewater treatment facilities
- Collection and conveyance systems
- Material handling
- Industrial facilities
- Food and beverage production plants
- Project management

Education

- BS, Civil Engineering, University of Wisconsin

Registrations/ Certifications

- Licensed Professional Engineer – Alabama, Florida, Texas, US Virgin Islands, Wisconsin
- Licensed Structural Engineer – Illinois

For more than 20 years, Jason Froehlich has designed and managed projects for wastewater treatment, biosolids conveyance, and material handling facilities. He performs and oversees structural analysis, building design, schematic and final designs, and demolition engineering. This involves analyzing and designing structural support systems and calculating stability, strength, and rigidity to identify the right materials and parameters for each job. He also provides ESDC, including specification preparation, construction record drawings, and construction inspection.

RELEVANT PROJECT EXPERIENCE

Cade Branch Lift Station East Leg Interceptor and Force Main Improvements, Trinity River Authority, Westlake, Texas
Structural Engineer. Mead & Hunt is serving as the prime consultant for the design of a new 9-MGD lift station with 9,000 linear feet of 27-inch interceptor and 2,000 linear feet of 24-inch high-density polyethylene force main. The design also includes an odor control system, chemical injection facility, electrical building, genera-tor, and metering station.

Sanitary Sewer Structure Inspections, Jacksonville Electric Authority (JEA), Jacksonville, Florida
Structural Engineer. JEA is performing efforts to inventory and document the condition of their sanitary sewer manholes. Engineered Spray Solutions (ESS) partnered with Mead & Hunt to perform post-rehabilitation inspection services of more than 100 manholes with the primary goal of documenting and verifying the repair/rehabilitation method. Mead & Hunt used an Envi-rosight 'CleverScan' system to capture 360-degree imagery of the structure. The results of the digital side scanning effort was documented and provided to ESS for review and distribution to JEA.

Lift Station Program, City of Clearwater Utilities, Florida
Structural Engineer. This project included comprehensive condition assessment of electrical, mechanical, structural, SCADA, and pumping systems for 76 wastewater pump stations. As part of the structural and operational inspections, the pumps, motors, wetwell, equipment, piping, generators, drawdowns, and electrical and SCADA system were all evaluated along with all GIS attributed updated.

Influent Pump Station , City of New London, Wisconsin
Structural Engineer. The City needed a new pump station to improve capacity. Jason developed the structural design for an influent pump station and served as a resident inspector. The pump station building consisted of a 27-foot deep wet well with masonry walls and a precast plank roof. He performed structural design for the pump station and wet well.

Alana Caiburri

CCTV QA/QC

Areas of Expertise

- CCTV inspection equipment
- Pipelines
- Equipment troubleshooting
- Safety and compliance

Education

- BS, Geological Engineering
  University of Mississippi

Registrations/Certifications

- Class A CDL
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Alana Caiburri is a dedicated CCTV foreman at Gulf Coast Underground, LLC (GCU), with experience in underground infrastructure inspection. She has built a strong reputation for attention to detail and efficiency, consistently ensuring that inspections are conducted with precision and meet the highest industry standards. Now leading her team, Alana takes a hands-on approach, providing high-quality inspections, streamlined operations, and innovative solutions.

RELEVANT PROJECT EXPERIENCE

AMP13 Hillman South Comprehensive Rehabilitation, Jefferson County, Alabama
CCTV. Alana played a key role in the CCTV inspections for a sewer rehabilitation project in Jefferson County, supporting GCU's partnership with the region, including Birmingham. She assisted in evaluating pipelines, service laterals, and manholes while working with project managers to ensure accurate data collection. Her coordination with local agencies helped maintain smooth operations and minimize traffic disruptions.

Jefferson County 2024 AMP Americana, Jefferson County, Alabama
CCTV. Alana played a key role in the CCTV inspections for the Jefferson County, Alabama 2024 AMP Americana project, assisting in evaluating pipeline and lateral conditions to support trenchless rehabilitation efforts. She collaborated with project managers to provide accurate data collection and worked closely with field crews to document existing infrastructure. Her attention to detail and coordination helped maintain efficiency, provided quality assessments, and minimized disruptions throughout the project.

Sanitary Sewer Improvements Project (Collection System Rehab), Uniontown, Alabama
CCTV. Alana is supporting the CCTV inspections for the ongoing Sanitary Sewer Improvements Project in Uniontown, assisting in evaluating the condition of the existing sewer system. She works closely with field crews to document pipeline and lateral assessments, ensuring accurate data collection for rehabilitation planning. Her role in coordinating inspections helps maintain efficiency, support project timelines, and provide valuable insights for repair and rehabilitation efforts.

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Coleman Miller, EI

CCTV SUPERINTENTDENT

Areas of Expertise

- CCTV
- Utility Condition Assessment
- Utility Rehabilitation
- I&I Reduction
- Lining CIPP Laterals

Registrations/Certifications

- Engineering In Training
- LMK Certified Installation Technician
- Tap Cutting Training
- Traffic Control Training
- CPR/First Aid Training
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Coleman Miller is a Senior Project Manager at GCU with over a decade of experience. Starting as an intern while earning his Civil Engineering degree, he advanced through roles to his current position. He specializes in sanitary sewer evaluation, CIPP trenchless technology, and installations. With hands-on experience operating boiler, cutter, and camera trucks, he manages project planning, scheduling, QA/QC, and client communication.

RELEVANT PROJECT EXPERIENCE

Gainesville Regional Utilities (GRU),Various Sewer Improvements, Gainesville, Florida
Senior Project Manager. Coleman managed a series of sewer improvement projects for GRU, overseeing planning, execution, and quality control for critical infrastructure upgrades. He coordinated field crews and subcontractors to ensure seamless delivery of GCU's services, including CCTV inspections, mainline and lateral CIPP installation, grouting, manhole and wet well coating, inspections, and excavated sewer repairs. Beyond daily operations, Coleman trained and developed new crews to meet GCU's high standards for safety, efficiency, and workmanship. He worked closely with GRU to align project goals with utility needs, proactively addressing challenges as they arose. His leadership and attention to detail kept the project on schedule and in full compliance with GRU's specifications. Through his oversight, these sewer improvements strengthened the region's wastewater infrastructure for long-term reliability.

Sanitary Sewer Improvements Project (Collection System Rehab), Uniontown, Alabama
Senior Project Manager. Coleman leads a $15 million project focused on repairing and rehabilitating Uniontown's aging sanitary sewer system. Overseeing multiple GCU field crews and subcontractors working simultaneously, he ensures seamless coordination and open communication with the city to keep the project on track. Coleman developed and implemented a comprehensive project timeline, identifying the critical path for completion and efficiently managing personnel to ensure all work aligns with project specifications. Throughout the project, he has maintained consistent communication with the client, adapting plans as needed to address on-site conditions. His expertise in value engineering has provided cost-effective solutions that maximize efficiency and ensure the city receives the highest return on investment.

GCU DESIGN.BUILD.DELIVER.™

Areas of Expertise

- Electrical
- Revit
- AutoCAD
- SKM-Power tools
- Project management
- Qualitative analysis
- Contract documents
- Shop drawings
- RFIs
- Site inspections

Education

- Bachelor of Science (BSEE), Electrical Engineering, University of South Florida

Registrations/ Certifications

- Licensed Professional Engineer – Florida

Keiran Smith, PE, LEED AP

BD+C | ELECTRICAL

Keiran Smith is a results-oriented engineer with more than 13 years of experience working on a variety of DB projects. Keiran brings a wide range of technical skills focused on electrical engineering, including proven knowledge of Canadian Electrical Code and the National Electric Code.

RELEVANT PROJECT EXPERIENCE

Pier Sixty-Six Hotel and Marina, Fort Lauderdale, Florida*
Lead Electrical Engineer. Keiran's responsibilities included supervising the implementation of three 480Y/277V, 3-phase, 4-wire, 3,000 amp services, including an in-house CEP backed up by an emergency system powered with a 750KW generator. Keiran managed all project milestones, reviewed construction and permit documents, and verified code compliance. He coordinated with other disciplines to minimize RFIs and resolve any construction concerns. The project is a 356,000-square-foot hotel and marina with 285 rooms and a combination of luxury and presidential suites, ballrooms, meeting rooms, prefunction spaces, pool, and dining area.

Leesar Regional Service Center, Fort Myers, Florida*
Lead Electrical Engineer. This renovation included a 205,000-square-foot regional service center addition that encompassed three kitchens; a surgical, medical, pharmaceutical, and healthcare sterile processing department; and two distribution areas. The entire infrastructure was serviced with cutting-edge control systems equipment. Keiran preformed drafting tasks, led MEP coordination efforts, implemented all electrical interconnection points for the kitchen and control system equipment, reviewed electrical drawings, and executed multiple onsite inspection punch lists that aided the team's ability to coordinate efficiently.

Sarasota Memorial Hospital (SMH) Hybrid Operation Room, MRI, CT-SCAN, Fort Lauderdale, Florida*
Project Engineer. This project included the renovation of Operational Room 21 for SMH and as the pilot for several future operation room renovations. The healthcare facility comprised 1,000-square-feet and consisted of electricity efficiency testing, implementation of a power distribution system, lighting control systems, standby power systems, and an uninterruptible power conditioning system. Keiran led American Health Care Association (AHCA) meetings involving explanations of design intent prior to permit approvals.

NBA Arena, The Chase Center (GSW), Fort Myers, Florida*
Electrical Engineer. The MEP team provided designs and LEED facilitation services for this 875,000-square-foot facility. Keiran served as electrical engineer on the design team and provided design, sizing, and implementation services, drafted diagrams, and coordinated with local utilities.

**Projects completed prior to joining Mead & Hunt*

Adam Bray

CCTV LEAD

Areas of Expertise

- Utility condition assessment
- Utility rehabilitation
- I&I reduction
- QA/QC

Registrations/Certifications

- LMK Certified Installation Technician
- Tap Cutting Training
- Traffic Control Training
- CPR/First Aid Training
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Adam Bray is a Project Manager at GCU with over two decades of experience in trenchless pipeline rehabilitation, specializing in CIPP, Spincasting, and Sectional Point Repairs. He began his career as a CCTV truck helper and worked his way up through roles including Foreman, Superintendent, and Operations Manager. With hands-on experience in installing 500,000+ linear feet of CIPP, Adam brings the expertise to efficiently plan, direct, and manage projects with precision and professionalism.

RELEVANT PROJECT EXPERIENCE

Robinson St. Sewer Improvements, Orlando, Florida

Project Management Assistant. Adam Bray was instrumental in supporting the project manager for the Orlando, FL project, which involved over 25,000 linear feet of CIPP lining and the reinstatement of over 125 laterals. Adam's primary role was to assist the project manager by being on-site to ensure smooth operations and effective coordination. His on-site presence allowed him to closely monitor progress, manage daily activities, and address any issues that arose. Adam coordinated with crews, handled logistics, and ensured that materials and equipment were properly managed. His hands-on approach and support were crucial in keeping the project on track, maintaining quality standards, and achieving successful completion of the CIPP lining and lateral reinstatement tasks.

Palmetto I&I Investigation, Palmetto, Georgia

Project Manager. Adam took charge of overseeing the inspection and cleaning of sewer lines. The job involved using CCTV to inspect over 12,500 linear feet of sewer lines. Adam coordinated every aspect of the project, making sure that the inspections and cleaning were done efficiently and to high standards. He handled the scheduling, directed the CCTV inspections, and made sure the cleaning operations were thorough. Adam's hands-on approach and leadership kept the project on track and maintained that everything ran smoothly from start to finish.

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Jacob Owen

CCTV OPERATOR

Areas of Expertise

- CCTV inspection equipment
- Utility condition assessment
- Utility rehabilitation I&I reduction
- QA/QC

Registrations/Certifications

- CPR/First Aid Training
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Jacob Owen is the CCTV Foreman at GCU, bringing ten years of experience to his role. He started as a CCTV Operator, mastering IBAK equipment and earning a reputation for precision and dedication. He now leads his team with a hands-on approach, ensuring efficiency, quality, and innovation. His expertise and leadership are key to delivering top-tier CCTV services and driving GCU's success.

RELEVANT PROJECT EXPERIENCE

Quails Run Blvd CCTV and Cleaning of Sewer Infrastructure, Englewood, Florida

CCTV Foreman and Operator. Jacob was responsible for operating the CCTV equipment to inspect and capture footage of over 3,500 linear feet of sewer lines. His work ensured that the footage was clear and detailed, which was essential for evaluating the condition of the pipes. Jacob also took charge of overseeing the team and managing the day-to-day operations. He made sure that the inspections and cleaning were carried out efficiently and addressed any issues with the equipment. His leadership and hands-on approach were key to keeping the project running smoothly and ensuring that the sewer infrastructure was thoroughly inspected and cleaned.

Robinson St. Sewer Improvements, Orlando, Florida

CCTV Foreman. Jacob was essential in overseeing the inspection of over 25,000 linear feet of sewer lines. He made sure the CCTV footage was clear and provided a good look at the condition of the pipes, which was critical for spotting any problems and planning the right fixes. Jacob also took charge of preparing the lines for the CIPP crews. This meant getting the sewer lines thoroughly cleaned and ready for the next step. He worked closely with his team to sort out any issues and ensure everything was set for a smooth installation. Jacob's hands-on approach and keen attention to detail helped keep the project on track and ensured that the CIPP installation went off without a hitch. His work was key to the project's success.

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Glenn Parks

SMOKE AND DYE TESTING

Areas of Expertise

- Utility hole inspections
- CCTV inspections
- Flow monitoring
- Dye testing
- Public outreach
- Nightflow isolation

Registrations/ Certifications

- OSHA Confined Space Training
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Glenn Parks has significant experience as a SSES field supervisor. His experience includes performing manhole inspections, smoke testing, dye testing, night flow isolations, flow meter installation and maintenance and CCTV inspections. Glenn has successfully completed OSHA approved Confined Space Training.

RELEVANT PROJECT EXPERIENCE

Collection System Assessment and Mapping, City of Daytona Beach Shores, Florida

Manhole Investigation Superintendent. Mead & Hunt updated the City's GIS model and utility mapping for tracking infrastructure assets and capital improvement projects. Mead & Hunt conducted a Level 1 survey to map sanitary sewer manholes and gravity sewer mains using survey-grade GPS. They then performed Level 2 in-manhole inspections with a GoPro and CleverScan equipment to assess conditions and document details like connectivity, size, material, and debris. The findings will be graded per NASSCO MACP guidelines, and recommendations for repairs and further inspections will be made. Additionally, an ESRI ArcGIS geodatabase of the sewer system will be created.

Fort Myers SSES Phase I and II, City of Fort Myers, Florida

Field Superintendent. Mead & Hunt developed and implemented a comprehensive SSES Program aimed at reducing I&I, preventing SSOs, and improving the reliability of the wastewater collection system. Phase I involved evaluating pump station runtimes and identifying sources of excessive rainfall-driven I&I, while Phase II focused on developing a flow monitoring program, conducting field investigations, and providing recommendations for system improvements and repairs.

Hurricane Hermine SSO Abatement, City of Largo, Florida

Senior SSES Inspector. Performed assessments of the City's sanitary sewer system to evaluate the impact on the system of Hurricane Hermine and establish and implement a plan to prevent SSOs from occurring during future wet seasons. Tasks included hydraulic modeling, flow and rainfall monitoring, smoke testing, manhole inspections, CCTV inspections, I&I quantification and abatement, dry and wet weather calibration of the City's InfoWorks model, alternative software evaluation, and identification of system defects and hydraulic deficiencies with recommendations for improvements. Glenn performed smoke testing, manhole inspections, CCTV, flow monitoring service installation.

Richard Schwarz

MANHOLE INSPECTIONS

Areas of Expertise

- Water/wastewater construction
- Pipeline rehabilitation
- CEI
- Regulatory compliance

Registrations/ Certifications

- Florida General Contractor

Richard Schwarz has over 40 years of experience in construction, including over 30 years working directly with water and wastewater construction. He has supervised successfully completed projects exceeding $7 million and multiple concurrent projects in excess of $20 million. He has extensive experience overseeing daily construction activities, project management, scheduling, and manpower associated with the project, including subcontractor oversight and quality control. He has worked throughout Florida for numerous municipalities, including St. Johns County, Manatee County, Indian River County, Hillsborough County, Lee County, Volusia County, JEA, City of Port Orange, City of Edgewater, City of Bushnell, and the City of Cocoa Beach. In addition to doing on-site construction oversight, Richard has performed various R&R condition assessment projects such as manhole investigations and smoke testing. He will leverage this comprehensive experience to support our field investigations for this project.

RELEVANT PROJECT EXPERIENCE

Collection System Assessment and Mapping, City of Daytona Beach Shores , Florida

Field Technician. Mead & Hunt updated the City's GIS model and utility mapping for tracking infrastructure assets and capital improvement projects. The team conducted a Level 1 survey to map sanitary sewer manholes and gravity sewer mains using survey-grade GPS. They then performed Level 2 in-manhole inspections with a GoPro and CleverScan equipment to assess conditions and document details like connectivity, size, material, and debris. The findings were graded per NASSCO MACP guidelines, and recommendations for repairs and further inspections were made. Additionally, an ESRI ArcGIS geodatabase of the sewer system was created.

Sanitary Sewer Inspections, City of St. Augustine, Florida

Field Technician. The project covered several service areas. Mead & Hunt conducted GPS locating and condition assessments for two lift stations and 309 manhole structures. The team performed Level 1 and Level 2 inspections using the CleverScan unit, recording data in the field and updating the City's GIS model. Comprehensive condition assessments and connectivity reviews were completed, and repair recommendations were provided to the City in a map, table, and report.

Sanitary Sewer Structure Inspections, JEA, Jacksonville, Florida

Field Technician. JEA is performing efforts to inventory and document the condition of their sanitary sewer manholes. ESS partnered with Mead & Hunt to perform post-rehabilitation inspection services of more than 100 manholes with the primary goal of documenting and verifying the R&R method.

Chris Lees, PE

MOT PLANNING

Areas of Expertise
- Civil engineering
- Roadway design
- Construction inspection

Education
- BS, Civil Engineering, West Virginia University

Registrations/ Certifications
- Licensed Professional Engineer – Florida, West Virginia

Chris Lees has 15 years of civil engineering experience managing, designing, and providing construction administration for transportation projects throughout Florida, West Virginia, and Ohio. He has assisted project managers in various civil engineering services including plan preparation, right-of-way plans, hydraulic analysis, and construction inspection/supervision. Chris also brings extensive experience working with OpenRoads Designer.

RELEVANT PROJECT EXPERIENCE

Find and Fix, Pinellas County, Florida
EOR. This project consisted of the planning and condition assessment of gravity sewers, with work to be performed in two phases. Phase I consisted of the planning, investigation, and assessment to be used in the development of a technical memorandum. Phase 2 includes post rehab inspection services. The County has prioritized Zones 4, 8 and 13 for I&I remediation in the South County for this project phase. Work in Zones 1, 2, 6, and 12 can be completed under this program at a later date under a separate project phase.

St. John's River (SJR) 2C Loop Trail Design, City of South Daytona, Florida
EOR. This project involved the design of an approximate two-mile shared use trail through South Daytona as part of the overall St. Johns River to Sea Trail project which is a portion of the statewide Sun Trail system. The trail's alignment involved city and county roadways, large drainage canals, bridges, railroad crossing, mid-block crosswalks, and an existing road realignment to avoid impacts to a number of large trees. The project design was funded by a grant from FDOT and all design elements were completed per FDOT requirements. A unique aspect of the project was the locating of trail along the bank of a large county-maintained drainage canal involving sheet piling wall, regrading of canal cross section, and decorative railing, façade treatment, and pathway lighting. The project also involved the preparation a supplement to the original Preliminary Engineering Report for revisions to the original alignment.

SR 111 from Beaver Street to Old Kings Road, FDOT District 2, Duval County, Florida
EOR. Chris provided roadway design for this 2.4-mile urban resurfacing project that included several speed mitigation elements. On-street parking was converted to separated bike lanes and travel lanes were reduced to 11 feet. Operational improvements were included at 5th Street to support WB-62FL turning movements requiring roadway reconstruction, drainage modifications, utility conflict resolution, a new mast arm, intersection lighting, and R/W acquisition within the 18-month production schedule. Traffic and pedestrian signals were upgraded. The project included two CSX railroad crossings.

Noah Adamoski

CEI SERVICES

Areas of Expertise

- CEI
- Utility planning
- Residential and commercial inspection
- Planning and coordinating field operations

Education

- Norwich Free Academy, Connecticut

Registrations/ Certifications

- ACI Concrete Field Technician Level 1
- APGNA Nuclear Gauge Safety & DOT Hazmat
- FDEP Stormwater, Erosion & Sedimentation Control
- FDOT Asphalt Paving Level 1
- FDOT Asphalt Paving Level 2
- FDOT Auger Cast Pile Inspector's Course
- FDOT Concrete Inspector Level 1
- FDOT Drilled Shaft Inspection
- FDOT Earthwork Construction Inspection Level 1
- FDOT Earthwork Construction Inspection Level 2
- FDOT Concrete Field Inspector

Noah Adamoski is an experienced construction manager who has worked throughout Brevard, Volusia, Lake, and Flagler Counties. As construction service manager, he manages a team of project representatives and provides oversight for all Florida on-going CEI projects. His responsibilities include planning and coordinating field operations; procurement structures, pipe, and supplies so materials are readily available for planned work events; performing daily verification and reporting on quantities of work installed; and anticipating potential conflicts with as-built drawings of existing utilities, storm pipe, and design plans to minimize delays to work schedule. He is a problem solver and adept and resolving field conflicts and minimizing change order requests.

RELEVANT PROJECT EXPERIENCE

Adelle Avenue Phase 4 Reclaimed Water Main, City of DeLand, Florida
Inspector. This project includes a 17,300-foot reclaimed water main extension on Adelle Avenue to support the distribution network in order to serve new customers in the Northwest service area. This area incorporates the Phase 4A distribution areas. The proposed reuse main will also support a new 2-MG storage tank and pump station in the Northwest area.

N. Banana River Boulevard Force Main, City of Cocoa Beach, Florida
Inspector. This project included the construction of a 3,700 +/- eight-inch-diameter HDPE force main. The design included a bypass pump connection at the City owned site immediately north of Brightwaters Blvd. The combination of reduced flow in the gravity collection system and bypass pumping created immediate relief to the area.

N. Banana River Boulevard Gravity Sewer Pipe Bursting, City of Cocoa Beach, Florida
Inspector. The existing cast iron pipe gravity sewer on N. Banana River Blvd. Deteriorated to the point that replacement was required. Mead & Hunt prepared a design to replace the sewer with traditional open cut procedures. Mead & Hunt constructed an eight-inch diameter gravity sewer and discharge.

Cocoa Beach WRF Upgrades and Improvements, City of Cocoa Beach, Florida
Inspector. The project entails various treatment plant upgrades and improvements required to enhance treatment plant performance, improve reliability and replace treatment plant components that have exceeded their useful life and need replacement. This scope also includes preparation of a SRF Facility Plan and loan application for a low interest loan to fund the described improvements.

Areas of Expertise

- Water/wastewater engineering
- Subaqueous horizontal directional drill crossings
- Wet utility improvement projects
- Trenchless pipeline design
- Instrumentation improvements

Education

- BS, Civil Engineering, Pennsylvania State University, Harrisburg

Registrations/ Certifications

- Licensed Professional Engineer – Florida

Marcos Espinosa, PE

TRENCHES REHABILITATION

Marcos Espinosa is a water/wastewater engineer with a strong foundation in water infrastructure design and analysis. Marcos primarily provides engineering design for municipal water and wastewater projects. He prepares engineering and design documents, reports, technical specifications, plans, schedules, and studies and develops probable construction costs. He uses software to develop designs, models, and construction drawings. He visits project sites and coordinates with clients, contractors, equipment manufacturers, permitting agencies, and other stakeholders.

RELEVANT PROJECT EXPERIENCE

Transmission Main Replacements, Florida Keys Aqueduct Authority (FKAA), Islamorada, Florida
Project Engineer. Marcos designed four sub-aqueous 42-inch water mains by HDD, each approximately 1,000 linear feet long, as part of a larger transmission main replacement project in the Florida Keys. He evaluated HDD calculations, prepared design drawings, cost estimates, permitting documents, and specifications, and provided services during construction.

Park Boulevard Emergency Water Main Replacement, Pinellas County, Florida
Project Engineer. Marcos designed approximately 2,000 linear 24-inch water mains for emergency replacement using a sub-aqueous HDD. He evaluated the HDD design, prepared drawings, cost estimates, and specifications, and coordinated with the client throughout construction and permitting.

Gulf to Bay MHP Septic to Sewer, City of Clearwater, Florida
Project engineer. Marcos provided design services for the septic to sewer design of a 60-unit mobile home park, including a new lift station along with a gravity sewer and force main for the development.

Saving Mercy Site Design, City of Ocala, Florida
Project Engineer. Marcos was responsible for the design of wet utilities for the Saving Mercy mobile home park in Ocala. The design included a new water main, gravity sewer, and modifications to an existing lift station to serve a new 50-unit mobile home park development.

Morgan Meuleman, EI

AIR RELEASE VALVES

Areas of Expertise

- Environmental analysis
- Environmental engineering and design
- Water/wastewater engineering and design
- Flood resiliency
- Construction administration
- Data processing
- Report writing

Education

- BS, Environmental Engineering, University of Florida

Registrations/ Certifications

- Engineer-in-Training
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Morgan Meuleman is an environmental engineer based out of Mead & Hunt's Florida water group. Her engineering experience includes wastewater, stormwater, and potable water. She is also familiar with flood resiliency, I&I, and various project administration processes. Morgan primarily works with project managers on municipal water, wastewater, and stormwater projects to prepare civil and environmental engineering design documents, design computations, quantity and cost estimates, and construction documents. She also visits project sites during the design and construction phases to collect and verify design data.

RELEVANT PROJECT EXPERIENCE

Septic to Sewer Program, Pinellas County, Florida

Engineer Intern. Mead & Hunt designed the septic to sewer conversion of approximately 150 parcels spanning two separate neighborhoods. The scope involved 18,000 linear feet of gravity main, 5,000 linear feet of force main, and three lift stations. We analyzed and proposed alternative methods and routes to the City and conducted hydraulic modeling to determine pump sizing. The project ties in over 200 private septic tanks to give the residents of Pinellas County a sewer connection.

SAHFI Funding Assistance, WTP Improvements and Resiliency Upgrades, City of Holly Hill, Florida

Engineer Intern. Mead & Hunt provided comprehensive professional services under the SAHFI program from the FDEP. Mead & Hunt's services included preparing the Drinking Water State Revolving Fund (DWSRF) Facility Plan, the SRF loan application, the DWSRF Business Plan, and the necessary resolutions and certifications for the loan application package. The project involved significant resiliency improvements at the city's WTP, including replacing and floodproofing electrical systems, abandoning the compromised elevated water storage tank, upgrading disinfection feed systems, and enhancing plant-wide control systems for automated and remote monitoring. Mead & Hunt also prepared and submitted all requisite documents on the city's behalf and provided bidding assistance.

SR50/Grove Road Force Main Replacement, Hernando County, Spring Hill, Florida

Engineering Intern. Mead & Hunt is providing design, permitting, bidding, construction and administration, and onsite inspection services through a part-time RPR contract. The project will add a new sewer force main along State Road 50 and Grove Road and modify the Winter St. and Hospital pump stations. Morgan created force main alignment map figures using ArcGIS Pro. She also contributed to the writing of the design report.

Brad Blais, PE

CODE REVIEW AND ENFORCEMENT

Areas of Expertise

- Project and client management
- WTP and WRF expansion and improvement
- Construction management and administration Project and client management
- WTP and WRF expansion and improvement
- Construction management and administration

Education

- BS, Civil Engineering, North Carolina State University

Registrations/ Certifications

- Licensed Professional Engineer – Florida, South Carolina

Brad Blais specializes in water treatment, advanced wastewater treatment process design, utility master planning, and funding assistance. In addition to serving as the EOR for design of various utility related projects, he also manages construction and provides contract administration services for those projects. Brad specializes in grant and loan acquisition and has helped clients secure over $200 million in grants and $100 million in low interest loans since 2018. He has designed and supervised construction on a variety of wastewater collection, I&I abatement, advanced wastewater treatment and an array of effluent disposal projects. He has also prepared planning and design documents for a variety of raw water supply, water/wastewater treatment, collection system rehabilitation, pumping and distribution projects. Brad's utility planning, design, and permitting experience is extensive and varied. He has been involved in utility planning, design, and CEI for utilities throughout Florida for over three decades.

RELEVANT PROJECT EXPERIENCE

WRF Upgrades and Improvements, City of Cocoa Beach, Florida

Design Project Manager. Responsible for a series of upgrades at the City's 6-MGD WRF over the last 50 years. Various project elements of work completed at this site include two 2-MG storage tanks, two 4-MG storage tanks, and a reclaimed water high service pump station for the city-wide reclaimed water distribution system.

WRF Plan Update, Cocoa Beach, Florida

Project Manager. Sustained, elevated tides and flooded roadways severely impacted the City's wastewater collection/transmission systems and wastewater treatment facility as a result of Hurricanes Fiona and Ian and Tropical Storm Nicol. The frequency and severity of extreme weather events escalated the incidence of sewage overflows. Brad and his team were successful in securing a $15 million, 100% principal forgiveness loan for I&I abatement. The WRF Plan Update details recommended improvements for the City's WRF, wastewater collection system, reclaimed water transmission and an I&I abatement program. It is a required element of the SAHFI loan agreement.

SRF Sanitary Sewer Rehabilitation Program, City of Cocoa Beach, Florida

Project Manager. Mead & Hunt prepared project plans and specifications illustrating the sewer mains, manholes, and laterals to be lined and repaired. Defects found during the initial investigation included cracks in a sewer pipe, leaking joints, offset joints, protruding laterals, bricks missing in manholes, and bad rings and covers. Approximately 50,00 linear feet of 8-inch gravity sewers and 5,000 linear feet of more than 8-inch sewers were CIPP lines. Additional repairs included lateral lining for over 400 laterals and manhole repairs.

Regina Brinkle

FUNDING COMPLIANCE AND REIMBURSEMENTS

Areas of Expertise

- Funding Compliance
- Planning and coordinating field operations
- FDOT-LAP Resident Compliance Specialist

Education

- AA, Business Administration and History, Seminole Junior College

Registrations/ Certifications

- American Recovery and Reinvestment Act/Davis Bacon Related Act/ Sponsored by Department of Environmental Protection
- OSHA Safety Certification
- FDEP Stormwater, Erosion and Sediment Control Inspector
- FDOT LAP/EEO Construction Contract Compliance
- FDOT Nuclear Gauge Safety
- ICC Property Maintenance and Housing Inspector
- ICC Residential Building Inspector

Regina Brinkle is an experienced inspector and FDOT resident compliance specialist. Regina's compliance activities on projects include reviewing certified payrolls from the prime contractor and subcontractors and shop drawing file for Buy American Certification completeness; performing in-field interviews with prime and subcontractor employees to comply with DBRA wage rates; inspecting bulletin boards; and preparing monthly FDOT/SRF reports as required

RELEVANT PROJECT EXPERIENCE

WRF Reclaimed ASR Wells, City of Cocoa Beach, Florida
Compliance Specialist. A reclaimed water ASR well was designed in addition to process conversion and plant upgrades. The reclaimed ASR was constructed in the Lower Floridan Aquifer (LFA) and allows the City to store and recover reclaimed water to meet the shortfall between demand and supply during the dry season. This ASR well allows the City to further minimize surface water discharge and comply with Total Maximum Daily Load (TMDL) limits. Regina provided Davis Bacon Compliance Reporting including Labor Interviews, SRF loan assistance was provided on this project.

South Central Regional Wastewater Treatment Facility (SCRWWTF) Expansion and Improvements, Brevard County, Viera, Florida
Compliance Administrator. Brevard County's SCRWWTF is an advanced nutrient removal treatment facility that provides sewage treatment and septage management for the rapidly growing area in and around Viera. The existing 6-MGD treatment facility was expanded to a total capacity of 12 MGD. In addition to capacity expansion, this project included numerous upgrades to the existing plant, a new laboratory, and a 12,000-square-foot maintenance and administration building. The completed project was recognized with an Engineering Excellence Award by the American Council of Engineering Companies of Florida. Regina provided both administrative support in processing SRF and SJWRD funding reimbursements and Davis Bacon compliance reporting including Labor Interviews and MBE Reporting.

Alexander Ave Reclaimed Water Storage Tank Pump Station and Transmission Main, City of Deltona, Florida
Compliance Specialist. Mead & Hunt designed and permitted the proposed one mg reclaimed water ground storage tank and pump station upgrades. The design included civil, structural, mechanical, electrical and instrumentation drawings. The 40-acre Rapid Infiltration Basin (RIB)/Pump Station is an integral part of the regional recharge enhancement program that supports the City's Consumptive Use Permit (CUP) and managed SJWMD reimbursements for grant.

Alex Sukupcak

DATA COLLECTION/GIS MODELING

Areas of Expertise

- GIS project visioning
- Inventory and mapping
- GPS survey of utilities and assets
- Data and as-built drawing conversion
- Web and mobile applications
- Dashboard development
- Public-facing applications
- Infrastructure and data analysis
- Ongoing GIS support and training

Education

- BS, Geoscience – Environmental Analysis, University of Wisconsin

Alex Sukupcak develops custom GIS solutions that simplify access to information and help local governments streamline workflows and better manage their asset information. The mobile GIS apps and survey tools he creates help communities transition from traditional paper-and-pen workflows and save time, resources, and money. The GIS dashboards he builds simplify complex datasets into visual, understandable platforms for day-to-day and long-term planning, empowering teams through a strategic intersection of geography and digital technology.

RELEVANT PROJECT EXPERIENCE

Collection System Assessment and Mapping, City of Daytona Beach Shores, Florida

GIS Specialist. This project involved an update to the city's GIS model and utility mapping for tracking infrastructure assets and capital improvement projects. Mead & Hunt conducted a Level 1 survey to map sanitary sewer manholes and gravity sewer mains using survey-grade GPS, then performed Level 2 in-manhole inspections with a GoPro and CleverScan equipment to assess conditions and document details like connectivity, size, material, and debris. We graded the findings per the NASSCO MACP guidelines and recommended repairs and further inspections. Mead & Hunt also created an ESRI ArcGIS geodatabase of the sewer.

Sanitary Sewer and Storm Sewer System GIS Implementation, City of Cedarburg, Wisconsin

GIS Specialist. The City had been utilizing a paper-based method for managing its sanitary sewer and storm sewer assets, which was creating efficiency and accuracy bottlenecks. Our GIS team designed, planned, and implemented a GIS solution that helped the City modernize its tracking system. Alex developed a database schema for multiple workflows, including manhole inspections, sewer emergency responses, catch basin cleaning, and sewer televising. Alex also created a mobile app with field maps for ArcGIS to further improve data collection and asset management in the field, as well as trained City staff to fully understand and utilize the tools he created. Working closely with the City, Alex built a custom Operations Dashboard that condenses the results of its enhanced workflows into several visualizations. The City has a clear view of the sanitary system in real time as staff enter information, videos, and photos to the GIS during sanitary asset inspections and maintenance activities. One view highlights the assets that had been inspected in a single year, as well as the details of those inspections.

Ben Pecheux

DATA ANALYTICS/MACHINE LEARNING APPLICATIONS

Areas of Expertise

- Big data analysis
- Alternatives analysis
- Data collection, curation, analysis, and visualization
- Industry study panel participation
- Systems engineering
- Software development process
- System/device performance testing
- Cloud computing technologies
- Data mining technologies
- Satellite system software
- Telecommunications services
- Transportation systems

Education

- MS, Mechanical Engineering, concentration in Fluid Mechanics, Université de Poitiers, France
- MS, Mechanical Engineering, concentration in Computational Mechanics, Institut National des Sciences Appliquées de Lyon, France
- BS, Mechanical Engineering, concentration in Design and Optimization, Université de Poitiers, France

Ben Pecheux has over 25 years of experience auditing and prototyping data collection, data mining, text mining, business intelligence, and data visualization systems. He has worked on many high-visibility projects for federal, state, and local clients, as well as for-profit and non-profit organizations. Ben is the head of Analytics at Mead & Hunt responsible for the utilization and governance of data across the organization, supporting its aviation, transportation, water, architecture and building, environment, and corporate divisions. He is building a corporate broad-scale data platform in partnership with Mead & Hunt CTO, developing a team of analysts and data scientists to deliver insights from low code to digital twins, creating an operational data model for the organization, engaging with senior stakeholders to understand data needs and provide inspiration/ideation for the use of data to support corporate objectives, planning data governance and privacy and driving data-driven/data-supported behaviors and cultural change company-wide.

RELEVANT PROJECT EXPERIENCE

Traffic Incident Management (TIM), Nationwide
Technical Lead. Ben analyzed the feasibility and practical value of big data approaches to improve TIM and provide guidelines, including techniques and tools, to address the findings and recommendations of NCHRP 17-75. He led the assessment of a wide range of data, including traffic, roadway, weather, crowdsourced, third-party, and connected vehicle data, and developed big data pipelines (both historical and real time) associated with five use cases to improve TIM.

NCHRP 03-138 Application of Big Data Approaches for Traffic Incident Management, Transportation Research Board (TRB), Nationwide
Technical Lead. Ben worked to demonstrate the feasibility and practical value of big data approaches to improve TIM and to provide guidelines, including techniques and tools, to address the findings and recommendations of NCHRP 17-75. He led the assessment of a wide range of data and is currently developing large data pipelines associated with five use cases for improve TIM.

NCHRP 08-119 Data Integration, Sharing, and Management for Transportation Planning and Traffic Operations, TRB, Nationwide
Technical Lead. Ben worked to develop tools, methods, and guidance for improving data integration, sharing, and management practices to enable transportation agencies, in collaboration with private-sector and public-sector stakeholders, to make better planning and operations decisions. He led the development of eight planning and operational use cases in which transportation agencies currently struggle to share, integrate, and manage data.

Areas of Expertise

- Regulatory compliance and permitting
- Advanced wastewater treatment
- Pipeline design
- Reclaimed water systems
- Hydraulic modeling
- Stormwater modeling
- Utility coordination/planning

Education

- BS, Civil Engineering University of Central Florida
- Associate Degree, Seminole State College of Florida

Registrations/ Certifications

- Licensed Professional Engineer – Florida

Matt Guzinski, PE

REGULATORY COMPLIANCE AND PERMITTING

Matt Guzinski is an analytical and detail-oriented engineer involved in a wide array of civil engineering projects. He works alongside professional engineers, supporting the design development, implementation, and technical analysis of water/wastewater systems to suit individual municipal client needs. Matt has worked on various water, wastewater, and stormwater projects throughout Florida.

RELEVANT PROJECT EXPERIENCE

Wastewater Treatment Plant FDEP Operating Permit Renewals, Various Cities and Counties, Florida
Project Engineer. Matt has completed several FDEP operating permit renewals for various clients over the past few years. He completed the required forms for each permit renewal and wrote the following reports when needed; operation and maintenance report, capacity analysis report, reuse feasibility study, and biosolids storage plan. Matt worked closely with each client to ensure a complete and accurate application package was submitted. Each of the permit renewal applications Matt completed has had only one request for additional information before issuing final permits.

Wastewater Treatment Plant FDEP Operating Permit Renewals, Various Cities and Counties, Florida
Project Engineer. Matt has completed several FDEP operating permit renewals for various clients over the past few years. He completed the required forms for each permit renewal and wrote the following reports when needed; operation and maintenance report, capacity analysis report, reuse feasibility study, and biosolids storage plan. Matt worked closely with each client to provide a complete and accurate application package was submitted. Each of the permit renewal applications Matt completed has had only one request for additional information before issuing final permits.

Wastewater Master Plan Update, City of DeLand, Florida
Project Engineer. Mead & Hunt prepared DeLand's original Utility Master Plan in February 2003. The wastewater elements were updated in 2015 and 2021. The study area includes the City of DeLand's entire sewer service area and future service areas. The wastewater master plan update addressed wastewater collection and transmission, population projections, and growth. Matt also identified new projects and completed hydraulic modeling of the system in SewerCAD. The plan provided specific project recommendations, schedules, CIP recommendations, and planning level cost estimates.

Lori Buck

PUBLIC OUTREACH

Areas of Expertise

- Public outreach and relations
- Stakeholder meetings
- Emergency response notifications

Education

- BA, Communications, University of South Florida

Lori Buck is a veteran communications professional with experience in community engagement, public involvement, media, and marketing. Lori has served the FDOT and municipal agencies for more than 20 years on various planning, PD&E, design, construction, safety and DB projects. She is experienced with working with communities identifying potential impacts to the public, developing and disseminating clear and accurate collateral materials, and working with agencies and stakeholders to develop strategic partnerships. She is experienced in developing fact sheets, brochures, newsletters, website content, social media content, PowerPoint presentations, meeting notifications, and other collateral materials. She has coordinated and facilitated dozens of public meetings and hearings and has experience coordinating virtual meetings using GoToWebinar and Teams live. She also has experience with Wiki Mapping and online surveys.

RELEVANT PROJECT EXPERIENCE

Cape Coral, Utilities Extension Project, Cape Coral, Florida
Lori worked with the City to support public information activities. This project included adding potable water, sewer and irrigation services to more than 3,000 properties in Southwest Cape Coral. She was responsible for the development of website content, newsletters, project informational signage and on-going public information outreach.

FDOT District One, SR 777/River Road from US 41 to I-75, Sarasota County, Florida

Public Information Liaison. Lori serves as the Public Information Liaison for a $47.5 million, five-mile roadway widening project, overseeing all stakeholder communications and community engagement efforts. She is responsible for maintaining and regularly updating the project website with current information, images, and RoadWatch construction alerts. Lori manages all public inquiries, responding promptly to phone calls and emails, and provides consistent, comprehensive stakeholder support. In addition, she compiles and distributes weekly community outreach reports to ensure transparency and ongoing public awareness throughout the duration of the project.

19th Avenue Water/Wastewater/ Reclaimed Water Pipelines Design-Build, Hillsborough County, Florida
Public Outreach. Lori provided community outreach support for this design-build pipeline improvement program that benefited South Hillsborough County neighborhoods. Lori worked with the County and the Design-Build Team coordinating meetings with stakeholders, providing project information for distribution, lane closure/detour notifications, creating mailing lists, fliers, news releases and advertisements, and providing construction project updates to the County.

Kyle Engelking

GPS MAPPING

Areas of Expertise

- GIS project visioning
- Custom Esri-based GIS solutions
- Inventory and mapping
- Data conversion
- Infrastructure and data analysis

Education

- MA, Urban Planning, University of Wisconsin
- BA, Public History, University of Wisconsin
- BA, Urban Studies, University of Minnesota

Registrations/ Certifications

- GIS Certificate

Kyle Engelking delivers creative GIS solutions and oversees Mead & Hunt's One Water GIS team. Kyle transforms scattered information and clunky documentation into intuitive GIS-based solutions that simplify access to information, streamline operations and data collection, and provide insights that support data-driven decision-making, reporting, and public communications. Kyle works collaboratively with local governments to provide custom GIS-based desktop and mobile tools for managing utilities and other assets.

RELEVANT PROJECT EXPERIENCE

Collection System Assessment and Mapping, City of Daytona Beach Shores, Florida

GPS Mapping. Mead & Hunt updated the City's GIS model and utility mapping for its tracking infrastructure assets and capital improvement projects. Mead & Hunt conducted a Level 1 survey to map sanitary sewer manholes and gravity sewer mains using survey-grade GPS. They then performed Level 2 in-manhole inspections with a GoPro and CleverScan equipment to assess conditions and document details like connectivity, size, material, and debris. The findings will be graded per NASSCO MACP guidelines, and recommendations for repairs and further inspections will be made. Additionally, an ESRI ArcGIS geodatabase of the sewer system will be created.

Water and Sanitary Sewer System GIS Upgrade and Urban Forest Management GIS, Village of Plover, Wisconsin

GIS Project Manager. The Village of Plover wanted a more accurate and efficient system for conducting and tracking sanitary sewer system asset inspections than its internally created GIS system was providing. Working closely with Plover's GIS Manager, Kyle led the conversion of Plover's data to an updated coordinate system and developed an ArcGIS web application of the existing sanitary sewer and water system asset data. With a thorough understanding of how utility workers inventory assets, record observations, and perform inspections in the field, Kyle developed GIS mobile apps with more than 50 layers that enable City staff to easily conduct manhole inspections, hydrant inspections, valve maintenance activities, and more. When workers input data, photos, and video in the field, the changes go live in real time. Kyle implemented a training program for Plover utility workers on how to most effectively utilize the application and web maps. Plover continues to reach out to Kyle for further GIS solutions, including an urban forest management GIS solution that enabled City workers to easily track tree maintenance activities, as well as to avoid underground utility lines while removing trees.

Russell Hyatt, PSM

SURVEY

Areas of Expertise

- Survey and mapping
- Project management

Education

- BS, Survey and Mapping, University of Florida

Registrations/Certifications

- Professional Surveyor and Mapper – Florida

As Vice President of Hyatt Survey Services, Inc. (Hyatt Survey), Russell Hyatt's duties include local, state, and federal contract administration and overall quality control. In addition to his administrative duties, Russell is also responsible for the production of boundary, hydrographic, and topographic surveys. He couples over 37 years of surveying experience with a four-year degree in Surveying and Mapping. His project experience has included commercial/municipal development surveys and geodetic surveys and beach/channel/port hydrographic surveys. Russell has extensive experience providing survey services to local, state and federal agencies such as the Pinellas, Hillsborough, Manatee, Sarasota, and Charlotte Counties, Florida Department of Transportation, Florida Department of Environmental Protection and the U.S. Army Corps of Engineers-Jacksonville District.

RELEVANT PROJECT EXPERIENCE

Fort Myers SSES Phase I and II, City of Fort Myers, Florida
Survey The team developed and implemented a comprehensive SSES Program aimed at reducing I&I, preventing SSOs, and improving the reliability of the wastewater collection system. Phase I involved evaluating pump station runtimes and identifying sources of excessive rainfall-driven I&I, while Phase II focused on developing a flow monitoring program, conducting field investigations, and providing recommendations for system improvements and repairs.

Casa Loma Water Main Replacement Survey, Manatee County, Florida
Survey. Hyatt Survey performed a ROW and topographic survey for a proposed water main replacement (12,800 linear feet). The scope included performing a topographic survey at 50-foot intervals in a 12,800-foot x 50-foot corridor, including aerial base map plus ground detail. Hyatt performed SUE designation for Casa Loma ROW within survey limits. All work was completed within schedule and budget constraints.

NAVD 88 Benchmarks 1-3, Charlotte County, Florida
Survey. Hyatt Survey provided monumentation for 65 new benchmarks and performed 100 miles of Second Order Geodetic Leveling through Charlotte County for NAVD 88 Vertical Datum Densification.

APF Naples Airport, TW A & B Safety Improvements -Topographic Survey, Manatee County, Florida
Russell served as the project manager where Hyatt Survey performed a Topographic Survey of the area referenced above as located within the Naples Municipal Airport. Hyatt Survey located visible aboveground site improvements, utilities, and appurtenances. The team determined site elevations on a maximum 25-foot grid, at grade breaks and changes in direction.

Hyatt SURVEY

Jay Gehret

FIELD OPERATIONS SUPPORT

Areas of Expertise

- AutoCAD
- Stormwater design
- SWPPP development
- Permitting
- Comprehension of construction material
- Florida environmental policies
- Best management practices per site-specific conditions
- Field inspections

Education

- BS, Environmental Engineering, University of Central Florida
- AA, Architecture, Valencia State College

Registrations/ Certifications

- Certified Stormwater Erosion and Sediment Control Inspector, FDEP
- NASSCO Pipeline Assessment and Certification Program (PACP, MACP, LACP)

Jay Gehret is an environmental engineer based out of Mead & Hunt's Florida Water group and primarily focuses on municipal water, wastewater, and stormwater projects. His engineering experience includes roadway design, stormwater design, permitting, Stormwater Pollution Prevention Plan (SWPPP) development, complying with state environmental policies, and planning appropriate BMPs per site-specific conditions. He is skilled at interpreting and analyzing site-specific details and documents and performing field Inspections to maintain compliance with state and client standards. Jay helps prepare civil/environmental engineering design documents, design computations, quantity/cost estimates, and construction documents. Additionally, Jay visits project sites during design and construction to collect and verify design data.

RELEVANT PROJECT EXPERIENCE

US 1 Utility Undergrounding, City of Holly Hill, Florida
Design Engineer. Mead & Hunt provided design, permitting, bidding assistance, and construction contract administration and inspections on this 1.7-mile utility conversion project along US 1. Phase 1 included designing, permitting, and constructing individual electrical and communication services for each of the properties fronting US 1. Phase 2 required individual building permits for the properties and coordinating with communication providers to review the designs of their underground facilities. In the third and final phase, Mead & Hunt provided construction administration services and inspecting the work. As part of Phase 3, Jay determined the area required for construction in the right of way and laid out the areas that had already been acquired for new utility lines.

Gravity Sewer Phase 1 and WWTP Upgrades, Town of Pierson, Florida
Design Engineer. Mead & Hunt designed the first phase of this project to construct a sanitary sewer system. The project includes 11,400 linear feet of gravity main, 1,700 linear feet of force main, and a new lift station. The City will replace the existing WWTP with a new packaged WWTP. Once complete, the downtown area of Pierson will have a central sewer available, and existing septic tanks can be abandoned. Jay reviewed the project documents and take-offs to verify accurate project requirements.

Water Supply Alternatives Analysis, Volusia County, Florida
Project Manager and EOR. The County faced constraints on water supply related to minimum flows and levels (MFL) and sought increased demand due to rapid population growth. This led the County to investigate offset limitations in water supply and alternative sources of potable water. The outcome is a combination of alternatives, with RO as an option. Jay analyzed the reported data for each municipality and predicted the future demands for the areas of concern.

PROJECT CONTROL

ABILITY TO MEET SCHEDULE AND COST REQUIREMENTS

SCOPE MANAGEMENT

Our primary management responsibility on projects is to make sure we are doing the right job for our clients. We define the right job through detailed project scope development with Charlotte County's staff to identify critical elements needed to meet the County's goals and vision of a successful project. The primary tool we use in scope management is a detailed work breakdown structure (WBS) that defines the activities required to complete the project. This WBS will be referenced by the project manager, the project team, and the County throughout the project to identify potential scope changes and prompt the authorization of activities to begin at the appropriate time.

SCHEDULE MANAGEMENT

Once the activities required to complete the project have been defined, they must be properly sequenced and resource-loaded, and their durations must be estimated to develop an overall project schedule. Our project manager, **Carl Albano**, will be responsible to making sure the schedule is met and all tasks remain on track. He will access the knowledge and experience of the project team to develop and continuously update an accurate project schedule.

BUDGET MANAGEMENT

Project cost management begins with developing a baseline budget development while the project scope and schedule are defined. It is followed by continued cost monitoring and control during project execution. Our project manager will guide the team in developing a scope that is tailored to meet the County's quality and budget goals. Once planning is complete and a baseline is established, our project managers monitor scope, cost, and schedule compliance weekly with our integrated software tools.

TOOLS FOR SUCCESS

Deltek Vision

Mead & Hunt uses two integrated software tools to manage project scope, cost, and schedule. Deltek Vison™ provides project managers with reports that document expenditures to-date, estimates to complete, estimates at completion, and activity progress. These reports can also assess the "actuals" and estimates against the initially proposed budget and schedule to evaluate schedule and cost variance at both the individual task and the overall project level.

NEWFORMA Project Center

Newforma Project Center™ provides a one-stop shop to access project documents and monitor work progress. Newforma provides a repository for emails, transmittals, deliverables, and QA/QC records that any team member can access, including our subconsultants or the County.

SCHEDULE/COST CONTROLS: INNOVATIVE IDEAS

COSTS

- Develop a qualified on-call contractor's list to include unit costs for repair and replace activities.
- A construction sequencing plan provides uninterrupted service to your customers without significantly increasing construction costs.
- Value engineering with selected contractor provides additional cost savings.

SCHEDULE

- Early regulatory agency pre-application meetings with a 30% submittal encourage timely approval. Permit applications submitted at the 60% stage protect the project schedule.
- Updated contractor schedules are a prerequisite for review of contractor's monthly pay requests.
- Identifying pre-procurement options limits potential construction delays on long-lead equipment.

PROJECT ALTERNATIVES AND SELECTION

- Life-cycle analysis is performed on all identified alternatives.
- Consensus design approach captures individual staff concerns and preferences for developing final recommendations.
- Performing a risk analysis to prioritize repair and replace projects generated under this contract.

RECENT, CURRENT, AND PROJECTED WORKLOAD

Our team of professionals is ready to deliver a successful project for the County. We will provide services locally from our Fort Myers office with support from our Tampa, Port Orange, and Orlando locations. A depth of additional national resources are available to the County, offering the flexibility of staff required to keep this project on track.

All key staff and subconsultants are local to the area, bringing local project experience and specific knowledge of the region. This includes in-depth knowledge of the local industry, community considerations, design criteria, construction conditions, and local permitting agency requirements.

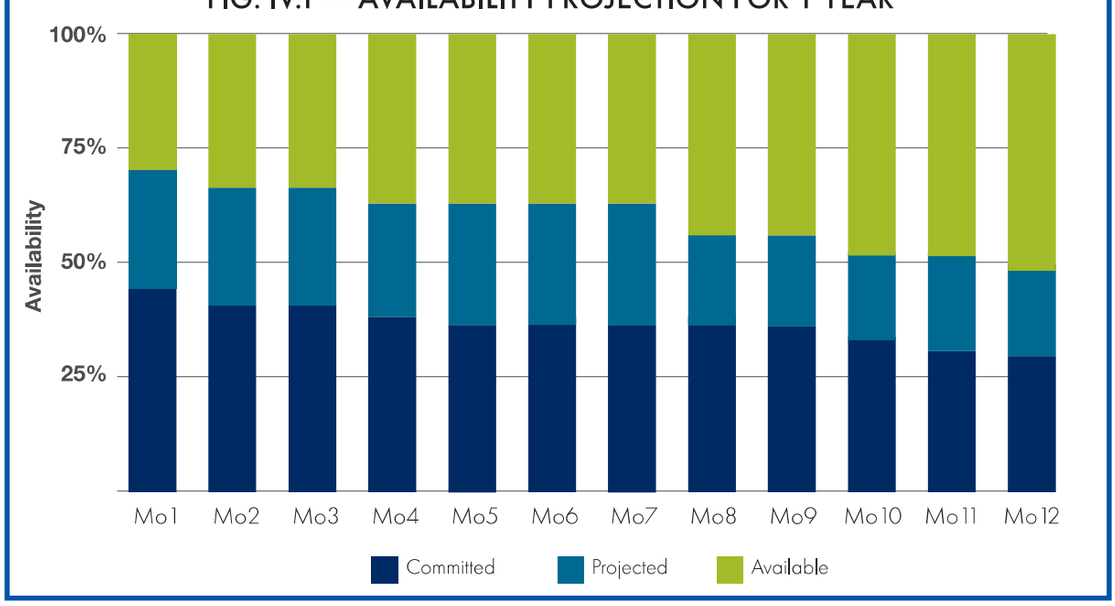
Current and projected workloads of our staff members were carefully considered when assembling this team. **All proposed personnel are available to successfully deliver this project and have confirmed their commitment and availability.**

Our team of experienced professionals has consistently proven their ability to execute project tasks in a timely, responsive, and cost-effective manner. It will be critical to provide the County with sufficient qualified staff to support all tasks; **we can assure the County that our team will remain dedicated to this project from start to finish.**

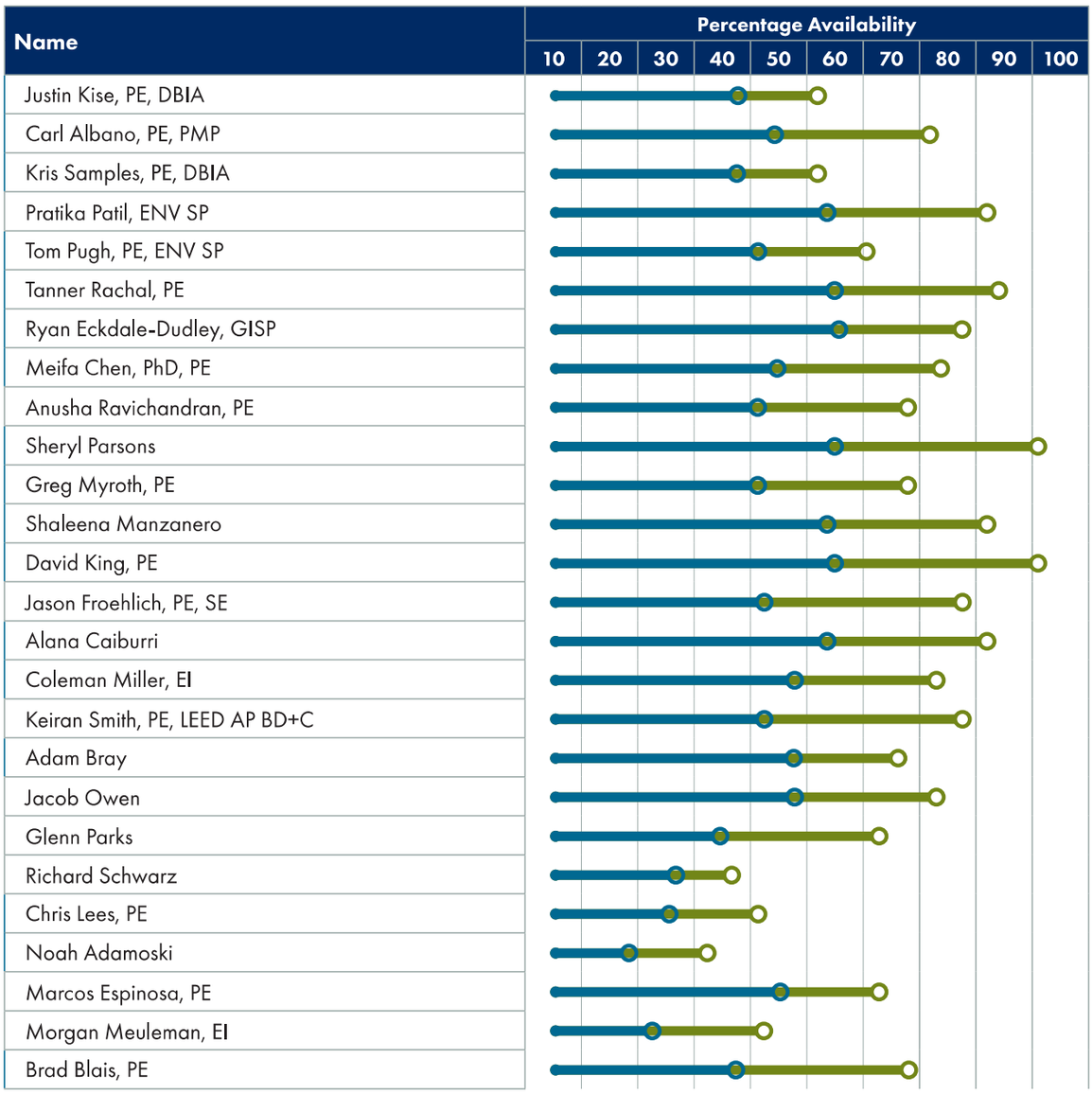
Availability can also be increased by redistributing workload among staff to accommodate any additional project needs the County may have or emergencies that may arise. Our workload projections include evaluations of current project backlogs as well as those under negotiation. Our depth of additional resources offers the ability to make adjustments, if needed, in staffing allocations and provides the County with an added level of assurance that this project will remain on track.

Figure IV.1 shows Mead & Hunt's available staffing as it relates to projected workload. As the projected workload illustrates, our team's availability exceeds current commitments.

FIG. IV.1 — AVAILABILITY PROJECTION FOR 1 YEAR



KEY PERSONNEL AVAILABILITY



AVAILABILITY KEY

Current
Projected

PRESENT PROPOSED DESIGN APPROACH FOR THIS PROJECT

V.

PRESENT PROPOSED DESIGN APPROACH FOR THIS PROJECT

A RESIDENTIAL STREET AFTER HURRICANE IAN

OVERVIEW AND UNDERSTANDING

Charlotte County requires a team capable of performing all necessary components of an SSES Program to include planning, inspection and condition assessment, and operations and maintenance (O&M) recommendations as part of their CMOM efforts. These services will be comprehensive for the County and include gravity sewers, manholes, force mains (4 to 30 inches in diameter), and pump stations.

Our work plan is structured to coordinate individual project team members to rapidly deploy technical assets and scale up to meet program needs as multiple projects are identified, designed, and constructed. While our work plan is set up to address a large volume of work—especially at the outset—we are also cognizant of County budgeting and scheduling constraints. With advanced program monitoring and project controls, we will forecast the level of work as the program progresses and tailor resource deployment in the most efficient manner.

DRAFT WORK PLAN

PHASE 1: PROGRAM DEVELOPMENT

Objective: Establish the framework, procedures, and strategic direction for successful program delivery.

Tasks:

1. **Project Initiation**
   a. Kick-off meeting with CCU
   b. Review existing documentation and data
   c. Workshop 1 – Kickoff and Strategy Alignment
      i. Purpose: Align with CCU on project extents, goals, existing workflows (Cityworks and GIS), and success metrics

2. **Procedure and Strategy Development**
   a. GIS and Asset Management Dashboard Development (recommended)
   b. Create risk scoring methodology (LOF/COF) for gravity sewers, force mains, and lift stations
   c. Workshop 2 – Risk Scoring and Evaluation Review
      i. Purpose: Confirm LOF/COF risk scoring logic with CCU
   d. Implement PACP/MACP-compliant CCTV and inspection procedures (incorporating CCU modification, if requested)
   e. Implement alternative inspection techniques available (if required)
   f. Develop structured system-wide cleaning program
   g. Establish gravity sewer data maintenance and GIS/Cityworks integration strategy
   h. Develop condition assessment strategies for:
      i. Gravity sewers and manholes
      ii. Force mains
      iii. Lift stations
      iv. ARV data collection template
      v. Workshop 3 – Procedure Framework Review
         - Purpose: Confirm PACP/MACP procedures with CCU

3. **Lift Station Operational Standards Improvements**
   a. Review/update pump rotation strategy
   b. Review/update SOP templates and workflows for lift stations
   c. Workshop 4 – Lift Station SOP
      i. Purpose: Confirm SOP updates and approach with CCU

4. **Regulatory Agency Coordination (recommended)**
   a. Coordinate with regulatory agencies to maintain compliance with regulations

5. **Funding Evaluation and Coordination (recommended)**
   a. Evaluate funding options and coordinate sources for project implementation

Deliverables:

- Kick-off summary and workshop notes
- Inspection and assessment procedures
- Cleaning program plan
- Risk framework documentation
- SOP and rotation strategy updates

PHASE 2: PROGRAM IMPLEMENTATION

Objective: Execute the condition assessments, inspections, and risk evaluations based on the developed strategies.

Tasks:

1. **Gravity Sewer and Manhole Inspection**
   a. Night Flow Isolation for CCTV Prioritization (recommended)
   b. Conduct CCTV inspections and cleaning
   c. Smoke Testing and Dye Testing (recommended)
   d. Apply PACP/MACP ratings and condition assessments

2. **Force Main Assessment**
   a. Collect ARV data
   b. Apply condition assessment strategy and risk scores

3. **Lift Station Assessment**
   a. Conduct inspections per strategy
   b. Apply condition and risk scoring

4. **Decision Support and Rehabilitation Planning**
   a. Develop decision trees for rehabilitation options
   b. Prioritize rehabilitation programs (gravity, force main, lift station)
   c. Prepare cost estimates and schedules
   d. Workshop 5 – Rehabilitation Program Development
      i. Purpose: Collaborate on selection of rehabilitation methods, budget phasing, and prioritization approach

Deliverables:

- CCTV logs and PACP/MACP summaries
- Updated risk scores
- Decision tree model
- Workshop summaries and rehabilitation plan documentation

▶ PHASE 3: PROGRAM REPORTING

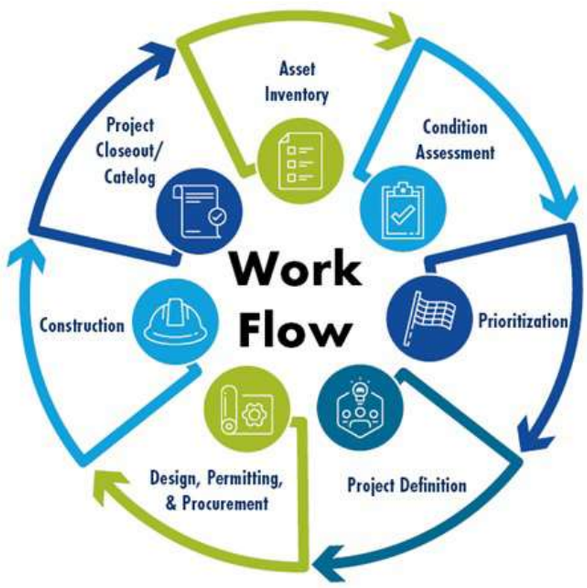
Objective: Communicate results, gather feedback, and finalize documentation for program delivery and future planning.

Tasks:

1. **Workshop 6 – Final Recommendations Validation**
   a. Purpose: Present all findings, validate recommendations with CCU staff, and gather feedback for report finalization
2. **Prepare Draft Final Report**
3. **Revise based on feedback and submit Final Comprehensive Report**
4. **Develop On-call Contractors List (recommended)**

Deliverables:

- Meeting and workshop summaries
- Draft Final Report (post-workshop)
- Final Comprehensive Report (with incorporated feedback)
- List of On-Call Contractors Qualification Package (recommended)



PROJECT APPROACH

PROJECT PHASES

The following approach is presented in phases intended to represent the practical flow of project tasks and effort as outlined by the Work Plan provided previously.

▶▶ PHASE 1: PROGRAM DEVELOPMENT

DATA REVIEW AND ANALYSIS

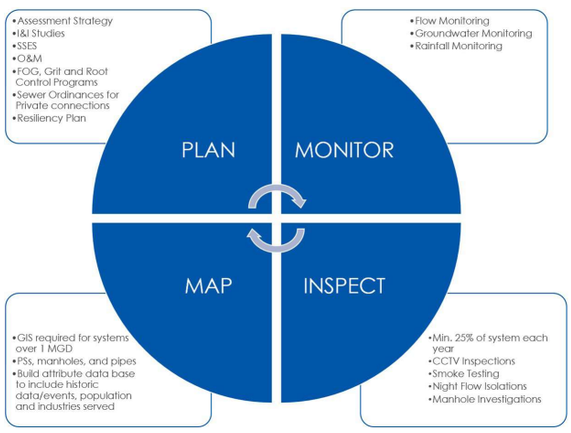
- Perform a detailed review of existing data and reports with the intent of developing a comprehensive SSES Program for the gravity sewer system.
- Review and provide a detailed summary of existing CCTV PACP data performed within the last five years and provide recommendations for additional CCTV and night flow isolations within the unlined service areas.
- Review and analyze pump station run-times compared to recorded wet weather events to identify problematic basins prone to I&I.

VALUE ADDED SERVICES

DEVELOP WRITTEN SSES AND IMPLEMENTATION PLAN

The Mead & Hunt team has 11 NASSCO-certified staff (including subconsultants) who can develop a written SSES Plan. The plan will identify the areas/basins recommended for further flow monitoring and evaluation, the prioritized infrastructure repair and replacement based on a risk analysis, and the findings identified within the project tasks. We will coordinate with the County to establish the program limitations based on the available CIP budget and the funding resources targeted. **Mead & Hunt will engage the public through our subconsultant, Quest, and County platforms for all field activities.**

FDEP RULE 62 OVERVIEW



LEAD THE DEVELOPMENT AND IMPLEMENTATION OF PLANS TO ADDRESS FLORIDA ADMINISTRATIVE CODE RULE 62-600.705

- Lead the development and implementation plan to support the development of the overall SSES Program.
- Develop a power outage contingency plan and application for a new permit for the County to submit to the FDEP.
- Develop a five-year gravity sewer and force main assessment, repair, rehabilitation, and replacement plan in conjunction with the County's linear asset management program. This program shall meet Florida standards for mitigating raw wastewater SSOs to the maximum extent feasible. The plan will provide a detailed strategy to assess at least 25% of the wastewater collection system within a five-year span.

FUNDING COMPLIANCE

Mead & Hunt provides complete funding and compliance services including planning, application, reimbursement requests, reporting, and other compliance support duties that can expedite reimbursement of expended funds and provide a clean project audit. Sheryl Parsons brings 12 years experience training states and cities in Davis-Bacon, American Iron and Steel compliance, and fraud prevention during construction. This direct experience translates into a higher probability of securing necessary funding for Charlotte County and ensuring smoother, audit-proof project execution.

Our team of specialists will leverage their extensive experience performing compliance responsibilities for the project, saving the County time and money.

Mead & Hunt is a proven winning team with organization, skill, expertise, and talent. We have managed projects funded from multiple sources and have the expertise to leverage available funding sources.

Our team will assemble a schedule that melds the construction and funding milestones to provide funding advantages for the County. Compliance support includes:

- Davis-Bacon payroll review and verification
- American Iron and Steel material verifications or BABA compliance, as required
- EEO/MBE/WBE utilization verification
- E-Verify monitoring
- On-the-job training monitoring

Through our extensive careers, we have streamlined the funding process, making it efficient and seamless. We partner with local municipalities to manage funding compliance, keeping the money and the projects moving.

DEVELOP AND MAINTAIN DASHBOARDS

Field activities and inspections will leverage the latest advancements in mobile GIS technology. This includes the

use of ESRI's Survey 123, Fieldmaps, and Quick Capture to accurately and efficiently collect standardized data and content. These tools will be stored in a hosted and secure geospatial database. By employing these cutting-edge technologies, we can achieve:

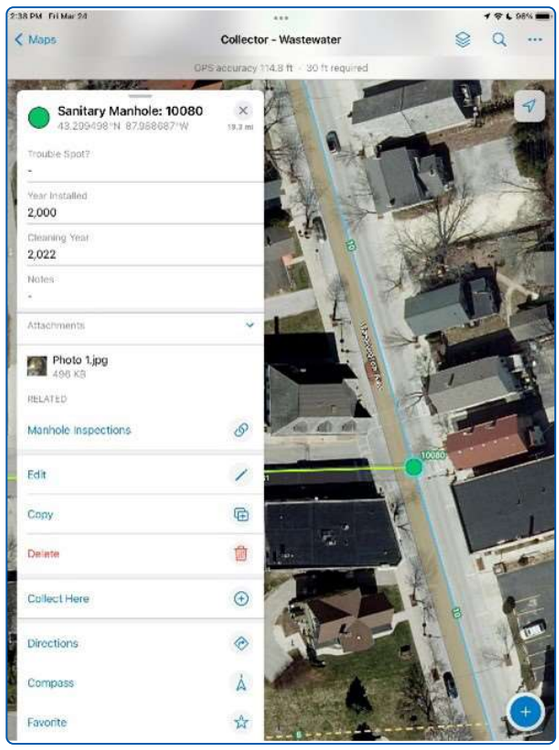
- Enhanced data accuracy and consistency across field operations
- A streamlined data collection process, reducing time and effort
- Real-time data for improved decision-making
- Secure and centralized repository for geospatial data
- Improved access and information sharing among team members and stakeholders

This approach improves field activity efficiency and supports comprehensive data analysis and reporting, leading to more informed and effective management of assets and operations.

Mead & Hunt excels at creating dynamic ESRI and Microsoft Power BI dashboards, offering clients real-time, intuitive access to critical asset information. This fosters transparency, collaboration, and informed decision-making. Our integrated operational and reporting dashboards handle complex datasets, statistics, and geospatial relationships. We manage program elements, including:

- Collection system assets
- Asset characteristics (condition, age, material, etc.)
- Inspections (manhole, CCTV, pipe, valve, flow monitoring, smoke testing)
- Maintenance requirements and critical issues
- Rehabilitation and CIP recommendations
- Cost estimates
- Overall project status
- SSOs and construction status

These dashboards provide comprehensive management and insightful analysis for better program oversight.



SAMPLE DASHBOARD 1

COST SAVING INNOVATIONS

Before commencing inspection programs, Mead & Hunt will implement a geo-analytical sub-basin screening and ranking tool. This tool will strategically prioritize locations for CCTV, smoke testing, manhole inspections, and flow monitoring. The analysis will incorporate:

- High-resolution land surface elevations
- Groundwater elevations
- Satellite imagery for flood-prone analysis
- Critical infrastructure elevations

With these data sources, we can accurately predict areas with a higher potential for I&I and execute more targeted and effective inspections.

Mead & Hunt will conduct a series of workshops with the County, update the risk analysis approach developed with the County, and refresh the risk profile of the sanitary sewer collection system, lift stations, force mains, and air release

valve assets. Once the assets have been prioritized, we will begin Phase 2 of program implementation.

▶▶ PHASE 2 – PROGRAM IMPLEMENTATION

INFILTRATION AND INVESTIGATIONS

Manhole Investigations (NASSCO MACP Compliant)

Manhole investigations will be led by Mead & Hunt's NASSCO MACP certified staff and conducted in the priority basins to identify manholes in need of repair, relining, or replacement. Investigations will be performed based on system age and operations and maintenance (O&M) history.

Manhole inspections will document the existence of a stormwater inflow abatement insert/dish, identify previously completed manhole R&R, establish the existence of active groundwater infiltration, determine manhole structural conditions based on visual observation, and document any O&M related defects like roots, grease, and sediment buildup. The following identifies the approach for completing the inspections:

- **Conduct First Pass (Level 1) Inspection –** Document manhole location, piping connectivity, piping depths, piping materials, piping size, frame/cover dimensions, existence of inflow insert/dish and drop connections, manhole construction materials used, manhole dimensions, and condition of connecting mainline gravity sewers. Establish general O&M and structural grades using NASSCO MACP guidelines.
- **Conduct Second Pass (Level 2) Inspection –** Conduct digital side scan inspection of all structures using the Envirosight CleverScan.

The report will provide cost estimates and proposed schedules for manhole improvements that use County CIP budgets. Mead & Hunt will help the County import the MACP data into the County's SSES Program Dashboard and GIS database. **Based on the condition and completeness of the County's GIS System, this project task may be completed as part of Phase 1 of this program to thoroughly develop the County's GIS database and model based on field data collected during the Level 1 Investigations.**

VALUE ADDED SERVICE: Night Flow Isolations

The Mead & Hunt team will conduct night-time visual flow isolations/inspections in the priority basins to quantify groundwater infiltration (GWI) baseflows and locate potential significant groundwater infiltration sources.

CCTV Investigations (Cleaning/Inspection)

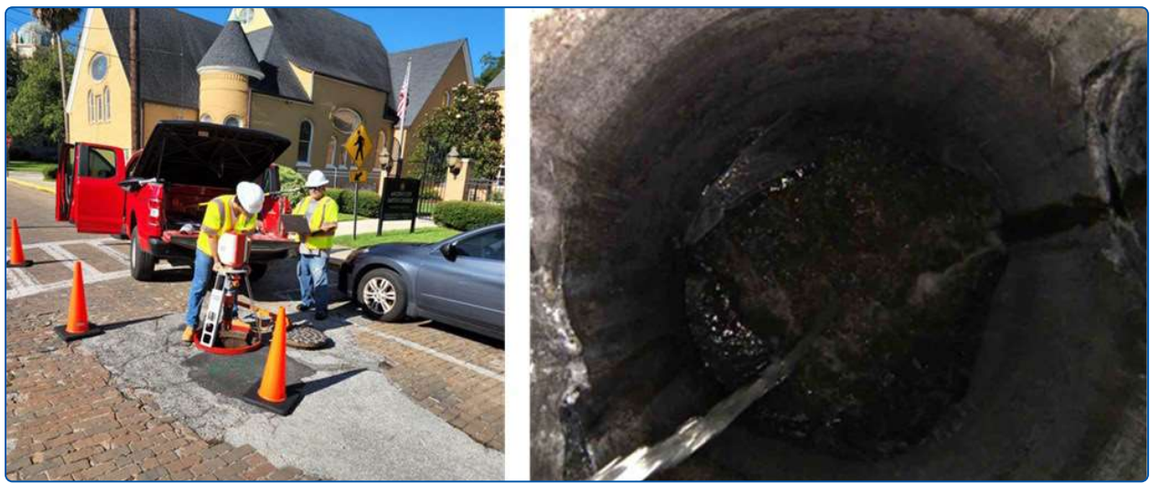
Mead & Hunt has partnered with GCU for CCTV investigations. GCU is committed to adhering to the specified requirements for sanitary sewer cleaning, flow control, and television inspection, as detailed by industry best practices. We understand the importance of these procedures for proper sewer maintenance and functionality. GCU will implement the necessary equipment, techniques, and precautions to provide effective cleaning, flow control, and inspection of sanitary sewers while prioritizing safety, efficiency, and compliance with regulatory standards.

GCU will use Granite.Net software for in-pipe CCTV inspections to align with CCU systems. This software will help us integrate smoothly with CCU's existing database for documenting and storing inspection footage. By using Granite.Net, we can provide efficient data transfer, consistent reporting, and compliance with county requirements.

GCU will conduct a thorough assessment of the project area in close collaboration with the County to plan CCTV work accordingly. During flow control operations, we will employ proven techniques such as plugging, blocking, or bypass pumping to effectively manage sewer flow, as required. For television inspection, our trained inspectors will use specialized equipment to conduct thorough visual assessments of the sewer conditions. Any defects or blockages encountered will be promptly documented and addressed to maintain project momentum.

The Mead & Hunt team will be responsible for the following related CCTV services as requested within the project scope:

- Perform video closed circuit television inspection



CLEVERSCAN IMAGE

- Perform video pipe inspections using the PACP from NASSCO
- Clean pipes prior to video inspection to provide unobstructed access for the television camera, including debris and roots
- Conduct all work in such a manner as to limit traffic flow disruption

We will draw on our knowledge and experience gained from successfully delivering numerous other cleaning and CCTV projects and implementing planning and preparation procedures. A summary of our proposed methods and techniques are:

- Attend a pre-construction meeting with the County.
- Perform a reconnaissance site visit to plan traffic control and equipment staging, and note visible debris and water levels. Report any issues found before mobilization to the County.
- Prioritize the work order to create an efficient plan and schedule and present the work schedule to the County.
- Distribute notifications to private property owners, as required.
- Mobilize CCTV and combination jet/vac trucks to project site.
- Perform pipe cleaning in accordance with the project specifications, including root removal.
- Remove all sludge, dirt, sand, rocks, grease, roots, and other solid or semisolid material resulting from the cleaning operation.
- Perform CCTV video of the pipes, identify defects, and measure pipe lengths and diameters.
- Submit videos, reports, and rehabilitation recommendations for approval to the County.

We anticipate that lateral CCTV inspections may be required as part of this project. If three or more sewer lateral CCTV inspections are required on a single sewer mainline segment, or if exterior lateral access is unavailable, lateral launch inspection equipment will be used to complete the inspection. GCU's lateral launch inspection equipment is capable of sending an auxiliary CCTV camera into the lateral system via the lateral tap connection within the sewer mainline and is LACP compliant.

Deficient laterals can affect the homeowner and may also allow extraneous water and soil into the mainline. Lateral launch cameras can find these issues as well as cross bores.

After completing the field investigations, a summary report and maps of significant defects and recommendations for sewer improvements will be developed. The report will provide cost estimates and proposed schedules for sewer improvements that use County CIP budgets. Mead & Hunt's team will help the County import the PACP data into the

County's CCTV and GIS software, and/or CMMS software as directed by the County.

Our ultimate objective is to deliver high-quality results that exceed the specified standards while upholding the integrity of the sewer system and limiting disruptions to the community. With our professional approach and unwavering dedication, we are confident in our ability to successfully complete the project to the highest standards of excellence.

GCU AT A PROJECT SITE

VALUE ADDED

INFLOW INVESTIGATIONS

The Mead & Hunt team will perform smoke and dye testing to detect inflow sources into the public and private portions of the sewer system and identify structural defects needing repair. Smoke testing will be performed during dry months when the ground water level is lowest to effectively identify and locate potential cross connections and inflow defects.

Our field crews use Trimble GPS units to locate defects, which get uploaded real-time to GIS. This allows team leaders and County staff to see where and when our crews are working within the community. Based on the results of the smoke testing effort, we will perform dye testing/flooding on portions of the storm drainage system that are identified as being connected to the wastewater collection system.

A detailed smoke testing plan is critical to streamline these efforts and ease public concerns. The following identifies the tasks that will be completed during the smoke/dye testing initiative.

Smoke Testing

1. Identify/map testing area.
2. Distribute smoke testing notifications and contact Fire and Rescue.
3. Identify businesses and residential areas to determine those with sensitive needs.
4. Provide 24-hour notice to residents and business owners.
5. Perform smoke testing efforts not exceeding notified areas daily.
6. All testing activity will cease if any resident complains of smoke entering their establishment.
7. During smoke testing, team personnel will scout the area for smoke escaping from ground sources, roof vents, storm drain structures, etc. All I&I sources will be photographed, measured, drawn, and documented accordingly with addresses, data, and sketches. The smoke test form will identify which sewer reach is being tested by its component identification in the County's GIS database.

Mead & Hunt will develop a smoke testing results spreadsheet that identifies each pipe section tested and the results of the test, whether positive or negative. A separate spreadsheet, smoke testing defects, will contain a column that identifies the surface area associated with each defect, the associated inflow volume based on a one-inch rainfall event at the defect, and if there is a need to conduct dye water testing/flooding.

Dyed Water Tracing

We will conduct private system dyed water tracing by introducing a small quantity of liquid dye concentrate into suspect sources such as downspouts, area drains, patio drains, window well drains, and driveway drains, and then introduce a sufficient volume of clean water to locate the source's discharge point. During each tracing, sanitary sewers, storm drains, and curb lines downstream of the sources will be monitored for signs of dyed water. The quantity of dye concentrate and water used will vary depending on pipe size and the quantity of flow and debris in each line section.

Dyed Water Flooding

The field inspection procedures for dyed water flooding are as follows:

1. Fire hydrants used to supply the water source will be coordinated with the County.
2. Prior to any testing, the appropriate County staff shall be notified of the specific testing location and what adjacent waterways may be affected when the dye water is released into the storm drainage system.
3. A mixture of water and any approved dye coloring substance will be introduced to the identified source. Dye water team inspectors will be stationed immediately downstream on the local sanitary and storm sewer lines. Observations, whether positive or negative, will be documented appropriately. Whenever possible, the dyed water point of exit will be documented either by a handheld digital recorder or by HD CCTV inspection equipment.

Each location where dyed water tracing has been performed will be noted in a report that identifies where the dyed water was introduced and maps the locations where the water entered the wastewater collection system. Photos will be taken where the dyed water is introduced and where it discharges into the downstream wastewater collection system manhole.

The dyed water flooding results will be documented for each location where the storm drainage system is flooded. Each dyed water flood report will identify the section of wastewater gravity piping tested and the locations where the storm water system piping was isolated and flooded. It will provide photographs of each setup and the CCTV inspection results identifying the locations where dyed water entered the wastewater collection system.

PUMP STATION CONDITION ASSESSMENT

The Mead & Hunt team will perform a comprehensive condition assessment of the prioritized County lift stations. These condition assessments will include drawdown tests for pump performance testing, electrical and controls, structural assessment, and piping/appurtenance evaluation. Kris Samples, PE, DBIA will lead the condition assessment effort for the lift stations, bringing his 16 years of experience in condition assessment and asset management to benefit this project. Kris will be supported by structural and electrical engineers with experience in field evaluations and condition assessments for lift stations and air release valves.

The institutional knowledge held by County staff who maintain and operate the transmission system on a day-to-day basis is just as important to condition assessments as the field evaluation. Prior to field work, the condition assessment team will meet with County staff for their input on the system, identifying areas with operational issues requiring frequent maintenance. To the extent it is available, we will review historical work order information to conduct the field evaluation in an efficient and targeted manner. Data will be collected electronically and immediately uploaded to the project files and GIS allowing for real time tracking of condition assessment progress.

AUTOMATIC AIR RELEASE VALVE (ARV) ASSESSMENT

Wastewater and water utilities have many ARVs throughout their pressure pipe networks to release air or allow air intake to maintain efficient flow of the water throughout the system. These ARVs oftentimes fail due to corrosion, lack of operation or become clogged. Failures associated with wastewater ARVs can result in sewage spills, odors, and flow restriction. It is essential for utilities to perform routine inspection, maintenance, and replacement to prevent overflows from occurring.

Using data from GIS and CMMS, our Team will utilize standard GIS web-based applications (Field Maps, ArcGIS Collector and/or Survey 123) to locate, photograph, and record findings that are then uploaded to the ESRI Cloud and the SSES dashboard. The inspection form incorporates existing GIS data fields as well as other attribution and condition fields from the CMMS. This information is integrated to locate ARVs on a map via smart phone or tablet. It also incorporates photos at each ARV location which are coded using the asset ID and allowed accessed from the ESRI web portal. Data management is accomplished by the development of a web portal that provides the ability to sort, filter, and summarize the inspection data quickly in both tabular and geographical format.

Score	Description
1	Excellent
2	Good
3	Fair
4	Poor
5	Very Poor

As part of the inspections, ARVs are given the same CoF rating from 1 to 5 as the connected force main. The key aspects of the CoF are the volume of water that could spill from that location and the proximity to sensitive environmental (e.g. water bodies) and social elements nearby. The LoF was determined during the field inspection using a scoring system from 1 to 5 as noted in the LoF scoring scale showing examples of various conditions.

It is critical to develop set frequencies for every ARV because every force main has different characteristics. The recommended frequency for initial inspections is six months to two years. As the ARV program develops, the information should be stored in the County's CMMS to schedule future inspections. Depending on the amount of debris inside the ARV and the overall condition of the body of the ARV, the inspector will provide a recommendation to keep the same frequency, increase the frequency, or decrease the frequency. This is extremely beneficial to maximize the efficiency of the program and minimize ARV failures.

FORCE MAIN CONDITION ASSESSMENT

Mead & Hunt will perform a desktop evaluation of the wastewater system and GIS model to prioritize parts of the system in need of investigation based on pipe material, age, failure history, risk of failure, and consequence of failure. We will then identify and assign available technology which can be applied to each of the prioritized areas based on service, diameter, access, and material and provide budgetary cost estimates to perform the investigative efforts along with potential rehabilitation/replacement costs to justify the investigation effort. This information will then be used to assist in updating the County's CIP based on the project costs and prioritization. The information collected will be formatted and developed into a comprehensive report for review by the County. Once completed, we will prepare RFP documents, in collaboration with the County, to advertise an on-call contractors list for pressure pipe condition assessment. Based on the selected technology in the report, we will provide competitive unit costs amongst similar technology to execute WOs on the projects identified within the report and as outlined in the updated CIP. This on-call contractor's list can be developed in parallel to a more comprehensive list to include contractors that specialize in other areas of this project, such as the pump station, pipeline, and manhole rehabilitation.

▶▶ PHASE 3 – PROGRAM REPORTING

FINDINGS AND RECOMMENDATIONS PROJECT REPORT

The Mead & Hunt team will produce a comprehensive project report deliverable that documents data collection and field investigation activities and presents findings and recommendations for wastewater collection system capital improvements and O&M, including a recommended schedule and cost for proposed improvements. Updates will also be incorporated into the County's CMOM program and improvements will include estimates costs and funding options to be incorporated into the County's CIP program.

VALUE ADDED

DESIGN IMPROVEMENTS AND DEVELOP ON-CALL CONTRACTORS LIST

The team will prepare final design plans and specifications, and RFP documentation for improvement alternatives developed during this evaluation, which can be awarded directly to a contractor for construction. We will also help the County develop an RFP to generate an on-call services contract to identify pre-qualified contractors to perform the necessary construction efforts and implement the design improvements throughout the County's collection and conveyance system.

Mead & Hunt will continue to work alongside the County by providing construction engineering and inspection services throughout construction for each of the repair and replacement projects performed under this contract.

VALUE ADDED

UPDATE COUNTY CODES FOR PRIVATE I&I

The team will review the County's existing codes as they relate to private I&I, investigate their feasibility, and make recommendations for a private I&I program that includes:

- Potential code changes to strengthen the ability of the County to investigate and enforce removal of private I&I sources
- Potential private lateral program to provide incentives for residences to inspect and rehabilitate laterals
- Potential funding opportunities to support possible incentives to the home owners
- Potential program for permitting private collection systems

INTEGRATE SSES PROGRAM DATA

Under this task, the Mead & Hunt team will use the data sets collected as part of this effort and dynamically update the risk models, integrate the County's existing systems, prioritize assets, and recommend projects that can be carried forward to future planning horizons. Objectively balancing and prioritizing between varied criteria is critical and will allow the County to identify what capital projects should be undertaken, when, and for what reason. Prioritizing assets can be daunting. We will implement the prioritization based on the core risk scores and the improvements proposed through hydraulic modeling from a capacity perspective.

A GIS-based application will be developed that will allow County staff to dynamically prioritize and plan infrastructure improvement projects using risk-based scores, project costs, and other critical variables. This infrastructure planning solution will provide advanced insight help to make informed data-driven decisions tailored to the County's priorities.

Sample Dashboard 2 is an example of a dynamic infrastructure planning dashboard that integrates several diverse datasets and provides real-time planning tools.

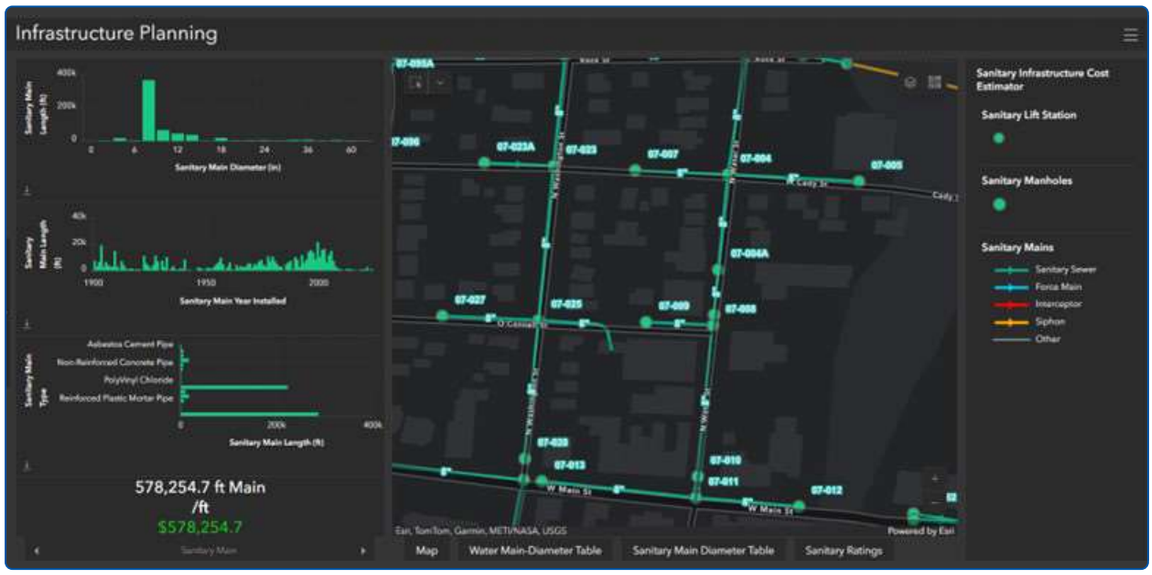
ASSET CRITICALITY MATRIX			CRITICALITY				
			Severe	Significant	Moderate	Low to Moderate	Low
			5	4	3	2	1
CONDITION	Un-serviceable	5	Highest Priority Immediate Action	High Priority Program Rehab	Priority Program Rehab	Priority Program Rehab	Priority Program Rehab
	Renewal Req.	4	High Priority Program Rehab	Priority Program Rehab	Priority Program Rehab	Frequent Condition Evaluation	Frequent Condition Evaluation
	Maint. Req.	4	Priority Program Rehab	Frequent Condition Evaluation	Frequent Condition Evaluation	Frequent Condition Evaluation	Regular Monitoring
	Minor Defects	2	Frequent Condition Evaluation	Frequent Condition Evaluation	Regular Monitoring	Regular Monitoring	Regular Monitoring
	Very Good	1	Regular Monitoring	Regular Monitoring	Regular Monitoring	Regular Monitoring	Regular Monitoring

ASSET CRITICALITY MATRIX

All program datasets will be managed in a centralized database, accessible via a datahub for County staff and the project team. This allows easy access to accurate information, enhancing collaboration and decision-making. It also improves data integrity, security, and efficiency management. The system's scalability supports long-term project benefits leading to better outcomes.

The data hub is essential to integrate multiple data sources and dynamically update the dashboards. The data hub will house all data generated, promoting appropriate control and permission levels related to the project.

Storing data in a centralized location also means that linear asset data in the County will be accessible for projects that may affect other buried infrastructure. This allows for visualization of multiple buried asset locations updated in real time, enhancing decision-making and short-, medium-, and long-term planning and budgeting.



SAMPLE DASHBOARD 2

SAMPLE DASHBOARD 3

QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC)

Mead & Hunt will provide value to the County throughout this project by becoming a trusted advisor and committed partner in meeting goals and following County procedures. This is an approach we have successfully implemented with clients throughout Florida. Our dedication to partnership is the most significant contributor to our success. Complex projects require firms that are nimble and able to adjust to the County's needs.

To maintain this success, Justin Kise, PE, DBIA, has been assigned as the Principal-in-Charge and Quality Control Manager. **Justin will verify that both Mead & Hunt and County quality control procedures and expectations are met throughout this project.** Mead & Hunt's size and structure allows us to change with you, pull from additional national resources as needed, and provide services customized to the County's needs.

Our initial step is to meet to discuss your goals. We use a consensus-based decision-making process that begins with listening and understanding. This approach is holistic through meeting with County stakeholders, including engineering and operations. All stakeholders will be heard early during project development to meet the project budget, fulfill the County's goals, and accommodate the operations staff's needs.

The next step in the project delivery process is to develop task orders. Mead & Hunt will develop a customized approach to deliver a solution that meets the County's needs while remaining mindful of established budgets. Project Manager, Carl Albano, PE, PMP, is responsible for delivering a quality project designed for durability and maintenance, and for communicating with the County's designated project representative. He will lay out our communication protocol, progress meeting frequency, and other expectations during task order development to set the team up for successful project delivery.

Our job continues after the delivery of the final work product and invoice. We will follow up to confirm your satisfaction and that we have met your expectations.

QA/QC PROCESS

To recognize the importance of QA/QC in all company activities, Mead & Hunt has developed corporate quality guidelines. Outlined in the quality guidelines are the procedures to be followed from project scoping to project completion, confirming that Mead & Hunt consistently delivers quality projects to our clients. Mead & Hunt uses a five-step QA/QC process. A project-specific quality control plan is implemented at project initiation and continues throughout deliverable development.

1. KICKOFF

A meeting with our project manager, engineers, designers, and relevant subconsultants to discuss the project goals, milestones, deliverables, scheduling, and any pitfalls to avoid.

2. MONITOR

Mead & Hunt uses a peer review system between our engineers and subconsultants to continuously monitor design document development and the project schedule.

3. TECHNICAL REVIEW

The project manager and QA/QC reviewer verify that deliverables are technically correct and easily interpreted. The team follows a checklist outlining the necessary items to review. Documents are then refined based on the technical review.

4. QA/QC REVIEW

This meeting is held between the project manager, QA/QC reviewer, lead design engineer, and other key team members. The QA/QC reviewer verifies that design products have been thoroughly reviewed before submission to the County or permitting agency.

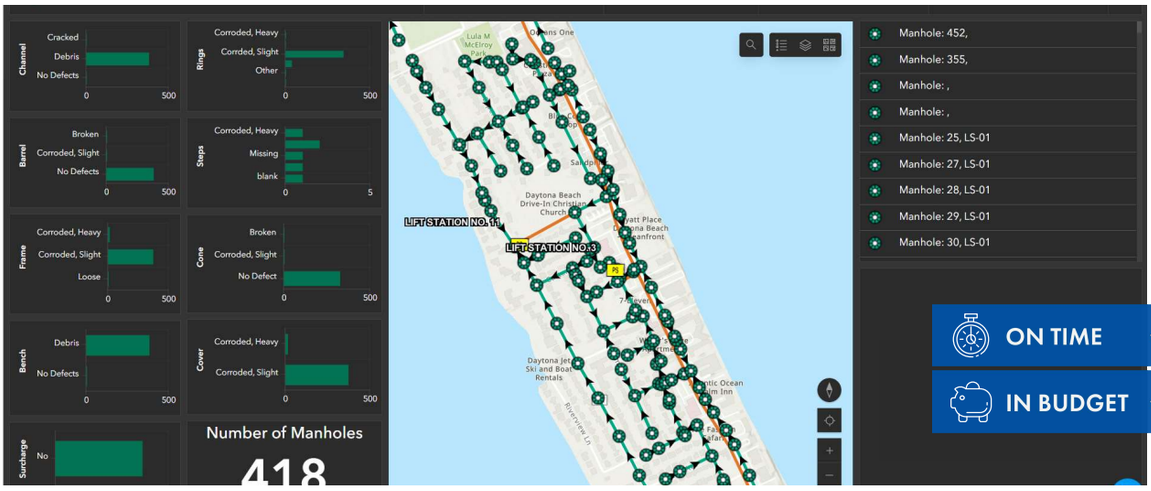
5. REVIEW GOALS

We verify that deliverables have met the project goals and needs, and review these with the County to discuss any changes.

PRESENT EXAMPLES OF RECENTLY ACCOMPLISHED SIMILAR PROJECTS

V.I.

RECENTLY ACCOMPLISHED SIMILAR PROJECTS



Schedule and Costs

- Start: 2023
- Completion: 2024
- Mead & Hunt Fees: $237,920
- Total Cost: $237,920

Services Provided

- Project management
- GPS manhole survey
- Manhole and sewer inspections
- Manhole and sewer conditional assessment
- GIS mapping of sewer system

Key Staff

- Kris Samples – QA/QC
- Meifa Chen – Project Manager
- Kyle Engelking – GPS Mapping
- Ryan Eckdale-Dudley – GIS Lead
- Pratika Patil – R&R Lead
- Glenn Parks – Manhole Investigation Superintendent

Contact

- Stewart Cruz, AICP, City of Daytona Beach Shores
- SCruz@cityofdbs.org
- 386-763-5353

COLLECTION SYSTEM ASSESSMENT AND MAPPING

CITY OF DAYTONA BEACH SHORES – DAYTONA BEACH SHORES, FLORIDA

The City of Daytona Beach Shores wanted to update its GIS model, utility mapping, and asset attribute information to track infrastructure assets and long-term capital improvement projects. The City requested that Mead & Hunt map the existing sanitary sewer manholes and gravity sewer mains using survey-grade GPS and inspect the manholes and sewers to identify the structures that require some form of R&R and potential additional inspection efforts.

Mead & Hunt has completed a Level 1 above-grade survey to locate all manholes using survey-grade GPS equipment. We have also created the gravity sewers feature class in ArcGIS by connecting manholes to perform Level 2 in-manhole inspections using a GoPro camera and Envirosight's CleverScan equipment. Mead & Hunt will assess the manhole and sewer conditions based on the images collected and grade them per NASSCO MACP guidelines. The in-manhole inspections will document piping connectivity, size, material, depths, surcharge condition, and debris. Mead & Hunt will recommend R&R and any potential additional inspection efforts. In addition, we will create an ESRI ArcGIS geodatabase of the City's sewer system using the data acquired.

The project was at the planning level and did not encompass construction or any related issues.

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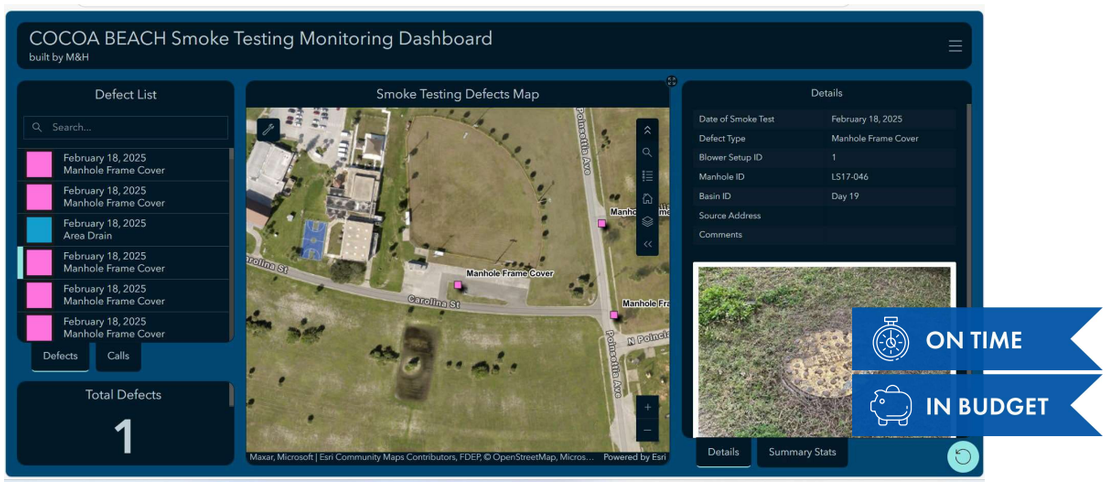

Schedule and Costs

- Start: 2025
- Completion: Ongoing
- Mead & Hunt Fees: $1.9 M
- Total Cost: $2.0 M

Services Provided

- Smoke testing
- Manhole investigations
- CCTV investigations
- I&I identification
- R&R recommendations
- Improvements design
- Flow monitoring plan development
- GIS dashboard development
- City code review

Key Staff

- Dr. Meifa Chen – Project Manager
- Kris Samples – QA/QC

Contact

- Brad Kalsow, City of Cocoa Beach
- bkalsow@cityofcocoabeach.com
- 321-868-3228

Partners

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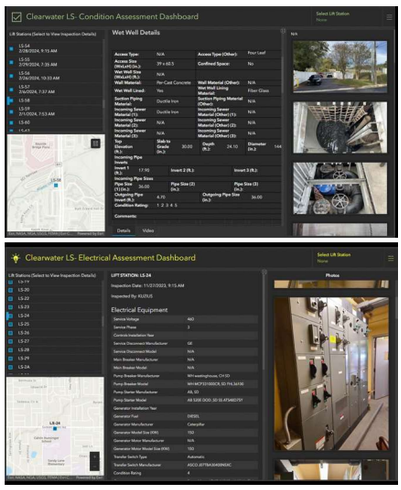
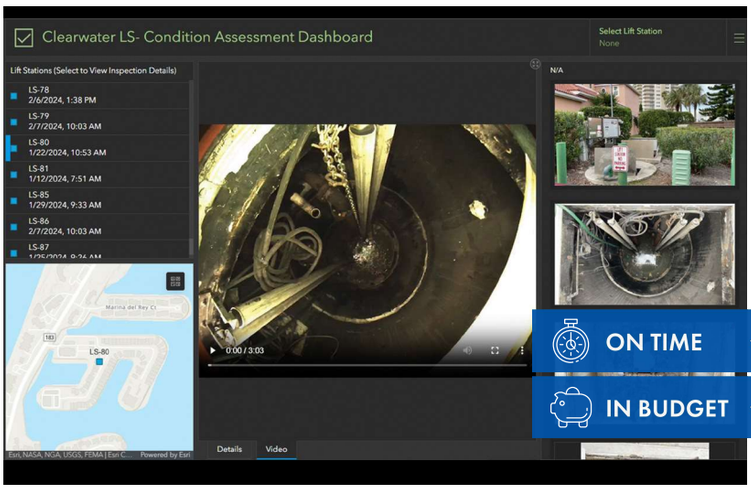
SANITARY SEWER REHABILITATION PROGRAM

CITY OF COCOA BEACH – COCOA BEACH, FLORIDA

The City of Cocoa Beach engaged Mead & Hunt for its comprehensive inflow and infiltration (I&I) Abatement Program to address significant challenges and SSOs within its aging (56+ years) sanitary sewer system. These issues were exacerbated by heavy rainfall, extreme tides, and severe weather, including impacts from Hurricanes Ian and Fiona. A primary goal is to rehabilitate infrastructure, reduce SSOs, and protect the City's wastewater treatment plant and collection system. This initiative is fully supported by a $15 M, 100% principal forgiveness loan from FDEP under the SAHFI program. Mead & Hunt assisted the City to obtain this loan. Mead & Hunt is delivering a full spectrum of services, from initial planning and investigation through design, bidding, funding compliance, and construction phase support. Key responsibilities include:

- Program planning, management and data analysis
- Extensive field investigation of I&I
  - Inflow: Conducting smoke testing on 300,000 linear feet of gravity sewer and subsequent dyed water testing to identify inflow sources in public and private systems.
  - Infiltration: Performing NASSCO MACP Level 1 and Level 2 (including 3D manhole scanning) inspections on up to 1,059 manholes.
- Technical services and design solutions: Developing R&R details, technical specifications, assisting with an on-call services contract, and creating a permanent flow monitoring plan.
- Advanced data management and reporting: Utilizing ESRI GIS tools (survey 123, Fieldmaps) and Microsoft Power BI for developing an interactive dashboard for data collection, management, and visualization. Delivering a comprehensive Findings and Recommendations Report with actionable capital improvement plans.
- Funding and regulatory compliance
- Policy and community engagement
- Construction phase support





Schedule and Costs

- Start: 2023
- Completion: 2025
- Mead & Hunt Fees: $2.3 M
- Total Cost: $891,073

Services Provided

- Condition assessment
- Lift station program

Key Staff

- Kris Samples – Project Manager

Contact

- Jeremy Brown, City of Clearwater
- jeremy.brown@MyClearwater.com
- 727-562-4040

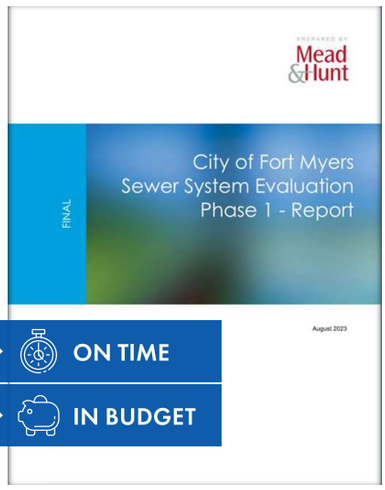
LIFT STATION EVALUATION PROGRAM

CITY OF CLEARWATER – CLEARWATER, FLORIDA

This project assessed the condition of lift stations for the City of Clearwater to determine a backlog of projects as part of the establishment of a program for continuous lift station rehabilitation. In partnership with Tetra Tech, Mead & Hunt performed the comprehensive assessment of 80 pump stations for the identification and prioritization of projects. Mead & Hunt will also provide construction administration and coordination services for the construction phase of the program including emergency repairs. Development of this program will improve the overall system condition, decrease deferred maintenance, and reduce risk.

To consolidate and readily share progress updates with the City on a weekly basis, Mead & Hunt managed and coordinated the inspections via development of GIS project tracking dashboards where progress of mechanical and electrical inspections could be tracked and shown. Lift station technical details and collected data could be easily accessed and confirmed. Because assessment/defect photos could be accessed and shared for discussion, the City was able to address operational issues immediately.

There were no construction-related issues or delays associated with this project.



SEWER SYSTEM EVALUATION SURVEY (SSES) PHASE 1 AND 2

CITY OF FORT MYERS – FORT MYERS, FLORIDA

The City's wastewater collection system comprises approximately 260 miles of gravity sewers, 6,906 manholes, 158 miles of force main, 103 air release valves, and over 200 lift stations. The Department of Public Utilities selected Mead & Hunt to provide engineering services to develop and implement a comprehensive SSES Program aiming to cost-effectively reduce I&I, reduce the risk of SSOs, and improve overall gravity system reliability and structural integrity.

Phase 1

Mead & Hunt performed an extended runtime evaluation of the top 14 prioritized basins, as determined in Task 12 of the I&I abatement desktop evaluation report and as identified by the City, to proactively address the risk of potential future SSOs the system. The primary objective was to pinpoint the entry points of excessive rainfall-driven inflow and infiltration (RDII) into the wastewater collection system and identify the sources contributing significant RDII to the Central and South service area flows. To accomplish this, 12 months of pump station runtimes were evaluated for the targeted basins and analyzed compared to wet weather events recorded by nearby rain gauges maintained by NOAA. Based on these results, further investigations were recommended.

Phase 2

Mead & Hunt developed a strategic short- and long-term flow monitoring program based on basin size and the I&I desktop analysis previously performed. Field Investigations proceeded in parallel to the flow monitoring approach development based on the recommendations of the SSES Phase 1 Report prepared by Mead & Hunt. Upon completing the short-term flow monitoring program, the collected rainfall, groundwater and flow meter data was used to develop a prioritized list of areas/basins for additional SSES field investigation activities such as CCTV, smoke testing, manhole inspections, and dye testing. In addition to flow monitoring and I&I investigations, this project also included comprehensive condition assessments of the City's lift stations and air release valves. Mead & Hunt performed and oversaw the SSES activities, analyzed and compiling results, and developed a cost-effective corrective action plan that includes detailed recommendations for pipe and manhole rehabilitation and replacement. A thematic-based report will be provided, outlining the field plan as well as the results of analyses supporting the recommendations and AACE Level V cost estimates. Recommendations from the SSES program, including potential improvements to the system, were compared with general recommendations contained in the City's 2023 Utilities Master Plan in order to provide consistency with those recommendations. Mead & Hunt also helped compile a list of on-call contractors to perform repairs, train City staff, and possibly provide engineering support for existing system repair work orders as requested by the City.

The project was at the planning level and did not encompass construction or any related issues.

Schedule and Costs

- Completion: Ongoing
- Mead & Hunt Fees: $329,000
- Total Cost: $500,000

Services Provided

- Sewer system I&I study
- Lift stations runtime evaluation
- GIS and mapping updates

Key Staff

- Kris Samples – SSES Specialist
- Glenn Parks – Field Superintendent
- Pratika Patil – R&R Specialist
- Meifa Chen – QA/QC
- Shaleena Manzanero – QA/QC
- Ryan Eckdale-Dudley – GIS Support

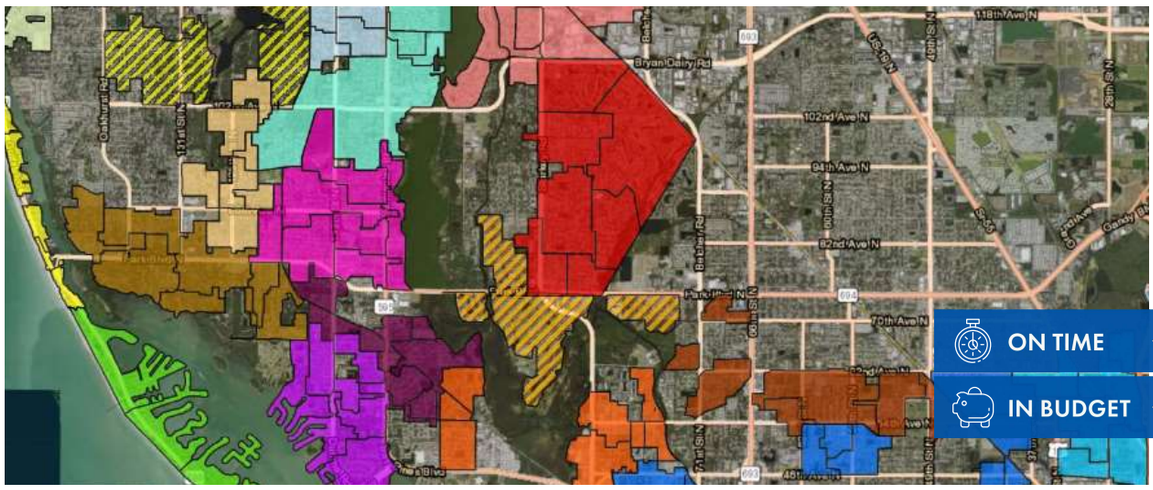
Contact

- Jason Sciandra, City of Fort Myers
- JSciandra@cityftmyers.com
- 239-321-7467

Partners

Hyatt Survey

Mead&Hunt



Schedule and Costs
- Start: 2024
- Completion: 2026
- Mead & Hunt Fees: $500,000
- Total Cost: $35 million

Services Provided
- System mapping
- Smoke testing
- Pipeline condition assessment
- Manhole condition assessment

Key Staff
- Carl Albano – Project Manager
- Kris Samples – QA/QC
- Pratika – R&R Lead
- Glenn Parks – Field Investigations
- Ryan Dudley – GIS Support
- Jacob Owen (GCU) – CCTV and Lateral Inspections

Contact
- Kerstin Kenty, Jacobs
- Kerstin.Kenty@jacobs.com
- 813-367-6488

Partners

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FIND AND FIX

PINELLAS COUNTY – PINELLAS COUNTY, FLORIDA

Pinellas County adopted a Find and Fix policy in November of 2021. The purpose of the Find and Fix Policy is to identify the sources and locations of the I&I and provide for the appropriate rehabilitation and or replacement to target reduction of I&I into the County's wastewater collection system. With the Find and Fix Policy in place, the County is implementing a Find and Fix program to remediate critical portions of its wastewater collection system as part of the Capital Improvement Program (CIP). This project consisted of the planning and condition assessment of gravity sewers within Zones 4, 8, and 13 priority areas. Specifically, the work will be performed in two phases. Phase I consisted of the planning, investigation, and assessment to be used in the development of a technical memorandum. Phase 2 will include post rehab inspection services. The County has prioritized Zones 4, 8, and 13 for I&I remediation in the South County for this project phase. Work in Zones 1, 2, 6, and 12 can be completed under this program at a later date under a separate project phase.

ZONE	GRAVITY MAINS (LINEAR FEET)	NUMBER OF SEWER LATERALS	LATERAL PIPE (LINEAR FEET)	NUMBER OF MANHOLES
4	42,121	691	21,410	214
8	28,363	550	15,433	122
13	25,049	196	4,078	119
Total	**95,533**	**1,437**	**40,921**	**455**

There were no construction-related issues or delays associated with this project.

Mead&Hunt

Schedule and Costs
- Start: 2019
- Completion: Ongoing
- Total Cost: $1.2 M

Services Provided
- Service laterals rehabilitated
- Manhole linings
- Cleanout installs
- Public outreach

Key Staff
- Coleman Miller – Superintendent

Contact
- Peter Sims, PE, GRU
- SimmsPA@gru.com
- 352-393-1637

FY23 PROJECT AREAS N&O LATERAL CLEANING AND CIPP INSTALLATION WITH CLEANOUTS

GAINESVILLE REGIONAL UTILITIES (GRU) – GAINESVILLE, FLORIDA

GCU has inspected over 117,000 feet of mainline sanitary sewer and launched into more than 3,000 service laterals throughout GRU sanitary sewer system. In completing this project, our team has effectively cleared away debris, roots, and tuberculation from the mainlines, while carefully documenting all defects with NASSCO-certified inspection reports. We also provide detailed as-built drawings of any unmapped features we find, which then go into the Owner's GIS to ensure they have the system well marked in the future. On lateral inspection work orders, we conduct thorough assessments from the mainline to the right of way (ROW), pinpointing pipe locations at the ROW while confirming whether each lateral is active or inactive.

GCU's data and project management teams work closely with GRU to provide their engineers with the information needed to make sound decisions about their infrastructure. We deliver our findings in a clear and accessible cloud-based format, customized to meet GRU's needs. This collaborative process allows them to define the necessary repairs and make the most of the available repair budget, thus helping GRU achieve the best possible outcomes for each project.

Given that much of our work takes place in busy, residential areas, keeping the public informed is crucial. We coordinate with GRU and the City of Gainesville to notify residents of upcoming work through yard signs and public meetings. This open communication is especially important for projects involving cleanout installations and lateral lining, where clear updates help maintain trust and cooperation from the community.

There were no construction-related issues or delays associated with this project.

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REFERENCES

	CONTACT INFORMATION (Name/Email/Phone Number)	PROJECT	SERVICES PROVIDED	PROJECT START DATE
1	**Stewart Cruz** Community Services Director City of Daytona Beach Shores SCruz@cityofdbs.org 386-763-5353	Daytona Beach Shores Collection System Assessment and Mapping	• Project management and funding assistance • Manhole and sewer inspections and conditional assessment • Sewer system GIS mapping	2023
2	**Bill Brown** Assistant Environmental Services Director City of Largo WiBrown@largo.com 727-507-4468	Largo Permanent Flow Monitoring	• Permanent flow meter technology and program evaluation • Collection system flow monitoring • Staff training	2022
3	**Jim Ailes** Utilities Director City of Deland AilesJ@deland.org 386-626-7252	Downtown Redevelopment Study	• Flow monitoring • Hydraulic modeling • Manhole investigations • Planning	2022

During my 40 year career, Mead & Hunt has provided engineering expertise on a variety of projects from master planning, to preliminary planning, design, permitting, bidding, and construction. The designated Project Manager for Mead & Hunt promptly responds to all forms of communication, addressing concerns and providing solutions.

Roger Smith, PE
Utility Engineer
Volusia County Water Resources and Utilities

VII.

DESCRIBE YOUR EXPERIENCE AND CAPABILITIES IN THE [SPECIFIED] AREAS

EXPERIENCE AND CAPABILITIES IN SPECIFIED AREAS

A. CMOM PROGRAMS DEVELOPMENT PROJECTS

Mead & Hunt's team possesses an in-depth understanding of USEPA CMOM guidelines, best practices, and Florida-specific regulations concerning SSOs and collection system management. We leverage this expertise to maintain condition assessments, O&M strategies, and capital planning integrate seamlessly within a comprehensive CMOM framework. Our approach involves interpreting and aligning all project activities with Charlotte County's existing CMOM program, optimizing O&M strategies (such as system-wide cleaning programs) to support CMOM goals, and proficiently documenting activities and findings to meet reporting requirements. We prepare all condition assessments to adhere to NASSCO PACP/MACP standards, a cornerstone of a robust CMOM program.

B. WASTEWATER SYSTEM EQUALIZATION ANALYSIS

Led by experts including **Kris Samples** and **Dr. Meifa Chen**, Mead & Hunt offers advanced capabilities in wastewater system flow equalization analysis and peak flow management. Our team is highly experienced in flow monitoring design, data analysis, flow characterization (including diurnal patterns, peaking factors, I&I components), capacity analysis, lift station and force main manifold system operation optimization, and storage solutions. Dr. Chen combines expertise in data analysis and hydraulic modeling to address risks associated with peak flows and has designed equalization/storage facilities ranging from 470,000 to 40 million gallons. This capability allows us to accurately inform I&I assessments and risk analyses critical to this project.

C. HYDRAULIC MODELING FOR WASTEWATER

Mead & Hunt's team, including **Dr. Meifa Chen** and **Carl Albano**, provides expert wastewater hydraulic modeling services using industry-standard software such as Bentley SewerCAD/GEMS (now OpenFlows Sewer), PCSWMM and InfoWorks ICM, etc. We have extensive experience developing, calibrating, and applying hydraulic models for diverse client needs including I&I abatement analysis, master planning, system capacity evaluation, and facility sizing. For this project, Mead & Hunt can efficiently update the County's existing hydraulic model, verify system capacity under current and future conditions, and utilize the model to

support risk assessments (especially Consequence of Failure analysis) and evaluate rehabilitation alternatives.

D. I&I ANALYSIS/EVALUATION AND REDUCTION

Mead & Hunt offers significant expertise in I&I analysis and reduction. We excel at identifying visual I&I indicators using NASSCO PACP/MACP/LACP standards during CCTV and manhole inspection reviews. Our team thoroughly understands the relevant defect codes and employs proven methodologies to quantify and simulate I&I sources, enabling effective prioritization of sewersheds or lift station service areas for rehabilitation. We translate inspection data (correlating defect type and severity with potential I&I magnitude) into actionable, cost-effective I&I reduction strategies, recommending targeted techniques like lining, grouting, point repairs, and manhole rehabilitation.

E. EVALUATION OF HYDROGEN SULFIDE/ ODOR/CORROSION CONTROL

Mead & Hunt provides nationally recognized expertise in H2S, odor, and corrosion control for wastewater facilities, demonstrated by recent successful design and implementation of major odor control facilities for the largest treatment facility in Orlando, Florida. Our experts possess a deep understanding of the chemical and biological processes driving H2S generation and corrosion (including MIC) in collection systems. We accurately identify visual corrosion indicators across various pipe and manhole materials, utilizing NASSCO PACP/MACP defect codes to assess severity and inform risk analysis (Likelihood of Failure). This expertise allows us to recommend the most appropriate and durable corrosion control measures and rehabilitation solutions.

F. CCTV INSPECTIONS

Mead & Hunt has partnered with GCU for CCTV investigations. GCU will implement the necessary equipment, techniques, and precautions to provide effective cleaning, flow control, and inspection of sanitary sewers while prioritizing safety, efficiency, and compliance with regulatory standards. GCU will conduct a thorough assessment of the project area in close collaboration with the County to plan CCTV work accordingly. We will employ proven techniques to effectively manage sewer flow. For television inspection, our trained inspectors will use specialized equipment to conduct thorough visual assessments of the sewer conditions. Any defects or blockages encountered will be promptly documented and addressed.

G. ASSET/DATA MANAGEMENT

Mead & Hunt understands the critical role of robust data management in effective asset management. Our team is proficient with NASSCO PACP/MACP database structures and data exchange formats. We possess strong capabilities in relational databases, utility network GIS principles, asset hierarchy development, and implementing rigorous QA/QC protocols for condition assessment data. We are familiar with Cityworks functionality for inspection and work order management and will ensure all data collected and analyzed under this project adheres to the County's standards and integrates smoothly with existing systems. Our process emphasizes data integrity throughout the lifecycle—from field collection and coding to analysis, reporting, and strategic integration—provides reliable data that supports informed decision-making. In addition, Mead & Hunt frequently set up ArcGIS Dashboards and Storymaps for our clients, which are great tools for decision making and community education.

H. OTHER SPECIALIZED EXPERIENCE

Mead & Hunt prepared a Clean Water State Revolving Fund (CWSRF) Facility Plan as a supporting document for the principal forgiveness loan application. It is currently being reviewed by the FDEP Bureau of Facility Funding. We also prepared the loan application and supporting documents that define requisite improvements, goals, and objectives for projects being funded by this program. Our engineering staff and funding specialists understand the processes and procedures required to finalize and secure funding approvals, administer the projects, and comply with federal funding guidelines. This is a complex process and all state and federal funds spent on these projects are subject to inspection, accounting, and audit. Mead & Hunt has in-house staff that have provided these services for similar projects and we are positioned to continue doing so for this project.

VOLUME OF WORK

VII.

VOLUME OF WORK

Mead & Hunt does not have any current work with Charlotte County.

LOCATION

LOCATION

Our local Florida team is committed to serving Charlotte County and our community, and will provide services for this project from our Fort Myers office. Additional support will come from our Tampa, Port Orange, Orlando, and other Florida locations. Mead & Hunt's depth of resources offers the flexibility to provide experienced staff at your disposal to keep this project on track. **All key staff and subconsultants are local to the area, bringing local project experience and specific knowledge of the region. Our local presence combined with our national corporate resources has resulted in consistently balanced staffing requirements, quality service, and successful schedule outcomes.**

A NATIONAL FIRM LEADING WITH LOCAL RESOURCES

LITIGATION

LITIGATION

Prepared by Mead & Hunt Legal Department on April 21, 2025

Shaw et al v. Q & D Construction, LLC, County of Sonoma, CA et al, Case No. 24CV00050
Superior Court of the State of California, County of Sonoma

Mead and Hunt, Inc. is one of four named defendants in this personal injury case which happened at an airport while it was under construction. Plaintiffs are alleging that construction defects and professional negligence contributed to an airport visitor opening a door into a pedestrian area that resulted in injuries to the plaintiff. Mead and Hunt provided design services for this project and only recently was added as a third-party defendant to an Amended Complaint and served in November of 2024.

Sarah E. Clark v. Mead & Hunt, Inc. et al, Case No. 23-C-590
Circuit Court of Kanawha County, West Virginia

Mead and Hunt, Inc. is one of four named defendants in this personal injury case which was caused by a traffic accident which occurred in an area of roadway construction. Mead and Hunt, Inc. provided construction inspection services on a transportation project and did not design or construct the project. Through mediation, the matter settled, and lawsuit was dismissed October 2024.

Van Nest et al v. Boggs Contracting, Inc. et al, Case No. 2022-CP-22-00423
Court of Common Pleas, Fifteenth Judicial Circuit, Georgetown County, South Carolina

Mead and Hunt, Inc. is one of six named defendants in this personal injury case which was caused by a traffic accident that occurred in an area of roadway construction. Mead and Hunt, Inc. provided construction inspection services on a transportation project and did not design or construct the project. The case settled in mediation in November 2024.

Hunsicker v. Boggs Contracting, Inc. et al, Case No. 2024-CP-22-00580
Court of Common Pleas, Fifteenth Judicial Circuit, Georgetown County, South Carolina

Mead and Hunt, Inc. is one of four named defendants in this personal injury case which was caused by a traffic accident that occurred in an area of roadway construction. Mead and Hunt, Inc. provided construction inspection services on a transportation project and did not design or construct the project. This case is in the discovery phase.

Abdille et al v. Bizzack Construction, LLC et al, Case No. 22-C-789
Circuit Court of Kanawha County, West Virginia

Mead and Hunt, Inc. is one of five named defendants in this personal injury case which was caused by a traffic accident which occurred in an area of roadway construction. Mead and Hunt, Inc. provided construction inspection services on a transportation project and did not design or construct the project. The case settled in mediation in November 2024.

Mead & Hunt acquired Sabra & Associates, Inc. in April of 2019, the below matters relate to the acquired entity.

Diane Emerson v. Sabra & Associates, Inc., et al., Case No. D-06-CV-21-007586
District Court of Maryland for Montgomery County

Claim received November 4, 2021. Sabra & Associates (Sabra) conducted a traffic survey on November 7, 2018, for Montgomery County, Maryland. Plaintiff alleged that Sabra's negligence caused Plaintiff to trip and sustain injuries. Sabra denied these allegations. This case settled and was dismissed in April 2023.

Mead & Hunt acquired Symbiont in June of 2022, the below matters relate to the acquired entity.

Building Trades United Pension Trust Fund, et al. v. Symbiont Construction, Inc., Case No. 21-CV-1401,
United States District Court for the Eastern District of Wisconsin.

This case involved the desire of the Building Trades United Pension Trust Fund to audit payroll during a timeframe in which Symbiont Construction, Inc. had no union employees. The case was voluntarily dismissed in January 2023.

Augustana College v. City of Rock Island, IL, Case No. 2018 L 71
Rock Island County Circuit Court, Illinois

The City of Rock Island (City) filed a complaint against Symbiont to make it a third-party defendant in the above case. The City attempted to tie a Combined Sewer Overflow study done by Symbiont in 2003 to a June 2017 sewer collapse that resulted in flooding at Augustana College (College) with damage to several of its buildings. The City's own expert placed no responsibility on Symbiont. The matter settled in September of 2022 and the settlement is confidential.

Roumann Consulting, Inc. and Ron Rousse v. T.V. John & Son, Inc. et al, Case No. 2:17-cv-01407-LA.
United States District Court for the Eastern District of Wisconsin.

T.V. John & Son is now known as Symbiont. The circumstances of this case involve a terminated written service agreement and a claim of contract breach as a result of that termination. Numerous attempts have been made to settle the matter. The case is nearing the trial stage and is not covered by insurance.

MINORITY BUSINESS

MINORITY BUSINESS

Although Mead & Hunt is not a certified minority business enterprise, we make continuous efforts to support minority businesses on our projects. For this project, we have included the following DBE/WBE firms on our team:

- Quest Corporation of America (Quest) – (DBE/WMBE)
- Hyatt Survey Services, Inc. (Hyatt Survey) – (WBE)

$52 MILLION
TO DM-DWBE FIRMS

Mead & Hunt continuously takes steps to remove systemic and institutional discriminatory barriers and promote equity in opportunities for economic growth, community leadership, and improved social wellbeing, both internally and by supporting minority and historically underutilized businesses. We strive to be positive stewards in the architecture, engineering, and construction (AEC) industry by mentoring and sharing resources with growing firms. We pay special attention to those that are disadvantaged and genuinely desire to see them independently thrive in the marketplace.

MBE, WBE, DBE, AND SBE PARTICIPATION

At Mead & Hunt, it is our culture to be proactive and positive stewards in the AEC community leveraging our years of experience and skilled employee base to mentor and share resources with growing firms. We believe in delivering valuable and meaningful work for the firms we collaborate and partner with. Building a diverse team that captures targeted, innovative approaches strengthens our communities and benefits all stakeholders.

THE BIGGER PICTURE: MEAD & HUNT'S COMMITMENT TO INTENTIONAL EQUITY

Mead & Hunt values diversity of demographics, disciplines, and desires. This is reflected in how we assemble our team. We share the success with our partners because that strengthens communities and every project we touch has a community impact.

We live in the communities we serve, we drink the water, take the roads, and use the airports, so we understand that our responsibility goes beyond successful project outcomes. Our overarching values are **taking care of people, doing the right thing, and doing what makes sense.**

MENTORING AND CAREER DEVELOPMENT

Mead & Hunt is committed to mentoring and career development not only of our staff but the local community. Engaging management with project-level professionals, technicians, and field crews, enables the retention of labor within the industry and allows for the following:

- Promote career readiness
- Identify workforce incentives
- Champion local businesses
- Remove the access barriers for MBE/WBE/DBE/SBEs

CHAMPION LOCAL BUSINESSES

The Mead & Hunt team will continue to seek partnerships with small, diverse suppliers, subcontractors, and consultants providing value-added services in support of your goals and objectives. We will partner closely with Citrus County to see that we remain in alignment with your goals as this contract progresses.

FDOT · Broward County Florida · Lee County Port Authority · Greater Orlando Aviation Authority · Jacksonville Transportation Authority

Florida Unified Certification Program

Disadvantaged Business Enterprise (DBE)

Certificate of Eligibility

QUEST CORPORATION OF AMERICA INC
MEETS THE REQUIREMENTS OF 49 CFR, PART 26
APPROVED NAICS CODES:
541611, 51820

Samuel Febres

Samuel Febres (Sammy)
DBE & Small Business Development Manager
Florida Department of Transportation

Miami-Dade County · Tampa International Airport · Tallahassee · Votran

State of Florida

Woman Business
Certification

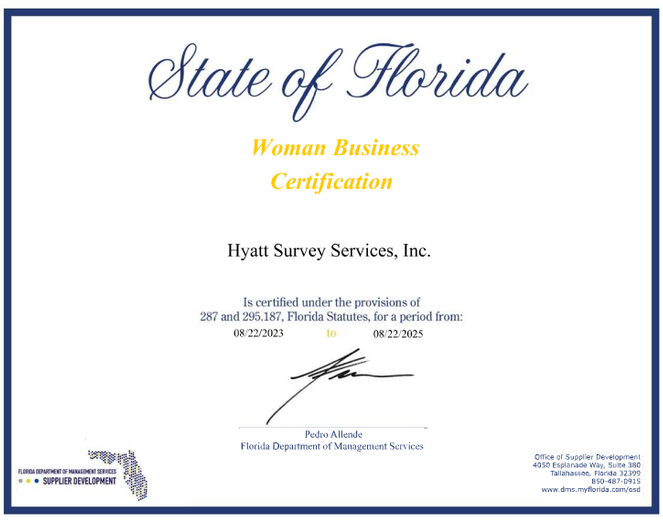
Quest Corporation of America, Inc.

Is certified under the provisions of
287 and 295.187, Florida Statutes, for a period from:
01/29/2024 to 01/29/2026

J. Todd Inman
Florida Department of Management Services

Florida Department of Management Services · Supplier Diversity

Office of Supplier Diversity
4050 Esplanade Way, Suite 380
Tallahassee, FL 32399
850-487-0915
www.dms.myflorida.com/osd



State of Florida

Woman Business
Certification

Hyatt Survey Services, Inc.

Is certified under the provisions of
287 and 295.187, Florida Statutes, for a period from:
08/22/2023 to 08/22/2025

Pedro Allende
Florida Department of Management Services

Florida Department of Management Services · Supplier Development

Office of Supplier Development
4050 Esplanade Way, Suite 380
Tallahassee, Florida 32399
850-487-0915
www.dms.myflorida.com/osd

APPENDIX: FORMS

PROPOSAL SUBMITTAL SIGNATURE FORM (PAGE 1)

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
	Justin Kise	16	Tampa	Tampa	Tampa
	Carl Albano	8	Tampa	Tampa	Ruskin
	Kris Samples	16	Tampa	Tampa	Tampa
	Tom Pugh	36	Fort Myers	Fort Myers	Fort Myers
	Pratika Patil	10	Tampa	Tampa	Tampa

2.	Magnitude of Company Operations Information provided below for operations in Florida	
	A) Total professional services fees received within last 24 months:	$ 24 M
	B) Number of similar projects started within last 24 months:	10
	C) Largest single project to date:	$ 65 M

3.	Magnitude of Charlotte County Projects	
	A) Number of current or scheduled County Projects	0
	B) Payments received from the County over the past 24 months (based upon executed contracts with the County).	$ 0

4.	Sub-Consultant(s) (if applicable)	Location	% of Work to be Provided	Services to be Provided
	Gulf Coast Underground (GCU)	Sarasota	20%	CCTV
	Quest Corp. of America (Quest)	Land O'Lakes	3%	Public outreach
	Hyatt Survey	Bradenton	7%	Survey

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 _____

(This form must be completed and returned)

PROPOSAL SUBMITTAL SIGNATURE FORM (PAGE 2)

6. Minority Business: 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.	**Yes** _____ **No** X
Comments or Additional Information:	
We have included the following DBE/WBE subconsultants on our team: Hyatt Survey and Quest	

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 2/26/25 Addendum No. 2 Dated 3/19/25 Addendum No. 3 Dated 3/28/25
Addendum No. 4 Dated 4/11/25 Addendum No. 5 Dated 4/16/25 Addendum No. 6 Dated 4/29/25
Addendum No. 7 Dated 5/2/25 Addendum No. _____ Dated _____ Addendum No. _____ Dated _____

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

Mead & Hunt — Firm Name
813-210-8740 — Telephone

Fictitious or d/b/a Name
39-0793822 — Federal Employer Identification Number (FEIN)

2440 Deming Way — Home Office Address

Middleton, WI 53562 — City, State, Zip
125 — Number of Years in Business

1533 Hendry Street, Unit 301, Fort Myers, FL 33901 — Address: Office Servicing Charlotte County, other than above

Tom Pugh, PE — Name/Title of your Charlotte County Rep.
608-443-0545 — Telephone

Justin Kise, PE, DBIA — Name/Title of Individual Binding Firm (Please Print)

Signature of Individual Binding Firm
May 6, 2025 — Date

Justin.Kise@meadhunt.com — Email Address

(This form must be completed & returned)

DRUG FREE WORKPLACE

DRUG FREE WORKPLACE FORM

The undersigned vendor in accordance with Florida Statute 287.087 hereby certifies that Mead & Hunt (name of business) does:

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.

Wendy K. Culver
Proposer's Signature

05/06/2025
Date

(This form must be completed & returned)

HUMAN TRAFFICKING AFFIDAVIT

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

Charlotte County Contract #20250188

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.

Wendy K. Culver
Signature

Wendy Culver
Printed Name

CHRO
Title

Mead & Hunt
Nongovernmental Entity

05/06/2025
Date

END OF PART IV

NAME OF FIRM Mead & Hunt
(This form must be completed & returned)