



Lake County | **ON-CALL, TRANSPORTATION AND TRAFFIC ENGINEERING SERVICES** (RSQ 21-0940)

September 21, 2021



3 | Proposed Solution



UNDERSTANDING AND APPROACH

WGI is committed to improving safety and reducing congestion on roadways within Lake County. WGI brings you experts with a fresh and innovative perspective in planning, traffic operations, safety, data collection, roadway/intersection design, constructability and more. We have a proven track record in providing award-winning services on task work order and pushbutton assignments. WGI was the prime consultant for FDOT District 5's Community Traffic Safety Program, where we consistently delivered on budget and on schedule. We also held three districtwide traffic operations and design-build pushbutton contracts in FDOT Districts 1 and 7 and successfully completing 120+ projects to date. Each work order was designed and constructed in under a year and with a \$1M maximum construction budget. These examples, along with our vast experience with task work order-based contracts demonstrates our understanding and capabilities on similar contracts.

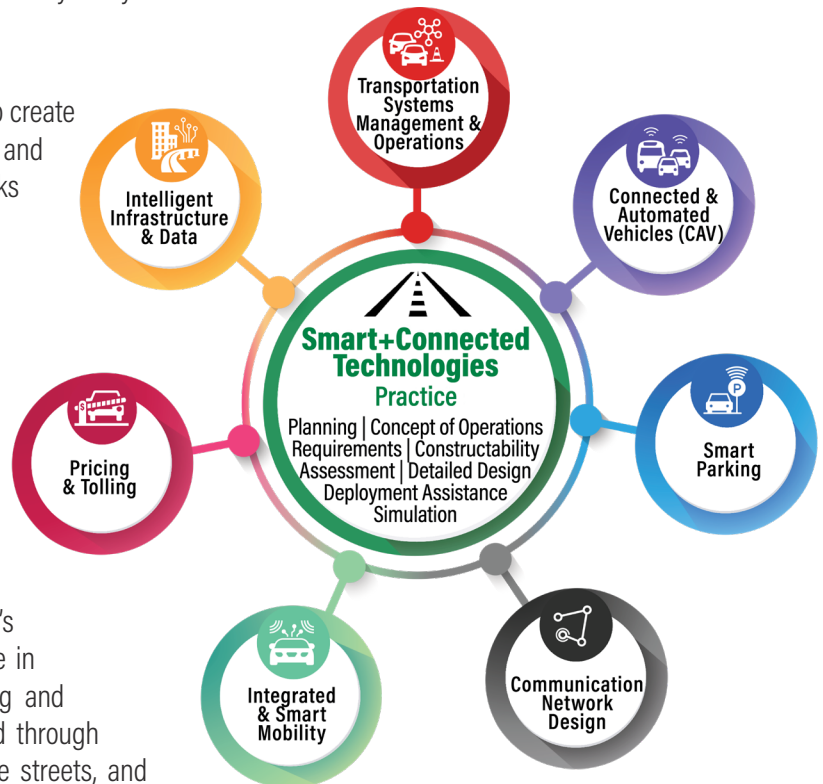
Our streamlined approach accelerate each task work order's milestone submittal through effective leadership and by eliminating redundancy. Our Project Manager, **Henri Belrose, PE**, and Task Order Manager, **Jimmy Mulandi, PhD, PE**, begin each task by quickly developing a contract-specific management plan, qualified staff, schedule, fee estimate, monthly reporting system, and public involvement approach, if applicable. Once a task is authorized by the county, we will work expeditiously to deliver it on time and within budget. We will track and illustrate W/MBE and D/SBE usage in our monthly progress reports. We will use cloud-based tools including ProjectWise, Bluebeam, Power BI, Zoom, and Teams to streamline communication, collaboration, and management.

Jimmy Mulandi has 17 years of engineering experience, which include an extensive background in transportation planning and engineering, operations and safety. He previously served as an embedded traffic engineering supervisor at the Florida's Turnpike Headquarters for nine years, supporting the Traffic Operations, Planning and the Environmental Management Office. His experience includes, but is not limited to, analysis and development of innovative intersection alternatives and configurations, data collection and analysis, traffic operations analysis and simulation, intersection and corridor studies, traffic impact studies, capacity analysis, traffic signal warrant analysis, signal timing design, traffic forecasting, safety analysis, express/managed lanes studies, and production/execution of interchange access requests and other traffic reports. He is highly skilled in VISSIM, Synchro, Highway Capacity Software, Sidra, Intersection Control Evaluation (ICE), Highway Safety Manual analysis methodologies, and the Interchange Safety Analysis Tool.

Planning

One of the goals of Lake County's Economic Action Plan is to create a business-friendly environment for pedestrians, bicyclists, and motorists. Well-planned and efficient transportation networks are the foundation of economic prosperity. WGI has helped numerous transportation agencies plan and develop landmark projects that will stand the test of time. We have addressed needs such as planning for urban and regional growth and investment, creating a prosperous downtown area through transit-oriented development, planning for new mobility strategies, and enhancing operations and connectivity for a transportation network.

WGI's planners and policy experts draw from analyses and recommendations to formulate meaningful and informed policy and planning decisions that are relevant to the client's future transportation needs. WGI has extensive experience in all aspects of urban and regional transportation planning and growth management. Transportation needs are addressed through context sensitive solutions, multimodal solutions, complete streets, and



flexible infrastructure design. Safety and *Vision Zero* campaigns raise the bar on predictive and preventative approaches to design, policy, and management. Depending on the roadway's context classification, pedestrians, bicyclists, motorists, and transit riders of all ages and abilities must be able to safely move along and across a complete street. At the local level, multimodal street design can support everyday trips through a variety of modes. Multimodal corridor projects provide complete streets, transit availability, and accommodation for safe movement of pedestrians and bicyclists. Implementation of transportation solutions requires a thoughtful planning process that engages stakeholders and end users from start to finish.

Henri and Jimmy will be supported by experienced WGI key planning staff, including:

- **Bill Evans, PE, AICP**
- **David Taxman, PE**
- **Ravali Kosaraju, PTOE**
- **Lynn Zolezzi, AICP**

Bill has 33 years of experience and is a senior transportation project manager actively engaged in leading WGI consultant teams through complex and controversial FDOT Project Development & Environment (PD&E) studies and National Environmental Policy Act (NEPA) corridor studies on major interstate, managed lanes, and arterial highways. Through a comprehensive understanding of planning, environmental effects analysis and engineering, successful alternative solutions are created, solving regional and local transportation needs. He also has extensive experience running public involvement programs and working with community leaders to gain consensus.

David brings 15 years of experience in traffic impact analyses, traffic modeling, signal warrant analyses, traffic calming studies, bus capacity analysis, complete street design, pedestrian facility design, traffic signal timing, multimodal studies, and traffic count surveys, as well as Transportation Demand Management (TDM) and Mobility Best Practices (MBP).

Ravali has 14 years of experience as a traffic engineer specializing in traffic impact analysis, traffic engineering and operations, traffic studies, traffic signals design, construction, and maintenance. She has worked for several local government agencies, managing teams, and providing reviews for consultants' work.

Lynn has 28 years of extensive experience providing professional planning and design services in the public and private sectors. She provided planning support for land acquisition through the eminent domain process and master planning for cities, neighborhoods, and property owners. She also facilitated the adoption of future land use plan amendments, modification to developments of regional impacts, rezonings, site plans, master planning, and plats. Lynn is qualified as an expert in interpreting comprehensive plans and land development regulations throughout Florida. She also provides expert witness testimony at trial, pretrial mediations, and order of take hearings.

Project Development & Environment Studies

Our PD&E process involves four major components: public involvement, engineering/environmental analysis, agency coordination, and documentation. Led by **Bill Evans, PE, AICP**, we will coordinate each PD&E study with Lake County and FDOT District 5 (when necessary) and assist in determining the class of action through the Efficient Transportation Decision Making (ETDM) process. The class of action may be a Categorical Exclusion (Type 1 or 2), Environmental Assessment or Environmental Impact Assessment. WGI staff are experienced in conducting all types of PD&E studies. We can also assist the County with document reviews and approvals through the Statewide Environmental Project Tracker (SWEPT) platform when required. WGI is fully capable of conducting PD&E re-evaluations to advance projects, conduct major design change re-evaluations or initiate the design phase.

The steps/process detailed on the following page are conducted in part or whole on every PD&E study.

1 Define Overall Objectives

- ✓ Work closely with County staff to establish the overall objectives of this project
- ✓ Evaluate the project in the context of other County initiatives
- ✓ Use objectives to guide the development of project alternatives

3 Establish Priorities and Design Criteria

- ✓ Bring together County goals and objectives, corridor opportunities and constraints, regulatory requirements, and stakeholder input
- ✓ Formulate priorities and develop comprehensive design criteria

4 Develop and Evaluate Alternatives

- ✓ Discipline leads will evaluate existing conditions, identify existing/available rights-of-way, evaluate future traffic projections, conduct analysis, environmental review, and develop acceptable alignments, typical sections and intersection configurations.
- ✓ The analysis to include an avoidance and minimization discipline review to reduce project effects and costs

5 Complete Preliminary Concept

- ✓ Prepare a preliminary concept plan detailing the project features that will confirm project objectives are met, based on the approved design criteria and comprehensive analysis

6 Identify and Engage Stakeholders

- ✓ Work with County staff to evaluate and plan stakeholder input throughout the study process
- ✓ Use our wealth of public involvement experience and unique skill set to learn the most from project stakeholders
- ✓ Use advanced visualization technology to quickly and effectively communicate project options

7 Coordinate with Regulatory Agencies

- ✓ Early coordination with regulatory agencies to improve the efficiency of regulatory compliance
- ✓ Use our familiarity with agencies to keep the project on track and avoid permitting hold-ups

2 Identify Project Purpose and Need

- ✓ Conduct reviews of the transportation and mobility vision identified in the Lake-Sumter MPO plans and the County's Comprehensive Plan
- ✓ Evaluate traffic projections through 2050

8 Gather Community Feedback

- ✓ Continue to engage the community throughout the course of the project
- ✓ Keep the stakeholders apprised of progress and gather feedback to refine the design along the way
- ✓ Work to make sure there will be no surprises for stakeholders and community members

9 Confirm Construction Cost Estimates

- ✓ Draw from current construction cost data for project cost estimates
- ✓ Track probable construction costs for accurate project programming

10 QA/QC and Documentation

- ✓ Use qualified senior professionals to perform cross-discipline reviews to identify incompatible elements between project components
- ✓ Our QC team will have no direct involvement in the project, which allows them to bring a fresh perspective to each review
- ✓ Our QA officer will sign off prior to all milestone deliverables verifying our QC process was followed and properly documented. The QA officer has the authority to stop any submittal that does not meet our standards for quality work
- ✓ Documentation to include a Public Involvement Plan and related material, traffic/safety/engineering analysis reports, environmental documents, among others.

11 Complete Optional Final Design

- ✓ Use our efficient systems and procedures to ensure a high-quality, comprehensive set of construction documents
- ✓ Use our built-in peer review and quality control (QC) program to rigorously check the final design to confirm completeness and constructability
- ✓ Provide the contractor a set of construction documents with all the information necessary to construct the project efficiently and cost effectively

Travel Impact Studies

WGI has a long history of conducting and reviewing traffic impact studies to ensure concurrency with both national and local policies and guidelines. We have conducted more than 30 traffic impact studies in the last year. We will conduct or review traffic impact studies per the Lake County's adopted policies, plans, land development regulations, land development codes, and the methodology letter agreed upon. We are familiar with the Lake-Sumter Metropolitan Planning Organization's (MPO) *Traffic Impact Study Methodology and Guidelines (2017)*. We conduct analyses following methods and guidelines documented in the latest editions of the Highway Capacity Manual published by the Transportation Research Board and the Trip Generation Manual published by the Institute of Transportation Engineers. We carefully assess the level of detail required for each study. This includes a thorough investigation of the site development and impacts, approved developments in the area, future land use map, changes in zoning, and local government comprehensive plan and amendments, among others. Where applicable, we consider internal capture and pass-by trips in estimating generated trips and determining the study type. We will adhere to the Lake-Sumter MPO adopted standard Level of Service (LOS).

Development of Regional Impact (DRI) Studies

Lake County has one approved DRI, the Summer Bay Development of Regional Impact. The WGI team will review Notice of Proposed Changes or monitoring/modeling analysis for the 351-acre DRI in accordance with Lake County Ordinance No. 2016-56. Our team has private planning experience with DRIs as well as public sector traffic review experience with large scale master planned communities and will review any new DRIs in accordance with Florida Statutes 380.06.

Travel Demand Modeling

WGI's partner, **Connetics Transportation Group (CTG)**, will provide travel demand modeling support. CTG has successfully supported various plans, corridor traffic and Bus Rapid Transit (BRT) ridership forecasting projects across the nation. CTG staff are both travel demand model users and developers, comprehending technical interactions within each model step and how they may impact multi-resolution modeling systems. CTG has successfully built state-of-practice travel models. For FDOT District 5, **CTG recently led the development of Version 7 of the Central Florida Regional Planning Model (CFRPM7)**, the model used for all Long-Range Transportation Plans (LRTPs) and many traffic studies in the region, including Lake County. CTG was responsible for developing, calibrating, and validating all of CFRPM7's components. Consequently, CTG knows **how to best apply CFRPM7 for different types of projects in the Lake County area**. For transit, the CTG Team has significant experience developing and applying the Federal Transit Administration's Simplified Trips-on-Project Software (STOPS) models. CTG developed FDOT Freight, Logistics and Passenger Operations' "Guidebook for Florida STOPS Applications" in November 2016, and recently provided a statewide workshop on STOPS in January 2021. CTG has developed and applied more than 20 STOPS models around the country, including: Tampa, Orlando, and Southeast Florida as well as Atlanta (multiple models), Corpus Christi, Columbus Ohio, Minneapolis-St. Paul (multiple models) and New Orleans.

Transit Planning

Our partner **Toole Design Group, LLC (TDG)** will provide transit planning support. TDG's transit planning and design expertise is built on experience working with transit agencies and MPOs throughout Florida and across the country on system development, regional coordination of policies and service, strategic planning, and stop/station design. TDG takes transit planning beyond the bus to include the interface between transit and bicycle/pedestrian infrastructure, safety, access, and equity. TDG has experience co-locating bikeshare with transit and has developed innovative designs for separated bike lanes, on-street parking, and transit stops. TDG's staff have experience working with LakeXpress on local service needs and coordination with LYNX on regional transit demands. TD has also worked with small and rural transit systems on integrating emerging technology and microtransit solutions.

Traffic Engineering and Safety

WGI is well versed in all traffic engineering services, from conducting traffic studies to development of contract plans for construction of signal infrastructure, traffic calming measures, and intersection safety and operations improvements. Our approach to any traffic engineering assignment focuses on the safety and function of the roadway corridor for all modes. WGI embraces the concept of *Safety by Design* and supports the Vision Zero safety program.

Henri and Jimmy will be supported by experienced WGI key traffic engineering staff, including:

- **George Knox, PE**
- **Brett Fuller, PE**
- **Acey Roberts, PE**

George has 10 years of experience in roadway and intersection design on state and municipal projects. He has served as the engineer of record in the development of roadway, traffic control, and signing and pavement marking plans. Brett brings 11 years of experience in engineering design of major/minor roadway facilities, plans production, vertical and horizontal geometric design, intersection design, signing and pavement marking, signalization, and intersection and corridor lighting design. Acey has 20 years of experience including his service as an embedded traffic design PM in FDOT District 1 and has experience in traffic signal design, intelligent transportation systems, safety countermeasures, CAVs and smart technologies.

Arterial/Intersection Operations and Safety Analysis

Arterial Analysis

Arterials are to be evaluated from the perspective of operational efficiency, safety, and roadway geometrics. WGI will conduct a comprehensive approach, including functional classification, access management, connectivity, and land use in alternatives development to ensure any proposed improvements, such as collector-distributor systems, auxiliary lanes, lane re-purposing, or complete streets will consider overall impacts to the entire transportation network and provide a safe and functional environment for all modes. Field reviews, qualitative assessments, and detailed operations and crash data analysis will also be conducted to estimate anticipated level of operations for proposed changes.

Intersection Analysis

Operations and safety are the two main components of detailed analyses of intersections. Both must be clearly understood to provide the right mitigations. WGI has developed countermeasures to improve intersection operations and safety which include signal and phasing changes, lane re-purposing, wrong-way entry measures, and innovative configurations. WGI will conduct qualitative assessment of operations and safety through field reviews. Analysis of traffic and crash data will provide further insight on existing conditions and help in developing mitigations. Our team is highly skilled in VISSIM, Synchro, HCS and SIDRA analysis. We will conduct intersection control evaluation (ICE) screening and look at other innovative configurations not included in the ICE tool. When needed, we will forecast traffic to verify future operations of proposed mitigations. We can also record video clips from VISSIM, prepare presentations and easy to understand material for public engagement and agency coordination. To provide a better understanding of the merits of the proposed improvements, we will conduct benefit and cost analysis whenever needed. We are experienced in quantitative analysis of future safety conditions following HSM/FDOT methodologies and interchange safety analysis tool enhanced (ISATe).

Signal Warrant Analysis

Signal warrants determine the minimum traffic conditions where a signal would be beneficial to an intersection's operational characteristics, with the understanding that a traffic signal is not always the best solution for traffic control or safety. WGI's initial step will be to conduct field reviews to qualitatively assess traffic operations, geometric conditions, traffic control, and safety concerns. We will then collect traffic data (24-hour, TMCs) to evaluate signal warrants in accordance with the MUTCD and FDOT's MUTS. We will apply right-turn volume reduction where applicable. Five-year historical crash data from CARS, Signal 4 or local agencies will be processed and studied to further understand safety concerns and conduct warrant analysis. Our analysts will review the detailed crash reports to verify the accuracy of the data provided. Operations analysis using Synchro will be used to estimate LOS, delay, and queue lengths. ICE screening will be conducted where applicable.

Traffic Counts

WGI has partnered with **Peggy Malone & Associates, Inc. (PMA)**, a firm specializing in traffic data collection. Established 20 years ago, PMA has conducted traffic counts for more than 2,000 projects in the last five years throughout the Southeastern and Mid-Atlantic U.S.

- **Traffic Data Collection Services:** 24-hour machine counts, vehicle classification, speed studies, turning movement counts, spot speed studies, intersection delay studies, origin-destination studies, vehicle occupancy studies, travel time studies, and other miscellaneous traffic surveys. Other services include development of condition diagrams, signal timing, and photography. All data collection efforts follow FDOT's MUTS specifications.
- **Traffic Data Collection Equipment:** PMA continually upgrades and increases equipment inventory and currently have hundreds of traffic counters, electronic turning movement boards, and automated video recording units for turning movements, and they use Tru-Traffic software to conduct travel time, speed, and delay studies.
- **Quality Control:** All data is verified in the field during collection before it is retrieved and checked for accuracy. Then the data is processed in PMA's headquarters. Traffic counts are reviewed by a registered Professional Engineer.

Roadway/Intersection Design, Traffic Signal Design, and Lighting

WGI makes safety a priority in all our projects, and we are committed to developing plans to address safety during our survey and data collection, project design, construction, and final operations. Upon notice to proceed, WGI will conduct field reviews and a comprehensive evaluation of existing roadway conditions using information gathered from desktop research, such as review of as-built plans and crash data analysis. There will also be a sidewalk ADA deficiency review that will outline a plan for correction. WGI will conduct a detailed analysis of individual crash reports to help determine additional safety features needed based on recurring trends. Safety improvements within WGI's expertise include intersection improvements, ADA upgrades, pedestrian/bicyclist safety improvements, turn lane widening/extension to increase capacity, access management median modifications, new intersection signalization and lighting, signal and lighting replacements, sidewalks, drainage, and local flooding remediation. WGI's structures group will analyze existing mast arms and strain pole assemblies to ensure all new signal layouts are structurally sound. WGI will also investigate flexible, retro-reflective backplates on all signal heads, which do not adversely affect the structural loadings of the mast arm or strain pole assemblies. Pedestrian detectors can be upgraded to include a raised tactile arrow to indicate crosswalk direction.

Traffic calming measures are essential for safe, friendly corridors for all users and specific measures are identified in the Lake County *Traffic Calming Procedures* document. We recommend 10 or 11-foot travel lanes as a traffic calming measure on low-speed roads. Coupled with a raised landscaped median, reduced-width travel lanes reduce vehicle speed. We will evaluate the use of chicanes and/or bulbouts for long stretches of roads without a signalized intersection. Alternative intersection designs may be considered, such as raised intersections or roundabouts. However, given limited right-of-way, these options may not be feasible in some areas. Additionally, we will analyze corridors for trip generators and pedestrian patterns near side street crosswalk locations and determine if any crossings warrant Rectangular Rapid Flash Beacon (RRFB) assemblies. When installed, RRFBs act as traffic calming measures due to the visibility of the flashing beacons. We will utilize AutoTurn software to maximize the effectiveness of traffic calming features while confirming design vehicles can access the roadway conveniently.

Sidewalk geometry will meet current ADA Standards for Accessible Design. These standards require maximum cross slopes of two percent. We suggest a 1.5 percent cross slope to allow for construction tolerances while ensuring compliance. Longitudinal slopes should not exceed five percent. If this is not achievable in a straight-line path, we will either meander the sidewalk to flatten out the running grade or use ramp and landing criteria to ensure ADA standards are met. Where power poles or other above ground fixed objects cannot be easily moved, the sidewalk will deviate around them and provide a two-foot safety buffer. Sidewalk placement criteria will be in the following order of desirability: ① as near the right-of-way line as possible, ② outside of the clear zone, ③ five feet beyond the limits of the full width shoulder, and ④ at the limits of the full width shoulder. In all flush shoulder locations, a minimum three-foot separation buffer from the paved edge of the shoulder will be designed. Drainage structures that must lie within or near sidewalks will be avoided, but if they are necessary, we propose to use structures and grate tops that are bicycle, pedestrian, and vehicle wheel load capable. This will maximize safety to the public and durability of the constructed design which will help to conserve ongoing maintenance budgets for the County.

WGI recommends conducting a pavement condition survey for rutting and cracking to determine appropriate milling depth. In areas where widening is needed, WGI recommends using asphalt base, which improves constructability and accelerates the schedule. Additionally, using asphalt base in areas where the water table is high will reduce the chances of pavement settlement via base erosion and improve the long-term serviceability of the pavement. We will follow Lake County's standards and regulations for transportation planning, design, and construction; stormwater design; and turn lane details.

Maintaining a mix of pedestrians, business and residential traffic, transit, and emergency vehicle access through a corridor during construction will be a priority. Pedestrian detours and diversions will be implemented per Index 102-660. We will provide the contractor with a contact matrix of parties, including Lake County School Board, LakeXpress, utility agencies, etc., that need notification at the start of each phase of construction. WGI also will note in the construction plans to coordinate with local emergency services, such as the fire department, so construction does not impede their ability to respond to unforeseen situations. We will coordinate with the appropriate agency for lane closure and detours on County/state roads.

The following strategies will be utilized to assist safe travel through work zones:

- Maintain or improve the quality of existing traffic operations in terms of flow rate and safety.
- Minimize the impact of construction vehicles entering exiting the work zone.
- Maintain reasonable access to adjacent properties/businesses.
- Coordinate with maintaining agencies.
- Accommodate school and transit routes.
- Communicate with the public about route changes and construction.
- Provide pedestrian routes and protections.

WGI will perform a field review and a photometric analysis to evaluate the current roadway lighting throughout a corridor or intersection. Additional lighting required will be discussed with the County and stakeholders to ensure compliance with Orlando Utilities Commission (OUC) and FDM design criteria for roadways, intersections, sidewalks, and shared use paths.

Geographic Information System (GIS)

Using WGI's custom built applications, clients can view, edit, and share data using a variety of GIS web-based mapping solutions, without the need to purchase expensive software or hiring dedicated staff. Users can leverage GIS data to make better decisions rapidly. WGI strives to be a leader in technology to increase efficiency and accuracy. Our GIS team utilizes the latest software, equipment, and work flows to provide the most innovative products and deliverables currently available. We have dedicated, highly trained, and qualified GIS project managers and specialists with experience providing geospatial services to multiple disciplines including transportation engineering, survey, structural engineering, parking solutions, architecture, subsurface utility engineering, landscape architecture, land planning, civil engineering, environmental sciences, and water resources. WGI also provides GIS support services to government entities, including Water Management Districts, Florida Department of Transportation, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, and the Army Corps of Engineers. GIS can provide efficiency, cost savings, and value to your organization. Real-time access to data allows real-time solutions to meet your project needs.

Public Engagement

WGI has developed a system of engagement for public involvement consisting of customizable Esri ArcGIS Online web applications to disseminate information to the public, solicit feedback, and track trends in stakeholder opinion. A story map will act as a web portal to distribute pertinent information such as project background/summary and other project details. A public input survey will be embedded in the story map to solicit public feedback on the project. An operations dashboard will be embedded in the story map to visually summarize the results of the public input survey if the County wishes to offer a higher level of transparency or the dashboard can be made available only to County staff to analyze data quickly, make informed decisions, and manage projects proactively. All components of the system of engagement will be accessible to the public or the County via a web browser through URLs and/or QR codes. WGI can host the system of engagement components on the County's behalf for the duration of the project or provide feature services and applications to seamlessly integrate into the County's existing GIS platform.

Controlling Project Quality, Schedule, and Cost

In order to provide quality deliverables and maintain the schedule and budget, WGI prepares a detailed project management plan (PMP) at the start of each project. This PMP fully addresses the coordination, public awareness, technical aspects, financial controls, quality control (QC), and scheduling requirements. The detailed plan contains a project contact list, project file directory, scope of services, negotiated man-hours, schedule, budget, and project-specific quality assurance (QA) manual with a QC plan.

WGI's experienced management team will focus on controlling the quality, schedule, and costs for every project. As shown on our organizational chart, WGI's team is led by Vice President and Project Manager, **Henri Belrose, PE**, along with Senior Vice President and Principal in Charge, **Nancy Clements, PE**. They lead our team of resources and maintain clear, proactive communications among the County, stakeholders, and subconsultants. Throughout each project, Henri and Nancy, along with each discipline leader, will be involved in project scheduling, team meetings, and providing constant peer review of reports, plans, and documents.



To manage the interdependent elements found in the projects anticipated with this contract, Henri will deploy project management controls tailored to the specific task. He will lead the team by integrating the total effort across all active tasks to achieve the technical success that the County expects. WGI's management team will focus on:

- **Managing proactively**—Regularly scheduled internal progress meetings will be held amongst the team members, ensuring the project progresses smoothly. Regular communication will ensure critical path items are identified and completed successfully.
- **Accelerating the start of critical path activities to assist in maintaining the County's schedule and budget requirements**—The key to success is the early coordination with County traffic forecasts, early data collection, conditions assessment, and early coordination with agencies and stakeholders to set the critical alignment parameters.
- **Building and maintaining relationships**—Working with public agencies, such as FDOT and SJRWMD, to control the permitting schedule.
- **Tracking the schedule**—WGI uses Microsoft Project for schedule management and tracking, allowing easy preparation of critical path method scheduling. It allows for unlimited numbers of activities, customized calendars, GANTT and PERT charting, cost loading and resource leveling of activities, and dynamic filter and report creation. In addition, Project is the best platform for preparation of base schedules, analyzing monthly schedule updates, performing time impact analysis and what-if scenarios, and documenting project progress.
- **Tracking the budget**—WGI uses a sophisticated internal budget tracking system that provides regular reports describing project labor charges, direct costs to the project, and relative percent of the fee utilized. We also use Deltek Vision software in projecting staffing needs. Deltek Vision is linked to budgeting software to provide accurate and continuously updated information, including a three-line diagram that compares planned performance to actual progress. This exercise ensures that any necessary staffing adjustments are identified and resolved as soon as possible.
- **Project compliance**—WGI will verify that deliverables meet the County's standards and requirements.

3 | PROPOSED SOLUTION

Quality, Schedule, and Cost

- **Document control** - WGI uses the proven ProjectWise content management software for all our projects. ProjectWise was specifically designed to manage the large interdisciplinary data collection and CADD requirements of projects. WGI will be the main hub for document control, status reporting, project communication, design collaboration, and CADD drawings. ProjectWise serves as a cloud-computing platform that gives team members—regardless of location or prime/subconsultant role—equal access for posting new documents, editing documents, making comments, and approving documents in real-time for all team members to see.
- **Management of subconsultants**—WGI is experienced at working in a team environment and has managed multiple contracts and subconsultants for state, local, and federal clients. We have excellent relationships with our proposed subconsultants and we require that they comply with our project work plan and QA/QC plan and provide timely cost and schedule inputs to the project manager. The project manager is responsible for managing and controlling cost and schedule performance for WGI’s subconsultant’s tasks.

Quality Assurance/Quality Control

Lee Dowden, PE, LEED AP, a vice president with WGI, will be our QA manager. He will sign off prior to all milestone deliverables verifying our QC process was followed and properly documented. Lee has the authority to stop any submittal that does not meet our standards for quality work. Our QC discipline leaders are senior professionals who are recognized experts in their respective fields, and have the breadth and depth of knowledge to perform cross-discipline reviews to identify incompatible elements between design components. Our QC team will have no direct involvement in the design development, which allows them to bring a fresh perspective to each review. Our QC process is based on establishing a culture of quality that includes self-checks, independent reviews, and QA. We will provide a project-specific QC plan detailing our formal red, yellow, green process for reviewing all construction documents. WGI also will oversee the quality of work performed by our subconsultant. Our subconsultants will be held to the same WGI standards for quality work and must provide proper documentation per the QC process.

