

## SENIOR PROJECT ENGINEER

As a professional engineer, Tamara's experience includes design, permitting, and preparation of civil site plans, specifications, and cost estimates for projects involving site and utility layout. She has extensive experience with permitting for multiple local, state, and federal agencies, such as the State of Florida, City of Jacksonville, City of Jacksonville Beach, Nassau County, Beaches Energy, Jacksonville Electric Authority, Florida Department of Environmental Protection, St. Johns River Water Management District, and the United States Army Corps of Engineers. Tamara's design emphasis has been drainage, specifically stormwater collection and management.

### RELEVANT EXPERIENCE

Sinai Residences of Boca Raton Phase 2 - Civil Engineering Services, Palm Beach County, FL, Leo A Daly. Civil engineering services provided for this project include design and construction documents, plans, details, and specifications for stormwater management; erosion and sedimentation control; paving, grading and storm sewer, earthwork, signing and pavement marking; potable water distribution; wastewater collection; dewatering system; existing system demolition; and providing an Engineer's Opinion of Cost. WGI also prepared and submitted permit applications to the applicable agencies, and provided utility coordination and construction phase services.

Central Park Commerce Center Phase 1 Services, Palm Beach County, FL, Cielo Data Centers, LLC. WGI provided surveying, planning, engineering, landscape architecture, and irrigation design services to develop more than two million square feet of data centers. The project, the largest single-site data center in the eastern United States, incorporates eight individual data centers ranging from 18 MW to 27 MW and is located on 138 acres in western Palm Beach County. WGI's innovative design concepts for design and construction infrastructure included traditional underground utilities (water, sewer, power, and communications), redundant power delivery, and dedicated water supply for the facility's cooling tower needs. The finished floor elevation of the buildings was designed more than four feet above the 500-year flood elevation.



# Tamara **Henderson**, **PE**

#### **REGISTRATIONS:**

Professional Engineer, FL, #PE61700, 2004

#### **EDUCATION:**

Bachelor of Science, Civil Engineering - University of Alabama, 1998

#### **CERTIFICATIONS:**

FDEP Stormwater Management Inspector

YEARS OF EXPERIENCE TOTAL: 22

WITH WGI: 3

#### 4840 Hoffner Avenue, Orlando - Environmental, Planning & Civil Services, Orange County,

FL, Dalfen Industrial, LLC. Working with Dalphen Industrial, WGI provided survey, planning, environmental, and civil engineering services for the 100,000 square foot warehouse site within the city of Orlando. The improvements included the development of a new warehouse building and associated parking and access improvements. Planning services included the entitlement process with the City of Orlando. Environmental services included the assessment and permitting to mitigate existing wetlands to accommodate the project. Civil engineering services included the development of construction plans and permitting with St. Johns River Water Management District, Florida Department of Environmental Protection, City of Orlando, and Florida Department of Transportation.

Immokalee Medical Clinic, Collier County, FL, Seminole Tribe of Florida. This project consists of a new medical and emergency service facility within the Immokalee Reservation of the Seminole Tribe. The complex includes medical facility, police station, and fire station to service the local community.

St. Petersburg / Madeira Beach KOA Campground, Pinellas County, FL, Kampgrounds of America, Inc. (KOA). The client reached out to WGI after receiving multiple notices of code violations as a result of unauthorized activity within the property including fill of mangrove trees along the shoreline, removal of protected trees from the interior of the property, and construction of impervious pavers. WGI coordinated with the County to develop a plan of action to resolve the code violations and still accomplish the goals of the unauthorized development for the client. A phased site plan was developed to show all desired improvements to get approved by the County under one review but developed over an extended time period. In addition, the drainage plan for the property was modified and permitted to accommodate the additional improvements and impervious area. Finally, a restoration and mitigation plan was developed to address impacts to the shoreline and interior trees to result in no net loss of ecological functions on the property.

OFFICE LOCATION: JACKSONVILLE

#### **Previous Work Experience:**

**PGA Tour Properties Stormwater Modeling Services, Ponte Vedra Beach, Florida.** Project Engineer for investigation and modeling services for the existing Sawgrass Players Club Association, Inc. stormwater management system in Ponte Vedra Beach, Florida.

East Peyton Parkway, St. Johns County, Florida. Project Engineer responsible for roadway drainage and stormwater management design.

In-Fill Lot Grading Plans, Jacksonville, Florida. Project Engineer and Task Manager for individual in fill lot grading plans. Currently provided more than 200 lot grading plans for this task.

**Anthem Lakes Assisted Living Facility, Jacksonville, Florida.** Project Engineer for the design and permitting of an assisted living facility, which included the construction of three buildings and associated infrastructure including roadways and three stormwater management facilities.

**Southside Oaks Phases 1 and 2 Single-Family, Jacksonville, Florida.** Project Engineer for the design and permitting of a 90-lot single-family subdivision, which included a recreation area and a stormwater management facility.

**Branan Fields Healthcare Community, Clay County, Florida.** Project Engineer for the design and permitting of a skilled nursing facility with associated utilities and stormwater collection and management.

Miller Electric Company (MECO) Office Site Redevelopment, Jacksonville, Florida. Project Engineer for the design and permitting of the redevelopment of the MECO office building, including expansion of the existing stormwater management

**Duval Owens T-Road Infrastructure, Jacksonville, Florida.** Project Engineer for the design and permitting of project infrastructure, including roadway, water, sewer drainage, and stormwater management.

River City Rehabilitation Facility, Jacksonville, Florida. Project Engineer for the design of a skilled nursing facility, which included the expansion of shared-use stormwater management facility.

Reed Street Drainage Improvements, JB Coxwell Contracting, Jacksonville, Florida. Project Engineer for the design and permitting of stormwater collection improvements to alleviate localized flooding.

University of Florida (UF) Health Site at SW Corner of A1A William Burgess, Nassau County, Florida. Project Engineer responsible for stormwater management design of a 45,000-sf medical office facility along SR 200.

Integra at River City Apartment Complex, Jacksonville, Florida. Project Engineer for the design and permitting of a 300-unit apartment complex and associated infrastructure. Permitting included modification of an existing SJRWMD master drainage permit.

**Hudson Crossing Subdivision, East Parcel, Jacksonville, Florida.** Project Engineer responsible for the stormwater management design of a 40-lot single family subdivision, which included two stormwater management facilities and an extensive drainage study to ensure discharge flows from the on-site wetlands were maintained.

Fernandina Beach Stormwater Master Plan Update, Fernandina Beach, Florida. Project Engineer responsible for stormwater modeling. GAI updated the nearly 20-year-old Stormwater Master Plan for the City of Fernandina Beach.

University of North Florida – Continuing Civil Engineering Contract, Jacksonville, Florida. Project Engineer, since 2014, working under the direction of a Senior Professional Engineer on various projects for the University under this current continuous civil engineering contract.

**Durbin Development of Regional Impact (DRI), St. Johns County, Florida.** Project Engineer as part of design and permitting of all the required on-site and off-site infrastructure necessary to serve the project, including master utility plans, master stormwater management considerations, and various other engineering components.

Animal Care and Protective Services, City of Jacksonville, Jacksonville, Florida. Civil Engineer for the City of Jacksonville Animal Care and Control Facility, a 48,000-sf building, a design-build project. Project tasks included civil site, storm drainage, and stormwater treatment design, as well as potable water distribution and sanitary sewer collection system design. Permitting was coordinated with SJRWMD, JEA, and the City of Jacksonville. LEED Gold Certification. Professional Services: 2012; Construction 2012



**Duval County Courthouse, City of Jacksonville, Jacksonville, Florida.** Civil engineer for the 800,000-sf Duval County Courthouse in downtown Jacksonville, Florida, a design-build project. Project tasks included civil site, roadway, and storm drainage design, as well as potable water distribution and sanitary sewer collection system design. Permitting was coordinated with the City of Jacksonville, JEA, and FDEP. The project achieved LEED certification (Silver). Professional Services: 2012; Construction 2012

Marsh Inlet, Sophia's LLC, Jacksonville, Florida. Civil Engineer for the design and permitting a nine-lot residential subdivision. The project required civil site, roadway, and drainage design, including a 360-linear-foot roadway, potable water distribution and sanitary sewer collection systems, and a stormwater treatment facility with a bulkhead. Permitting was coordinated with the City of Jacksonville Beach, Beaches Energy, and SJRWMD.

Arlington Middle School, Duval County Public Schools, Jacksonville, Florida. Civil Engineer for preparation of civil site plans, specifications, and cost estimates for a 163,000-square-foot (sf) new school facility. Services included site and utility layout and design with permitting of the stormwater management facility through SJRWMD. Permitting of the water and sanitary sewer systems including a new pump station was through JEA, Regulatory and Environmental Services Department for the City of Jacksonville, and the Florida Department of Environmental Protection. The project included the review by the State of Florida to verify compliance with the requirements for educational facilities.

John E. Ford K-8 Facility Improvements, Duval County Public Schools, Jacksonville, Florida. Civil Engineer for the preparation of civil site plans and specifications for improvements to John E. Ford necessary to convert the campus from an elementary school to a K-8 facility. Design included new parking areas, reconfiguration of the existing parking area, and modification of the existing stormwater management facility. Permitting was coordinated with SJRWMD and the City of Jacksonville. Post design services such as shop drawing review and requests for information (RFI) response were also provided.

North Campus Childcare Center, Florida Community College of Jacksonville, Jacksonville, Florida. Civil Engineer for the preparation of civil site plans, specifications, and cost estimates for the play area at the North Campus Childcare Center. Major project tasks included site layout, hydrologic analysis of the watershed, and stormwater management design. Permitting was coordinated with SJRWMD.

#### **Civil Works**

Herbert Hoover Dike Rehabilitation and Repair, Reach 1/Subreach D Design Documentation Report, Plans, and Specifications, USACE Jacksonville District, Florida. Civil Engineer for the preparation of design documentation report, plans, and specifications. This project consisted of analysis and design of seepage control measures to prevent piping of embankment and foundation materials and improve the stability of the embankment without adversely affecting adjacent private lands.

Herbert Hoover Dike Rehabilitation and Repair, Reach 1/Subreach C Design Documentation Report, Plans, and Specifications, USACE Jacksonville District, Florida. Drainage Engineer for the preparation of design documentation report, plans, and specifications. This project consisted of analysis and design of seepage control measures to prevent piping of embankment and foundation materials and improve the stability of the embankment without adversely affecting adjacent private lands.

Routine Levee Safety Inspections, South Florida Region, USACE Jacksonville District, Clewiston, Florida. Levee Inspection Coordinator for three levee systems in Clewiston. This project consisted of levee routine inspections to verify the proper operation and maintenance of system components in accordance with nationwide USACE standards.

Periodic Levee Inspection #11, Miami Region, USACE Jacksonville District, Florida. Drainage Engineer for levee inspections and periodic inspection reports. This project consisted of levee safety periodic inspection to verify proper operation and maintenance, evaluate operational adequacy, evaluate structural stability of individual structures and system segments, review design criteria identifying changes in current design standards, identify features to monitor over time, and improve the ability to communicate the overall condition of each system through a standardized data base.

Periodic Levee Inspections, Multiple Locations, USACE Jacksonville District, Florida. Quality Assurance/Quality Control Review of periodic inspection reports for 13 levee segments and/or systems in multiple regions, including South Florida, Puerto Rico, and St. Croix (U.S. Virgin Islands). This project consisted of levee safety periodic inspection to verify proper operation and maintenance, evaluate operational adequacy, evaluate structural stability of individual structures and system segments, review design criteria identifying changes in current design standards, identify features to monitor over time, and improve the ability to communicate the overall condition of each system through a standardized data base.



#### Drainage Design

Master Drainage Plan, Suwannee County Airport, Suwannee County, Florida. Civil Engineer for the design of the Master Drainage Plan for this 206-acre drainage basin, 168 acres of which will be for future development. Design included construction of five interconnected stormwater treatment ponds designed to hold the 10-day/100-year storm with no discharge. While wetlands were identified within the property, the ponds were designed to work with the wetlands and it is anticipated that over the years new wetlands will emerge due to the depth of the ponds as they relate to the existing wetlands.

## Argyle Forest Boulevard Widening Segment II, Jacksonville Transportation Authority (JTA), Jacksonville, Florida.

Drainage Engineer for the improvement of a 1.9-mile section of roadway from 2-lane to a 4-lane. Designed paving and local drainage improvements, concrete box culvert extension including gravity wall and mechanically stabilized earth (MSE) wall design, utility relocations, signing and pavement marking, signalization, lighting, and landscaping; and performed Floodplain Compensation Facility design.

#### **Project Management**

General Engineering Services, South Florida Water Management District (SFWMD), Florida. Project Manager and Civil Engineer for various civil projects as part of the miscellaneous contract. Projects included the PC15-C18 Project Culvert Replacement, which included removal of the existing project culvert and replacement with dual concrete box culverts along with a control building, telemetry, slide gates and site restoration (reshaping the banks, rip rap, and grassing), and the maintenance plans for SFWMD Canals and Stormwater Treatment Area Structures, which called for the development of maintenance plans and specifications for sediment removal in District canals located immediately upstream of stormwater treatment area (STA) inflow structures.

Emergency Action Plans for High Hazard Structures, SFWMD, Florida. Project Manager and Civil Engineer for the development of emergency action plans (EAP) for 12 structures within the boundaries of SFWMD, which safeguard lives and reduce damages to properties of citizens who inhabit in areas that could be affected by flooding. The EAPs outlined hazard triggers, identified procedures, and provided a concept of operations to reduce the impact of emergency event and enabled the water control structure to recover from potential failure and return to normal operations.

#### Permitting

SR 26 Safety Improvements, Milling and Resurfacing, FDOT, Alachua County, Florida. Project Engineer for milling and resurfacing SR 26 from 14th street to 175 ft west of railroad track in Alachua County, replacing non-functional sidedrains, placement of the new guardrail, and updating the guardrail end sections, constructing bridge approach railing and clean and seal the joints at Bridge No. 260033 over hatchet creek, replacement of the existing pull boxes, and re-looping signalized intersections, upgrading some signs and pavement markings.

SR 21/Blanding Boulevard Milling and Resurfacing, FDOT, Duval County, Florida. Project Engineer for milling and resurfacing of SR 21 (Blanding Boulevard) from Collins Road to 103rd Street in Duval County, replacing non-functional sidedrains, installing end treatments to some cross drains, constructing paved shoulders from Collins Road to Morse Avenue (as needed), constructing sidewalks from Morse Avenue to 118th Street, signals loop assembly replacement, pedestrian signals installation, signing and pavement markings, and special marking for JTA's bus lane pilot project from Morse Avenue to 103rd Street.

SR 33 Milling and Resurfacing, FDOT, Polk and Lake Counties, Florida. Project Engineer for milling and resurfacing SR 33 from Polk County line to 200 +/- south of SR 50 in Lake County, replacing non-functional sidedrains, replacement of an existing traffic monitoring site (TMS) loops and a pull box, placement of new guardrail and updating existing guardrail end anchorage assemblies, pavement markings, and inverted rib profile markings.

#### Program Management

Façade Grant Program, Jacksonville Economic Development Commission (JEDC), Jacksonville, Florida. Program Manager for a grant program that provided funds to Small Businesses within the Jacksonville Metropolitan area to improve the aesthetic quality of their business, thus increasing their earning potential. Acted as point of contact between JEDC, the small business owners, and the contractors hired to perform improvements to the various businesses.

#### Additional Major Projects



#### TAMARA HENDERSON, PE | PAGE 5

SR 25/US 27 Preliminary Engineering Report and Project Development and Environment (PD&E) Study, FDOT District Five, Lake County, Florida. Project Engineer for the evaluation of design improvements for 27 miles of SR 25/US 27 in Lake County from a 4-lane rural to 6-lane rural roadway. Responsible for development of the study, which included analysis of three alternatives that minimized right-of-way (ROW) and environmental impacts. Also included an alternative for the total avoidance of the Lake Louisa State Park area.

**SR 500/US 441 Widening and Reconstruction, FDOT District Two, Tavares, Florida.** Project Engineer for design improvements for 2.0 miles of SR 500 in the City of Tavares from a 4-lane urban to 6-lane urban; included extensive drainage design, including a pond siting report, cross drain analysis, and storm sewer design. Proposed alignment was designed to minimize ROW impacts through the City of Tavares and local businesses. Roadway design included intersection improvements, retaining walls, signing and pavement markings, traffic signals, lighting, traffic control, and utility adjustments.

SR 115 Milling and Resurfacing (Arlington Expressway, Lem Turner Road), FDOT District Two, Jacksonville, Florida. Project Engineer for the milling, resurfacing, drainage repairs, intersection improvements and pavement reconstruction of 12 miles of SR 115. The Arlington Expressway portion included major drainage and full pavement repairs, as well as detailed MOT plans. Improvements involved depressed 4-lane freeway section and frontage road systems with major intersections at University Boulevard, Cesery Boulevard, Arlington Road, Lem Turner Boulevard, which included milling and resurfacing of 2-lane rural facility from I-295 north to the Nassau County Line.



