

EDUCATION:

Master of Science, Civil and Environmental Engineering, Florida International University
Bachelor of Science, Civil and Environmental Engineering, University of South Florida
Construction Management Certificate Program, Florida Atlantic University
Small Business Executive Program, Florida State University, College of Business
FES/FICE Florida Engineering Leadership Institute

REGISTRATIONS:

Registered PE, Florida #54731
LEED Accredited Professional
EPA/FDEP NPDES Instructor
OSHA Trench Safety Certificate

AFFILIATIONS:

FICE/ACEC-Florida, Past-President
NSPE 2003, National Young Engineer of the Year
FES Broward, Past-President
City of Coconut Creek Environmental Advisory Board
Stranahan H.S. Advisory Board
Broward County Construction Advisory Board, Vice-Chair

PUBLICATIONS:

“Determining the Cause of Activated Sludge Foaming and Bulking at the Sawgrass WWTP in Sunrise, Florida”, AWWA/FWEA State Conference 1999

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SUMMARY

James F. Thompson, P.E., LEAD AP[®] has worked in South Florida since 1996 on civil engineering projects related to municipal utility and right-of-way improvements, HDD projects, FEMA grants, CDBG grants, Development of Regional Impact (DRI), value engineering, annexation studies, infrastructure valuation studies, peer review reports, expert witness testimony, land planning, platting, parcel dedications, infrastructure and site civil design, permitting, geotechnical testing, construction inspection and contract administration for private and municipal clients. Mr. Thompson's municipal experience includes large multi-phase neighborhood redevelopment projects, minor treatment plant improvements, utility and right-of-way improvements, and various new municipal projects such as parks and schools.

Mr. Thompson brings to each project a unique approach which emphasizes teamwork and collaboration between all team members in order to identify and resolve issues early. It is this style of project management that ensures the final design plans meet the client's needs as well as the permitting criteria while staying on schedule and within the anticipated budget. This project approach works exceptionally well for design-build projects.

EXPERIENCE

Fort Lauderdale Lift Station D-38 Improvements, Fort Lauderdale, Florida. Engineer-of-Record for the Pump Station D-38 Upgrades. The scope included the design, permitting and construction inspection associated with temporary bypass pumping, rehabilitation of existing wet well, replacement of pumps and all equipment, replacement of electrical service from 240 volts to 480 volt supply, replacement of electrical equipment including power panels, pump control panels, instrumentation panels, and station lighting, replacement of lightning and power surge equipment as well as a combustible gas detector, redesign of influent gravity main and manholes, redesign of force main and connection to manifold system, raised rim elevations and electrical services to meet current flood requirements, roadway repair, and median landscaping.

20 inch HDD – 320 LF HDPE Water Main Design/Build, Fort Lauderdale, Florida - Design services were provided for the horizontal directional drill of a new 20 inch potable water main under Broward Boulevard in the middle of State Road 7. The project had to be coordinated with the City of Fort Lauderdale, the City of

Plantation, and the Florida Department of Transportation. The project was completed as part of a design



alternative related to the Broadview Park Neighborhood Improvement Project by the Broward County Water and Wastewater Division. T&A was the engineer-of-record for the HDD design of the new 24 inch water main, assisted with permitting efforts, conducted construction inspection, and designed the required MOT plans for State Road 7 and Broward Boulevard. The project was completed on time and had caused very little impact to the public during construction.

42 inch HDD - 1,500 LF HDPE Reclaimed Water Transmission Main, Broward County, Florida – As the prime consultant and engineer-of-record of this 11-mile large diameter pipe project, services include preliminary design report, design, permitting, bidding assistance, and construction administration. The project is composed of two (2) bid packages; Bid Package #1 is comprised of 5 miles of a 42 inch pipe and Bid Package #2 is comprised of 6 miles of 24 inch pipe. Multiple corridors were evaluated, and cost comparisons completed for each alternative. The final design requires the installation of the proposed reclaimed water transmission main in FDOT and SFWMD right-of-way. Permitting efforts includes multiple agencies and municipalities. The estimated construction cost for the project is approximately \$35 million.

12 inch HDD – 3,700 LF HDPE Water Main Design/Build, Broward County, Florida. As the engineer-of-record on the Design/Build team, T&A completed the design, permitting and construction inspection for the North Springs Improvement District (NSID). The proposed 12 inch water main connects the NSID's water treatment plant to the Palm Beach County Water Utilities potable water distribution system through an aerial crossing of the Hillsboro Canal. Five (5) HDD's were designed ranging from 600 ft to 800 ft in length for a total HDD length of 3,700 LF.

16 inch HDD – 450 LF HDPE Water Main, Palm Beach County, Florida. As the Prime Consultant, T&A completed civil design for the on-site and off-site improvements required for a new charter school. The offsite improvements included the widening of Lyons Road as well as the addition of over a half a mile of a 16 inch potable water main, 20 inch reclaimed water main, and an 4 inch sanitary sewer force main. There were three (3) HDD sections to avoid existing box culverts. Each HDD was approximately 450 ft in length.

20 inch HDD – 450 LF HDPE Reclaimed Water Main, Palm Beach County, Florida. As the Prime Consultant, T&A completed civil design for the on-site and off-site improvements required for a new charter school. The offsite improvements included the widening of Lyons Road as well as the addition of over a half a mile of a 16 inch potable water main, 20 inch reclaimed water main, and an 4 inch sanitary sewer force main. There were three (3) HDD sections to avoid existing box culverts. Each HDD was approximately 450 ft in length.

4 inch HDD – 450 LF HDPE Sanitary Sewer Force Main Lyons Road Water Main and Force Main HDD, Palm Beach County, Florida. As the Prime Consultant, T&A completed civil design for the on-site and off-site improvements required for a new charter school. The offsite improvements included the widening of Lyons Road as well as the addition of over a half a mile of a 16 inch potable water main, 20 inch reclaimed water main, and an 4 inch sanitary sewer force main. There were three (3) HDD sections to avoid existing box culverts. Each HDD was approximately 450 ft in length.

North Andrews Gardens Neighborhood Improvement Project (NAGNIP), Broward County, Florida. Services provided for this 730-acre community included design permitting and construction administration of eight (8) bid packages for the project with an estimated \$120 million construction budget. Specific tasks included: Basis of design report (BODR); modeling and design of the water distribution system, sanitary sewer transmission system and stormwater system; value engineering sessions; construction/contract administration; public relations and information campaign; Homeowner Association meeting presentations; permitting of all associated design work with various jurisdictional agencies; Preparation of bidding documents; landscaping and entry sign features. **Central County Neighborhood Improvement**



Project (CCNIP) North Bid Packages, Broward County, Florida. Completed the design, permitting and construction administration of four (4) construction bid packages for the communities of Franklin Park, Washington Park, St. George East, and St. George West. The project area included existing residential and commercial properties, the Broward Sheriff's Office, a county library, two county schools, three community centers and several county parks. Design improvements included water distribution systems, sanitary sewer collection and transmission systems, stormwater drainage systems, roadway, sidewalks, pavement markings, landscaping and neighborhood signage, and art in public places. Total CCNIP budget was nearly \$150 million.

Garden Acres Industrial Area Design Build, Broward County, Florida – This heavy industrial area of the City of Oakland Park required a new sanitary sewer system and water main improvements. A traditional gravity sanitary sewer system was not a design alternative, as a result T&A had to be creative and design a low-pressure grinder pump station system with a common low-pressure force main. Special accommodations were taken to reduce future surface conflicts for existing businesses, as well as provide convenient locations for future sanitary sewer connections. T&A served as the engineer-of-record as well as the CEI for this design/build project. The project required special permitting efforts since the water and sewer approvals must come from the City of Oakland and the City of Fort Lauderdale, since they were the master provider. The site civil development included the upsizing and abandonment of existing potable water main for service and fire suppression, the replacement of the existing septic system with a shallow sanitary sewer collection system equipped with grinder pumps and service connections for individual properties in the project area, horizontal directional drilling to connect to the existing City sanitary sewer system and pavement marking and signage plan. Scope included the preliminary design, design, permitting and construction observation services; pipe installations, water main pressure tests and lift station startup.

Florida Keys Overseas Heritage Trail (FKOHT) CEI, Monroe County, Florida. Florida Keys Overseas Heritage Trail extend from Layton to Channel 5 Bridge, mile marker 68.4 TO 70.8. The FKOHT is an eight (8) foot to twelve (12) wide pedestrian and bike path from Key Largo to Key West. Florida Department of Environmental Protection (FDEP) required Construction Engineering and Inspection (CEI) services for the various phases of the FKOHT. CEI services were completed in conjunction with FDOT and FDEP staff. T&A was the project manager and engineer-of-record for the CEI effort. Responsibilities included attending weekly meetings which coordinated construction progress, project schedule, local events schedule, unforeseen conditions, design changes, coordination with FCAA, FPL, and other utilities, coordination with other agencies such as FDOT and the City of Layton, pay request reviews, change order reviews, and final close-out review and documentation.

Educational Corridor Improvements Construction Engineering Inspection (CEI) Services, City of Coconut Creek, Florida. 1.5 miles of Coconut Creek Parkway was improved to promote pedestrian and biking connectivity for several large institutions, including the Wynmoor Retirement Community, Broward County North Regional Library, Broward College North Campus, Atlantic Technical Center, Coconut Creek High School, Federal Social Security Building, Dave Thomas Educational Center, Technological University of America, Coconut Creek Community Center, Coconut Creek Elementary School, several churches and various businesses. CEI services were completed.

Western-Eastern Shores Street Improvements, North Miami Beach, Florida. This portion of the City's Improvement Program consisted of stormwater drainage improvements, streetscaping, landscaping, road design and pavement marking and signage. Final construction budget was just over \$500,000.

Davie Travel Center Expansion 595 Truck Stop, Town of Davie, Florida – Thompson & Associates were retained to provide Civil Engineering Services for the 595-truck stop expansion and additional truck parking



facility on a 20-acre parcel located south of Interstate 595 on State Road 7 in Town of Davie. The project scope included additional 375 truck parking stalls, stormwater system including lake, swales and a drainage collection system, water main extension for fire protection, prefabricated restrooms and guard gate, site lighting and landscape. As the Engineer of Record T&A was in charge of the preparation of the site plan to accommodate the parking spaces and provide proper circulation for large trucks, preliminary design, final design, permitting, bidding assistance, and construction inspection services. Infrastructures included potable water main extension, fire main extension, site grading, storm water system, signage, pavement marking, and erosion control plans.

Happy Hollow Charter School, Palm Beach County, Florida – A 2,435 student private charter school located on a 22-acre parcel property north of Atlantic Avenue and west of Florida's Turnpike in unincorporated Palm Beach County. The school will be developed as two (2) schools, a lower school for elementary grades and an upper school for middle and high school students. The amenities for this K-12 charter school include an equestrian trail, tropical fruit grove, soccer field, basketball courts, student garden and secured bicycle storage. Offsite roadway improvements required for the development of the school include, widening of Lyons Road from 2 to 4 lanes divided as well as right and left turn lanes and median openings. Intersection improvements are also included at Happy Hollow Road and Lyons. The project consists of full site civil development including an onsite gravity sanitary sewer system, 4,300 LF of 4" force main and a private lift station (1,200 gpm), 4,900 LF of 8" potable water main, 3,400 LF of 16" water main extension, fire suppression system, 3,500 LF of 20" reclaimed water main, surface water management system, grading, pavement, sidewalks, pavement marking and signage, and SWPPP plans.

Wellington Charter School and Daycare Facility, Village of Wellington, Florida - Thompson & Associates were retained to provide Civil Engineering Services for the design the charter school approved for 1,500 students, located on an 8.0-acre parcel on State Road 7 in the Village of Wellington. The amenities for this K-8 charter school includes an all-purpose field, cover playground, and secured bicycle storage. As part of the site development, a bridge and aerial water main crossing over a canal, road improvement to an adjacent property, as well as right turn lane and left turn lane additions. As the Engineer of Record T&A was in charge of the preparation of the project due diligence report, preliminary design, final design, permitting, bidding assistance, and construction inspection services. Infrastructures included potable water main extension, sanitary sewer collection system, parking lot and access road, site grading, storm water system, pavement marking and signage. Permitting was completed through FDOT, LWDD, SFWMD, PBC Land Development, PBC Water Utilities Department, and PBC Health Department.

Trails Charter School, Palm Beach County, Florida – Thompson & Associates were retained to provide Civil Engineering Services for the design the private charter school approved for 1,240 students, located on 7.5-acre parcel near Hypoluxo Road and Military Trail in unincorporated Palm Beach County. The amenities for this K-8 charter school include an all-purpose field, cover playground, and secured bicycle storage. As part of the site development, a signalized intersection was created, parking lot improvement to an adjacent property, almost ½ mile of 12" force main, as well as right turn lane and left turn lane additions. As the Engineer of Record T&A was in charge of the preparation the project due diligence report, preliminary design, final design, permitting, bidding assistance, and construction inspection services. Infrastructures included potable water main extension, sanitary sewer lift station and transmission system, parking lot and access road, site grading, storm water system, pavement marking and signage.

Goldenrod Charter School, City of Orlando, Florida - Thompson & Associates were retained to provide Civil Engineering Services for the design the private charter school approved for 1,415 students, located on 4.2-acre parcel near Orlando International Airport. The amenities for this K-8 charter school include an all-purpose field, soccer field, cover playground, secured bicycle storage, and covered drop-off and pick-up



area. As part of a greater master planned property, the design had to be completed with future phases of the development in mind. As the Engineer of Record T&A was in charge of the preparation the project due diligence report, preliminary design, final design, permitting, bidding assistance, and construction inspection services. Infrastructures included potable water main extension, fire main extension, reclaimed water main extension, gravity sanitary sewer system, parking lot and access roads, site grading, storm water system, pavement marking and signage.

Hallandale Beach Fiber Optic Cable Master Plan, City of Hallandale Beach, Florida. Design of over 25,000 LF of fiber optic cable connecting City facilities, included community centers, City parks and recreation sites, sanitary sewer lift station SCADA systems, fire station communication systems, police traffic cameras, and emergency centers. The Master Plan divided the entire system into 4 separate phases. The technical criteria packages were developed in order to advertise the design/build procurement contracts.

Port Everglades Slip 1 Expansion Project - MARAD Grant Writing, Broward County, Florida. As the Prime Consultant, T&A completed the Grant writing effort for this \$25 million MARAD Port Infrastructure the Grant Request was completed on September 16, 2019 from the U.S.D.O.T. Maritime Administration. The scope included working closely with Port staff and reviewing multiple Port documents, such as the Port's Mater Plan, several Port studies, numerous agreements with other agencies, as well as completed and proposed Port infrastructure projects. The Grant Request was for financial assistance to offset the approximate \$150 million budget for the Slip 1 Expansion Project. The Grant is currently under review by MARAD.

County-wide Grant Writing and Administration, Broward County, Florida. This two (2) year continuing contract with the Broward County Office of Intergovernmental Affairs & Professional Standards covers all types of grant services, from research and applications, to administration and close-out. The contract is open to all departments and divisions under the authority of the Board of County Commissioners and expires in 2012. Included to date have been the \$3 million FEMA grant close-out for the North Andrews Gardens Neighborhood Improvement Project, and the \$1.5 million FEMA grant close-out for the Broadview Park Neighborhood Improvement Project.

Canopy, Sidewalk and Drainage Improvements for the Palm Beach County School Board, Palm Beach County, Florida. This design / build project included the site civil development of the new canopy, sidewalk and drainage improvements for over 20 schools throughout the school district. The project focus was on student and staff safety as well as flood protection of school property.

Downtown Master Plan Review, Town of Lantana, Florida. Responsible for reviewing the Downtown Master Plan and determining the feasibility of the implementation due to drainage and ROW concerns. Created GIS coverages of the downtown documented ROW surveys. Presented findings to the Town Council.

Port Everglades NPDES Stormwater Permitting, Broward County, Florida. NPDES permitting was completed for a private client in Port Everglades. Stormwater drainage flow and possible contaminants were evaluated and inspections of the site were completed and documented in order to comply with FDEP NPDES requirements.

Port Everglades Air License Permitting, Broward County, Florida. Air License permitting was completed through the Broward County Environmental Protection and Growth Management Department Pollution Prevention Division for a private client in Port Everglades. The aggregate transfer operation utilized three (3) hoppers for offloading bulk aggregate with potential for airborne particulate emissions.



Bulkhead Replacement Project, Town of Lake Park, Florida. Designed a replacement bulkhead for an existing aging bulkhead for approximately 1,100 linear feet of a City park. The bulkhead was located on the environmentally sensitive Lake Worth Lagoon. Design considerations included public safety for the upland portion of the City park, as well as protection of protected aquatic species of plant and animal life such as seagrass, coral, and manatees.

Florida Keys Storm Water Improvement Project, Lower Matecumbe Key, Islamorada, Florida. Islamorada secured grant funds from FDOT for stormwater quality improvements along US 1 on Lower Matecumbe Key. Along with stormwater improvements, a brick paver bike path and special salt tolerant landscaping were added. A special public information session was held with local residents and business owners to incorporate their interests into the final design. Special considerations were made for endangered plant and animal species located on the fringes of the project area.

Lazy Land Mobile Home Park Sanitary Sewer Improvements, Fort Lauderdale, Florida - The 9.82-acre property contained 14 septic tanks that served 121 mobile homes, clubhouse and a laundry facility. A new sanitary sewer collection system with four (4) low pressure grinder lift stations were design, permitted and installed in order to allow the septic tanks to be abandoned. The low-pressure force main discharged into an existing Broward County sanitary sewer manhole.

ARAMARK Uniform and Career Apparel, LLC Facility, Pompano Beach, Florida - ARAMARK is a leading provider of uniforms and workplace supplies to over 300,000 clients across a variety of industries nationwide. The proposed Pompano Beach facility is an industrial laundry facility permitted to discharge 200 GPM of pretreated process water into an existing 8" force main operated by Broward County Water and Wastewater Engineering Division. Thompson and Associates was retained to prepare plans and calculations for the proposed lift station, the design included a one in-line Variable Frequency Drive duplex with 200 gallons per minute (GPM) at a Total Dynamic Dead (TDH) 52 feet and a static pressure of 13.2 feet at the 8 inch force main. Two (2) on-site 10-hp variable speed drive booster pumps were utilizing with a 805 linear feet of 4" force main in order to discharge the wastewater. The scope also included permitting through Broward County and the City of Pompano Beach, construction oversight and final closeout.

Franklin Academy Flamingo, City of Cooper City, Florida - A private K through 8 school located on 9.25-acre campus in Cooper City. The 81,000 square foot state-of-the-art facility includes specialty rooms for music, art, computer labs, large multipurpose room as well as science labs and locker rooms. Thompson & Associates was retained to evaluate the existing lift station servicing this site and provide calculations, plans and specifications to upgrade the existing lift station for the increase flow. Calculations were completed to include sewage flow from the proposed school, as well as a single-family residence, multifamily residences, and a church. Coordination with the City of Cooper City Utilities Department focused on the force main connection alternatives in order to accommodate the proposed sewage flow. The design included a duplex with 15.5 HP submersible pumps at 100 gallons per minute (GPM) and a Total Dynamic Dead (TDH) 150 feet.

Palm Beach International Airport Lift Station Improvements, City of West Palm Beach, Florida. Project included the complete redesign of an existing lift station and force main due to an expansion of the airport terminal offices and the subsequent additional sanitary sewer flows. Project was completed on time and within budget.

Broward County Landfill Leachate Force Main and Lift Station, Pembroke Pines, Florida. Design of this 1,200' leachate force main and lift station included extensive permitting with local jurisdictional agencies



and coordination with the City of Pembroke Pines. The County's force main discharges into the City's force main system, therefore an inter-local agreement has to be negotiated.

East Water Treatment Plant Modification, Plantation, Florida. Redesigned membrane effluent pipes when the caustic water on its way to the air stripping units deteriorated cement-lined cast iron pipe. High-density polyethylene (HDPE) pipe was designed to convey the membrane effluent to the air strippers. The project was completed on budget and on schedule.

Lauderhill Utilities Aerial Force Main and Water Main Rehabilitation, Lauderhill, Florida. Design and contract documents were prepared for the City for the rehabilitation of a water main and force main aerial crossing of the C-13 Canal. The design included the replacement of air release/vacuum valves, split repair sleeve coupling, and the application of a new coating system for the pipes, which required a lead survey to be completed. The existing 140' crossing was comprised of ductile iron pipe and rolled steel pipe. This project is in the bidding phase.

Davie Utilities Water Treatment Plant Expansion, Town of Davie, Florida. Evaluated options for the Town's 4 MGD lime softening WTP to comply with new DBP regulations. Treatment options evaluated included the Tonka post-treatment Ion Exchange System, the MIEX pre-treatment Ion Exchange System, and the Micro₂ pre-treatment System.

A1A Roadway and utility Improvements, Town of Jupiter, Florida. Project included improvements to a one-mile segment of A1A. Tasks included; replacement of a water main, replacement of a force main, roadway improvements, Addition of a bike lane, Drainage design and permitting, Utility coordination, and SWPPP design.

Lime Hill Road Water Main Replacement, City of Lauderhill, Florida. Improvements included the replacement of original galvanized and asbestos cement pipe, undersized water main, and the addition of properly placed fire hydrants.

Courts of Inverrary Water Main Replacement, City of Lauderhill, Florida. Improvements included the replacement of original galvanized and asbestos cement pipe, undersized water main, and the addition of properly placed fire hydrants.

19th Street Water Main Replacement, City of Lauderhill, Florida. Improvements included the replacement of 1,200 feet of original galvanized and asbestos cement pipe, undersized water main, and the addition of properly placed fire hydrants.

Florida Turnpike Utility Crossing Peer Review, City of Lauderhill, Florida. Improvements included the replacement of existing water main and force main that ran across Florida Turnpike. A review was conducted of the project design and comments generated for the City's consultant to consider.

Sanitary Sewer System, Hypoluxo Point, Florida. Sanitary sewer collection system project was in a small neighborhood on the Intracoastal Waterway located. Each home was converted from a septic tank to a centralized gravity sewer. Two designs were completed (vacuum and gravity) and bid as alternates against each other. High ground water was a problem for the design and construction of the deeper pipe and lift station. Final construction cost was \$1.2 M and was completed on schedule.

Wastewater Facilities Improvements, United States Virgin Islands. The Government of the Virgin Islands entered into a consent decree with the US EPA in 1994 to improve the islands' wastewater system. Designed rehabilitation for three large pump stations on St. Thomas and three large pump stations on St. Croix. Telemetry was also designed for 15 smaller lift stations on St. Thomas and 17 smaller stations on St.



Croix. Designed improvements for a 1 MGD package plant on St. Thomas. A large force main was studied and a report issued to aid in the design/build project.

Industrial Wastewater Monitoring Program, Town of Davie, Florida. Project was an on-going effort to ensure each of the Town's +/- 4,000 businesses met all regulations for compliance with strict local (Davie Ordinance), state (FDEP), and federal (USEPA) industrial wastewater discharge requirements. A computer tracking system was setup, and the filing system was enhanced to better track the permitted businesses. An effort was undertaken to identify businesses that should be in the Town's Industrial Wastewater Monitoring Program. Site inspection were conducted, and a process questionnaire was created as part of the information gathering phase of the permitting.

Hard Rock Stadium Improvements, Site Work Construction Engineering Inspection (CEI) services, City of Miami Gardens, Florida. The existing stadium is a multi-purpose facility that is home to the Miami Dolphins, Miami Hurricanes, and numerous special events. The stadium undergone interior renovations to the seating, concourses, and was retrofitted with a shade canopy. The proposed site work consisted of general civil improvements include demolition of selective concrete and asphalt adjacent to the helical walkways, grading of the demolished areas, drainage, potable water distribution system; demolition of the existing islands in the parking area, pavement reconstruction; milling and resurfacing, seal coating, walkways and hardscape in the parking area, and pavement markings. T&A was retained as the construction Engineering inspection responsible for all site work performed. The project was fast-tracked in order to be open for start of the season. The project was completed on time and within budget.

Bayview Towers Apartments, Dome Condominium Association, Inc., North Miami, Miami-Dade County - Thompson & Associates were retained by the Dome Condominium to evaluate the drainage system and recommend improvements to minimize flooding in the parking area and the lower floor of the parking garage. The existing drainage system consisted of inlets and a number of drainage wells. The wells were found to be completely clogged and could not be redeveloped. A proposed drainage system consisting of collection systems for the parking area and the lower parking garage deck were designed discharging to two drainage wells. The plans were permitted through Florida Department of Environmental Protection, Miami-Dade County Department of Regulatory and Economic Resources, water control section and the City of North Miami. T&A prepared the bid packages; reviewed the bid results and recommended award; provided engineering support and oversight during construction and final close-out.

Mariposa Development of Regional Impact (DRI), Putnam County, Florida. The proposed 4,000-acre Mariposa DRI is a master planned, mixed-use development. Phase I contains 3,500 residential units and 350,000 square feet of non-residential space. The proposed development will incorporate a medical facility, K through 20 education facility, a private WTP and WWTP with 100% re-use, a golf course, and active retirement residential component. Off-site and on-site improvements were examined and negotiated as part of the development order.

Brent's Cove DRI, Duval and Nassau Counties, Florida. The proposed 3,000-acre DRI includes 4,000 single-family and 3,500 multi-family residential units, 350,000 square feet of non-residential space, 3 spine roads, 7 miles of off-site force mains, and 4 miles of off-site water mains.

Indrio Road DRI, St. Lucie County, Florida. The proposed 225-acre DRI included mixed uses such as a 5-star hotel, office buildings, retail bays, parking garages, and condominiums. The off-site design included water mains, force mains, drainage conveyance, electrical transmission, and roadway improvements.

Gevin's Bend Planned Unit Development (PUD), St. Johns County, Florida. The proposed 500-acre PUD included single family pods and multi-family pods. An on-site elementary school and community parks



were also required. Off-site improvements were evaluated and negotiated with the County staff while on-site environmental wetlands were delineated. Developed site plan with land planner and architect in order to meet client's density goals while maintaining essential characteristics of a rural neighborhood.

Quillen DRI, Martin County, Florida. The proposed 580-acre DRI includes the design of a potable water distribution system, sewage collection and transmission system, reclaimed water storage and distribution system, a major and minor road network, relocation of a county road, surface water management system, and off-site improvements, including a WTP and WWTP. Possible development scenarios included the dual crossing of a state SIS facility with a CSX railroad for an inland port Economic Overlay District and following the local CRA development plan for the incorporation of a Traditional Neighborhood Development (TND).

Valencia Square Shopping Center, Palm Beach County, Florida. The new 27-acre shopping center included a Publix, Staples, two (2) banks and several retail bays. The project included the planning, design, permitting, and construction observation of all site civil improvements as well as off-site improvements. The project scope required coordination with landscape architects, structural and MEP engineers, architects, and irrigation designers.

Whitworth Estates PUD, Palm Beach County, Florida. The 159-acre residential development included 380 single-family units. The scope encompassed the planning, design, permitting and construction observation of the water distribution and sewage collection systems, stormwater drainage systems, and paving and grading design.

Gulfstream Park Racetrack and Casino, City of Hallandale Beach, Florida. The 250-acre site was completely redeveloped as part of a \$500 million renovation effort. The project included the replacement of the existing dirt and grass racetracks, the grandstand and clubhouse facility, and horse stables. Three existing lift stations were replaced with one AIRVAC vacuum sewage collection system and force main. The 25 acres lake was reshaped to meet current standards. A week after opening for the 2005 season, a WORLD RECORD was set on the turf track!

Boca Raton Annexation Study, City of Boca Raton, Florida. Study included the annexation of residential and commercial areas adjacent to the City of Boca Raton. Infrastructure was evaluated in terms of present value, level of service, and future value. Fire protection, ambulance, water service, sewer service, drainage, roads, sidewalks, streetlights, parks, and other typical City provided services were reviewed for consistency with existing incorporated areas. GIS was utilized as a vital tool to manage the data and depict it in a clear format.

Largo Annexation Study, City of Largo, Florida. Study included the annexation of residential and commercial areas adjacent to the City of Largo. For the first time ever in the State of Florida, the annexation included the bay bottom of Tampa Bay as a corridor to connect the existing incorporated area to the proposed incorporated area. Infrastructure was evaluated in terms of present value, level of service, and future value. Fire protection, ambulance, water service, sewer service, re-use service for irrigation, drainage, roads, sidewalks, streetlights, parks, and other typical City provided services were reviewed for consistency with existing incorporated areas. GIS was utilized as a vital tool to manage the data and depict it in a clear format.

Cannonsport Marina and Condominiums, Town of Palm Beach Shores, Florida. The development included the demolition of existing motel units, construction of five (5) four story condominium buildings with marina. Tasks included: Site paving, grading design, drainage design and permitting, water and sewer design, permitting and utility coordination and SWPPP design.



Royal Palm Yacht and Country Club Area Drainage Improvements, Boca Raton, Florida. Completed and implemented drainage study into design to improve neighborhood stormwater drainage infrastructure. Design improvements consisted of adding catch basins, exfiltration trench, outfalls, and redesigning road grades to assist stormwater conveyance.

Canopy, Sidewalk and Drainage Improvements for the Palm Beach County School Board, Palm Beach County, Florida. This design / build project included the site civil development of the new canopy, sidewalk and drainage improvements for over 20 schools throughout the school district. The project focus was on student and staff safety as well as flood protection of school property.

Downtown Master Plan Review, Town of Lantana, Florida. Responsible for reviewing the Downtown Master Plan and determining the feasibility of the implementation due to drainage and ROW concerns. Created GIS coverages of the downtown documented ROW surveys. Presented findings to the Town Council.

Bulkhead Replacement Project, Town of Lake Park, Florida. Designed a replacement bulkhead for an existing aging bulkhead for approximately 1,100 linear feet of a City park. The bulkhead was located on the environmentally sensitive Lake Worth Lagoon. Design considerations included public safety for the upland portion of the City park, as well as protection of protected aquatic species of plant and animal life such as seagrass, coral, and manatees.

Palm Beach International Airport Lift Station Improvements, City of West Palm Beach, Florida. Project included the complete redesign of an existing lift station and force main due to an expansion of the airport terminal offices and the subsequent additional sanitary sewer flows. Project was completed on time and within budget.

MLK Blvd. Improvements, City of Riviera Beach, Florida. Project included utility improvements to almost a mile of roadway including a sub-aqueous canal crossing with a raw water main. Coordination with City County and State agencies was required, including FDOT, FDEP, FDOH, and SFWMD. Coordination with another consulting firm was also required since the City and County were completing separate utility and roadway projects within the same corridor.

Broward County Water and Sewer Master Plan, Office of Environmental Services Broward County, Florida. The master plan is updated every 10 years. Modeling and GIS applications assist in the future projections of utility needs as well as assessing the current level of service the utility provides to customers.

A1A Roadway and utility Improvements, Town of Jupiter, Florida. Project included improvements to a one-mile segment of A1A. Tasks included; replacement of a water main, replacement of a force main, roadway improvements, Addition of a bike lane, Drainage design and permitting, Utility coordination, and SWPPP design.

Sanitary Sewer System, Hypoluxo Point, Florida. Sanitary sewer collection system project was in a small neighborhood on the Intracoastal Waterway located. Each home was converted from a septic tank to a centralized gravity sewer. Two designs were completed (vacuum and gravity) and bid as alternates against each other. High ground water was a problem for the design and construction of the deeper pipe and lift station. Final construction cost was \$1.2 M and was completed on schedule.

Maintenance of Traffic Plans, Florida – Developed Maintenance of Traffic (MOT) plans as per Florida Department of Transportation Standards for various construction projects in Broward, Palm Beach, Martin, Miami-Dade and Lee Counties.



Happy Hollow Charter School, Palm Beach County, Florida – A 2,435 student private charter school located on a 22-acre parcel property north of Atlantic Avenue and west of Florida's Turnpike in unincorporated Palm Beach County. The school will be developed as two (2) schools, a lower school for elementary grades and an upper school for middle and high school students. The amenities for this K-12 charter school include an equestrian trail, tropical fruit grove, soccer field, basketball courts, student garden and secured bicycle storage. Offsite roadway improvements required for the development of the school include, widening of Lyons Road from 2 to 4 lanes divided as well as right and left turn lanes and median openings. Intersection improvements are also included at Happy Hollow Road and Lyons. The project consists of full site civil development including an onsite gravity sanitary sewer system, 4,300 LF of 4" force main and a private lift station (1,200 gpm), 4,900 LF of 8" potable water main, 3,400 LF of 16" water main extension, fire suppression system, 3,500 LF of 20" reclaimed water main, surface water management system, grading, pavement, sidewalks, pavement marking and signage, and SWPPP plans.

Hawk's Cay Marina Improvements, Monroe County, Florida – A marina improvement project located in off US1 Federal Highway in Duck Key. The site civil development included improved water main installation for dock service and fire suppression. Scope included the preliminary design, design, permitting.

Wellington Charter School and Daycare Facility, Village of Wellington, Florida - Thompson & Associates were retained to provide Civil Engineering Services for the design the charter school approved for 1,500 students, located on an 8.0-acre parcel on State Road 7 in the Village of Wellington. The amenities for this K-8 charter school includes an all-purpose field, cover playground, and secured bicycle storage. As part of the site development, a bridge and aerial water main crossing over a canal, road improvement to an adjacent property, as well as right turn lane and left turn lane additions. As the Engineer of Record T&A was in charge of the preparation of the project due diligence report, preliminary design, final design, permitting, bidding assistance, and construction inspection services. Infrastructures included potable water main extension, sanitary sewer collection system, parking lot and access road, site grading, storm water system, pavement marking and signage. Permitting was completed through FDOT, LWDD, SFWMD, PBC Land Development, PBC Water Utilities Department, and PBC Health Department.

Trails Charter School, Palm Beach County, Florida – Thompson & Associates were retained to provide Civil Engineering Services for the design the private charter school approved for 1,240 students, located on 7.5-acre parcel near Hypoluxo Road and Military Trail in unincorporated Palm Beach County. The amenities for this K-8 charter school include an all-purpose field, cover playground, and secured bicycle storage. As part of the site development, a signalized intersection was created, parking lot improvement to an adjacent property, almost ½ mile of 12" force main, as well as right turn lane and left turn lane additions. As the Engineer of Record T&A was in charge of the preparation the project due diligence report, preliminary design, final design, permitting, bidding assistance, and construction inspection services. Infrastructures included potable water main extension, sanitary sewer lift station and transmission system, parking lot and access road, site grading, storm water system, pavement marking and signage.

Pope John Paul II High School Athletic Fields, City of Boca Raton, Florida. Project included the site civil development of the new baseball and softball fields for the high school including gravity sanitary sewer, potable water main, surface water management system, grading, pavement, sidewalks, fencing plan, dug-out and clubhouse, lighting, pavement marking and signage, and SWPPP plans. Scope included the master plan development, preliminary design, design, and permitting coordination services.

Valencia Square Shopping Center, Palm Beach County, Florida. The new 27-acre shopping center included a Publix, Staples, two (2) banks and several retail bays. The project included the planning, design, permitting, and construction observation of all site civil improvements as well as off-site improvements.



The project scope required coordination with landscape architects, structural and MEP engineers, architects, and irrigation designers.

Delray Marketplace - Traditional Marketplace Development (TMD), Palm Beach County, Florida. The site civil design was for a mixed use (commercial/residential) development, which included a 2-story Publix, movie theater, restaurants, retail bays, office space and integrated condominiums and townhomes. The scope encompassed the planning, design, permitting, and construction observation of the water distribution and sewage collection systems, stormwater drainage systems including underground vaults, and paving and grading design with brick paver design. Other tasks included site plan revisions and calculations, re-negotiating the COA, and platting services.

Frenchman's Yacht Club, City of Palm Beach Gardens, Florida. This 13.9-acre development included 113 units of low-rise condominiums and 9,950 SF of commercial space. The scope encompassed the planning, design, permitting and construction observation of the water distribution and sewage collection systems, stormwater drainage systems, and paving and grading design. Special coordination was required due to the functioning marina and special bulkhead rehabilitation issues. Other duties included complete miscellaneous utility coordination and underground conduit design for the miscellaneous utilities.

Whitworth Estates PUD, Palm Beach County, Florida. The 159-acre residential development included 380 single-family units. The scope encompassed the planning, design, permitting and construction observation of the water distribution and sewage collection systems, stormwater drainage systems, and paving and grading design.

Mirasol Beach Residences, Singer Island, Florida. Development included the demolition of an existing hotel, and the construction of an 18-story luxury ocean-front condominium building. Tasks included: Site paving and grading design; Drainage design and permitting; Water and sewer design and permitting; Utility coordination; and SWPPP design.

Grandview Heights Townhomes, West Palm Beach, Florida. Development included 14-two story townhomes on 2 acres of land near downtown West Palm Beach. Tasks included: Site paving and grading design; Drainage design and permitting; Water and sewer design and permitting; Utility coordination; and SWPPP design.

Tabernacle of Pentecost Church, Village of Royal Palm Beach, Florida. Development included a day-care facility, church, Sunday school classrooms, and an auditorium. Tasks included; site paving and grading design, drainage design and permitting, water and sewer design and permitting, lift station design and permitting, utility coordination, and SWPPP design.

Fifth Third Bank, Town of Davie, Florida. Completed a design for the proposed new bank site adjacent to a new residential development. Coordinated the properties' infrastructure to reduce development costs and shared access driveways, fire hydrant and water distribution systems, and a sanitary sewer lift station with new force main. Tasks included; site paving and grading design, drainage design and permitting, water and sewer design and permitting, utility coordination, and SWPPP design.

Indiantown Company Water, Wastewater and Reclaimed Water Master Plan, Martin County, Florida. Completed computer modeling and analysis of the private utility's water, wastewater and reclaimed water infrastructure in order to accommodate development within the primary and secondary service areas. Computer modeling efforts utilized the EPANET program and modeled existing infrastructure and proposed development scenarios.