MADRID ENGINEERING GROUP, INC.

PO Box 2506, 175 E Summerlin St
Bartow, FL 33830
863 533-9007 Fax: 533-8997 E-mail: info@madridengineering.com

The Earth is our Business℠

Dear Prospective Client:

Thank you for reviewing our qualifications statement. After review, we believe that you will agree with us that Madrid Engineering Group, Inc. is an excellent choice for your **geotechnical engineering, construction services**, and **water quality** needs.

We would like to stress to you that we are an **8(a)** firm located in Bartow, the heart of Central Florida. We also want to stress that we are team players, and that we look forward to partnering with you, to provide you with the absolute best solutions. We hope you will also note that when you use Madrid Engineering Group (MEG) you will receive unsurpassed value because we are very efficient in our construction schedules, designs and recommendations and because we implement proven, cutting edge technologies to streamline all aspects of the job.

We believe that our staff of engineers, contractors, geologists, scientists and technicians is of the highest quality in both work ability and work effort. With MEG, you will get accurate, precise results and reports in a timely manner.

Please take a look at the list of services MEG can provide you on page 4. MEG NAICS codes are: 541330, 562910, 233320, 234110, 234120, 234910, 234930 and 234990**.** The MEG staff is fully qualified and able to perform all these tasks with a very high degree of expertise. Also, please review the short summaries of just a few of the hundreds of projects MEG have or are performing for our clients.

MEG is ready, able and eager to take on new construction and engineering projects. We will give you unsurpassed expertise and value. Please give us the opportunity to prove this to you. We are ready to earn your confidence. We have a current SF254 on file in Oregon. We have also included a copy for your convenience.

Sincerely,
MADRID ENGINEERING GROUP, INC.

Larry Madrid
President

TABLE OF CONTENTS

HISTORY AND PERSPECTIVE

We celebrate 2002, our 10th anniversary, as an exciting time and milestone in the history of Madrid Engineering Group, Inc. (MEG). Founded in 1992 by Mr. Larry D. Madrid, P.E., as a small geotechnical firm, MEG has grown to become a multi-disciplined team of engineers, contractors, scientists, technicians, and support personnel. We are a registered professional engineering consulting and construction firm, centrally located in Bartow, Florida. In 1999 MEG added a heavy construction division. In 2000, MEG added a sinkhole division. Today, MEG is involved in exciting design-build projects that range from emergency repair of flood control structures to grouting structures to correct subsidence problems.

The purpose of the firm has remained unchanged since its inception: to provide high quality engineering, construction, and support services to our clients throughout Florida and beyond. ***On March 5, 1999 Madrid Engineering Group, Inc. was certified as a Participant in the U.S. Small Business Administration's (SBA) 8(a) (BD) program.*** *We are seeking work with Federal government agencies through this program.* MEG NAICS codes are: 541330, 562910, 233320, 234110, 234120, 234910, 234930 and 234990**.**

To sum up the past ten years, a phrase that would best describe MEG is 'Steady Expansion'. MEG has expanded from a geotechnical to a multi-discipline design build firm. We have expanded our number of employees and our offices from a shared office to over 12,000/sf of office, laboratory and equipment storage space, and expanded our revenues to a multi-million dollar company. MEG has expanded both manpower and equipment, including drill rigs, pumping and earthmoving equipment. Perhaps most important, we've expanded our thinking to go beyond traditional boundaries, and have developed proprietary products and procedures that surpass conventional engineering consulting and construction services. Two new innovative technologies that have been developed in the past few years are **PhosPhilter**tm and **PhosCrete**tm. (See more information on each on pages 7 and 9). We've also expanded our reach geographically, from building a wastewater treatment plant at Fort Gordon, Georgia and building Army Reserve tank wash racks in Jasper, Alabama, Jacksonville and Ft. Lauderdale to designing a earthen dam for a needy village in Papua New Guinea. During this 10-year period of growth and expansion, our expertise, experience, capabilities, ideas, and outreach similarly have increased with minimal employee turnover. We are excited about the road before us.

ABOUT MEG

MEG is a leading engineering and construction firm dedicated to the success of its clients and staff, and to achieving the highest levels of professional expertise. Through the past 10 years, MEG has evolved into a group of experts focused on developing innovative solutions to technical problems. At any given time, MEG may have as many as 200 active projects. Some of our clients have been with us since our inception, and 85 percent of our business is with repeat clients.

MEG brings to its clients a broad range of services in three major areas: **Geotechnical Engineering / Geologic Hazards, Construction Services and Water Quality Solutions.**

FACILITIES AND EQUIPMENT

Madrid Engineering Group, Inc. has a two-story office facility located at 175 Summerlin Street, in downtown Bartow, Florida. The office has over 6000 square feet, and includes a geotechnical laboratory. Equipment includes state-of-the art computers and printers, word processors, spreadsheets, scheduling, CAD and other technical software, color copier, fax machine, and drafting equipment. Our facilities compliment the services

we provide, which include laboratory soil and analytical testing, drilling and field testing, and full AutoCAD capabilities in-house or through established contractual agreements. The company also has an in-house engineering library and access to an extensive electronic library of engineering and regulatory reference materials.

PRODUCTS AND SERVICES

MEG offers engineering, construction and water quality services that span a wide range of areas, as listed on the next page. Additional services can also be provided, depending on the individual needs of our clients.

APPLICATIONS	DESIGN-BUILD CAPABILITIES	
Site Development Underground Utilities Foundations Roadways Bridges Seawalls/Port Facilities Commercial Properties Agricultural BMP's Water Quality Enhancement Landfills Land Reclamation, Restoration and Enhancement Foundation Support – Shallow & Deep Reinforced Earth Retaining Walls Grouting & Underpinning Uplift/Anchor Systems Dewatering Systems Sheet Piling & Seawalls Slope Stability Phosphorus Reduction Soil Stabilization Landfill Liners & Containment Systems Pile Driving Monitoring Groundwater Quality Assessment Best Management Practices Class A G.C. License CGC-0056600 Georgia Utility License Bonding Insurance	**GENERAL CONSTRUCTION** *turn key service* *deep foundations* *shallow foundations* *industrial construction* *underground utilities* *site work* *storm sewer* *sanitary sewer* *potable water* **SINKHOLE EVALUATIONS** *ground penetrating radar* *site investigations* *soil testing* *grouting plans* *underpinning design* *remediation monitoring* **GEOTECHNICAL LABORATORY** *geotechnical index tests:* *grain size / hydrometer test* *organic content* *specific gravity of solids* *Atterberg limits (pl/ll)* *moisture / solids content* *standard/modified Proctor density* *clay consolidation behavior* *flexible wall hydraulic conductivity* *falling/constant head permeability* **ENVIRONMENTAL** *surface water quality* *water balance* *erosion control* *mined land reclamation* *lake restoration & enhancement* **PhosCrete™** *proprietary chemical soil stabilization technique developed by MEG for waste phosphatic clay and other very soft, highly plastic and highly liquid clays. Increases strength up to 1000 times. Reduces compressibility and increases workability*	**GEOTECHNICAL ENGINEERING** *subsurface investigations* *roadway soils surveys* *embankment stability analysis* *dredging studies* *site evaluation* *geotechnical instrumentation* *shallow / deep foundations* *underdrains* *dewatering scenarios* *pilings and drilled shafts* *geosynthetics and liners* *soft sediment analysis* *geophysical explorations* *settlement analysis* *retaining walls* **SUBSURFACE FIELD ACTIVITIES** *standard penetration test (SPT)* *core sampling* *flight auger borings* *undisturbed sampling (Shelby tube)* *hydrocone CPT* *piston tube/soft sediment sampling* *hand CPT* *electronic resistivity* *ground penetrating radar* **CONSTRUCTION MONITORING** *construction materials testing* *engineering inspection* *quality control/quality assurance* *in-situ testing* **PhosPhilter™** *proprietary filter developed by MEG to greatly reduce phosphorus levels in stormwater runoff at a fraction of the cost of conventional treatments*

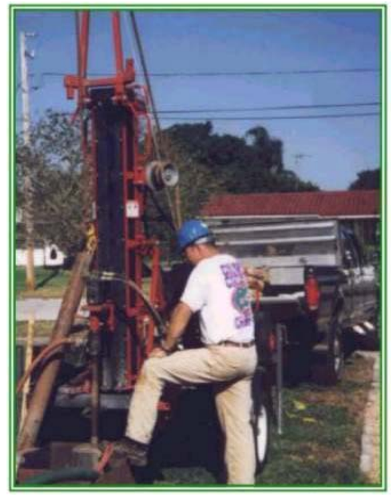
GEOTECHNICAL ENGINEERING / GEOLOGIC HAZARDS

MEG provides geotechnical investigations, recommendations and reports. MEG works hand-in-hand with Federal and local government and agencies, land developers, private land owners, site planners, the commercial and industry sector, architects, and structural engineers to create and implement comprehensive yet cost saving plans to determine the suitability of constructing on specific properties that range in size from individual lots to thousands of acres. Construction projects range from small houses to large buildings and small structures to dams and dikes. MEG provides the best plan to meet the desired goal of the client. These plans start with subsurface drilling to obtain soil strengths and collect samples (Standard Penetration Test –SPT borings, CPT, probes, and hand auger borings). Selected soil samples are then returned to the MEG soils laboratory for testing. MEG provides a full array of soils tests to determine the physical and engineering properties of the soil. We then apply that knowledge and engineer a solution that accounts for field conditions and cost constraints. A typical MEG geotechnical report includes field data (soil classifications, descriptions and strengths), laboratory results and foundation design recommendations. MEG has extensive experience in soft soils, and has developed PhosCrete™, which in specific soil conditions (very soft clays) will greatly strengthen the soil to allow normal building loads.

- **GEOLOGIC HAZARDS (SINKHOLE INVESTIGATION SERVICES)**

Madrid Engineering professional engineers and geologists have over 30 years of combined experience investigating sinkhole activity and other causes of ground subsidence. We offer turnkey geotechnical investigations to determine the cause of subsidence related damage to structures, foundation stabilization and remedial recommendations.

- **DRILLING SERVICES**



Madrid Engineering provides geotechnical, sinkhole, drilling, and related specialties. Standard, production drilling is completed using our SIMCO 2800 HS rig. MEG also owns a low ground pressure, trailer mounted drill rig suitable for difficult access. This rig has also been mounted on our airboat hull for difficult access drilling in vegetated lakes. As needed, MEG will also coordinate drilling services with other drilling companies, where MEG provides the supervision and monitoring. We take great pride in the selection of our drilling subcontractors, who must meet our stringent quality and production requirements. Our engineers are experienced in coring through concrete and asphalt surfaces for core sampling or subsurface sample recovery. MEG is also equipped and experienced in sampling soft sediments in lakes, settling ponds and low lying wetland areas.

- **GEOTECHNICAL LABORATORY AND SOIL SAMPLING EQUIPMENT**

Madrid Engineering Group, Inc. has two in-house geotechnical laboratories. Madrid laboratory managers have over 30 years experience in conducting and supervising geotechnical laboratory testing and laboratory research on a wide range of soil properties. MEG lab technicians and scientists have a combined experience of over 50 years. Standard equipment is available for classification tests on soils in accordance to ASTM procedures.

LABORATORY TESTING EQUIPMENT

- *ASTM hydrometers (particle size distribution)*
- *Stack sieves and shaker (gradation analysis)*
- *Atterberg Limits (plastic and liquid limit)*
- *Specific gravity equipment*
- *Metric scale*
- *Convection oven (moisture content)*
- *Muffle furnace (organic content)*
- *Constant/falling head rigid wall permeameter*
- *Standard/modified Proctor apparatus*
- *Triple beam balance*
- *Floating ring consolidometer*
- *Flexible wall permeameter*

FIELD EQUIPMENT

- Drill rig for difficult access (50+ feet capability)
- SIMCO 2800 HS drill rig
- 4x4 trucks (3) F350 support truck
- *Bucket hand auger (20 feet capability)*
- *Dutch hand auger (clayey soils)*
- *Probe rods (30 feet capability)*
- *Hand CPT*
- *Vane shear device*
- *Soft sediment piston tube sampler*
- *Centrifugal water pumps*
- *Battery operated submersible pump*

FIELD MATERIALS AND GROUNDWATER TESTING

- *Slug test*
- *Turbidity testing*
- *Double ring Infiltration*
- *Piezometer installation*
- *Sand cone apparatus (in-place density tests)*

Additional testing and sampling equipment may be acquired for specific projects.

- **PhosCrete™**

Madrid Engineering provides an innovative and cost effective solution to land developers, builders, owners, settlement pond designers, landfill designers and others who face the challenge of building on *waste phosphatic clay and other very soft, highly plastic and highly liquid clays. PhosCrete^tm^, is a proprietary chemical soil stabilization technique developed by MEG. PhosCrete^tm^ increases soil strength up to 1000 times, reduces compressibility and increases workability.*

CONSTRUCTION SERVICES

Madrid Engineering Group, Inc. provides in-house heavy construction services for specific areas of construction. These areas include earthmoving, underground utilities, deep and shallow foundations, and infrastructure improvement (small bridges, etc.). Recent activities include the construction of a wastewater treatment plant, wash racks, elevated tanks, and water systems.

MEG construction personnel are well versed in quality control requirements for any project. Certifications include the following:

- ACI
- MSHA
- OSHA 40 Hour CFR 1910, 1917, 1927
- OSHA HazWhopper
- U.S. Army Corps of Engineers QC/QA Training
- Nuclear Density Certified

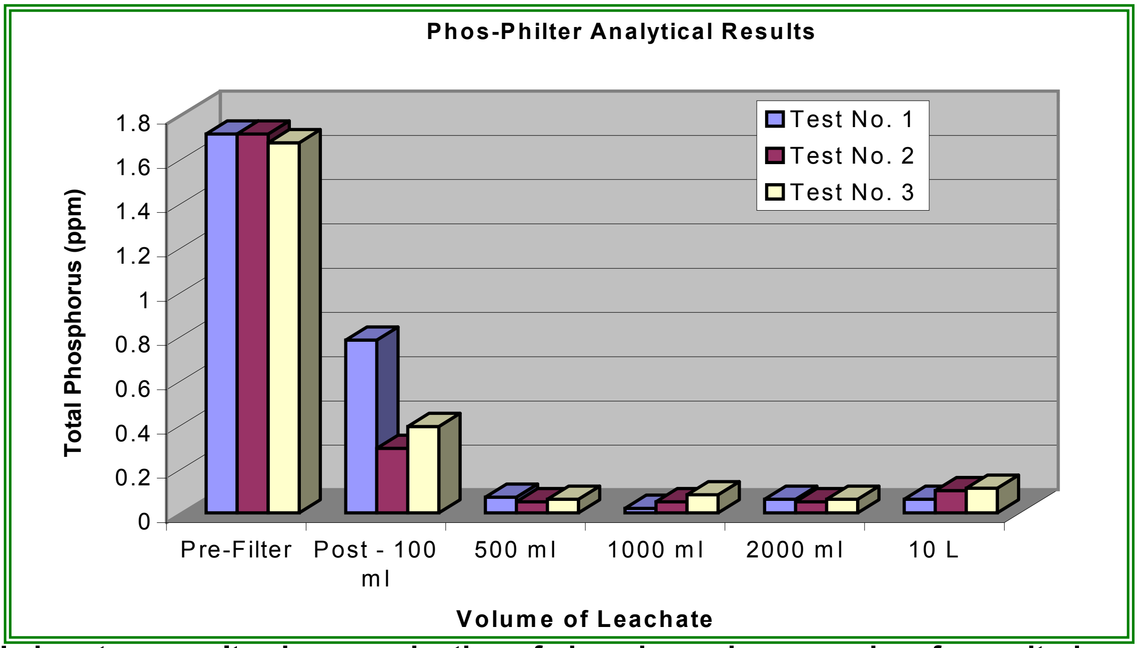
MEG personnel are conversant in the required code, regulation, and testing procedure for all aspects of a project. Our focus is on project quality as well as schedule and value. Our strength is value engineering and comes into play on almost every project, and clients benefit from this item.

In addition to our expertise, MEG has the equipment and manpower to initiate projects on short notice and in emergency situations. Our equipment is late model and in good condition. Our safety record is excellent with no lost time injuries in our 10-year history. Our safety plan has been reviewed and accepted by the U.S. Army Corps of Engineers on multiple contracts and at various installations.

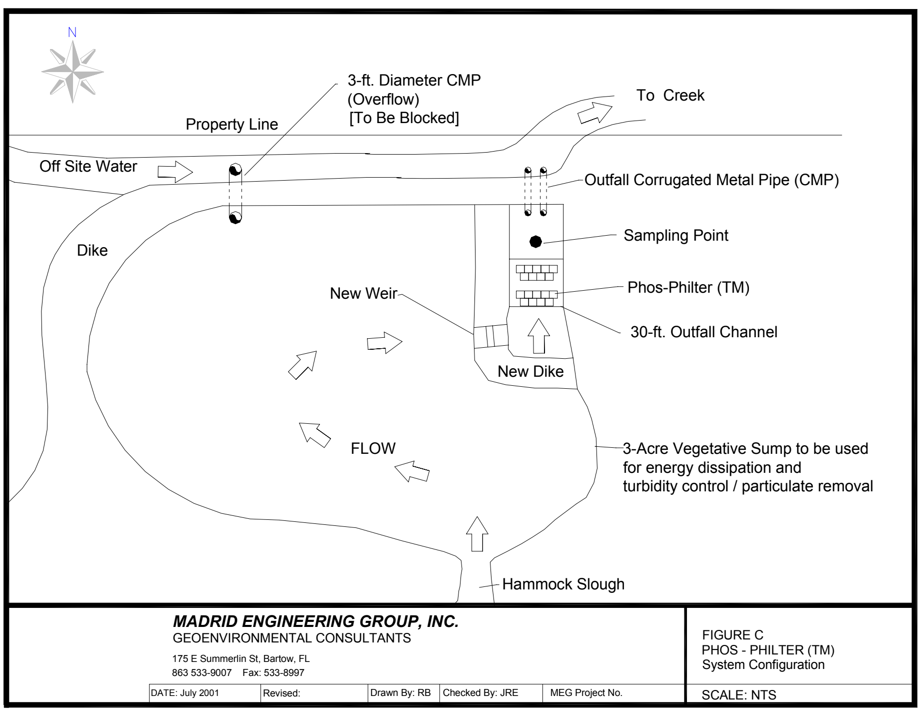
Our project approach is earnest and straight forward with little emphasis put on superfluous claims and change orders. We look forward to our next project with you.

WATER QUALITY SOLUTIONS

Madrid Engineering provides an innovative solution to phosphorus reduction in ditches, streams, lakes and rivers using **PhosPhilter**^{tm}, a proprietary filter developed by MEG. **PhosPhilter**^{tm} greatly reduce phosphorus levels in stormwater runoff at a fraction of the cost of conventional treatments.



Laboratory results show a reduction of phosphorus by one order of magnitude.



PhosPhilter^{tm} is custom designed to fit each site.

MEG CONSTRUCTION, ENGINEERING AND DESIGN-BUILD PROJECTS

Madrid Engineering Group, Inc. has completed over $8,000,000 in services in less than nine years. These services have included a broad range of engineering investigations, designs, and construction for its clients. By listening to the needs of our clients, working hard to meet those needs, and by offering creative solutions that meet or exceed technical and regulatory requirements, MEG has achieved a great measure of success. Listed below is an abbreviated project list that provides an overview of the broad range of capabilities that we have to offer.

- ✓ **Tampa, Florida - S155 Emergency Repair To Flood Control Structure** - The Madrid Engineering Group/Spencer, White & Prentis Foundation Corporation team was selected to complete a design build emergency response to repair water control structure S-155. The solicitation for proposal was presented and subsequent contract administered by the Southwest Florida Water Management District.

The design-construct team complimented each other by utilizing their individual skills. Spencer, White & Prentis Featured 80-plus years of specialty geotechnical construction and design experience, while MEG brought general construction and design experience. The overall project approach was expedited due to technical understanding of the project and spirit of cooperation.

The water control structure straddles the Hillsborough River and is the last flood control structure on the river before the water reaches Tampa. S-155 was constructed by contractors working for the U.S. Army Corps of Engineers in the late 1970's. The structure consists of a 30-foot tall earthen embankment, an adjustable broad crested weir, concrete abutments and bridge deck and A36 sheetpile wing walls. The sheetpile wingwalls were originally driven with a vibratory hammer and restrained with an internal waler and tieback system. The tieback system extended 80 feet into the earthen embankment where it was secured to a deadman anchor.

The downstream wingwalls had begun to deflect substantially over the past few years. The restraining bolts charged with the responsibility of holding the sheetpile to the waler were failing with fully half of them being on the river bottom. The situation had become dire and immediate design and remediation was required.

The Team was charged with the responsibility of designing an engineered system that would prohibit further movement of the affected wingwalls. Our solution to this complex problem was very straightforward and included the use of soil anchors and an external waler system to restrain the wingwall from moving further.

Our team completed soil borings, laboratory testing, anchor design, structural analysis, barge mounted horizontal drilling, anchor installation, anchor grouting, load testing, and site work. Anchor lengths ranged from approximately 70 feet to 90 feet.

Anchor installation was completed by utilizing a D-4 adapted to drill horizontally through the holes cut into the sheetpile retaining walls. All the drilling work was done from the waterward side utilizing modular barges as a staging and work platform. The drill was equipped with a grout pump making the entire operation self-contained.

Upon completion of the anchor system, the external walers were mounted to bearing saddles and welded into place. Prior to final tensioning of the anchors, each anchor was tested to 1.5 to 2 times the design load, thus assuring the integrity of each individual anchor.

To further increase the factor of safety for this project we utilized a lightweight fill product named Geo-Foam. Geo-Foam is a lightweight extruded polystyrene (EPS) product that weighs 1 pound per cubic foot and has been utilized as embankment fill over soils that have low shear strength. In this application, we utilized the product to reduce the vertical and related horizontal stress behind the wall. The Geo-Foam was ordered in 3 foot by 4 foot by 12-foot sizes. Installation required an underdrain and a geotextile fabric as a separator. After fill placement, we covered the material with 2 feet of fill and an additional foot of rubble riprap. The project has been completed successfully with the walls not only being stabilized but even nominally restored vertically.

- ✓ **Miami River Wash Borings, Miami** – MEG provided the Army Corps of Engineers (ACOE) – Jacksonville District, with 30 wash probes on the Miami River in Miami Florida. The ACOE provided maps and coordinates in State Planes Coordinates System to pin point the exact location of each probe. MEG personnel provided utility clearance, project coordination and supervision. The purpose of the wash probes was to determine the thickness of sediment in the river for future dredging. All depths were calibrated to take into account the rising and falling of the river due to tidal influence. MEG offers sediment mapping and chartarization as an engineering specialty.

LOCATION		STATE PLANE (X,Y)	DATE	TIME	RIVER ELV.	H20 TO SEDIMENT	H2O TO ROCK
						SEDIMENT ELV	**ROCK ELV**
WP-MROO-11A	PROPOSED	743719, 535896	17-Oct-00	1503	2.06	13.22	17.11
	ACTUAL	743719, 535896				**-11.16**	**-15.05**
WP-MROO-11B	PROPOSED	743706, 535880	17-Oct-00	1452	2.09	13.81	17.75
	ACTUAL	743706, 535880				**-11.72**	**-15.66**
WP-MROO-11C	PROPOSED	743690, 535865	17-Oct-00	1441	2.16	14.48	16.34
	ACTUAL	743690, 535865				**-12.32**	**-14.18**
WP-MROO-11D	PROPOSED	743676, 535849	17-Oct-00	1431	2.22	14.87	20.92
	ACTUAL	743676, 535849				**-12.65**	**-18.70**
WP-MROO-11E	PROPOSED	743662, 535836	17-Oct-00	1422	2.30	11.46	11.71
	ACTUAL	743662, 535836				**-9.16**	**-9.41**

- ✓ **Avon Park, Florida Charlie Tower Renovation-** Army Corps of Engineers –Mobile District. This project consisted of the total renovation of an active historic air traffic control tower. Renovation included complete replacement of all windows and skylights, interior finishes, anchor bolt and foundation repair, replacement of balcony and hand rail for OSHA compliance, as well as retrofit or replacement of all mechanical and electrical systems.

- ✓ **WasteCorp of Central Class III and C&D Landfill – Ft Meade –** MEG completed geotechnical investigations on two formerly mined sites for certification as Class III and C&D landfills. Field investigations included soft sediment delineation in three lakes with collection of undisturbed samples, SPT boring, hand augers, muck and slime probes. The final reports included slope stability analysis, soil profiles, boring location CAD drawings, and recommendations. MEG also accompanied the client to meetings with the Florida DEP. As a result of using PhosCrete™ to strengthen very soft clays, client was able to add 75% more volume to landfill design.

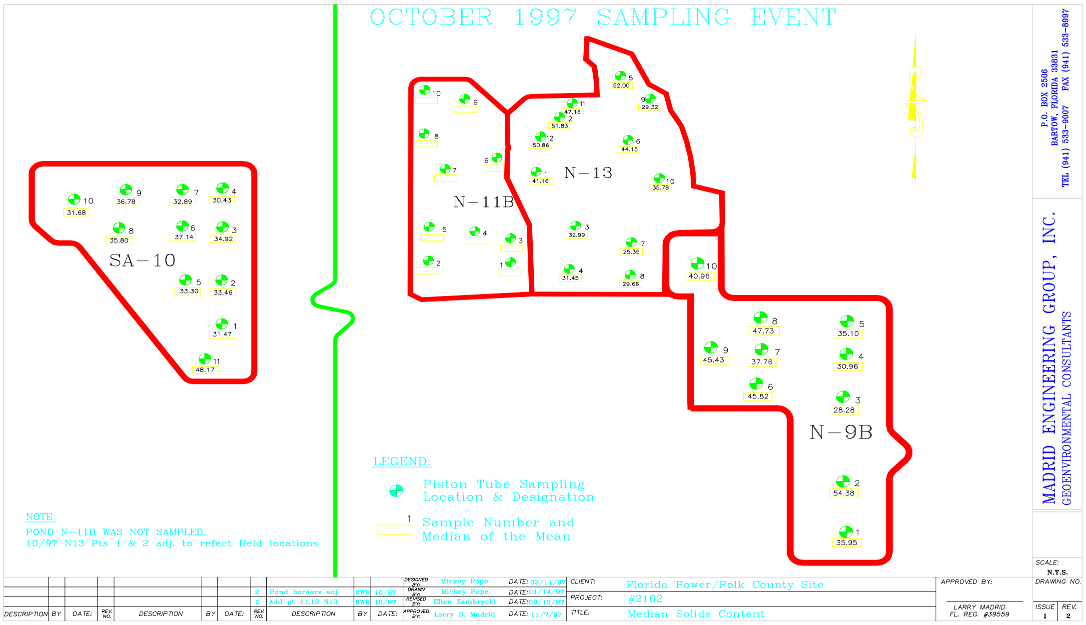
- ✓ **Fort Gordon, Georgia Leachate Collection System and Waste Water treatment Plant -** Project was mandated by a consent order stemming from landfill leachate discharge into waters of the state. Madrid participated in pre-design conferences with the project engineer and provided design input. The project consisted of construction of 1,400 linear feet of under drain to collect fugitive leachate, a 18 feet deep 12 foot in diameter wet well, 5,800 feet of force main and yard piping, and a waste water treatment plant consisting of a clarifier tank, aeration tank, polymer injection system, chemical feed system, automated controls and telemetry to the wet well.

- ✓ **Intersection Improvements, Polk County** – MEG completed geotechnical investigations, environmental corridor studies and existing asphalt cores at xx sites to determine roadway and asphalt design for widening and adding turn lanes at the intersections.

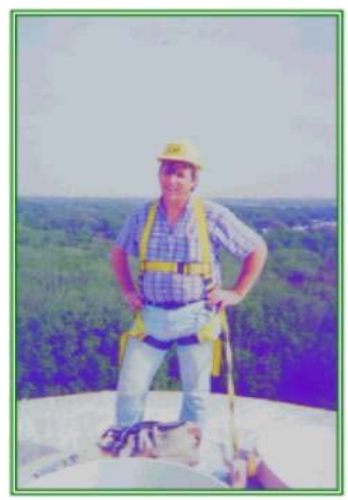
- ✓ **Bridge Replacement Project-Southwest Florida Water Management District -** This design-build project consisted of replacing three bridges spanning the Withlacoochee River and two of its tributaries. Each clear span bridge has an HS20 loading with the largest clear span being 100 feet long. MCS provided engineering for each structure including the deep foundation (pipe pile) design and related abutment design. The site is located within the Green Swamp, 9.7 miles from a highway, so access is difficult. Additionally, extensive dewatering (due to the flowing river) is required. All work on this project is being done in strict compliance with an Environmental Resource Permit issued by Florida Department of Environmental Protection. The project also includes erosion protection and wetland revegetation.

- ✓ **540A Widening, Polk County** - MEG completed 3 miles of geotechnical investigations, environmental corridor study and soil infiltration rates for design of roadway widening and storm water pond design from Old 37 to past SR 37B.

- ✓ **Quarterly Clay Sampling for Florida Power Corporation Hines Complex, Bartow** - Piston tube sampling of very soft to soft waste phosphatic clays at 7 settling areas undergoing dewatering phase. MEG also completed laboratory testing of the samples.



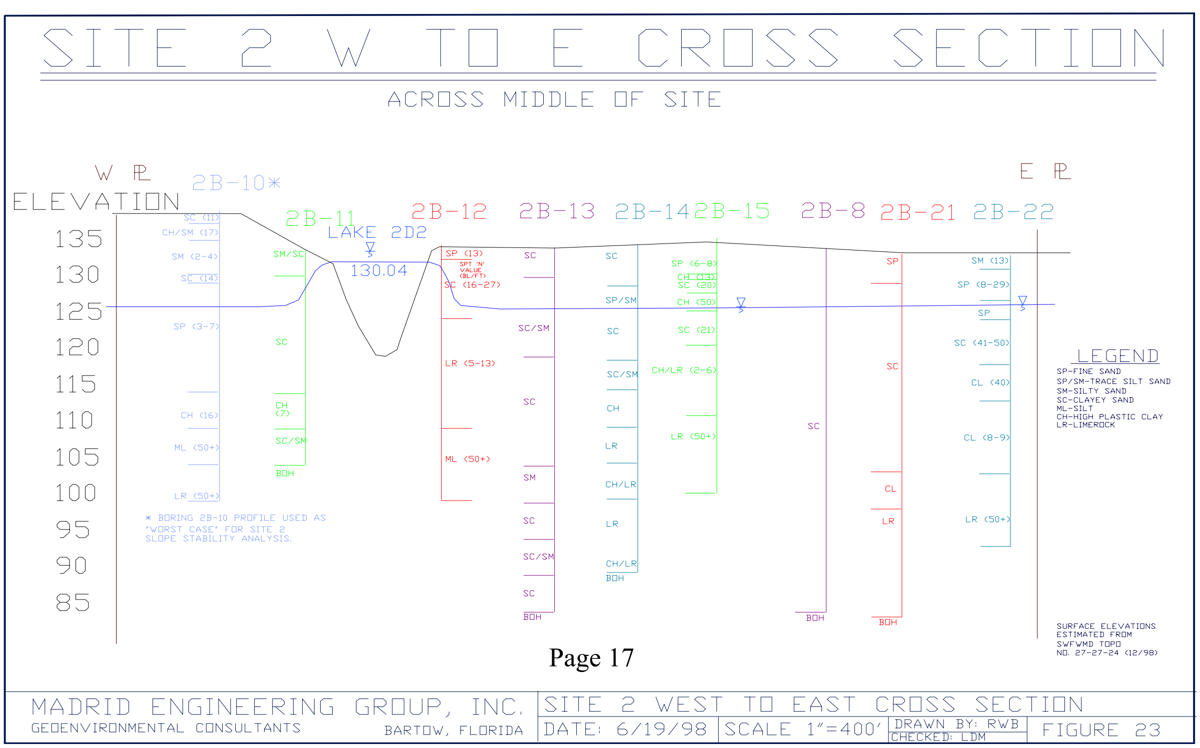
- ✓ **Polk County Water System Improvements** - Madrid Construction Services served as a subcontractor to a national general contracting firm, Caldwell Tanks, Incorporated. The project consisted of providing two, point- loaded anchor bolt critical foundations required to support pedesphere single pedestal elevated water storage tanks. Also associated with the project is 9,000 cubic yards of earthmoving activities, retaining wall construction, sidewalk construction, water main installation, yard piping and valve installation, road base and asphalt paving.



- ✓ **Sarasota County Water System Improvements** - Madrid Construction Services served as a subcontractor to a

national general contracting firm, Caldwell Tanks, Incorporated. This project consisted of providing one point loaded anchor bolt critical foundation required to support a pedesphere single pedestal elevated water storage tank. Project location is in a municipal park with difficult access and high foot traffic. MCS provided temporary fencing, de-watering, water main installation and tie in, above grade yard piping, valve installation, foundation construction, and electrical services. Additional work activities included on this project were the retrofit an existing elevated tank to meet current OSHA standards, including removal and replacement of existing tank ladders, pit welding, and protective coating repair.

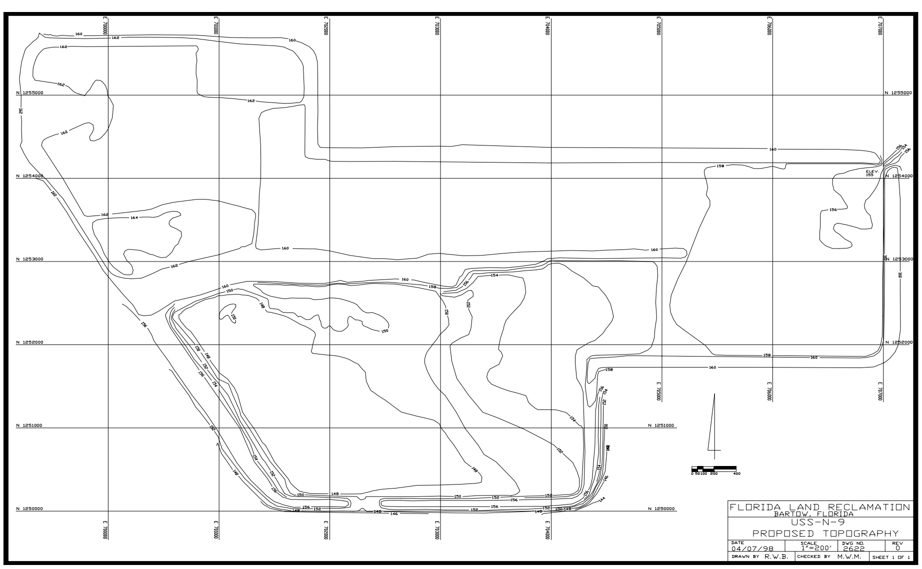
- ✓ **CSX Corings/Lab Support, Tampa –** CSX planned an expansion of a loading facility at their Rockport shipping terminal. MEG performed continuous split-spoon sampling to 14 feet depth, Shelby Tube sample collection, monitor well and piezometer installations to 14 feet, double ring infiltration tests, geotechnical testing including organic content and particle size, constant head permeability testing, and determination of the friction angle, cohesion, and *in situ* density. The site was a former dredge material fill area, but was deemed suitable for limited usage.
- ✓ **Soil Survey in mined area in North Lakeland** - MEG obtained over 50 soil



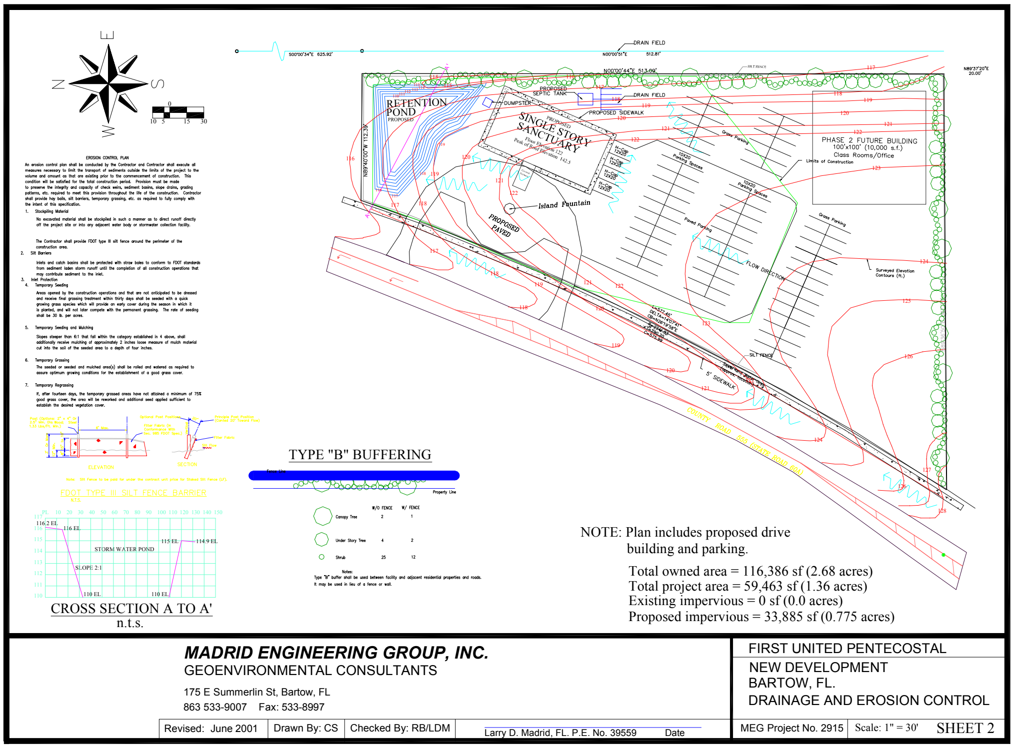
samples, on over 800 acres of land on two sites. MEG completed laboratory testing and provided slope stability and foundation design on mined land. Also completed ecological study, environmental site assessments, and bathymetric surveys of seven lakes, which included lake volumes, lake bottom muck probes, and lake contours.

Four Corners, Florida - Environmental concerns mandated the implementation of this project. Project consisted of installation of an air sparge system designed to accelerate the dissipation of hydrocarbons in a petroleum contaminated site. Extensive dewatering and use of trench boxes were required due to the depth of excavation and the relative lack of distance from adjacent structures.

- ✓ **AUTOCAD Drawings, Various Projects -** Provided digitizing of topographic maps for detailed cut/fill earthmoving calculations on various mined land reclamation parcels.



- ✓ **Landfill Geotechnical Assessment, City of Tampa, Cypress Point** - A prime property adjoining Tampa Bay was acquired by the City of Tampa for a proposed park, but only after Madrid Engineering Group, Inc., working with other consultants, investigated subsurface conditions at the site. Historical aerial photos indicated two non-native conditions. Part of the land surface had been created from spoil materials pumped in by dredging contractors who deepened the bay for boat traffic. Also, illicit miscellaneous waste materials were dumped at the site over several years, and covered with fill dirt. Over 100 borings were completed strategically across the site to assess the overall subsurface conditions, determine the type of debris, the depth and thickness of the debris, and determine if the debris contained hazardous materials. Based on the results, the City purchased the property and is using the information to design park elements while limiting or eliminating the need to excavate any waste debris. Borings were also be used to design stabilization for a parking lot, and foundations for facilities.
- ✓ **Storm water Pond Design, Bartow Various churches** – MEG completed auger borings, double-ring infiltration testing, SPT borings and foundation design for construction of church sanctuary and associated stormwater retention ponds. Pond design included a mounding and recovery analysis using MODRET software.



- ✓ **Jacksonville, Florida Wash Rack – Department of the Army** - Project consisted of erection of new wash rack and EPA mandated oil water separator.

- ✓ **Fort Lauderdale, Florida Wash Rack - Department of the Army** - Project required demolition of existing concrete structure and erection of a new wash rack and integrated EPA mandated oil water separator.

- ✓ **Jasper, Alabama Wash Rack - Department of the Army -** This project consisted of demolition of existing concrete structure and erection of metal building. Project also brought this post into EPA compliance with installation of new oil water separator and related accessories.

- ✓ **Cherry Street Manhole Repair, Plant City –** Unacceptable pavement distress had developed on a heavily traveled street in Plant City. Soil borings revealed poor compaction adjacent to the manholes at 3 feet below the surface. MEG devised an innovative, low cost approach for the City of Plant City Engineering Department involving injecting low strength grout, which added strength to the soils and filled the voids. Conventional approaches would have required digging up the loose soil and re-compacting, which would have taken much more time and disrupted traffic MEG developed and submitted compaction grouting specifications for the remediation of the subsurface soils adjacent to manhole structures located on Cherry Street. We also provided construction monitoring and quality control over the compaction grouting operation for each of eight manhole structures, including materials testing of the slurry grout mix. Field personnel submitted daily summary reports for the remediation operation.

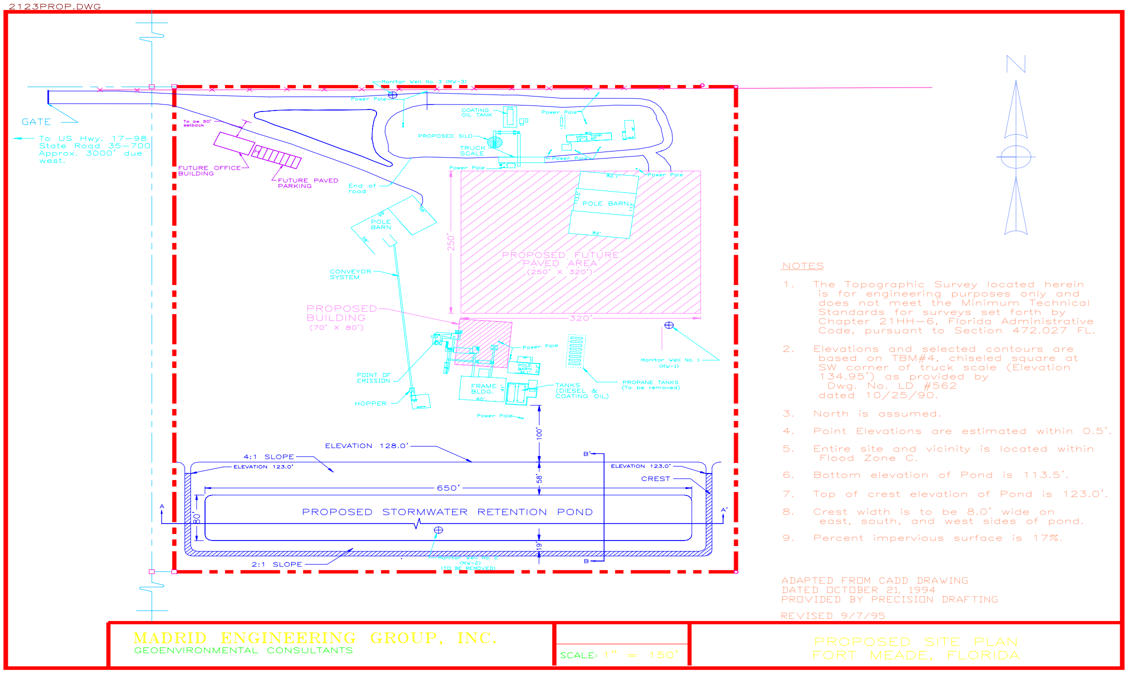
- ✓ **Wilder Road at I-4 Subsurface Exploration, Plant City** – As a spin-off to the I-4 widening, the City of Plant City was required to relocate a major pipeline utility. MEG completed a subsurface exploration in a peat-filled area to identify soil stratigraphy and the seasonal high water table. Based on the report, the revised location of the pipeline crossed an area with over 20 feet of peat. MEG designed a pile-supported cradle to cross the soft, compressible, organic peat, engaged a contractor, and monitored construction. A letter report including the pile driving records was submitted at the end of the job.

- ✓ **Surface Water Permitting, Limestone Processing Facility, Mulberry** - Provided design of retention pond to hold 100-year storm event on-site. Design challenges included soft, unsuitable soils, wetlands, and other environmental liabilities.

- ✓ **Environmental Permitting for Confidential Client, central Florida** - An unfortunate incident involving an off site discharge of process water caused this industrial client to be placed under a consent order by the Florida Department of Environmental Protection. Madrid Engineering Group, Inc. was directed by the client to assess the damage to the site surface and groundwater, if any, and to determine a course of action to satisfy regulatory requirements and provide for future safety to the environment. Madrid Engineering acted on behalf of the client for all correspondence to all agencies, made recommendations and supervised construction of facility improvements, which included construction of a designed retention pond to store all process and stormwater on site.

  Permitting of the site was required by Polk County, FDEP, and SWFWMD. The site was first surveyed and plans were drawn using CADD techniques for precision. Plans included both existing and proposed conditions. The retention pond shown below was designed for a 100-year storm event by engineers at Madrid Engineering using sophisticated surface water computer modeling.

  Madrid Engineering also designed foundations for a heavily loaded new industrial manufacturing facility. All geotechnical work was performed in-house.



The stormwater pond was designed to hold a 100-year storm event.

Infrastructure Design & Construction-Fort A. P. Hill, Virginia, USACOE

MCS staff participated in the design and construction of the on base water system improvement. Project consisted of overall project management including design, scheduling, materials procurement, contract administration, quality control, and project start up.

Infrastructure Design & Construction-Fort Knox, Kentucky, USACOE

MCS staff participated in the design and construction of the on base water system improvement. This project consisted of multiple sites, extensive excavation, caissons installation, foundation construction, tank construction, water main installation, telemetry design and construction.

Infrastructure Design & Construction-Wallops Island, Virginia-NASA

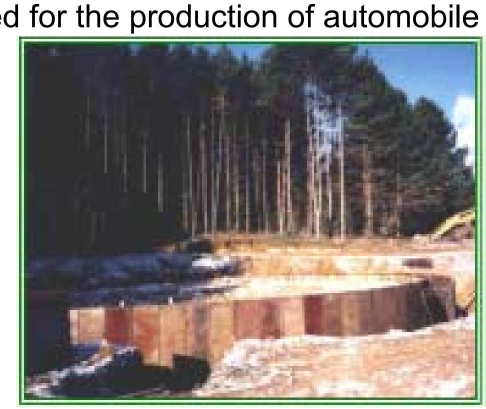
MCS staff participated in multiple projects both at Goddards Space Flight Facility and on the “Island”. Project mandated background checks for employees. Job site was contiguous with missile live fire test range which required work activities to be interrupted with short notice. Work activities included all design and construction of the infrastructure improvements, general project management, scheduling, material procurement, foundation construction, water main construction, and quality control activities.

Infrastructure Design & Construction-Fort Bragg, North Carolina-USACOE

Project entailed complete design and construction services for water system improvements including pile installation, foundation construction, raw material procurement and fabrication, scheduling, structural steel erection, protective coating application, installation of cathodic protection, and final site clean up.

Infrastructure Design & Construction-Wapaca Foundry-Tell City, Indiana

Project associated with new foundry construction. Fast track project that required personnel to design, construct, and test facility prior to foundry being placed on line. Strict construction schedule allowed no margin for error as the process water our structure provided was required for the production of automobile parts.



MEG CLIENTS

Our clients come from many sectors, ranging from Federal and local governments to homeowners and from industrial giants to small business as well as engineering consultants. We also support the construction industry. Contractors find our practical, no-nonsense recommendations provide immediate solutions and benefits to their day to day hands-on production. Some of our clients are listed below (we like the company we keep):

ENGINEERING FIRMS	***GOVERNMENTAL AGENCIES***
Carnell Engineering	City of Lakeland
Case Engineering	City of Plant City
Dyer, Riddle, Mills & Prescourt, Inc.	Florida Department of Transportation
EarthTech	Department of the Army
Geohazards	U.S. Army Corps of Engineers
HDR Engineering	***BUSINESS / INDUSTRY / COMMUNITY***
Keith & Schnars	Clear Springs Land Company
Pickett & Associates	International Minerals Corporation
Post, Buckley, Schuh & Jernigan, Inc.	Florida Power Corporation Hines Complex
SCS Engineers	Old Florida Plantation LP
URS Corp	Waste Corp of Central Florida

Other County and Municipal Infrastructure Design-build Projects

Amite County, MS
Andalusia, AL
Arabi, GA
Asheboro, NC
Attica, IN
Borrow County, GA
Botetourt County, VA
Carolla, NC
Charlevoix, MI
Chattanooga, TN
Clay County, AL
Columbia, SC
Crestview, FL
Crisp County, GA
Cullman, AL
Dupage County, IL
Edenburg, VA
Holly Hill, SC
Hutto, Texas
Hyatt's Corner, DL
Jamestown, TN
Loretto, TN
Madison County, FL
Magnolia, Delaware
Marion County, FL
Marshall County, AL
Martinsburg, WV
Martinsville, WV
Middletown, Maryland
Nashville, Indiana
North Branch, MI
Olive Branch, MS
Orangeburge, SC
Pike County, AL
Princess Ann, MD
Reaford, NC
Robeson County, NC
Salley, SC
Lexington, MI
Warren County, NC
West Branch, MI
West Point, MS
Westover, MD
Whaneta, FL
Wilkesboro, NC
Wilmington, NC
Winter Haven, FL