

Capabilities Statement

For

Triangle Facilities Engineering, P.A.



Design
Consulting
Investigation
Construction Management

Designs by Seasoned Professionals

OVERVIEW

Triangle Facilities Engineering (TFE) is a Consulting Engineering firm with design services ranging from site development to new buildings and structures through major capital improvements to infrastructure.

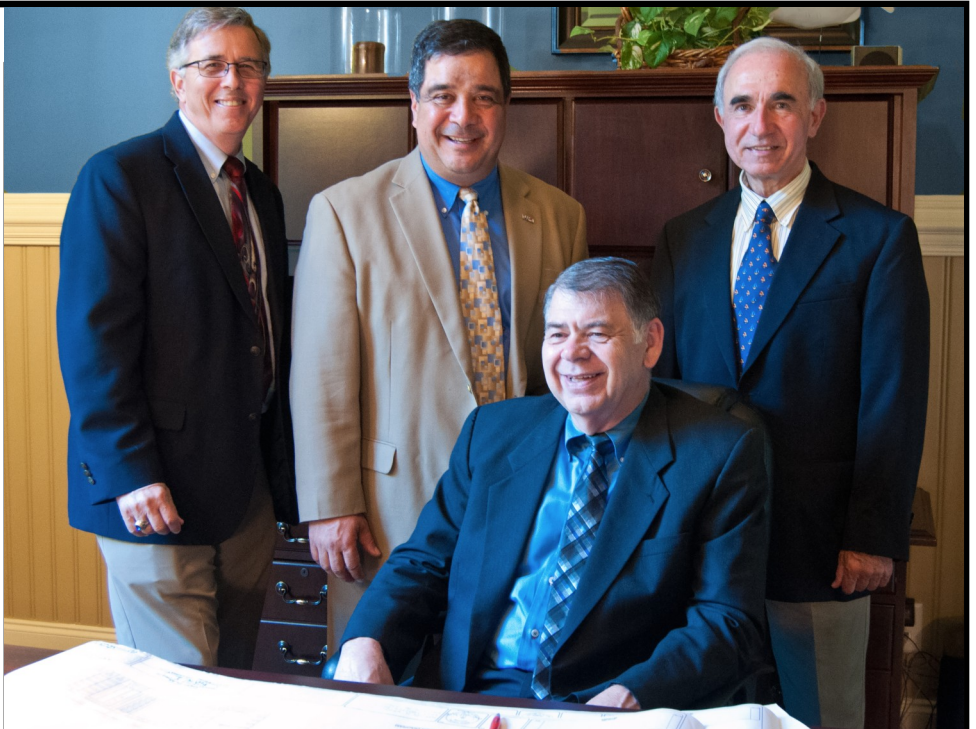
Our experienced and mature staff each have from 40 to 52 years of "hands-on" engineering, analysis, design, construction management experience and our principals collectively have over 400 years of experience.

MISSION

TFE's mission is to provide high quality engineering services that allow our clients to experience the most efficient design and construction possible.

OUR TEAM

We are Professional Engineers registered in multiple states that have the experience and commitment to "Get it Right The First Time."



CORE VALUES

Triangle Facilities Engineering provides superior quality engineering and consulting services including Civil, Site, Mechanical, Electrical, Plumbing and Structural designs. Our value to you is our extensive experience and comprehensive knowledge of design criteria for commercial and government facilities.

Quality

Technical Excellence, Innovation, Creativity, and Professionalism. We Take Ownership in Client Satisfaction!

Professionalism

Competent, Respectful, Considerate, Listening, Know-how, Responsiveness and Team Building.

Integrity

Honesty, Respect, Ethics, Responsibility, Allegiance, and Safety. Just Doing What's Right.!

Teamwork

Listening, Integrating, Responsiveness and Team Building. We Are All In This Together!

Communications

Listening, Discussing, Integrating, Updating and Dissemination. Our Clients Goals are Our Goals!

Commitment

Dedication, Enthusiasm, Investment, and Passion for a successful project.





DESIGN CAPABILITIES

Pre-Construction

TFE provides a team approach to design services. Communication and collaboration is always the key, whether we participate in Design/Bid/Build, Design/Build, CM at-Risk, or the modified CM delivery we call "Team/Build." To set the stage, TFE provides comprehensive pre-construction services including:

- ◆ Cost estimating and conceptual modeling
- ◆ Constructability reviews
- ◆ Value analysis / cost containment
- ◆ BIM modeling / clash detection
- ◆ Site logistics planning
- ◆ Scheduling
- ◆ Utility Coordination
- ◆ Subcontractor pre-qualification
- ◆ Subcontractor and supplier bid management

Civil Design

TFE provides civil engineering design services including public works and transportation projects for local, state, and federal agencies. Our design expertise ranges from simple repair projects to major corridor/utility systems design.

- ◆ Water and wastewater collection and distribution
- ◆ Site Design
- ◆ Roadway Design
- ◆ Storm Water Permitting
- ◆ Drainage design including storm water collection and storm water detention facilities

Structural Design

TFE provides structural engineering design services.

- ◆ New Concrete & Steel Structural Frame
- ◆ Analysis of Existing Frames
- ◆ Failure Investigations

SERVICES PROVIDED

- Civil & Site Design
- Structural Design
- Project Management
- Construction Management
- Construction Administration
- Mechanical & Plumbing Design
- Electrical Design
- Commissioning & Special Insp.
- Owners Representation
- Property Condition Assessments
- Phase I Environmental Site Assessment
- Quality Assurance/Control QA/QC

CLIENT & MARKET TYPES

- Federal Agencies
- State & Local Agencies
- Private Owners
- Private Developers
- Design Build Contractors
- Healthcare
- Higher Education Institutions
- K-12 Education Institutions
- Industrial Clients
- Utilities
- Residential



DESIGN CAPABILITIES

Mechanical & Plumbing

TFE provides high quality engineering and consulting services for Mechanical, and Plumbing engineering design. Our value is our extensive experience and comprehensive knowledge of design criteria for commercial and government facilities.

These services include:

- ◆ HVAC Systems
- ◆ Plumbing
- ◆ Fire Protection
- ◆ Cooling Towers

Electrical

TFE is capable of providing electrical services for low, medium or high voltage projects. Our value is our extensive experience and comprehensive knowledge of design criteria for commercial and government facilities.

These services include:

- ◆ Photovoltaic (PV) System Designs
- ◆ Power Plants
- ◆ Lighting Design
- ◆ Power and Signal Systems
- ◆ Fire Alarms
- ◆ Data and Communications

Quality Assurance/Quality Control QA/QC

At TFE, our staff includes personnel who have previously been procurement officers for the government, and our procedures match well with the US Army Corps of Engineers expectations. Our staff understands the effort required to execute an effective QA/QC program.

- ◆ Quality Assurance/Quality Control
- ◆ Constructability Plan Review/Value Engineering
- ◆ Schedule/Cost Control

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DESIGN CAPABILITIES

The design-build process can potentially bring a great value to an owner and project – as long as it is done right. TFE can provide a *full-service team* to provide the entire design package *all under one roof*. TFE has several qualified and experienced engineers who have participated in the design-build process for decades. Federal projects, benefit because our engineers have served as program managers and procurement officers for the federal government and other agencies.

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Professional Project Management

TFE takes pride in our project management capabilities relating to planning, design, construction, QA/QC and commissioning on behalf of clients. The services offered are tailored to suit each and every specific project and the particular client's needs and requirements.

The project management team takes responsibility for all aspects of the project phases from planning/permitting phase to establishing budgets to design/documentation to tender and superintending the contracts.

Choosing the Right Team

The design-build project success hinges on the team members expertise. Our experienced team has long-standing relationships with the country's best talent in design and construction which enables us to assemble a design-build team that has the right mix of skills and meets the specific requirements of your project.





DESIGN CAPABILITIES

Construction Administration

At TFE, we believe we believe that both our success as well as our client's success stems from being a part of the life of a project from its inception through construction. Our staff understands the requirements to execute successful projects through effective management of production quality, communication, schedule, and budget.

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- ◆ Coordinating with local, state government agencies
- ◆ Monitor compliance with building codes & permitting
- ◆ Plan review for value engineering, improvement, constructability and cost savings
- ◆ Monitor RFI & Submittal logs
- ◆ Review as-built's, warranties, O&M Manuals, etc.
- ◆ Scheduling, CPM Scheduling, and coordinating
- ◆ Progress meetings, schedule, design, quality & safety
- ◆ Earned Value Management
- ◆ On-site inspections Review of change order requests, payment requests
- ◆ Regular monitoring and updating of the schedule
- ◆ Providing detailed summary reports, monitoring and documenting all changes in schedule
- ◆ Project Closeout
- ◆ Start-Up and Testing / Training

Commissioning & State Inspections

TFE can provide commissioning services which consists of a quality based process to document building systems that are planned, designed, installed, tested, operated and maintained in compliance with project requirements. Commissioning can provide great long-term value for both new facilities and existing facilities.

- ◆ Verifying Equipment and Controls Function Correctly
- ◆ Identifying and Correcting Sub-Optimal Components
- ◆ Identifying Opportunities for Energy Savings
- ◆ Electrical System Testing
- ◆ Energy Modeling/Auditing
- ◆ HVAC System and Balancing
- ◆ Medium Voltage Cable Testing
- ◆ Equipment Calibration
- ◆ System Calibration



Specialty Services

Environmental Site Assessments

Our team has extensive site experience in Phase 1 Environmental Site Assessment (ESA) which is typically required for any developed or undeveloped property that is being transferred to new ownership or refinanced. The typical Phase 1 ESA consists of a site inspection to identify known or suspected recognized environmental conditions (RECs), follows ASTM Standard E1527-05, and includes a review of historical building permits, site records, aerial photographs, Sanborn Fire Insurance Maps, city directories, and topographic maps where available.

Property Condition Assessments

TFE can provide Property Condition Assessments typically required for developed property that is being transferred to new ownership or refinanced. Anywhere a due diligence report is desired to meet the objectives of your real estate portfolio, whether you represent a commercial real estate owner or manager, institutional investor or investment banker. We use experienced professionals who understand a structure and its components which are vital to investment and financial decision-making. Furthermore, our property condition reports typically comply with and generally exceed industry standards which include the Standard and Poor's as well as ASTM Standard E2018-08. Also, if necessary, we can provide a limited scope assessment to suit your special needs or time constraints, provided a lending institution doesn't have special requirements.

Failure Evaluation

TFE can has professionals with experience in failure investigations including roofs, pavements, runways, foundations, retaining walls, basement walls, piping, and dams.

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SERVICES PROVIDED

- Civil & Site Design
- Stormwater Drainage Design
- Erosion & Sediment Control
- Stormwater Design for Roadways, Site Development, and Airports
- Storm Drain Outfall Improvements
- Utility Design
- Parking Studies & Design
- Permitting
- Project Management
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Storm Drainage Services

Site Assessments

Good stormwater management practices are critical to reduce the risks of floods causing structural damage to buildings, houses, landscaped areas, driveways and pavements. Heavy rainwater is unable to take its natural course in developed areas covered with impermeable surfaces like structures, pavement and concrete sep. Instead, the rainwater overflow damages areas surrounding storm drains and drainage ditches.

Failure Assessments

TFE has professionals with extensive experience in failure investigations of stormwater infrastructure including , and dams.

Stormwater Design

TFE has professionals with extensive experience in stormwater design that bring effective solutions to site design and engineering challenges.

stormwater best management practices (BMPs)



EMERGENCY SERVICES

- Site Evaluation & Assessment
- Construction Order of Magnitude Estimates
- Structural Design
- Project Management
- Project Coordination
- Construction Management
- Construction Administration
- Owners Representation



SITE COORDINATION

- Lead and Direct site assessment teams
- Review and submit reports

Flood Disasters

Disaster Team Leader, James Jatko

Our disaster team leader has extensive in-depth knowledge and working experience in recovery from Hurricane and Flood Damage. He has had extensive program management, project development, and supervisory responsibilities working with government and non-government organizations. His design and project management responsibilities with the U.S. Department of Veteran's Affairs National Cemetery Administration, the U.S. Department of Navy Facilities Engineering Command, and as the Director of Facilities Engineering for the Naval Surface Warfare Center Carderock Division, the City of Greenville, NC as the City Engineer, U.S. Department of Homeland Security – Federal Emergency Management Agency (FEMA) Region and Federal Emergency Management Agency, and finally, the North Carolina Department of Public Safety – Division of Emergency Management. He is supported by civil engineers with 40+ years experience.

Failure Evaluation

TFE has professionals with experience in failure investigations including complex storm drainage issues, structures, roadways, pavements, runways, foundations, retaining walls, basement walls, piping, bridges and dams.

Team Coordination

TFE can provide Coordination to teams of professionals to participate in assessments of storm damage. We have several individuals who have participated in hurricane and storm damage, and who have worked for the Corps of Engineers, Navy Sea Bees, etc.

FEMA Submittals

TFE has professionals with extensive experience in producing the required Benefit Cost Analysis with appropriate comments within the FEMA RFI related to facility replacement or repair. Based on this information, we can draft comments for your response to FEMA Region IV.



Triangle Facilities Engineering, P.A.

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Cage Code: 6QTS9

SAM Registration: Completed

Business Size: Small Business

NCDOT Prequalified , 22 Categories

NCDOT Certif. Small Professional Services Firm (SPSF)

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Federal NAICS Codes

- ◆ 541330 (Prime) Engineering Services
- ◆ 541350 Building Inspection Services
- ◆ 541490 Lighting Design
- ◆ 541690 Energy Services

Principals

R. Glenn Craig, P.E.
President - Civil Engineering, Project Mgt., QA/QC

Joseph Angell, P.E., CCM, DBIA
Principal - Federal Design Build, QA/QC

William T. Sabata, P.E.
Principal - Civil Engineer, Environmental Engineer

James H. Jatko, P.E.
Principal - Civil Engineer

Atef Takla, P.E.
Civil Engineer, Structural Engineer, QA/QC

Marvin "Hank" Wright, P.E.
Principal - Chief Electrical & Instrumentation Engineer

Gary Weekly, P.E.
Civil Engineer/Geotechnical Engineer

Roger Woods, P.E.
Principal - Mechanical Engineer

Dave Koss, P.E., LEED-AP, CCA
Principal - Chief Civil, Structural & Site Engineer

William Hardin, P.E., P.L.S.
Principal - Civil Engineer/Surveyor