

Kaskaskia Engineering Group, LLC (KEG) is a 100% woman-owned and managed engineering and contracting firm that was founded in 2006. From the beginning, we have recruited highly skilled employees from a variety of public and private sector backgrounds. This has allowed us to quickly amass an impressive portfolio of federal, state, local public agencies, and private project experience. We have established professional relationships with The Federal Highway Administration, the Missouri Department of Transportation, the Missouri Department of Natural Resources, the Metropolitan St. Louis Sewer District, the St. Louis Board of Public Service, East-West Gateway Council of Governments, the U.S. Army Corps of Engineers, and area leaders.

KEG is a certified Disadvantaged Business Enterprise (DBE) through the Missouri Regional Certification Committee, licensed as a Women's Business Enterprise (WBE) by the Women's Business Enterprise National Council, and is recognized as a Women-Owned Small Business (WOSB) by the Small Business Administration. Our offices are located in Ste. Genevieve, Missouri; Belleville, Glen Carbon, Champaign, Macomb and Peoria, Illinois; Evansville, Indiana; and Saint Paul, Minnesota.

KEG is fully prequalified with MoDOT, including the E-Verify, Financial, Federal Aid Basic Training, Bridge Forms, and Bridge QC/QA Plan prequalifications.

It is KEG's policy to seek and employ qualified personnel in all of its facilities and at all of its locations; to provide equal opportunities for the advancement of employees, including upgrading, promoting and training; and to administer these activities in a manner which will not discriminate against any person because of race, color, religion, sexual orientation, national origin, disability, gender identity, or veteran status. Currently, women make up 30 percent of our staff and 15 percent of our employees are minorities.



ABOUT KEG

We operate on the paradigm that there is plenty for everybody, and that one person's success is not achieved at the expense or exclusion of the success of others. It's not your way or my way; it's a better way, a higher way. We believe the betterment of one leads to the growth of all. Our collective quest for the development of the individual's ultimate potential is based on our keen understanding that we are all responsible to grow ourselves, the company, and our communities.

At KEG our goal is to provide extraordinary service through expert technical knowledge, collaboration, and communication early and often. KEG's full service capabilities include transportation engineering, traffic engineering, surveying, CADD design, public involvement, geotechnical engineering, structural engineering, general contracting, GIS mapping, environmental science, construction observation and management, infrastructure analysis and planning, right-of-way research and acquisition, grant writing, cost estimating,



and water resource management, including water, wastewater, and stormwater planning and design. KEG Build, the contracting division of KEG, regularly performs roadway maintenance and drainage work and is available for cost estimation and constructability reviews of design performed by KEG staff.

The diversity of our in-house services affords us the ability to understand more than just how to complete a project. It allows us to view projects with a holistic approach - considering all phases of projects, as well as environmental, client, and stakeholder needs.





TRANSPORTATION PLANNING & DESIGN

Our Transportation Planners and Engineers have the education, training, and experience to design multi-modal transportation projects that enhance our communities by increasing safety, providing mobility, reducing pollution, and increasing economic development. We have performed transportation planning and design for projects that range in size from small projects with localized impacts to large projects that have regional and statewide significance. By working collaboratively with our clients, we can create multi-modal engineering projects that benefit us all.

- Highway/Roadway Design on New Alignments, Realignments, and Resurfacing
- Traffic Studies Intersection and Interchange Design Studies
- Traffic Management Planning
- Project Development Reports
- Traffic and Pedestrian Signal Design
- Traffic Counts and Modeling
- ADA Design and Compliance
- Drainage Analysis and Improvement Plans
- Utility Coordination and Engineering
- Signing and Pavement Marking Plans
- Bicycle, Pedestrian and Recreational Facility Design
- Project Management and Inspection Services
- Microstation, AutoCAD and GIS Services

STRUCTURAL ENGINEERING

KEG's structural engineering team has the education, training, experience, and licensure to plan, design, and inspect a vast array of buildings, bridges, retaining walls, culverts, and other structure types to meet the safety, functionality, constructability, aesthetics, and cost effectiveness for all of our clients' needs.

- **Steel and Concrete Bridge Design** ¢
- Foundation and Pile Design •
- Type, Size and Location (TS&L) Details Bridge Planning and Condition Reports Erection Plans
- Pre-Cast and Cast-in-Place Culvert Design ۲
- **Temporary Shoring Plans and Design**
- **Retaining Wall Design** .
- Sign Structure Design and Sign Truss Inspection ۲
- **Bridge Painting Plans**
- **NBIS and Element Level Bridge Inspections** •
- **Bridge Management**

* New Mississippi River Bridge - KEG'S structural engineers performed the design and plan preparation for the 2,500-foot long Illinois approach span bridge and also participated in the Alternate Technical Concept Process. This allowed contractors to provide input on constructability early in the design process. Their ideas were reviewed and incorporated into the plans by KEG engineers, assuring that innovation and best value for the client was achieved.







GEOTECHNICAL ENGINEERING

Our geotechnical engineers are proficient in the application of soil and engineering mechanics, subsurface exploration methods, and laboratory investigation techniques. KEG has the experience and the expertise to investigate and evaluate complex subsurface conditions. We have performed geotechnical investigations for major river crossings, levees, municipal buildings, commercial and industrial developments, roads, utilities, tunnels, and dams.

- **Geotechnical Analyses Rock and Soil** •
- **Bearing Capacity Analyses**
- **Settlement Analysis**
- Slope Stability Analyses
- Seepage Analyses (Including 2D & 3D Modeling) Geotechnical Report Preparation
- Groundwater Modeling
- Stream Bank Protection Design and Plan Development
- Construction Quality Assurance Oversight Deep and Shallow Foundation Design & Analyses
- Subsurface Exploration
- Standard and Reinforced Earthen Slope and Embankment Design
- Seismic and Liquefaction Analysis

ENVIRONMENTAL SCIENCE

Our environmental scientists and engineers understand the diverse federal and state rules and policies and can shepherd any project through these cumbersome regulations to bring value to the community while respecting the environment in which we all live.

- NEPA
 - Categorical Exclusions (CE)
 - Environmental Assessments (EA)/Findings of No Significant Impact (FONSI)
 - Environmental Impact Statements (EIS)
 - Phase I Property Investigations
 - Red Flag Summary Reports
- Wetland Delineation and Plant Ecology
- Threatened and Endangered Species Identification
- Wetland Mitigation

- Permitting
- Noise Studies
- Public Involvement and Stakeholder Meetings
- Archeological and Historic Resource Identification and Section 106 Reports
- Floodplain Management Studies
- Biological Surveys and Analysis
- Air Quality Analysis
- Agricultural Impact Studies
- Cultural Resource Coordination





RECREATIONAL FACILITIES

KEG's planners, environmental scientists, engineers and public involvement employees work on projects that enhance the quality of life in our communities. These projects are widely used by our friends and neighbors and include parks, recreational facilities, boat ramps, ball fields, pedestrian/bike paths, and buildings to support these facilities.

- Bike, Pedestrian, and Recreational Path Design
- New Parking Lot Layout and Design
- Parking Lot Rehabilitation
- ADA Transition Planning
- ADA Compliant Site Design
- Utility Design and Coordination
- Landscape Layout and Design
- Cost Estimates/Value Engineering

- Local, State, and Federal Permit Applications
- Erosion and Sedimentation Control with Construction Permitting
- Underground Storage Structures
- On and Off-Site Water Distribution Design
- Floodplain Compliance, Analysis, and Permitting
- Park Master Plans
- Park Rehabilitation Plans

QUALITY CONTROL/QUALITY ASSURANCE

A lot of companies preach quality, but at KEG we live it. Starting at the top, our company president, Geri E. Boyer, is a major proponent of having an established QC/QA process that is applied to each of our projects. All deliverables are reviewed by a senior member of our design team to ensure clarity and accuracy of the work product. Following the review, the originator of the work implements the necessary corrections, and the reviewer will then check to make sure the corrections were incorporated. Our thorough review practice is another critical aspect of the project management process and will result in a high quality product.

