

# Company Brochure

## About Bowen Engineering & Surveying

Bowen Engineering & Surveying was founded in 1979 and since that time we have provided civil engineering and land surveying services to government agencies, municipalities, private entities and individuals in southeast Missouri. We believe the following items make us well qualified to provide consulting engineering services to Local Public Agencies throughout the area:

- Bowen Engineering and Surveying has called southeast Missouri home for over 40 years. Our staff members are very familiar with local regulations, local geology and issues unique to the region.
- Our staff members are experienced with state and federally funded projects, such as the Federal-Aid Surface Transportation Program (STP) and the Community Development Block Grant (CDBG) program.
- Our company can provide construction testing and inspection services. We employ MoDOT and ACI certified lab and field personnel.
- We are adequately staffed to ensure that work on each project will begin promptly and will remain a priority of our company.

We hope that the information included in this brochure will give you an idea of our firm's experience and capabilities. We know you will find that Bowen Engineering and Surveying is well qualified to provide consulting services and we look forward to working with you on your next project.

## Civil Engineering

Our engineering staff includes three professional engineers, as well as experienced civil technicians and draftsmen. Our staff has substantial experience in site civil engineering and we have completed many projects in the southeast Missouri area involving state and federal grant



funding. We have worked with the Southeast Missouri Regional Port Authority of Cape Girardeau and Scott Counties since 1983. We have extensive experience with river port projects, street design and construction, load-out facilities and rail extensions. Over the past 39 years, our firm has prepared plans and specifications for the Semo Port on water lines, sanitary sewer lines, highways, railroads and site grading projects. Most projects completed for the Semo Port were done with the assistance of state and federal grant money.



We have completed many roadway projects in the southeast Missouri area including projects for the cities of Cape Girardeau and Park Hills. These projects have ranged in complexity from local road extensions to major upgrades for multi-lane arterial streets with pedestrian walking paths.

Our design and construction experience also includes extensive work in commercial and residential subdivision development, drainage facilities, water and sewer projects, storm water management projects and ADA-compliant design. We are experienced with completing hydrologic analyses of watersheds

and hydraulic analyses of storm sewers, culverts, bridges and natural waterways to prepare optimized designs with minimal impact to the environment and any adjacent properties. We are also experienced in preparing cost estimate data, permit applications, construction plans, bid documents, specifications and construction records.

Typical civil engineering services we provide include the following:

- Streets and Roads - New Roadway Design, Street Extensions, Widening, Rehabilitation and Resurfacing, Signalization
- Sidewalks and Trails - New Sidewalk Design, Trail Extensions, Widening and Rehabilitation
- Site Design - Site Layout and Grading Plans, Site Utility Plans, Stormwater Management and Collection, Stormwater Pollution Prevention Plans, Permitting
- Wastewater Treatment Design - Residential and Commercial Wastewater Treatment Systems, Septic System Design, Sanitary Sewer Design
- Drinking Water - Public Water Line Extensions, Public and Private Wells
- Industrial - Port Authority Development, Railroad Design
- Structural - Foundations, Structural Design and Analysis

## **Surveying**

Our surveying staff includes two professional land surveyors and 3 fully equipped survey crews. We utilize the latest surveying equipment and software, including cutting edge GPS systems and 3D Laser Scanning equipment that collect real time data and minimize field survey costs and office processing. Our surveyors are very experienced in completing residential and commercial boundary surveys, right of way and easement surveys, and topographic and utility surveys – particularly in southeast Missouri.

We provide construction surveying services, including construction staking, mapping control surveys, earthwork surveys and as-built surveys. Our surveying clients include state and federal agencies, local municipalities, corporations, contractors, developers and private landowners.



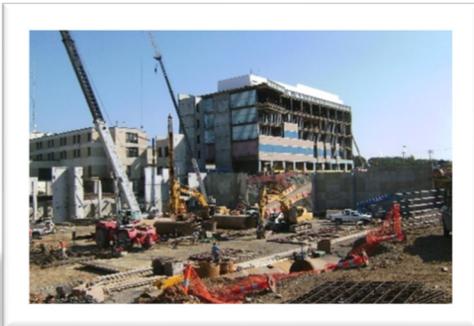


We are the only company between St. Louis, MO and Memphis, TN to provide hydrographic surveying and we operate a fully equipped hydrographic surveying vessel and several smaller boats for accessing confined waterways. Since 2001, our firm has continually contracted with the St. Louis District US Army Corps of Engineers to provide land and hydrographic surveying services. We are currently one of only three surveying companies contracted by the St. Louis District and have completed surveys throughout eastern Missouri and western Illinois. We have completed hydrographic surveys extensively on the Mississippi, Missouri, Illinois and Kaskaskia Rivers and have surveyed major impoundments as far away as Oklahoma, Texas, Pennsylvania and New York State.

Our staff is also experienced in collecting field data for use in Geographic Information System (GIS) applications, as well as encoding the data into Esri ArcGIS software. We have completed GIS projects that involved coordinating aerial photography with on the ground survey data to update utility maps for local public agencies. We have also completed GIS projects for the Corps of Engineers, such as collecting and processing survey data for all navigable features along 700 miles of the Missouri River.

### **Testing and Inspection**

Our testing and inspection staff includes professional engineers and certified technicians. Typical testing and inspection services we provide include:



- Field and Laboratory Concrete Testing
- Soils and Aggregate Testing and Classification
- Moisture / Density Testing of Soils and Asphalt
- Residential and Commercial Structural Inspection
- Construction Inspection and Monitoring

Our technicians maintain the following certifications:

- American Concrete Institute (ACI) Concrete Field Testing – Grade 1
- Humboldt Scientific / Troxler Electronic Laboratories Nuclear Gauge Training
- MoDOT Concrete Field
- MoDOT Concrete Strength
- MoDOT Aggregate Technician
- MoDOT Soil Density
- MoDOT Plasticity Index
- MoDOT T85 Absorption

## Personnel

Our staff includes three Professional Engineers, two Professional Land Surveyors, three fully equipped survey crews, and various office and field technicians. We maintain a highly experienced and motivated team and are adequately staffed to meet the time constraints of demanding projects. The majority of our employees have been with the firm for over 10 years, and their experience and loyalty are evident in the quality of work that is delivered to our clients. Below is some brief information about our key employees:



Chris Bowen, P.L.S. (MO), President

Education: Civil Engineering & Land Surveying – University of Missouri, Columbia

With over 40 years of experience in the surveying and civil engineering fields, Chris draws from his deep knowledgebase to lead our company. His responsibilities include overseeing daily operations including coordination of field crews, record research, data processing, review of survey information, review of CAD Drawings and project management.



Christopher M. Buerck, P.E. (MO), Project Manager

Education: B.S. Civil Engineering – University of Missouri, Columbia

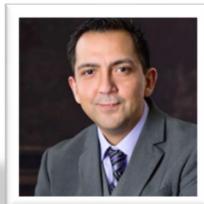
Chris has been with the company since 1997 and has over 25 years of experience. His responsibilities include providing design and construction engineering services for municipal roadway projects, traffic signalization, rural and urban hydrology studies, watershed analysis, residential and commercial planning and site development. Chris also has extensive experience with sidewalk and trail projects. His other duties include overseeing CAD technicians, coordinating with survey crews and providing inspections for construction projects. Chris is extremely knowledgeable about the LPA program.



Martin G. Hoffman Jr., P.E. (MO), Project Manager

Education: B.S. Civil Engineering – Missouri University of Science and Technology

Martin has over 19 years of experience in civil engineering and has been with us since 2003. His responsibilities include providing design and construction engineering services to the Southeast Missouri Regional Port Authority (Semo Port), managing land and hydrographic surveying projects for the U.S. Army Corps of Engineers and co-managing our field and laboratory testing services department. He is an expert in survey data processing, CAD and GIS systems.



Jacob Ortega, P.E. (MO, TX), Project Manager

Education: B.S. Civil Engineering – University of Texas, San Antonio

Jacob has over 15 years of experience in the field of Civil Engineering and has been with Bowen Engineering & Surveying since 2017. Jacob's engineering expertise includes: streets, railroad extensions, sanitary sewers, wastewater treatment facilities, storm sewers, stormwater management facilities, site layout and grading. Jacob has accumulated experience with LPA projects during his career and he is very familiar with the entire process.

## Contact Us

We welcome any questions and look forward to speaking with you about your next project. We are always happy to provide references or additional information about our company that you might need during the consultant selection process. Please call us at (573) 339-5900 or visit our website at [www.bowenengsurv.com](http://www.bowenengsurv.com).