



**Missouri's
Local
Program**
*for community
development*

COVER SHEET

(This must accompany your firm's letter of interest and does not count in the page limit)

Firm's Full Legal
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TREKK Design Group, LLC

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Work Category:

- Roadway Design
- Trails & Sidewalks
- Construction Inspection
- Traffic Engineering & TEAP
- Structures
- Environmental
- Historic Preservation
- Multimodal Planning / Systems and Facilities Design
- Transportation Planning – **NEW CATEGORY**

TREKK is committed to delivering transportation projects that positively impact Missouri. Every day, we leverage our entrepreneurial culture, technology and innovation to engineer solutions that support the growth and restoration of the communities we serve. We call this IMPROVING LIVES.

As a pre-qualified MoDOT consultant and approved firm on the current Local Public Agency (LPA) on-call list, TREKK's transportation team has been involved in numerous projects across Missouri as both a prime consultant and sub-consultant. We appreciate each opportunity to serve the local agency, MoDOT and the citizens of Missouri. Being selected as one of your Structures on-call providers would allow us to expand our opportunities to provide the first-priority customer service that you deserve.

GENERAL EXPERIENCE OF FIRM

Since 2002, TREKK has served Missouri residents providing quality transportation design services focused on delivering commonsense, holistic solutions. We are a full-service firm offering roadway, structural, hydraulics, traffic, drainage, erosion control, utility coordination, permit assistance, construction engineering and inspection, and both traditional land survey and mobile LiDAR survey.

TREKK continues to make significant investments in our transportation team, growing to meet our clients' full-service consulting needs by adding expertise in roadway, structural and traffic design. We have also added recently retired MoDOT staff to bolster our experience and commitment to quality service.

The TREKK team brings a wealth of structural design experience. Our engineers are well-versed at taking a project from concept to construction. TREKK has provided high-quality structural solutions on numerous projects, ranging from simple stream crossings to complex, urban interchange bridges. Our experience with short- and long-span steel and concrete vehicular, pedestrian and bikeway bridges, bridge widenings, bridge rehabilitations, retaining walls and box culverts gives us the insight necessary to work as an extension of your staff.

FAMILIARITY/CAPABILITY

TREKK's team of more than 80 design professionals, including more than 15 LPA certified professionals, understands the requirements and expectations to deliver LPA projects. Thanks to the extensive experience among our project managers, TREKK can guide project teams through the project development process. Project teams collaborate effortlessly within TREKK, and with our clients, to deliver high-quality plans. Our team of roadway, traffic, structural, and hydraulic engineers have in-depth familiarity with LPA programs, design standards and specifications. Our design team takes great pride in delivering safe and reliable design services to Missouri residents.

ACCESSIBILITY

Given our experience as a MoDOT LPA on-call partner, we understand that on-call requests typically require urgency and heightened responsiveness. Delivering multiple, small projects within the same year is second nature at TREKK. With offices in Kansas City, St. Louis, Columbia and Springfield, the TREKK team will be responsive and remain flexible to our clients' needs across the state.

TREKK uses a variety of tools and technologies to remain responsive to our clients, ranging from in-person meetings to using technology to remain in contact even from a distance. We use Microsoft Teams to conduct virtual meetings, as well as the chat feature for quick conversations among team members. Our team employs several tools to monitor project schedules, including Microsoft Project. We are committed to meeting or exceeding your schedule demands as they arise.

PAST PERFORMANCE

TREKK is proud of our past performance on LPA and MoDOT projects. Examples of our recent experience include:



I-64 Improvements – Chesterfield Parkway to Long Road | City of Chesterfield, MO. TREKK is helping develop an Access Justification Report for this interchange replacement project. The project includes concept and preliminary designs, including

bridge and stormwater design, hydraulic analysis and survey. TREKK led conceptual designs to convert an interchange from partial to full-service and extend an outer road across a levee and major creek directly discharging into the Missouri River. The recommended 'button-hook' configuration avoids a major transmission waterline and levee pump station collection basin. TREKK developed design criteria, typical sections, bridge and MSE wall layouts and foundation concepts. This locally funded project is the first step in applying for federal funding for the construction.



Helmig Road Culvert Replacement | Jackson County, MO. TREKK provided design services for the replacement of the bridge box culvert at Helmig Road over a branch of Sni-A-Bar Creek. TREKK's services included survey, roadway, bridge and

hydraulic design. Stormwater analysis included hydrologic evaluation of the 1,130-acre drainage area and hydraulic modeling of existing and proposed conditions using HEC-RAS for the FEMA Zone A floodplain. This project was federally funded through the LPA Program.

Route D over Horse Creek | MoDOT Southwest District.

TREKK provided preliminary and final roadway and bridge design plans, utility coordination and construction support for this project. The replacement bridge is a skewed, three-span concrete spread box beam structure with a total length of 139 feet. This project included shoulder widening and guard rail improvements at the bridge approaches and an improved vertical curve over the bridge. This project was federally funded.



Route 123 over Barren Creek | MoDOT Southwest District. TREKK provided design services for the replacement of the bridge on Route 123 over Barren Creek, south of Fair Play. The three-span structure was replaced with a 114-foot single-span

NU-girder bridge. TREKK provided preliminary bridge and roadway plans, bridge hydraulic analysis, and final bridge and roadway plans. This project was federally funded.



Route 34 over St. Francis River | MoDOT Southeast District. TREKK provided bridge and roadway design for the rehabilitation of the nearly 700 foot, eight-span bridge.

Improvements included bridge deck replacement and widening,

replacement of expansion joints, new bridge barriers and substructure repairs. Accommodations were also made for the Ozark Trail, which crosses under the bridge and through the spill slope area. This project was federally funded.



140th Street over I-49 | MoDOT Kansas City District. TREKK provided bridge design services for a value engineering proposal saving taxpayers more than \$200,000 for this bridge replacement in Grandview. TREKK developed an

innovative solution to modify the cross-slope of the bridge under the sidewalks, utilizing a more cost-effective NU girder that provides the required vertical clearance. TREKK also provided traditional land and LiDAR survey. This project was federally funded.



67th Street over I-435 | MoDOT Kansas City District. TREKK provided a conceptual study report, survey, preliminary and right-of-way plans and final design for the 67th Street bridge replacement. With 67th Street designated a bike route, this project

included a conceptual study to evaluate overall project costs and right-of-way needs for various structure types. TREKK worked with MoDOT and the city of Kansas City to

design a bridge and roadway that provided access for vehicles, pedestrians and bicyclists. The final bridge layout was a two-span (93'-93') Prestressed Concrete NU35 bridge on MSE retaining walls. This project was federally funded.



Route 46 & Route W Bridge Replacements | MoDOT Northwest District.

TREKK provided bridge and roadway design and hydrologic and hydraulic modeling for these two bridges. At Route 46 over Marlowe Creek, the new SDCL bridge will

improve safety by providing a wider roadway. The new NU-girder bridge at Route W will also improve safety by correcting a deficient vertical curve just east of the bridge. Under an on-call contract with MoDOT, TREKK provided traditional land survey and aerial scanning for the bridges. This project was federally funded.



US 71 & Route W (Bannister Road) Interchange Improvements | MoDOT Kansas City District.

As part of this bridge replacement project, TREKK completed an interchange alternatives analysis to provide

operational and safety improvements. The preferred alternative included geometric interchange improvements in addition to the planned bridge replacements. Because the preferred configuration avoids right of way acquisition, the alternatives analysis resulted in both cost and time savings. TREKK completed a hydraulic analysis and provided final roadway and bridge plans in a compressed time frame to accommodate an upcoming regional closure on I-70. Improvements will address aging infrastructure, vertical clearance constraints and future traffic growth. This project was federally funded.

MOU Culvert Cleanouts | MoDOT St. Louis District.

TREKK provided hydraulic analysis, floodplain study, erosion control and proposed sediment removal for the design of culvert cleanouts within a 7x4 RCB, 6x3 RCB, 48" RCP, and 12x10 RCB. A hydraulic analysis was completed to show the impacts of the proposed design on an adjacent FEMA regulated floodplain. This project was state funded.

Route A Bridge Deck Replacement over Otter Creek | MoDOT Southeast District.

TREKK provided preliminary documents and is providing final plans for a bridge deck replacement and widening of Route A over Otter Creek. Improvements include making the bridge deck composite, using a Type D barrier with the existing girders and converting end bents and interior bents to integral. Ratings were updated for the widened composite deck and heavier barrier. This project is federally funded.

QUALIFICATIONS OF PERSONNEL

TREKK has built a team of proven professionals with the capacity and capability to fully serve MoDOT. Our design team of more than 80 professionals includes experienced practitioners and an innovative next generation of the profession. The design team is fully supported by our 10 in-house survey crews, which provide both traditional land survey and LiDAR services.



Tawn Nugent, PE, DBIA* | Associate Partner.

Tawn leads TREKK's Transportation practice. She brings nearly 30 years of MoDOT experience on a variety of roadway and bridge projects. Tawn is especially passionate about projects that improve safety, connectivity and quality of life for all individuals.



Kandi Spraggs, PE* | Structural Lead.

Kandi brings more than 15 years of professional experience, including design and project management of highway, railroad and pedestrian bridge projects. She has designed a diverse array of structures, which includes prestressed I-girders, box girders, simple and continuous steel spans including curved girder bridges, and multiple pedestrian bridges. Additionally, she has been actively involved in the load rating and rehabilitation of various bridges across the U.S.



Derrick Price, PE | Structural Lead.

Derrick specializes in bridge and structural design. His 11 years of experience includes preliminary and final design and quantity calculations for several bridge types, including steel girder, prestressed concrete girder and concrete slab structures. He also assists with hydraulics and hydrologic analysis for bridge projects.



Samantha Clark, PE | Structural Engineer.

Samantha has eight years of experience in both bridge and roadway projects. She has completed structural design tasks for prestressed girder bridges, steel girder bridges, reinforced box culverts, concrete foundations and concrete retaining walls across both MoDOT and municipal projects.



Bretlyn Opfer, PE | Structural Engineer.

Bretlyn has more than six years of bridge design, load rating and structural inspection and assessment experience, including bridges, signs and lighting towers. A certified Bridge Inspection Team Leader, Bretlyn has inspected various bridge types and box culverts across nine states and DOTs.



Eric True | Structural Engineer.

Eric is gaining experience in MoDOT bridge design. His background includes construction and quality inspection for girder, I-beam and box beam structures, as well as concrete testing and road, sidewalk, curb and ADA ramp inspections.



Hanna Jones, PE, CFM* | Hydraulic Engineer.

Hanna has nearly 10 years of experience in hydraulic and stormwater design for transportation projects, including bridges and culverts. Her experience includes hydrologic and hydraulic modeling and analysis, storm and sanitary sewer design, and water quality best management practices.



Sandra Wagner, PE, CFM* | Hydraulic Engineer.

Sandra's more than 20 years of experience includes roadway drainage design on numerous transportation projects. She regularly performs hydraulic analyses and modeling for bridges and box culverts. As a Certified Floodplain Manager, Sandra has a firm understanding of the requirements for development within floodplains.



Adam Peetz, PE* | Utility Coordination Manager.

Adam brings more than 21 years of expertise in public infrastructure, site and utility coordination. He helps guide utility coordination, including tracking existing utilities and identifying utility locations.



Mike Klasing, PLS | Survey Lead.

Mike's 31 years of topographic, boundary, hydrographic and LiDAR surveying experience across multiple project types will provide continuity and QA/QC to meet MoDOT standards. He has led TREKK's survey teams on dozens of MoDOT roadway, bridge and sidewalk projects across all Districts.



Phil Becker, PLS | LiDAR Manager.

Phil brings 16 years of experience with both traditional survey and LiDAR acquisition, extraction and data management for structural and roadway projects nationwide. He has worked on dozens of MoDOT projects, providing both traditional survey and LiDAR services.

** Indicates an LPA-certified professional*



TRANSPORTATION SERVICES

CLEAN WATER. SAFE ROADS. RELIABLE INFRASTRUCTURE.



IMPROVING SAFETY, CONVENIENCE AND ACCESSIBILITY FOR ALL USERS.

TRANSPORTATION

TREKK's transportation team designs creative, cost-effective solutions that enhance safety and improve roadway capacity and access. We offer comprehensive roadway planning, design, utility coordination, public involvement, survey and construction inspection services on a wide range of projects.

Our award-winning transportation team has experience working on everything from intersection modifications to new interchanges. We approach transportation challenges with a holistic, commonsense mindset. TREKK has been involved in many innovative transportation solutions, including diverging diamond and diverge-about interchanges.

We have wide-ranging experience on design-build projects as both the owner's engineer and the contractor's partner. A thorough understanding of both sides of the process provides a valuable perspective on all types of projects.

Our transportation experience isn't just limited to roadways. TREKK also has experience with railroad, transit and aviation projects. We are well versed in the design of multi-modal facilities to promote safety and mobility for all users. We apply our training in ADA principles to design ADA-compliant, pedestrian accessible sidewalks, ramps and transitions. We bring these learned and experienced skills to every transportation design project we perform.

COMPREHENSIVE TRANSPORTATION SERVICES



ROADWAY

TREKK values our role in designing roadways that safely move people and goods. We bring experience with designing all types of facilities, from interstate highways to rural roadways to city streets. We know that private property and utilities are often impacted by roadway improvements. TREKK will evaluate those impacts holistically throughout the design stages.



TRAFFIC

TREKK's team provides traffic analysis, study and design services that improve safety and reliability for all modes of transportation. Our traffic engineers leverage technology to understand the impacts of increased demand and changes in travel patterns. Our diverse expertise allows us to effectively design signage, pavement marking, traffic signals, ITS Systems and lighting plans to improve mobility.



SAFETY

Assessing safety enhancements is a critical aspect of all projects. TREKK's team considers how the transportation system can be safer after improvements are completed and also during the construction period. We perform safety assessments of existing facilities, reviewing historical data to identify trends. Our engineers are experienced with the latest industry guidance to provide recommendations in determining improvements that give the most benefit.



SURVEY AND UTILITIES

Survey data provides the foundation for any transportation project. Our crews have experience with the latest survey technologies to capture and deliver topographic data, including mobile, static and terrestrial LiDAR. Utility coordination is a value-added service that provides the assurance and accuracy of subsurface utility location prior to survey and design. To provide efficiency, TREKK's survey, utility and design teams offer seamless coordination.



STRUCTURAL

We understand the significance structures have on transportation project budgets and bring creativity to maximize their value and minimize overall project costs. TREKK offers broad structural design experience, including short- and long-span vehicular, pedestrian and bikeway bridges, bridge widenings, bridge rehabilitations, retaining walls and box culverts.



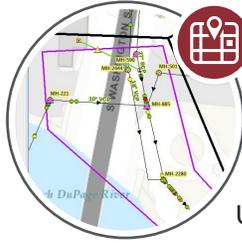
CONSTRUCTION

TREKK's construction inspectors provide the peace of mind that your project is being constructed as designed. Our certified inspectors have experience on all types of projects. By taking a proactive approach, we can help clients avoid schedule delays and costly budget overruns. We value being our clients' advocate, building relationships with the community, and keeping everyone apprised of construction activities.



MULTIMODAL

Bike and pedestrian facilities provide an alternate means of transportation, improved fitness and quality of place. In the right location they enhance communities and promote economic development. Connecting all modes of travel—roads, sidewalks, railroads, transit and ports—creates a unified system for moving goods and people. TREKK's staff provides detailed designs that reflect the bigger picture of making all modes function together efficiently.



GIS AND ASSET MANAGEMENT

Limited resources can force transportation agencies to make difficult budget choices. Understanding the location and condition of assets is a critical step to establish priorities. TREKK's team starts with the end user in mind and customizes the organization and retrieval of data to match the client's needs. This allows the client to build smart systems, which maximize the coordination and function of all types of infrastructure.

HOW TREKK CAN HELP

- Access management
- ADA compliance
- Aviation, rail and transit
- Bicycle and pedestrian facility design
- Bridge and retaining wall design
- Complete streets design
- Construction inspection
- Corridor and planning studies
- Design-build experience
- Grant writing and funding assistance
- Intelligent Transportation Systems
- Intersection geometric improvements
- Lighting design
- Park and trail design
- Pavement marking and signing
- Pavement rehabilitation
- Roadway and interstate highway design
- Storm sewer design and analysis
- Traffic and safety analysis
- Traffic calming
- Traffic impact studies
- Traffic signal design and progression
- Smart cities/systems
- Survey and utility coordination



CLEAN WATER.
SAFE ROADS.
RELIABLE INFRASTRUCTURE.

