



**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
Name:

Master Consulting Engineers, Inc.

Firm Contact Name:

Brad Loomis, PE, PTOE

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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**

December 12, 2025

Ms. Ashley Buechter, P.E.
Local Program Administrator

RE: MoDOT LPA On-Call Professional Services – Trails & Sidewalks

Dear Ms. Buechter:

Master Consulting Engineers, Inc. (MCE) is pleased to present this proposal for Local Public Agency (LPA) Professional Services for the 2026-2029 cycle. For over 25 years, MCE has delivered engineering solutions that help agencies operate safer, more reliable, and more efficient transportation systems. We combine technical expertise, real-world experience, rigorous analytical tools, and a dedicated team of licensed professional engineers to support cities, counties, Departments of Transportation, and federal entities across the country.

General Experience of the Firm

MCE and our staff have developed a robust portfolio of trail, greenway, streetscape, and sidewalk projects spanning urban, suburban, and rural settings. This experience includes multi-use paths, shared-use corridors, pedestrian bridges, neighborhood sidewalk infill, ADA retrofits, Safe Routes to School improvements, and trail systems integrated into parks and recreation master plans. Each of these project types requires distinct technical considerations, and our team has refined best practices that allow us to anticipate issues early and guide projects efficiently toward successful delivery.

We have substantial experience navigating the combination of engineering, aesthetic, and community-driven priorities that define trail and sidewalk design. Whether designing facilities adjacent to constrained rights-of-way, synthesizing public input into buildable concepts, or coordinating with utility providers and property owners, we emphasize proactive communication and coordination.

Our design philosophy centers on enhancing the user experience while protecting public investment. We employ durable materials, context-sensitive design elements, and cost-efficient construction strategies that allow communities to maximize their budgets without compromising safety or performance. Our team is also mindful of long-term maintenance needs, and we incorporate features that support sustainability — such as strategic drainage solutions, appropriate pavement selection, and thoughtful landscaping that complements the corridor's character.

Past Performance

Some example local agency trail and sidewalk design projects include:

- *Ferguson Community Center – Sand Volleyball Courts and Walking Trail – City of Ferguson Public Works, MO. (Locally Funded)* At a prior firm, Brad Loomis was responsible for design and construction engineering for sand volleyball and recreational trail improvements at the Ferguson Community Center. This project included design and construction engineering for a 1/3rd mile loop trail and three-court sand volleyball area on an existing vacant lot adjacent to the Community Center.
- *January Wabash Memorial Park Master Plan – City of Ferguson Public Works, MO. (Locally Funded)* At a prior firm, Brad Loomis was responsible for updating the existing master plan to develop a current use and needs analysis for January Wabash Park for the City of Ferguson. The project included review of the existing facilities for compliance with the Americans with Disabilities Act and preparation of a written analysis and recommendations for the proposed improvements.

- *St. Vincent Greenway – Great Rivers Greenway – City of Wellston and City of Pagedale, MO. (Locally Funded)* At a prior firm, Brad Loomis was responsible for planning services for the development of a paved, 2.5 mile long, 10-foot-wide multi-use trail. His other responsibilities included: trail planning and location studies; coordination with the local transit organization, Metro; coordination and meetings with the local municipality; field siting investigations to assess trail feasibility from financial and engineering perspectives; and development of GIS base maps for use in trail planning and presentations.
- *Topping Road – New Trail Grant Application – City of Town & Country, MO. (Locally Funded)* At a prior firm, Brad Loomis provided oversight for grant application assistance and engineering five concept design for a new 11-foot-wide trail adjacent to Topping Road for the City of Town & Country. The document and plans led to a TIP application for the City.
- *Halpin Park Concept Design – City of Ferguson Public Works, MO. (Locally Funded)* At a prior firm, Brad Loomis provided oversight for concept design of a park located on Halpin Road in Ferguson. Provided the City five options for features of the park including renderings and costs.
- *Manchester Road – MO Route 109 West to MO Route 100 – Widening, Resurfacing, and Bike Lane Improvements – City of Manchester, MO. (Locally Funded)* At a prior firm, Brad Loomis provided oversight for widening of three miles of roadway to accommodate bicycle lanes for the City of Wildwood. The project resurfaced the roadway and added paved shoulders to Manchester Road from Route 109 westward to Route 100. In addition to providing a new driving surface for vehicles, the existing shoulders were paved to provide a smooth surface for use by bicyclists and pedestrians that will separate them from the traveled lanes. This section of Manchester Road has been identified in the Gateway Bike Plan as a priority route, due in part to its inclusion in the development of U.S. Bicycle Route 66, a grassroots effort to develop a cross-country bicycle trail following the alignment of the former U.S. 66. While the paved shoulders are not wide enough to be designated as bike lanes, the inclusion of shared-lane arrows and additional Share the Road signage alerts motorists to possible bicyclists on the roadway.
- *Planning Study – Linear Park along Mason Road – City of Town & Country, MO. (Locally Funded)* At a prior firm, Brad Loomis provided oversight for a planning study for a linear park along Mason Road at Manchester Road going north and ending at Conway Road in the City of Town & Country. Services included preparing the study and report which contained schematic layouts and conceptual design criteria. An Opinion of Probable Cost was also created for each segment, allowing for appropriate phasing.
- *Mason Road Linear Park – Phase 1: South of Clayton Road to Mason Heights Road – City of Town & Country, MO. (Locally Funded)* At a prior firm, Brad Loomis provided oversight for production of construction documents to connect existing sidewalk elements, provide ADA ramps and a pedestrian crosswalk. Field inspection was completed for existing sidewalks to determine quantity of sidewalk to be repaired.
- *Bicycle Facilities Improvements – City of University City, MO. (Locally Funded)* At a prior firm, Brad Loomis was responsible for construction engineering for bicycle facilities improvements for three roadways in University City. Improvements included signage and pavement marking.

Qualifications of Personnel

The strength of our trail and sidewalk practice lies in the expertise of our multidisciplinary team. Our engineers, planners, landscape architects, environmental specialists, and construction-phase professionals each contribute specialized knowledge that ensures a complete and compliant final product.

Project Manager/Lead Engineer: Brad Loomis, PE, PTOE – Mr. Loomis has more than 23 years of experience in managing and designing various public works and private development projects. His experience and technical interests lie in the following areas: traffic engineering and operational analysis, roadway and highway; railroad design; federal and military facilities, and permitting.

Lead Designer: Scott Roeseler – Mr. Roeseler has over 25 years of experience in the drafting and design of a wide range of public and private infrastructure projects. His experience includes traditional and LIDAR field surveys, CAD Standards creation and training, roadway and highway improvements including intersection design studies and barrier warrant analyses, storm and sanitary sewers, parks and trails development, and a wide range of public and private site development projects.

Familiarity/Capability

MCE is thoroughly familiar with the requirements associated with federally funded transportation projects, particularly those administered through MoDOT's Local Public Agency (LPA) program. We understand the documentation, procedural checkpoints, and approval timelines that govern federally funded pedestrian projects.

Our team is proficient in preparing:

- Section 106 coordination
- Preliminary & final plans meeting MoDOT's Plan Development Guidelines
- Right-of-way plans and federal acquisition compliance
- Utility conflict documentation and agreements
- Estimate preparation consistent with federal requirements
- Bid-ready packages supporting LPA oversight

Because the federal process demands accuracy, documentation, and procedural discipline, our team maintains rigorous internal QA/QC workflows that ensure each milestone aligns with MoDOT and FHWA expectations. This familiarity reduces the likelihood of rework, accelerates approval timelines, and increases the predictability of project delivery.

Accessibility

A strong record of accessibility and responsiveness is central to our firm's culture. Trail and sidewalk projects often involve community engagement, stakeholder coordination, and frequent communication with LPA representatives. We maintain open, proactive communication with our clients through standing progress meetings, rapid response to emails and calls, and clear documentation of decisions and next steps.

Because these projects often involve multiple agencies, property owners, utilities, and public input, our ability to remain available and engaged ensures that issues are resolved quickly and expectations are clearly aligned. We pride ourselves on being a partner that our clients can depend on — one that responds promptly, provides clear guidance, and remains committed from project kickoff through construction closeout.

Our accessibility also extends to our leadership. Project managers and senior technical staff are directly involved in all stages of the project, ensuring both continuity and accountability. Clients consistently cite our hands-on approach, collaborative style, and willingness to adapt as key strengths that contribute to smooth project delivery.

MCE has earned a reputation for on-time deliverables, availability, and clear communication, and we appreciate the opportunity to provide our engineering services to the Local Public Agencies here in Missouri.

Very truly yours,

Master Consulting Engineers, Inc



Brad Loomis, PE, PTOE
Senior Principal



STATEMENT OF QUALIFICATIONS

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FIRM OVERVIEW

Master Consulting Engineers, Inc. (MCE) has been providing engineering services **since 1999**, with offices in St. Louis, Tampa, Orlando, Fort Lauderdale and Fort Walton Beach. MCE is a licensed firm with **over 30 employees**, including **8 licensed professional engineers** who bring **over 200 years of combined experience**. MCE is also licensed to perform engineering services in **22 states** across the United States of America.

CORE VALUES

EFFICIENCY

Our approach focuses on smart, practical solutions that keep traffic and commerce moving. By optimizing traffic operations, improving signal coordination, and applying proven design strategies, we reduce congestion and enhance safety. Every project is delivered on time, within budget, and in full compliance with MoDOT standards.

SAFETY

All of the projects that we take on are completed with the prioritization of public safety. By utilizing cutting-edge technology and our strategic analysis, we effectively minimize potential risks and efficiently improve roadway conditions.

INNOVATION

By leveraging advanced modeling and simulation tools, we deliver innovative engineering solutions tailored to the unique challenges of each project, ensuring forward-thinking, sustainable, and cutting-edge outcomes.

OUR VISION

"The vision of MCE is to encourage the advancement of engineering by using innovative design methods in an environment of ingenuity, leadership and excitement; which result in designing dynamic high performance structures that enhance the human experience."



MASTER CONSULTING ENGINEERS CIVIL ENGINEERING CAPABILITIES



Master Consulting Engineers, Inc. (MCE) brings continued excellence to each project. Our experience spans both urban and suburban environments, addressing diverse planning and engineering requirements. Overall, we prioritize timely solutions with our practical approaches for every project at hand.



TRAFFIC ENGINEERING AND PLANNING

- Roundabout Analysis
- Traffic Signal and Pedestrian Signal Design
- Signal Timing and Phasing
- Intersection Capacity Analysis
- Data Collection
- Traffic Studies
- Traffic Impact Analysis
- Traffic Safety Studies and Assessments
- Crash Analysis



HIGHWAY AND ROADWAY DESIGN

- Geometric Design
- Location Design Studies
- Mill and Overlay and Resurfacing Design
- Utility Coordination and Relocation Design
- Sidewalk, Bicycle, and ADA Improvements
- Overland Sheet Flow and Stormwater System Design



CIVIL SITE AND UTILITY DESIGN

- Site Feasibility and Layout for New Structures
- Rehabilitations and additions Site Grading Stormwater Quality
- Permeable Pavement
- Earthwork Analysis Parking, Sidewalks, and Trails
- Erosion Control and Drainage Designs
- Utility Coordination

PROJECT APPROACH



At MCE, we know the importance of providing quality work that is expected but instead we focus on exceeding that, starting with the delivery of a comprehensive management system and procedure.

Our approach is categorized into the following general phases:



Kick- Off Meeting

MCE will begin with a collaborative meeting involving all of the representatives and team members to understand the context and influences on the project and to communicate these for review and discussion.

Prior to commencement of work our team will perform a brief site analysis to address any possible program/permitting issues. This task could entail site visits, review of existing utility and property data and/ or aerial photo analysis.



Setting Goals and Timelines

Management-level planning maps out an overall management plan from which resources, acquisitions and sub-contracts can be identified, costed and put in place.

Quality requirements and approaches will be defined and agreed during the project start-up. Contingency plans and avoiding action will be defined as appropriate. MCE will have an effective team nurtured through appropriate initiation, training, and communications.



Budget for Surprises

MCE creates a detailed and accurate forecast of the total anticipated costs. The cost control begins with defining the clients program requirements, analyzing the project budget, and aligning both.

MCE takes every aspect of a project into consideration and consults with others who will be involved, and calculates the figures down to the last penny to create a timely budget.



Design Reviews "QA/QC"

Review of our Design Documentation is conducted at each 50, 75, 95, and 100% status point by the Principal in Charge. This involves comparing the existing documentation with the requirements and expectations articulated in our Project Performance Checklist.

All of MCE's submittals will undergo a rigorous QC review by an independent principal before leaving the building. Quality Control is a daily process, where engineering analyses, designs and plans are checked as the work progresses.