



November 15, 2013

Mr. Kenny Voss, P.E., Local Program Administrator  
Missouri Department of Transportation  
PO Box 270  
Jefferson City, Missouri 65102  
ATTN: Mary Ann Jacobs

**RE: Letter of Interest  
Local Public Agency (LPA) / Traffic Engineering and TEAP**

Dear Mr. Voss:

Crawford, Murphy & Tilly, Inc. (CMT) is very interested in becoming part of Missouri's LPA team of consultants to provide professional engineering for Traffic Engineering and TEAP. Our reputation for quality deliverables related to traffic engineering has proven to streamline the decision-making processes and deliver innovative solutions and has assisted our municipal clients' ability to best improve their infrastructure more cost-effectively.

#### **PREQUALIFICATION**

CMT has the prequalification requirements and is currently prequalified as follows:

- Federal Aid Basic Training January 1, 2015
- MoDOT E-Verify August 12, 2014
- Financial Prequalification August 29, 2014

#### **WORKFORCE DIVERSITY**

CMT strives for workforce diversity and promotes diversity in all facets of our business, including LPA work. CMT's commitment to diversity has been demonstrated on previous projects such as the I-70 Interchange for the New Mississippi River Bridge, which was completed for MoDOT. This project had a 12.4% women/13% minority participation and was instrumental in CMT receiving "Consultant of the Year" from MoDOT's External Civil Rights Division. CMT was also distinguished in 2012 by the Illinois Black Chamber of Commerce as one of three recipients of the "Outstanding Business of the Year". These recognitions reflect CMT's commitment to diversity through more proactive recruitment of minorities and women, mentoring programs and initiatives.

#### **THREE COMPANY REFERENCE FORMS**

The required company reference forms are included as an attachment to this letter.

#### **GENERAL EXPERIENCE OF FIRM**

CMT has been in the transportation field since our incorporation in 1946. We have continually served federal, state and local governments during that time span providing transportation engineering services including Traffic Engineering and TEAP. Since 1983, when CMT opened an office in Missouri, we have provided these engineering services to numerous municipal clients throughout the state. Some of our key LPA projects are more fully described in the Past Performance section of this document.

#### **PAST PERFORMANCE**

The following projects are indicative of CMT's commitment to providing outstanding engineering services related to Traffic Engineering and TEAP.

- **I-70 / Route MM AJR.** CMT completed a conceptual interchange study and Access Justification Report (AJR) for a new interchange at Route MM and I-70 in Warrenton, MO to relieve traffic from the congested Route 47 interchange. The interchange type selected to minimize impacts and operate efficiently was a series of three

roundabouts along the Route MM corridor. The analysis showed a large safety and operational benefit on the roadway network by diverting traffic from the congested Route 47 corridor to the new interchange.

- **I-65 / Worthsville Road AJR, Indiana.** CMT completed an AJR for a new interchange in suburban Indianapolis. This AJR included a comprehensive interchange type analysis that resulted in a Diverging Diamond Interchange. A detailed VISSIM analysis was conducted on the final interchange types considered. The safety analysis comparison of the alternative interchange configurations included vehicular and pedestrian considerations.
- **I-255 and Route 231 Conceptual Study.** CMT evaluated alternatives for improvements to the existing interchange using CORSIM simulation for several alternative interchange configurations. A cost-efficient alternative was selected based on CMT's recommendations.
- **I-70 / I-170 AJR.** CMT prepared an AJR for improvements to I-70 / Hanley Road, I-70 / I-170 and I-170 / Scudder Avenue. Synchro and VISSIM models were utilized for the study area to determine the improvements needed to accommodate a large regional development. The AJR included detailed operational and safety analysis of the complicated roadway network.
- **US Route 50/63 and McCarty Street Interchange.** CMT prepared a traffic study for a new Wal-Mart Supercenter in Jefferson City. The resulting interchange is a partial cloverleaf with dual roundabout ramp terminals. Safety, cost and operation benefits were the result of the roundabout option.
- **Relocated Route 266 and new Airport Road.** A location study and conceptual report were completed for this cost-share project, resulting in a 5-legged roundabout.
- **I-170 / Scudder AJR.** CMT prepared an AJR for improvements the I-170 & Scudder Avenue Interchange for St. Louis County. Traffic operations and safety were analyzed along I-170, Scudder Avenue, and Hanley Road.
- **Route 185 / Elmton Road over I-44.** Conducted a conceptual design analysis that evaluated three alignments for a new grade separation structure that carried traffic over I-44 based on geometric studies, traffic modeling, constructability, environmental impacts, right-of-way impacts and construction cost. This project was a cost-share project between the City of Sullivan and MoDOT.
- **Church Road.** CMT conducted traffic projections and capacity analysis along the Church Road corridor for the City of Arnold. Following the traffic study, CMT prepared signal and lighting plans for five intersections to improve traffic flow and support new retail development.
- **Route 100.** CMT provided traffic signal and lighting design for several intersections along the Route 100 corridor in the City of Washington.
- **Route 30 & Geyer.** CMT prepared plans for a new signalized intersection including traffic signals, intersection lighting and turn lane additions.
- **Wentzville Parkway.** CMT prepared signal and lighting plans for the intersection of Wentzville Parkway and West Meyer Road in the City of Wentzville.

## **QUALIFICATIONS OF PERSONNEL**

**Brian Eads, P.E., PTOE** - Brian offers over 14 years of experience in traffic analysis and studies. He is the lead project manager on all projects with traffic analysis involved for the entire company. In addition to his project experience, Brian is involved in research within the national transportation community. He was selected as a member of the team tasked with authoring the Highway Capacity Manual 2010. Brian has led numerous traffic and safety analyses on roadway design projects including complex ones such as the I-65/Worthsville Road AJR and the I-70 / I-170 AJR. He also has extensive experience with numerous traffic analysis software including, HCS, Synchro, SimTraffic, SIDRA, CORSIM and VISSIM. In addition, HSM and SSAM procedures have been used by him to complete quantifiable safety analyses.

**Andrew Schlichting, P.E., PTOE** – Andrew has over 9 years of experience as a roadway engineer. He has used, and is proficient in the use of the traffic analysis software Synchro, SimTraffic and VISSIM. Andrew has conducted traffic studies for private developers and local municipalities and most recently worked on the I-70/I-170 and I-65/Worthsville AJR's and led the I-64 Widening safety analysis. He also has extensive experience implementing Highway Safety Manual analyses on arterial and freeway routes.

**Bob Markunas, P.E., PTOE** – Bob offers over 18 years of experience in providing traffic analysis and highway design on transportation projects. He has conducted numerous Traffic Impact Analysis studies using a wide variety

of software tools for public and private clients.

**Charles Cole, P.E., PTOE** – Charles has over 10 years of experience as an engineer on roadway study and design projects. He has extensive experience in traffic signal design and intersection design.

**John Keeven, P.E.** – John has over 8 years of experience working on roadway design projects. He has extensive experience in both the design of traffic signals and construction observation of signalized intersections.

**FAMILIARITY/CAPABILITY**

CMT has a long history of meeting our clients’ goals on projects, whether this is through meeting aggressive schedules, using the latest technologies and software on a project or the application of cost-efficiency measures to help save construction dollars. CMT has an excellent relationship with our core group of clients and our extensive experience with their staffs gives us the familiarity to be very efficient throughout the design process. Through our projects, CMT has become intimately familiar with the processes and requirements on projects with federal oversight as well. The following table of projects shows projects that included federal oversight on LPA projects. All of these projects were completed with minimal review comments by FHWA:

- Church Road Improvements (Arnold)*
- Historic Lighting (Warrenton)*
- Schneider Road Bridge (Jefferson County)*
- Broadway Avenue Bridge (St. Louis)*
- Highway 54 (Camdenton)*
- West Terra Road – Phase III (O’Fallon)*
- Geiger Road (St. Louis County)*
- Goodfellow Blvd (St. Louis)*
- Wentzville Parkway (Wentzville)*
- Lions Den Road (Jefferson County)*

**ACCESSIBILITY**

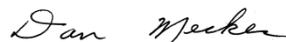
All of the assigned personnel for traffic engineering will be led by Brian Eads out of our St. Louis office. The entire group is highly focused on the successful delivery of services within allotted schedules set by our clients. Our St. Louis Highways & Bridges Group, which the traffic group is part of, has met 100% of their scheduled milestone dates on all of their projects over the last ten years. In addition, our team relies on responsiveness to our clients’ requests, with a goal of responding to all requests within 24 hours. The following table indicates some of our recent accelerated schedules:

PROJECT	CLIENT	CONTRACT DESIGN TIME	ACTUAL DESIGN TIME
MRB Interchange	MoDOT	14 months	12 months
Rte 266/Airport Blvd	Springfield, MO	20 months	7 months
Park Over the Highway	MoDOT	10 months	10 months
Rte 185/I-44	Sullivan, MO	24 months	21 months
I-44 Union to Pacific	MoDOT	10 months	7 months
Rte 100 Washington	MoDOT	24 months	10 months
Church Rd	Arnold, MO	12 months	10 months
US 50/63 & McCarty St.	Jefferson City, MO	24 months	21 months

CMT has enjoyed the working relationship that has been established and grown over the years with our LPA teammates. CMT offers an uncommon level of stability and staff continuity which will assist us as we move forward with more complex and exciting projects with municipalities throughout the state. We believe we have an excellent team that can provide responsive and innovative studies and designs for LPA Traffic Engineering and TEAP.

We wish to thank the selection committee in advance for their time and effort in reviewing and evaluating our Letter of Interest and look forward to your favorable consideration.

Respectfully yours,



Daniel R. Meckes  
President

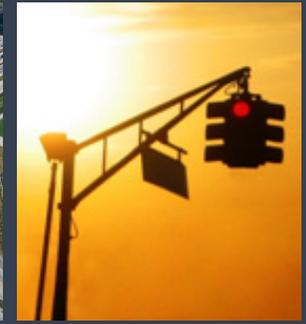
MoDOT

*Bringing Value to Missouri  
Highways and Bridge  
Infrastructure*



**CMT**

CONSULTING ENGINEERS



## About CMT

Established: 1946

Firm Size: 264

## Rankings

- #239 Among Top 500 Design Firms (Engineering News-Record 2013)
- #4 Midwest Civil Engineering Firm (Midwest Construction 2013)
- #6 Midwest Firm in Transportation (Midwest Construction 2013)
- #6 Design Firm in Missouri (Midwest Construction 2013)

## Service Areas

- Highways and Bridges
- Aviation
- Land Development
- Water and Wastewater

## Other Locations

- Springfield, IL (corporate)
- Aurora, IL
- Chicago, IL
- Columbus, OH
- Edwardsville, IL
- Indianapolis, IN
- Peoria, IL
- Rockford, IL

## CMT Highways & Bridges

From complex highway interchanges in urban settings to major bridge river crossings, CMT can take a transportation project from its earliest development stages through planning, design, and construction. Whether we are working with a large transportation agency or a local community, we are responsive to our clients' needs. While meeting their goals of providing safe and efficient transportation, we also seek out community input and account for environmental considerations to provide context-sensitive solutions that assure each project succeeds on every level.

## Highway and Bridge Services

- Program Development
- Planning/Feasibility Studies
- Noise and Air Quality Studies
- Environmental
- Road and Highway Design
- Bridge Design
- Traffic Studies
- Construction Phase Services
- Land Acquisition
- Structural
- Lighting
- Bikeways and Paths
- Drainage
- Public Involvement

## Missouri Offices

CMT's St. Louis and Springfield offices allow us to better serve multiple regions throughout the state. Between the two offices we have a staff of over 60 employees supporting transportation infrastructure projects throughout the state.



CMT-St. Louis  
Gateway Tower  
One Memorial Drive, Suite 500  
St. Louis, Missouri 63102  
314.436.5500 fax: 314.436.0723

CMT- Springfield, MO  
1631 West Elfindale  
Springfield, MO 65807  
417.869.6009 fax: 417.869.8129

[www.cmtengr.com](http://www.cmtengr.com)



## New I-70 Interchange for Mississippi River Bridge

MISSOURI DEPARTMENT OF TRANSPORTATION

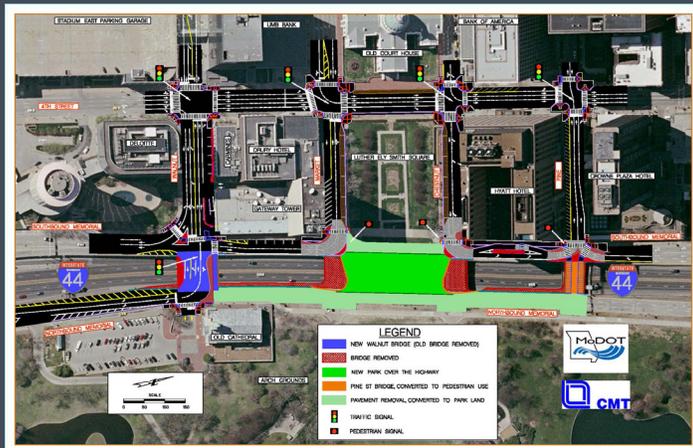
ST. LOUIS, MISSOURI

- Five new ramps providing movements to and from the new bridge to I-70 and I-44
- Seven bridges and six retaining walls
- Successful achievement of highly accelerated schedule – designed in 12 months
- Innovative Practical Design approach resulted in 30% cost reduction (\$13M)
- Reconfigured original interchange design to more economical configuration
- Documentation for route marking changes
- Complex construction staging
- Urban street designs including mobility and ADA requirements

## West Terra Road Improvements

CITY OF O'FALLON, MISSOURI

- Phase I and II consisted of widening/overlay of 7400 linear ft. of roadway improvements
- Phase III consisted of 6100 linear feet of roadway improvements
- MoDOT/LPA-administered project
- Improvements included overlay, shoulder/bicycle land additions and drainage improvements
- Field surveys
- Intersection design studies
- Drainage studies
- ROW surveys and documents
- Environmental survey request
- Traffic signal design



## A Park Over the Highway

MISSOURI DEPARTMENT OF TRANSPORTATION

ST. LOUIS, MISSOURI

- Very high profile project featuring a new 280 foot land bridge over I-70 connecting the Jefferson Expansion Memorial Park (Arch grounds) with the downtown at Luther Ely Smith Square
- Removal of three bridges over I-70 and reconfiguration of area traffic patterns involving improvements to a 8 square block area of downtown St. Louis
- Unique structural components
- Communication with a wide variety of stakeholders including extensive coordination with the landscape architect working for CAR2015
- Successful achievement of highly accelerated schedule – designed in 8 months
- Complex construction staging plan

## Church Road Widening

CITY OF ARNOLD, MISSOURI

- Widening and relocation of a two lane roadway to a proposed five lane roadway
- Traffic study
- Successful CMAQ Funding Application
- Public involvement meetings
- Five signalized intersections
- Coordination with MoDOT (CMAQ Project - LPA Manual)
- Construction Inspection





## Route 210 Widening

### MISSOURI DEPARTMENT OF TRANSPORTATION KANSAS CITY, MISSOURI

- 5 mile long project, converting a 2-lane rural to a 4 lane expressway.
- High traffic roadway with significant truck activity
- New roadway, drainage, signing, signals, lighting, etc.
- CMT conducted streamlined VE Study
- \$1.48M in savings (12.7%) from 63 creative ideas, 3 accepted VE Proposals

## Lions Den Road Improvements

### JEFFERSON COUNTY, MISSOURI

- CMT was selected for all four phases of a four mile roadway improvement.
- Widening from two 10-foot lanes to two 12-foot lanes with two 8-foot shoulders
- Prepared four alternative alignments with preliminary cost estimates
- Public Information meetings
- Funded with STP funds and MoDOT's Local Roads Group



## Historic Pedestrian Street Lighting

### WARRENTON, MISSOURI

- MoDOT LPA administered project consisting of approximately 2,200 feet of sidewalk to be illuminated
- Fixed construction budget
- Temporary traffic control
- Utility survey pickups and coordination
- Alternative lighting analysis utilizing IES RP-8-00 American National Standard Practice for Roadway Lighting
- Construction observation

## Route 61/67 Bridge over Meramec River

### MISSOURI DEPARTMENT OF TRANSPORTATION ST. LOUIS, MISSOURI

- Major river crossing connecting Jefferson and St. Louis counties
- Extensive 404 PERMIT and environmental permitting
- Detailed hydraulic analysis
- Architectural enhancements
- Fast schedule was accelerated - CMT met all the required milestones

