CBB Crawford, Bunte, Brammeier
Traffic and Transportation Engineers
Since 1973

November 15, 2013

Mr. Kenny Voss, P.E.
Local Programs Administrator
Missouri Department of Transportation
105 W. Capitol Avenue
Jefferson City, Missouri 65102

RE: Letter of Interest
Missouri's Local Program (LPA) on-call Services – Sidewalks and Trails

Dear Mr. Voss:

Established in 1973, Crawford, Bunte, Brammeier (CBB) has since been a leader in transportation planning and engineering throughout the Midwest. Within this discipline, we are experts in the areas of traffic operations, control and safety, signal timing and coordination, design and modernization of roadways and traffic signals, lighting and interconnect systems, travel demand and simulation modeling, noise modeling, and traffic data collection. Accordingly, we are pleased to express our interest in providing ***Sidewalks and Trails*** services to MoDOT in all districts.

CBB is currently prequalified as an approved consultant for MoDOT and has participated in their On-Call Services program since 1998. We believe our 40 years of knowledge, resources, and experience in the region would continue to be of significant value to MoDOT. We have unique abilities and skill sets that are needed to complement and reinforce MoDOT's efforts. Our history of success in transportation engineering and planning is due in large part to an impeccable record of responsiveness to our clients' needs – always being accessible to them, listening and truly understanding their needs, and ultimately providing them with solutions to their transportation problems.

CBB's professional staff of traffic engineers, transportation planners and transportation designers includes 15 licensed Professional Engineers, 13 Professional Traffic Operations Engineers, and 3 Professional Transportation Planners. This staff is intimately familiar with the requirements necessary for federally funded projects or for projects where federal guidelines are required for approval. This requires a solid understanding of the processes involved and remaining current on the changes as these federal policies evolve.

We believe in and fully embrace workforce diversity both in our profession and for future projects under this program. We believe that a diverse workforce provides several different perspectives and ideas; resulting in a quality deliverable. Our team actively partners with academic institutions to not only promote technical disciplines but also to engage and recruit young engineers with diverse backgrounds. As reflected by the key-personnel listed in this letter, we are fully committed to ensuring diverse workforce participation for this study. We would submit diverse workforce participation percentages along with our monthly invoices. ***We are committed to providing a minimum 20% minority/women engineer workforce for this contract.***

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CBB has prepared detailed construction documents for the installation of sidewalks, bicycle and multiuse trails as well as pedestrian and bicycle crossings for both signalized and unsignalized, as well as performing sidewalk inventories and planning of bicycle and pedestrian facilities.

CBB has extensive experience with sidewalk and trail design. We work with municipalities and universities to improve all modes of transportation; in fact we are currently designing bicycle and pedestrian enhancements locally for both St. Louis University and Washington University. Our staff has extensive training in ADA conformance and design, understanding of the PROWAG as related to not only sidewalks and trails, but to actuated signal crossings as well. CBB prides itself on the quality and detail of its plan sets, and we have incorporated extensive QA/QC procedures into our design services, which facilitates more competitive bidding and ease of construction.

Collectively, we have worked on numerous related projects focused on ***Sidewalks and Trails***, including the following:

Broadway Avenue and Park - 7th Streets – STP 5422(612), City of St. Louis, Missouri

Constructed in 2012, CBB completed the design of major intersection improvements that included the removal and replacement of the median on Broadway Avenue, installation of new curb ramps, sidewalk and lighting as well as a decorative paved tree lawn with wells. This traffic improvement and enhancement project included the installation of two new traffic signals with wireless vehicle detection as well as pedestrian enhancements in the Historic Soulard District, on time and under budget. *This project was completed according to federal guidelines for use of STP funds.*

Soulard Bicycle Trail – DP-9900(618), St. Louis, Missouri

In cooperation with Bike St. Louis, CBB contributed to the establishment of a bike route from the existing parking lot/trailhead on Lenore K. Sullivan Boulevard in front of the Downtown St. Louis Arch along the riverfront to the Soulard Historic District. As part of this project, CBB provided design services for bike lane pavement markings, signage, drainage improvements and pavement repairs along the proposed route. Completed in 2010, this project will added approximately four miles of newly marked bike trail for Bike St. Louis via a combination of dedicated bike lanes and shared lanes as well as the incorporation of rest areas and bicycle parking racks.

Rock Hill Road and Brownbert Lane - STP 5577(630), City of Rock Hill, MO

As part of an STP project, CBB designed improvements that included a new traffic signal with wireless detection, pedestrian enhancements, internal circulation modifications and parking lot improvement for the City of Rock Hill at Steger School on Rock Hill Road. This project was completely constructed in 2012 during the school's summer dismissal. *This project was completed according to federal guidelines for use of STP funds.*

Brentwood Pedestrian and Transit Improvements – STP 5577(629), City of Brentwood, Missouri

In 2013, CBB performed Construction Engineering for the installation of sidewalks, curb ramps and retaining walls within the Hanley Industrial Court for the City. The project consisted of sidewalk enhancements between the MetroLink station adjacent to the industrial court and Straussner Road. Curb ramps were installed at each commercial entrance, checked by CBB for ADA conformance with SmartLevels and surveying equipment. Additionally, extensive overhead and underground utility relocations were required and coordinated by CBB. *This project was completed according to federal guidelines for use of STP funds.*

Clayton Road Pedestrian Enhancements - STP-5401(661), City of Town & Country, Missouri

In 2012, CBB designed pedestrian enhancements on Clayton Road (MO Route HH) between Woods Mill Road and Old Woods Mill Road. Constructed in 2013, the pedestrian improvements cross the Clayton Road Bridge over Missouri Route 141 separated by the installation of interlocking barrier with a decorative fence. The traffic signals and curb ramps were modified to incorporate the pedestrian enhancements and signage and pavement markings were added to enhance safety. In order to alleviate stormwater on this project, a bioretention swale was designed as well as water quality steps in the ditching within MoDOT right of way. *This project was completed according to federal guidelines for use of STP funds.*

Arena Parkway and South River/Friedens Intersection Improvements - CMAQ 5414(615), St. Charles County, Missouri
This CMAQ project, recently constructed in 2012, is the regions first modern "Green T", allowing motorists traveling from Arena Parkway to bypass the proposed traffic signal when traveling north from Arena Parkway to South River Road. The project consists of a new traffic signal and pedestrian enhancements including reconstructing the intersection to change the predominant thru movement of the intersection. These plans required extensive construction staging as well as the use of temporary traffic signals due to the total reconfiguration of the intersection. Relocation of the adjacent Katy Trail was required to allow room for the improvements. *This project was completed according to federal guidelines for use of CMAQ funds.*

CBB prides itself on the quality of its products and the commitment of our personnel to the specialized training that is needed to provide reliable results. The individuals listed below all have strong relationships with MoDOT and are well acquainted with the standards and procedures required for the successful completion of ***Sidewalks and Trails*** projects:

Christopher M. Brammeier, P.E. As manager of the Design Department, Mr. Brammeier will be the principal-in-charge on any roadway design projects. Mr. Brammeier has over 22 years of experience in highway engineering and has led all design efforts at CBB for the past 12 years. His areas of expertise include intersection and roadway geometrics, overhead highway signing design, hydraulics and hydrology, and floodplain management.	**Brian E. Courtwright, P.E., PTOE** Mr. Courtwright has served as project manager on several complex LPA projects during his 7 years with CBB. Prior to joining our firm, Brian served as a squad leader for the Illinois Department of Transportation. Brian routinely designs intersections to accommodate large vehicles, dual turning movements and has experience in the design and traffic control and staging of roundabouts.
Steve Stirnemann, P.E. With over 14 years of experience at CBB, Steve serves as project manager on a wide range of civil projects including intersection design, establishing horizontal geometrics and profile grades as well as design of drainage structures, construction staging, traffic control, construction scheduling and estimating. With prior experience as a geotechnical engineer, Steve designs sign foundations and retaining walls (concrete and modular block wall) for all CBB projects.	**Robert Twillman, P.E., PTOE** Mr. Twillman has accumulated more than 9 years of traffic and transportation engineering experience. He has received extensive training on ADA standards, ensuring that our designs comply with the current PROWAG standards for sidewalk and curb ramp design. During that time, Rob has not only designed, but served as a construction inspector on several roadway projects, becoming intimately familiar with current ADA construction standards.
Supporting Contributions By: Jamie Wilson, P.E., PTOE, Mike Dolde, P.E., PTOE, Shawn Leight, P.E., PTOE, PTP, Robert Lee Cannon, P.E., PTOE, Brian Rensing, P.E., PTOE, Srinivasa Yanamanamanda, P.E., PTOE, PTP Jon Deves, P.E., PTOE	

We appreciate the opportunity to express our interest in Missouri's LPA Program in the area of ***Sidewalks and Trails***. We believe we are uniquely qualified and experienced to provide these services to MoDOT with a team that has an exceptional understanding of City, County and State level transportation issues.

Sincerely,

Jamie Wilson

Jamie Wilson, PE, PTOE
President/Chief Executive Officer

Providing
Traffic Solutions...

CBB
Crawford, Bunte, Brammeier
Traffic and Transportation Engineers

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CRAWFORD, BUNTE, BRAMMEIER (CBB), established in 1973, constantly strives to maintain its role as a regional leader in the highly specialized fields of traffic engineering and transportation planning. Through our integrity, innovation, and reliability, we are dedicated to raising the standards of our industry while achieving client satisfaction.

Transportation Planning

CBB's Transportation Planning Group is focused on providing ***innovative solutions*** for our clients. We regularly contribute to multiple stages of project development; including transportation ***comprehensive planning, "Great Streets"***, and the performance of location, corridor and NEPA studies.

Our philosophy is simple. We blend engineering and planning to develop ***visionary yet practical solutions to meet the needs of our clients*** and their citizens. Planning staff are ***regular users of multiple modeling software packages***.

CBB believes transportation concepts strengthen community connections, promote sustainability, enhance multi-modalism, and facilitate safe and efficient circulation.

Traffic Study Services

CBB's Traffic Studies Group develops ***practical solutions*** for a wide range of complex projects. We perform traffic impact studies, site access assessments, traffic operation and safety studies, parking studies, data collection analysis, grant writing , expert testimony, among other specialized services.

We commonly serve private businesses, developers and various government agencies and we enjoy a high level of repeat business due to the ***satisfaction of our clients.***

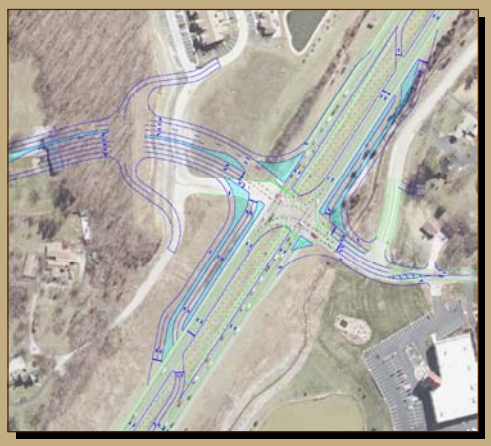
Our studies staff work with clients to address capacity and safety issues. We strive to develop ***solutions that balance emerging needs with available resources***.

Roadway Design Services

CBB's Roadway Design Group performs services for public and private projects, varying in size from interchanges to turn lanes to driveways.

Our design team has the capabilities to handle ***diverse applications***. In addition to performing geometric highway design, we design nature trails, retaining walls, parking lots, roundabouts, and perform floodplain studies. Many of our projects also incorporate aesthetic treatments.

Roadway Design projects have their own ***unique challenges*** and we approach our designs in this manner, often ***identifying alternatives*** that may result in lesser impacts and reduced construction costs by applying context sensitive solution principles.



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Signal & Lighting Design

CBB's Signal and Lighting Design Group has extensive experience in ***isolated intersections as well as complex area-wide systems***. Specific design requirements for each local agency, including ADA compliance issues, photometric lighting analyses, and detailed cabinet layouts are taken into account.

"Best-fit" designs are prepared for existing system infrastructure using our working knowledge of the industry's latest technologies in signal controllers and cabinets, vehicle and pedestrian detection, emergency preemption, video surveillance, fiber optic and wireless communications, ITS, and ATMS.

CBB incorporates ***"green" design principles*** for each lighting system. When applicable, LED and solar powered fixtures are utilized to further reduce power consumption.

Traffic Signal Operations

CBB's Signal Operations Group specializes in the ***analysis, optimization and synchronization*** of signalized intersections and signal corridors.

Our signature approach to signal timing optimization incorporates core traffic engineering practices with extensive ***in-field implementation*** experience.

In addition, the signal operations group specializes in ***traffic management*** during small and large scale construction projects including signal turn-on assistance and detour mitigation timing plans.

Our operations team is intimately familiar with the most ***current signal analysis software packages and current signal equipment specifications***.

Specialty Services

ADA Compliance
CBB's Design staff prepares ***detailed ramp designs*** which include signalized pedestrian crossings and plans including ***Accessible Pedestrian Signals*** (APS). CBB has the well rounded knowledge to meet the challenges unique to each location.

Construction Inspection
CBB's construction inspection personnel monitor the construction of transportation improvements for ***compliance with approved designs and agency standards*** to improve project implementation.

Noise Modeling
CBB provides complete traffic noise analysis including existing noise readings and future noise projections utilizing ***FHWA's Traffic Noise Model***. We have knowledge and experience with both MoDOT and IDOT guidelines, as well as certification for the TNM software.

CBB is an expert trusted advisor and friend to our clients.
We are a Midwest firm where free-thinking, innovation and collaboration merge with international best practices to provide traffic engineering and transportation planning solutions for safer, more sustainable, and economically vibrant communities.

- *Access Justification Reports*
- *ADA Compliance Issues*
- *Bicycle Studies*
- *Campus Master Planning*
- *"Complete Street" Designs*
- *Construction Review & Inspection*
- *Corridor Studies*
- *Data Collection*
- *Detour Mitigation Timing Plans*
- *Expert Witness Testimony*
- *Flood Plain Hydraulics*
- *Funding & Grant Applications*
- *Highway Sign Studies & Design*
- *Interchange Concept Studies*
- *Intersection Design Studies*
- *ITS Design*
- *Lighting Design*
- *LPA Documentation*
- *Multi-Modal Planning & Studies*
- *Noise Modeling*
- *Origin & Destination Studies*
- *Parking Studies*
- *Pedestrian Studies*
- *Retaining Wall Design*
- *Roadway & Highway Design*
- *Safety Studies*
- *Signal Turn-Ons & Programming*
- *Traffic Engineering*
- *Traffic Impact Studies*
- *Traffic Operation Studies*
- *Traffic Signal Design*
- *Traffic Signal Justification*
- *Traffic Signal Optimization & Synchronization*
- *Traffic Simulation Modeling*
- *Trail Planning and Design*
- *Transit Studies*
- *Transportation Planning*
- *Travel Demand Modeling*
- *Value Engineering Studies*

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