November 15, 2013

EFK♦Moen, LLC
Civil Engineering Design

Ms. MaryAnn Jacobs
Missouri Department of Transportation
Re: LPA On-Call Category – Trails & Sidewalks

The intent of the LPA On-Call Agreements is to provide Local Agencies a group of Engineering Firms that are familiar with the scope of work needed to design LPA projects; and with the MoDOT LPA process experience to be efficient with the plan production and delivery format required to work with this funding program. EFK♦Moen, LLC (EFK♦Moen) is on the prequalification list with MoDOT and has several project managers and engineers who have completed the LPA Federal Aid Basic Training Course. We have demonstrated that we have the capacity, availability and responsiveness to serve Local Agencies in this way; and we have the solid engineering and surveying experience to deliver quality projects within their schedule and budget. EFK♦Moen has provided roadway design services on interstates, freeways, expressways, multi-lane urban, two lane rural and local road projects since 1998 and our roadway engineers have earned the confidence of MoDOT and municipal design staffs all across Missouri. EFK♦Moen has provided roadway design services on federally funded roadway design projects to Local Agencies and MoDOT as a prime consultant, as a valued sub-consultant with other design firms, and through the MoDOT MOU On-Call process.

EFK♦Moen was selected by Great Rivers Greenway to provide engineering services on trails projects such as: Fenton Trail – Meramec Greenway and Creve Coeur Trail – Missouri River Greenway. Our roadway designs that have included trails & sidewalks include Route 364–St. Charles County, Route 60 DDI-Springfield, MO, Route 47 – Warren County, Recently we completed the 3rd Street & I-70 reconstruction project, which is part of the Arch Grounds rehabilitation project and included ADA compliant sidewalk and plaza area design tasks, which were designed within a very short timeframe, again showing our capacity, availability and responsiveness. Our design and survey groups work closely together to ensure all of design projects proceed efficiently.

General Trails/Sidewalk Design Experience: EFK♦Moen was founded in March of 1998 to provide transportation engineering, bridge design and surveying services, and has been successfully working with various cities, counties and state government agencies over the past fifteen years. EFK♦Moen has provided **Trail and Sidewalk Design Services** varying in size, scope, and complexity for many Missouri as well as many MoDOT and IDOT districts. EFK♦Moen's staff has experience with the issues that are important to MoDOT and the requirements of the LPA program, along with issues that are important to the local agencies, traveling public, property owners and contractors. We are conscious of the tight design budgets and schedules often associated with these types of operational projects and spot improvements. Since we are familiar with the MoDOT LPA processes we can produce quality designs quickly and efficiently. EFK♦Moen understands the importance of the On-Call agreements to local agencies and the flexibility that they give City officials. Our trail and sidewalk design experience and knowledge is available to assist local agencies in the following areas of design:

- Geometric Design
- Cross Sesection/Earthwork
- Hydraulic Analysis
- Pavement Drainage
- Traffic/Pedestrian Signal Design
- Trail Lighting Design
- Trail Signing
- ADA Compliance
- Bridge Design
- Retaining Wall Designs
- Traffic Control Staging
- Erosion Control
- Value Engineering
- Opinion of Probable Construction Cost
- Special Provisions
- Construction Specifications
- Construction Observation
- Record Drawings

General On-Call Project Approach Outline

- A Local Agency will assess internally a specific need resulting in an On-Call design assignment
- Once EFK♦Moen is contacted, a kick off meeting or teleconference will be scheduled to outline the project scope, schedule and budget
- EFK♦Moen will conduct a field visit at the project site; Field observations will be noted; project data will be collected and photos (probably too many) will be taken
- EFK♦Moen will quickly submit a detailed scope based on the information gathered; a proposal task list with hours and cost tabulated for each task; and a schedule that meets MoDOT's requirements
- Upon Notice-to-Proceed, EFK♦Moen will design the project, continuously looking for design ideas and constructability methods that will create value and stay within the budget
- Our staff is experienced with delivering plans according to MoDOT's plan submittal process; and we are familiar with the plan review staff to expedite final document reviews
- EFK♦Moen's staff is committed to being available during construction to answer questions and assist as-needed
- After the project is completed we appreciate feedback from MoDOT on how we can work more efficiently with your staff!

During the past several years we have provided On-Call services for roadway design, bridge engineering, surveying and traffic design for MoDOT, IDOT and several Missouri Municipalities; Jefferson County, St. Charles, St. Louis and Frontenac.

13523 Barrett Parkway, Suite 250,
St. Louis, Missouri 63021
Phone: 314-394-3100

We are dedicated to providing the same experienced group of engineers and support staff on this On-Call agreement that has made our firm successful on these work order based assignments.

Prequalification: EFK♦Moen is current with all of the MoDOT prequalification requirements.

EFK♦Moen's Commitment to a Diverse Workforce: In addition to valuing diversity in our internal staff, EFK♦Moen has recent experience in developing and successfully delivering a project team workforce diversity plan on MoDOT's I-70 & 3RD Street project. We are PLEASED to share our success in hitting 50% Minority+Woman workforce with final plans completed in April 2013. We are excited to have a network of STEM high schools and engineering universities in our region, and have been able to introduce a diverse group of student interns to our company's culture and engineering work.

Past Performance: EFK♦Moen is a **Certified MoDOT DBE** design firm that has been regularly selected as a PRIME consultant on a variety of municipal LPA roadway and bridge design projects. This past experience gives our firm necessary tools to deliver any LPA MOU assignment successfully, in a cost effective manner, to ensure public acceptance and adhere to an expedited project schedule typically associated with these work orders. To successfully deliver these On-Call assignments, Local Agencies require a team of highly experienced engineering professionals specializing in trail and sidewalk designs. EFK Moen has the necessary experience and many more, should any other task need to be addressed. Our firm is organized to efficiently perform project assignments typically associated with this type of work order assignment and will draw on the following features to successfully deliver any assignment we receive:

- Demonstrated ability to successfully deliver challenging design documents on time and within budget
- Proven ability in coordinating with the client and project stakeholders in developing acceptable project solutions
- Expertise in implementing and streamlining all facets of document production
- Established track record in exceeding client's expectations when delivering design projects

As on past projects, the EFK♦Moen Design Team will constantly look for ways to apply innovative and practical designs during all phases of project development. Our staff has recently demonstrated their ability to do this on:

- Route 364–St. Charles County–Expedit ed Schedule/Cost Savings over **$8 Million**
- Route 60 DDI-Springfield, MO – Innovative Design/Cost Savings over **$3 Million**
- Route MM - Jefferson County – Value Engineering Design/Cost Savings over **$2 million**
- Route 65 – Taney County – 8-Mile Corridor/Cost Savings over **$20 million**

Another VERY important addition to our past MoDOT design successes is our track record in contract scoping and negotiations. These tasks with EFK♦Moen are typically handled within a very short time frame, which allows us an earlier start than most, resulting in many of our projects finishing ahead of schedule and under budget.

Forest Park Multi-Use Path Signalized Crossing

St. Ferdinand Park Lake Trail

Washington University Multi-Use Trail

EFK♦Moen LPA Roadway Design, Bridge Engineering, Traffic, ADA Trails/Sidewalk and Construction Inspection Experience

Road	Agency	Survey	Trails/Walk ADA	Traffic Eng.	R/W Plans	PS&E	Const. Insp.
McClay Road - 1 Mile Reconstruction	St. Charles County	✓	✓	✓	✓	✓	
Fee Fee Road - Sidewalks	Maryland Heights	✓	✓		✓	✓	
Rte. 60 & National - Interchange Reconstruct	Springfield, MO	✓	✓	✓	✓	✓	
West Watson - 2 Mile Widen & Overlay	Sunset Hills	✓		✓	✓	✓	✓
Runnymede Drive - Bridge Replacement	St. Charles City	✓	✓	✓		✓	
West Meyer Road - 1 Mile Reconstruction	Wentzville	✓	✓		✓	✓	
Hazelwood Ave. - 1 Mile Reconstruction	Hazelwood	✓	✓	✓	✓	✓	✓
Woodson Road - .5 Mile Overlay & Sdwk.	Breckenridge Hills	✓	✓			✓	✓
Old Halls Ferry Road - Bridge Replacement	St. Louis County	✓	✓	✓		✓	
Progress Parkway - Reloc. & Reconstruction	Maryland Heights	✓	✓	✓	✓	✓	
Femme Osage Cr. Road - Bridge Replacement	St. Charles County	✓		✓	✓	✓	
Breckenridge Road - 1.5 Mile Overlay & Sidewalk	Breckenridge Hills	✓	✓			✓	✓
Joachim Road - Bridge Replacement	Herculaneum	✓			✓	✓	✓
Whitehead Road - Bridge Replacement	Jefferson County	✓		✓	✓	✓	
Price Road - Mile Roadway Rehab	Ladue, MO	✓	✓	✓	✓	✓	✓
Conway Road - Bridge Replacement	St. Louis County		✓	✓	✓	✓	
Maness Road – Bridge Replacement	Jefferson County	✓	✓	✓	✓	✓	
Crusher Drive – .5 Mile Extension	O'Fallon, MO	✓	✓	✓	✓	✓	✓

EFK♦Moen Recent Project References: Please see attached Company Reference Forms

Qualifications of Key Personnel: Our staff has designed all types of LPA projects involving trails and sidewalks having design tasks such as; alignment design, earthwork, drainage, signing, lighting, staging, MOT. This familiarity/knowledge of the MoDOT LPA design processes will provide the Local Agency and MoDOT staff with a secure feeling of partnership in developing and providing not only a successful design project, but also a proven track record in implementation and delivering innovative designs.

Senior Project Manager PJ Kronlage, has been responsible for the successful delivery of EFK♦Moen's MoDOT and LPA roadway, trails and sidewalk engineering assignments. PJ, and the staff of engineers and technicians shown to the right will be dedicated to all MOU trails and sidewalk projects assigned to EFK♦Moen.

Organization Matrix & Project Role	Key Project Staff & Firm	Years of Experience
Roadway Sr. Manager	PJ Kronlage, P.E.	30
Roadway Manager	Bob Orange	45
Roadway Engineer	Mark Huebbe, PE	11
Roadway Engineer	John Huebbe, PE	10
Roadway Engineer	Lori Swank, EIT	12

PJ Kronlage has over 30 years of experience in the transportation engineering field and has been involved in every aspect of roadway design, including trail/sidewalk alignment and geometrics, drainage systems, lighting, signals and signing, retaining wall layouts, standard plans and specification development, personnel and schedule management. **Mr. Orange** has over 45 years of experience in the transportation engineering field primarily working on surface transportation projects. **Mark, John** and **Lori** have years of experience with the ADA Guidelines and with municipal projects

Familiarity/Capability: EFK♦Moen's has been providing On-Call engineering services to several MoDOT districts for years, our firm's familiarity with these MoDOT's On-Call assignments have involved Roadway Design, Bridge Engineering, Traffic, ADA Trails/Sidewalk tasks. It also shows EFK♦Moen's capabilities to address a wide variety of design request to assisted local agencies with a variety of professional services across the state from conceptual studies to construction documents. We encourage you to contact the clients listed above as to EFK♦Moen's capabilities, accessibility, responsiveness and familiarity with MoDOT's LPA requirements.

Route	Description	District	Concept/Planning	Surveying	Prelim. Plans	Final Plans
240	Intersection Modification	Northeast	♦	♦	♦	♦
61	Land Corner Survey	Northeast		♦		
61	New Left Turn Lane	Northeast	♦	♦	♦	♦
19	Intersection Modification	Northeast	♦	♦	♦	♦
SET	Dist. 6 Estimating Team (Contract 1 & 2)	St. Louis	♦			
I-55	3.5 Mile Resurfacing	St. Louis	♦	♦	♦	♦
364	Median Drainage (Contract 1 & 2)	St. Louis				♦
I-170	Ladue Interchange Conceptual Study	St. Louis	♦	♦	♦	
W	Bridge Replacement	St. Louis	♦	♦	♦	♦
40	Interstate Signing	St. Louis			♦	♦
100	Signal and New Turning Lanes	St. Louis	♦	♦	♦	♦
I-64	Elm St. Retaining Wall Replacement	St. Louis			♦	♦
61	Intersection Modification	Southeast		♦	♦	♦
D	Signal Design & Intersection Mod.	Southeast				♦
F	Stinson (Bridge Rehabilitation)	Bridge			♦	♦
WW	Route 63 (Bridge Rehabilitation)	Bridge			♦	♦
63 NB	Hominy Creek (Bridge Rehabilitation)	Bridge			♦	♦
63	Grindstone Creek (Bridge Rehabilitation)	Bridge			♦	♦
40	Moniteau Creek (Bridge Rehabilitation)	Bridge			♦	♦

Accessibility: We understand that the success of these project assignments is the flexibility of the selected design firm to be ready to react when called upon. This is the accessibility that EFK♦Moen delivers to all of our clients, paying particular attention to this is extremely important for the On-Call work assignments as their schedules seem to be more immediate in nature. EFK♦Moen is committed to meeting with local agency staff members within 48 hours from initial contact to discuss a specific work order request.

As illustrated throughout this qualification package, we have a long history with a variety of MoDOT LPA design projects, as well as the MOU/On Call assignments.

The Benefit of Selecting EFK♦Moen

- Experienced PRIME DBE Firm on Large/High Profile Projects
- Experienced with MoDOT's On-Call assignments
- Senior Management Staff Very Familiar with LPA Requirements
- History of Expedited Scoping and Contract Negotiations
- History of Innovative Design Plans
- Experience of $50 Million + Practical Design Savings on Projects

Sincerely yours,
EFK♦Moen, LLC,

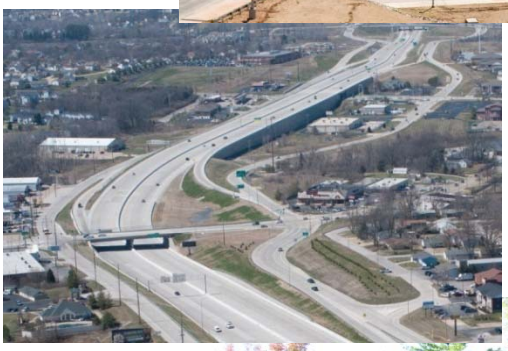
Darrell Eilers, Vice President

EFK♦Moen, LLC

Civil Engineering Design

Certified DBE/WBE

Quality Design Services since 1998



EFK♦Moen, LLC is a Civil Engineering firm with an emphasis in transportation engineering and design, including structural and surveying capabilities.

EFK♦Moen has excellent experience in developing new concepts for roadway/highway and bridge designs, from preliminary feasibility studies through final design documents and specifications. Our staff is experienced hydraulics and storm water detention, and all types of roadway structures: bridges, culverts and retaining walls.

EFK♦Moen has a good understanding of the most current guidelines and procedures used by federal, state and local governmental agencies, and has several project managers who have earned the Federal Aid/LPA Certification through MoDOT.

EFK♦Moen's staff is proficient in MicroStation, GeoPak, AutoCAD, SYNCHRO and several other design and survey software applications

Surveying – Structures – Roadway Design – Traffic Signal Design
Trails & Sidewalk Designs – Construction Services

Missouri
13523 Barrett Parkway Dr., Suite 250
St. Louis, Missouri 63021
Phone: 314-394-3100
Fax: 314-394-3199

LAND SURVEYING

Combining the latest technologies with a very experienced group of surveying personnel, is what makes EFK♦Moen an industry leader producing extremely accurate documentation for our clients.

EFK♦Moen offers the following full range of surveying services:

- Boundary Surveys
- ALTA/ACSM Surveys
- Right of Way and Corridor Surveys
- Topographic Surveys
- Aerial Control Surveys for Photogrammetry
- Construction Staking
- As-Built Surveys
- Legal Descriptions / Exhibits / Plats
- Subdivision Plats
- Record Research and Compilation

CONSTRUCTION SERVICES

EFK♦Moen's construction services group has been providing the following services to our public and private clients.

- Pre-Construction Conference
- Contract Paperwork
- Daily Site Inspections
- Material Inspection Coordination
- Contractor Invoice Review
- Labor Rate Interviews
- Daily Construction Diary
- Change Order Paperwork
- Utility Coordination
- Survey Layout & QA QC
- Value Engineering Studies
- MoDOT Progress Reports
- Final Inspection and Punchlist
- Final Close Out Documents

ROADWAY EXPERIENCE

EFK♦Moen's transportation engineering professionals have great depth of experience with all types of roadway/highway design projects. Our experience includes:

- Interstates
- Freeways
- Expressways
- Roundabouts/Traffic Circles
- Multi-Lane Urban Roadways
- Two Lane Rural Highways
- Interchanges
- Local Roads
- Intersections

•Conceptual / Feasibility Studies
•Alternatives Analysis
•Public Involvement
•Geometric Alignment Design
•ADA Compliant Intersection Design
•Earthwork and Cross Sections
•Hydraulic Analysis
•Pavement Drainage
•Detention Systems
•Traffic Capacity Analysis
•Traffic Signal Design
•Roadway Lighting Design
•Interstate / Highway Signing
•Intelligent Transportation Systems (ITS)
•Construction Staging/Maintenance of Traffic
•Utility Coordination
•Erosion Control
•Value Engineering
•Opinion of Probable Construction Cost
•Project Special Provisions
•Construction Specifications
•Construction Observation
•Record As-Built Drawings

TRAFFIC ENGINEERING

EFK♦Moen's traffic engineering group provides our clients with traffic demand studies and traffic signal design.

- Existing Site Traffic Analysis
- Site Traffic Projections
- ITE Analysis
- Safety Analysis
- Intersection Capacity Analysis
- Traffic Signal Phasing
- Traffic Signal Design
- Traffic Studies Reports
- Maintenance of Construction Traffic
- SYNCHRO /SimTraffic Software Expertise
- ADA Compliant Traffic Signal Equipment

STRUCTURAL EXPERIENCE

EFK♦Moen's structural engineering group understands the complexities of bridge, retaining wall and box culverts designs; and is also experienced in maintenance of traffic , construction methods, structure maintenance and inspection, expedited schedules and budget constraints. We offer services in the following areas:

- Bridge & Box Culvert Plans
- Bridge & Culvert Structural Analysis
- Bridge Inspections
- Bridge Hydraulic Studies
- Bridge Load Rating
- Bridge Alignments & Geometrics

•LFD & LRFD Design
•Bridge Superstructure Design
  -Prestressed Concrete I-Girder
  -Prestressed Concrete Box Girder
  -Steel WF Beam
  -Steel Plate Girder
  -Reinforced Concrete Slab
  -Single & Multiple Span Designs
•Bridge Substructure Design
  -Integral Abutments
  -Semi-Integral Abutments
  -Non-Integral Abutments
  -Column Piers
  -Pile Cap Piers
  -Pile Foundations
  -Drilled Shaft Foundations
  -Spread Footing Foundations
•Seismic Design
•Special Sign Truss Designs
•Sign Truss and Lighting Foundations
•Retaining Walls (Cast In Place & MSE)
•Precast Box Culvert Layouts
•Junction Chamber Design
•Opinions of Probable Construction Cost
•Contract Special Provisions
•Peer Design Review
•Shop Drawing Review
•Construction Administration