

MECO ENGINEERING COMPANY, INC.
ENGINEERS + SURVEYORS

3120 Highway W – Hannibal, Missouri 63401
Ph. (573) 221-4048 – Fax (573) 221-4377

November 15, 2013
001-646 / 041-335

Mary Ann Jacobs, MoDOT Central Office
MaryAnn.Jacobs@modot.mo.gov

RE: Pre-Qualification for LPA On-Call Services - Roadway Design

Dear Mary Ann:

MECO Engineering Company, Inc. (MECO) is pleased to submit this Letter of Interest with attachments for pre-qualification as a consultant for LPA On-Call Services. We are confident that you find that our experience demonstrates the qualifications necessary to meet LPA community project needs. Our firm is well-positioned and highly qualified to be considered as a Pre-Qualified consultant based on expertise, knowledge, experience, familiarity with program requirements and proximity. Our Management Team leaders possess the skill and capacity to lead the Project Team to perform the tasks required to complete projects on time and on budget. We offer you exceptional leadership, expertise, experience, evaluation and design capacity, and project and construction management experience relating to LPA projects.

Our Firm: MECO is a leading provider of municipal and county engineering services since 1985. As a full-service civil engineering and land surveying firm, MECO offers a wide range of disciplines and services to meet clients' project requirements, including regulatory compliance. We understand the needs and challenges that Missouri communities and counties face. The MECO team of professionals is dedicated to finding solutions that are appropriate and responsible, regardless of the size or scope of the project. MECO is dedicated to servicing our client's needs, providing quality workmanship with personal service. Locally owned, our corporate office is located in Hannibal, Missouri with supporting offices in Jefferson City and Boonville, Missouri, and Pittsfield, Illinois.

Our staff of 35 includes professional civil, environmental (wastewater), structural, mechanical and electrical engineers; hydrologist, Certified Floodplain Manager (CFM), professional land surveyors, GPS/GIS mapping specialists, talented CAD designers, highly skilled and knowledgeable construction technicians, and various support staff. We have the capacity to draw on the talents and expertise of any of our expert staff members to meet the specific needs of a project, providing cost efficiencies and time savings to a project and to the client as the work is done in-house. Should specialized services be required, such as soils or geotechnical investigative services, those services will be contracted through a professional sub-consultant. Through our respect for diversity, we effectively engage and work with minority-owned firms to provide specific skills and services, including geotechnical engineering and other specialty services.

Our firm has worked closely with the various funding enhancement programs administered through MoDOT and we look forward to continuing this work under the new MAP21 Program. MECO is a MoDOT approved Pre-Qualified Consultant (Expiration dates: E-Verify 1/28/2014; Financial 5/14/2014; Basic Training 1/1/2015) and has two **Certified Project Managers: Scott E. Vogler, PE / James D. Bensman, PE, SE;** and MoDOT Concrete-Field Certified construction technicians.

Project Management Team: MECO has decades of experience working with Missouri communities to improve their transportation infrastructure through the design and construction of local streets and highways. Our Project Team will be led by **Vice President/Principal Engineer Scott E. Vogler, PE**, based in our Jefferson City Office. He brings three decades of vast municipal/civil engineering experience, including roadway design and associated with transportation facilities, with numerous projects financed through a variety of MoDOT programs. He provides exceptional expertise, knowledge and familiarity of local needs and conditions.

As **Project Manager/Project Engineer**, Scott will be responsible for planning and design of roadway geometry, pavement design, related sidewalk improvements, parking lot system design, including storm water management, and complete oversight of the required studies, production of plans, specifications, cost estimates, survey, right-of-way plans, and associated clearances and permits.

Scott has assembled a qualified and experienced team to assist him with design elements and related work, including **Senior Engineer James D. Bensman, PE, SE as Assistant Project Manager/Engineer** for those projects within the service delivery area of our Hannibal Office (roadway geometry, pavement design, technical specifications, cost estimates); **Jane M. Rushford, CFM** will assist with storm water drainage components, performing computer modeling and hydraulic calculations, and preparing reports storm water management (SWPPP and permitting), drainage and detention design, and permit applications. **Engineer Ellison Graham, PE** (roadway geometry, storm water, technical specifications, contract documents); **Senior MEP Engineer Roger C. Linneman, PE** (lighting plans for streets/parking lots, signalization, related work); **Ronald E. Kliethermes, PLS and/or Kevin L. Bock, PLS** (survey/ROW plans/maps), **Alan J. Scheperle, Designer II and/or James M. Puskar, Designer I**, each bringing decades of experience to the Team, providing expert CAD design, producing quality plans and constructible drawings.

Our Experience / Project Approach: Through our integrated services approach, we have the ability to utilize our most important assets - our skilled and experienced personnel, by providing a full complement of planning, survey, multi-disciplined engineering and design, AutoCAD drafting and mapping, and construction phase services based on the requirements of the project. We offer exceptional leadership, expertise and experience and will provide the engineering services required for roadway design and associated work. We effectively engage the owner, the owner's staff and other key stakeholders in implementing the strategies to produce measureable and successful results.

Our firm has designed numerous street and road projects through the MoDOT Surface Transportation Program (STP), adhering to MoDOT design guides for projects completed for our governmental clients. Our Team has extensive paving experience through our relationship with the University of Missouri. As a member of the University's Civil Tool Box Team, we have provided planning, design and construction phase services each year since 2007 for the Campus Parking Lot Summer Paving Program as well as other major paving projects undertaken by the University. As City Engineer for the City of Boonville, Scott works hand in hand with the Public Works Director to structure and implement the City's annual Concrete and Asphalt Street Repair Programs, including STP projects, identifying and prioritizing streets in need of repair/reconstruction, replacement and/or repaving and providing the services to complete the project.

Mid-America Industrial Park Improvements, Boonville, MO: Design water and sanitary sewer extension, new lift station, and new concrete roadway with retaining wall system (to allow for cul-de-sac). Project a result of the expansion of an existing industry and to provide for further development of the industrial park. Project activities included topographic survey, utility design, and production of plans, specifications, cost estimates, contract and bidding documents for the City-bid project. **MECO** provided construction observation services.

Veterans Road (Hannibal), Marion County Commission, Palmyra, MO: **MECO** was the design engineer for the three-phase \$5.4 million Veterans Road Project in Marion County, MO, a 3.24 mile, north-south connector roadway. This new roadway takes pressure off of busy Highway 61, provides another link to Highway 36 and promotes economic development. As the component of the Riverview Trail project, the Veterans Road 8-ft wide shoulders were designated as Bike Lanes, complete with pavement markings and Bike Lane signs along the corridor.



Beuth Road Reconstruction, Storm Water, Retaining Walls, Pedestrian Trail, Moberly, MO: This comprehensive project resulted in the realignment, widening, a vastly improved driving surface, enhanced storm water management, and overall appearance of Beuth Road. With the use of an innovative design, we were able to greatly enhance the road aesthetics without incurring additional construction cost. Project scope included the replacement of the existing storm water collection system, including the use of HDPE pipes up to 60" in size. A Versa-Lok Retaining Wall System was installed as a component of the storm water design and greatly enhanced aesthetics along the improved boulevard. **MECO** performed topographic surveys, prepared plans, specifications, and contract documents, assisted through the bidding phase and provided construction observation and construction management services. This roadway is a major connector road, providing linkage to schools and parks, residential neighborhoods and local businesses. The project included an asphalt pedestrian walking trail running parallel with the roadway to further enhance safety for pedestrians, bicyclists, and motorists alike.



East High Street Reconstruction, Jefferson City, MO: Preparation of Preliminary Engineering Report, survey, storm water calculations, design, production of plans, specifications, contract documents, and engineer's estimate. MECO provided complete construction management and observation services for the East High Street reconstruction, storm water improvements, and sidewalk project. This is a busy residential and connector street just off of the downtown district in Jefferson City that was subject to extreme flooding conditions during normal to high rain events. Project activities included the construction of a new asphalt driving surface with concrete curb and gutter, and replacement of sidewalks to meet ADA compliance. The installation of new storm water piping and the new curb and guttering has reduced the incidence of high water throughout this local area.



University of Missouri/Columbia Campus Summer Paving Programs/Emergency Room Parking Lot Design: MECO was directed by the University of Missouri/Columbia, Campus Facilities Planning, Design & Construction Division, to study, evaluate and recommend solutions for 12 parking lot areas in various stages of need for maintenance repair and/or reconstruction. Pavements were evaluated and various options for repair or rebuild were considered. Opinions of probable project cost were prepared, reviewed by the University, and the option that both upgraded the existing lot and fit within the budget constraints was determined for each of the targeted

parking lots. Options considered for each included seal coats, chip and seal surfacing, milling of existing pavements and placing new asphalt overlays and/or chip and seal surfacing. The extent of the existing state of deterioration controlled the extent of repair or reconstruction. Plans and specifications were prepared and provided to the University for their bidding of the projects. The Medical Center project resulted in the complete redesign/reconstruction of the parking lot system at the Emergency Room. MECO provided complete design services (PS &E) and construction phase services, with the University bidding their own project.

West Ely Road Rehabilitation; Hannibal, MO: This complete reconstruction project included a five-block section of West Ely Road, widening and improving the narrow and deficient roadway and providing for improved drainage through the design of new storm sewer, drainage ditch, and a detention basin. Driveway modifications were required along the route as the new roadway was construction. The important Head Lane Intersection, at the East End of the project, was also improved by this project. Various construction activities included excavation of existing pavement and replacement with 7,601 SY 4" thick aggregate base, 7,601 SY 8" thick non-reinforced PCC pavement, 3,100 LF 30" concrete curb/gutter, 1,070 SY 6" thick PCC driveway and 711 SY 6" thick driveway apron; 2,182 LF storm water pipe (12"-30"); one concrete headwall and concrete flume; 18 drop in-lets, 88 SY Type 2 ditch liner, erosion control, and site restoration to complete the \$875K project. MECO provided engineering design, project management and survey services. The City conducted construction observation services.



Accessible Pedestrian Routes: Proposed sidewalks and crosswalks within project limits will be designed and constructed in accordance with current Public Right of Way Accessibility Guideline (PROWAG) requirements. **Proximity:** Work will be directed and managed through the Office in closest proximity to the Local Public Agency and their project, resulting in prompt response, rapid deployment of personnel and accessibility to the Project Manager and his Project Team. To provide cost and time efficiency and prompt response, we will limit our service to those LPA clients within the **Northeast, Central, St. Louis, Kansas City and Southwest Districts.**

Service: You can rely on MECO and our Project Team to provide the attention to detail and a level of commitment to service, experience, knowledge, and expertise that you require and expect of your Engineering Consultant. We never forget that clients have many choices and options when selecting their consultant. Our Project Managers and Engineers understand, and demand, that our technical capabilities be matched with impeccable service and responsiveness. We are proud of our success in satisfying our clients' needs by providing quality design, being attentive to their concerns, addressing issues promptly and always with respect, meeting project schedules and performing within project budgets. Our approach ensures personal attention from the Project Manager and engineer leading the design team, ensuring transparency, effective communication, and personal service that is second to none.

Thank you for your consideration of MECO Engineering as a consultant to provide Roadway Design services for Local Public Agencies.

Sincerely yours,
MECO ENGINEERING COMPANY, INC.

Jan Wyatt
Marketing Coordinator

MECO BROCHURE (4 pages)
For MoDOT Website

PROJECT REFERENCES

Category: Roadway Design



COMPANY PROFILE - ROADWAY DESIGN

Vice President/Principal Engineer/Director of Engineering Scott E. Vogler, PE

Missouri Professional Engineer (PE) MO E-22510

University of Missouri, Columbia, Bachelor of Science Degree, Civil Engineering, 1982

Experience: 31 years (MECO Engineering - 18 years)

MoDOT Certified LPA Project Manager

Mr. Vogler will be assigned responsibilities as **Project Manager/Project Engineer**, leading his Project Team and directing work to ensure project readiness and progress, meeting schedules and budgets. He brings three decades of vast municipal/civil engineering experience, including Streets and Roads, Trails, Sidewalks, and related work, providing exceptional expertise, knowledge and familiarity of the MoDOT programs and local needs. As **Project Engineer**, Mr. Vogler will be responsible for and/or supervise, schematic design, design development and final design phases, hydraulic studies/calculations, calculation of cost estimates, permitting, geotechnical investigations (provided by sub-consultant), roadway geometry/sidewalk layout, pavement design, associated storm water management, and production of ROW plans, detailing and design plans, bid and contract documents, construction drawings, and maps, and construction engineering. **Construction Management:** The construction engineering phase, including contract administration, construction management and observation, is the implementation of the design ideas and goals into physical form. During the preparation of construction documents, periodic coordination and quality reviews are conducted. Review of documents with permitting authorities prior to plan submission assists in achieving reasonable permitting review times and comments. Construction administration consists of field visits, shop drawing reviews, processing of pay estimates and change orders, and providing response to field questions and coordination issues. As **Construction Manager**, **Mr. Vogler** will direct contract bidding, award, construction management, construction engineering and construction observation services, with personnel deployed from the appropriate office (Jefferson City/Boonville/Hannibal) to provide cost efficiency, prompt response, and accessibility to the client. **Point of Contact/Coordination:** **Mr. Vogler** will be the Primary Point of Contact for the LPA's Roadway projects awarded to the firm. This single point of contact provides you with assurance of communication throughout the project, continuity, and dependability, all essential to the development of a successful client relationship and completion of a successful project. Mr. Vogler can be contacted by phone at 573-893-5558, by email at svogler@mecoengineering.com or stop by our Jefferson City office at 2701 Industrial Drive.

Senior Structural Engineer James D. Bensman, PE, SE

Professional Engineer (PE) MO E-2001018705 (2001) IL No. 062-058863 (2006)

Structural Engineer (SE) IL No. 081-006043 (2004)

New Mexico State University, Las Cruces, New Mexico Bachelor of Science Civil Engineering; 1996

Experience: 16 Years (MECO Engineering)

MoDOT Certified LPA Project Manager

Mr. Bensman will oversee those LPA projects located within the service delivery area of our Hannibal Office, including Northeast and St. Louis Districts, fulfilling duties as the **Assistant Project Manager/Engineer**. This approach promotes cost efficiency, prompt response and rapid deployment of personnel from the appropriate office locations. Mr. Bensman is a Professional Engineer (Civil) and a licensed Structural Engineer (SE), leading our Structural Department with 16 years of extensive civil and structural engineering. He provides cost efficient design solutions that meet specific project site and budget requirements and works extensively with the various MoDOT programs providing funding for LPA projects.

Experience Counts: MECO provides assurance of experience, staff capacity, expertise and knowledge to meet LPA project requirements. All recordkeeping and submittals will be in accordance with the MoDOT Local Public Agency (LPA) Manual and design guidelines, and Public Right of Way Accessibility Guideline (PROWAG) requirements.



MECO ENGINEERING...Driven to Excellence. Delivering engineering

EXPERTISE

Municipal / County/Water District Engineering
Project Development
Feasibility Studies / Reports
Land Surveying
Civil Engineering
Site-Planning/ Land Use Planning
Grading Plans
Water and Sewer System Design
Water and Wastewater Treatment Design
Regulatory Compliance / Funding Programs
Roadway Geometry / Alignment
Pavement Design
Sidewalks/Trails/Parks
Structural and Bridge Engineering / Design
Storm Water Engineering
Hydraulics / Hydrologic Studies / Calculations
Floodplain Analysis
FEMA FIRM Map Revisions
Mechanical / Electrical Engineering
Energy Efficiency Design
Project Management
Contract Administration
Construction Management
Construction Engineering / Observation

CAPACITY

35 Employees, including:

9 Professional Civil Engineers (PE)
1 Structural Engineer (SE)
1 Mechanical/Electrical Engineer (MEP)
2 Staff Engineers
2 Professional Land Surveyors (PLS)
1 Certified Floodplain Manager (CFM)

Full Service multi-disciplined firm
Locally Owned and Managed Since 1985
Serving municipalities, counties, state agencies, educational institutions, and private sector clientele
Client Centered

Hannibal, Missouri

573-221-4048

mecoh@mecoengineering.com

Jefferson City, Missouri

573-893-5558

mecojc@mecoengineering.com

Boonville, Missouri

660-882-3324

mecojc@mecoengineering.com

ROADWAY DESIGN

MECO specializes in the planning and design, project management, and construction management of streets, roadways, highways, bridges, small airports, and storm water facilities. These projects vary from new construction to replacement and rehabilitation of existing structures and facilities. Our professionals are experts at storm water management and utility relocation analysis and design. Specialized project-related services provided by our firm include:

Specialized Services Include:

- Boundary and topographic surveys
- Aerial photography control surveys
- Preparation of right-of-way and easement documents
- Easement acquisition assistance
(private landowners/governmental properties)
- Preliminary Engineering Reports/Feasibility Studies/Facility Plans
- Cost Estimates
- Streets, Roads, Highway design, including asphalt, concrete, brick, and stabilized base construction (new construction/rehabilitation)
- Bridge design
- Rail spur design in accordance with railroad specifications
- Geotechnical report evaluations
- Permitting applications, including MoDOT/IDOT, Railroad, MDNR (Utility/SHPO/Parks/Land Disturbance), IEPA (water/wastewater), FAA, US Army Corps of Engineers, local governments, regulatory agencies and others as applicable
- Computer-aided design drafting
- Computer modeling for storm water analysis and hydrologic/hydraulic studies utilizing US Army Corps of Engineers HEC-RES Computer Software
- Environmental / Archeological Report Evaluations

***A MoDOT AND IDOT PRE-QUALIFIED FIRM
Two MoDOT LPA PROJECT MANAGERS ON STAFF***



Infrastructure design needs associated with transportation and storm water management projects

- Relocation of existing utilities (underground/aerial)
- Storm water management facilities
- Sediment and erosion control
- Storm water detention studies
- Sidewalk design
- Infrastructure system mapping
- Street and utility mapping

Project Related Services

- Construction observation services
- Construction management services
- MoDOT/IDOT certified technicians
- Multi-agency coordination with state and federal funding agencies (MoDOT/IDOT/CDBG/CDAP/IEPA)
- Funding application assistance
- Financing options planning assistance
- Master and strategic planning



MECO ENGINEERING...Driven to Excellence. Delivering engineering solutions that work.

LOCAL ROADS

CITY OF BOONVILLE, MO

Project Manager/Project Engineer: **Scott E. Vogler, PE**

ASPHALT REPAIR AND OVERLAY PROGRAM STP 1300 (504), PHASE I / PHASE II: This project addressed asphalt streets that were in need of general maintenance repair within the city. MECO worked closely with the Public Works Department to determine the locations that required complete removal of pavement and the streets that required only application of overlay pavement. At the close of the study, the evaluation identified 35 individual streets in need of improvements and design was authorized for the entire project. Phase I of the Overlay Project included the bidding and improvements for twelve (12) streets and Phase II completed the streets selected for improvements.

Phase 1 Construction Costs \$378,009.88 Phase II Project Costs \$209,710.54

Riviera Street: Concrete roadway reconstruction w/ 8" PCC pavement and storm water drainage \$618,454.50 **Rankin Mill Street:** Concrete roadway reconstruction w/8" PCC pavement and storm water drainage \$498,512.00 **Locust Street:** A primary East-West artery roadway, this concrete roadway replacement project widened the street to 33-feet, installed concrete curb and gutter/curb inlets, relocated sanitary sewer and waterlines, and repaired or replaced affected retaining walls. **Concrete Street Repair Program:** The City has undertaken a Concrete Street Repair Program for the last six years. Typical design/project elements: street design and related services, removal of existing concrete, excavation of unsuitable materials/subgrade compaction, installation of storm water piping, rock backfill w/geotextile separation fabric, concrete curb/gutter and monolithic curb, site restoration. **2012 Project** (\$317,639.00) 3,405 SY PCC pavement. **2013 Project:** 3,405 SY PCC pavement (Eng. Estimate \$262,172 Construction Cost \$255,744). **Mid-America Industrial Park Drive:** Survey, design and construction phase services to construct new concrete roadway to serve the Mid-America Industrial Park. The roadway required a retaining wall system (16-foot high) to be designed to allow for a cul-de-sac and to keep bank from eroding/sliding. Additional design elements: new lift station and utility extensions.

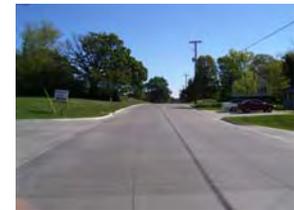
INDUSTRIAL PARK STREET, CITY OF ELDON, MO: Engineering design, bidding and contract preparation for the Industrial Park Street with Curb and Gutter. Project elements: concrete street, cleaning of road ditches, pipe installation and installing 1,272 LF of curb and gutter. Project in design phase. Project Manager/Engineer Scott E. Vogler, PE

EAST HIGH STREET RECONSTRUCTION, CITY OF JEFFERSON, MO: Preparation of Preliminary Engineering Report, survey, storm water calculations, design, production of plans, specifications, contract documents, and engineer's estimate. MECO provided complete construction management and observation services for the East High Street reconstruction, storm water improvements, and sidewalk project. This is a busy residential and connector street is located in close proximity to the downtown district, in an area that was subject to extreme flooding conditions during normal to high rain events. Project activities included the construction of a new asphalt driving surface with concrete curb and gutter, and replacement of sidewalks to meet ADA compliance. New storm water piping and the new curb and guttering has reduced the incidence of high water throughout this localized area. Project Manager/Engineer Scott E. Vogler, PE

VETERAN'S ROAD, SECTIONS A/B/C, MARION COUNTY COMMISSION, PALMYRA, MO: MECO provided design, survey, ROW, project management, construction management/observation services for Sections A/B/C including preliminary and final design, roadway geometry, pavement design, production of plans, specifications, cost estimates, constructible drawings, maps, and contract documents for the three-phase north-south connector road project. Design elements: The 3.24 mile roadway consists of two 12-ft wide PCC surface driving lanes w/ 8-ft wide asphalt shoulders (designated as bike path), two box culverts (8' x 5' / double 10' x 10'), multiple crossroad/entrance road pipes, relocation/adjustment of utilities, and new railroad crossing. Design of new left turn lanes (Highway MM) and widening of the MM/Veterans Road intersection was added by MoDOT to improve safety / line-of sight at the intersection. The project was a cooperative effort between Marion County, the City of Hannibal and MoDOT, with a Marion County transportation tax funding the project. The \$5.2 million dollar came in under budget and on time for each of the three sections. The roadway provides linkage between Route W in Marion County (north) to Paris Gravel Road at the south end, providing important connection to Highway 61, with controlled access to US Highway 36.



WEST ELY ROAD RECONSTRUCTION; CITY OF HANNIBAL, MO: This complete reconstruction project included a five-block section of West Ely Road. MECO provided engineering design, project management and survey services. Design elements included widening/improving the narrow and deficient roadway, improved drainage through new storm sewer facilities, drainage ditch, detention basin; driveway modifications along the route, and improvements to Head Lane intersection. Construction elements: excavation of existing pavement and replacement with 7,601 SY 4" thick aggregate base, 7,601 SY 8" thick non-reinforced PCC pavement, 3,100 LF 30" concrete curb/gutter, 1,070 SY 6" thick PCC driveway and 711 SY 6" thick driveway apron; 2,182 LF storm water pipe (12"-30"); one concrete headwall and concrete flume; 18 drop in-lets, 88 SY Type 2 ditch liner, erosion control, and site restoration to complete the \$875K project. The City provided construction observation services for the city-financed project.



MECO ENGINEERING...Driven to Excellence. Delivering engineering solutions that work.

