



**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

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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**



QUIGG ENGINEERING INC

Project Contact: Todd Welz, PE
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314-339-8431

December 12, 2025

Missouri LPA 3-Year On-Call Services
Trails & Sidewalks – Statewide

Introduction

Quigg Engineering Inc (QEI) is pleased to submit this letter of interest for on-call services for **Trails & Sidewalks** in response to your November 3, 2025, solicitation. This contract will be managed and executed from our St. Louis office. QEI is current in all categories on MoDOT's approved consultant pre-qualification list including LPA requirements.

Quigg Engineering Inc. (QEI), a woman-owned engineering firm, has provided services since 2006. QEI now has over 90 employees. Our primary focus is delivering services to the transportation industry. We serve MoDOT from our St. Louis office, which opened in 2016 and has delivered several projects for MoDOT.

General Experience of Firm

QEI's experience includes the planning and design of ADA-compliant pedestrian and bicycle facilities. We have worked with several agencies and municipalities in developing the designs for greenway corridors that include both nonmotorized paths and bridges. Along with new bridges, our design has included retrofitting existing highway bridges to include nonmotorized traffic and repurposing abandoned highway and railroad bridges for use in as part of a trail. Locally we have worked on Great Rivers Greenway projects and are currently on their on-call list to provide design and survey services.

QEI follows the Public Right-of-Way Accessibility Guidelines (PROWAG) manual when designing new sidewalks and upgrading existing ones. Our designs can be provided in AutoCad or MicroStation CADD formats. For bicycle facility designs, we follow The AASHTO Guide for the Development of Bicycle Facilities. QEI also has survey staff that has provided topographic and boundary surveys along with using the latest LIDAR technology.

Past Performance

Master Planning and Alternatives Analysis, Pitman Hill Greenway, St. Charles County, Missouri, Great Rivers Greenway:

The St. Charles County Greenway Master Plan identified the community's desire for a greenway corridor linking Dardenne Greenway at St. Charles Community College to Katy Trail State Park. This new greenway corridor project requires community engagement, master planning, and professional design services. The project is currently in the community engagement and master planning phase. Future stages of the project will include design, engineering, and implementation of the new greenway master plan. QEI is responsible for data collection and review of natural, cultural, and man-made environmental conditions, constraints, and opportunities, for incorporation into the master plan. QEI conducted desktop and field evaluations to identify environmental conditions that may impact potential alternative greenway alignments, resulting in the selection of a preferred alternative which meets project objectives while minimizing impacts to sensitive environment resources.



20th Street over US Route 20, Rockford, IL, IDOT District 2: QEI was hired by IDOT to develop plans, specifications, and estimates for roadway and multi-use path design. The proposed 10-foot multi-use path proposed on the west side of 20th Street project created some challenges because many adjacent properties lie close to and lower than 20th Street. QEI engineers developed a plan and profile for the path that best minimized the right of way impacts to the adjacent parcels while also designing new entrances for each property. QEI was the lead on this project with IDOT coordinating the plans with the City of Rockford.

Illinois Prairie Path Realignment, DuPage County, Illinois: QEI worked on field surveys, and development of plans, specifications, and estimates. The design plans included bike path re-alignment, maintenance of traffic plans for pedestrians and bicyclists, erosion control plans, reconfiguration of split rail fencing, and installation of a railroad access gate to separate path users from railroad maintenance areas. This project included the realignment of 515 feet of a 10-foot-wide multi-use path in the vicinity of Pioneer Park (which is part of the Elmhurst Park District) to improve safety at the path's crossing at the Chicago Central & Pacific Railroad (now the Canadian National [CN] Railway).

Newton Bike Path (Eagle Trail) over Embarras River, Newton Illinois: The project involved the rehabilitation of a pin-connected 7-panel Pratt truss bridge over the Embarras River in Newton. The bridge, which at one time carried Wade Township Road 164. . Our staff performed a full bridge rehabilitation plan for the historic pin-connected truss bridge. QEI prepared plans for improvements to the bridge, which included: steel repairs; the addition of a new timber deck and handrail system; replacement of bearings; reconstruction and repair of limestone abutments; temporary shoring of the structure; and replacement of 12 pins. To gain a better understanding of the structure, QEI investigated bridge construction techniques from the late 1800s. The findings concluded that the bridge was originally designed for a horse and wagon. The design vehicle loading from 1890 is very similar to the loadings currently used for pedestrian bridge design.

Sangamon Valley Trail over IL Route 97, Springfield Illinois: This project involved a bridge type study for a new bridge carrying the Sangamon Valley Trail over IL Route 97 on the northwest end of Springfield. QEI studied the benefits of using a prefabricated structure versus constructed-in-place superstructures and developed four bridge alternatives for consideration. Aesthetic features were considered, and renderings of four bridge alternates were prepared. Cost estimates and advantages and disadvantages were prepared for the final four options. The recommended alternative is a prefabricated structure due to the short construction time and ability to provide an open view of the roadway. QEI has prepared the final design plans for the replacement structure which consists of a single span truss, 165’-9” back-to-back of abutments with a 10’ clear width.

US 30 Bike path over Fox River, Oswego, Illinois: This project included field surveys, the preparation of a bike path alignment study, structure type study, and contract plans for highway and bike path work. The resulting bike path consisted of a bituminous surfaced path and a bridge carrying the bicycle path over the Fox River. The bike path bridge is a special design with concrete deck on steel plate girders with 5 spans at 150’ each for a total length of 750’. The Bike Bridge is supported on the highway bridge piers. The US 30 Bike Trail/Fox River Trail connection is included in the project. QEI conducted field surveys, preparation of a bike path alignment study, structure type study, and contract plans.

Wabash Corridor Trail, Springfield Illinois: This project consisted of a Field Survey, Preliminary Study, Preparation of Construction Plans and Construction Observation for 2.3 miles of new multipurpose trail. The trail runs easterly from Robbins Road to the parking facility at the east end near MacArthur Blvd. The trail follows along the abandoned Wabash RR. The trail was designed using AASHTO guidelines with a 12 ft wide aggregate base course pavement with HMA Surface course, with 2 ft. aggregate shoulders. This project included the design of a single span prefabricated steel truss bridge over Chatham Road with modular block retaining walls and the modification of an existing two span RR bridge over IL Rte. 4.



Route 79, Ralls & Pike County, MoDOT NE District: QEI prepared preliminary and final ROW plans, preliminary and final design plans 24 miles of shoulder widening, new guard rail and resurfacing along approximately 24 miles of Route 79 in Ralls and Pike Counties. The project included ADA improvements at multiple crossings along Route 79 in Louisiana, MO from Noyes Street to South Carolina Street and along Route 54 from 4th Street to Dougherty Pike. These ADA plans also include addressing drainage issues associated with these improvements and examining each intersection for perpendicular pedestrian access routes (PAR) slope criteria. The design of the ADA ramps and sidewalk improvements were in accordance with the MoDOT EPG and PROWAG.

New Village Park, Sherman, IL, Village of Sherman: The Village of Sherman constructed a new Village Park at the corner of Business 55 and Old Tipton School Road. The new park features include an amphitheater, walking paths, ponds, and space for the future Village Hall. QEI prepared conceptual plans, design, and final bid plans for the roadway and path system within the Village Park. As, aesthetics were important to the Village within the park, and the design included stamped and colored concrete pavement and curbs. Quigg Engineering also designed the infrastructure for the park including grading, storm water, sewer, and water line.

Qualifications of Personnel



Todd Welz, PE, has over 39 years of experience specializing in transportation projects involving design and construction of major urban facilities and airports. His project and design management and transportation engineering expertise includes feasibility studies, alternatives analysis, Environmental Assessment and Design Reports, preliminary and final design, development of final construction plans, and Design-Build delivery.



Francis Nelson, PE, has over 25 years of civil engineering experience and a variety of project management experience. His diverse technical expertise incorporates the inspection and design of countless roadway and airport pavements, in addition to transportation and highway design, erosion control and landscape design, environmental permits, project management, construction management, pavement management systems, utility coordination, and consultation.



David Booher, PE, SE, has over 40 years of technical and project management experience in the fields of civil and structural engineering with extensive experience in all phases of bridge and structural design including: hydraulics, foundations, substructures, super-structures, rehabilitation, and strengthening of members. David has led the design of several bridge repurposing and retrofits to include bicycles and pedestrians.



Tammy Neff-Smith has 29 years of experience in all aspects of Civil Engineering working on diverse projects. She possesses a thorough understanding of engineering and plan production with experience in Preliminary and Final Roadway Improvement Plans, Topographic Surveys, Utility Coordination, Electrical Plans, and miscellaneous exhibits. She has a solid knowledge and understanding Civil Engineering Construction Document standards and specifications.

Familiarity/Capability

QEI has a thorough understanding of your delivery process and procedures by delivering a variety of projects for several different districts. Though each district has their preferences, we recognize the Engineering Policy Guide (EPG) provides the planning and design methodology for all to follow. The EPG also provides the necessary design criteria or weblinks to reference manuals containing additional design criteria to be followed. QEI's staff is proficient with the latest version of MoDOT's OpenRoads Designer. Our staff keeps current by attending the week-long training sessions when provided by MoDOT. We also utilize MoDOT's YouTube training videos to keep our staff up to date on different design topics.

Accessibility

We pride ourselves on our service to MoDOT and being responsive to your needs. Our staff has experience delivering projects for MoDOT and will make any project assigned to us a priority to deliver a quality project meeting your schedule. We have provided high-quality services through a blend of remote and in-office work supported by our cloud computing provider the past ten years. Through the use of this technology, we are able to communicate quickly through the use of screen and file sharing. However, we understand the importance of meeting face-to-face to collaborate when needed. Our strong relationship with MoDOT is built on consistently staffing projects with responsive professionals who have the right expertise for the job.



OUR SERVICES

- Bridges & Structures
- Construction Inspection & Material Testing
- Environmental Studies & Permitting
- Surveying
- Transportation/Civil Engineering
- Traffic Studies
- Aviation
- Site Development

LICENSES / REGISTRATIONS

- 24 Professional Engineers
- 3 Professional Land Surveyors
- 3 Professional Structural Engineers
- 2 Professional Traffic Operations Engineers

***Quality with
Excellence and
Integrity***



QUIGG ENGINEERING INC

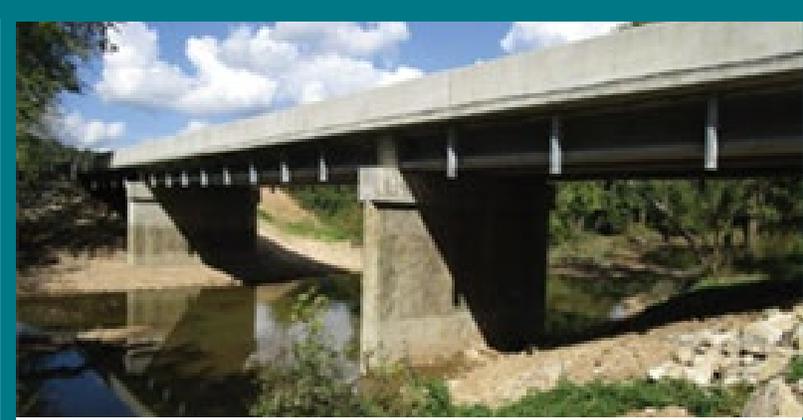
Quigg Engineering Inc. (QEI) has been proudly serving public and private sector clients since 2006 including those located in Missouri when we opened our St. Louis office in 2016. With a team of over 90 professionals across the Midwest, we specialize in a wide range of infrastructure services, including highway and bridge design, land surveying, environmental studies and permitting, site development, traffic engineering, aviation, and construction inspection. Our mission is to exceed client expectations by delivering high-quality projects on schedule and within budget—driven by the expertise and integrity of our dedicated staff.

LOCATIONS

Headquarters: Springfield, IL
2351 S. Dirksen Parkway
217-670-0563

- St. Louis, MO
- Jacksonville, IL
- LaGrange, IL
- West Chicago, IL
- Middleton, WI
- Heinston, LA
- Meridian, ID
- Columbia Heights, MN

BRIDGES & STRUCTURES



Route 94 Bridges over Smith & Lost Creeks
MoDOT NE District, Warren County, MO
Construction Cost: \$1.5M

- Completed the sounding layout sheets, bridge memorandums, final bridge plans and preliminary, right-of-way and final roadway plans for two bridge replacements.
- New bridge over Smith Creek is a 187-foot 3-span NU-girder structure.
- New bridge over Lost Creek is a 128-foot 2-span NU-girder structure.
- Additional work included safety improvements, new entrance and side road connections.



Route B over Ten Mile Creek
MoDOT SE District, Carter County, MO
Construction Cost: \$1.1M

- Completed Hydraulic Report, Preliminary and Final Plans for the bridge replacement.
- New bridge is a 114-foot, 3-span with a spread box beam superstructure with pile cap bents and integral end bents.
- Completed Preliminary, Right-of-Way and Final Plans for the approach roadways.
- Conducted boundary analysis to re-establish the existing right-of-way.
- Conducted topographic and hydraulic survey.

CONSTRUCTION INSPECTION & MATERIAL TESTING



IL Route 3 Waterloo Bypass
IDOT District 8, Monroe County, IL
Construction Cost: \$22M

- Performed the construction inspection services for the widening from two lanes to five lanes of full-depth hot mix asphalt pavement along IL Route 3.
- The project included inspecting box culverts, earth excavation, lime stabilization, storm sewer, bike trail, pedestrian tunnel, noise wall, roundabout, drainage, and signalized intersections.



Bridge Replacement over Cedar River
IADOT District 6, Cedar Rapids, IA
Construction Cost: \$10.3M

- Performed the construction inspection for the replacement of the historic eastbound Cedar River Bridge along Highway 30.
- Supervised the construction, reconstruction, resurfacing of embankments, and the adjoining roadway pavement sections.
- Directed the full-depth pavement patching, drainage systems, and coordinated landscape restoration efforts.

ENVIRONMENTAL STUDIES & PERMITTING



US 67 Safety Improvements
MoDOT SL District
St. Charles County, MO

- Delineated wetlands across multiple seasons under two separate on-call Work Orders. QEI delineated a 51-acre project area in 2020 and a 98-acre project area in 2024.
- Performed desktop review and area reconnaissance to evaluate jurisdictional connectivity of aquatic resources.
- Coordinated with MoDOT and USACE to obtain concurrence on the aquatic resource report findings and jurisdictional connections.



US Route 34 (FAP 313)
IDOT District 4
Henderson County, IL

- As part of the project team with WSP, QEI provided critical support for the completion of the Supplemental EIS for a 9-mile section of US 34, with 6 miles located within the Mississippi River floodplain
- Led the alternative evaluation, presented at public meetings, and contributed to EIS sections for farmland, ecology, special waste, and community impacts.
- Coordinated with agencies and developed EIS exhibits.
- Performed TNM 2.5 modeling, authored the noise study report, and completed noise validation work in the field.

TRANSPORTATION



MO Route 79
MoDOT NE District, Ralls and Pike Counties, MO
Construction Cost: \$8.5 million

- Prepared preliminary and final design plans for 24 miles of shoulder widening, new guardrail, resurfacing, and ADA improvements.
- Designed multiple sidewalk and ADA improvements for 17 intersections through Louisiana.
- Addressed drainage issues associated with sidewalk and ADA improvements.



IL Route 75 Rock River to IL Route 2
IDOT District 2, Winnebago County, IL
Construction Cost: \$9.3M

- Designed ADA complaint sidewalks for bicycle/pedestrian accommodations including the implementation of the Complete Streets Policy and access to 100-year-old buildings.
- Designed roadway, multi-use path, geometrics, pavement, drainage, signing/stripping, earthwork, and erosion control.
- Served as sole designer, completing field surveys, ROW plats, and construction documents

SURVEYING



MO Route 100 over Shawnee Creek
MoDOT CN District, Osage County, MO
Construction Cost: \$708,000

- Conducted topographical and hydraulic surveys, boundary research, and established existing right-of-way.
- Prepared property plats for new right-of-way taking.
- Developed the preliminary and final bridge plans.
- Developed preliminary, right-of-way, and final plans for the approach roadways
- Prepared drainage plans and added backflow preventers to keep the water in the drainage canal from entering the ditches.



Big Bend over Interstate 44
MoDOT SL District, St. Louis County, MO
Construction Cost: \$7M

- Set survey control and conducted, topographic, utility surveys using a combination of LIDAR and conventional methods.
- Established existing right-of-way and property lines through field work, courthouse document research and as-built plans.
- Designed integral end bents for the bridge replacement.
- Developed ITS layout throughout the project including fiber splicing details.

TRAFFIC STUDIES



NDSLSD, E. Grand Ave to W. Hollywood Ave
CDOT, Chicago, IL

- Updated the 2007-2011 crash data information to compile two new reports. The study included identifying hot spots, observation of potential causes, and recommendations for countermeasures.
- Obtained, compiled, and analyzed additional crash data (2012-2016) to produce a Crash Validation Memorandum.
- Assisted with the evaluation of conceptual design alternatives for the overall mainline cross-section of NDSLSD throughout the corridor and interchange configuration alternatives.



IL 43 Harlem Avenue
IDOT District 1, Cook County, IL
Construction Cost: \$26M

- Traffic Analysis: Reviewed and balanced data, prepared exhibits, and coordinated with CMAP.
- Geometric Studies: Modeled existing, No-Build, and three alternatives for five intersections.
- Intersection Design: Completed AM/PM capacity analyses.
- Bridge Inspection: Prepared abbreviated BCR for SB Harlem over RR.
- Feasibility Study: Evaluated sidewalk widening and bridge load ratings over CNRR and CSS Canal.