



November 15, 2013

One Campbell Plaza
St. Louis, Missouri 63139
T. 314 781 7770 F. 314 781 9075

www.cdgengineers.com

Ms. Mary Ann Jacobs
Local Programs Administrator
**MISSOURI DEPARTMENT
OF TRANSPORTATION (MoDOT)**
105 West Capitol Avenue
Jefferson City, Missouri 65102

**RE: Letter of Interest for Missouri's
Local Program (LPA) On-Call Services
Construction Inspection Work Category
CDG Qualifications No. Q13092.05**

Dear Ms. Jacobs:

In response to MoDOT's request for consulting firms to perform on-call professional services for an LPA pre-qualified list, CDG Engineers, Inc. ("CDG") submits this letter of interest. CDG is interested in being qualified for the following work categories: roadway design, trails and sidewalks, construction inspection and structures in all areas of the state. This letter of interest specifically concerns qualifications for Construction Inspection.

CDG is a 65-person A/E firm located in the City of St. Louis. Its main disciplines are civil and structural engineering, with in-house capabilities in electrical and mechanical engineering, architecture and construction administration/inspection.

Key personnel at CDG have a complete and thorough understanding of the performance requirements for engineering and design work subject to the design and documentation requirements of the Local Public Agency Manual (LPA). CDG has completed over twenty (20) LPA projects in the last five years for various entities in the State of Missouri. CDG has successfully performed work on projects subject to the LPA Manual without any incidences where the sponsoring community has been in danger of losing its funding due to missed deadlines or the inability to obtain MoDOT acceptance of design submissions. In fact, one of the first things CDG does at the start of an LPA project is to have a meeting with the sponsoring community representative(s) and the MoDOT representative to ensure that all parties are in agreement with project goals and budget, and to identify any new requirements and/or documentation requirements of the LPA. Several members of CDG have attended the LPA Basic Training Classes and are currently certified for LPA projects. Additionally, a member of our firm (Glenn Smith) was a member of the Statewide MoDOT LPA Committee. 2012-2013.

Typical Approach to an LPA Construction Inspection Project:

Based on successful completion of multiple LPA construction inspection projects that were conducted in a timely manner and on budget, CDG offers the following typical approach:

- Conduct a pre-construction meeting with all contractors present. This will set the tone for the project and assure all parties are on the same page.
- Verify the contractor has distributed advance notices to the affected property owners about upcoming construction.
- Review the contractor's construction schedule to ensure it meets project deadlines.
- Walk the site with the contractor videotaping existing conditions. CDG views this as an important pre-construction procedure. The video protects all involved in the construction so there can be no finger pointing if conflicts arise.



Ms. Mary Ann Jacobs
November 15, 2013
Page 2

- Make sure that no material requiring a Buy America certification is delivered to the site without said certification in the Owner's or CDG's possession.
- Maintain daily activities log and quantities log books. CDG understands that MoDOT treats these logs as the official written field record and audits the log books in the field to verify they are being done correctly.
- In addition to the quantities log, CDG maintains a spreadsheet that tracks actual quantities constructed, change order quantities and estimated quantities to completion. This spreadsheet is an excellent tool to help keep the project on budget.
- Review monthly payment applications from the contractor to verify the payment request is accurate.
- In addition to daily inspections of construction activities, CDG inspects the site bulletin board bi-monthly, the SWPPP after rainfall events and traffic control daily.
- Manage and negotiate change orders, conduct independent estimates for the proposed change order and coordinate with the LPA and MoDOT.
- Maintain a list detailing the status of all shop drawings. Review contractors stamped shop drawings.
- Work closely with the contractor so that the plans and specifications are followed.
- CDG is available to answer questions from the LPA, the contractor and local property owners at any time.
- Interact with the property owners noting complaints and work closely with the contractor to fix any problems.
- Coordinate a preliminary project walk-thru where a punch list for final acceptance will be developed.
- Coordinate a final walk-thru after punch list completion for final acceptance and payment.
- Aid in as-built development.
- CDG coordinates materials quality control testing and verify tests are performed properly and at appropriate frequencies.
- CDG monitors the contractor's job site practices to provide a safe work environment for the workers, as well as nearby property owners.
- CDG works with several geotechnical sub-consultants (including DBEs) to provide construction testing services during construction. Depending on criticality, CDG measures slopes on formwork prior to placement of concrete or other materials.

Key Personnel:

Mark W. Birchler, P.E., P.L.S., CFM – Mark has over 35 years of experience in the review and preparation of plans for street rehabilitation and improvement projects, as well as an extensive background in providing full-time and periodic C.E./C.A. services. Mark has worked on dozens of LPA projects subject to the documentation and procedural requirements of the LPA Manual.

Brandt M. Genz, P.E. – Brandt has successfully completed civil engineering work on numerous municipal public works and infrastructure projects in the St. Louis Metropolitan Area, including a public works and infrastructure project for the St. Louis Development Corporation (Carrie Avenue from Broadway to Hall Street). Brandt has also performed construction administration services for roadway improvements, bridge replacements and storm water control system upgrades. He was the main construction inspector for the Carrie Avenue project and has been performing construction inspection services for several other LPA projects.



Ms. Mary Ann Jacobs
November 15, 2013
Page 3

Matthew M. Voss, P.E. – Matt is a graduate of the University of Missouri at Rolla. He has successfully completed civil engineering work on numerous public works and infrastructure projects in the St. Louis Metropolitan Area. He has also performed work for utility and commercial development companies, and he is a former staff member of the St. Louis Metro. District MoDOT (Chesterfield Office). He has been performing construction inspection services for bridge and roadway LPA projects.

Recent Construction Inspection Project Experience:

Carrie Avenue Reconstruction, City of St. Louis SLDC/LCRA – CDG provided full-time, on-site construction engineering services for this roadway corridor improvement project. Additionally, the staff also prepared preliminary and final construction plans and specifications for road improvements to Carrie Avenue between Broadway and Hall Street. Included: repair of approximately 1,600 feet of the Carrie Avenue concrete roadway located between Terminal Railroad Association tracks and Hall Street and overlaid with asphalt; new driveway entrances, as well as resetting of granite curbs; replaced and added sidewalk and installation of ADA accessible ramps.

Clayton Road Improvements Phase I and Phase II, City of Town & Country, Missouri – Performed engineering and design services for the improvement of several major sections of Clayton Road with residential properties and a large secondary school property dominating the project area.. The project involved two parts: the design of the rehabilitation and overlay of Clayton Road and the design of a pedestrian trail. This LPA funded project also included pavement reconstruction (full depth replacements), intersection upgrades, ADA pedestrian pavements, storm water drainage upgrades and utility relocations to accommodate the project site upgrades. CDG also provided construction phase services.

Appalachian Trail Drive Roadway Improvements, City of Chesterfield, Missouri – Engineering design services for the removal and replacement of existing pavement structure on Appalachian Trail Drive. Also included the engineering design of new ADA curb ramps and storm water “water quality” dry swales. This engineering services assignment included the performance of periodic construction engineering (C.E./C.A.), project administration and inspection services.

* All Construction Engineering, Administration and Inspection services for the above projects included: periodic inspection of construction; review of construction to verify that it was being accomplished according to final plans and specifications; review of construction progress; review of change order requests; responding to questions in the field; reviewing contractor pay requests; and reviewing shop drawings.

CDG is very interested in providing construction inspection services on LPA projects across the State of Missouri. Please refer to our three (3) company reference forms and four page qualifications for more information.

Respectfully submitted,
CDG Engineers, Inc.

Handwritten signature of Michael A. Augustine in blue ink.

Michael A. Augustine
Manager, Project Development

Handwritten signature of Brandt M. Genz in blue ink.

Brandt M. Genz, P.E.
Project Manager

Enclosures

CDG Engineers, Inc.

Public Works and Infrastructure Services Overview St. Louis, Missouri

CDG Engineers, Inc. is a full service, multi-discipline professional services organization with more than 65 personnel. Technical services have included various engineering studies, design and construction coordination assignments. Specialized experience and technical expertise for the following:

- Pedestrian and Bikeway Trails and Walkways
 - Recreational Park and Recreational Site Improvements and Amenities
 - Hiking and Biking Trails (locations studies, alternative alignments, design, etc.)
- Street and Streetscape Improvements and Other Transportation Enhancements
 - Site Planning and Landscaping Improvements
 - New Sidewalks, Curbs and Gutters
 - Street and Pedestrian Lighting
- Creek/Channel/Stream Restoration, including Erosion Control
- Flood Plain Protection Studies, including hydrological and hydraulic modeling
- Permitting Assistance, Permit Applications and Compliance
 - Flood Plain Development, Army Corps of Engineers, State Department of Natural Resources (or Environmental Protection Agency) and Water Quality Permits
- Roads/Bridges/Culverts/Retaining Wall Structures
 - Plans, Specifications, Construction Estimates, Construction Administration
- LPA Project Administration and Execution
 - Preparing Applications for Local Public Agency (LPA) funding assistance
 - Managing LPA funded projects and complying with all technical requirements
- City Engineer Services
 - Performance of on-call task order assignments
 - Indefinite Delivery/Indefinite Quantity (IDIQ) contracts
- Area-wide Exterior, Security and Pedestrian Lighting
- Parking Lots, Equipment Storage Yards, Material Storage Facilities
- Parking Structures (New Construction and Repair/Restoration)
 - Studies, Inspections, Design and Construction Administration
- Sanitary Sewers and Storm Water Drainage and Control Systems
 - Sanitary Relief Sewers
 - Combined Sewer Relief Projects
 - Channel Restoration and Stream Bank Stabilization
 - Sewer Rehabilitation and/or Replacement
 - Pump Stations and Outfalls
- Administrative, Maintenance and Support Buildings Programming and Design, as well as Site Planning and Other Project and Construction Administration Services

CDG Engineers and its full-time 65-person technical staff routinely provide multi-discipline expertise for various municipalities and governmental entities.





Mark W. Birchler, P.E., R.L.S., CFM (Principal/Manager of Civil Engineering) – Mark has over 35+ years of experience in design and preparation of plans for roadways, bridges and culvert installation, urban and suburban area renewal and revitalization work, street reconstruction, infrastructure improvements and related public works projects. His expertise includes the preparation of plans and specifications, as well as an extensive background in providing full-time and periodic C.E./C.A. services. Mark has worked on dozens of LPA projects subject to the documentation and procedural requirements of the LPA Manual.

Brandt M. Genz, P.E. (Civil Engineer) – Brandt has over 5 years of experience and he has successfully completed civil engineering work on numerous municipal public works and infrastructure projects in the St. Louis Metropolitan Area, including a public works and infrastructure project for the City of St. Louis Board of Public Service and St. Louis Development Corporation (Carrie Avenue from Broadway to Hall Street). He has also performed construction administration services for roadway improvements, bridge replacements and storm water control system upgrades. He has a thorough and complete understanding of C.E./C.A. documentation requirements for Federally-funded projects associated with LPA improvement projects.



Matthew M. Voss, P.E. (Civil Engineer) – Matt has over 5 years of experience and is a former staff member of the St. Louis Metro. District of MoDOT (Chesterfield Office). He has civil engineering, analysis and design experience, as well as construction inspection and materials testing expertise. This experience and expertise has been applied to roadway improvements, bridge replacements, culvert installations, storm water drainage systems, site work and utility system installations, paved trail developments, and other public works and infrastructure work. Matt has been the construction inspector for several bridge projects in the last two years.

Michael J. Caruso, P.E. (Civil Engineer) – Mike has over 5 years of civil engineering and design experience for streets, highways, bridges, culverts, sidewalks, storm water drainage and sanitary sewer systems and other public works associated with site and infrastructure improvement work. Mike has provided civil engineering, design and construction engineering (inspection) services for a variety of public works improvements in the St. Louis Metropolitan Area. His recent C.E. assignments have been provided to such CDG Engineers' clients as the Great Rivers Greenway District, the City of Town and Country (Clayton Road Improvements – Phases I and II) and Ameren Missouri.



Daniel J. Rieck, P.E. (Civil Engineer) – Dan has civil engineering analysis and design experience, including site data collection and engineering analysis for street improvement projects, storm water drainage and control systems design work, site reconnaissance for utility installation and relocation work, property research for public works improvement projects and capital improvement work for the Metropolitan St. Louis Sewer District (MSD). He has provided construction engineering services for several LPA projects including sidewalk improvements, roadway reconstruction and storm sewer upgrades.

The following listing of construction inspection projects represents work administered under the LPA Program that is subject to review by the Missouri Department of Transportation (MoDOT) with coordination through the East-West Gateway Council of Governments (the Local MPO).



City of Chesterfield, Chesterfield, Missouri – Engineering design services for the removal and replacement of existing pavement structure on Appalachian Trail Drive (Phase I Improvements) between Olive Boulevard and Beaver Creek Drive. Along this section of road, the City desired to replace the existing pavement with a concrete roadway with curb and gutter, matching the existing width. The roadway was striped with two (2) 11-foot wide lanes flanked by 8-foot parking lanes. Improvements included “bump-outs” at street intersections and lane edge of striping. As a result of the installation of bump-outs, some sidewalks at intersections were extended and new ADA accessible curb ramps installed. The project also required the identification and design of innovative water quality features for the treatment of storm water runoff, and the design of aesthetic improvement to a school entrance through the use of brick pavers. As part of construction engineering services, CDG staff members developed temporary

construction easement exhibits.

City of Crestwood, Crestwood, Missouri – Performed preliminary and final engineering for the design of a bridge replacement over a section of Gravois Creek in Whitecliff Park. The existing bridge had been closed for several years prior to replacement due to deficiencies. Later provided construction administration services.

City of Des Peres, Des Peres, Missouri – Provided preliminary and final engineering design for the Brookbend Drive bridge replacement over Two Mile Creek. Replaced an existing bridge with a one span bridge to reduce flooding in a residential area. CDG also provided construction administration services.

Franklin County (Highway Department), Union, Missouri – Preparation of the successful T.I.P. application for the New Hope Church Road bridge replacements project. Also, provided engineering and design services to replace two nearby bridges over the Big and Little Indian Creeks with the accompanying roadway and site work. Project area was located in a rural area of the County. Following design work, CDG Engineers personnel provided construction inspections and administration services to the County.



Franklin County (Highway Department), Union, Missouri – Preparation of the successful T.I.P. application for the Enoch’s Knob Road bridge replacement project. Also provided engineering and design services for improvements to Enoch’s Knob Road located in a rural area of the County. Included replacement of an existing bridge built in 1908 over Bush Creek. Following design work, CDG Engineers personnel provided construction inspections and administration services to the County.

City of Pacific, Pacific, Missouri – Civil engineering analysis and design services for Payne Street site improvements (pavement reconstruction and widening, storm water drainage system improvements, new sidewalks, etc.). CDG personnel also were charged with the performance of periodic inspection and construction administration services.

City of St. Louis Board of Public Service (BPS), *St. Louis, Missouri* – Preparation of preliminary and final construction plans and specifications for street enhancement project (landscaping, retaining walls, pedestrian and roadway pavement upgrades, etc.) located along the Delor Avenue street right-of-way, between Ridgewood on the west and Gravois on the east. Also provided construction inspection services.

City of St. Louis – St. Louis Development Corp. (LCRA), *St. Louis, Missouri* – Performance of construction engineering services for design review, assistance with construction bidding process, construction oversight and other assistance for the implementation of street improvements in the Laclede’s Landing Area of the City of St. Louis. This area is a historically significant area of the waterfront.



City of St. Louis – St. Louis Development Corp. (LCRA), *St. Louis,*



Missouri – Preparation of preliminary and final construction plans and specifications for construction of road improvements for a segment of Carrie Avenue between Broadway and Hall Street. This project included extensive utility work, including the design of an improvement storm water management system. This was an A.R.R.A. project with an aggressive design schedule (August thru November of 2009). Following the completion of design services, CDG Engineers provided construction engineering and inspections services during construction.

City of Town and Country, *Town and Country, Missouri* – Engineering concept and detail design services for the preparation of construction plans and specifications for roadway and other improvements to Clayton Road (just east of Old Woods Mill Road to Clayton Place). This project also included the design of a pedestrian and bikeway trail parallel to and north of Clayton Road (from just east of Longview Park to a point just opposite of Clayton Place). Also provided construction engineering services.



City of University City, *University City, Missouri* – Engineering concept and detail design services for the preparation of construction plans and specifications for the installation of streetscape improvement and other enhancements (landscaping, lighting, pedestrian pavements, utility relocations, etc.) for portions of Olive Boulevard in the City of University City. Project included the installation of entrance monuments, new pedestrian level lighting, new underground wiring, new sidewalks, a bikeway, route signs, bike racks, new concrete and asphalt pavements (some with imprinting), landscaping, irrigation system equipment, a retaining wall, decorative fencing, bus shelters and area identification banners for light poles. CDG Engineers also provided full-time and periodic construction administration services for this project.

City of Webster Groves, *Webster Groves, Missouri* – Preparation of engineering designs for the improvement of two (2) segments of North Elm Avenue. These two sections were from Glendale Road to Watson Road (4,120 lineal feet) and Moody to Kirkham Avenue (1,900 lineal feet). Work included selective pavement reconstruction, joint repairs, the replacement of damaged curbs and gutters and storm water drainage system improvements, where feasible. Services included field inspections and evaluations, identification of impacted utilities, preparation of preliminary and final plans and post design assistance during construction.