



**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
Name:

CDG Engineers, Inc.

Firm Contact Name:

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St. Louis, MO 63139

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**



December 12, 2025

LOCAL PUBLIC AGENCIES OF MISSOURI

**RE: Letter of Interest for Multimodal Planning
CDG Qualification No. M25327**

Dear Members of the Selection Committee:

CDG Engineers, Inc. ("CDG") is pleased to submit our qualifications for your review and consideration. This letter is in response to a request for Missouri's Local Program ("LPA") Consulting Services prequalification for the Multimodal Planning/Systems Facilities Design category. CDG is currently on MoDOT's Approved Consultant Prequalification List.

General Experience:

CDG's team of engineers has worked on numerous MoDOT and LPA bridge projects throughout the state, as well as various ports and terminals across the country. CDG has a full-time professional staff of more than 80 personnel in our St. Louis office, including those who have the appropriate experience and available capacity for this work. CDG has the following experience:

- > Marine Facilities, Ports & Terminals
- > Barge Loading & Unloading Systems
- > Bulk Materials Handling Equipment Design
- > Navigation Master Planning
- > ADA Compliance
- > Certified Floodplain Manager on Staff
- > Rail Design
- > Hydraulic Analysis of Structures
- > Permitting Assistance
- > Roads, Culverts, Retaining Walls
- > Electrical Systems
- > Architectural Building Experience

Past Performance:

CDG's staff members are familiar with MoDOT's policies and procedures and have good working relationships with MoDOT staff. CDG understands the importance of project performance and its direct link to client satisfaction and repeat business. We have built our business by delivering high quality projects on schedule and budget while maintaining open client communications and closely tracking scope and project goals.

Port & Terminal Operations: CDG has operated as a consulting engineer for several different private companies on port terminal design projects since the 1990s. The port terminal projects completed by CDG have ranged from minor improvements and expansions to total concept design and final services for terminals and other marine facilities.

Rail: CDG technical staff members have provided engineering and design services for railroad facilities associated with bulk materials handling and railroad unit train loading and unloading facilities. Areas of expertise include:

- > Unit Train Unloading/Loading
- > Bottom Dump and Rotary Dumps
- > Track Loops and Spurs
- > Railroad Bridges

Material Handling: CDG has a wealth of experience in material handling systems for electric utilities, mining operators, grain companies and terminals. Technical services have been directed at bulk materials handling, storage, transfer, sampling, preparation, loading/unloading, conveying and reclaiming.

The following list contains representative projects that CDG has completed:

Cairo Port Facility – CDG prepared a feasibility study and conceptual design for the development of a port facility on the left descending bank of the Mississippi River, near the confluence of the Mississippi and Ohio Rivers. Provided examination of river bottom conditions, river current conditions, barge tow traffic and navigation entry and exit conditions for the proposed site. Investigated all possible permitting. CDG also prepared preliminary design for barge mooring and hauling and fleeting areas, as well as conceptual design for the port which included rail facilities, grain handling facilities, coal handling facilities and liquid handling facilities.

Bunge North America & SFC Grain, LLC – CDG worked as part of a design/build team to develop a new commodities elevator barge terminal facility on the east bank of the Mississippi River. CDG's main responsibilities consisted of permitting assistance, site work, marine substructures and architectural design for maintenance buildings and office structures. Overall site planning and design included site grading and stormwater drainage, an access roadway, various culverts, other site pavement areas, water supply lines, sanitary sewer system with septic tank field and pump stations, a railroad crossing, site work at the river and designs for other utility lines.



American Milling Company – Previously, American Milling had hired another engineering firm to provide design services for the new rail loop and associated railroad spur on the site. American Milling management personnel, however, were not happy with the design and asked CDG to comment and revise as appropriate. CDG revised the rail loop and spur design for American Milling approval:



- > Accommodated a 150-car unit train. The minimum length to be used was 9,000 feet.
- > Followed Union Pacific and BNSF unit train design and construction criteria.
- > Revised the layout of the loop using #11 turnouts in tangent sections and 7° 30' curves (764.49 feet) throughout. An 11-foot wide access road at sub-ballast level was included.
- > All parts of the design had to be 30 feet from Ameren transmission towers. Base of embankments were a total of 70 feet from transmission towers. CDG worked to provide 100 feet clear of transmission towers where possible to allow for future expansion of rail.
- > Cross sections used for the rail loop included an access road per UPRR standards. Phase I, two tracks in handle of rail, included a single extended loop with a siding. Phase II included an additional loop that traversed around the outside of Phase I. Phase III included an additional spur between Cargill Road and the loop.
- > Project work included a run-around (wye at the loop). Minimal run length for Phase I was 18,000 feet wide from clear point of the turnout located south of Cargill Road and back.

TransAlta Centralia Generation, Centralia, Washington – Design of a new unit train rail receiving loop and low profile, high-capacity rail unloading system at TransAlta's power plant site. CDG evaluated the existing site conditions and designed the railroad unit train receiving loop for the specific nuances of the plant site. The loop was also designed to include a new low profile coal unloading facility capable of unloading coal at a rate of 4,000 tons per hour. Other elements included extensive site work and the installation of coal chutes, wear liners and deflectors, flop gates, support structures, and dust containment equipment (curtains, skirtboards, etc.).



Qualifications of Personnel:

The following are some of CDG's key engineers:



37 years exp.

Steve Hilderbrand, PE, CFM

- Manager, Water Resources
- Storm & San. Sewer Design
 - Hydraulic Analysis



16 years exp.

Paul Cardwell, PE, SE

- Manager, Structural Engineer
- Foundations
 - Structures for Buildings
 - Structural Inspection



19 years exp.

Dan Rieck, PE, LSIT

- Manager, Civil Infrastructure
- Port Planning
 - Stormwater Drainage
 - Roadway Design



11 years exp.

Kevin O'Shaughnessy, PE, PMP – Civil Project Manager

- Rail Design
- RR Track Inspection
- Roadway Design



18 years exp.

Dustin Doerr, PE, PMP

- Mechanical Engineer
- Bulk Material Handling
 - Conveyor Upgrades
 - Port Planning



22 years exp.

Nathan Barger, PE, LEED AP

- Structural Engineer
- Structural Analysis, Barge & Conveyor Equipment
 - Foundation Design



7 years exp.

J.R. Frisella, PE

- Electrical Engineer
- Lighting Design
 - Automation



40 years exp.

Greg Brunkhorst, AIA, LEED AP – Architect

- Equipment Yards/Facilities
- Support Buildings

Familiarity/Capability:

CDG has successfully designed multiple projects for local municipalities, counties, MoDOT, and various ports and terminals. CDG understands the requirements of projects with federal funding and knows how to deliver projects meeting those requirements. We look for opportunities to apply innovative and practical design solutions to improve project economy and efficiency. We are very familiar with the MoDOT LPA policies/procedures and know how to deliver federally funded projects to obtain PS&E approval and obligation of construction funds.

Accessibility:

CDG understands that clients need consultants who can respond quickly to requests. Responsiveness is engrained in our corporate culture and a requirement of our employees. CDG prides itself in being available to our clients with a pledge to respond within 24 hours. Maintaining active Consultant-to-Client communications on project engineering and design assignments is vital for success and is a trademark of CDG.

Sincerely,

CDG Engineers, Inc.



Stephen G. Hilderbrand, PE, CFM; Manager, Water Resources – shilderbrand@cdgengineers.com



CDG
ENGINEERS



**ENGINEERING
A BETTER WAY**

cdgengineers.com

One Campbell Plaza
St. Louis, Missouri 63139

ST. LOUIS, MO

CHARLOTTE, NC

SHERIDAN, WY

TROY, IL

33

Years of Engineering Excellence

100+

Employees Firm-Wide

200+

Bridges Inspected & Designed by
CDG Staff

300+

Trail, Roadway, Sidewalk, & ADA
Improvements in the Last 5 Years

FIRM OVERVIEW

CDG is a full service, multi-discipline engineering firm with capabilities in civil, structural, mechanical and electrical engineering, as well as architecture. Services include planning, engineering, architectural design, and construction administration. CDG works in the fields of public works/infrastructure, power, renewable energy, industrial, and mining.

In 2025, CDG celebrated 33 years of engineering excellence. We have built our reputation on referrals and repeat business and have created trusted partnerships with our clients that is based on integrity, value, and responsiveness.

INFRASTRUCTURE SERVICES

CDG provides a wide variety of infrastructure services. These services largely involve public works and concentrate on state and local infrastructure. Projects range from roads, highways, and pedestrian trails to bridges, culverts, river structures, and more.

Transportation

- > Roads and Highways
- > Bike/Pedestrian Trails
- > Marine Facilities
- > Bridges
- > Streetscapes
- > Rail

Water Resources

- > Hydraulic Modeling
- > Hydrologic Analysis
- > Flood Protection
- > Streambank Stabilization
- > Stormwater
- > Wastewater
- > Potable Water

Site Development

- > Planning
- > Drainage
- > Grading
- > Parking Lots



STRUCTURES

CDG provides clients with practical and cost-effective structural engineering solutions. Our staff can provide inspection, evaluation, design, and construction aspects of structures such as stream crossing bridges, grade separations, culverts, retaining walls, and other unique structures.



ROADWAYS

CDG provides clients with full spectrum engineering solutions for roads and highways. Our experienced staff has expertise in roadway widening, intersection design and realignment, transit planning, curb design, streambank stabilizations, streetscape improvements, and hydraulics and hydrology.



TRAILS & SIDEWALKS

CDG recognizes the importance of pedestrian-friendly spaces and brings a unique approach to trail design by incorporating community needs, regulatory constraints, and aesthetic considerations to each project. Our experienced staff also have extensive knowledge in ADA compliance.



Henry Avenue Roadway Improvements, STP-4939(604), City of Ballwin, MO - 1.3 miles of roadway improvements from Clayton Road south to the city limits. Cold milling and resurfacing of 4-5 inches of asphalt pavement; replacement of structurally deficient curb and gutter sections; new curb and gutter; re-established gutter capacity where curb was overlaid; stormwater upgrades; new storm sewers where needed; new sidewalks; and curb ramps to comply with ADA requirements; striping and crosswalks.



Boeuf Creek Road Bridge Replacement, STP-5490(615), Franklin County, MO - Replacement of existing bridge and roadway realignment over a tributary to Boeuf Creek. The existing bridge carried a single lane of traffic. A 65' long single span precast, prestressed concrete spread box beam bridge on pile cap integral end bents was the best solutions for this site. Two 12' lanes with 2' shoulders were provided. The road was raised slightly at the bridge and approaches to accommodate the increased depth of the new, longer bridge. CDG provided both design and construction engineering services for this project.



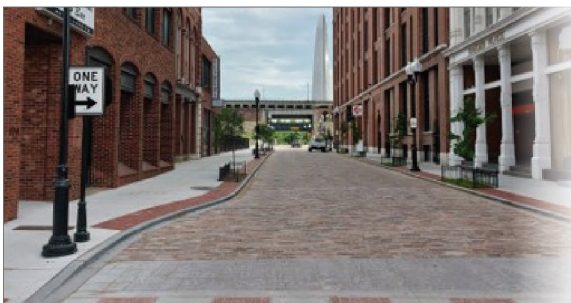
Rock Island Spur Trail (47-mile Extension of Katy Trail State Park), Missouri State Parks - CDG designed the western Missouri ped/bike trail and performed construction inspection between Windsor and Pleasant Hill, Missouri, along the abandoned Missouri Central Railroad corridor. The 12' wide gravel trail travels over 85 existing bridges and culverts. Several trailheads and road crossings over county/state routes were developed during design.



Lucas-Hunt Road (North) Improvements, St. Louis County, MO - Engineering and design services for 1.3 miles of roadway improvements to Lucas-Hunt Road between Hord/Hulskamp Avenue and Halls Ferry Road (HWY AC). Included surveying, utility coordination, stakeholder coordination, and environmental permitting. Design consisted of cold milling 3 inches of asphalt pavement, asphalt resurfacing, partial depth pavement and concrete base repairs, pavement joint repairs, guardrail removal and replacement to meet MASH standards, replacement of structurally deficient concrete curb and gutter and sidewalk sections, upgrading curb ramps to comply with ADA requirements, traffic control, and erosion control.



Longview Drive Bridge, St. Louis County, MO - St. Louis County DOT needed to replace Bridge No. 511 located immediately east of State Route 61/67 (Ferry Road). It was determined to temporarily divert and construct a two-lane temporary road to the north across private property in an easement then returning the ground to its original condition. A custom designed single cell 20' wide x 8' tall cast-in-place box culvert was selected as the best option with a slightly rased deck. After the new bridge was constructed, the temporary road and box culvert were removed and the site was re-graded and vegetated with native grasses. It was turned back over to the property owner.



Laclede's Landing Street Improvements, HUD No. 2008-DI-114, City of St. Louis Land Clearance for Redevelopment Authority (LCRA) - \$5.2M project to reconstruct 1st and 2nd Streets in Historic Laclede's Landing in downtown St. Louis. Removed cobblestones and added concrete curb and gutter. New concrete sidewalks and crosswalks (redesigned 35 ADA compliant curb ramps). Improved stormwater system and replaced entire street lighting system and power supply. CDG performed all LPA required CE inspections, documentation, and submittals.