

ESTABLISHED 1980  
PRESIDENTS  
1980 - 1991 HRINSIN, JOHN A.  
1992 - BERTHOLD, WILLIAM K.



CIVIL / STRUCTURAL /  
LAND SURVEYING

November 14, 2013

Missouri Local Program/ MoDOT  
Central Office  
105 W. Capitol Avenue  
Jefferson City, MO 65102

**RE: MISSOURI LOCAL PROGRAM FOR COMMUNITY DEVELOPMENT – ON CALL PROFESSIONAL SERVICES RFQ  
ROADWAY DESIGN**

**1.0 Prequalification's**

Frontenac Engineering Group has submitted all information required for MoDOT pre-qualification and expects approval prior to the solicitation expiration date.

**2.0 3 Company Reference Forms**

Three completed company reference forms are attached.

**3.0 General Experience**

The Frontenac Team consists of sufficient experienced personnel, which will enable adequate staffing to successfully execute multiple, concurrent work orders. We will assemble each project team based on the individual team members' technical capabilities and experience relative to the project scope. The Team's registered professionals and computer aided support staff understand MoDOT guidelines and ADA compliancy issues relative to potential work orders involving mill and overlay widening, street replacement work, culverts, sewers and utilities, and drainage. Our Team members' educational background and practical experience uniquely qualifies the entire staff for the proposed assignments.

On road projects we utilize traffic planning, sewer and utility surveys, rehabilitation pavement design, and construction planning to produce accurate and economical designs. Our bidding and construction phase services produce thorough and accountable bids, contracts, quality improvements, pay request processing, and project closeout.

**4.0 Past Performance**

**Rock Hill Culvert Replacement** – Project consisted of replacing the existing stone culver with new MoDOT-type box culvert, roadway re-surfacing, sidewalks, guard-rails, retaining walls, fencing, and related utility relocation.

**Sunnen Drive Extension** – Project consisted of extending 700' of 4-lane concrete roadway and ADA compliant sidewalks and design of new signalized intersection at Hanley Road in St. Louis, MO.

**2013 Maplewood Street Replacements** – Project consisted of the Removal and replacement of existing streets with new concrete pavement, utility and sewer coordination and upgrades, sidewalk replacement and ADA upgrades.

**Manchester Road Phase 2** -Project consists of widening of existing roadway, new curb and gutters, new driveway aprons and sidewalks, traffic signal replacement and modification and property restoration.

**Challenge:** Utility Relocation Schedule and ADA Compliance. **Resolution:** Worked continuously and relentlessly to keep pressure on utility companies to complete their relocations. Worked closely with MoDOT ADA staff to resolve ADA compliance issues.

**2011 Maplewood Street Projects** - Project consisted of removal and replacement of pavement and asphalt overlay of local streets throughout the City.

**Challenge:** Coordination with Missouri Water Co. while they replaced water mains under several of the streets. **Resolution:** Relentless pressure and assistance to push M.A.W.C to complete their work.

**2010 Maplewood Street Project** - Project consisted of total reconstruction of 2600 L.F. of road pavement, curbs, and sidewalks with new concrete pavement. This project consisted of widening of the existing roadway, new curbs and gutters, new driveway aprons and sidewalks, traffic signal replacement and modification, and property restoration. The project included utility and M.S.D. coordination, bidding, and construction phase management and inspection.

**Challenge:** Old Trolley tracks and pavement within existing pavement section. **Resolution:** Worked with contractor to adjust pavement grades and avoid removal of trolley pavement bed.

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**Dunn Road Widening and Drainage Improvements:** Project consisted of widening of Dunn Road to add turning lane for Federal Records Center and drainage improvements to MoDOT right-of-way.

**Taylor Avenue Streetscape:** Project consisted of widening and streetscape and drainage improvements to Taylor Avenue in the City of St. Louis.

**St. Louis University Streets and Alleys:** Various street and alley improvements for St. Louis University in the City of St. Louis.

**270 West Outer Road Widening and Drainage Improvements:** Project consisted of widening the 270 West Outer Road to add a turning lane and drainage improvements to the MoDOT right-of-way.

List of additional projects

## 5.0 Qualifications of the Personnel

Our combined staff experience exceeds 130 years of engineering design and construction experience on a very wide variety of projects including LPA projects and MoDOT permit projects.

EMPLOYEES BY DISCIPLINE	PROFESSIONAL ENGINEER	E.I.T.
<b>CIVIL ENGINEERS</b>		
William K. Berthold, P.E., P.L.S.	✓	
Steven R. Miller, P.E.	✓	
Dave G. Welton, P.E.	✓	
<b>STRUCTURAL ENGINEERS &amp; TECHNICIANS</b>		
Kent MacPeck		✓
Joshua J. Schmitz, P.E.	✓	
Aaron M. Odle		✓
Debbie Killius		
Cory Calkins		
<b>CADD DRAFTSMEN</b>		
Ameet Prasad		
Jennifer Brown		

### Personnel Qualifications

Mr. Miller has over 20 years experience as a Civil/Structural engineer, project manager, and inspector of public works projects. Projects ranging in scope from initial feasibility studies, road construction and widening, pavement condition analysis, new road design, drainage improvements, right-of-way and utility relocations. Mr. Miller has experience with local, regional, and national design standards. His project experience has included work as a consulting engineer for municipalities, schools, federal government and state agencies. Mr. Miller also worked as a Civil Engineer for a large progressive municipality where he reviewed prospective developments, was in charge of public works projects, and served as the City's Floodplain Administrator. Mr. Miller also has extensive experience as a field engineer and project manager on projects of all sizes including multi-million dollar interstate Highway and Mass Transit projects.

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**Miller's Capabilities**

- Project Management
- Contract Administration
- Coordination of Public Agency Review
- Rezoning/Public Hearing Representation
- Site Planning and Site Feasibility
- Site Design
- Roadway Design
- Utility and Sewer Planning and Design
- Traffic and Parking Design
- Stormwater Hydraulic and Detention Design
- Floodplain and Floodplain Administration
- Construction Cost Estimating
- Structural Design of Buildings, Bridges, and Mechanical Structures

**Education**

BSCE. Bradley University – Peoria, IL  
 1989

**Registration**

Registered Professional Engineer –  
 Missouri

**6.0 Familiarity/Capability**

Frontenac Engineering has extensive experience working on contracts for a variety of private clients and municipalities. We have completed numerous MoDOT permit project during our 33 years in business. We understand that a prompt response to work orders and completing projects on-time and within budget is essential for success. We pride ourselves in honoring our commitments to our clients. Our firm has the capacity and experience to accomplish any MoDOT design project within the required time and budget.

**7.0 Accessibility**

Responsiveness is a top priority for Frontenac Engineering. In order to maintain the flexibility and time necessary to respond quickly to our client's needs we maintain a margin of excess capacity as indicated by the following table.

Employee Category	Current Utilization	% Availability	Hour/Month Availability
Civil Engineers	75%	25%	160 hrs/month
Land Surveyors	75%	25%	120 hrs/month
Draftsmen	75%	25%	80 hrs/month
Structural Engineers	80%	20%	120 hrs/month

If selected for any of the LPA projects, we will work to eliminate surprises, accurately predict costs and deliver our work on schedule. We appreciate your interest in Frontenac Engineering and look forward to hearing from you.

Respectfully Yours,

William K. Berthold, P.E., P.L.S.  
 President

## COMPANY PROFILE

Frontenac Engineering Group, Inc.  
 2725 Sutton Boulevard  
 St. Louis, Missouri 63143  
 314-644-2200 Phone  
 314-644-0645 Fax  
 www.fe-stl.com



## Types of Service

**CIVIL**

Site Analysis  
 Site Development Design  
 Roadway Design and Reconstruction  
 Utility and Sewer Main Extension & Replacement  
 Flood Plain Studies  
 Feasibility Studies  
 Zoning  
 Permitting  
 BMP Inspections  
 Sustainable Design Practice (LEED)  
 Contract Administration

**CONTRACT ADMINISTRATION**

Bidding  
 Contract Preparation  
 Project Coordination  
 Inspection  
 Testing  
 Budget Management  
 Funding Agency Requirements

**STRUCTURAL**

Structural Inspection & Evaluation  
 Cost Estimation  
 Project Management  
 Seismic Rehabilitation  
 Retrofitting and Code Compliance  
 On-site Construction Troubleshooting  
 Structural Analysis & Design  
 Insurance Claims and Liability Assessment

## A Brief History

Frontenac Engineering Group provides comprehensive engineering services to the municipal, industrial, commercial and institutional building and land development markets; our focus is Civil and Structural Engineering and Land Surveying. Located in Maplewood, Missouri since 1992, our unparalleled accuracy and outstanding level of service enables our clients to execute their projects on time and on budget. We have extensive experience working with businesses, municipalities, institutions, and real estate developers.

Our staff devotes their personal attention to every client, and constant oversight ensures timely and precise results. Frontenac Engineering data acquisition, analysis, and engineering technologies are state-of-the-art; our experienced 20 person staff is dedicated to all aspects of our clients' development needs.

## Types of Projects

Commercial  
 Municipal  
 Retail  
 Schools and Colleges  
 Land Development  
 Redevelopment  
 Parks  
 Hospitals  
 Traffic/Transportation  
 Institutions  
 Research Facilities  
 Zoos  
 Prisons  
 Army / D.O.D.  
 Medical Offices  
 Warehouses  
 Manufacturing  
 Sports  
 Museums  
 Roads  
 Sewers  
 Utilities



### Related Projects

#### Roxana Water District

Route Surveys

#### City of Maplewood

Street Projects

#### Sutton Avenue Lighting Project

Street Lighting

#### Jefferson County Public Water District III

Water Main Extensions

#### United States Postal Service

Mount Vernon, IL

St. Louis, MO

Chesterfield, MO

University City, MO

Columbia, IL

Park Hills, MO

#### Manchester Avenue Reconstruction

Street Reconstruction

#### Deer Creek Park Lighting Project

Park Lighting and

Electric Relocation



## Road Work

Services Provided:

- Pavement Evaluation
- Traffic Planning
- Sewer & Utility Design and Relocation
- Pavement Design
- Route Selection
- Right-of-way
- Land Surveying
- Bidding & Construction
- Phase Services

Our company designs, bids, and administers roadway construction and rehabilitation projects.

On road projects we utilize traffic planning, sewer and utility surveys, rehabilitation pavement design, and construction planning to produce accurate and economical designs. Our bidding and construction phase services produce thorough and accountable bids, contracts, roadway improvements, pay request processing, and project closeout.

In addition to our engineering abilities, we perform complete survey and design documentation to expedite the permit and review process. Our 25 years of experience working with regulatory and permitting agencies guides our projects to completion on-time and on-budget.



### Related Projects

#### Rock Hill Road Culvert

#### Replacement

Culvert / Bridge

Replacement

#### Sugar Creek Road Bridge

#### Replacement

Bridge Replacement

#### Bellevue Municipal

#### Parking Lot

Surface Parking and

Landscaping

#### Maplewood Community

#### Center

Roof Replacement

#### National Geospatial-

#### Intelligence Agency

#### United States

#### Department of Defense

Various Building and

Mechanical Projects

#### City of Normandy

5-year Street Program



## Manchester Avenue

Maplewood, Missouri

Services: Contract Administration  
 Provided: Inspection  
 Testing  
 Construction Coordination

Our company has a longstanding relationship with many municipalities, including the City of Maplewood, for which we have provided engineering, permitting, and contract administration services for the reconstruction of numerous city streets, including Manchester Avenue.

These projects utilize traffic studies and implementation of signalizations, pavement markings, roadway and streetscape improvements. Our scope of work includes topographic surveys, easements, roadway and streetscape design, and construction documents, including drainage and utility relocations/adjustments. This and other projects that we have managed are funded through MoDOT with Federal T-21 funding.



### Related Projects

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Route Surveys

#### City of Maplewood

Street Projects

#### Sutton Avenue Lighting Project

Street Lighting

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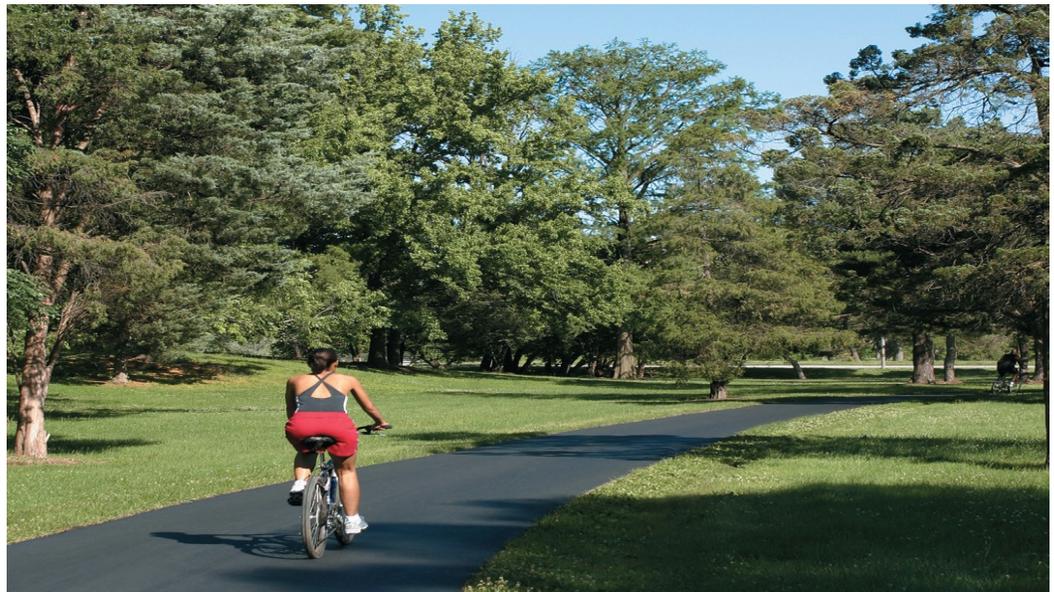
#### Manchester Avenue Reconstruction

Street Reconstruction

#### Deer Creek Park Lighting Project

Park Lighting and

Electric Relocation



## Pedestrian Trails and Paths

Services: Land Planning  
 Provided: ADA Design  
 Civil Engineering  
 Land Surveying  
 Contract Administration  
 Testing & Inspections  
 Easements  
 Construction Phase  
 Services

Our firm engineers ADA accessible walking paths with unique characteristics to suit all types of terrain and usage demands. We have extensive experience working on high-traffic projects, such as the St. Louis Zoo Central Corridor, which accommodates over 1 million visitors each year. We understand how to incorporate all of the vital parameters of walking paths, including aesthetic appeal, user type, drainage, erosion control, bridges, and user safety.