

COMPANY PROFILE

In business since 1968 (then Buescher Frankenberg Associates), BFA is a Civil Engineering Consulting firm with full capabilities in surveying (traditional and GPS), AutoCAD Civil 3D drafting, Civil Site Design (grading, utilities, parking, drainage, stormwater, and permitting). Professional Engineering licenses in 40 states – Professional Land Surveying Licenses in 5 states – Nationwide credentials for Certified Professionals in Erosion and Sediment Control (CPESC) and Certified Floodplain Managers (CFM).

LPA CONSTRUCTION INSPECTION QUALIFICATIONS/CREDENTIALS

- ✓ MoDOT LPA Basic Training Certifications
- ✓ MoDOT Financial Pre-Qualification Listing
- ✓ Missouri Registered Professional Engineers (PE)
- ✓ Missouri Registered Professional Land Surveyors (PLS)
- ✓ Certified Professionals in Erosion and Sediment Control (CPESC)



ESC Inspection



Pipe Installation



ADA Inspection



Asphalt Placement

CONSTRUCTION INSPECTION SERVICES

- ✓ Assistance with drafting and gaining approval of MoDOT's required Engineering Services Contract
- ✓ Coordination of Materials Testing Services (BFA will sub materials testing to DBE or others)
- ✓ Assist or provide Pre-Construction Meetings, Change Orders, Approval of Pay Applications, etc.
- ✓ Maintaining Daily Diary and Pay Items Diary (including storing daily progress photos)
- ✓ Weekly and Monthly Progress Reports
- ✓ Bulletin Board Inspections, Wage Interviews, Commercially Useful Function/DBE Interviews
- ✓ Erosion and Sediment Control Inspections
- ✓ Semi-Final and Final Inspections
- ✓ Assistance with Close-Out Documentation (Final Change Order, Final Cost Estimate, Final Lien Waiver from Prime Contractor, Final Lien Waivers from Subcontractors, Project Certification Letter, and Project Acceptance Letter)

LPA PROJECT EXAMPLES

Washington MO – Bluff Road Improvements - 2018 - SSTP-6400(623)

BFA provided Construction Inspection services for this project which includes roadway repairs, overly, traffic signal improvements, new right turn lane and grade improvements to improve truck traffic flow from a nearby industrial park.



Marthasville, MO - Main Street Sidewalk Improvements (Hwy D) - 2019 – TAP 9900 (388)

BFA is working with the City of Marthasville to prepare design plans, bid documents, specifications, and cost estimates for the proposed 2,050' of sidewalk improvements along Main Street (Hwy D). Phase I includes construction of an asphalt shoulder to a concrete curb and gutter with storm inlets, storm sewer pipe underneath a new 60" wide sidewalk with ADA ramps. Phase II, will replace 1,250' of existing sidewalk that is in despair and a dangerous condition for safe travel along the north side of Highway D. The activities for Phase II include removing the existing 30" narrow sidewalk and replacing with a 60" concrete sidewalk with ADA ramps.



Franklin County MO – Circle Drive Bridge Replacement - 2016 - STP-5489(606)

The purpose of this project is to remove and replace a structurally deficient, functionally obsolete road bridge which crosses a railroad line in Franklin County, near Robertsville. BFA's scope of services for this project includes site topographic survey; roadway plan design; coordination of structural bridge design; communicating with railroad authorities for design approval and agreements; obtaining permits; developing cost estimates; project management; and **construction management**.



LPA PROJECT EXAMPLES

Jefferson Street Bridge – Washington MO (Completed Summer 2016) BRM6405 (605)

BFA was selected to handle construction engineering for this bridge replacement project in the heart of Washington MO.

Interesting requirements for this project include ADA upgrades to the signalized intersection which exist immediately at the north end of the existing bridge structure and hydrologic/hydraulic calculations for permitting approvals in a tight stream corridor with recently updated FEMA flood elevations.

BFA's responsibilities include land surveying, Right-of-Way plans, permitting, LPA contract management, assembling bid documents and specifications, as well as overall project coordination/management to incorporate updated approaches and improvements to the signalized intersection and crosswalks. Structural Engineers from Jacobs handled the layout and design of the bridge structure, itself.



New Haven MO – Safe Routes to School - 2015 SRTS-INF-H32F(101)

BFA provided engineering services to develop plans, specifications, and estimates (PSE) for a Safe Routes to School project to construct 1200' of sidewalk for the City of New Haven. This project was designed in 2014 and constructed in 2015. BFA provided Design Engineering and Construction Engineering services for this successful project.



LPA PROJECT EXAMPLES

Franklin County MO - Labadie Great Streets Project - 2013 - STP-5489(605)

BFA provided Construction Engineering and Inspection Services for this project (that was designed by another engineering firm). The initial peer review of the proposed bid set found errors and conflicts, as well as missing design items. Through addendums and meetings with project stakeholders, modifications to the plans were made and approved prior to the start of construction. During construction, BFA provided monitoring and maintained the daily diary and pay diary logs as required for LPA projects. Daily photo logs were kept, as well as wage interviews, erosion inspection reports, bulletin board inspections, commercially useful function interviews, and other documentation, as required for LPA projects.



“I wanted to take a few minutes to express my appreciation for BFA’s work in providing the construction engineering services for the Labadie Great Streets project. Franklin County has many projects going on at this time and because of your thoroughness and efforts to keep us informed, we were able to reduce our staff time monitoring this project. Not only do we feel the project was monitored to make sure the plans and specifications were followed, but we also appreciate the “extra” conversations to make sure those involved were on the same page, and the County’s overall goals and desires for the project were kept in focus. We have been pleased with the work and because of your efforts to document progress and communicate, we are confident the County’s best interests were protected. Thanks again – we look forward to more projects with BFA in the future.”

**-Joe Feldmann, (Former) County Engineer
– Franklin County Highway Dept.**



CAPABILITIES STATEMENT

Missouri Local Program Projects
ROADWAY DESIGN

COMPANY PROFILE

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LPA ROADWAY DESIGN QUALIFICATIONS/CREDENTIALS

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ROADWAY/STREET DESIGN

Nearly every project we work on involves design of a new street or modification of an existing street. Our strategic partnerships with Traffic Consultants and Geotechnical Engineers provide a single source for all the professional services our clients need for these projects. We often work with state Department of Transportation engineers and reviewers to obtain approvals for our projects.

- New Road Design
- Signalized Intersection
- Turn and other Lane Additions
- Overlay Projects
- Culverts and Bridges

LPA ROADWAY DESIGN SERVICES

- ✓ Assistance with drafting and gaining approval of MoDOT's required Engineering Services Contract
- ✓ Coordination of Environmental and Geotechnical Investigations (sub-contracted)
- ✓ Full Surveying Capabilities (Traditional and GPS field equipment, AutoCAD Software, Licensed Surveyors)
- ✓ Legal Descriptions and Easements for obtaining Right of Way and other ownership issues
- ✓ Permitting and Approvals (MoDOT, US Army Corp of Engineers (Section 404 Nationwide Permits, Section 408 Approvals), Missouri DNR Section 401 Water Quality Certification, State Historic Preservation Office (SHPO) documentation, US Fish and Wildlife, Endangered Species, Floodplain Development Permits and "No-Rise" Certifications, Missouri DNR Land Disturbance, etc.)
- ✓ Traffic Reports and Intersection Design (can be sub-contracted at times)
- ✓ Erosion and Sediment Control Plans and Specifications



PROJECT EXAMPLES

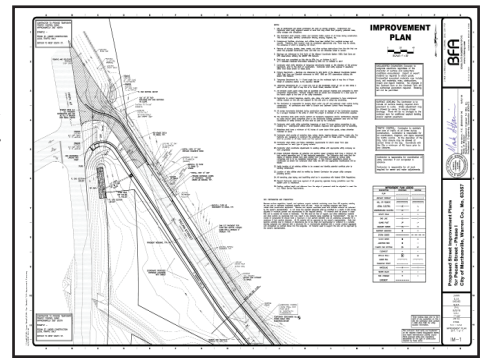


Washington MO – Bluff Road - STP-6400(623)

BFA was selected for this project by the City of Washington, from MoDOT's LPA On-Call List of approved Engineering firms for Roadway design. The scope of work includes signalized intersection improvements at Hwy 100, turn lane addition, filling the roadway to reduce grade inclines (for tractor trailer traffic approaching the intersection from Bluff Road), and structural asphalt overlay. BFA is providing surveying, design, permitting, and construction engineering services for this project.

Marthasville MO – Pecan Street Improvement Project

The City of Marthasville retained BFA to design roadway improvements to Pecan Street. BFA's responsibility was to prepare plans, specifications, bid documents, and bid administration for the 1,400 foot stretch of Pecan Street. The project consists of aligning the street intersection with Dollar General at Hwy 47, adding curb and gutter, storm sewers, street widening, and pedestrian access with a new 5' wide sidewalk. BFA added alternates to the bid package to allow the City flexibility in aligning their financial capabilities with the construction bids. BFA worked diligently to ensure utility relocations are performed in a manner that maintain services to residents and ease construction.



Village of Twin Oaks MO - Street Improvements

The Scope of Work for this project consisted of Village-wide street maintenance projects: curb repairs, crack sealing, and ultrathin bonded wearing surface overlay (Nova-Chip). BFA developed project plan sheets, construction details and bid documents for the project. BFA also managed the project during construction. Identifying change/add orders and working with the contractor to accomplish same. BFA confirmed pay quantities for the contractors pay applications, reviewed certified payroll docs for the Village and managed punch-list repair items to ensure project was completed.

The Scope of Work for this project consisted of demo and replacement of concrete pavement panels on Woodland Oaks Court and curb demolition/replacement at several locations throughout the Village. BFA assembled plan sketches, details, and bid documents and then managed the contractor during the work. BFA assembled 2 change/add orders during construction.



PROJECT EXAMPLES

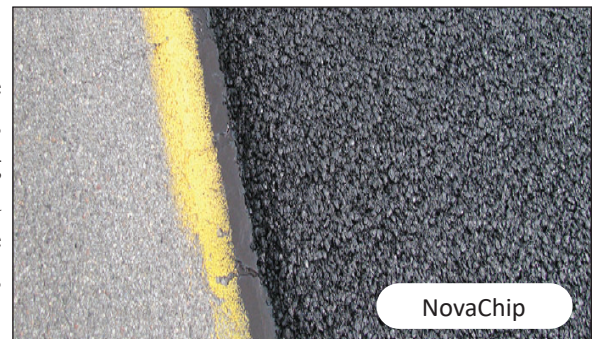
Jefferson Street Bridge – Washington MO - BRM6405(605)

This project included upgrades to the signalized intersection and roadway improvements to both approaches of the replaced bridge structure. BFA's responsibilities included land surveying, Right-of-Way plans, permitting, LPA contract management, assembling bid documents and specifications.



City of Wildwood MO - STP-5602(619) ***Ultrathin Bonded Overlay (NovaChip) Project***

BFA developed plan specifications and drawings to facilitate bidding of an overlay road project covering 10 miles of roadways in the City of Wildwood. This "Book Job" consisted of evaluating the roadway corridors to identify specific locations that needed subgrade and pot holes repaired prior to the NovaChip overlay. The project also consisted of developing construction cost estimates and details for specific work items.

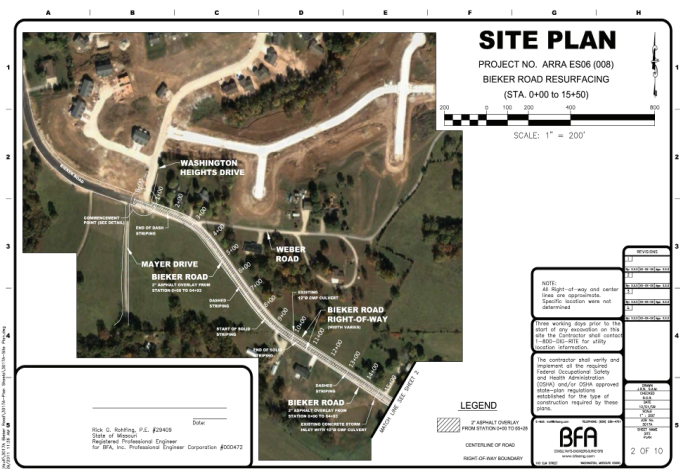


The project required re-striping of the roadway corridor since the existing striping was covered by the overlay. Although ADA routes were analyzed, they were not included in the project work as they were being handled by other City programs.

Washington MO – Bieker Road Improvements - ARRA-ES06(008)

BFA worked with the Washington Special Road District (WSRD) to prepare design plans and provide Construction Inspection/Engineering for this roadway improvement/overlay project. This project consists of a 1.2 mile stretch of a two-lane highway known as Bieker Road, which is located immediately south of the Washington, MO city limits. The improvements along this route primarily include resurfacing and restriping of the highway along with storm water drainage infrastructure improvements to address runoff erosion to downstream property owners.

BFA monitored construction and maintained receipts for the project in order to track the construction budget and justify approval of pay applications.



PROJECT EXAMPLES

City of Cape Girardeau MO Bloomfield Road Improvements

The design work included right-of-way and property research, topographic field work and surveying, sketch plans of design options, cost estimates, environmental reports, wetland delineation, and assistance with public meetings. Proposed improvements include concrete roadway with curb, gutter, stormsewer infrastructure, and adjacent 8' wide multi-use trail.



St. Charles County – Rose Hill Estates

The Scope of Work for this project was road widening and asphalt overlay (approximately .75 mile) with associated drainage handling and improvements. BFA provided surveying, plan development, assistance with project bidding, and construction observations.





CAPABILITIES STATEMENT

Missouri Local Program Projects
TRAILS AND SIDEWALKS

COMPANY PROFILE

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COMPLETE TRAIL AND SIDEWALK SERVICES

- ✓ Assistance with drafting and gaining approval of MoDOT's required Engineering Services Contract
- ✓ Coordination of Environmental and Geotechnical Investigations (sub-contracted)
- ✓ Full Surveying Capabilities (Traditional and GPS field equipment, AutoCAD Software, Licensed Surveyors)
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- ✓ Permitting and Approvals (MoDOT, US Army Corp of Engineers (Section 404 Nationwide Permits, Section 408 Approvals), Missouri DNR Section 401 Water Quality Certification, State Historic Preservation Office (SHPO) documentation, US Fish and Wildlife, Endangered Species, Floodplain Development Permits and "No-Rise" Certifications, Missouri DNR Land Disturbance, etc.)
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Warrenton MO – Downtown Sidewalk Replacement Project

BFA was selected to provide design and construction engineering services for the Downtown Sidewalk Replacement project in Warrenton, Missouri. The project entailed design plans for the replacement of the existing downtown sidewalk. The project area is approximately 380 feet in length along the North side of Route MM/ Main Street from North East Street to Dryden street and the East side of Dryden Street.

The current sidewalk was in poor condition and had a significant elevation change, approximately 2 feet from the street to sidewalk in some areas. The project scope was to improve not only the condition of the existing sidewalk but also to improve the accessibility both for wheelchair and foot traffic. BFA's design included four additional handicap spaces, two ramps, and eight sets of stairs, which will improve access from the street parking to the sidewalk. This project will enhance sidewalk conditions while improving accessibility to ADA standards. One of the many design constraints consisted of maintaining the grades along the existing building fronts. Our solution was raising the road grade in the parking to reduce the elevation difference. This project required a specialized design and planning effort.



A few of the deliverables on this project included preliminary & final design plans, bid documents, construction plans, presentation of design to City Staff, assistance with bidding & contractor selection, contract review & recommendation, weekly construction site inspection, ADA inspection, final inspection, review of change orders, invoices, and labor records.

PROJECT EXAMPLES

Riverwalk trail – Cape Girardeau, MO - DP1500(020)

This Local Public Agency (LPA) administered project consisted of approximately 2000' linear feet of public sidewalk/trail and a 100' span pedestrian bridge over Sloan's Creek, a tributary to the Mississippi River. This project required floodplain development permitting, no-rise certifications, and 404 Permit/408 Clearance with the US Army Corp of Engineers. The project is an integral part of the City's hiking/biking Master Trail plan and highlights BFA's project management and communication capabilities to manage a project with numerous stakeholders.



City of Cape Girardeau MO – Bloomfield Road Improvements

The design work included right-of-way and property research, topographic field work and surveying, sketch plans of design options, cost estimates, environmental reports, wetland delineation, and assistance with public meetings. Proposed improvements include concrete roadway with curb, gutter, stormsewer infrastructure, and adjacent 8' wide multi-use trail.

New Haven MO – Safe Routes to School - SRTS-INF-H32F(101)



BFA provided engineering services to develop plans, specifications, and estimates (PSE) for a Safe Routes to School project to construct 1200' of sidewalk for the City of New Haven. This project was designed in 2014 and constructed in 2015. BFA provided Design Engineering and Construction Engineering services for this successful project.

PROJECT EXAMPLES

Washington MO – Phoenix Center Park and Trail

This project includes a public park development with a 0.8 mile exercise trail route and 2 pedestrian bridges to cross over water areas and provide access to adjacent neighbors. BFA worked with the developer and City to have the property annexed and rezoned. We prepared and provided all Surveys and Right-of-Way Property Transfer and Acquisition Exhibits. We also developed and submitted the required drainage calculations to obtain necessary floodplain development permits as well as a Nationwide Permit from the COE to fill 2,550 LF of stream channel. Upon completion of the trails and park area, the area was dedicated to the city for public use.



“I have been involved with BFA, Inc. in numerous projects over the past 30 years. These projects have been in the public and private sectors and ranged from fairly small, straight forward jobs to highly complex developments having budgets in the millions of dollars. Types of projects have varied, including public utilities, municipal streets, commercial/retail developments, state park facilities, pre-construction and post-construction surveys, etc....

BFA, was our first choice to provide engineering and surveying services on our project. Their experience and quality of service is very exceptional in my opinion and I would encourage they be considered for any civil engineering needs you may have.”

-Joe Vernaci, President – Phoenix Center II Development

