# BFA

# SIDEWALK IMPROVEMENTS

## MAIN STREET SIDEWALK IMPROVMENTS CITY OF MARTHASVILLE, MISSOURI PAGE 1 OF 2

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**Client:** City of Marthasville

**Phone:** (636) 433-5747

**Year: 2019** 

**Contact:** David Lange, Mayor

402 East Main Street Marthasville, MO 63357

mayorlange.marthasville@outlook.com

Project Manager: Mark A. Harriman Engineering & Surveying Services Cost

Estimated: \$25,000
Actual: \$24,970
Geotechnical Engineering

**Estimated:** \$8,596.80

Actual: \$5,264.82
Construction Project Time

**Estimated:** 120 Days **Actual:** 120 Days

**Construction Cost** 

**Estimated:** \$329,300 **Actual:** \$329,300

Engineers Estimate: \$393,763.25

Low Bid: \$329,300

\*All Totals shall be considered approximate.

BFA provided Professional Engineering and Surveying Services for the above project. BFA's general scope of work was to survey and design sidewalk improvements along Highway D as described in the TAP Grant Application. Improvements included:

- Approximately 1,400 LF of sidewalk being removed and replaced to conform to the Americans with Disabilities Act, connecting the existing sidewalk to the Elementary School in town.
- Approximately 2,090 LF of new sidewalk was constructed from the Elementary School to near the East city limits, stopping at an apartment complex. The Sidewalk was constructed 5 ft wide along with improvements to entrances and stormwater drainage to facilitate proper installation to State and Federal requirements.

The general listing of the work breakdown phases,

services, and deliverables provided by BFA are as follows:

**GEOTECHNICAL ENGINEERING** - BFA worked with SCI Engineering to complete Construction Observation/ Testing Services. These services included:

- Compaction testing of backfill for utility trenches.
- Compaction testing of aggregate base for sidewalk.
- Concrete testing to include slump, air, temperature, and casting, curing, and testing of compression test specimens for structural concrete, flatwork, and site concrete.

**SURVEYING SERVICES** - BFA gathered survey field data sufficient to develop a topographic survey drawing to facilitate project design. BFA also worked with the City to obtain title documents and evaluated them for right-of-way determinations. The following tasks and deliverables included:

- Site visit(s) to gather field data.
- Obtained and reviewed available historic surveys from the State Survey Repository.
- Reviewed Title Search materials.
- Drafted topographical survey drawing.
- Establishing Right-of-Way survey drawing.

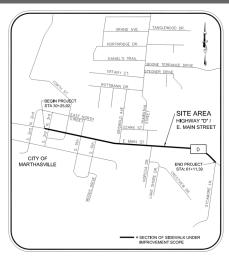
## **PROJECT PERMITTING AND REGULATORY REQUIREMENTS - BFA assisted in MoDOT required**permitting and clearance items:

- Missouri Department of Natural Resources
   Land Disturbance Permit BFA developed
   Erosion and Sediment Control Plans and Specs to obtain permit coverage.
- MoDOT Categorical Exclusion Clearance.

PRELIMINARY DESIGN (PS&E) - BFA provided Preliminary Design plan sheets for Client Review and Commenting. Preliminary Plan sheets included: 1) Cover Sheet; 2) Topographic/Right of Way Survey; 3) Improvement Plans – identifying grading, drainage, utilities, and details. The following tasks and

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SITE LOCATION MAP

deliverables included:

- Assessment of required permitting and approvals required for the project.
- Preliminary calculations, exhibits, and drawings for Erosion and Sediment Control Plans, permitting, and jurisdictional approvals.
- Preliminary Plan Sheets.

**FINAL DESIGN** - BFA provided Final Design Plans for "out to bid". They received all required approvals and the engineering drawings were signed and sealed by the engineer of record. The deliverables for this phase included:

- Final Signed/Sealed Plan Set
- Final Cost Estimate
- Project Construction Specifications

### **PROJECT BIDDING ASSISTANCE -** The tasks for this phase included:

- Uploaded plans and specifications to Drexel Plan Room for access by interested bidders.
- Provided bid question responses.
- Attended Pre-Bid Meeting at City Hall and provided a detailed project overview to potential bidders and other stakeholders.
- Reviewed bid submittals, contact references provided by bidders (as deemed appropriate), and provided recommendation to Client.

**PROJECT CONSTRUCTION ASSISTANCE** - BFA assisted the city, when requested, with daily inspections, approving pay applications, and maintaining daily

diaries and pay item diaries, when needed. The tasks for this phase included:

- Attending the Pre-Construction Meeting at the project site and providing clarification and direction to construction questions the awarded contractor posed.
- Provided responses to Client Project Manager on construction and site questions that developed during construction
- Provided Shop Drawing Submittal reviews
- Reviewed Pay applications
- Provided (3) Site Visit Inspections

#### **Before**



After

