

SIGNAL DESIGN

BUFFALO TRAIL AT N. LIBERTY HILL DRIVE

CLIENT:

Berry Engineers, LLC

JMTE SERVICES:

- Base Maps
- Geometric Plans
- Electrical Plans
- Infrastructure Inventory
- Signal Warrant Analysis
- City of Morristown Collaboration
- TDOT Collaboration

LOCATION:

Morristown, TN

J.M. TEAGUE
ENGINEERING & PLANNING

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J.M. Teague Engineering & Planning (JMTE) prepared a traffic signal warrant analysis and prepared a signal design to accommodate the traffic that would be generated by a proposed development consisting of a grocery store (41,117 SF) and a 12-pump gas station planned along Buffalo Trail in Morristown, TN.

From the results of the Signal Warrant Analysis, JMTE designed the traffic signal and electrical plans for the intersection following guidelines set forth by the Tennessee Department of Transportation (TDOT) and the City of Morristown.

Signal design base maps were developed from plans provided by the client. A geometric plan was prepared that incorporated the addition of the new westbound approach and modifications such as loop detector placement, signal head alignment, signal timing, updated phasing, and clearance interval modifications.

The signal design timings were prepared in conformance with current TDOT and MUTCD standards as required and reflected in the controller timing chart. The addition of the new westbound approach was incorporated into the phasing diagram, table of operation chart, and the loop & detector installation chart.

The traffic signal plan and electrical details were reviewed and approved by the City of Morristown and TDOT.

