

Services Provided

- Surveying*
- Environmental*
- Right of way acquisition*
- Public Involvement*
- Roadway Design*
- Drainage Design*
- Utility Coordination*

Date of Completion

On-going

Client

TxDOT Tyler District

Project Designer

Miguel Sanchez, PE

Jeff Thomas, PE

Kevin Daily, PE

Project Manager

Alfonso Garza, PE

TxDOT Tyler District FM 16 Roadway Schematic

AZ&B is providing surveying and engineering design services for the schematic and development of FM 16 in Lindale, TX for TxDOT Tyler District. The roadway project is approximately 4 miles in length. Specific issues that must be resolved include rural roadway design alternatives, right-of-way acquisitions, drainage study, and urban arterial roadway alternatives. The FM 16 urban segment is constrained by: limited ROW and historical structures, homes, schools, businesses and diagonal parking. The FM 16 rural segment is constrained by: wetlands, FEMA AE zones, utilities, and high pressure gas line. Proposed Toll 49 presents a future constraint.

AZ&B prepared the schematic roadway design. Designs consisted of drainage design, roadway plan and profile design, roadway cross-sections, storm drainage and pavement design. The design includes tie-ins to all intersecting streets and driveways. The existing horizontal and vertical roadway geometric constraints have contributed to sight distance problems and traffic fatalities, AZ&B designed the road improvements to eliminate these problems.

- ✓ Analyzed existing/future constraints, conditions and developed alternatives based on a collaborative effort with the stakeholders and TxDOT TP&D, and rank alternatives.
- ✓ Provided design recommendations with back up data, including forecasted traffic counts, cost estimates, maintenance reduction costs, structure savings, safety improvements, and environmental impacts reductions.
- ✓ Design included developing traffic routing and circulation improvements to adjacent schools and businesses alleviating congestion to private driveways and FM 16.
- ✓ Performed drainage analyses to determine top ditch width, develop proposed drainage structures & construction phasing.
- ✓ Reviewed which alternatives support expedited construction and reduced costs.
- ✓ Provided coordination with RMA for proposed Toll 49 project.
- ✓ Coordinated with City Planner to develop urban options: Urban options are impacted by limited ROW in urban section with diagonal parking spaces and historical structures abutting the parking and sidewalks.
- ✓ Designed included mapping all existing utilities.
- ✓ Analyzed ROW impacts to businesses, homeowners, and utilities.
- ✓ Performed utility coordination for existing, proposed utilities & cost relocates, & analyzed environmental constraints.
- ✓ Minimized impacts to waters of U.S., wetlands, historic resources, 4(f) impacts to school, rodeo arena. Balance needs of neighborhoods/businesses and regional transportation needs.
- ✓ Conducted public involvement meetings.