

TOLL 49 SEGMENT 4 PROGRESS REPORT



*DECEMBER 2016
PROGRESS REPORT NO. 6*

RS&H





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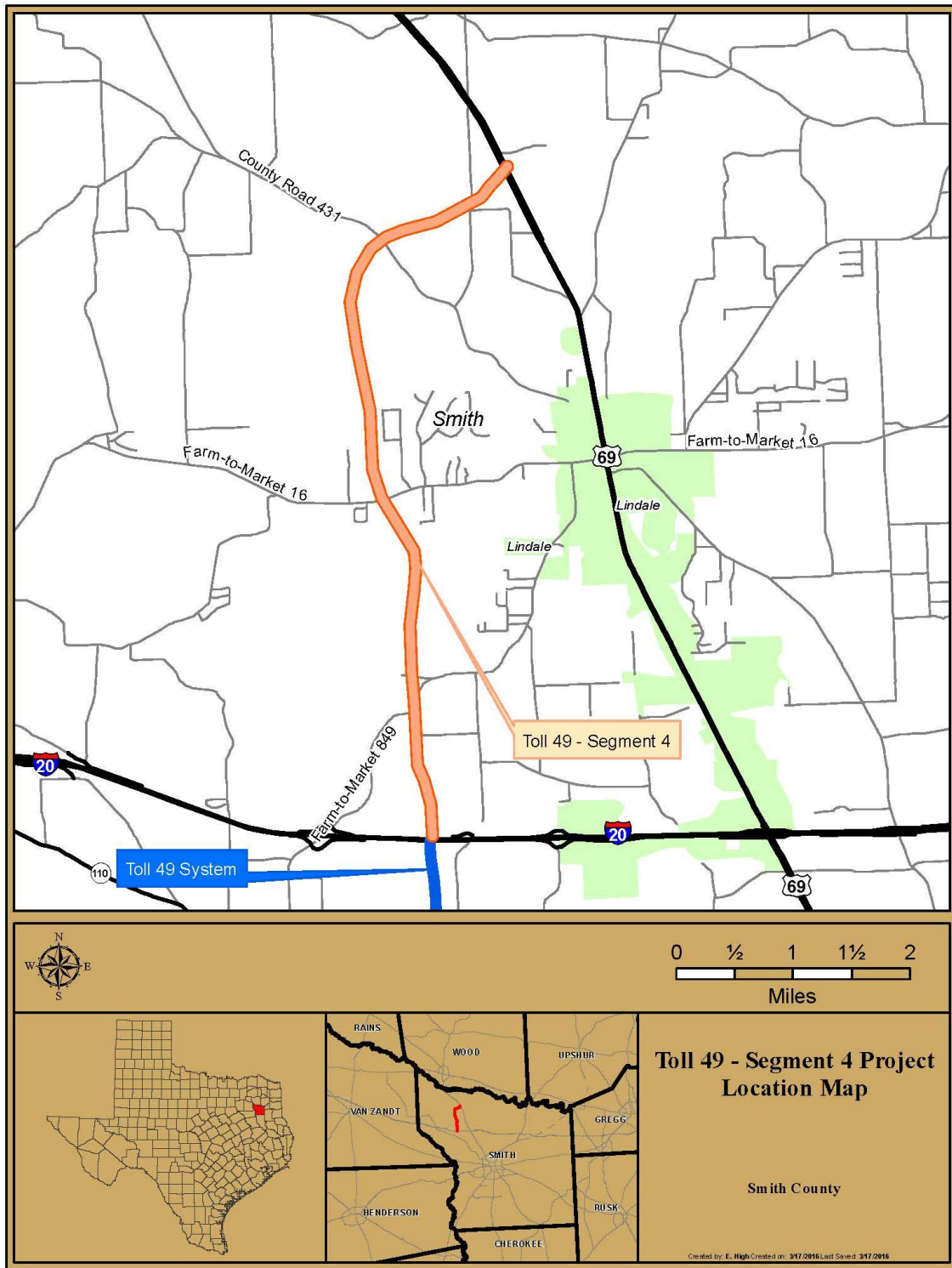
1.1 INTRODUCTION

This report documents and describes the development and construction of the Toll 49 Segment 4 Project during the period from November 7, 2016 to December 6, 2016. This Project is being developed and constructed by the North East Texas Regional Mobility Authority ("the Authority"). The Segment 4 Project is funded by Series 2016A Senior Lien bonds, and funds committed by the Federal Highway Administration (FHWA) and the Texas Department of Transportation (TxDOT).

1.2 PROJECT DESCRIPTION

The Segment 4 Project extends along new alignment from US 69 in the City of Lindale south to IH 20, north of the City of Tyler in Smith County, Texas. The Segment 4 Project connects with Toll 49 Segment 3B, extending Toll 49 by a length of approximately 6.6 miles. The Segment 4 Project consists of an interim two-lane access controlled tollway with grade separations at major cross streets, and toll collection facilities. The interim two-lane facility may be expanded to its ultimate four-lane configuration as traffic demand warrants and funding sources are identified in the future. The Segment 4 Project includes the construction of an at grade intersection at US 69, a diamond interchange including access ramps at FM 16, access ramps south of SH 110, and a three level interchange at IH 20. Continuous access/frontage roads will not be constructed as part of the Segment 4 Project.

FIGURE 1: Project Location Map



1.3 DEVELOPMENT ACTIVITIES

1.3.1 Right-of-Way

To date, the Authority has either acquired, or acquired access rights to, forty-one of forty-two project parcels. The Authority will take possession of the final project parcel in early December by obtaining the Warranty Deed through a real estate closing.

TABLE 1: RIGHT-OF-WAY PARCEL STATUS

Parcel	Acreage	Estimated Acquisition	
		Date	Status
202	3.93	NTP	Closed
203	1.44	Acquired	Closed
204	0.73	NTP + 75 Days	Closed
205	0.52	NTP	PUA executed Parcel is accessible to Contractor
206	2.42	NTP	Closed
207	0.40	NTP	Closed
208	7.03	NTP + 75 Days	Closed
209	12.47	15-Jul-16	The Authority has taken possession Parcel is accessible to Contractor PUA executed
210	0.84	15-Jul-16	Parcel is accessible to Contractor
213	39.13	NTP	The Authority has taken possession Parcel is accessible to Contractor
214	9.95	NTP	Closed
215	36.64	NTP	The Authority has taken possession Parcel is accessible to Contractor
216	28.31	NTP	The Authority has taken possession Parcel is accessible to Contractor
217	8.39	NTP	Closed
218	5.61	NTP	Closed
219	21.01	NTP	Closed
220	1.35	NTP	Closed
221	5.69	NTP + 30 Days	PUA executed Parcel is accessible to Contractor
222	2.46	NTP + 30 Days	Closed
223	0.13	NTP + 30 Days	Closed
224	0.17	NTP + 30 Days	Closed
225	0.04	NTP + 30 Days	Closed
226	11.63	NTP + 30 Days	Closed
227	3.18	NTP + 60 Days	Closed
229	22.23	NTP + 60 Days	Closed

Parcel	Acreage	Estimated Acquisition	
		Date	Status
230	3.22	NTP + 60 Days	Early December closing
231	4.25	NTP + 60 Days	Closed
232	14.47	NTP + 60 Days	Closed
233	1.52	NTP + 60 Days	Closed
235	0.85	NTP + 60 Days	Closed
236	9.71	NTP + 60 Days	Closed
237	0.41	NTP + 60 Days	Closed
238	22.66	NTP + 60 Days	The Authority has taken possession Parcel is accessible to Contractor
239	1.04	NTP + 60 Days	The Authority has taken possession Parcel is accessible to Contractor
240	13.39	NTP + 60 Days	The Authority has taken possession Parcel is accessible to Contractor
241	0.36	NTP + 60 Days	Closed
242	11.04	NTP + 60 Days	Closed
243	9.16	NTP + 60 Days	Closed
244	19.14	NTP	Closed
245	5.81	NTP	Closed
246	0.10	NTP + 30 Days	Closed
247	0.07	NTP + 60 Days	The Authority has taken possession Parcel is accessible to Contractor

1.3.2 Utilities

The Authority has initiated the adjustment of all of the privately-owned utilities impacted by the Segment 4 Project. Relocation design and construction will be performed by the utility owners with 100% reimbursement from the Authority. The Authority has executed relocation agreements with ten of the eleven privately owned utilities impacted by the Segment 4 Project and has issued NTP for the relocation of nine of these facilities. The Authority anticipates executing a relocation agreement with the remaining utility by the end of December.

Due to coordination and construction timeframes, the relocations for some utilities are not anticipated to be complete within the contract's estimated completion dates. It is not anticipated that these relocations will impact the Project critical path.

TABLE 2: UTILITY RELOCATION STATUS

Utility Company	Estimated Relocation Completion Date	Status
AT&T (SBC)	NTP + 120	Utility agreement executed 3-29-2016
		Relocation NTP issued 6-24-2016
		Relocation is ongoing
CenterPoint Energy	NTP+120	Utility agreement executed 3-22-2016
		Relocation NTP issued 6-24-2016
		Relocation is ongoing
City of Lindale	N/A	Webber to relocate as part of construction
Crystal Systems Water	N/A	Webber to relocate as part of construction
East Texas Electric Cooperative	1-Jan-17	Utility agreement executed 1-21-2016
		Relocation NTP issued 6-24-2016
		No conflict identified, no relocation
Enbridge	No conflict	No conflict identified, no relocation
Gulf South	NTP+90	Full utility agreement executed early December
Lindale Rural WSC	N/A	Webber to relocate as part of construction
MHM Pipeline	Relocation will begin 2 weeks after clearing	Relocation is complete
		Utility agreement executed 5-4-2016
		Relocation NTP issued 6-24-2016
Oncor Electric Delivery (Distribution)	NTP + 90 to 120 Days	Relocation is ongoing
		Utility agreement executed 3-24-2016
		Relocation NTP issued 6-24-2016
Oncor Electric Delivery (Transmission)	1-Nov-16	Relocation NTP issued 6-24-2016
Peoples Telephone Cooperative	NTP + 0 to 60 Days	Relocation is complete
SuddenLink	NTP + 150 Days	Utility agreement executed early December
Wood County Electric	NTP + 110 Days	Relocation is complete
Zayo	NTP + 150 Days	Utility agreement anticipated in December

1.3.3 Archeological Survey

During archeological survey undertaken in support of a utility relocation on the project, archeologists encountered a single previously unrecorded archeological site within the project right of way. Following discovery of this site, the Authority enlisted the services of Hicks & Company to perform data recovery and mitigation at the site. Throughout the course of the archeological investigation, the Contractor has been allowed only limited access to the right-of-way near the archeological site. This limited access impeded earthwork activities, resulting in the demobilization of the earthwork contractor for a period of time during the month of December. The Contractor has recently gained expanded access to the right-of-way and it is anticipated that the earthwork contractor will remobilize after the first of the new year. After remobilizing,

the Contractor will provide an overall schedule update that will be reviewed closely for any impacts to the project completion dates.

1.4 PROGRESS PHOTOS

1.4.1 Earthwork

Clearing and grubbing activities are complete at all areas necessary within the project limits with the exception of the archeological area, to which the Contractor has limited access. Excavation of topsoil continues between IH 20 and FM 849, and the Contractor is stockpiling the material south of IH 20. Backfilling is ongoing at various culvert and bridge abutment locations including the IH 20 main lane bridge.



Excavation for temporary drainage (at future US 69 southbound entrance ramp)



Topsoil stockpile south of IH 20



Final grading for roadway subgrade south of US 69



Excavation/hauling north of IH 20

1.4.2 Drainage Structures

The Contractor has completed construction of drainage structures including minor culverts at the US 69 ramps and major cross culverts No. 5, 7-12 and 14. Construction of other various minor culverts across the project and major cross culvert No. 15 is ongoing.



Minor culvert inlet construction at US 69
SB entrance ramp



Cross Culvert #7 concrete box culvert
construction (north of FM 16)

1.4.3 Bridge Structures

The Contractor continues work at project bridges including installation of drilled shafts, columns, caps, and abutments at numerous bridge locations across the project.



Bridge abutment for main lane overpass
at IH 20



Davis Branch Tributary bridge columns



Drill shafts for bridge abutment at FM 16 overpass



Flared column construction for main lane overpass at IH 20

1.4.4 Subbase

The Contractor began subbase activities in the month of November. To date, the Contractor has cement-stabilized the subgrade and placed the flexible base layer for the US 69 ramps and the Toll 49 main lanes from US 69 to just north of CR 4118.



Main lane cement subgrade stabilization south of US 69



Flexible base at Toll 49 main lane and US 69 southbound entrance ramp

1.5 PROGRESS NARRATIVE

Clearing and grubbing activities are complete excluding the area affected by the archeological study, and the placement of environmental controls continues. Excavation activities also continue between FM 849 and IH 20 including the hauling of topsoil across IH 20 to stockpile locations. Embankment work includes the backfilling at the northern IH 20 main lane bridge abutment and Culvert No. 7. Cement-stabilization of the subgrade is complete for the US 69 ramps and the Toll 49 main lanes from US 69 to just north of CR 4118, and placement of the flexible base layer is ongoing. The grading for roadway side slopes is ongoing north of FM 16 and north of IH 20.

Drill shaft work is complete at Long Brake Tributary, Stevenson Branch, Davis Branch, Davis Branch Tributary, and the IH 20 entrance ramp and is ongoing at all other bridge locations. Construction of columns is also complete at Long Brake Tributary, Davis Branch, and Davis Branch Tributary. Footing placement continues at IH 20 along with the construction of flared columns. MSE wall construction has begun at FM 849 and is complete at the Davis Branch Tributary Bridge. Installation of major cross Culverts No. 5, 7-12 and 15 is complete and construction of culverts No. 14 and other minor culverts project-wide is ongoing.

Table 3 below reflects construction progress based on the Contractor's schedule of values and approved construction draws.

TABLE 3: CONSTRUCTION PROGRESS

Construction Activity	Percent Complete
Mobilization	90.00%
Traffic Control	30.43%
Earthwork	41.59%
Drainage	16.60%
Sub-base and Base Course	0%
Pavement	0%
Structures	19.29%
Pavement Markings and Signals	6.18%
Environmental	10.58%
Extra Work Items	16.58%
Change Orders	50.44%

1.6 FINANCIAL SUMMARY

Table 4 shows the overall financial status for the Toll 49 Segment 4 project through December 6, 2016. The original budget established for the Project and the expenditures to date are provided. An estimated cost remaining and an estimate at completion are also provided.

TABLE 4: FINANCIAL STATUS SUMMARY

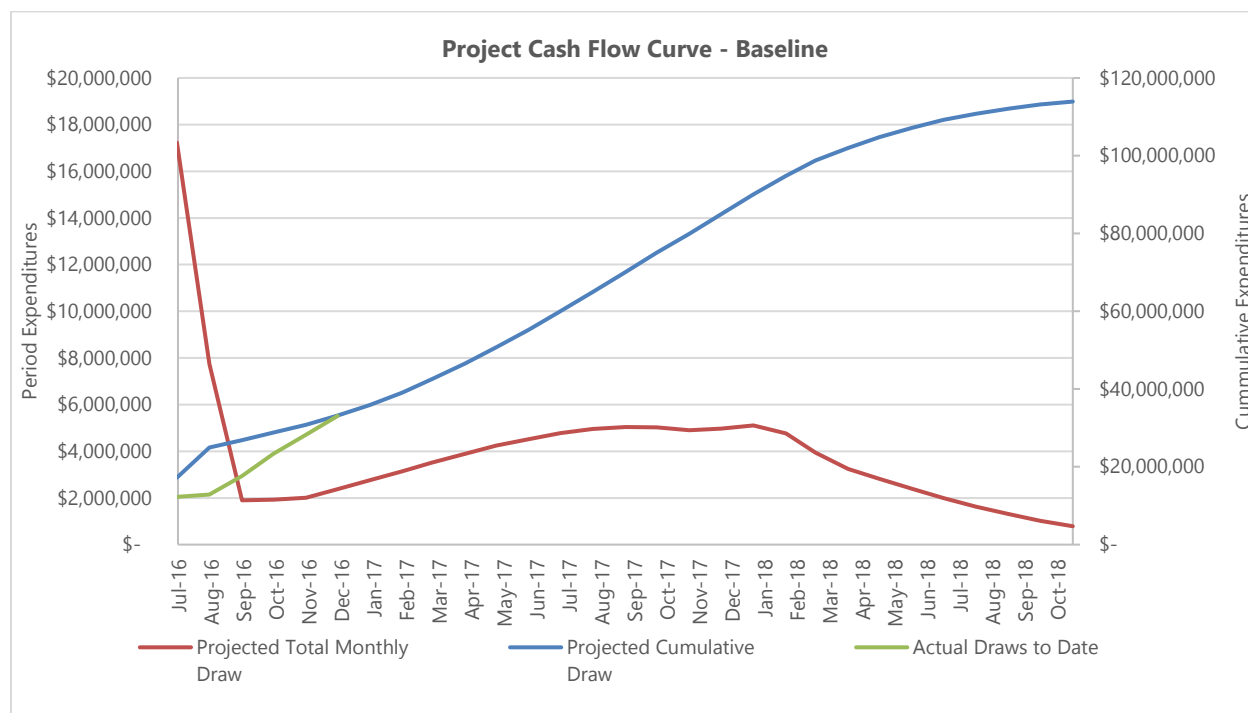
Project Description	Original Cost Estimate (\$)	Expenditures to Date (\$)	Estimated Remaining Cost (\$)	Estimate at Completion (\$)
Toll 49 Segment 4	\$126,220,000	\$33,085,548.27	\$93,134,451.73	\$126,220,000

Note: These costs include Traffic & Revenue studies costs, ROW survey and mapping costs, Final Engineering costs, Utility Relocation costs, Oversight costs, Construction (including GEC costs), and contingencies.

1.6.1 Project Cash Flow Curve – Baseline

Figure 2 summarizes the actual project costs to date through during this reporting period in comparison to the projected project costs.

FIGURE 2: PROJECT CASH FLOW CURVE - BASELINE



1.7 CONSTRUCTION FINANCIAL STATUS

The following summary provides the financial status of the Project.

Original Contractor Amount:	\$68,760,000
Authorized Changes (Change Order and/or Amendments):	
Change Order #1 ¹	\$0.00
Change Order #2	\$26,247.38
Change Order #3	\$17,257.93
Current Authorized Contract Amount:	\$68,803,505.31
Previous total of Contractor Payments:	\$13, 154,028.77
Amount Paid this Reporting Period:	\$4,449,377.25
Total Amount Paid To-Date:	\$17,603,406.02
Retainage withheld:	\$0.00
Approved Amount for work completed (through Draw #4):	\$17,603,406.02

Amount remaining for work to be completed:

\$51,200,099.29

Total Percent of Budget Expended through December 6, 2016:

25.59%

Footnotes:

1. Change Order number 1 did not result in a change in price

1.7.1 Summary of Change Orders This Reporting Period

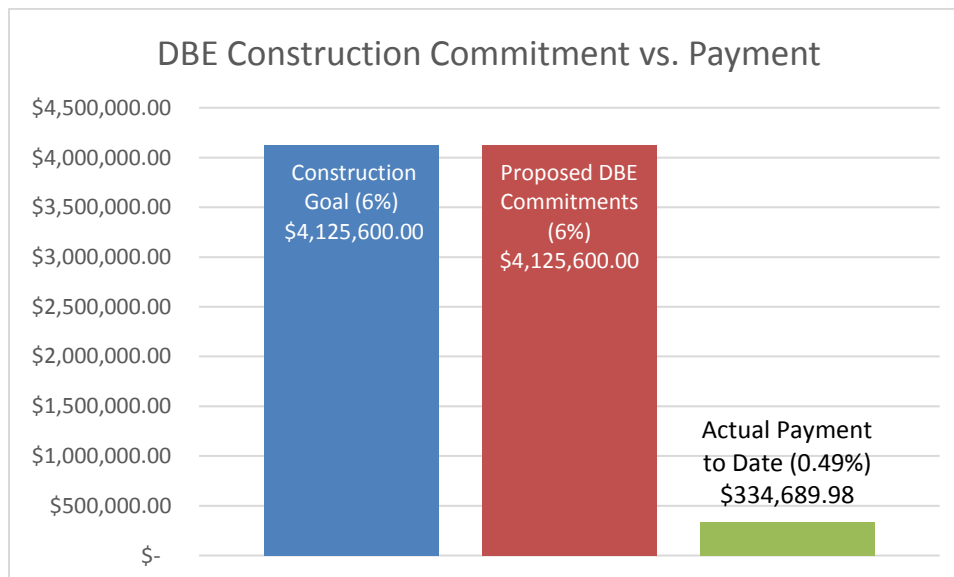
During this reporting period, two change orders were executed. Change Order #2 added mile markers for the length of Segment 4 and part of the length of Segment 3B from IH 20 south to SH 110. Change Order #3 reimbursed the Contractor for the cost of off-duty law officers to be on site to ensure the safety of field personnel after an encounter with a property owner.

1.8 DBE STATUS

The Contractor is required to meet the Disadvantage Business Enterprise (DBE) goal of 6% for the Segment 4 Project. The Contractor has proposed costs associated with DBE development work in the amount of \$4,125,600.00 which equals 6.00% to date of the original contract value. This represents anticipated subcontracts with the following firms: Rambo Contracting INC (culverts, inlets, headwalls, and wing walls), Odum Services LP (metal beam guard fence and guard rail), Texas Environmental Management (stormwater pollution prevent plans and erosion control), MCL Contracting rebar tying), and Indus Construction LP (substructures).

To date, the Contractor has made payments in the amount of \$334,689.98 to DBE subcontractors, 0.49% of the original contract amount or 8.11% of their commitment amount.

FIGURE 3: DBE STATUS



1.9 COMPREHENSIVE ENVIRONMENTAL PROTECTION PROGRAM

In accordance with the terms of the Environmental Record of Decision (ROD) and contract requirements, the Contractor was required to develop and implement a Comprehensive Environmental Protection Program (CEPP) applicable throughout the duration of construction to establish the approach, requirements and procedures to be employed to protect the environment. The Contractor's CEPP includes the following component parts:

- » Areas of Special Environmental Interest - Describes steps taken to prevent impacts to at risk, rare species and their habitat as well as historical resources including:
 - Educating employees to recognize these impacts
 - Identifying the areas where construction related activities are not to take place based on the relevant migratory bird timing windows
 - Keeping water work to a minimum and cleaning any equipment which must enter the water both prior and after to mitigate the spread of Zebra Mussels
 - If endangered/rare species or historical/archaeological/paleontological resources are encountered, ceasing working in the area and notifying the engineer or applicable agency for direction on any mitigation action required
- » Environmental Protection Measures include the following:
 - Erosion and sediment control measures
 - Preparation for seasonal shutdown
 - Protection of wildlife and wildlife habitat
 - Proper practices for clearing vegetation
 - Appropriate handling and storage of soil
 - Protection of wetlands, watercourses (streams), and riparian areas
 - Air quality management
 - Proper handling and storage of petroleum, oil, lubricant, and other chemicals
 - Management of waste
 - Constructing, operating, and reclaiming borrow excavations
 - Operating concrete batch plants
 - Well impacts and requirements
 - Recycling program
- » Monitoring and Inspection efforts consist of:
 - Self-Regulatory inspection program
 - Construction Monitoring
 - Post construction monitoring
- » Energy Conservation measures including the following:
 - Reusing and recycling of construction materials
 - Maximizing the use of local materials to reduce hauling
 - Carpooling of workers to and from the jobsite
 - Regular maintenance of equipment to ensure proper working order
 - Reducing energy consumption by turning off equipment and vehicles when not in use

- Minimizing stops and delays by efficient routing of trucks to and from the jobsite and utilizing off-peak travel times to maximize fuel efficiency
- Minimizing the need for artificial light by scheduling construction during daytime hours to the extent practicable
- Maintenance of traffic control plan that minimizes lengthy detours or delays for motorists.
- » The Environmental Protection Training Plan educates non-administrative employees to:
 - Recognize the overall importance of environmental issues
 - Recognize environmental impacts as they relate to construction
 - Know what actions to take to minimize impacts
- » The Communication Plan provides contact information for the Environmental Manager, Superintendent, Project Engineer and Project Manager

Per the CEPP, the contractor has conducted the following activities:

- » Submitted for and posted TCEQ Notice of Intent (NOI) for stormwater discharges. The NOI and large construction site notices are posted on the Contractor's Equal Employment Opportunity board in front of the field office to address accessibility concerns.
- » Implemented proper vegetation clearing practices including installing sediment and erosion control measures prior to beginning the clearing and grubbing work.
- » Minimized disturbance to aquatic resources during clearing and grubbing by installing silt fence between the construction site and watercourse to prevent sedimentation and equipment from encroaching on protected areas and installing temporary crossings to allow construction equipment to cross various tributary streams.
- » Performed weekly inspections to ensure the measures are operating correctly.
- » Implemented the Environmental Protection Training Plan by providing staff access to the TxDOT Environmental Management System training website.

APPENDIX A: AERIAL PHOTOGRAPHS (DECEMBER 2016)



FIGURE 4: PROJECT AREA AT IH 20

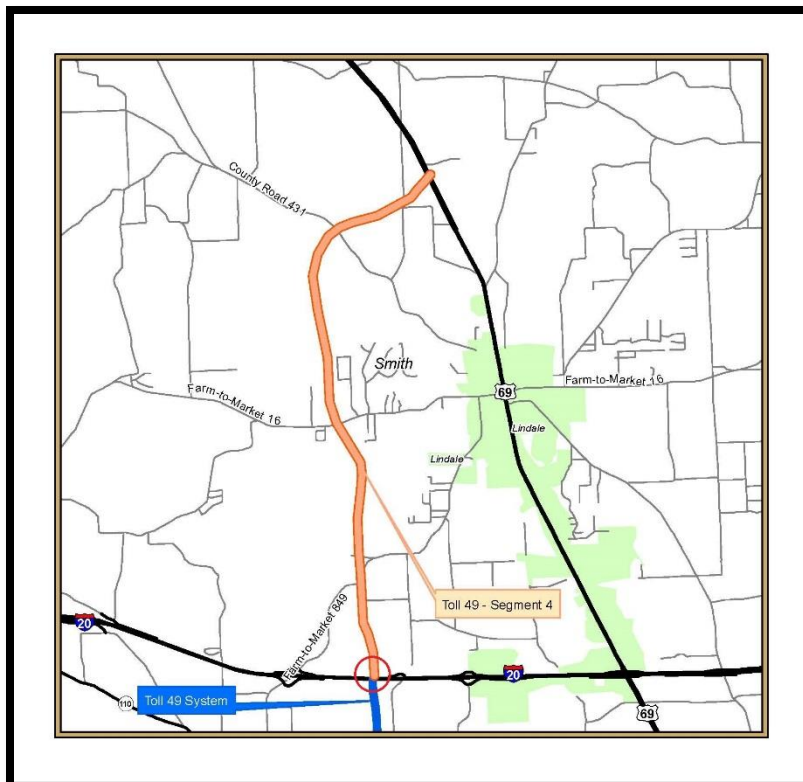




FIGURE 5: PROJECT AREA BETWEEN IH 20 AND FM 849

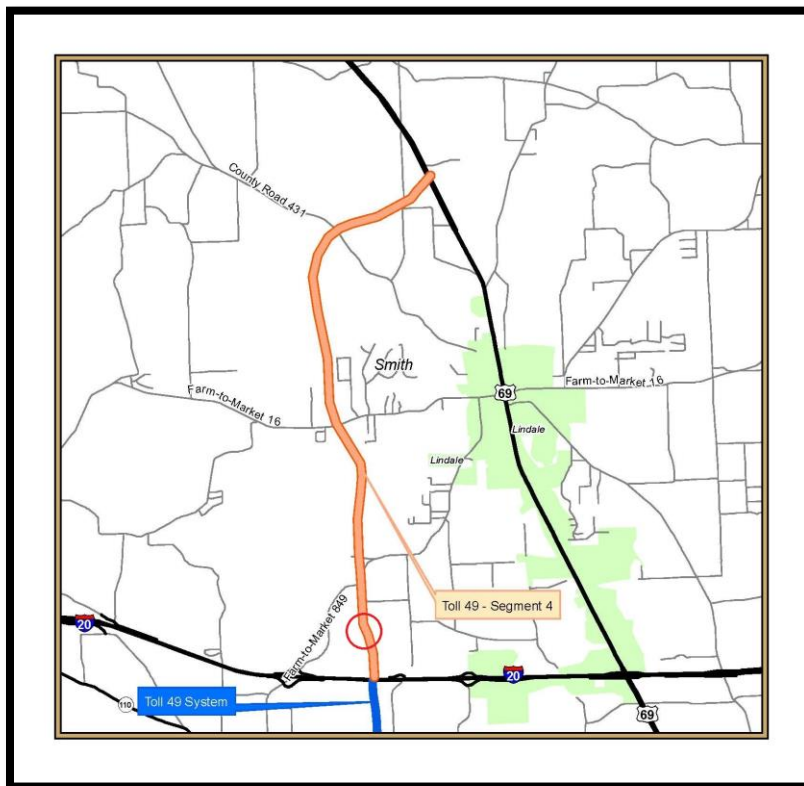




FIGURE 6: PROJECT AREA AT EXISTING FM 849

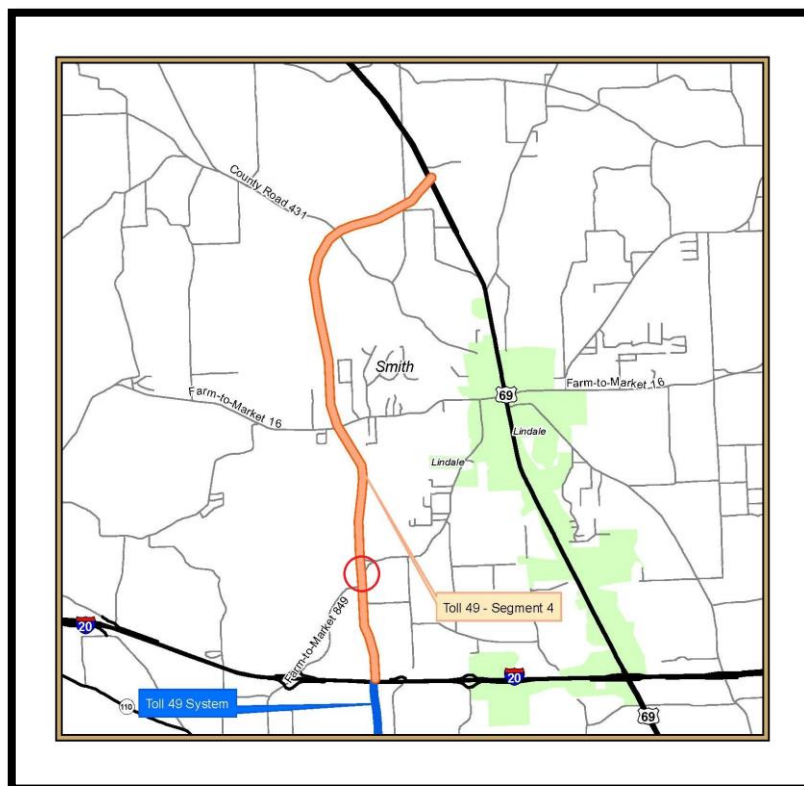




FIGURE 7: PROJECT AREA NORTH OF FM 849

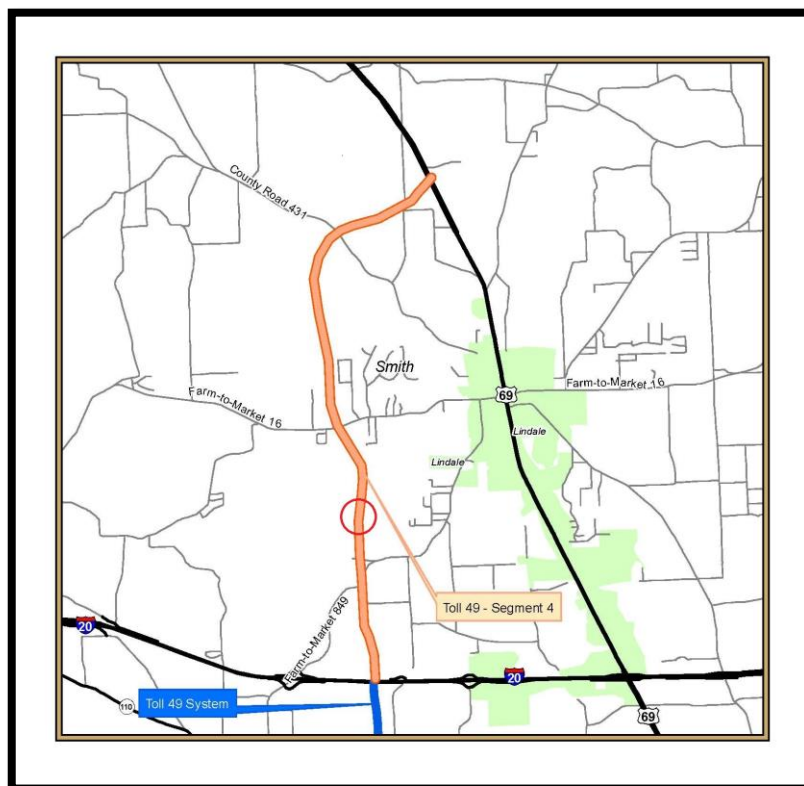




FIGURE 8: PROJECT AREA DAVIS BRANCH TRIBUTARY

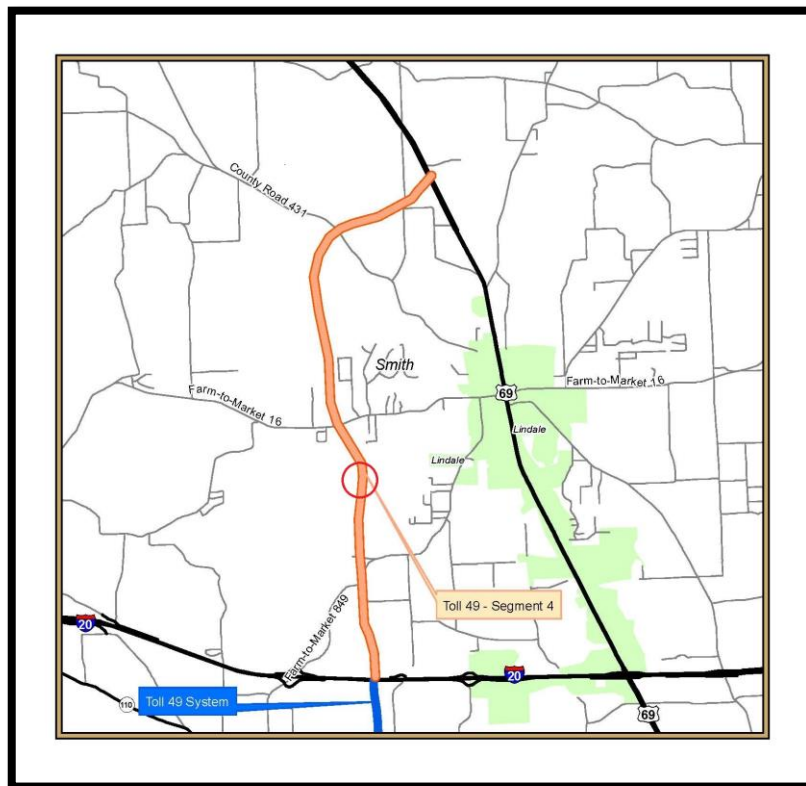




FIGURE 9: PROJECT AREA BETWEEN DAVIS BRANCH AND FM 16

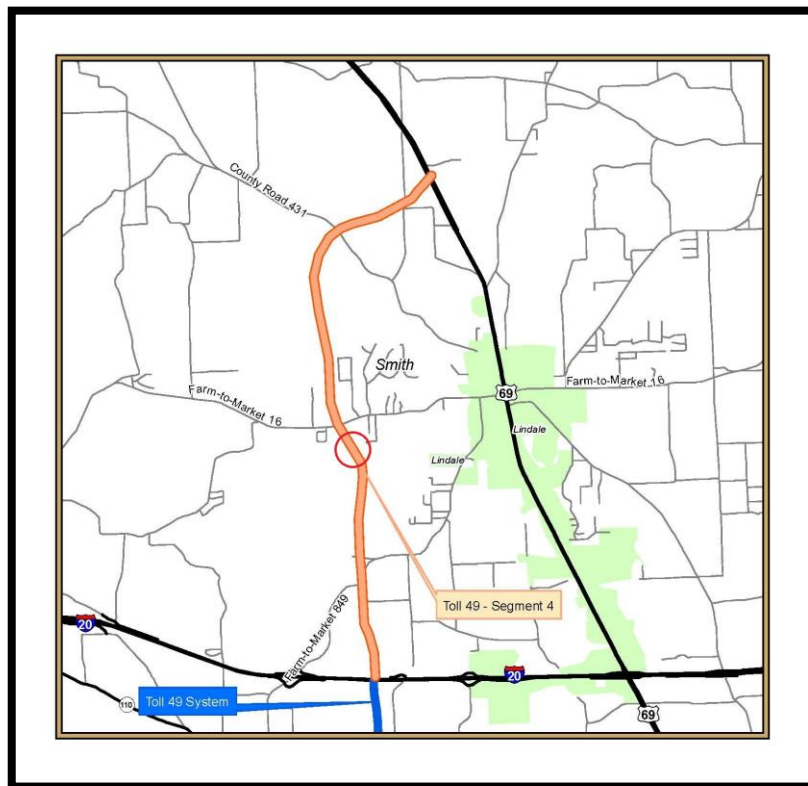




FIGURE 10: PROJECT AREA AT FM 16

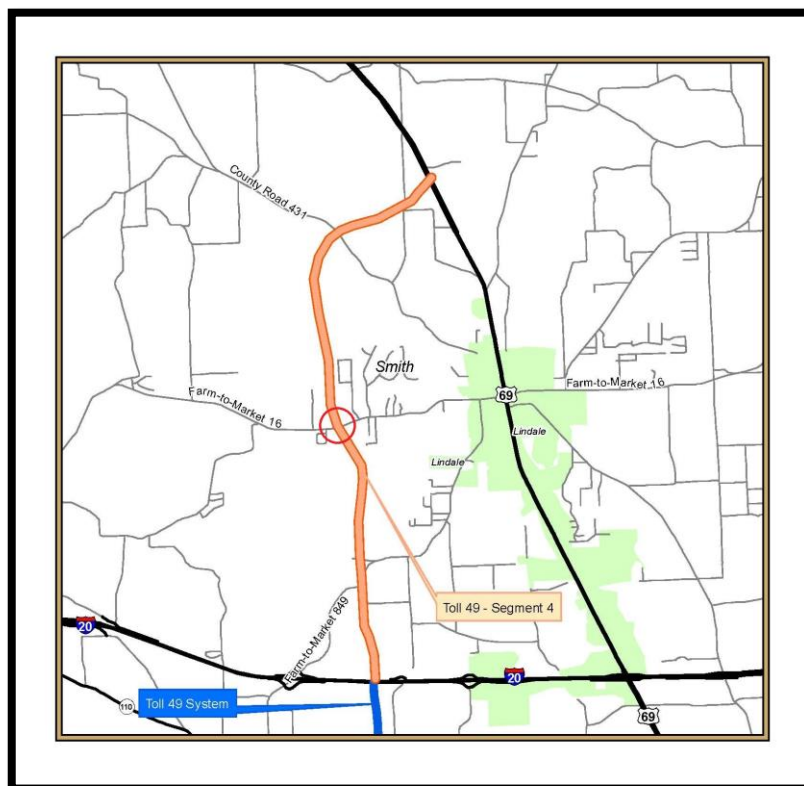




FIGURE 11: QUARRIES NORTH OF FM 16





FIGURE 12: PROJECT AREA NORTH OF THE FM 16 QUARRIES

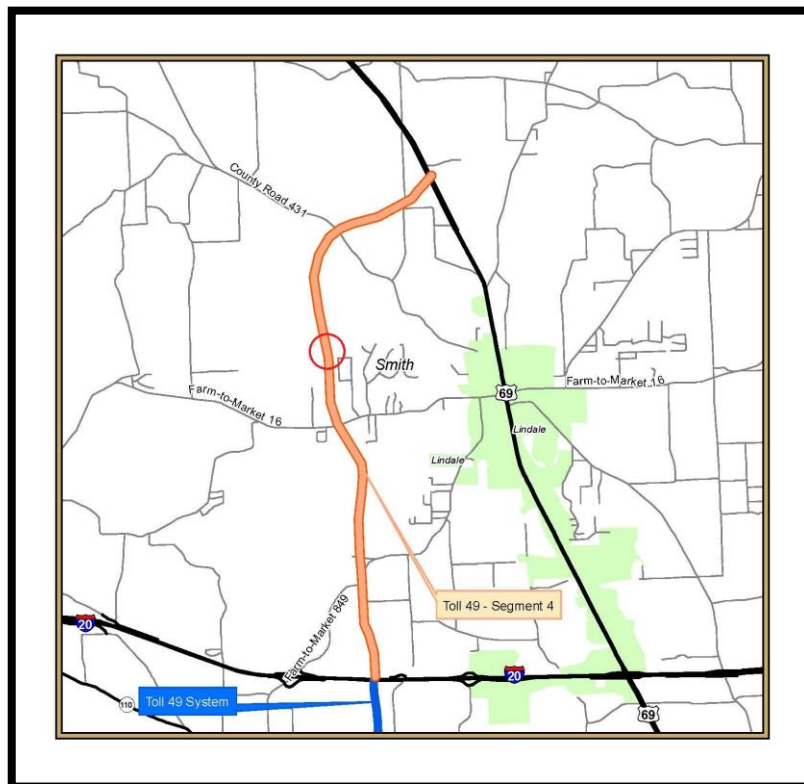




FIGURE 13: PROJECT AREA BETWEEN FM 16 AND CR 341

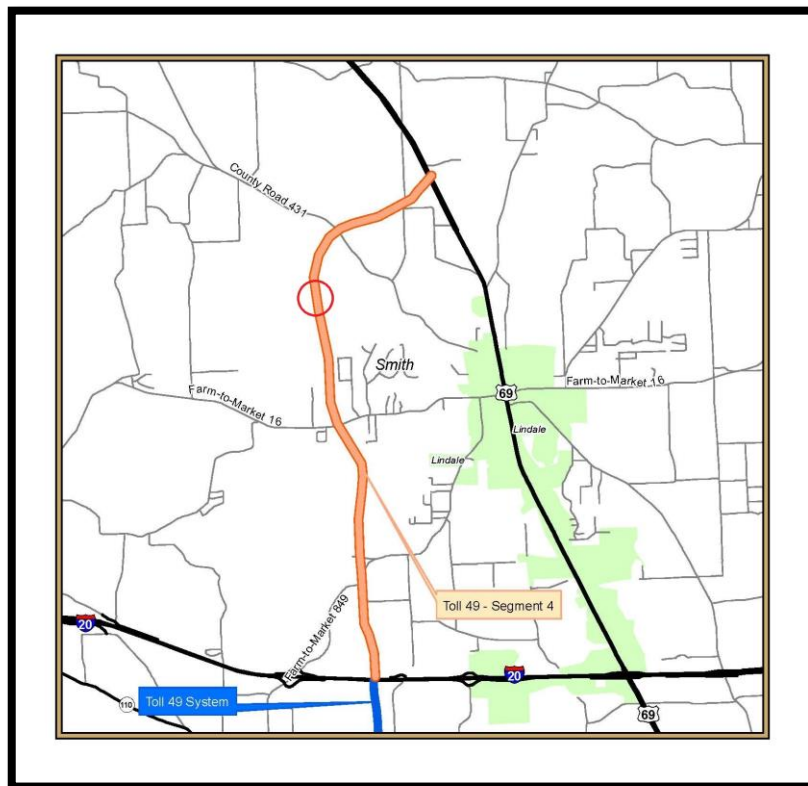




FIGURE 14: PROJECT AREA SOUTH OF CR 431

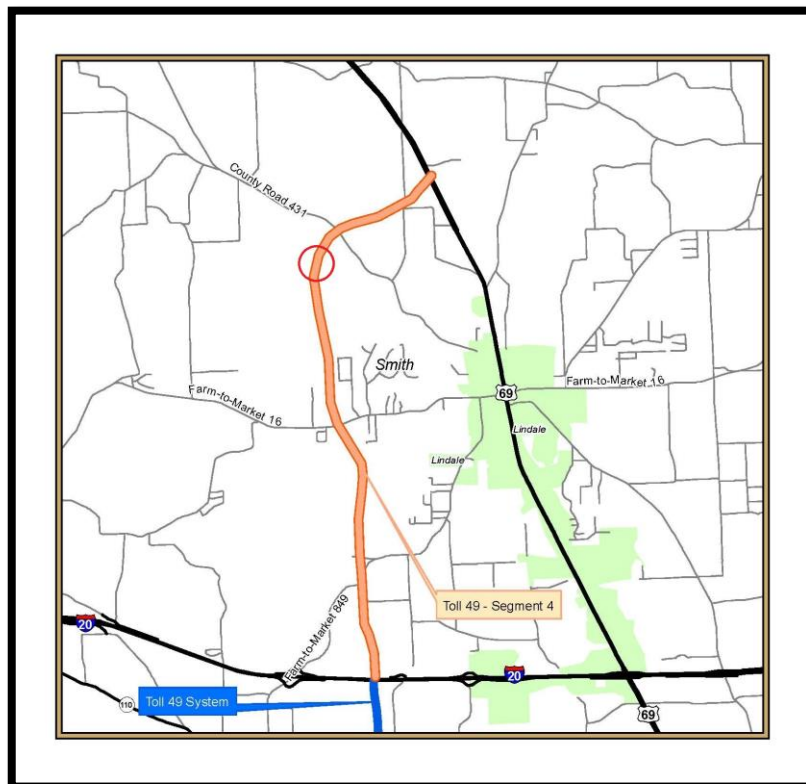




FIGURE 15: PROJECT AREA AT CR 431

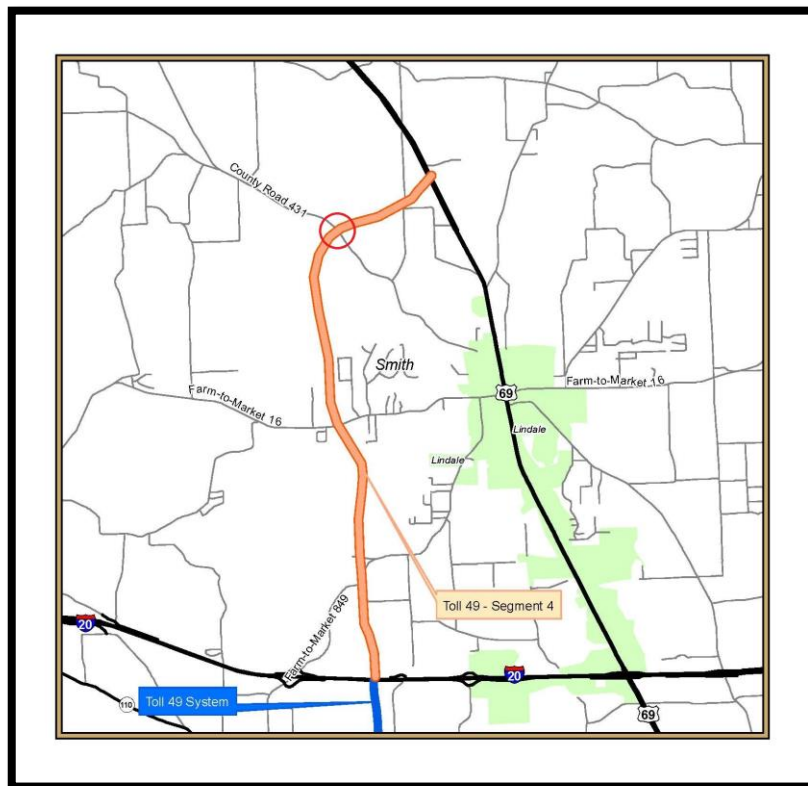




FIGURE 16: PROJECT AREA NORTH OF CR 431

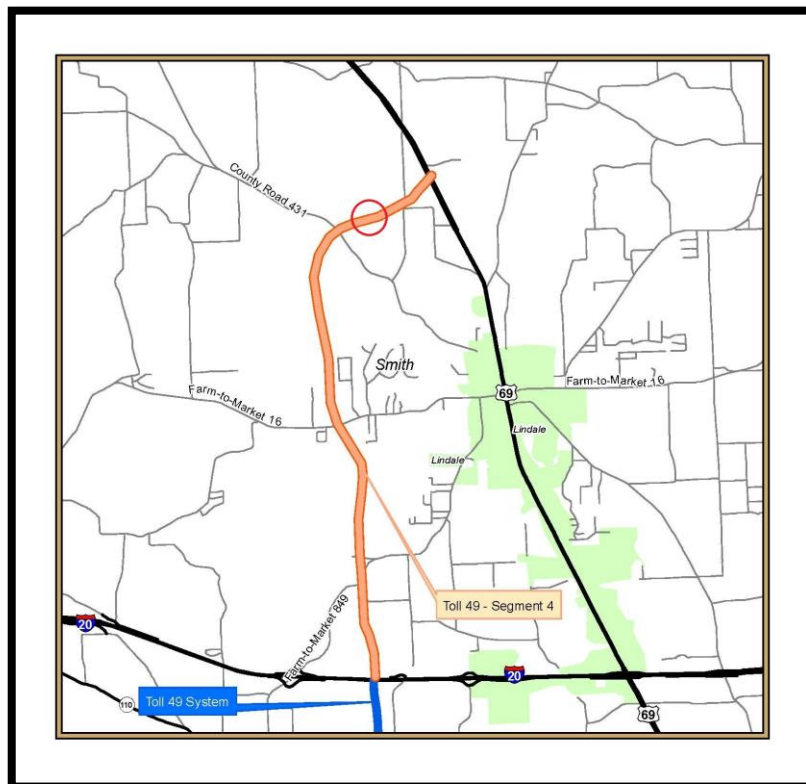




FIGURE 17: PROJECT AREA AT CR 4118

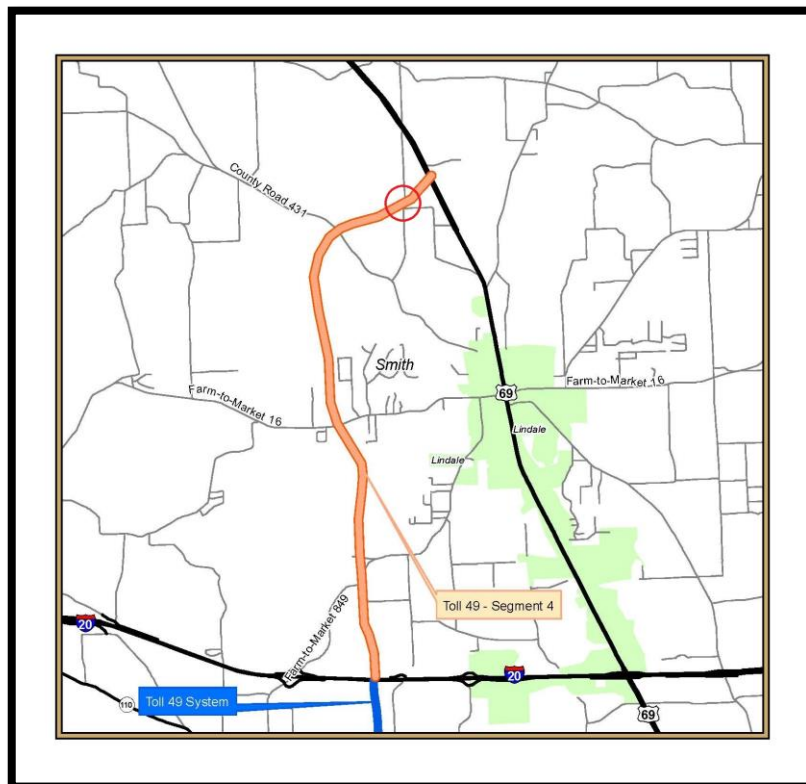




FIGURE 18: PROJECT AREA AT US 69

