# *TOLL 49 SEGMENT 4 PROGRESS REPORT*



# OCTOBER 2016 PROGRESS REPORT NO. 4







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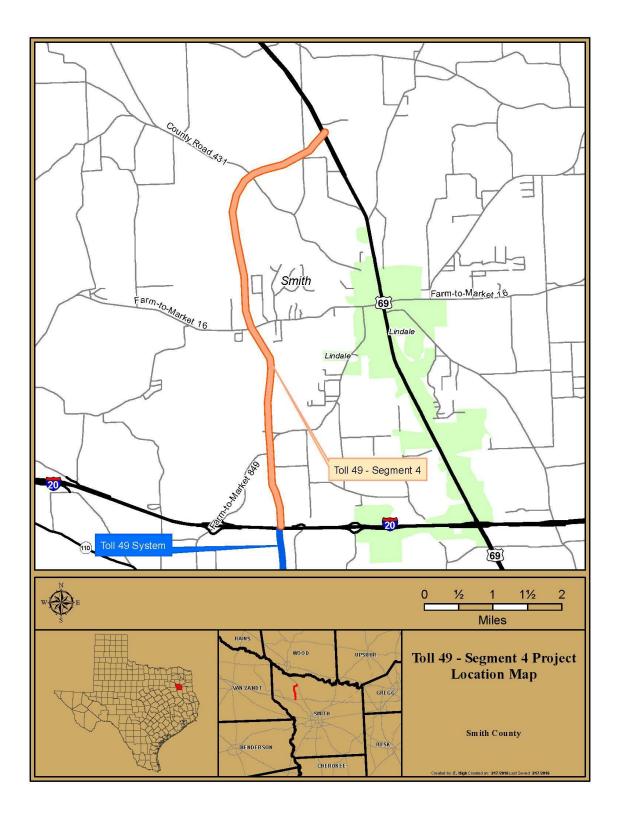
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# 1.1 INTRODUCTION

This report documents and describes the development and construction of the Toll 49 Segment 4 Project during the period from September 3, 2016 to October 4, 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.



### 1.3 DEVELOPMENT ACTIVITIES

In September, the Authority continued to make progress in right-of-way and acquisition by obtaining a Warranty Deed through a real estate closing for parcel 242. The Authority anticipates taking possession of the final project parcel by the end of October by obtaining the Warranty Deed through a real estate closing.

		Estimated Acquisition	
Parcel	Acreage	Date	Status
202	3.93	NTP	Closed
203	1.44	Acquired	Closed
204	0.73	NTP + 75 Days	Closed
			PUA executed
205	0.52	NTP	Parcel is accessible to Contractor
206	2.42	NTP	Closed
207	0.40	NTP	Closed
208	7.03	NTP + 75 Days	Closed
			The Authority has taken possession
209	12.47	15-Jul-16	Parcel is accessible to Contractor
			PUA executed
210	0.84	15-Jul-16	Parcel is accessible to Contractor
			The Authority has taken possession
213	39.13	NTP	Parcel is accessible to Contractor
214	9.95	NTP	Closed
			The Authority has taken possession
215	36.64	NTP	Parcel is accessible to Contractor
			The Authority has taken possession
216	28.31	NTP	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
			PUA executed
221	5.69	NTP + 30 Days	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
			PUA executed
226	11.63	NTP + 30 Days	Parcel is accessible to Contractor
227	3.18	NTP + 60 Days	Closed
229	22.23	NTP + 60 Days	Closed

#### TABLE 1: RIGHT-OF-WAY PARCEL STATUS

		Estimated Acquisition	
Parcel	Acreage	Date	Status
230	3.22	NTP + 60 Days	Projected late October 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
			The Authority has taken possession
238	22.66	NTP + 60 Days	Parcel is accessible to Contractor
			The Authority has taken possession
239	1.04	NTP + 60 Days	Parcel is accessible to Contractor
			The Authority has taken possession
240	13.39	NTP + 60 Days	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
			The Authority has taken possession
247	0.07	NTP + 60 Days	Parcel is accessible to Contractor

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 nine of the eleven privately owned utilities impacted by the Segment 4 Project and has issued NTP for the relocation of these facilities. The Authority anticipates executing relocation agreements with the two remaining utilities by the end of October and anticipates completing most private utility relocations within the timeframes specified in the Segment 4 Contract.

Due to coordination timeframes for the Authority to sell ROW easements to Oncor Electric Delivery, the Oncor transmission lines and the East Texas Electric utilities will likely not be relocated by the November 1<sup>st</sup> and January 1<sup>st</sup> dates, respectively, as specified in the Contract. Completion of the Gulf South relocation is projected to be complete in January. It is not anticipated that these relocations will impact the Project critical path.

#### TABLE 2: UTILITY RELOCATION STATUS

	Estimated Relocation	
Utility Company	Completion Date	Status
		Utility agreement executed 3-29-2016
		Relocation NTP issued 6-24-2016
AT&T (SBC)	NTP +120	Relocation is ongoing
		Utility agreement executed 3-22-2016
		Relocation NTP issued 6-24-2016
CenterPoint Energy	NTP+120	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		Utility agreement executed 1-21-2016
Cooperative	1-Jan-17	Relocation NTP issued 6-24-2016
Enbridge	No conflict	No conflict identified, no relocation
		Pre-agreement executed
Gulf South	NTP+90	Full utility agreement anticipated in October
Lindale Rural WSC	N/A	Webber to relocate as part of construction
	Relocation will begin 2	Utility agreement executed 8-18-2016
MHM Pipeline	weeks after clearing	Relocation NTP issued 8-19-2016
		Utility agreement executed 5-4-2016
Oncor Electric Delivery		Relocation NTP issued 6-24-2016
(Distribution)	NTP + 90 to 120 Days	Relocation is ongoing
Oncor Electric Delivery		Utility agreement executed 3-24-2016
(Transmission)	1-Nov-16	Relocation NTP issued 6-24-2016
		Utility agreement executed 1-20-2016
Peoples Telephone		Relocation NTP issued 6-24-2016
Cooperative	NTP + 0 to 60 Days	Relocation is ongoing
SuddenLink	NTP + 150 Days	Utility agreement anticipated in October
		Utility agreement executed 2-8-2016
		Relocation NTP issued 6-24-2016
Wood County Electric	NTP +110 Days	Relocation is complete
Zayo	NTP +150 Days	Utility agreement anticipated in October

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 has enlisted the services of Hicks & Company to perform data recovery and mitigation at the site. Field work commenced in early September and is projected to complete mid-October. Upone completion of this field work, the Texas Department of Transportation will perform a site

visit and advise on any additional mitigation measures that may be needed. The Contractor has been advised to avoid impacts to this site until investigation is complete.

# 1.4 PROGRESS PHOTOS

#### 1.4.1 Pipe Underdrain

The Contractor completed the installation of underdrains and added sod to the affected areas south of IH 20 along Toll 49 Segment 3B, reaching Milestone 1A in the contract in early September.



Sod over underdrain installation south of IH 20 (southbound side facing north)



Sod over underdrain installation south of IH 20 (southbound side facing south)

#### 1.4.2 Drainage Structures

The Contractor has begun construction of drainage structures including culverts No. 8-12 between CR 431 and FM 16.



Culvert #11 footing construction (north of FM 16)



Culvert #11 wingwall installation (north of FM 16)

#### 1.4.3 Earthwork

The Contractor continues clearing and grubbing activities at both ends of the project (progressing to the center of the project at FM 16). To date, the Contractor has cleared the areas from US 69 to FM 16 and from IH 20 to south of FM 849.



Clearing and grubbing (controlled burn north of FM 16)



Excavation hauling north of FM 16

#### 1.4.4 Erosion Controls

The Contractor continues placing erosion control measures as clearing and grubbing progresses, including installation of silt fence and rock filter dams.



Rock filter dam at proposed culvert No. 8 location south of Stevenson Branch



Silt fence at culvert No. 9 between Stevenson Branch and FM 16

#### 1.4.5 Bridge Structures

The Contractor has begun substructure work on the CR 431 bridges and continues work at the IH 20 bridges including installation of drilled shafts, columns, and the placement of mass footings.



Drilled shaft work at IH 20 overpass (Abutment No. 17)

## 1.5 PROGRESS NARRATIVE



Bridge columns at CR 431 overpass (Abutment No. 10)

As noted in the progress photos above, the Contractor completed the installation of underdrains south of IH 20 in September, reaching the contract Milestone 1A. Clearing and grubbing activities are nearly complete from US 69 to FM 16 (excluding the area affected by the archeological study) and continue from IH 20 towards FM 849 and along with the placement of environmental controls. Excavation activities also continue between US 69 and CR 4118 and embankment work has begun north of FM 16. Drill shaft, column, and mass footing placement continues at IH 20 and has begun at the CR 431 bridges. Installation of drainage structures has begun including Culverts No. 8-12. Table 3 below reflects construction progress based on the Contractor's schedule of values and approved construction draws.

Construction Activity	Percent Complete
Mobilization	75.00%
Traffic Control	16.22%
Earthwork	16.20%
Drainage	4.72%
Sub-base and Base Course	0%
Pavement	0%
Structures	4.00%
Pavement Markings and Signals	5.58%
Environmental	4.50%
Extra Work Items	15.36%

#### TABLE 3: CONSTRUCTION PROGRESS

#### 1.6 FINANCIAL SUMMARY

Table 4 shows the overall financial status for the Toll 49 Segment 4 project through September 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	Original Cost	Expenditures to	Estimated Remaining	Estimate at
Description	Estimate (\$)	Date (\$)	Cost (\$)	Completion (\$)
Toll 49 Segment 4	\$126,220,000	\$23,373,900.93	\$102,846,099.07	\$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: Authorized Changes (Change Order and/or Amendments):	\$68,760,000
Change Order $#1^1$	\$0.00
Current Authorized Contract Amount:	\$68,760,000
Previous total of Contractor Payments:	\$4,105,655.36
Amount Paid this Reporting Period:	\$4,859,884.53
Total Amount Paid To-Date:	\$8,965,539.89
Retainage withheld:	\$0.00
Approved Amount for work completed (through Draw #2):	\$8,965,539.89
Amount remaining for work to be completed:	\$59,794,460.11
Total Percent of Budget Expended though October 4, 2016:	13.04%
Footnotes: 1. Change Order number 1 did not result in a change in price	

#### 1.7.1 Summary of Change Orders This Reporting Period

There were no change orders executed during this reporting period.

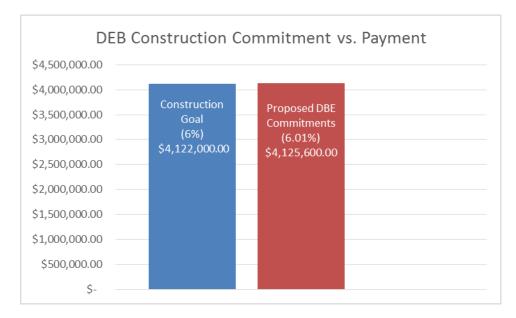
## 1.8 DBE STATUS

The Contractor is required to meet the Disadvantage Business Enterprise (DBE) goal of 6% for the Segment 4 Project. The Contractor's proposed commitment to date is 6.01%. 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).

The Contractor has proposed costs associated with DBE development work in the amount of \$4,125,600.00 which equals 6.01% to date of the original contract value. This amount slightly exceeds the contractual DBE goal of 6%.

The Contractor has not made any payments to DBE subcontractors to date.

#### 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:
  - o 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
  - o Protection of wetlands, watercourses (streams), and riparian areas

- Air quality management
- o 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.
- » 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.

APPENDIX A: AERIAL PHOTOGRAPHS (OCTOBER 2016)



FIGURE 4: PROJECT AREA AT IH 20

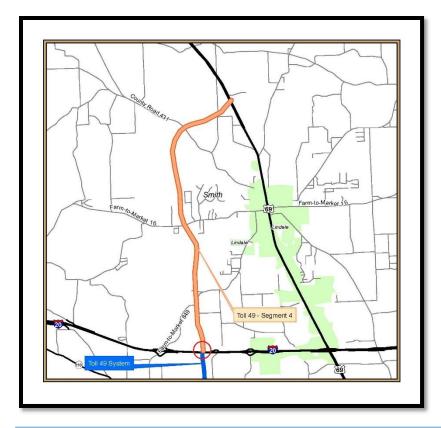




FIGURE 5: PROJECT AREA BETWEEN IH 20 AND FM 849

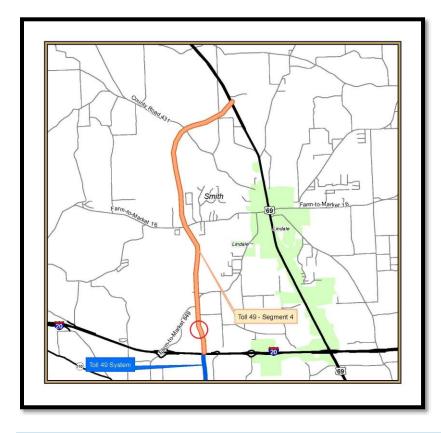




FIGURE 6: PROJECT AREA AT EXISTING FM 849

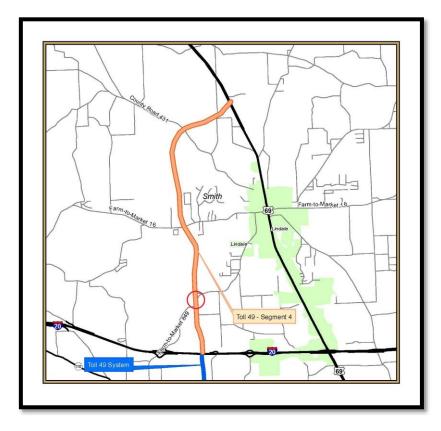




FIGURE 7: PROJECT AREA NORTH OF FM 849

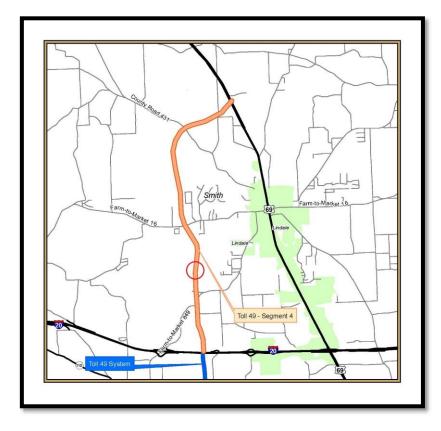




FIGURE 8: PROJECT AREA DAVIS BRANCH TRIBUTARY

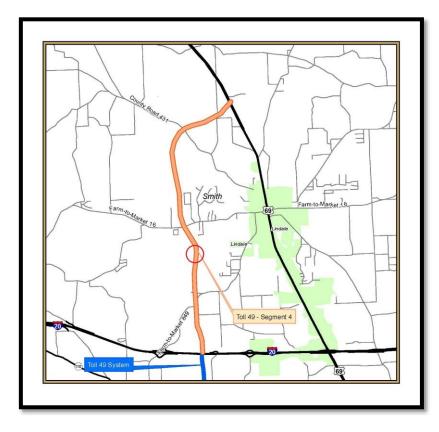




FIGURE 9: PROJECT AREA BETWEEN DAVIS BRANCH AND FM 16

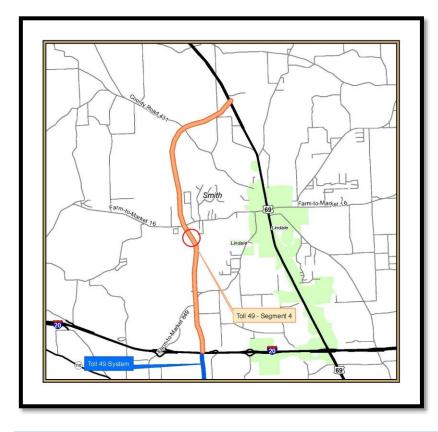




FIGURE 10: PROJECT AREA AT FM 16

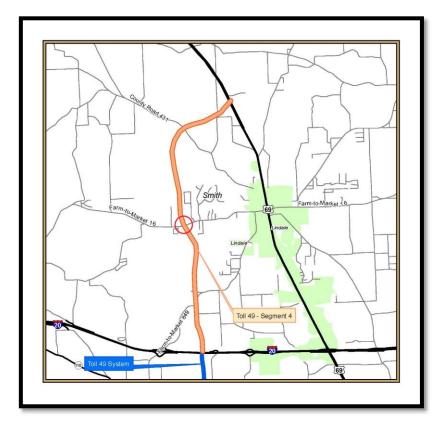




FIGURE 11: QUARRIES NORTH OF FM 16

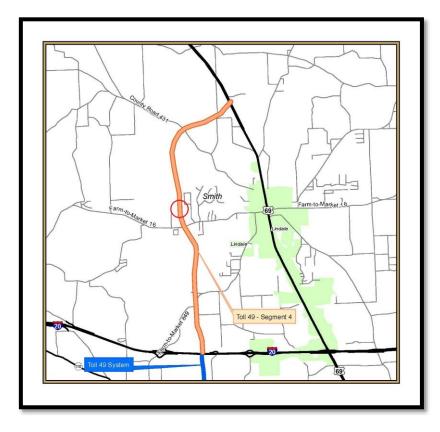




FIGURE 12: PROJECT AREA NORTH OF THE FM 16 QUARRIES





FIGURE 13: PROJECT AREA BETWEEN FM 16 AND CR 341

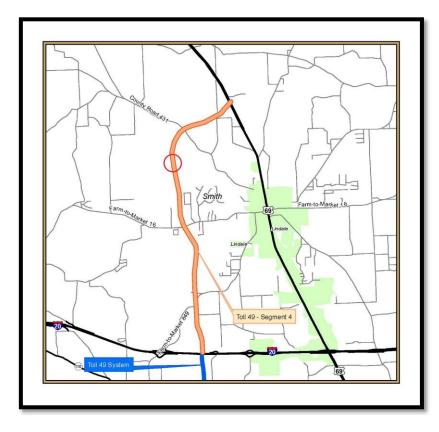




FIGURE 14: PROJECT AREA SOUTH OF CR 431

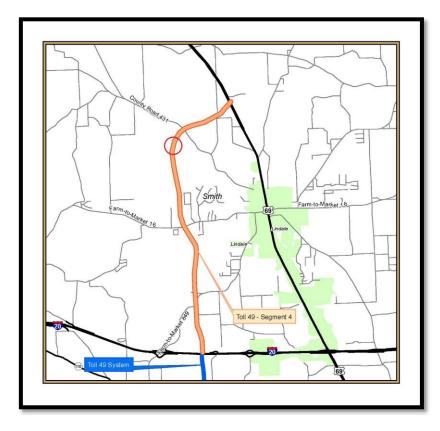




FIGURE 15: PROJECT AREA AT CR 431

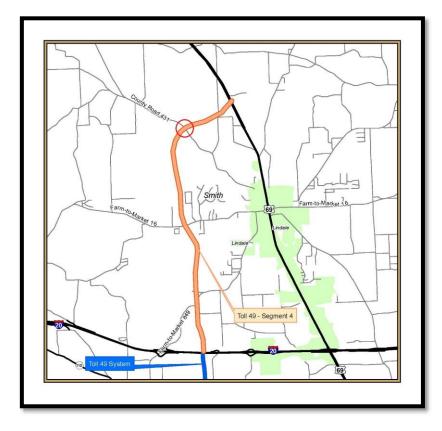




FIGURE 16: PROJECT AREA NORTH OF CR 431

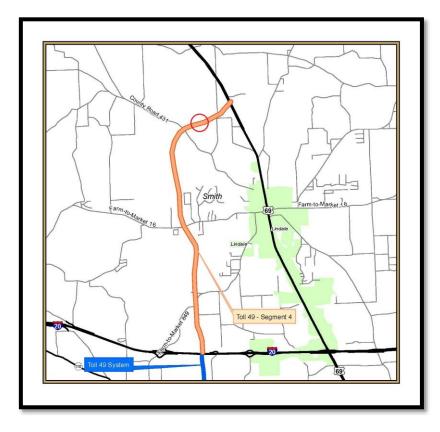




FIGURE 17: PROJECT AREA AT CR 4118

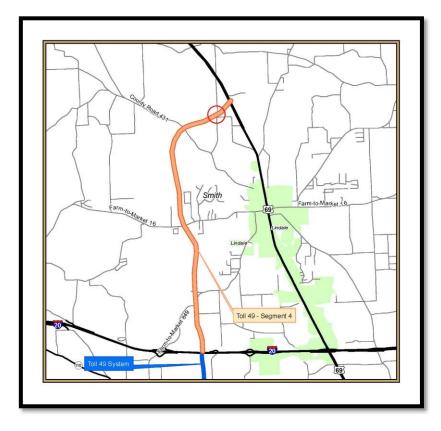




FIGURE 18: PROJECT AREA AT US 69

