TOLL 49 SEGMENT 4
PROGRESS REPORT



APRIL 2017
PROGRESS REPORT NO. 10







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TABLE OF CONTENTS

1.1	Introduction	1
1.2	IntroductionProject Description	1
1.3	Development Activities	3
1.3.1	Right-of-Way	3
1.3.2		
1.3.3	Archeological Survey	5
1.4	Progress Photos	6
1.4.1	Earthwork	6
1.4.2	Drainage Structures	6
1.4.3	Bridge & Wall Structures	7
1.4.4	Erosion Control	8
1.5	Progress Narrative	8
1.6	Financial Summary	. 10
1.6.1	Project Cash Flow Curve – Baseline	. 10
1.7	Construction Financial Status	. 11
1.7.1	Summary of Change Orders This Reporting Period	. 11
1.8	DBE Status	. 11
1.9	Comprehensive Environmental Protection Program	. 12

LIST OF TABLES

Table 1: Right-Of-Way Parcel Status	3
Table 2: Utility Relocation Status	5
Table 3: Construction Progress	9
Table 4: Financial Status Summary	10
LIST OF FIGURES	
Figure 1: Project Location Map	2
Figure 2: Project Cash Flow Curve - Baseline	
Figure 3: DBE Status	12
Figure 4: PROJECT AREA south of IH 20	16
Figure 5: PROJECT AREA AT IH 20	17
Figure 6: PROJECT AREA BETWEEN IH 20 AND FM 849	18
Figure 7: PROJECT AREA AT EXISTING FM 849	
Figure 8: PROJECT AREA North OF FM 849	
Figure 9: PROJECT AREA DAVIS BRANCH TRIBUTARY	21
Figure 10: PROJECT AREA BETWEEN DAVIS BRANCH AND FM 16	
Figure 11: PROJECT AREA AT FM 16	
Figure 12: QUARRIES NORTH OF FM 16	
Figure 13: PROJECT AREA NORTH OF THE FM 16 QUARRIES	
Figure 14: PROJECT AREA BETWEEN FM 16 AND CR 341	
Figure 15: PROJECT AREA SOUTH OF CR 431	
Figure 16: PROJECT AREA AT CR 431	
Figure 17: PROJECT AREA NORTH OF CR 431	
Figure 18: PROJECT AREA AT CR 4118	
Figure 19: PROJECT AREA AT US 69	31

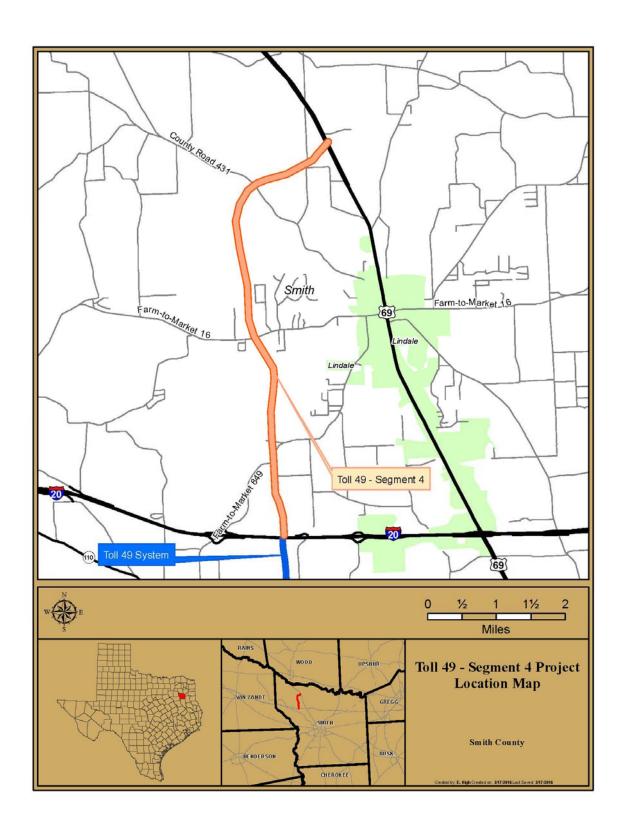
1.1 INTRODUCTION

This report documents and describes the development and construction of the Toll 49 Segment 4 Project during the period from March 1, 2017 through April 1, 2017. 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, all forty-two project parcels. There are two remaining parcels for which Possession and Use Agreements (PUAs) have been executed and are anticipated to close at a later date.

TABLE 1: RIGHT-OF-WAY PARCEL STATUS

		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
210	0.84	15-Jul-16	Closed
			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
226	11.63	NTP + 30 Days	Closed
227	3.18	NTP + 60 Days	Closed
229	22.23	NTP + 60 Days	Closed
230	3.22	NTP + 60 Days	Closed

		Estimated Acquisition	
Parcel	Acreage	Date	Status
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

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 April.

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

	Estimated Relocation	
Utility Company	Completion Date	Status
AT&T (SBC)	NTP+120	Relocation is complete
CenterPoint Energy	NTP+120	Relocation is complete
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
		Full utility agreement executed 12-11-2016
Gulf South	NTP+90	NTP anticipated May 2017
Lindale Rural WSC	N/A	Webber to relocate as part of construction
	Relocation will begin 2	
MHM Pipeline	weeks after clearing	Relocation is complete
		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
Peoples Telephone		
Cooperative	NTP + 0 to 60 Days	Relocation is complete
SuddenLink	NTP + 150 Days	Relocation is complete
Wood County Electric	NTP +110 Days	Relocation is complete
Zayo	NTP +150 Days	Utility agreement anticipated in April

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 months of December and January. The Contractor has recently gained expanded access to the right-of-way and the earthwork subcontractor remobilized in late January. In an effort to further expand access, the NET RMA is working with TxDOT to allow the clearing of a construction haul road near the archeological site that will allow the Contractor to transport earth and construction equipment along the Project ROW. The Contractor's most recent schedule reflects a delay of approximately four months to the completion of the project, and the Contractor has submitted a time impact analysis related to delays associated with the archeological studies. The NET RMA is reviewing the time impact documentation to identify potential measures to accelerate the completion of the project.

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 site, to which the Contractor has limited access. Embankment and excavation activities are ongoing from the southern limits of the archeological site down to FM 16.



Compaction near Stevenson Branch



Excavation between Stevenson Branch and FM 16

1.4.2 Drainage Structures

The Contractor has completed construction of drainage structures major cross culverts No. 5, 7-12 and 14-15. Construction of other various minor culverts, stormdrain, and concrete riprap across the project is ongoing.



Drop intel at Culvert No. 15 near Davis
Branch Tributary



Concrete riprap construction near future cross
Culvert No. 16 south of FM 849

1.4.3 Bridge & Wall Structures

The Contractor continues bridge work including installation of drilled shafts, columns, caps, beams, metal decking, and abutments at numerous bridge locations across the project. In addition, construction of all Mechanically Stabilized Earth (MSE) walls is complete and the construction of cast-in-place (CIP) walls is ongoing.



Bridge beams and silt fence at Davis
Branch Tributary bridge



Metal decking and paneling at the FM 849 bridge



Deck panels at the IH 20 main lane overpass bridge



Cast-in-place retaining wall #5 at IH 20 northbound ramp overpass

1.4.4 Erosion Control

The Contractor continues to place environmental controls such as silt fence, soil retention blankets, and rock filter dams as needed throughout the project to prevent erosion. Seeding continues north and south of FM 16 where backslopes are complete.



Soil retention blankets near future cross culvert No. 16 south of FM 849



Rock filter dam at cross culvert No. 12 just south of FM 16

1.4.5 Lighting & Signals

The Contractor continues signal and roadway lighting work near US 69 south toward FM 849, and beginning work on the toll gantry foundations south of FM 16.



Light pole installation along just south of US 69



Signal pole installation at intersection with US 69

1.5 PROGRESS NARRATIVE

Clearing and grubbing activities are complete excluding the area affected by the archeological study. Excavation and embankment work continues from the southern edge of the archeological site down to FM 16. Topsoil, compost, and seeding continues on backslope areas north and south of FM 16. The Contractor continues placement of erosion control items including silt fence, rock filter dams, erosion control blankets and temporary seed as needed to prevent erosion.

Drilled shaft work and construction of bridge columns is ongoing at FM 16 and complete at all other bridge locations on the project. Footing placement is complete. Cap construction is ongoing at the CR 431, IH 20 Northbound Ramp, FM 16, CR 4118, and the north side of the IH 20 Main Lane bridge and complete at all other bridge locations on the Project. The Contractor also completed the placement of bridge beams for the Davis Branch Tributary bridge and the southern half of the IH 20 Main Lane bridge. The Contractor has begun placing the forms for the bridge deck at these two locations and for FM 849 and anticipates beginning pouring bridge deck in the month of April.

All MSE wall construction is complete on the project. Work on cast-in-place (CIP) retaining walls is complete with the exception of Retaining Wall No. 4. The Contractor continues signal and roadway lighting work adding signal heads at US 69, continuing foundation installation south down toward FM 849, and beginning work on the toll gantry foundations south of FM 16. The Contractor is also nearly done relocating the City of Lindale utility at FM 16.

Installation of major cross Culverts No. 5, 7-12 and 14-15 is complete and installation of stormdrain and water line is ongoing near FM 849 and FM 16 and north of CR 431. The construction of the remaining major cross culverts south of FM 849 will continue as stream mitigation is secured. The Contractor continues placing concrete riprap along the ROW in areas just north and south of FM 16 and north of IH 20.

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	46.78%
Earthwork	57.97%
Drainage	31.00%
Sub-base and Base Course	5.56%
Pavement	0%
Structures	44.22%
Pavement Markings and Signals	12.79%
Environmental	21.48%
Extra Work Items	26.57%
Change Orders	48.80%

1.6 FINANCIAL SUMMARY

Table 4 shows the overall financial status for the Toll 49 Segment 4 project through April 7, 2017. 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.

Project **Original Cost** Expenditures to **Estimated** Estimate at Completion (\$) Description Remaining Cost (\$) Estimate (\$) Date (\$) Toll 49 \$126,220,000 \$43,029,722.33 \$81,190,277.67 \$126,220,000 Segment 4

TABLE 4: FINANCIAL STATUS SUMMARY

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.

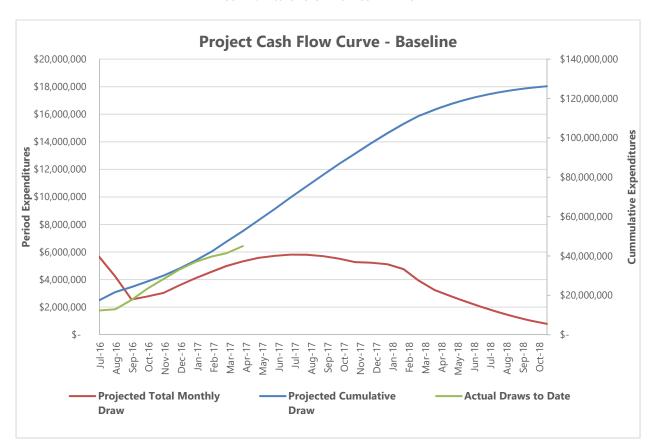


FIGURE 2: PROJECT CASH FLOW CURVE - BASELINE

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 No. 1 ¹	\$0.00
Change Order No. 2	\$26,247.38
Change Order No. 3	\$17,257.93
Change Order No. 4	\$156,926.00
Change Order No. 5	\$100,000.00
Current Authorized Contract Amount:	\$69,060,431.31
Current Additionable Contract Amount.	φου,σου,-υ 1.υ 1
Previous total of Contractor Payments:	\$24,855,471.61
Amount Paid this Reporting Period:	\$2,587,105.40
Total Amount Paid To-Date:	\$27,422,577.01
Retainage withheld:	\$0.00
Approved Amount for work completed (through Draw No. 8):	\$27,422,577.01
Amount remaining for work to be completed:	\$41,637,854.30
Total Percent of Budget Expended though April 7, 2017:	39.71%

Footnotes:

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

1.7.1 Summary of Change Orders This Reporting Period

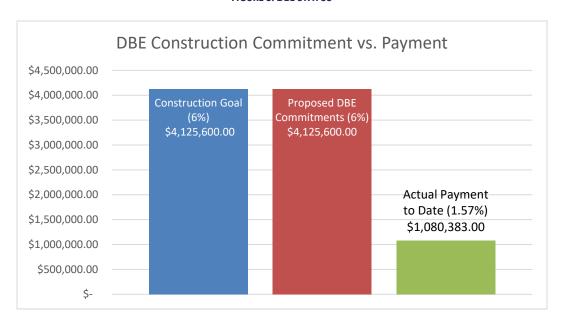
Change Order No. 5 was executed during this reporting period, increasing the contract amount by \$100,000.00. The change order included various erosion control items.

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% of the original contract value. This represents approved subcontracts with the following firms: Rambo Contracting INC (culverts, inlets, headwalls, and wing walls), Texas Environmental Management (stormwater pollution prevent plans and erosion control), MCL Contracting (rebar tying), Buyers Barricade (advanced warning signs), and South Texas Painting (painting) along with an anticipated subcontract with Odum Services LP (metal beam guard fence and guard rail).

To date, the Contractor has made payments in the amount of \$1,080,383.00 to DBE subcontractors, 1.57% of the original contract amount or 26.2% 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
 - o 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
 - o Preparation for seasonal shutdown
 - Protection of wildlife and wildlife habitat
 - o Proper practices for clearing vegetation
 - Appropriate handling and storage of soil
 - o Protection of wetlands, watercourses (streams), and riparian areas

- Air quality management
- Proper handling and storage of petroleum, oil, lubricant, and other chemicals
- o Management of waste
- o Constructing, operating, and reclaiming borrow excavations
- o Operating concrete batch plants
- o Well impacts and requirements
- o Recycling program
- » Monitoring and Inspection efforts consist of:
 - Self-Regulatory inspection program
 - o Construction Monitoring
 - o Post construction monitoring
- Energy Conservation measures including the following:
 - o Reusing and recycling of construction materials
 - Maximizing the use of local materials to reduce hauling
 - Carpooling of workers to and from the jobsite
 - o Regular maintenance of equipment to ensure proper working order
 - o 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
 - o Maintenance of traffic control plan that minimizes lengthy detours or delays for motorists.
- The Environmental Protection Training Plan educates non-administrative employees to:
 - o Recognize the overall importance of environmental issues
 - o 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

In order to comply with TCEQ regulations and the stormwater pollution prevention plan, the NET RMA executed Change Orders No. 4 and 5 in the months of February and March, respectively, to include additional erosion control measures on the project. During the week of March 13th, the NET RMA suspended non-erosion control related work on the Project to focus on stormwater pollution prevention measures.

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.
- Continues to avoid impacts to streams south of FM 849 until mitigation is secured.

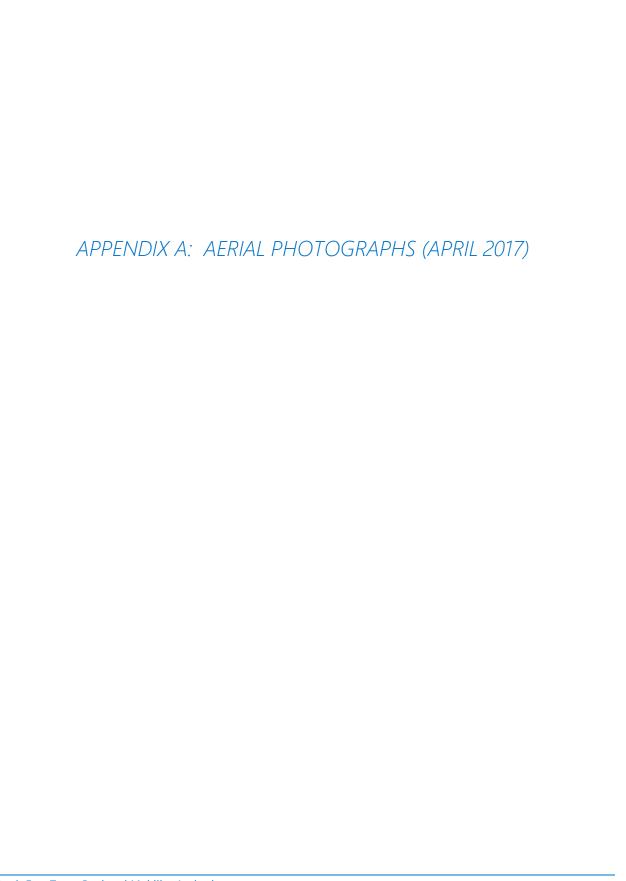




FIGURE 4: PROJECT AREA SOUTH OF IH 20

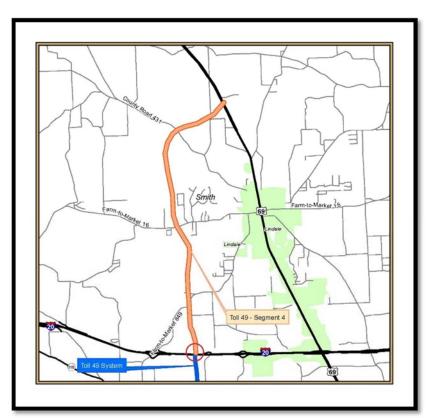




FIGURE 5: PROJECT AREA AT IH 20

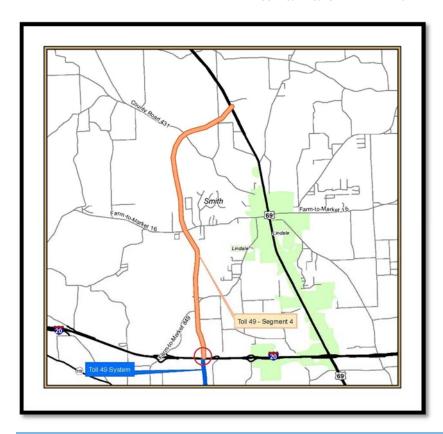




FIGURE 6: PROJECT AREA BETWEEN IH 20 AND FM 849





FIGURE 7: PROJECT AREA AT EXISTING FM 849

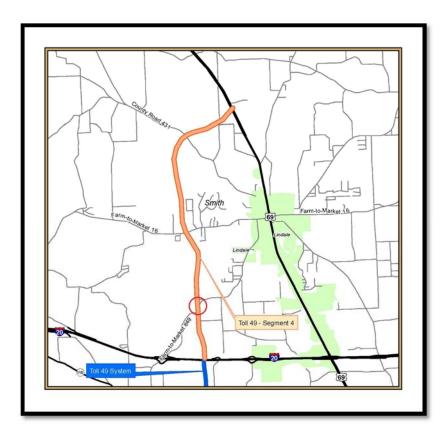




FIGURE 8: PROJECT AREA NORTH OF FM 849

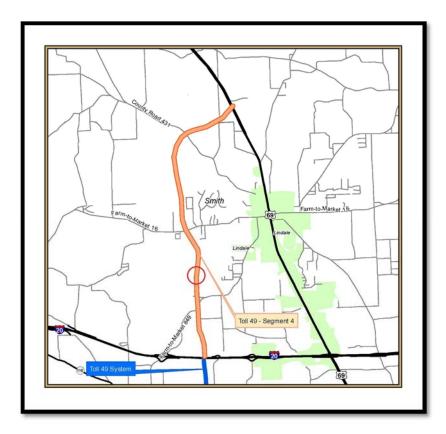




FIGURE 9: PROJECT AREA DAVIS BRANCH TRIBUTARY

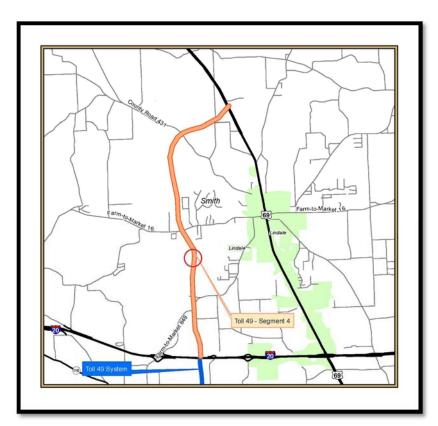




FIGURE 10: PROJECT AREA BETWEEN DAVIS BRANCH AND FM 16





FIGURE 11: PROJECT AREA AT FM 16

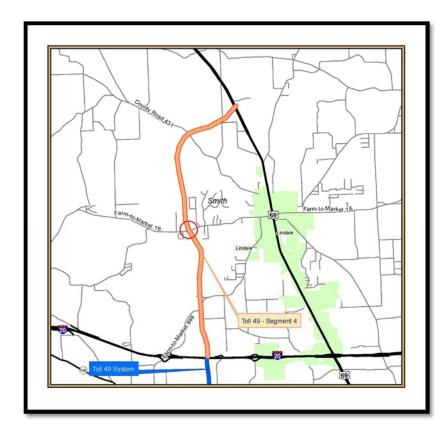




FIGURE 12: QUARRIES NORTH OF FM 16

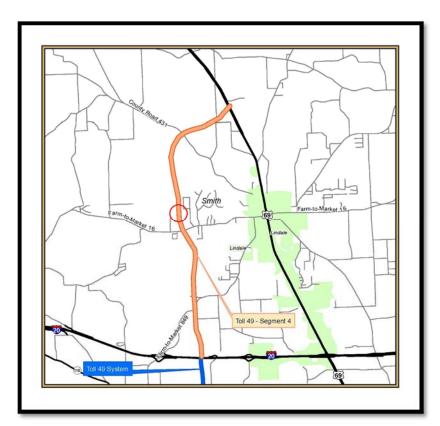




FIGURE 13: PROJECT AREA NORTH OF THE FM 16 QUARRIES

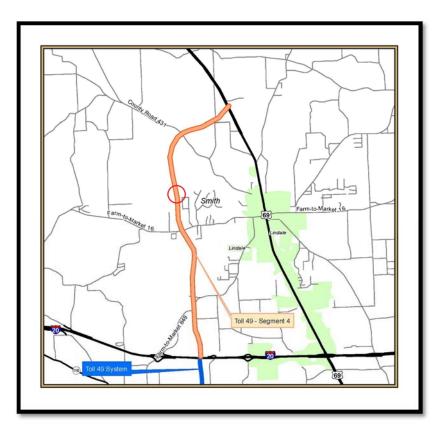




FIGURE 14: PROJECT AREA BETWEEN FM 16 AND CR 341





FIGURE 15: PROJECT AREA SOUTH OF CR 431





FIGURE 16: PROJECT AREA AT CR 431

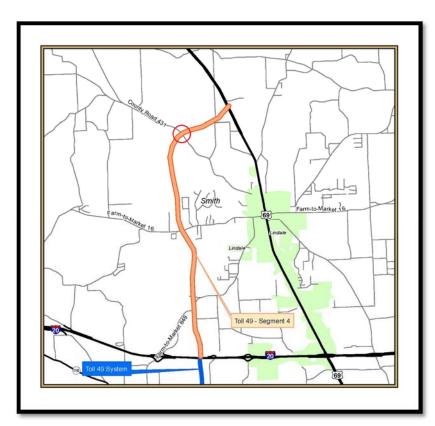




FIGURE 17: PROJECT AREA NORTH OF CR 431

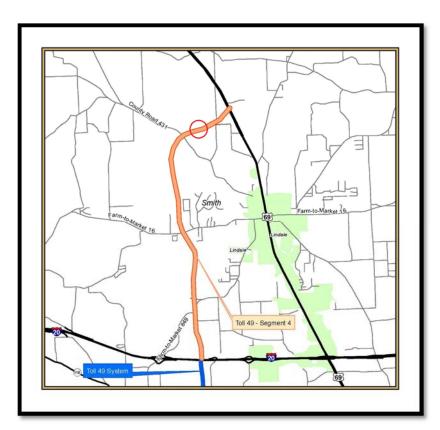




FIGURE 18: PROJECT AREA AT CR 4118





FIGURE 19: PROJECT AREA AT US 69

