Section 3H:

Moores Mill Road Corridor



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INTRODUCTION

This section documents the results of traffic operations evaluations for the Moores Mill Road Corridor from Samford Avenue to Hamilton Road/Ogletree Road in Auburn, Alabama. The intersections analyzed in this corridor include:

- Moores Mill Road at Samford Avenue
- Moores Mill Road at Dean Road
- Moores Mill Road at East University Drive
- Moores Mill Road at Grove Hill Road
- Moores Mill Road at Hamilton Road/Ogletree Road

The locations of the study intersections along the Moores Mill Road Corridor are illustrated in **Figure 1**. To accomplish the traffic operations evaluations for the Moores Mill Road Corridor, the following tasks were undertaken:

- existing peak hour turning movement counts were conducted for the study intersections;
- drive times were collected for the morning and afternoon commuter peak periods;
- capacity analyses were conducted for the study intersections;
- arterial capacity analyses were conducted for Moores Mill Road;
- current traffic operational deficiencies were identified;
- projections for ten (10) year growth in traffic through the corridor were developed; and
- geometric and traffic control improvements were developed for the study intersections to address traffic operational and safety deficiencies for existing and projected ten (10) year conditions.

Sources of information used in this section include: The City of Auburn, Alabama; the Institute of Transportation Engineers; American Association of State Highway and Transportation Officials; the Manual on Uniform Traffic Control Devices; the Transportation Research Board; and the files and field reconnaissance efforts of Skipper Consulting, Inc.



Figure 1 - Moores Mill Road Corridor and Study Intersections

BACKGROUND INFORMATION

Study Area Roadways

Moores Mill Road is a minor arterial roadway from Samford to Hamilton Avenue Road/Ogletree Road. From Samford Avenue southeast through the Interstate 85 bridge Moores Mill Road provides single family access to residential development. To the southeast of Interstate 85 to



Hamilton Road/Ogletree, Moores Mill Road provides access to larger residential areas and commercial and retail land uses. Moores Mill Road through the study area is approximately 2.4 miles in length. Characteristics of the roadways within the Moores Mill Road Corridor are summarized in **Table 1**.

TABLE 1 – CORRIDOR ROADWAY CHARACTERISTICS

	Roadway	Parking	# of Lanes	Travel Direction	Travel Speeds (mph)	Classification
	oores Mill Road Ave to Sherwood Dr)	None	2	North/South	25	Minor Arterial
	oores Mill Road ood Dr to Dean Rd)	None	2	North/South	35	Minor Arterial
	oores Mill Road d to E. University Dr)	None	4	East/West	35	Minor Arterial
1	oores Mill Road ity Dr to Stoneridge Dr)	None	5	East/West	35	Minor Arterial
	oores Mill Road Ige Dr to Hamilton Rd	None	3	East/West	45	Minor Arterial

Peak Hour Traffic Counts

Morning (7:00-9:00 am) and afternoon (4:00-6:00 pm) peak hour turning movement counts were conducted along the Moores Mill Road Corridor at study intersections in 2013, 2014, and 2018. Traffic count data utilized for the analyses of these intersections is summarized in **Figure 2**.

EXISTING CONDITIONS ANALYSES

Existing Intersection Capacity Analysis

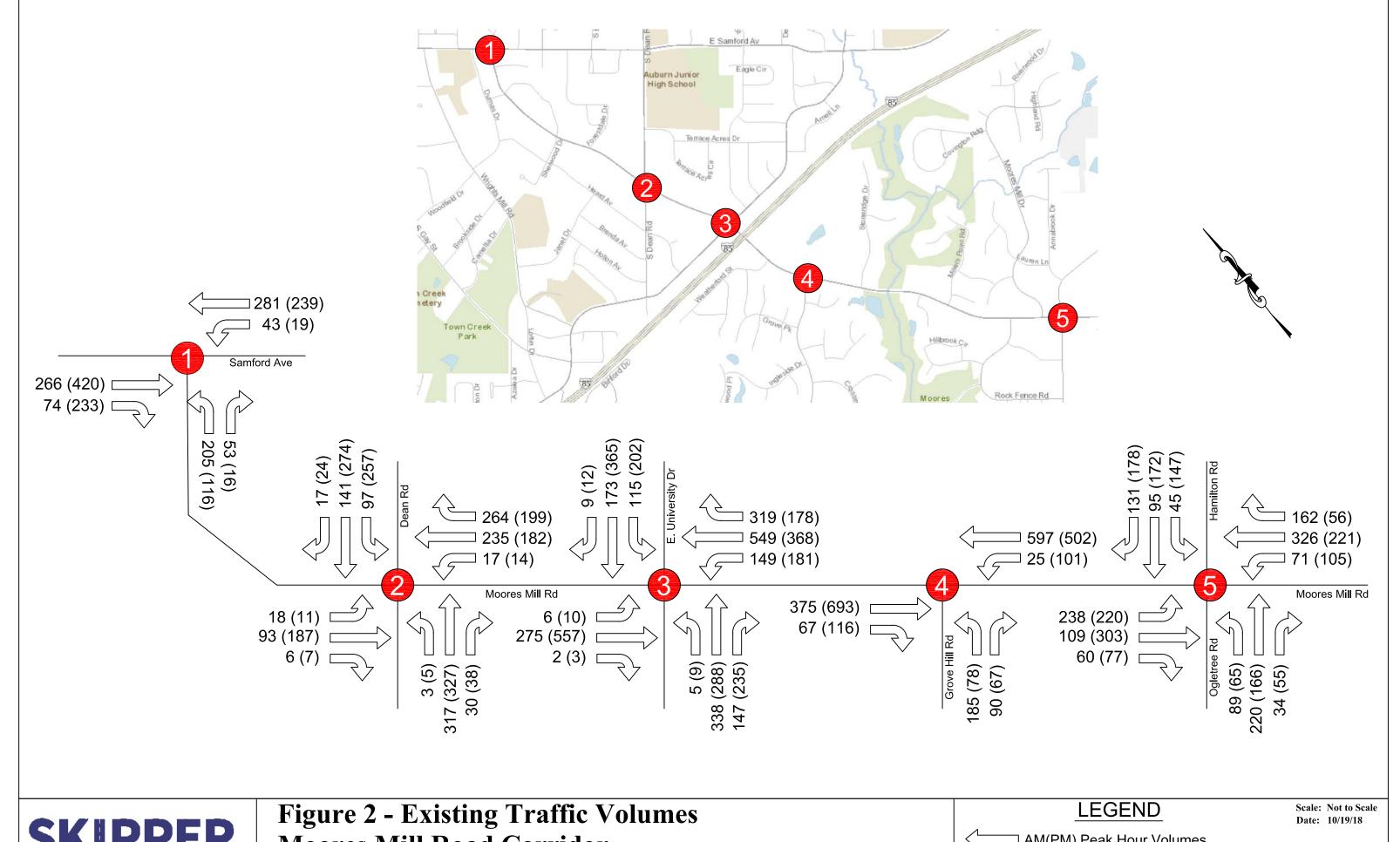
Capacity analyses for peak hour conditions at the study intersections along the Moores Mill Road Corridor were conducted for the morning and afternoon peak hour periods using methods outlined in the *Highway Capacity Manual*, 2010. According to methods of the *Highway Capacity Manual*, capacity is expressed as levels of service ranging from "A" (best) through "F" (worst). In general, a level of service "C" is considered desirable while a level of service "D" is considered acceptable during peak hour operations. Results of these capacity analyses for existing conditions are summarized in **Table 2**.

As shown in **Table 2**, the following intersections operate will all movements at acceptable levels of service:

- Samford Avenue at Moores Mill Road
- Dean Road at Moores Mill Road
- Moores Mill Road at Grove Hill Road
- Moores Mill Road at Hamilton Road/Ogletree Road

The following intersections and movements have deficient levels of service during the peak hours of traffic flow:

- East University Drive at Moores Mill Road
 - East University Drive northbound left (AM and PM LOS E)
 - East University Drive southbound left (PM LOS E)

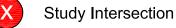




Moores Mill Road Corridor Auburn, Alabama



AM(PM) Peak Hour Volumes



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TABLE 2 - EXISTING INTERSECTION LEVELS OF SERVICE

		0.0000000000000000000000000000000000000	Level of Service		
Intersection (traffic control)	Approach	Movement/Lane	A.M.	P.M.	
(traffic control)		Group	Peak Hour	Peak Hour	
Samford Avenue	EB Samford Ave	Through-Right	А	Α	
at Moores Mill	WB Samford Ave	Left-Through	А	Α	
Road	NB Moores Mill Rd	Left-Right	С	С	
(traffic signal)	Overall LOS		В	Α	
	ED Magaza Mill Dd	Left	В	В	
	EB Moores Mill Rd	Through-Right	В	В	
		Left	В	В	
	WB Moores Mill Rd	Through	В	В	
Dean Road at		Right	Α	Α	
Moores Mill		Left	Α	А	
Road	NB Dean Rd	Through	В	С	
(traffic signal)		Right	Α	Α	
		Left	Α	Α	
	SB Dean Road	Through	В	В	
		Right	Α	В	
	Overall LOS	В	В		
	ED Magaza Mill Dd	Left	С	В	
	EB Moores Mill Rd	Through-Right	D	D	
		Left	С	D	
511	WB Moores Mill Rd	Through	С	В	
E University Dr		Right	С	С	
at Moores Mill Rd	NB E University Dr	Left	Е	Е	
(traffic signal)		Through	D	D	
(traffic signal)		Right	С	D	
	CD E University Dr	Left	D	Е	
	SB E University Dr	Through-Right	С	D	
	Overall LOS	С	D		
	ED Magaza Mill Dd	Through	А	Α	
	EB Moores Mill Rd	Right	А	А	
Moores Mill Rd	M/D Macarac Mill Dd	Left	А	Α	
at Grove Hill Rd	WB Moores Mill Rd	Through	А	А	
(traffic signal)	ND Crove Hill Dd	Left	D	D	
	NB Grove Hill Rd	Right	D	D	
	Overall LOS		В	В	
	ED Macana Mill D-l	Left	С	В	
	EB Moores Mill Rd	Through-Right	С	С	
		Left	В	В	
Moores Mill Rd	WB Moores Mill Rd	Through	С	С	
at		Right	С	С	
Hamilton Rd/	ND October - Dd	Left	В	В	
Ogletree Rd (traffic signal)	NB Ogletree Rd	Through-Right	С	С	
(traffic signal)	CD Hamilton D.I.	Left	С	В	
	SB Hamilton Rd	Through-Right	С	С	
	Overall LOS	С	С		

Existing Peak Hour Roadway Segment Capacity Analysis

Roadway segment capacity analyses for peak hour conditions along the Moores Mill Road Corridor are applicable for the section of Moores Mill Road west of Hamilton Road/Ogletree Road. Existing peak hour roadway segment capacity analyses were conducted for the morning and afternoon peak hour periods using methods outlined in the *Highway Capacity Manual, 2010*. Levels of service for the arterial analyses conducted for Moores Mill Road west of Hamilton Road/Ogletree Road are summarized in **Table 3**.

TABLE 3 – EXISTING PEAK HOUR ROADWAY SEGMENT LEVELS OF SERVICE

Moores Mill Road Arterial Analysis							
Fuere		Segment	gment Roadway LOS by Segn				
From	То	Length (miles)	AM Peak	PM Peak			
Stoneridge Dr	Hamilton Rd/ Ogletree Rd	0.74	С	С			

Existing Daily Roadway Segment Capacity Analysis

Roadway segment capacity analyses for daily traffic conditions along the Moores Mill Road Corridor were performed using the daily capacity and level of service chart obtained from the Alabama Department of Transportation. This chart is included in **Table 4**. Levels of service for the daily roadway segment capacity analyses conducted for Magnolia Avenue are summarized in **Table 5**.

TABLE 4 – DAILY CAPACITY AND LEVEL OF SERVICE CHART

F C	Number of	N	Maximum Daily Flow Rate Related to Level of Service							
Functional Classification	Lanes	А	В	С	D	E	F			
	4	23,800	34,000	42,160	51,000	68,000	>68,000			
Francisco	6	35,700	51,000	63,240	76,500	102,000	>102,000			
Freeway	8	47,600	68,000	84,320	102,000	136,000	>136,000			
	10	59,500	85,000	105,400	127,500	170,000	>170,000			
	4	17,500	25,000	31,000	37,500	50,000	>50,000			
Expressway	6	26,250	37,500	46,500	56,250	75,000	>75,000			
	8	35,000	50,000	62,000	75,000	100,000	>100,000			
	2	7,700	11,000	13,640	16,500	22,000	>22,000			
Artorial (Divided)	4	11,865	16,950	21,018	25,425	33,900	>33,900			
Arterial (Divided)	6	17,500	25,000	31,000	37,500	50,000	>50,000			
	8	25,760	36,800	45,632	55,200	73,600	>73,600			
	2	6,230	8,900	11,036	13,350	17,800	>17,800			
Arterial (Undivided)	4	10,850	15,500	19,220	23,250	31,000	>31,000			
Arteriai (Offalvidea)	6	16,030	22,900	28,396	34,350	45,800	>45,800			
	8	22,085	31,550	39,122	47,325	63,100	>63,100			
	2	7,280	10,400	12,896	15,600	20,800	>20,800			
Collector (Divided)	4	9,975	14,250	17,670	21,375	28,500	>28,500			
	6	14,700	21,000	26,040	31,500	42,000	>42,000			
	2	5,810	8,300	10,292	12,450	16,600	>16,600			
Collector (Undivided)	4	9,170	13,100	16,244	19,650	26,200	>26,200			
	6	13,545	19,350	23,994	29,025	38,700	>38,700			

Table 5 – EXISTING DAILY ROADWAY SEGMENT LEVELS OF SERVICE

	Moores Mill Road								
From	То	Segment Length (miles)	Cross Section	Daily Volume	Roadway LOS by Segment				
Samford Avenue	Sherwood Drive (N)	0.17	2 Lane	3,624	А				
Sherwood Drive (N)	Sherwood Drive (S)	0.24	2 Lane	3,651	А				
Dean Road	East University Drive	0.33	4 Lane Undivided	6,477	А				
East University Drive	Grove Hill Boulevard	0.33	4 Lane Divided	15,769	D				

Exiting Right-Turn Lane Warrant Evaluations

Existing peak hour traffic volumes were compared with the turn lane warrant criteria outlined in the National Cooperative Highway Research Program (NCHRP) Report 457 *Evaluating Intersection Improvements: An Engineering Study Guide*, published by the Transportation Research Board. For evaluation purposes, the posted speed limit was utilized for roadways. Evaluations were conducted for the following approaches:

- Samford Avenue eastbound at Moores Mill Road NOT WARRANTED
- Moores Mill Road eastbound at Dean Road NOT WARRANTED
- Moores Mill Road eastbound at East University Drive NOT WARRANTED
- East University Drive southbound at Moores Mill Road NOT WARRANTED
- Moores Mill Road eastbound at Hamilton Road/Ogletree Road NOT WARRANTED
- Hamilton Road southbound at Moores Mill Road NOT WARRANTED

Intersection Crash Evaluation

Skipper Consulting, Inc. performed a citywide crash study for intersections and roadway segments maintained by the City of Auburn. The results of this crash study have been documented in a separate bound report. The citywide crash study included the study intersections along Moores Mill Road. Screening procedures and crash analyses were conducted to determine any locations that are worthy of safety-based roadway improvements. The crash analysis indicated the following:

- Low Priority Intersections this indicates the crash experience should be considered when completing other roadway improvements at this location. However, the crash experience does not warrant an immediate safety improvement project.
 - Moores Mill Road at Grove Hill Road
- Moderate Priority Intersections this indicates the crash experience should be monitored in the near future and could be worthy of a safety-based roadway improvement if crash experience trends upward. This does not warrant a safety-based improvement at this time, but a safety-based improvement should be incorporated in any roadway improvement at this location.
 - o None
- High Priority Intersections this indicates that improvements are recommended for each location identified based upon the detailed crash evaluation.

o None

Travel Time

GPS-based Travel time runs were performed on Moores Mill Road from Samford Avenue to Hamilton Road/Ogletree Road on Thursday, April 26, 2018. Travel time runs were performed during the a.m., midday, and p.m. peak periods of traffic flow. Six runs were performed in each direction during each time period. The results of the travel time runs are shown in **Table 6**.

TABLE 6 – TRAVEL TIME RUNS

AM Peak			Midday Peak			PM Peak					
Start Time	Dir.	Elapsed Time	Avg. Speed	Start Time	Dir.	Elapsed Time	Avg. Speed	Start Time	Dir.	Elapsed Time	Avg. Speed
6:53	EB	5:04	28.4	11:16	WB	4:41	30.7	4:08	WB	4:13	34.1
7:00	WB	5:06	28.2	11:22	EB	5:20	26.9	4:15	EB	6:08	23.4
7:07	EB	4:46	30.1	11:29	WB	7:18	19.7	4:23	WB	4:44	30.4
7:14	WB	5:03	28.5	11:39	EB	5:46	24.9	4:29	EB	5:54	24.4
7:21	EB	5:28	26.3	11:46	WB	4:37	31.1	4:39	WB	5:03	28.5
7:30	WB	5:45	25.0	11:53	EB	4:18	33.4	4:46	EB	4:59	28.8
7:38	EB	5:01	28.6	12:04	WB	4:14	33.9	4:52	WB	4:24	32.7
7:45	WB	4:47	30.0	12:10	EB	5:03	28.5	4:59	EB	5;09	27.9
7:53	EB	5:49	24.7	12:17	WB	4:44	30.4	5:06	WB	4:48	29.9
8:01	WB	5:25	26.5	12:24	EB	4:46	30.1	5:12	EB	5:20	26.9
8:09	EB	4:47	30.0	12:31	WB	4:16	33.7	5:20	WB	4:47	30.0
8:16	WB	4:08	34.8	12:38	EB	5:52	24.5	5:26	EB	7:15	19.8

Observations

Observations of traffic flow on Moores Mill Road were performed during the a.m. and p.m. peak hours of traffic flow on Thursday, April 26, 2018. The purpose of the observations was to verify capacity deficiencies indicated by capacity analyses and determine other roadway improvements needed which are not indicated in the capacity analyses.

Observations indicate a significant queue of vehicles eastbound on Moores Mill Road approaching Hamilton Road/Ogletree Drive from 5:15 to 5:45 p.m. The maximum queue of vehicles was approximately 1,700 feet. This deficiency was not noted in the capacity analyses of the intersection. The added travel time to the eastbound Moores Mill Road corridor was approximately two minutes.



EXISTING CONDITIONS ANALYSES WITH IMPROVEMENTS

Recommended Improvements

Roadway and traffic control improvements have been developed to help address capacity deficiencies identified in the existing capacity analyses conducted or traffic operational issues observed during peak periods along the Moores Mill Road corridor. The following outlines the recommended improvements for existing conditions along Moores Mill Road.

Moores Mill Road at East University Drive

The intersection of Moores Mill Road at East University Drive has recently been improved as part of the project to replace the Moores Mill Road bridge over I-85. However, capacity analyses indicate that the improvements did not fully address capacity deficiencies at this intersection. There are two movements — the northbound and southbound left turns on East University Drive which currently operate at levels of service "E" during the p.m. peak hour and the northbound left turn operates at a level of service "E" during the a.m. peak hour as well. Signal timings have recently been optimized at this intersection, so no improvement in level of service can be anticipated with further signal retiming.

The northbound left turn movement during the a.m. peak hour is 6 vehicles and during the p.m. peak hour is 10 vehicles; therefore, no improvements are recommended to mitigate this level of service "E" due to limited benefit-to-cost ratio.

The southbound left turn is currently a dual left turn. There are no additional improvements possible to improve the level of service "E" experienced during the p.m. peak hour. Observations do not indicate that this movement experiences significant delay or queuing during the p.m. peak hour.

Moores Mill Road at Hamilton Road/Ogletree Road

Observations indicate that there is an excessive queue on Moores Mill Road eastbound during approximately 30 minutes during the p.m. peak period. It is recommended that a Max Green II timing pattern be implemented which adds five seconds to the eastbound through movement. When implemented, it should be observed and fine-tuned in the field.

PROJECTED TRAFFIC GROWTH

Growth rates were calculated for the study roadways based on historical traffic volumes and growth trends. The historical growth rates calculated for intersections on Moores Mill Road were as follows:

- Moores Mill Road at Samford Avenue: +1.4% per year
- All other intersections: +0.9% per year

The annual growth rate was applied for a ten (10) year period. Future traffic volumes are illustrated in **Figure 3**.

ANALYSES WITH PROJECTED TRAFFIC GROWTH

Analyses conducted for this scenario assumes projected traffic volumes for ten (10) years would be in place.

Intersection Capacity Analysis with Projected Traffic Growth

Capacity analyses for projected ten (10) year peak hour conditions were conducted for the study intersections along the Moores Mill Road Corridor using methods outlined in the *Highway Capacity Manual*, 2010. Results of these capacity analyses are summarized in **Table 7**.

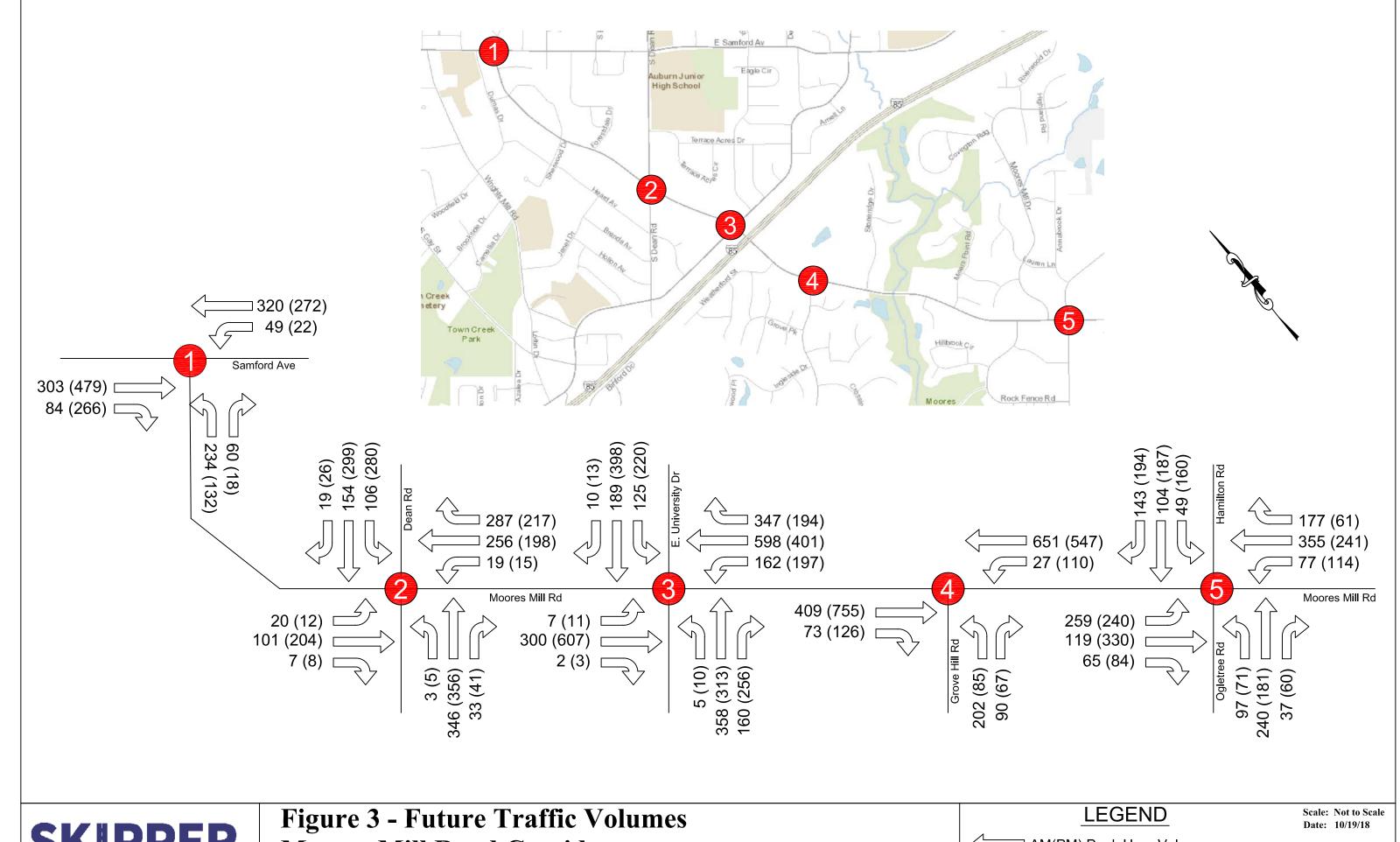




Figure 3 - Future Traffic Volumes Moores Mill Road Corridor Auburn, Alabama

AM(PM) Peak Hour Volumes



Study Intersection

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TABLE 7 -INTERSECTION LEVELS OF SERVICE WITH PROJECTED TRAFFIC GROWTH

Interpostion		Navamant/Lana	Level of Service		
Intersection (traffic control)	Approach	Movement/Lane	A.M.	P.M.	
(traffic control)		Group	Peak Hour	Peak Hour	
Samford Avenue	EB Samford Ave	Through-Right	Α	Α	
at Moores Mill	WB Samford Ave	Left-Through	Α	Α	
Road	NB Moores Mill Rd	Left-Right	С	С	
(traffic signal)	Overall LOS		В	Α	
	EB Moores Mill Rd	Left	В	В	
	LB WOOTES WITH Ru	Through-Right	В	В	
		Left	В	В	
	WB Moores Mill Rd	Through	С	В	
Dean Road at		Right	Α	Α	
Moores Mill		Left	Α	Α	
Road	NB Dean Rd	Through	С	С	
(traffic signal)		Right	Α	Α	
		Left	Α	В	
	SB Dean Road	Through	В	В	
		Right	Α	Α	
	Overall LOS		В	В	
	EB Moores Mill Rd	Left	С	С	
		Through-Right	D	Е	
	WB Moores Mill Rd	Left	С	Е	
E University Dr		Through	С	С	
at Moores Mill		Right	D	D	
Rd	NB E University Dr	Left	Е	Е	
(traffic signal)		Through	D	D	
(crame signal)		Right	С	D	
	SB E University Dr	Left	D	Е	
	<u> </u>	Through-Right	С	D	
	Overall LOS	D	D		
	EB Moores Mill Rd	Through	Α	Α	
	EB WOOTES WIIII NO	Right	Α	Α	
Moores Mill Rd	WB Moores Mill Rd	Left	Α	Α	
at Grove Hill Rd	VVB WIGOTES WIIII NG	Through	Α	Α	
(traffic signal)	NB Grove Hill Rd	Left	D	D	
		Right	D	D	
	Overall LOS		В	В	
	EB Moores Mill Rd	Left	С	В	
	ED MOOTES Will No	Through-Right	С	С	
Moores Mill Rd		Left	В	С	
at	WB Moores Mill Rd	Through	С	С	
Hamilton Rd/		Right	С	С	
Ogletree Rd	NB Ogletree Rd	Left	С	С	
(traffic signal)	ND OBJECTICE NO.	Through-Right	D	С	
(1. 2. 2. 10. 10. 1	SB Hamilton Rd	Left	В	В	
		Through-Right	С	D	
	Overall LOS		С	С	

As shown in **Table 7**, the following intersections are projected to continue to operate will all movements at acceptable levels of service:

- Samford Avenue at Moores Mill Road
- Dean Road at Moores Mill Road
- Moores Mill Road at Grove Hill Road
- Moores Mill Road at Hamilton Road/Ogletree Road

The following intersections and movements have deficient levels of service during the peak hours of traffic flow:

- East University Drive at Moores Mill Road
 - Moores Mill Road eastbound through-right (PM LOS E)
 - Moores Mill Road westbound left (PM LOS E)
 - o East University Drive northbound left (AM and PM LOS E)
 - o East University Drive southbound left (PM LOS E)

Peak Hour Roadway Segment Capacity Analysis with Projected Traffic Growth

Roadway segment capacity analyses for peak hour conditions on Moores Mill Road between Stoneridge Drive and Hamilton Road/Ogletree Road were conducted for the morning and afternoon peak hour periods using methods outlined in the *Highway Capacity Manual, 2010*. Levels of service for the roadway segment analyses conducted for this segment of Moores Mill Road are summarized in **Table 8**.

TABLE 8 – PEAK HOUR ROADWAY SEGMENT LEVELS OF SERVICE WITH PROJECTED TRAFFIC GROWTH

Moores Mill Road Arterial Analysis							
From:	To	Segment	Roadway LO	S by Segment			
From	То	Length (miles)	AM Peak	PM Peak			
Stoneridge Dr	Hamilton Rd/ Ogletree Rd	0.74	С	С			

Daily Roadway Segment Capacity Analysis with Projected Traffic Growth

Roadway segment capacity analyses for daily traffic conditions along the Moores Mill Road Corridor were performed using the daily capacity and level of service chart obtained from the Alabama Department of Transportation. Levels of service for the daily roadway segment capacity analyses conducted for Moores Mill Road are summarized in **Table 9**.

TABLE 9 – FUTURE DAILY ROADWAY SEGMENT LEVELS OF SERVICE

	Moores Mill Road								
From	То	Segment Length (miles)	Cross Section	Daily Volume	Roadway LOS by Segment				
Samford Avenue	Sherwood Drive (N)	0.17	2 Lane	4,131	А				
Sherwood Drive (N)	Sherwood Drive (S)	0.24	2 Lane	4,162	Α				
Dean Road	East University Drive	0.33	4 Lane Undivided	7,060	А				
East University Drive	Grove Hill Boulevard	0.33	4 Lane Divided	17,188	E				

Right-Turn Lane Warrant Evaluations with Projected Traffic Growth

Projected peak hour traffic volumes were compared with the turn lane warrant criteria outlined in the National Cooperative Highway Research Program (NCHRP) Report 457 *Evaluating Intersection Improvements: An Engineering Study Guide*, published by the Transportation Research Board. For evaluation purposes, the posted speed limit was utilized for roadways. Evaluations were conducted for the following approaches:

- Samford Avenue eastbound at Moores Mill Road NOT WARRANTED
- Moores Mill Road eastbound at Dean Road NOT WARRANTED
- Moores Mill Road eastbound at East University Drive NOT WARRANTED
- East University Drive southbound at Moores Mill Road NOT WARRANTED
- Moores Mill Road eastbound at Hamilton Road/Ogletree Road NOT WARRANTED
- Hamilton Road southbound at Moores Mill Road NOT WARRANTED

RECOMMENDED IMPROVEMENTS WITH PROJECTED TRAFFIC GROWTH

Based upon the analyses and evaluations conducted for the Moores Mill Road Corridor for projected ten (10) year conditions, recommendations are made to help improve traffic operations and to address capacity deficiencies identified at the intersection of East University Drive and Moores Mill Road. In order to correct projected deficiencies (with the exception of the northbound left turn from East University Drive to Moores Mill Road as noted previously) a second through lane would need to be constructed on Moores Mill Road eastbound. The proposed improvement is illustrated in **Figure 4**.

ANALYSES WITH RECOMMENDED IMPROVEMENTS & PROJECTED TRAFFIC GROWTH

Intersection Capacity Analysis with Improvements and Projected Traffic Growth

Capacity analyses were conducted for the study intersections assuming recommended improvements (outlined above and illustrated in **Figure 4**) and projected ten (10) traffic volumes would be in place. Capacity analyses were conducted using methods of the *Highway Capacity Manual*, as previously introduced. **Table 10** provides a summary of the levels of service for study intersections with recommended improvements and projected ten (10) traffic volumes in place.

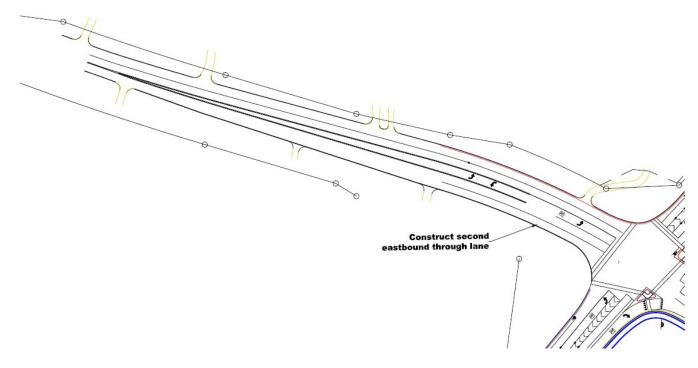


Figure 4 - Moores Mill Road at East University Drive - Proposed Improvement

TABLE 10 –INTERSECTION LEVELS OF SERVICE WITH PROJECTED TRAFFIC GROWTH AND PROPOSED IMPROVEMENTS

lutana attan		B.0	Level of	Service
Intersection (traffic control)	Approach	Movement/Lane Group	A.M.	P.M.
(traffic control)		Group	Peak Hour	Peak Hour
	EB Moores Mill Rd	Left	С	С
	LB MOOTES MIII Ru	Through-Right	С	D
	WB Moores Mill Rd	Left	С	С
511		Through	С	С
E University Dr		Right	D	С
at Moores Mill Rd	NB E University Dr	Left	Е	Е
(traffic signal)		Through	D	D
(traffic signal)		Right	С	D
	CD E University Dr	Left	С	E
	SB E University Dr	Through-Right	С	С
	Overall LOS		С	D

The East University Drive northbound left turn remains at a level of service "E" during the a.m. and p.m. peak hours. This effects only five (5) vehicles during the a.m. peak hour and ten (10) vehicles during the p.m. peak hour, so no additional improvements are recommended. The East University Drive southbound left turn also continues to operate at a level of service "E" during the p.m. peak hour. This movement is already a dual left turn. No additional improvements are recommended.

Pedestrian and Bicycle Improvements

The City of Auburn has an approved TAP grant project to construct an eight foot wide sidewalk along the southwest side of Moores Mill Road from Samford Avenue to a point where it will tie into the existing sidewalk between Dean Road and East University Drive.

Proposed pedestrian and bicycle improvements for the intersection of Moores Mill Road at East University Drive are shown in **Figure 5**. The proposed improvements include: restriping crosswalks as high visibility crosswalks, set back the southbound stop line 6 feet; and dash white bike lane extension markings.

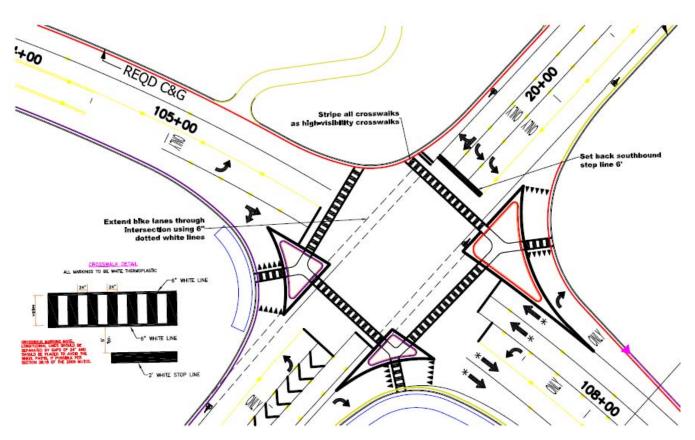


Figure 5 - Moores Mill Road at East University Drive - Pedestrian and Bicycle Improvements

In order to connect the significant bicycle facilities recommended for Dean Road with the existing bicycle facilities on East University Drive, it is recommended that the existing and proposed sidewalk on Moores Mill Road from Dean Road to East University Drive be replaced with a 10 foot multi-use path. This improvement is depicted in **Figure 6**.

For the section of Moores Mill Road between Samford Avenue and Dean Road, it is recommended that shared use lane markings ("sharrows") be installed.

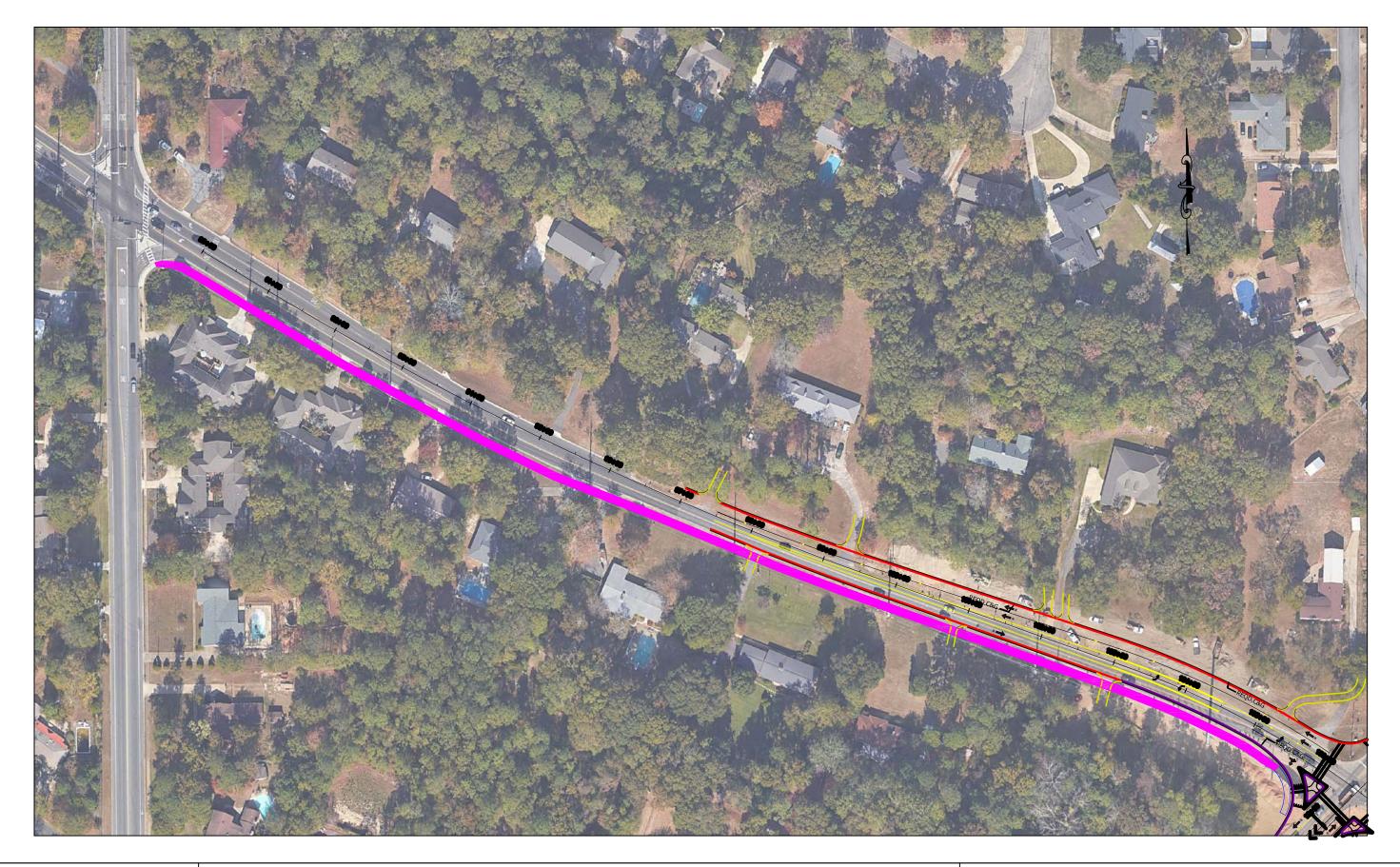




Figure 6 - Proposed Multi-Use Path Moores Mill Road Corridor Auburn, Alabama

Scale: Not to Scale Date: 12/28/18