

**TENNESSEE DEPARTMENT OF TRANSPORTATION
STRATEGIC TRANSPORTATION INVESTMENTS DIVISION**

PROJECT NO.: BR-NH/APD-40(37) : 70068-0211-94 ROUTE: S.R. 40
 COUNTY: Polk CITY: _____
 PROJECT PIN NUMBER: 124102.00
 PROJECT DESCRIPTION: Bridge over Ocoee River @ L.M. 3.12

DIVISION REQUESTING:

MAINTENANCE	<input type="checkbox"/>	PAVEMENT DESIGN	<input type="checkbox"/>
S.T.I.D.	<input type="checkbox"/>	STRUCTURES	<input type="checkbox"/>
ENVIRONMENTAL	<input type="checkbox"/>	SURVEY & ROADWAY DESIGN	<input checked="" type="checkbox"/>
PUBLIC TRANS. & AERO.	<input type="checkbox"/>	TRAFFIC SIGNAL DESIGN	<input type="checkbox"/>
YEAR PROJECT PROGRAMMED FOR CONSTRUCTION:	<u>2019</u>	OTHER	<input type="checkbox"/>
PROJECTED LETTING DATE:	<u>8/23/2019</u>		

TRAFFIC ASSIGNMENT:

BASE YEAR		DESIGN YEAR					DESIGN ROADWAY % TRUCKS		DESIGN AVERAGE DAILY LOADS	
AADT	YEAR	AADT	DHV	%	YEAR	DIR.DIST.	DHV	AADT	FLEX	RIGID
5,790	2022	6,950	695	10	2042	65-35	5	8	303	453

REQUESTED BY: NAME Rachel Gentry DATE 11/13/18
 DIVISION Region 2 Project Development
 ADDRESS 7512 Volkswagen Dr.
Chattanooga, TN 37416

REVIEWED BY: DEBBI HOWARD *Debbi Howard* DATE 11/13/18
 TRANSPORTATION MANAGER 1
 SUITE 1000, JAMES K. POLK BUILDING

APPROVED BY: TONY ARMSTRONG *Tony Armstrong* DATE 11.15.18
 TRANSPORTATION MANAGER 2
 SUITE 1000, JAMES K. POLK BUILDING

COMMENTS:

Furnish the 2022-2042 ADL for pavement design on a 3-lane roadway and the present ADT on all crossroads within the limits of the project.

This Traffic was taken from a previous project prepared for the Environmental Division dated 10/17/18. AADT's and ADL's are included.

DHV'S ARE NOT REQUIRED FOR SIDE ROADS LESS THAN 1000 AADT.NOTE:

FOR BRIDGE REPLACEMENT PROJECTS, ADLs ARE NOT REQUIRED FOR ADTs OF 1000 OR LESS AND PERCENTAGE OF TRUCKS OF 7% OR LESS.

SEE ATTACHMENTS FOR TURNING MOVEMENTS AND/OR OTHER DETAILS.

(REV. 4/1/18)

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FAP Rural

Pavement Structural Design

Calculation of Equivalent Daily 18 Kip Single Axle Loads

Type Vehicle	ADT (No. Counted)	Flexible		Rigid	
		18-kip Factor	ADL	18-kip Factor	ADL
Pass. cars and motorcycles (1-2)	3,850	0.001	4	0.001	4
Pick-up, Panel, Van (3)	2,010	0.005	10	0.004	8
Sing. Unit	Buses (4)	4	0.300	1	0.300
	2-axle, 6-tire (5)	77	0.240	18	0.310
	3-axle or more (6-7)	80	1.700	136	2.300
Comb.	4-axle (8)	119	1.110	132	1.500
	5-axle or more (9-13)	230	1.320	304	2.200
Totals (2032 AADT)	6,370		605		905

Suggested Percentages of Trucks in Design Lane

5,000 or less ADT	95%
5,000 - 10,000 ADT	90%
10,000 - 15,000 ADT	85%
15,000 - 20,000 ADT	80%
20,000 - 30,000 ADT	75%
30,000 - 40,000 ADT	70%
40,000 Plus	60%

No. of Lanes: 3

% Trucks in Design Lane: 100%

ADL in Design Lane:

FLEX:	0.5	X	1.00	X	605.3	=	303
RIGID:	0.5	X	1.00	X	905.5	=	453

ADL Calculations By: Ashlie Bevan
 Reviewed By: *Tomy*
 [REV. 7/1/14]

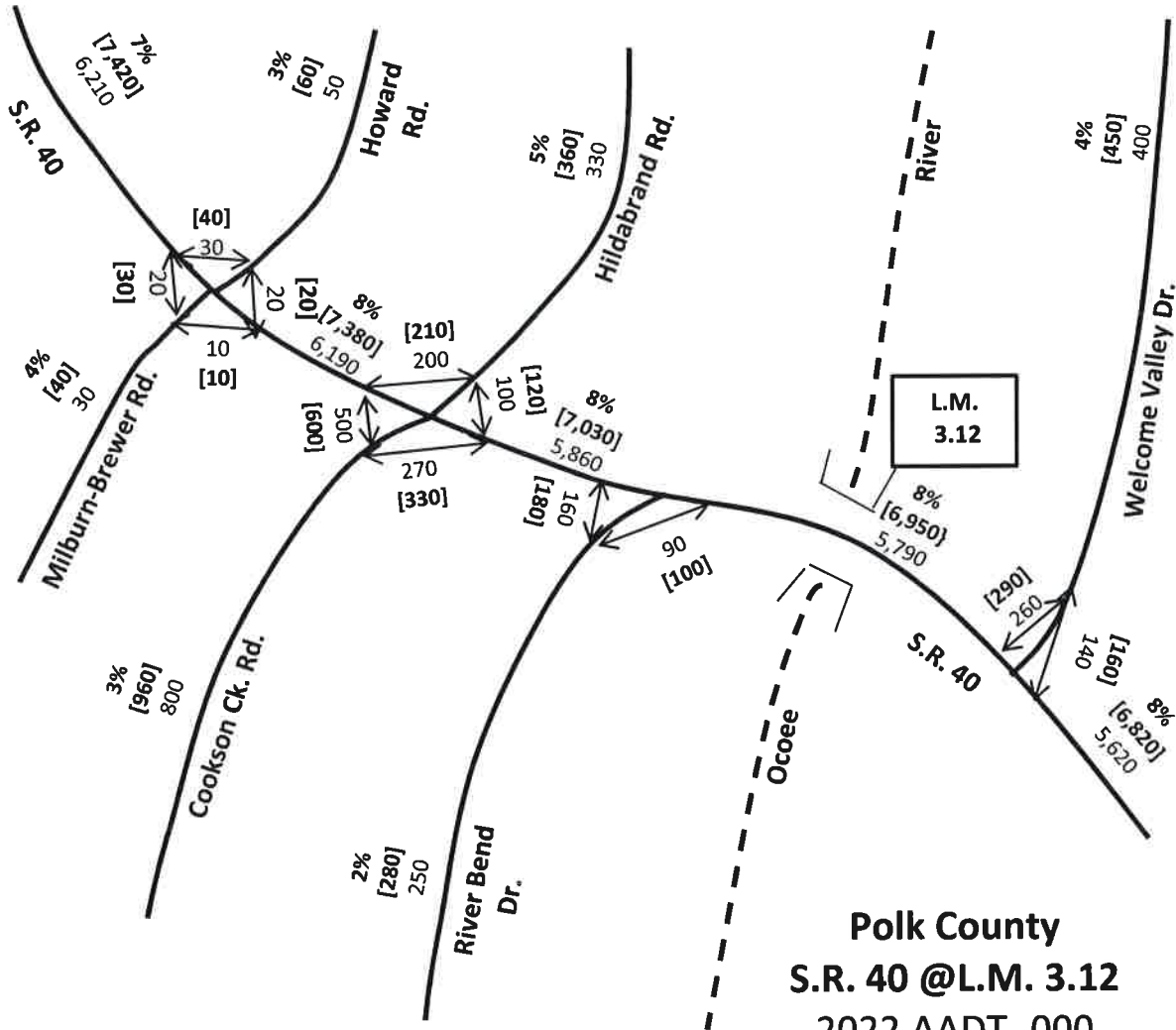
Date: 11/14/2018
 Date: 11.15.18



POLK COUNTY
S.R. 40 @ L.M. 3.12



AADT



Polk County
S.R. 40 @ L.M. 3.12
2022 AADT- 000
2042 AADT- [000]
AADT Truck %-0%
Date: November 14, 2018
AB