

Spot Safety Project Evaluation

Project Information

Order ID: 41000030273

Project ID: 09-09-204

Location: SR 2207 (Old Rural Hall Road) in the vicinity of SR 2233 (Racine Road)

County: Forsyth

City: Winston-Salem

Division: 9

Signal ID: N/A

Countermeasure: Install approximately 750 feet guardrail on the eastern side of SR 2207 in the vicinity of MP 1.55.

Project Completion: December 03, 2009

Project Cost: \$36,000.00

Map and Aerial (from Google Maps – Coordinates are 36.170464,-80.23545)



Naive Before and After Analysis

- Before Period: February 1, 2005 through August 31, 2009 (4 years, 7 months)
- Const. Period: September 1, 2009 through November 30, 2009 (3 months)
- After Period: December 1, 2009 through June 30, 2014 (4 years 7 months)
- Analysis Criteria: Treatment data consisted of all crashes on SR 2207 (Old Rural Hall Road) with a 0-foot y-line and within the milepost range from MP 1.407 to MP 1.745
- Target Crashes: Lane Departure crashes – Run-Off Road (left, right or straight), Sideswipe (Opposite Direction), Fixed Object, Rollover, and Head-On

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	9	2	-77.8%
Total Severity Index	5.9	1.0	-83.1%
Target Crashes	9	2	-77.8%
Target Crash Severity Index	5.9	1.0	-83.1%
Volume (2007, 2011)	2300	1800	-21.7%

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	0	0	0.0%
Class A injury Crashes	0	0	0.0%
Class B injury Crashes	5	0	-100.0%
Class C Injury Crashes	1	0	-100.0%
Property Damage Only	3	2	-33.3%

Overall Summary Results

Total Crashes:	-77.8 %	(reduction)
Total Crash Severity:	-83.1 %	(reduction)
Target Crashes:	-77.8 %	(reduction)
Target Crash Severity:	-83.1%	(reduction)
Volume:	-21.7 %	(reduction)

Items for Discussion/Concerns

The total crashes experienced a decrease of 77.8% (9 to 2 crashes) between the before and after periods. Because all crashes in the analysis were target crashes, the target crashes experienced the same decrease of 77.8% (9 to 2 crashes) between the before and after periods. The total crash severity and target crash severity both experienced a reduction of 83.1% between the before and after periods.

Data Prepared For

The Traffic Safety Unit *of the*
Transportation Mobility and Safety Division *of the*
Division of Highways *of the*
North Carolina Department of Transportation

Data Prepared By

Principal Investigator: Celeste Harvey
Work Group/Consultant: Hatch Mott MacDonald
Date: September 18, 2014

SS# 09-09-204
 Order# 41000030273
 Forsyth County
 BEFORE Period
 2/1/2005 - 8/31/2009

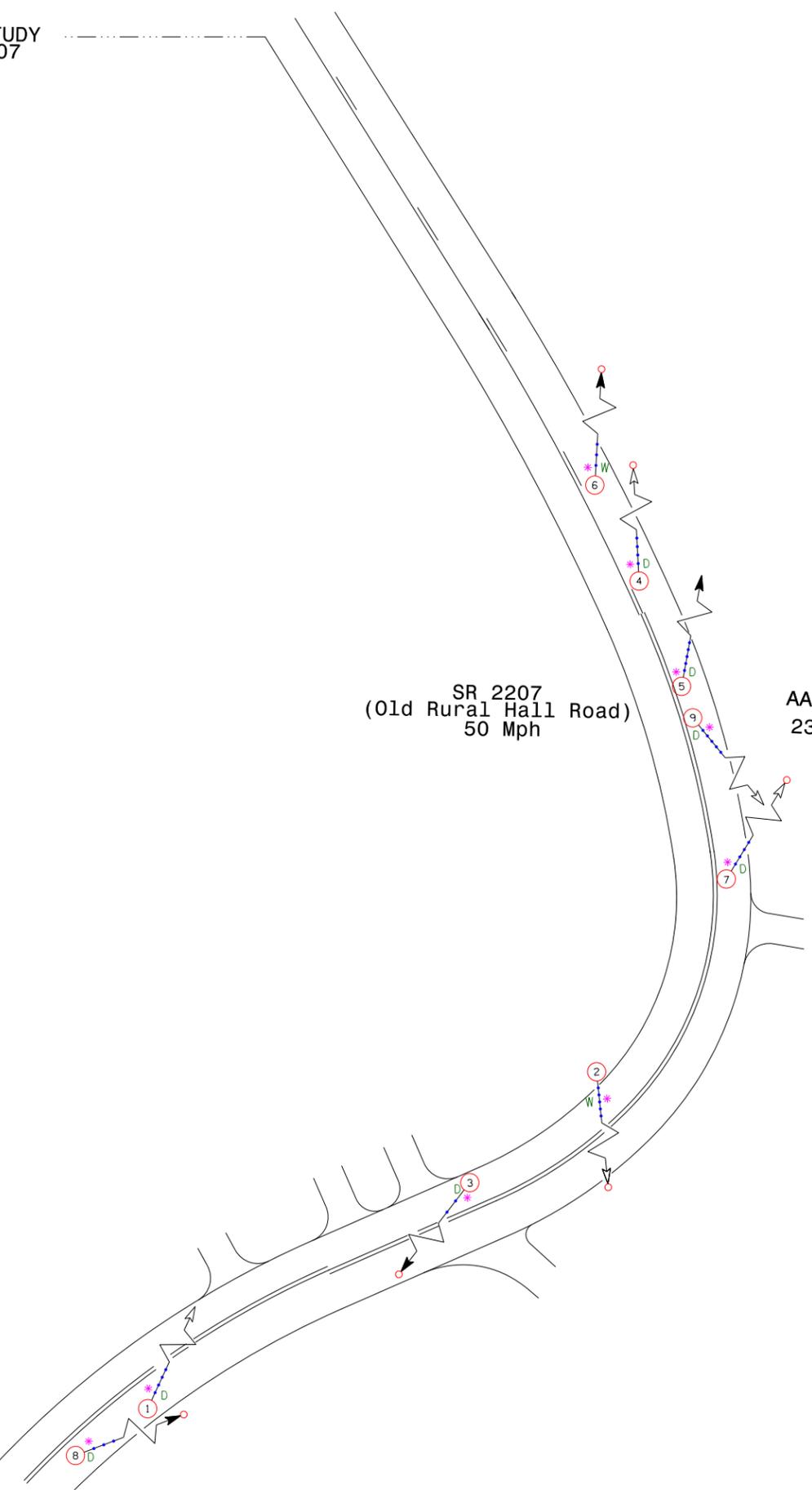
BEGIN STUDY
 MP 1.407

END STUDY
 MP 1.745

SR 2207
 (Old Rural Hall Road)
 50 Mph

AADT (Year)
 2300 (2007)

LEGEND			
	MOVING VEHICLE		ANGLE
	PARKED VEHICLE		TURNING
	PARKING VEHICLE		BACKING
	MOVABLE OBJECT		SIDESWIPE
	HEAD ON		INJURY
	REAR END		FATALITY
	RAN OFF ROAD		9 MPH OR LESS
	DAYLIGHT CRASH		10 MPH TO 19
	NIGHT CRASH		20 MPH TO 29
			30 MPH TO 39
			40 MPH TO 49
			50 MPH TO 59
			60 MPH TO 69
			70 AND UP
			SPEED UNKNOWN
	STOP SIGN		A ANIMAL
	P PEDESTRIAN		B BICYCLE
	T TRAIN		* DRIVER AT FAULT
	D DRY		W WET
	I ICY OR SNOWY		O Other



Target Crashes



N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
TRANSPORTATION MOBILITY and
SAFETY DIVISION

TRAFFIC SAFETY UNIT

Date: 9/8/2014 Prepared By: Celeste Harvey



SS# 09-09-204
 Order# 41000030273
 Forsyth County
 AFTER Period
 12/1/2009 - 6/30/2014

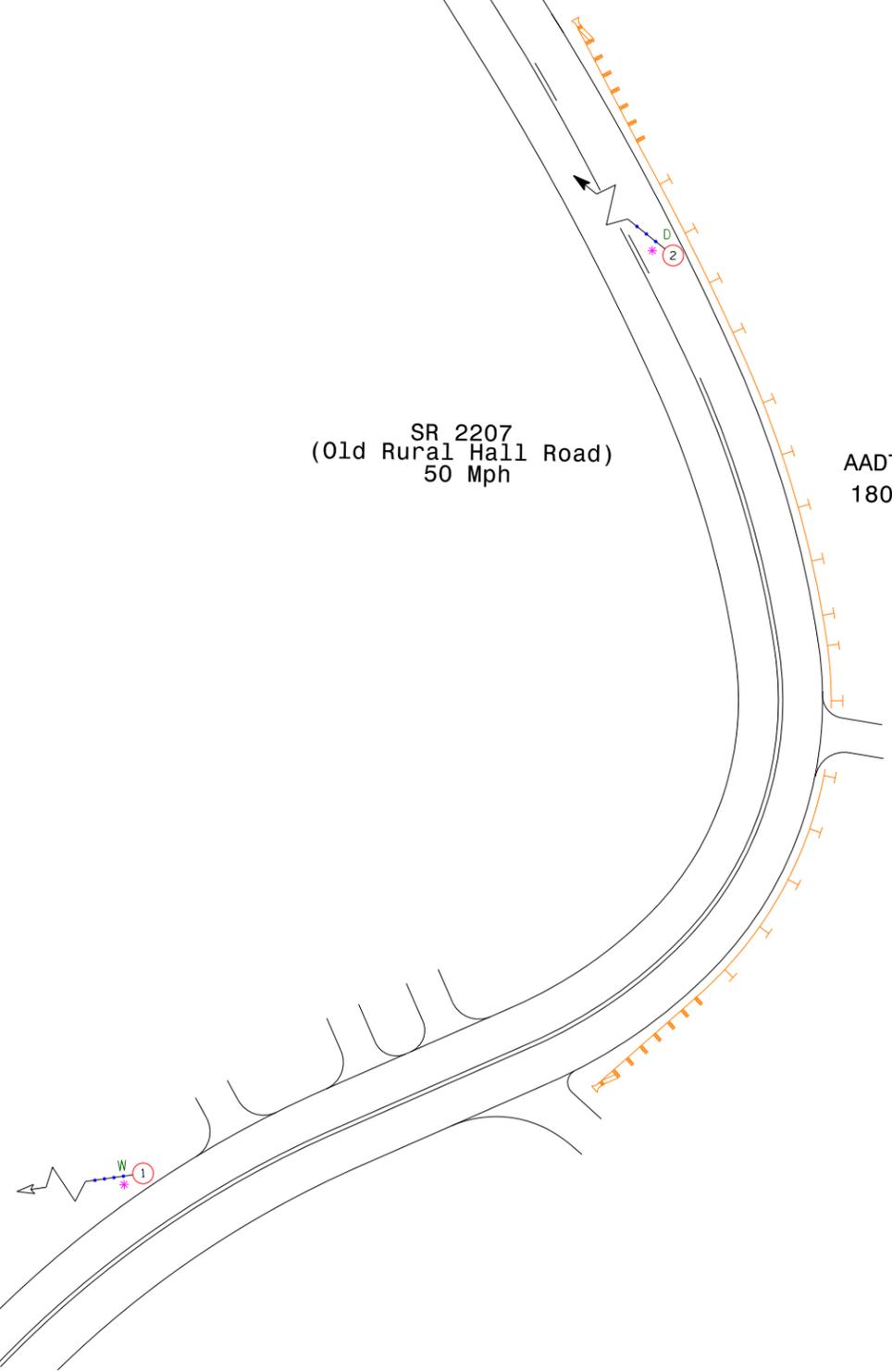
BEGIN STUDY
 MP 1.407

END STUDY
 MP 1.745

SR 2207
 (Old Rural Hall Road)
 50 Mph

AADT (Year)
 1800 (2012)

LEGEND			
	MOVING VEHICLE		ANGLE
	PARKED VEHICLE		TURNING
	PARKING VEHICLE		BACKING
	MOVABLE OBJECT		SIDESWIPE
	HEAD ON		INJURY
	REAR END		FATALITY
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Target Crashes

