

Spot Safety Project Evaluation

Project Information

Order ID: 41000030547

Project ID: 02-07-214

Location: US-13 from SR 1149 (Warrentown Road) / SR 1205 (Peanut Rd) north/east for 0.35 mile

County: Greene

City: Near Snow Hill

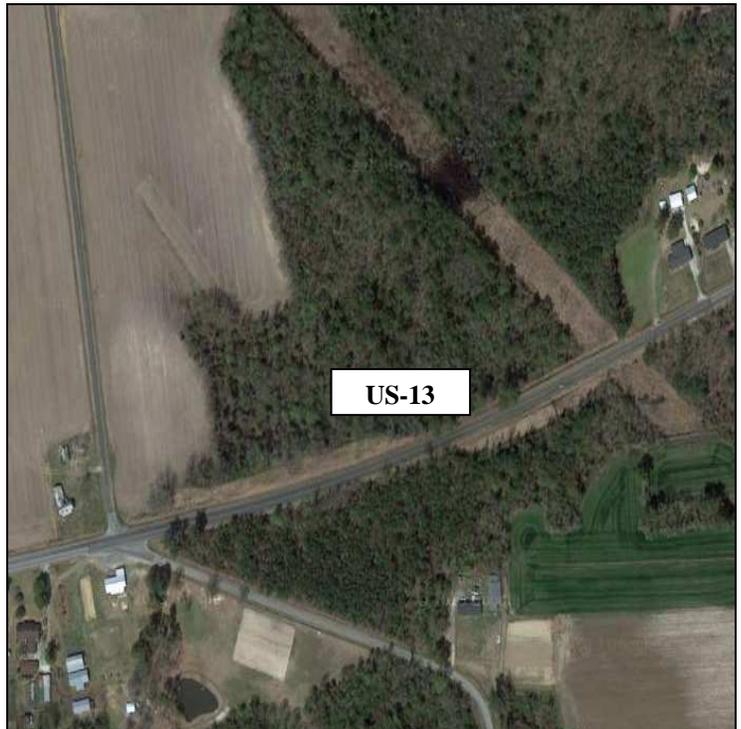
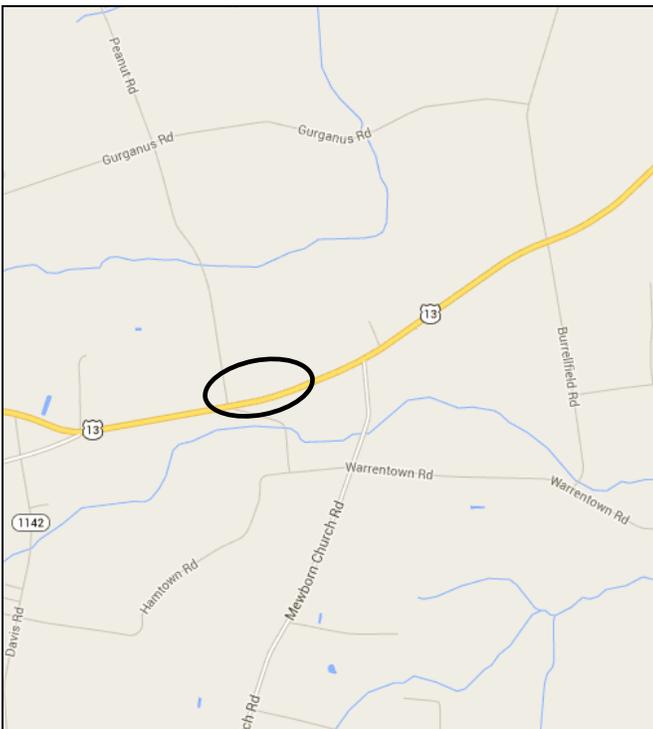
Division: 2

Signal ID: N/A

Countermeasure: Increase superelevation through curve and overlay with friction course

Project Completion: December 21, 2009 Project Cost: \$132,500

Map and Aerial (from Google Maps) – Coordinates: 35.438016,-77.760447



Naive Before and After Analysis

Before Period: April 1, 2005 through August 31, 2009 (4 years, 5 months)

Const. Period: September 1, 2009 through December 31, 2009

After Period: January 1, 2010 through May 31, 2014 (4 years, 5 months)

Analysis Criteria: Treatment data consisted of all crashes on US-13 within the study milepost and a 0-foot y-line. The milepost range consisted from 150-feet west of SR 1149 (Warrentown Road) intersection to 0.35 mile east of the SR 1149 intersection (Milepost Range 3.772 to 4.150).

Target Crashes: Lane Departure Crashes were the target crashes, which include the following: Ran-off Road (Right, Left, Straight); Fixed Object; Sideswipe (Opposite Direction); and Head-On. Lane Departure Wet Roadway crashes are also highlighted in the tables below.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	20	2	- 90.0 %
Total Severity Index	8.12	4.70	- 42.1 %
Target Crashes – Lane Departure	18	1	- 94.4 %
Target (LD) Crash Severity Index	8.09	8.40	3.8 %
Lane Departure Wet Roadway	15	0	- 100.0 %
LD-Wet Road Severity Index	8.52	0.00	- 100.0 %
Volume (2007, 2012)	5,500	4,700	- 14.5 %

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	0	0	N/A
Class A injury Crashes	1	0	- 100.0 %
Class B injury Crashes	3	0	- 100.0 %
Class C Injury Crashes	6	1	- 83.3 %
Property Damage Only	10	1	- 90.0 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Night Crashes	8	2	- 75.0 %
Wet Road Crashes	15	0	- 100.0 %
Alcohol / Drug Involvement Crashes	0	0	- 100.0 %

Overall Summary Results

Total Crashes:	- 90 %	(reduction)
Total Crash Severity:	- 42 %	(reduction)
Target Crashes:	- 94 %	(reduction)
Target Crash Severity:	4 %	(increase)
Volume:	- 15 %	(reduction)

Additional Summary Results

Lane Departure Wet Road:	- 100 %	(reduction)
Night Crashes:	- 75 %	(reduction)

Items for Discussion/Concerns

None – Countermeasures effective at eliminating before period crash patterns.

Data Prepared For

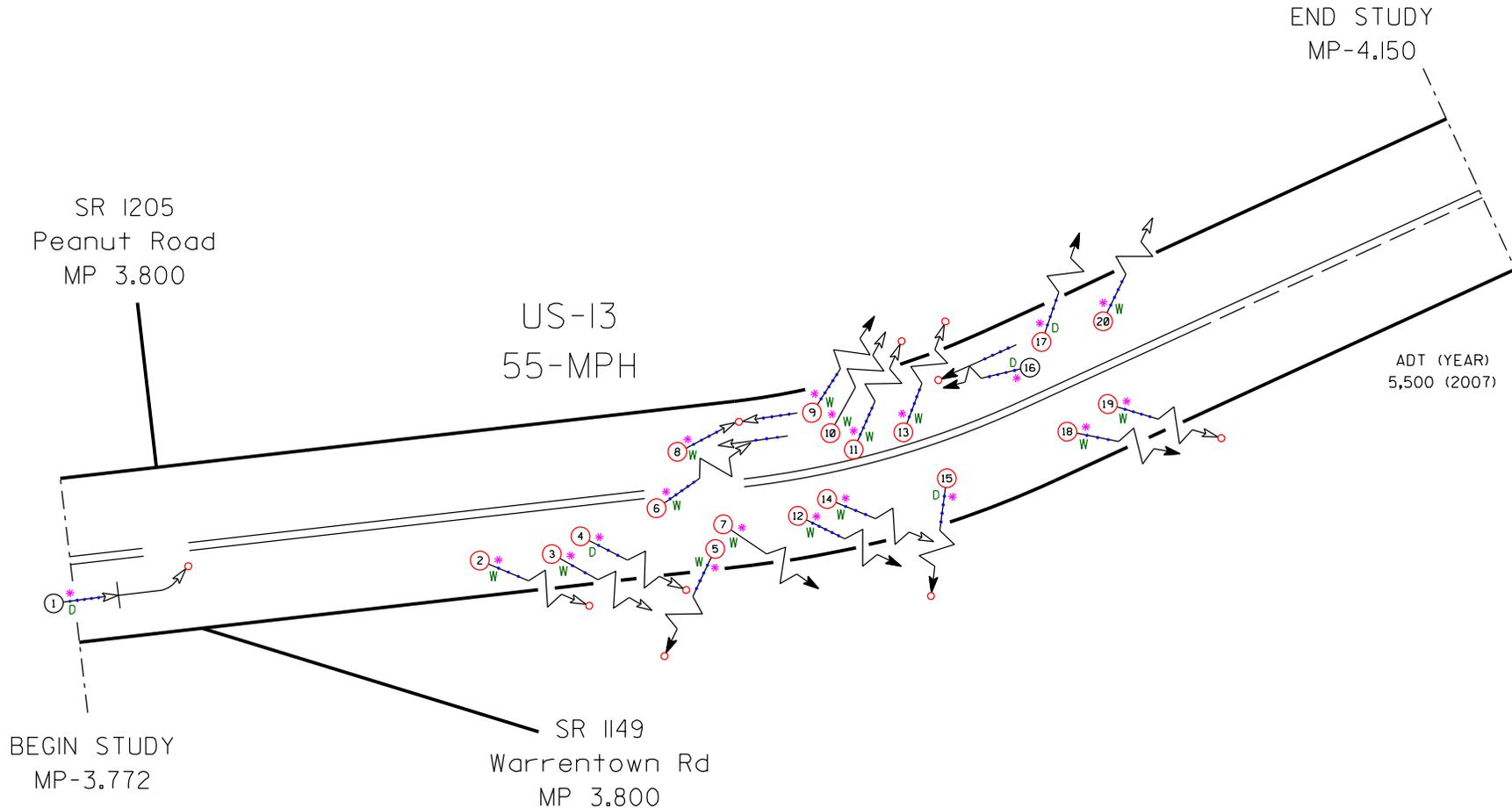
The Traffic Safety Unit *of the*
Transportation Mobility and Safety Division *of the*
Division of Highways *of the*
North Carolina Department of Transportation

Data Prepared By

Principal Investigator: Jason B. Schronce, EI
Work Group/Consultant: NCDOT - Safety Evaluation Group
Date: September 5, 2014

SS# 02-07-214
 Order# 41000030547
 Greene County
 BEFORE Period
 4/1/05 - 8/31/09

LEGEND							
	MOVING VEHICLE		ANGLE		9 MPH OR LESS		PEDESTRIAN
	PAKED VEHICLE		TURNING		10 MPH TO 19		TRAIN
	PARKING VEHICLE		TURNING		20 MPH TO 29		DRIVER AT FAULT
	FIXED OBJECT		BACKING		30 MPH TO 39		DRY
	HEAD ON		SIDEWPE		40 MPH TO 49		WET
	REAR END		RAJURY		50 MPH TO 59		ICY OR SNOWY
	RAN OFF ROAD		FATALITY		60 MPH TO 69		ICY OR SNOWY
					70 AND UP		OTHER
					SPEED UNKNOWN		



Lane Departure Target Crashes

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

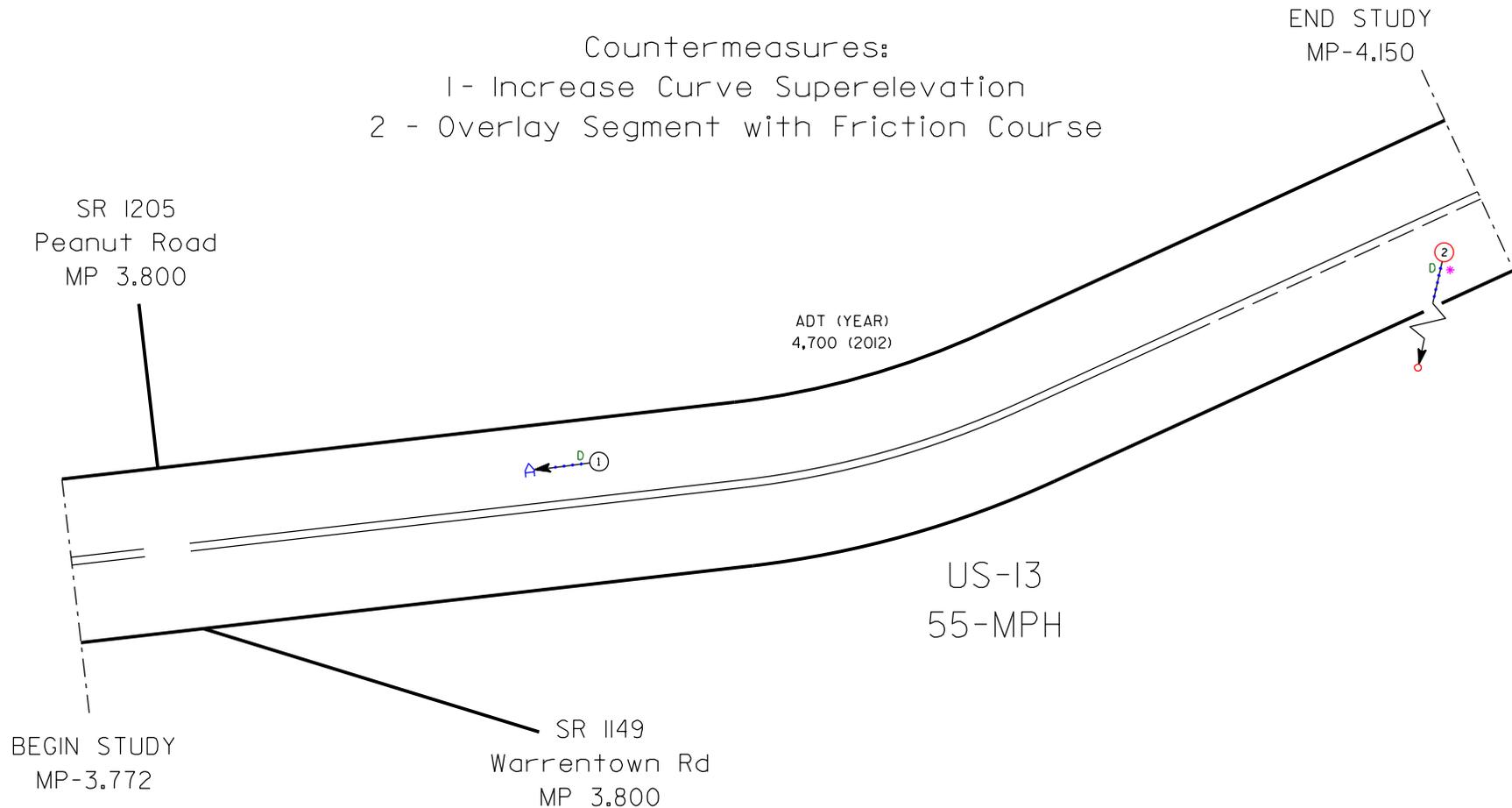
TRAFFIC SAFETY UNIT

Date: 9-2-2014 Prepared By: J. Schronce

SS# 02-07-214
 Order# 41000030547
 Greene County
 AFTER Period
 1/1/2010 - 5/31/2014

LEGEND							
	MOVING VEHICLE		ANGLE		9 MPH OR LESS		P PEDESTRIAN
	PAKED VEHICLE		TURNING		10 MPH TO 19		T TRAIN
	PARKING VEHICLE		TURNING		20 MPH TO 29		* DRIVER AT FAULT
	FIXED OBJECT		BACKING		30 MPH TO 39		D DRY
	HEAD ON		SIDESWIPE		40 MPH TO 49		W WET
	REAR END		INJURY		50 MPH TO 59		I icy or snowy
	RAN OFF ROAD		FATALITY		60 MPH TO 69		70 AND UP
			SPEED UNKNOWN		O OTHER		

Countermeasures:
 1- Increase Curve Superelevation
 2 - Overlay Segment with Friction Course



Lane Departure
 Target Crashes

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

TRAFFIC SAFETY UNIT

Date: 9-2-2014 Prepared By: J. Schronce