

Spot Safety Project Evaluation

Project Information

Order ID: 41000030270

Project ID: 02-08-204

Location: NC 102 and SR 1725 (County Home Road)

County: Pitt

City: Ayden

Division: 2

Signal ID: N/A

Countermeasure: Construct concrete channelization islands with stop signs and stop bars on both approaches of SR 1725. Construct commercial channelization in southwest quadrant of NC 102.

Project Completion: September 08, 2009

Project Cost: \$19,000.00

Map and Aerial (from Google Maps – Coordinates are 35.469566,-77.347913)



Naive Before and After Analysis

Before Period: September 1, 2004 through June 30, 2009 (4 years, 10 months)

Const. Period: July 1, 2009 through August 30, 2009 (2 months)

After Period: September 1, 2009 through June 30, 2014 (4 years, 10 months)

Analysis Criteria: Treatment data consisted of all crashes within 150 feet of the subject intersection for the NC 102 and SR 1725 approaches.

Target Crashes: Frontal impact crashes including between a vehicle entering from SR 1725 and a vehicle on NC 102.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	9	13	44.4%
Total Severity Index	11.9	9.7	-18.5%
Target Crashes	9	9	0%
Target Crash Severity Index	11.9	12.7	6.7%
Volume (2007, 2012)	3,900	4,300	10.3%

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	0	1	100.0%
Class A injury Crashes	1	0	-100.0%
Class B injury Crashes	2	3	50.0%
Class C Injury Crashes	1	2	100.0%
Property Damage Only	5	7	40.0%

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Northbound SR 1725 Frontal Impact (Target)	5	1	-80.0%
Southbound SR 1725 Frontal Impact (Target)	4	8	100.0%

Overall Summary Results

Total Crashes:	44.4 %	(increase)
Total Crash Severity:	-18.5 %	(reduction)
Target Crashes:	0 %	(no change)
Target Crash Severity:	6.7 %	(reduction)
Volume:	10.3 %	(increase)

Additional Summary Results

Northbound SR 1725 Frontal Impact (Target):	-80 %	(reduction)
Southbound SR 1725 Frontal Impact (Target):	100 %	(increase)

Items for Discussion/Concerns

The total crashes experienced an increase of 44.4% (9 to 13 crashes) between the before and after periods. The target crashes experienced no change between the before and after periods, with 9 crashes in each. The total crash severity experienced a reduction of 18.5% and the target crash severity experienced an increase of 6.7% between the before and after periods.

Frontal Impact Crashes involving vehicles on the northbound approach of SR 1725 experienced a reduction of 80% (5 to 1 crashes) between the before and after periods. Frontal Impact Crashes involving vehicles on the southbound approach of SR 1725 experienced an increase of 100% (4 to 8 crashes) between the before and after periods.

Data Prepared For

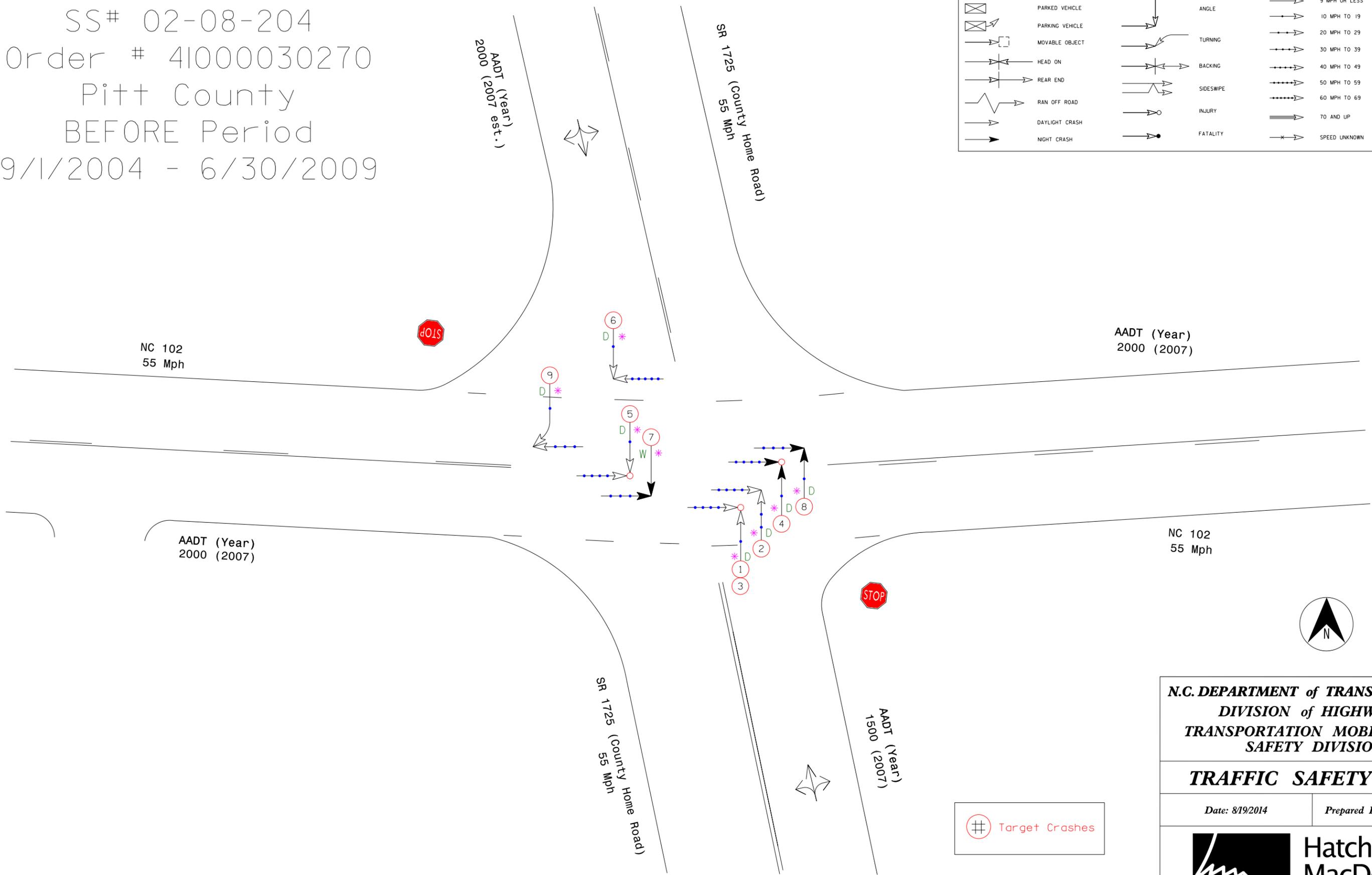
The Traffic Safety Unit *of the*
Transportation Mobility and Safety Division *of the*
Division of Highways *of the*
North Carolina Department of Transportation

Data Prepared By

Principal Investigator: Celeste M. Harvey
Work Group/Consultant: Hatch Mott MacDonald
Date: August 28, 2014

SS# 02-08-204
 Order # 41000030270
 Pitt County
 BEFORE Period
 9/1/2004 - 6/30/2009

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

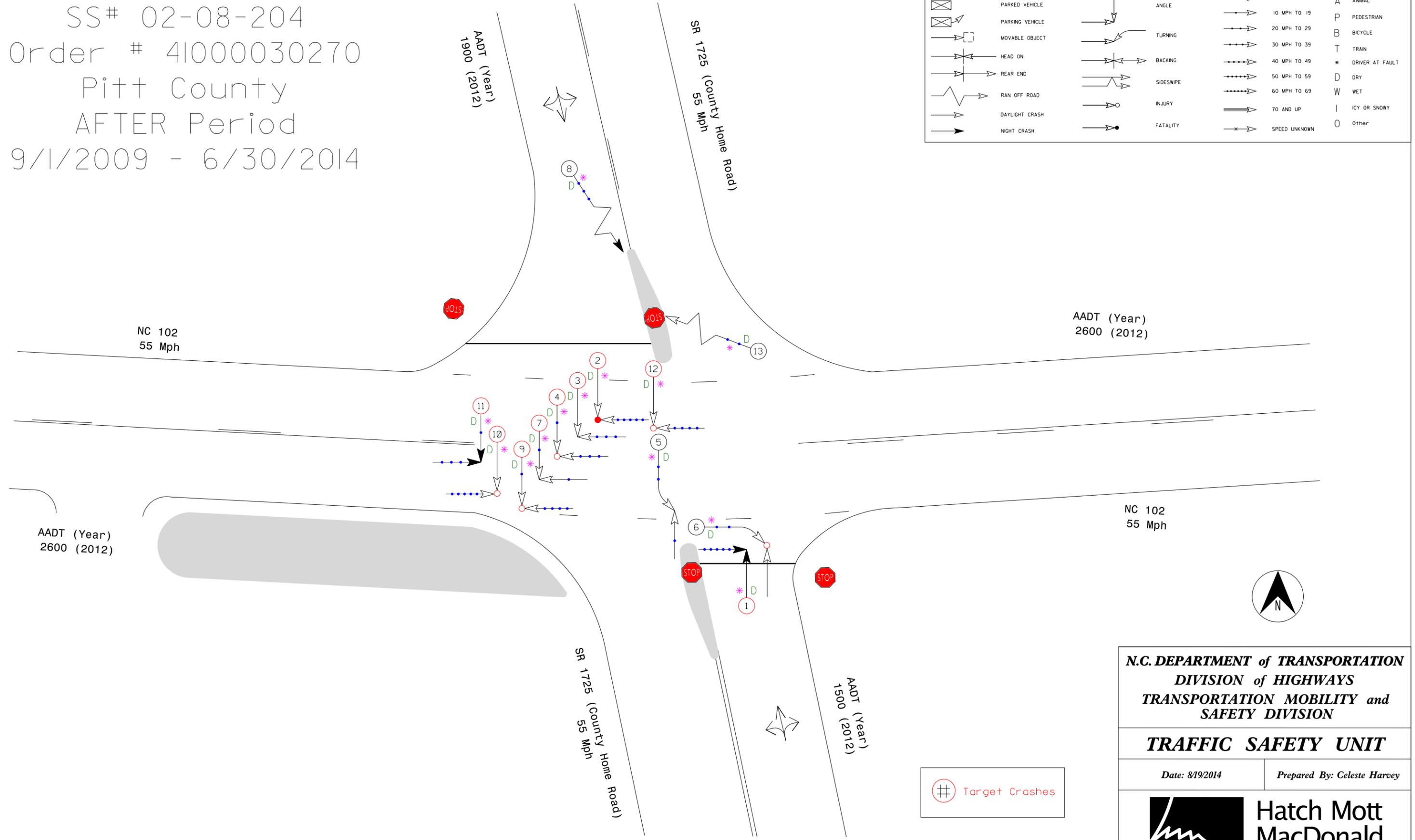
Date: 8/19/2014

Prepared By: Celeste Harvey



SS# 02-08-204
 Order # 41000030270
 Pitt County
 AFTER Period
 9/1/2009 - 6/30/2014

LEGEND			
	MOVING VEHICLE		ANGLE
	PARKED VEHICLE		TURNING
	PARKING VEHICLE		BACKING
	MOVABLE OBJECT		SIDESWIPE
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