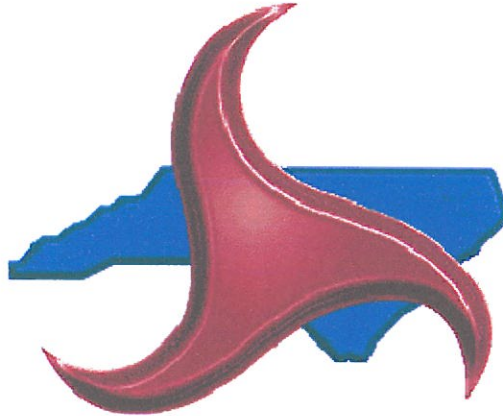


17BP.7.R.86 Bridge Design Speed Study

Bridge #400272 on SR 3368 (Watchtower Road)

Guilford County



Document Prepared By:

Regional Traffic Office – Triad Region
Traffic Safety Unit
Transportation Mobility and Safety Division
North Carolina Department of Transportation

September 30, 2014

Principal Investigator:



John C. Button, PE, PLS
Triad Regional Traffic Safety Engineer



Bridge and Approach Investigation Checklist

Project 17BP.7.R.86
Description Bridge # 400272 over Climax Creek
Route SR 3368 (Watchtower Road)
Division 7
County Guilford

Existing Speed Limit 55 mph ☐ Posted ☒ Statutory

Reasonable & Comfortable Passenger Car Speed 55 mph

Speed Data No speed data collected because of sparseness of traffic.

Ball Bank Speed Study 12 degrees at 55 mph for curve located west of bridge.

Warning Signs at Bridge W23-10 object markers, one at each corner of bridge.
W5-2 "Narrow Bridge" warning sign located on each approach to the bridge.

Roadside Development Rural

ADT History No ADDT history found.
2013 AADT estimated to be 700 vpd based on surrounding roads.

Pedestrian/Bicycle Traffic No bike or pedestrian traffic observed during site visit.
Little bike or ped traffic expected.

Bridge and Approach Digital Photos See attached photos.

Approach Lane Width 19'-6" overall pavement width with 8'-6"/8'-8" lane widths.

Approach Shoulder Width: Varies from 5' to 8'.
Shoulder Type Grass

Lane Width (existing bridge) 20'-9" overall pavement width with 7'-11"/8'-6" lane widths.

Shoulder width (existing bridge) 19"/12"

Strategic Corridor / Thoroughfare Designation and Recommended Cross Section This section of SR 3368 is designated as a local route on the NCDOT Functional Classification Route Map.
The NCDOT "R-R-R Guide" recommends a minimum of 10 foot lane widths and 3 foot shoulder widths (6 foot shoulder widths where guardrail is to be installed) on local routes.

Crash History and Safety Considerations No crashes recorded in vicinity of bridge from 07/01/2004 to 06/30/2014.

Comments _____

Reasonable Bridge Speed 60 mph



Guilford County



SR 3368 (Watchtower Road) eastbound ± 0 feet west of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) eastbound $\pm$ 50 feet west of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) eastbound $\pm$ 100 feet west of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) eastbound ± 150 feet west of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) eastbound ± 200 feet west of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) eastbound $\pm$ 250 feet west of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) westbound ± 0 feet east of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) westbound ± 50 feet east of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) westbound $\pm$ 100 feet east of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) westbound $\pm$ 150 feet east of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) westbound $\pm$ 200 feet east of Bridge# 400272

Guilford County



SR 3368 (Watchtower Road) westbound ± 250 feet east of Bridge# 400272

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Study Criteria Summary

County: GUILFORD **City:** All and Rural
Date: 07/01/2004 to 06/30/2014 **Study:** GUILFORDBRIDGE400272
Location: 500 feet on either side of bridge 400272 on SR 3368 (Watchtower Road) **ADT ESTIMATE OF 400 BASED ON ADT OF AREA ROADS**

Report Details

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
GUILFORDBRIDGE400272				76.8	8.4	400	40003368

Request Date	Courier Service	Phone No.	Ext.	Fax No.

County			Municipality						
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years	
GUILFORD	40	7	All and Rural		0	07/01/2004	06/30/2014	10.00	

Location Text	Requestor
500 feet on either side of bridge 400272 on SR 3368 (Watchtower Road) **ADT ESTIMATE OF 400 BASED ON ADT OF AREA ROADS**	

Fiche Roads	
Name	Code
SR 3368	40003368
WATCHTOWER	50032183

Strip Road					
Name	Code	Begin MP	End MP	Miles	Kilometers
SR 3368	40003368	2.055	2.251	0.196	0.315

09/10/2014

All data presented in this report comes explicitly from the Traffic Engineering Accident Analysis System based upon vi
criteria provided by the report's creator. The onus is strictly upon the user of this report to exercise due diligence in in
and further representing this data.

-1-