

Bridge Design Speed Investigation

Bridge #195 on SR 1700 (Cane Creek Mountain Road) over Cane Creek
Rutherford County



Document Prepared By:

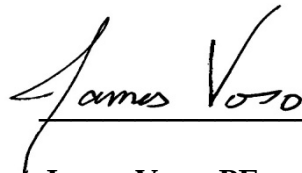
Mattern & Craig, Inc.
Consulting Engineers - Surveyors
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Commission No: 3350

July 18, 2013



Investigating Engineer



James Voso, PE

Bridge and Approach Investigation Checklist

Project 17BP.13.PE.1
Description Replace Bridge #195 on SR 1700 (Cane Creek Mountain Road) over Cane Creek
Route SR 1700 (Cane Creek Mountain Road)
Division 13
County Rutherford

Existing Speed Limit 55 mph ☐ Posted ☒ Statutory

Reasonable & Comfortable
Passenger Car Speed 25 mph

Speed Data N/A

Ball Bank Speed Study Curve east of Bridge #195 had a ball bank indication of 15 at 20 mph.

Warning Signs at Bridge 4 Bridge End Delineators, Weight Limit (16 tons - single vehicle, 22 tons - truck tractor semitrailer), Narrow Bridge warning sign, Stop Ahead warning sign posted east of the bridge

Roadside Development Church in northeast quadrant of bridge. Farm land in all other quadrants of the bridge.

ADT History 150 (2000)

Pedestrian/Bicycle Traffic Low

Bridge and Approach
Digital Photos (attached)

Approach Lane Width 8'

Approach Shoulder Width: 9'
Shoulder Type grass

Lane Width (existing bridge) 9'

Shoulder width (existing bridge) 1.2'

Strategic Corridor / Thoroughfare
Designation and Recommended
Cross Section Not a Strategic Corridor/Thoroughfare. Two lane cross section at 25 mph based on 3R guidelines.

Crash History and
Safety Considerations No crashes reported near bridge (5/1/2003 - 4/30/2013, 10 years).

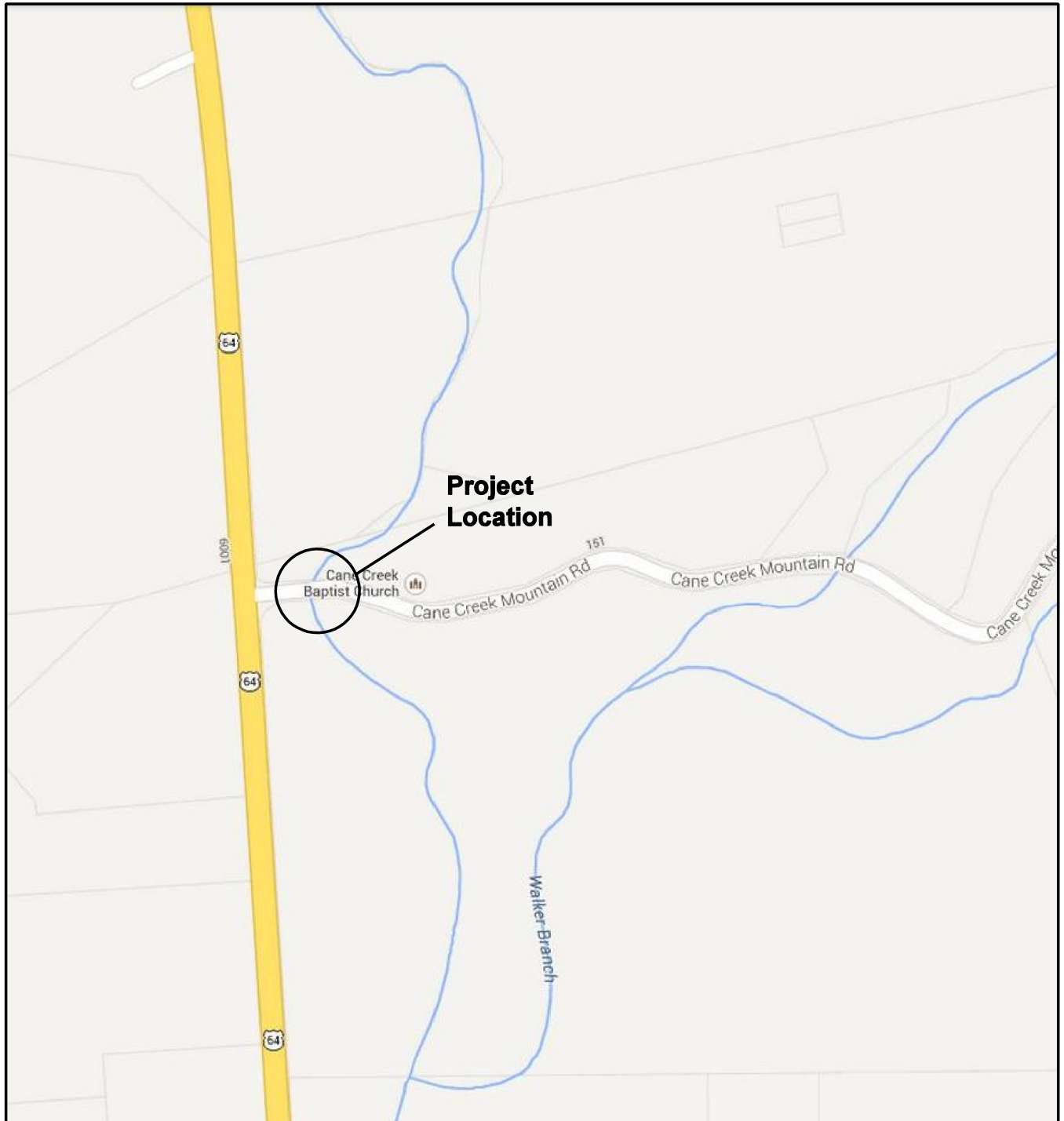
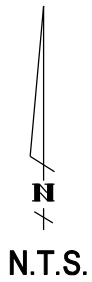
Comments Farm access road located at the west end of the bridge. Church parking lot entrance located at the eastern terminus of the bridge. Bridge number posted on bridge. SR 1700 intersects US 64 just west of the bridge with stop control on the SR 1700 approach.

Reasonable Bridge Speed 25 mph

Investigated by: Mathew Bolden

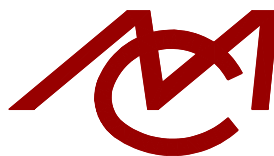
Reviewed by: James Voso

Bridge #195
Rutherford County
Division 13



VICINITY MAP

Bridge #195 on SR 1700
(Cane Creek Mountain Road)
over Cane Creek



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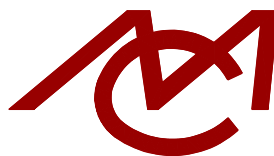


Eastbound Approach



Eastbound Approach at bridge

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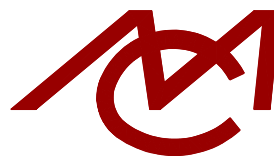


Westbound Approach



Westbound Approach at bridge

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

Study Criteria Summary

County: RUTHERFORD **City:** All and Rural
Date: 05/01/2003 to 04/30/2013 **Study:** RUTHERFORDBRIDGE195
Location: SR 1700 (Cane Creek Mountain Rd) from 500 feet east of Bridge 195 to US 64

Report Details

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
RUTHERFORDBRIDGE195				76.8	8.4	150	40001700

Request Date	Courier Service	Phone No.	Ext.	Fax No.
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County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
RUTHERFORD	80	13	All and Rural		0	05/01/2003	04/30/2013	10.00

Location Text	Requestor
SR 1700 (Cane Creek Mountain Rd) from 500 feet east of Bridge 195 to US 64	

Fiche Roads	
Name	Code
SR 1700	40001700
CANE CREEK	50004825

Strip Road					
Name	Code	Begin MP	End MP	Miles	Kilometers
SR 1700	40001700	4.573	4.706	0.133	0.214