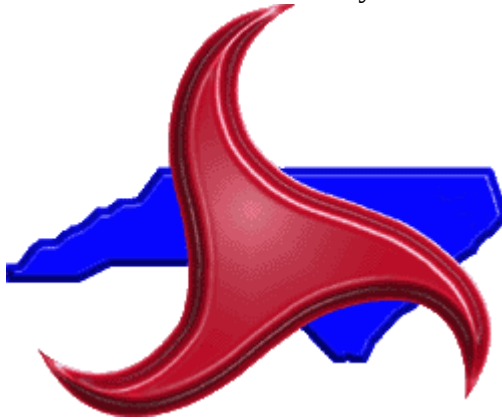

Bridge Design Speed Investigation

230068

Structure #68 on NC 214 (Sam Potts Hwy) over Green Swamp

Columbus County



Document Prepared By:

Ramey Kemp & Associates, Inc.
8307 University Execution Park Drive, Suite 260
Charlotte, NC 28262

April 13, 2016

Project Manager

Jacob D. Carpenter, PE
Regional Manager

Principal Investigator

J. Andrew Eagle, PE, PTOE
Senior Transportation Engineer



Bridge and Approach Investigation Checklist

Project B-5699
Description Replace Bridge #68 over Green Swamp
Route NC 214 (Sam Potts Hwy)
Division 6
County Columbus

Existing Speed Limit 55 mph ☐ Posted ☒ Statutory

Reasonable & Comfortable
Passenger Car Speed 60 mph

Speed Data Estimated 60 mph

Ball Bank Speed Study N/A

Warning Signs at Bridge WB (2x Bridge End Delineators), EB (2x Guardrail)

Roadside Development Undeveloped

ADT History 2000 vpd (From NCDOT TEAAS)
1300 vpd (From NCDOT Traffic Volume Map-2014)

Pedestrian/Bicycle Traffic Minimal Expected

Bridge and Approach
Digital Photos Attached

Approach Lane Width 10.5 ft

Approach Shoulder Width 8 ft
Shoulder Type grass

Lane Width (existing bridge) 10.5 ft

Shoulder width (existing bridge) 4 ft shoulder plus ~2 ft gutter (~34 ft Total Width)

Strategic Corridor / Thoroughfare
Designation and Recommended
Cross Section NC 214 is classified a major collector facility in the Statewide Functional
Classification System. 2-lane cross-section recommended.

Crash History and
Safety Considerations Crash Analysis completed for 01/01/2011 to 12/31/2015. No accidents
reported.

Comments _____

Reasonable Bridge Speed 55 mph

Investigated by: J. Andrew Eagle, PE, PTOE

Reviewed by: _____



County: Columbus

Route: NC 214 (Sam Potts Hwy)

Date: 04/13/16

Eastbound



Eastbound

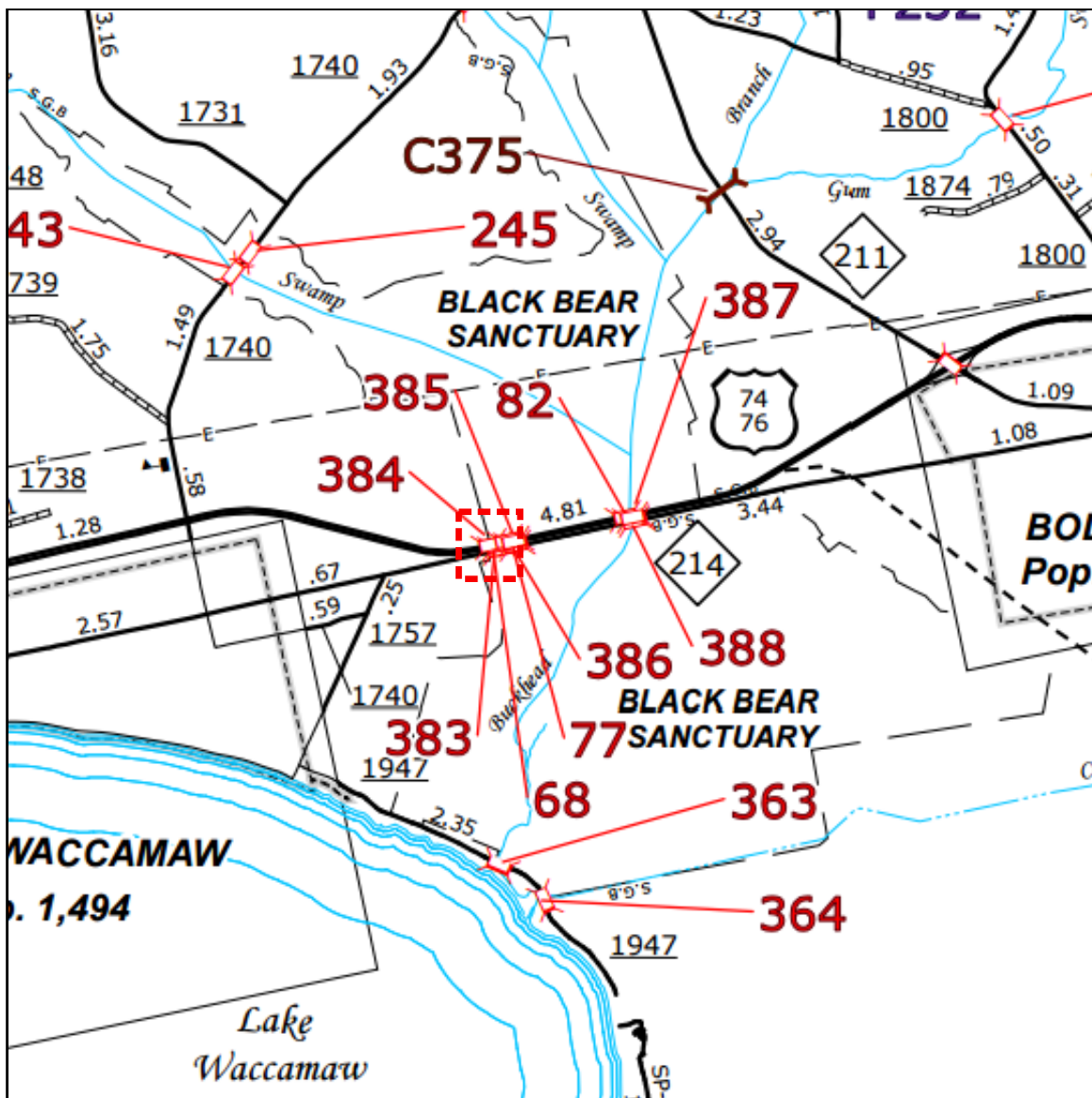


Westbound



Westbound





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

Study Criteria Summary

County: COLUMBUS **City:** All and Rural
Date: 01/01/2011 **to** 12/31/2015 **Study:** COLUMBUSBRIDGE68
Location: 500 feet either side of Bridge No. 68 on NC 214 over Green Swamp
NO CRASHES FOUND IN STUDY

Report Details

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
COLUMBUSBRIDGE68				76.8	8.4	2000	

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
COLUMBUS	24	6	All and Rural		0	01/01/2011	12/31/2015	5.00

Location Text	Requestor
500 feet either side of Bridge No. 68 on NC 214 over Green Swamp NO CRASHES FOUND IN STUDY	

Fiche Roads	
Name	Code
NC 214	30000214
SAM POTTS	50034597
NC 214 WB COUPLET	30600214

Strip Road					
Name	Code	Begin MP	End MP	Miles	Kilometers
NC 214	30000214	11.560	11.820	0.260	0.418