

Bridge Design Speed Investigation

Bridge #84 on SR 1349 (Pigeon Roost Road) over Pigeon Roost Creek
Mitchell County



Document Prepared By:

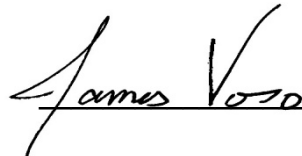
Mattern & Craig, Inc.
Consulting Engineers - Surveyors
12 Broad Street
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Commission No: 3241

May 15, 2012



Investigating Engineer


James Voso, PE

Bridge and Approach Investigation Checklist

Project 17BP.13.R.65
Description Replace Bridge #84 on SR 1349 (Pigeon Roost Road) over Pigeon Roost Creek
Route SR 1349 (Pigeon Roost Road)
Division 13
County Mitchell

Existing Speed Limit 55 mph ☐ Posted ☒ Statutory

Reasonable & Comfortable
Passenger Car Speed 25 mph

Speed Data N/A

Ball Bank Speed Study Curve south of Bridge #84 had a ball bank indication of 14 at 30 mph.

Warning Signs at Bridge Bridge End Delineators both ends, Narrow Bridge warning sign, Weight Limit (7 tons - single vehicle, 12 tons - truck tractor semitrailer)

Roadside Development Wooded in all quadrants of bridge.

ADT History 310 (2009), 190 (2007), 400 (2006), 220 (2005), 220 (2003), 400 (1999)

Pedestrian/Bicycle Traffic None

Bridge and Approach
Digital Photos (attached)

Approach Lane Width 8.5'

Approach Shoulder Width: 3'
Shoulder Type Grass

Lane Width (existing bridge) 7.5'

Shoulder width (existing bridge) 1.5'

Strategic Corridor / Thoroughfare
Designation and Recommended
Cross Section Not a Strategic Corridor/Thoroughfare. Two lane cross section at 30 mph based on 3R guidelines.

Crash History and
Safety Considerations No crashes reported (1/1/2002 - 12/31/2011, 10 years).

Comments Mountainous, winding road necessitates slower travel speeds.

Reasonable Bridge Speed 30 mph

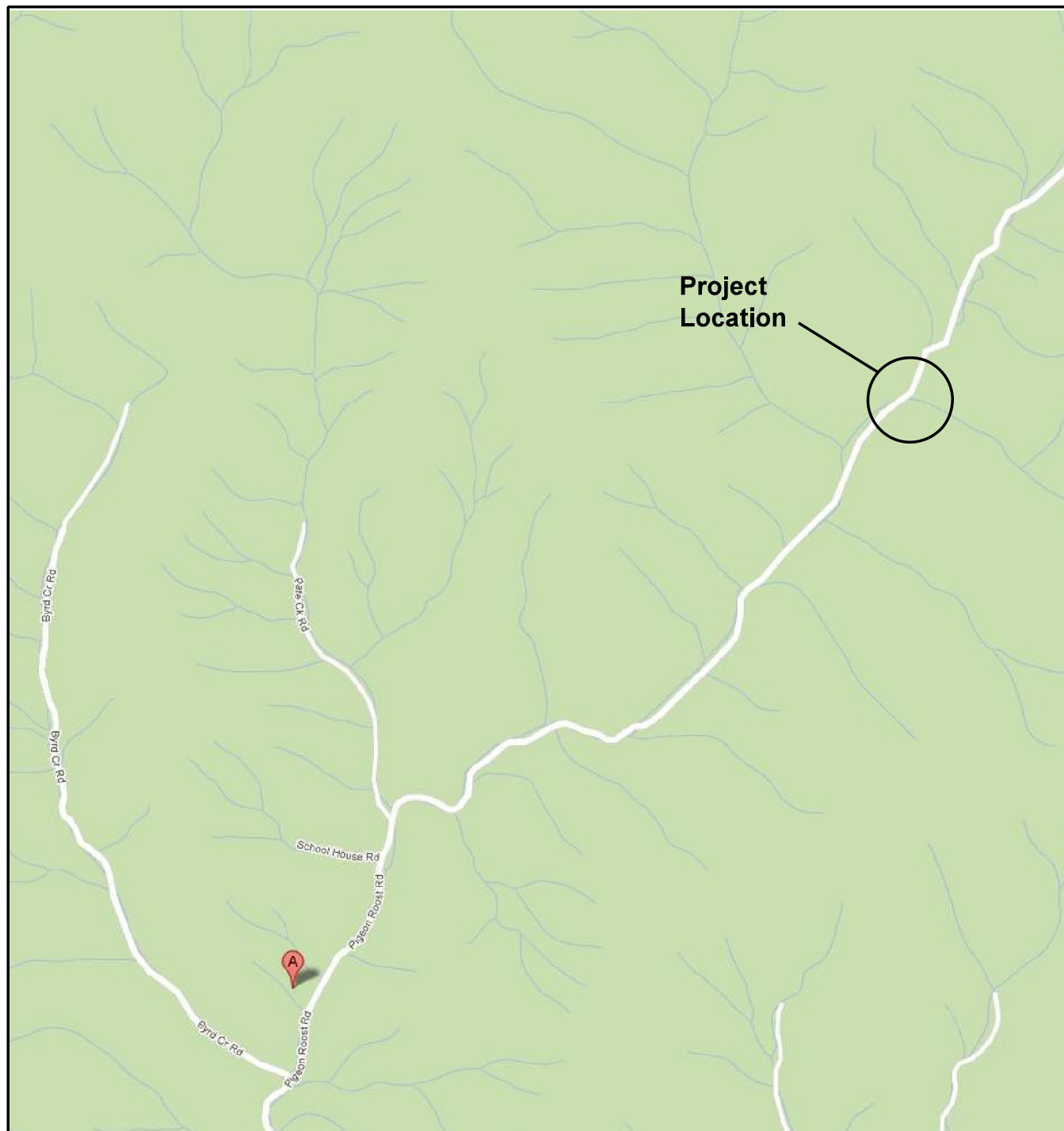
Investigated by: Tom Mulloy

Reviewed by: James Voso

Bridge #84

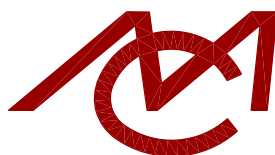
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VICINITY MAP

Bridge #84 on SR 1349
(Pigeon Roost Road)
over Pigeon Roost Creek



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Bridge Approach Speed Crash Analysis Request

Order # 41000018064

500 feet on Both Sides of Bridge Number 84 on Secondary Route 1349 (Pigeon Roost Road) over Pigeon Roost Creek in Mitchell County

Document Prepared By:

Safety Planning Group
Traffic Safety Systems Management Unit
Transportation Mobility and Safety Division
North Carolina Department of Transportation

Note: The crash statistics have been generated and are available through North Carolina's Crash Database. This database provides an inventory of **reported** crashes on record that have occurred at this location. Please note that many traffic crashes go unreported for a variety of reasons, and this report simply provides a listing of all crashes on record that occurred within 0 feet of the section described above.

Bridge #84
Mitchell County
Division 13

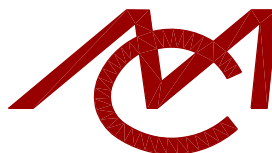


Northbound Approach



Northbound Approach at bridge

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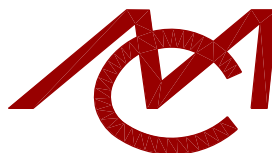


Southbound Approach



Southbound Approach at bridge

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