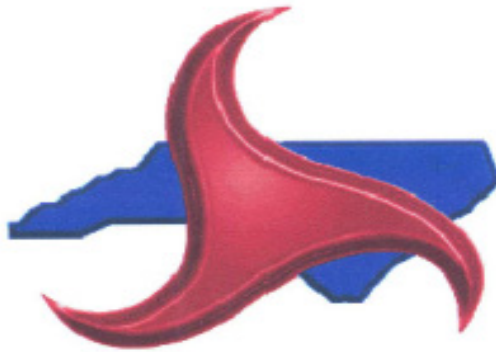


Bridge Design Speed Investigation

Bridge #231 on SR 1333 (Upper Pig Pen Road) over Pig Pen Creek
Yancey County



Document Prepared By:

Mattern & Craig, Inc.
Consulting Engineers - Surveyors
12 Broad Street
Asheville, NC 28801
(828) 254-2201
FAX: (828) 254-4562

Commission No: 3241

May 15, 2012



Investigating Engineer


James Voso, PE

Bridge and Approach Investigation Checklist

Project 17BP.13.R.92
Description Replace Bridge #231 on SR 1333 (Upper Pig Pen Rd) over Pig Pen Creek
Route SR 1333 (Upper Pig Pen Road)
Division 13
County Yancey

Existing Speed Limit 30 mph ☒ Posted ☐ Statutory

Reasonable & Comfortable
Passenger Car Speed 30 mph

Speed Data N/A

Ball Bank Speed Study Curve east of Bridge #231 had a ball bank indication of 14 at 25 mph.

Warning Signs at Bridge Bridge End Delineators both ends, One Lane Bridge warning sign, Weight Limit (11 tons - single vehicle, 20 tons - truck tractor semitrailer)

Roadside Development Residences north of bridge. Wooded in the southwest quadrant and farm land in the southeast quadrant of the bridge.

ADT History 330 (2010), 320 (2008), 370 (2006), 410 (2004), 300 (2002), 300 (2001), 320 (1999)

Pedestrian/Bicycle Traffic Low

Bridge and Approach
Digital Photos (attached)

Approach Lane Width 8'

Approach Shoulder Width: 3.5'
Shoulder Type Grass

Lane Width (existing bridge) 14' one lane

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 None

Reasonable Bridge Speed 30 mph

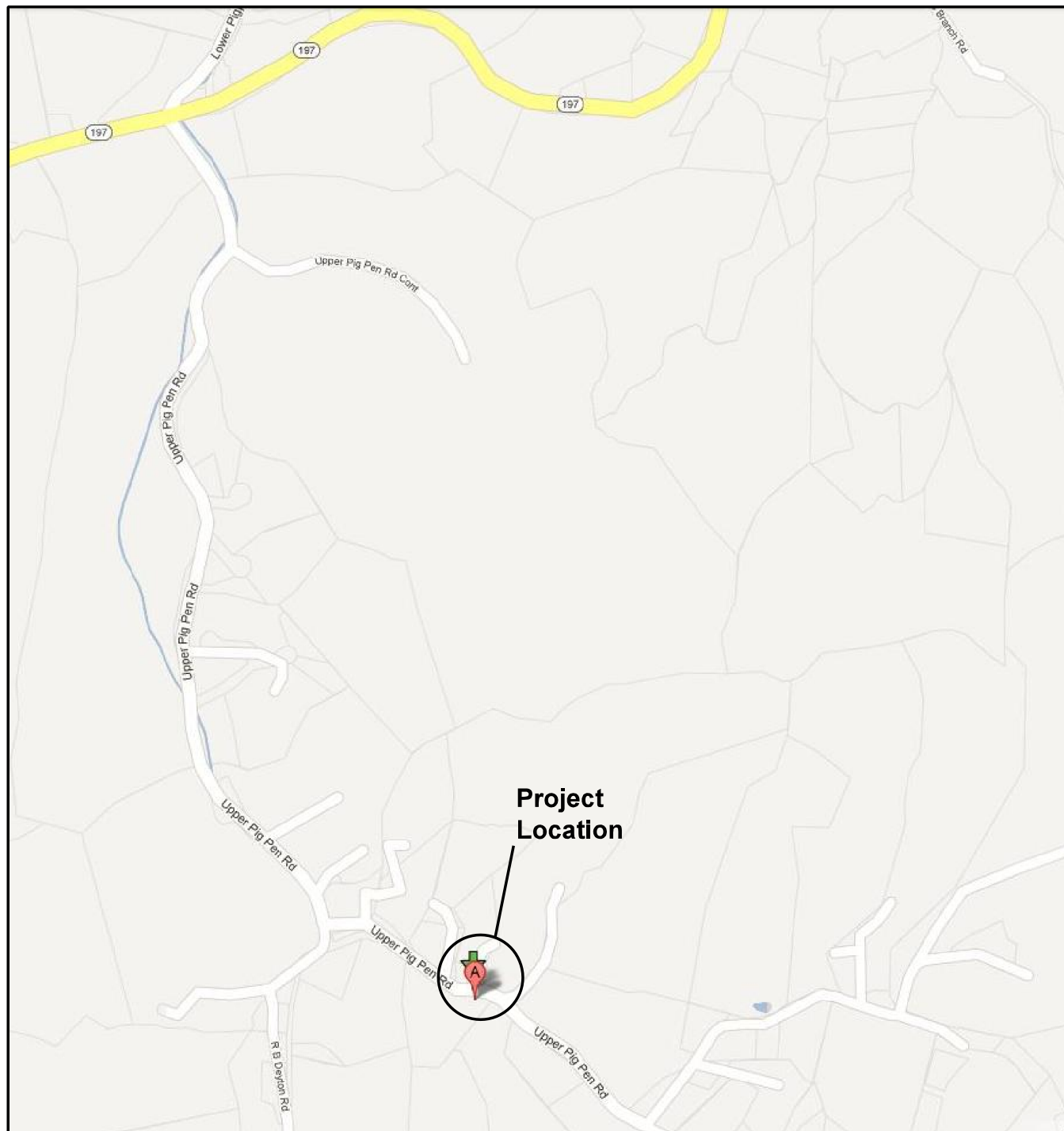
Investigated by: Tom Mulloy Reviewed by: James Voso



Bridge #231

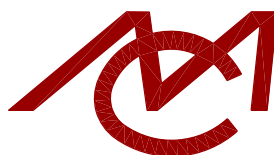
Yancey County

Division 13



VICINITY MAP

Bridge #231 on SR 1333
(Upper Pig Pen Road)
over Pig Pen Creek



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Bridge Approach Speed Crash Analysis Request

Order # 41000017986

500 feet on Both Sides of Bridge Number 231 on Secondary Route 1333 (Lower Pig Pen Road) over Creek in Yancey 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 #231
Yancey County
Division 13

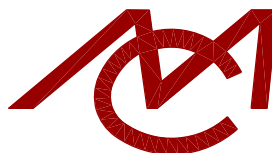


Eastbound Approach



Eastbound Approach at bridge

Bridge #231 on SR 1333
(Upper Pig Pen Road)
over Pig Pen Creek



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Bridge #231

Yancey County

Division 13

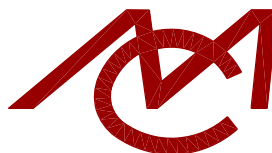


Westbound Approach



Westbound Approach at bridge

Bridge #231 on SR 1333
(Upper Pig Pen Road)
over Pig Pen Creek



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