

Bridge Design Speed Study

Bridge # 160106 over Burkes Creek on SR 1156 (Oakview Loop Rd)
Caswell County
WBS Element # 17BP.7.R.19



Document Prepared By:

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Principal Investigator

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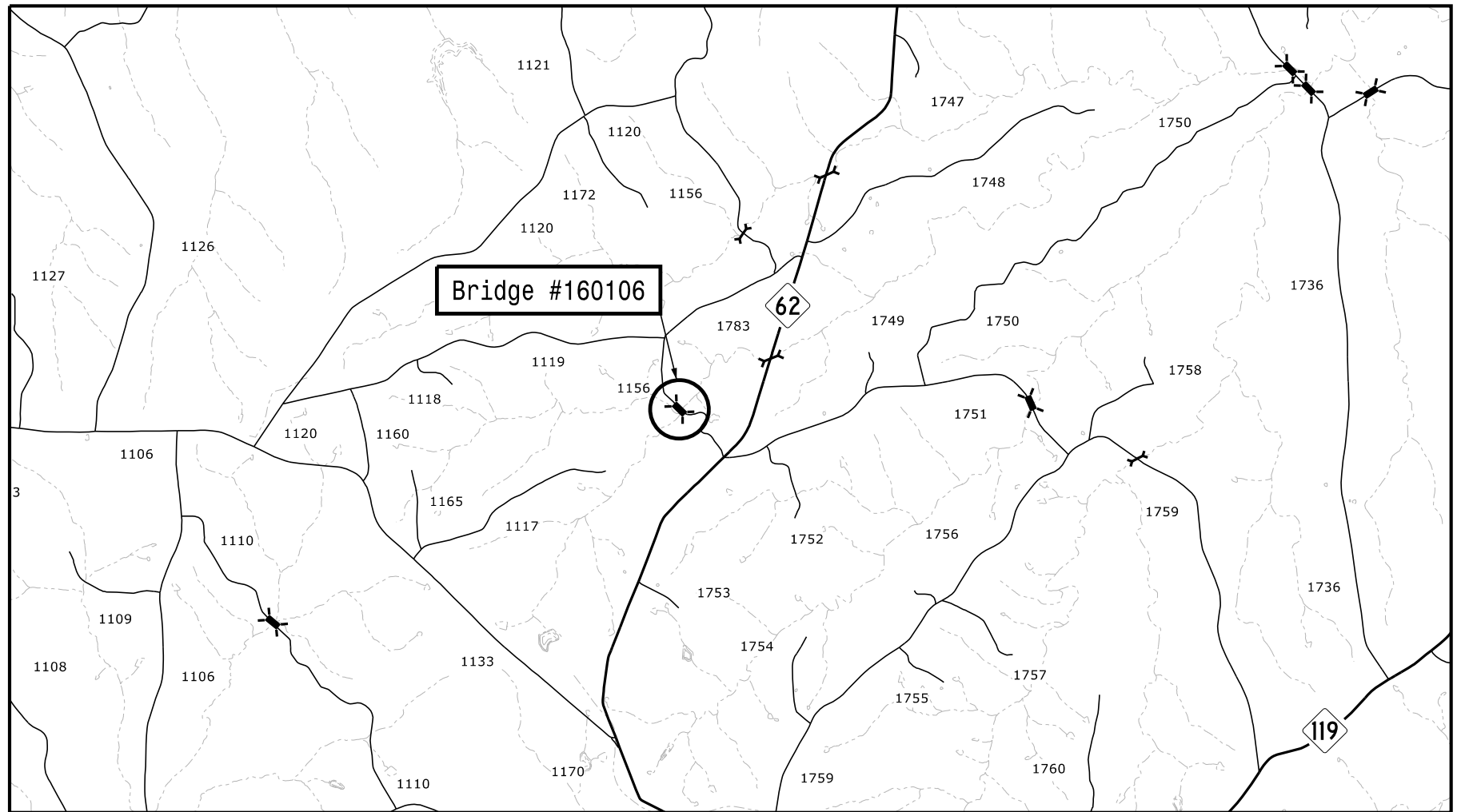
Project Manager

Bradley A. Reynolds, PE
Project Manager



Division 7 - Caswell County
Design Build Year 2 Bridge Program

Bridge locations plotted based on coordinates provided by Bridge Management



Division	County	Structure Number	Structure Description	Latitude	Longitude
7	Caswell	160106	Bridge #106 over Burkes Creek on SR 1156	36.31734113	-79.35993636

Bridge and Approach Investigation Checklist

Project 17BP.7.R.19

Description Bridge #106 over Burkes Creek on SR 1156

Route SR 1156 (Oakview Loop Rd)

Division 7

County Caswell

Existing Speed Limit 45 ☐ Posted ☒ Statutory

Reasonable & Comfortable Passenger Car Speed 30-35 mph

Speed Data No speed data points collected due to sparseness of traffic.

Ball Bank Speed Study Curve on west side of bridge ball banks at 12 degrees at 30 mph and 16 degrees at 35mph. Curve on east side of bridge ball banks at 4 degrees at 30 mph and 11 degrees at 35 mph.

Warning Signs at Bridge W23-10 object markers, one located at each corner of the bridge.
Regulatory 17 ton/23 ton weight limit sign on each approach.
W1-1 Turn Warning Sign with 30 mph advisory speed west of bridge.
W1-5 Winding Road Warning Sign with 25 mph advisory speed posted on both approaches.
W5-3 One Lane Bridge on both approaches.

Roadside Development Rural Residential/Undeveloped

ADT History 60 vpd from 2010 NCDOT Traffic Survey Map
80 vpd from 2002 NCDOT Traffic Survey Map

Pedestrian/Bicycle Traffic No bike or ped traffic observed during investigation. Little bike or ped traffic is expected on SR 1156.

Bridge and Approach Digital Photos See attached photos.

Approach Lane Width 19' over all pavement width with 9.5' lanes

Approach Shoulder Width: Varies from 4.5' to 10.5'±
Shoulder Type Grass

Lane Width (existing bridge) 17' overall pavement width with a 14' lane

Shoulder width (existing bridge) 1.5' /1.5'

Strategic Corridor / Thoroughfare Designation and Recommended Cross Section SR 1156 is classified as a local roadway, therefore it is recommended that the minimum cross section follow the NCDOT "R-R Guide" with a minimum of 10 foot lane widths and 3 foot shoulder widths (6 foot graded shoulder width where guardrail is to be installed).

Crash History and Safety Considerations No crashes have been reported in the vicinity of the bridge from 1/1/2002 to 12/31/2011 (10 years).

Comments One lane bridge and curves on both approaches severely limit approach speeds.

Reasonable Bridge Speed 35 mph

Investigated by: Andrew Klinksiek, EI Reviewed by: Bradley Reynolds, PE

County: Caswell

Description:

Bridge #106 over Burkes Creek

Route: SR 1156

SR 1156 (Oakview Loop Rd) EB $\pm 50'$ from Bridge #106



SR 1156 (Oakview Loop Rd) EB $\pm 150'$ from Bridge #106



SR 1156 (Oakview Loop Rd) EB $\pm 100'$ from Bridge #106



SR 1156 (Oakview Loop Rd) EB $\pm 200'$ from Bridge #106



County: Caswell

Description: Bridge #106 over Burkes Creek

Route: SR 1156

SR 1156 (Oakview Loop Rd) EB $\pm 250'$ from Bridge #106



SR 1156 (Oakview Loop Rd) EB $\pm 300'$ from Bridge #106



SR 1156 (Oakview Loop Rd) EB $\pm 350'$ from Bridge #106



SR 1156 (Oakview Loop Rd) WB $\pm 50'$ from Bridge #106



County: Caswell

Description: Bridge #106 over Burkes Creek

Route: SR 1156

SR 1156 (Oakview Loop Rd) WB ±100' from Bridge #106



SR 1156 (Oakview Loop Rd) WB ±200' from Bridge #106



SR 1156 (Oakview Loop Rd) WB ±150' from Bridge #106



SR 1156 (Oakview Loop Rd) WB ±250' from Bridge #106



County: Caswell

Description: Bridge #106 over Burkes Creek

Route: SR 1156

SR 1156 (Oakview Loop Rd) WB ±300' from Bridge #106



SR 1156 (Oakview Loop Rd) WB ±350' from Bridge #106



Bridge Approach Speed Crash Analysis Request

Order # 41000018385

500 feet on Both Sides of Bridge Number 106 on Secondary Route 1156 (Oakview Loop Road) over Burkes Creek in Caswell 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.

