
Bridge Design Speed Investigation

850257

Structure #257 on SR 1600 (Lumber Plant Road) over Creek

Surry County



Document Prepared By:

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Project Manager

A handwritten signature in black ink, reading "Jacob D. Carpenter".

Jacob D. Carpenter, PE
Regional Manager

Principal Investigator

A handwritten signature in black ink, reading "Andrew Eagle".

Andrew Eagle, PE, PTOE
Traffic Engineer



Bridge and Approach Investigation Checklist

Project W02881

Description Bridge # 257 over Creek

Route SR 1600 (Lumber Plant Road)

Division 11

County Surry

Existing Speed Limit 55 ☐ Posted ☒ Statutory

Reasonable & Comfortable Passenger Car Speed 15

Speed Data 15-20 mph

Ball Bank Speed Study Reasonable and comfortable speed on road limited to 15-20 mph due to gravel road surface.

Warning Signs at Bridge 4x Bridge End Delineators, 2x Weight Limit (14 ton SV, 19 ton TTST), 2x One Lane Bridge

Roadside Development Residential, Farm, Wooded

ADT History 410 vpd (From NCDOT TEAAS); 50 vpd (2000)

Pedestrian/Bicycle Traffic Minimal Expected

Bridge and Approach Digital Photos Attached

Approach Lane Width 13 ft (one lane only)

Approach Shoulder Width: 4 ft
Shoulder Type grass

Lane Width (existing bridge) 12 ft (one lane only)

Shoulder width (existing bridge) 2.5-3 ft (~17 ft total width)

Strategic Corridor / Thoroughfare Designation and Recommended Cross Section SR 1600 is classified as a rural local facility in the Statewide Functional Classification System. One or 2-lane cross-section recommended.

Crash History and Safety Considerations Crash analysis completed for 7/1/2003 to 6/30/2013. No collisions reported.

Comments This bridge is located on a portion of SR 1600 that is a gravel road.
The ADT is most likely closer to the 50 vpd found in the NCDOT online ADT maps rather than the 410 vpd listed on the TEAAS crash report.
Reasonable bridge speed 20 mph due to narrow, gravel road.

Reasonable Bridge Speed 20

Investigated by: J. Andrew Eagle, PE, PTOE

Reviewed by: 

County: Surry

Bridge and Route: 850257 – SR 1600 Lumber Plant Rd.

Date: 9/17/13

Northbound



Northbound

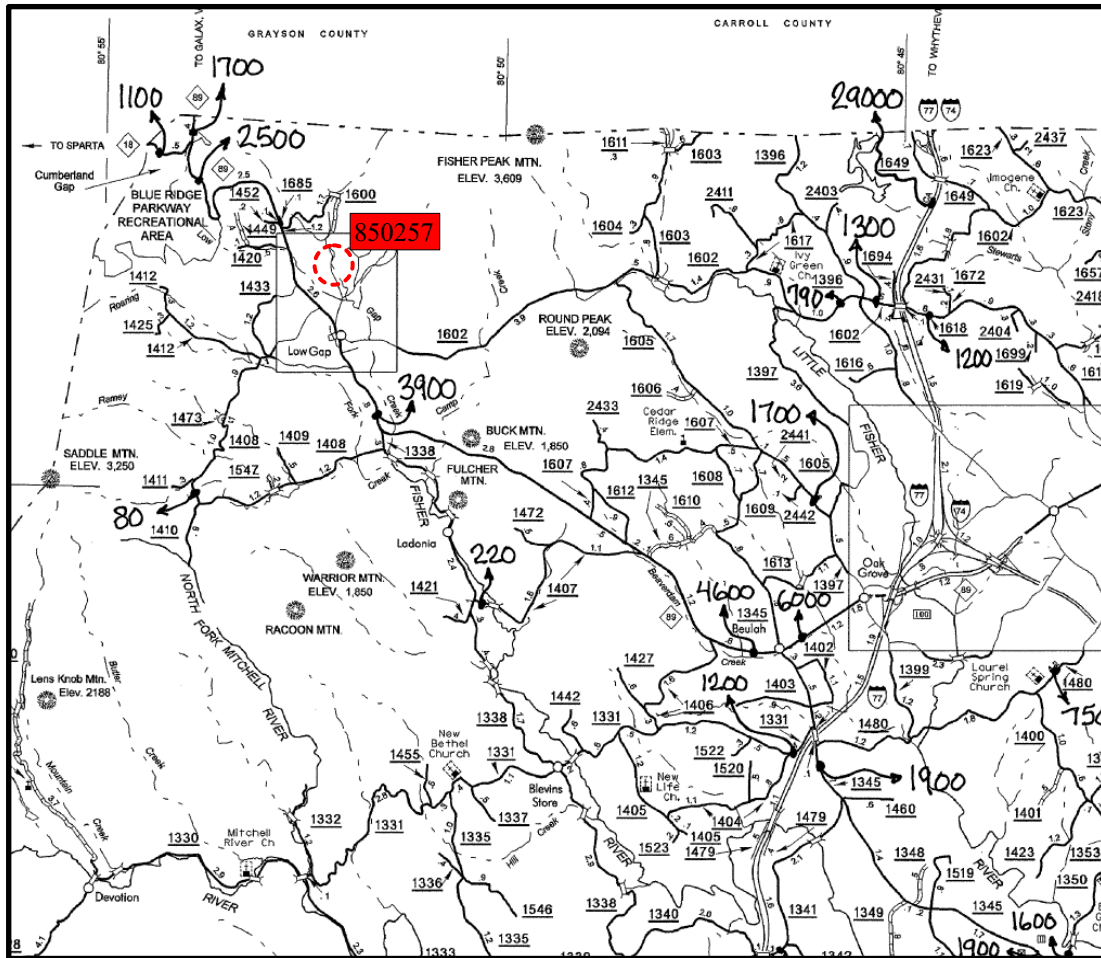


Southbound



Southbound





Bridge Location Map - Bridge #850257

