
Bridge Design Speed Investigation

420245

Structure #245 on SR 2054 (Marshbanks St) over East Buies Creek

Harnett County



Document Prepared By:

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Project Manager

A handwritten signature in black ink, appearing to read "Jacob D. Carpenter".

Jacob D. Carpenter, PE
Regional Manager

Principal Investigator

A handwritten signature in black ink, appearing to read "J. Andrew Eagle".

J. Andrew Eagle, PE, PTOE
Senior Transportation Engineer



Bridge and Approach Investigation Checklist

Project B-5711

Description Replace Bridge #245 over East Buies Creek

Route SR 2054 (Marshbanks St)

Division 6

County Harnett

Existing Speed Limit 35 mph ☒ Posted ☐ Statutory

Reasonable & Comfortable Passenger Car Speed 40 mph

Speed Data Estimated 35-40 mph

Ball Bank Speed Study N/A

Warning Signs at Bridge 2x Narrow Bridge, 4x Bridge End Delineators, 2x Weight Limit (21 ton SV, 27 ton TTST)

Roadside Development Undeveloped, Residential, Commercial

ADT History NCDOT TEAAS information has not been received yet
1300 vpd (From NCDOT Traffic Volume Map-2014)

Pedestrian/Bicycle Traffic Minimal Expected

Bridge and Approach Digital Photos Attached

Approach Lane Width 9.5 ft

Approach Shoulder Width 1 ft paved, 4 ft grass (21 ft EOP to EOP)
Shoulder Type

Lane Width (existing bridge) 9 ft

Shoulder width (existing bridge) 1 ft (20 ft total width)

Strategic Corridor / Thoroughfare Designation and Recommended Cross Section SR 2054 is classified a rural local facility in the Statewide Functional Classification System. 2-lane cross-section recommended.

Crash History and Safety Considerations Crash data has been requested but not yet received. Upon receiving crash data, if the information significantly affects the design of this bridge, an updated document will be submitted.

Comments

Reasonable Bridge Speed 40 mph

Investigated by: J. Andrew Eagle, PE, PTOE

Reviewed by: 

County: Harnett

Route: SR 2054 (Marshbanks Rd)

Date: 04/13/16

Northbound



Northbound

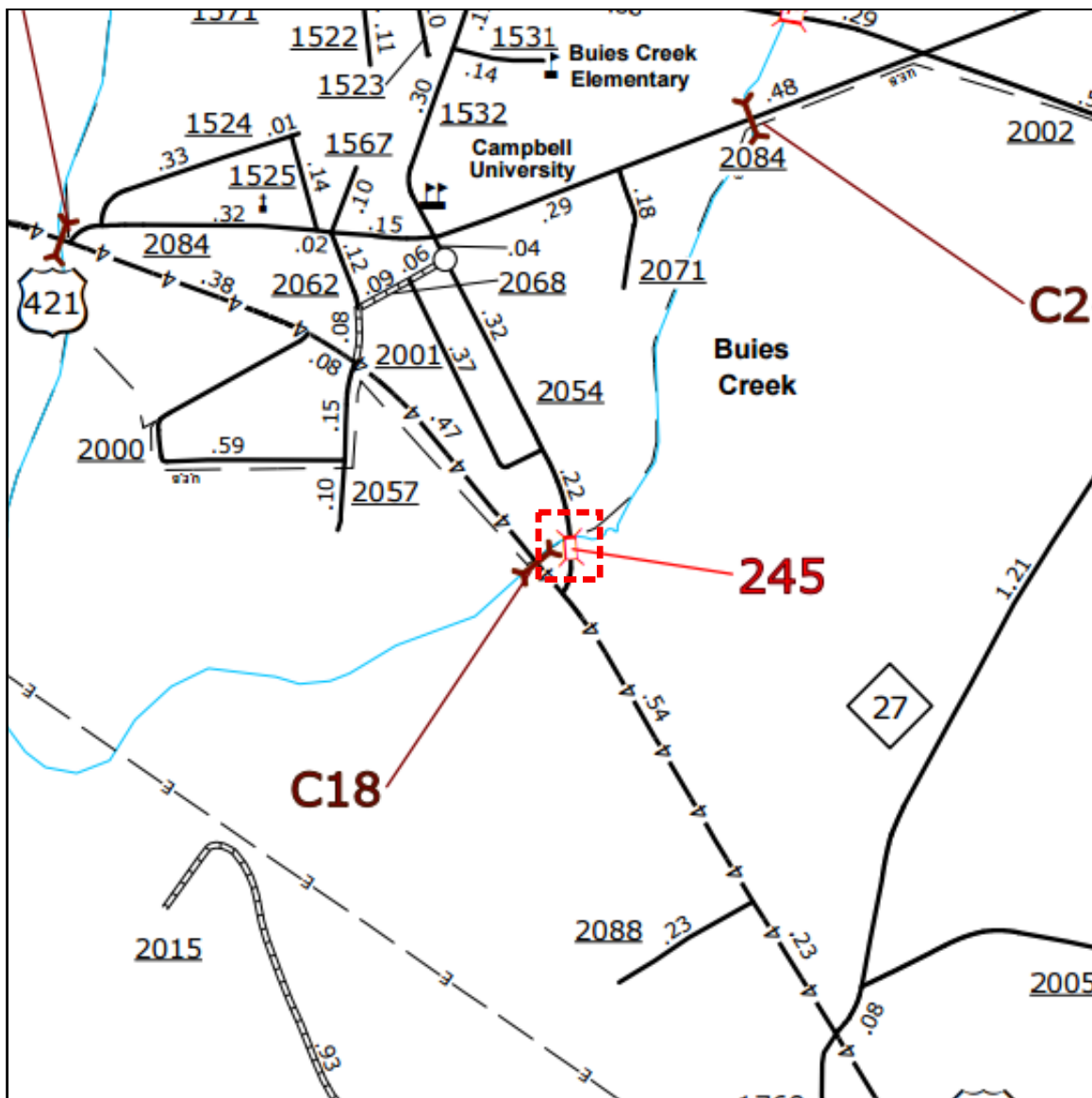


Southbound



Southbound





Bridge Location Map-Bridge #420245