

# Bridge Design Speed Investigation

Bridge #14 on SR 1746 (Cub Creek Circle) over Cub Creek  
Burke County



Document Prepared By:

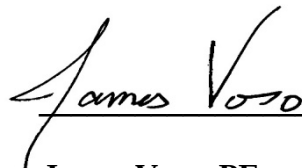
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Consulting Engineers - Surveyors  
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Commission No: 3350

July 18, 2013



Investigating Engineer

  
James Voso, PE

# Bridge and Approach Investigation Checklist

Project 17BP.13.PE.1  
Description Replace Bridge #14 on SR 1746 (Cub Creek Circle) over Cub Creek  
Route SR 1746 (Cub Creek Circle)  
Division 13  
County Burke

Existing Speed Limit 55 mph ☐ Posted ☒ Statutory

Reasonable & Comfortable  
Passenger Car Speed 30 mph

Speed Data N/A

Ball Bank Speed Study Curve south of Bridge #14 had a ball bank indication of 12 at 25 mph.

Warning Signs at Bridge 4 Bridge End Delineators, Weight Limit (15 tons - single vehicle,  
21 tons - truck tractor semitrailer)

Roadside Development Farm land in northwest quadrant of bridge. Wooded in all other quadrants  
of bridge.

ADT History Not available

Pedestrian/Bicycle Traffic Low

Bridge and Approach  
Digital Photos (attached)

Approach Lane Width 9'

Approach Shoulder Width: 13'  
Shoulder Type grass

Lane Width (existing bridge) 7.5'

Shoulder width (existing bridge) 2'

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 near bridge (5/1/2003 - 4/30/2013, 10 years).

Comments Driveway near south end of bridge. Bridge number posted on bridge.  
SR 1746 intersects Mineral Springs Mountain Rd with stop control on the  
SR 1746 approach just north of the bridge.

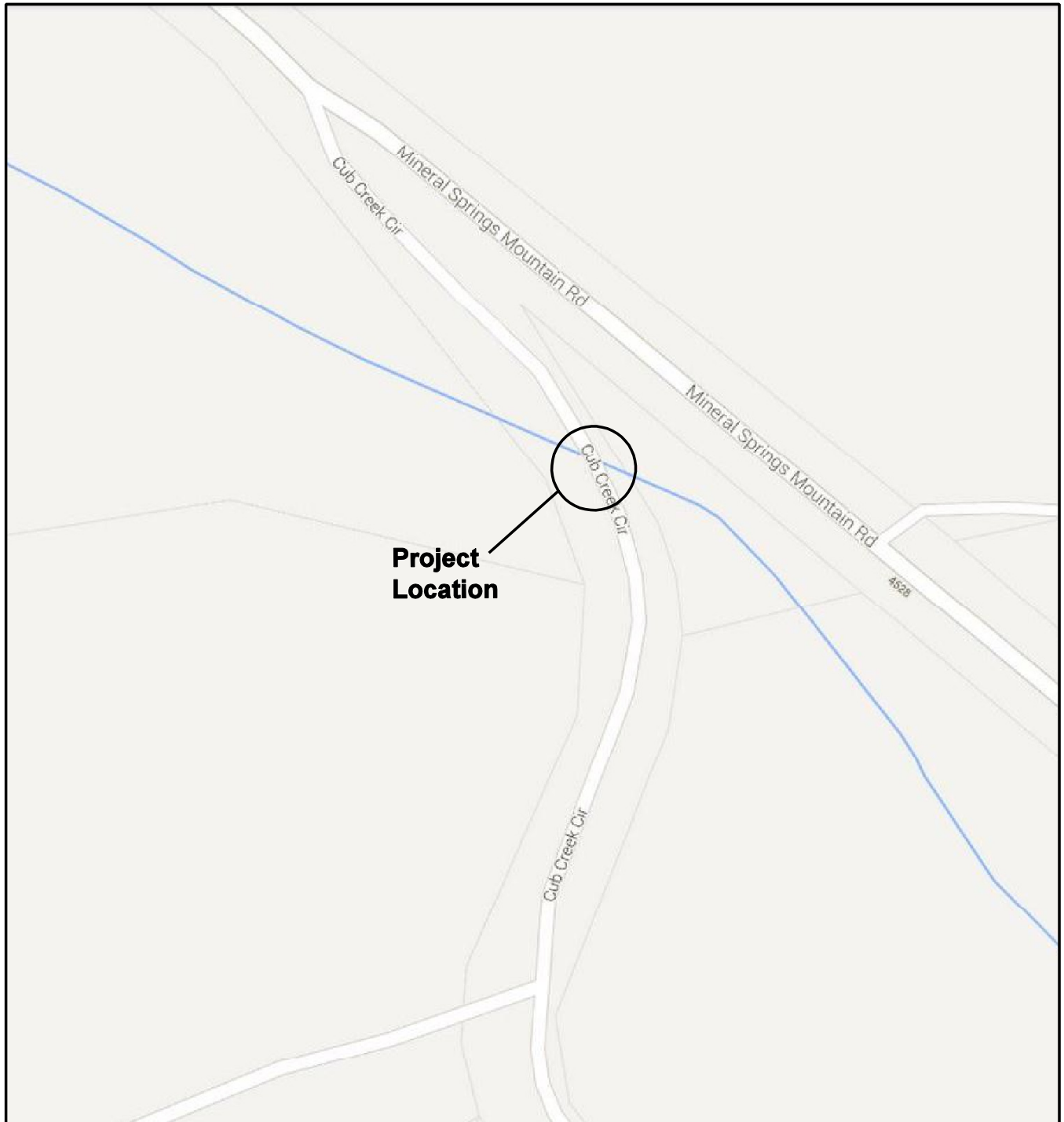
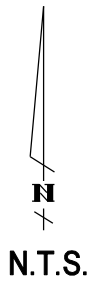
Reasonable Bridge Speed 30 mph

Investigated by: Mathew Bolden Reviewed by: James Voso

Bridge #14

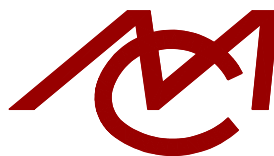
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VICINITY MAP

Bridge #14 on SR 1746  
(Cub Creek Circle)  
over Cub Creek



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**Bridge #14**

**Burke County**

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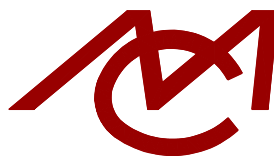


**Northbound Approach**



**Northbound Approach at bridge**

**Bridge #14 on SR 1746  
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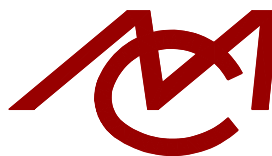


**Southbound Approach**



**Southbound Approach at bridge**

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