

# Project No. B-3804: Bridge No. 296 over North Fork New River on Campbell Road (S.R. 1351)

Project No. B-4704: Bridge No. 49 over Buffalo Creek on N.C. 194 / N.C. 88

## **About Project B-3804**

The purpose of this project is to replace Ashe County Bridge No. 296 on Campbell Road (S.R. 1351) over North Fork New River. The existing bridge is considered "functionally obsolete" according to Federal Highway Administration (FHWA) standards. This is due to the deck geometry and the approach roadway alignment. Components of both the concrete and steel superstructure have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The posted weight limit on the bridge is down to 23 tons for single vehicles and 31 tons for truck-tractor semi-trailers. The bridge is approaching the end of its useful life. Replacement of the bridge will result in safer and more efficient traffic operations.

Existing Bridge No. 296 is 87 feet long. The bridge is a "low-water" bridge meaning that during high waters events, the stream will flow over the bridge. Low-water bridges are economical structures for broad flat streams like the North Fork New River, however, they have several deficiencies:

- Frequent flooding
- Substructure tends to trap debris; thereby, decreases the conveyance and contributes to further flooding
- Normal bridge railings cannot be used; therefore, traffic safety is a concern

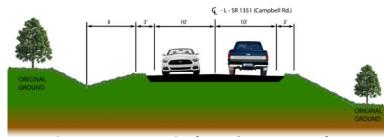
Due to these insufficiencies, low-water structures are not preferred.

The replacement structure will be a cored slab bridge. The approaches will be widened to include a 20-foot pavement width providing two 10-foot lanes. Three-foot unpaved shoulders will be provided on each side (7-foot shoulders where guardrail is included). Refer to "Typical Sections" on the right. The roadway will be designed as a Rural Local Route with a 15 mile per hour design speed.

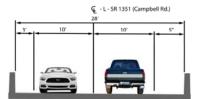
Two build alternatives are being investigated (refer to the figures on the next page):

- Relocate the bridge 70 feet upstream using an offsite detour to maintain traffic during construction
- Relocate the bridge 150 feet upstream using the existing structure to maintain traffic during construction

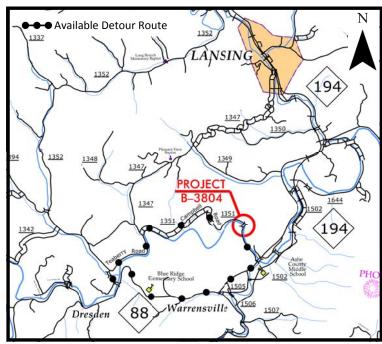
Traffic would be maintained on site during most of the construction. A short-term off-site detour may be used during tie-ins of the existing roadway to the proposed roadway. The detour would include Campbell Road, Teaberry Road (S.R. 1347), N.C. 88, and N.C. 194. Refer to the figure below. A 2-mile section of Campbell Road from Teaberry Road to 0.47 miles west of Bridge No. 296 is narrow and unpaved.



**Project B-3804 Typical Section on Roadway** 



**Project B-3804 Typical Section on Bridge** 



**Project B-3804 Vicinity and Detour** 

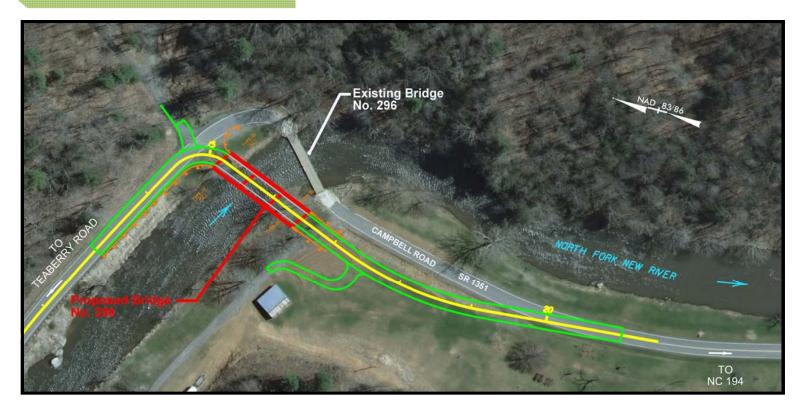
Connecting people, products and places safely and efficiently with customer focus, accountability and environmental sensitivity to enhance the economy and vitality of North Carolina.



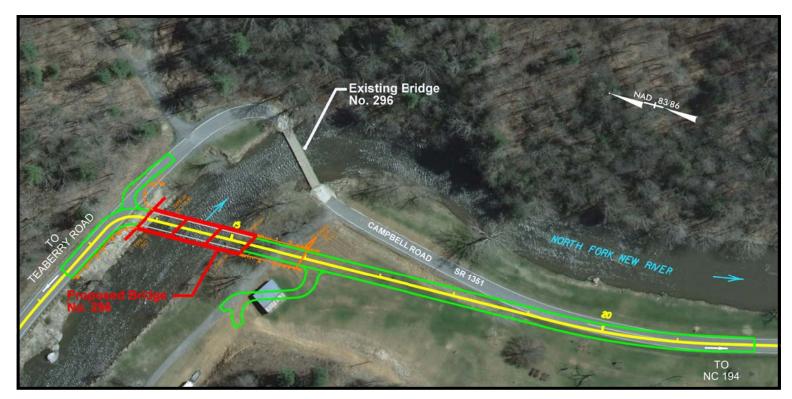
Campbell Road (S.R. 1351)

Project No. B-4704: Bridge No. 49 over Buffalo Creek on N.C. 194 / N.C. 88

# **About Project B-3804 (cont.)**



Project B-3804 Alternative 1



Project B-3804 Alternative 2



Campbell Road (S.R. 1351)

Project No. B-4704: Bridge No. 49 over Buffalo Creek on N.C. 194 / N.C. 88

## **About Project B-4704**

The purpose of this project is to replace Ashe County Bridge No. 49 on N.C. 194 / N.C. 88 over Buffalo Creek. Existing Bridge No. 49 is 118 feet long. The replacement structure will be a prestressed concrete or steel girder bridge. The bridge width will provide two 12-foot travel lanes. The preliminary bridge length is approximately 110 feet. The roadway grade of the new structure will be about the same as the existing structure.

The bridge is considered "structurally deficient" according to Federal Highway Administration (FHWA) standards. The bridge also meets the criteria for "functionally obsolete" due to appraisals of its deck geometry and a structural evaluation.

Components of both the concrete superstructure and substructure have experienced an increasing degree of deterioration that can no longer be addressed by maintenance activities. The bridge is approaching the end of its useful life. Replacement of the bridge will result in safer and more efficient traffic operations.

The approaches will be widened to include a 32-foot pavement width providing two 12-foot lanes. Eight-foot shoulders, including 4-foot paved portions, will be provided on each side (11-foot shoulders where guardrail is included). Refer to "Typical Sections" on the next page. The roadway will be designed as a Rural Major Collector with a 35 mile per hour design speed.

Two build alternatives are being investigated:

- replace in-place using temporary on-site detour
- replace in-place using temporary off-site detour

However, it is likely that the off-site detour would also be used with either alternative during short-term operations such as rock blasting. The offsite detour for this project would include N.C. 88, N. Main Street / Old Highway 16 (S.R. 1573), Deep Ford Road (S.R. 1501), and West Deep Ford Road (S.R. 1514). Refer to the figure on the next page. The majority of traffic on N.C. 194 / N.C. 88 is through traffic. This detour would result in 3.5 miles of additional travel for the typical user.

Another alternative, relocation of the bridge downstream

(Continued on next page)



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# **About Project B-4704 (cont.)**

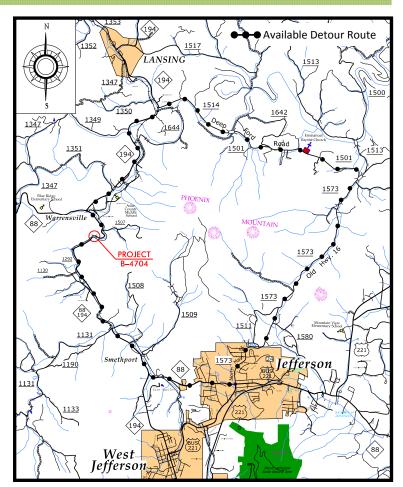
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while maintaining traffic on the current bridge during construction was eliminated from further consideration since it would involve extensive rock excavation and a business relocation.

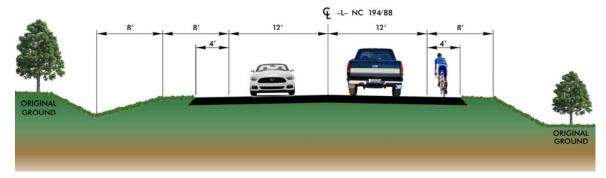
The no-build alternative would eventually necessitate closure of this important route.

The project has a number of unique features which will be considered during design:

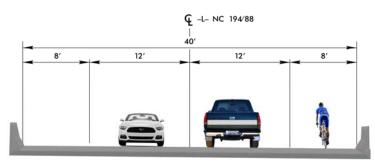
- Proximity of large rock outcroppings and steep rock cuts
- Bicycle accommodations as N.C. 194 / N.C. 88 is a designated Bicycle Route No. 28 in the High County Regional Bike Plan
- Volume of traffic as N.C. 194 / N.C. 88 is a major commuter route



**Project B-4704 Vicinity and Detour** 



**Project B-4704 Typical Section on Roadway** 



**Project B-4704 Typical Section on Bridge** 



Campbell Road (S.R. 1351)

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More Information
on the projects can be found on the
NCDOT public meetings website
by searching **B-3804** or **B-4704**in the search box at
www.ncdot.gov/projects/publicmeetings

## **Preliminary Schedules**

#### Project B-3804:

<b>Environmental Document</b>	Fall 2017
Right of Way Acquisition	Fall 2019
Construction	Fall 2020

#### Project B-4704:

Environmental Document	Fall 2017
Right of Way Acquisition	Fall 2018
Construction	Fall 2019

\*Based on the Draft 2017-2027 Transportation Improvement Program Funding – Subject to Change

## **TIP Projects in the Area**

Other NCDOT Transportation Improvement Program (TIP) projects in the vicinity are:

- TIP No. B-4016: Bridge No. 273 on Teaberry Road (S.R. 1347) over Big Horse Creek
- TIP No. B-5504: Bridge No. 337 on Low Water Br Rd (S.R. 1503) over the North Fork New River
- TIP No. B-5147: Replace Bridge No. 327 on Claybank Road (S.R. 1509) over Creek
- TIP No. B-5838: Replace Bridge No. 309 on Silas Creek Road (S.R. 1523) over Silas Creek
- TIP No. R-2915E: Widen U.S. 221 from U.S. 221 Bypass to U.S. 221 Business / N.C. 88 in Jefferson

## **Your Participation**

Public involvement is an important part of the planning process. The N.C. Department of Transportation encourages public involvement on transportation projects, and will consider your suggestions and address your concerns.

Today's meeting is another important step in NCDOT's efforts to keep you, the public, involved in the planning and development of the project. This meeting is being held to obtain your input on the designs of the projects.

Comments should be mailed to Michael Wray by Wednesday, March 29, 2017

#### PROJECT CONTACTS

Mr. Michael Wray, PE

NCDOT Project Development - Western Region

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Campbell Road (S.R. 1351)

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# PUBLIC MEETING—COMMENT FORM

Adaress:				
	The comments below are in regard to			
	PROJECT B-3804	PROJECT B-4704	ВОТН	



Attn: Mr. Michael Wray, PE NCDOT Project Development -Western Region 1548 Mail Service Center Raleigh, NC 27699-1548



Campbell Road (S.R. 1351)

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# TITLE VI PUBLIC INVOLVEMENT FORM

The information requested in order to participate in this meeting.		
Date: March 14, 2017		
er on Campbell Road (S.R. 1351) 194 / NC 88		
authorities, the North Carolina Department of Transportation (NCDOT d the benefits of, or subjected to discrimination under any of the Depart nal origin, disability, age, income, or gender.  Involvement obligations under Title VI and NEPA, and will improve ignated box on the sign-in table, hand it to an NCDOT official or mail taleigh, NC 27699-1598. All forms will remain on file at the NCDOT are		
<b>Gender:</b> ☐ Male ☐ Female		
Age:  ☐ Less than 18 ☐ 45-64 ☐ 18-29 ☐ 65 and older ☐ 30-44  Have a Disability: ☐ Yes ☐ No		
National Origin: (if born outside the U.S.)  Mexican  Central American: South American: Puerto Rican Vietnamese Chinese Korean Other (please specify):		

How did you hear about this meeting? (newspaper advertisement, flyer, and/or mailing) \_\_\_\_\_\_ For more information regarding Title VI or this request, please contact the NCDOT Title VI Section at (919) 508-1896 or toll free at 1-800-508-1886, or by email at sddickens@ncdot.gov.



Attn: Jamille Robbins NCDOT - HES-PI 1598 Mail Service Center Raleigh, NC 27699-1598