

Bridge No.	434
Crosses	Back Swamp
Year Built	1970
Clear Roadway Width	29 feet
Length	76 feet
Sufficiency Rating	27.67
Functionally Obsolete?	Yes (Structural Appraisal=3)
Structurally Deficient?	Yes (Superstructure Condition=3)
Posted Weight Limit	24 tons SV 32 tons TTST

C. Categorical Exclusion Action Classification: (Check one)

TYPE I

D. Proposed Improvements

28. Bridge rehabilitation, reconstruction, or replacement or the construction of grade separation to replace existing at-grade railroad crossings, if the actions meet the constraints in 23 CFR 771.117(e)(1-6).

E. Special Project Information:

A vicinity map showing the location of the bridge and the detour route is included in Appendix A as Figure 1. Photographs of the bridges are included in Appendix A as Figure 2 and 3.

NCDOT has sought input from the following agencies as a part of the project development: U.S. Army Corps of Engineers, NC Department of Natural Resources, U.S. Fish & Wildlife Service, N.C Wildlife Resources Commission, NC Division of Water Quality, and the Environmental Protection Agency. No special concerns were expressed by any of the agencies contacted.

Estimated Costs:

The estimated costs, based on 2017 prices, are as follows:

R/W: \$120,000.00
Const: \$875,000.00
Total: \$995,000.00

Estimated Traffic:

Year 2015 2,000 vehicles per day (vpd)
Year 2040 3,300 vpd

Accidents: Five crashes occurred in the vicinity of the project during a recent five-year period. Of the five crashes, none were attributed to the geometry of the bridge or its approach roadways.

Design Exceptions: A design exception for the horizontal curve radius will be needed.

Pedestrian and Bicycle Accommodations: SR 1003 is not a designated bicycle route, nor does it have any pedestrian accommodations.

Offsite Detour: Bridge No. 434 will be replaced on the existing alignment. Traffic will be detoured offsite (see Figure 1) during the construction period. NCDOT Guidelines for Evaluation of Offsite Detours for Bridge Replacement Projects considers multiple project variables beginning with the additional time traveled by the average road user resulting from the offsite detour. The offsite detour for this project would include US 74 Alternate, SR 1157/SR 1223 (Henry Berry Road) and SR 1155 (Dew Road). The majority of traffic on the road is through traffic. The detour for the average road user would result in ten minutes additional travel time (five miles additional travel). Up to a 12-month construction duration is expected for this project.

Public Involvement: A landowner notification letter and a newsletter were sent to all property owners affected directly by this project. Property owners were invited to comment. No comments have been received to date.

Anticipated Permits: The proposed project not will affect any wetlands. A Nationwide permit (NWP) 23 (33 CFR 330.5(a) 23)) will likely be required for impacts to “Waters of the United States” resulting from this project. Other permits that may apply include a NWP 33 for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that may be required during bridge construction.

An NC Division of Water Resources Section 401 Water Quality General Certification may be required prior to the issuance of a Section 404 Permit. The US Army Corps of Engineers holds the final discretion as to what permit will be required to authorize project construction.

Due to the presence of a flood zone, a FEMA permit will be required.

F. Project Impact Criteria Checklists:

<u>Type I & II - Ground Disturbing Actions</u>			
<u>FHWA APPROVAL ACTIVITIES THRESHOLD CRITERIA</u>			
If any of questions 1-7 are marked "yes" then the CE will require FHWA approval.		Yes	No
1	Does the project require formal consultation with U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	Does the project result in impacts subject to the conditions of the Bald and Golden Eagle Protection Act (BGPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	Does the project generate substantial controversy or public opposition, for any reason, following appropriate public involvement?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Does the project cause disproportionately high and adverse impacts relative to low-income and/or minority populations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5	Does the project involve a residential or commercial displacement, or a substantial amount of right of way acquisition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	Does the project require an Individual Section 4(f) approval?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7	Does the project include adverse effects that cannot be resolved with a Memorandum of Agreement (MOA) under Section 106 of the National Historic Preservation Act (NHPA) or have an adverse effect on a National Historic Landmark (NHL)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If any of questions 8 through 31 are marked "yes" then additional information will be required for those questions in Section G.			
<u>Other Considerations</u>		Yes	No
8	Does the project result in a finding of "may affect not likely to adversely affect" for listed species, or designated critical habitat under Section 7 of the Endangered Species Act (ESA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Is the project located in anadromous fish spawning waters?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	Does the project impact waters classified as Outstanding Resource Water (ORW), High Quality Water (HQW), Water Supply Watershed Critical Areas, 303(d) listed impaired water bodies, buffer rules, or Submerged Aquatic Vegetation (SAV)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Does the project impact waters of the United States in any of the designated mountain trout streams?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Does the project require a U.S. Army Corps of Engineers (USACE) Individual Section 404 Permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Will the project require an easement from a Federal Energy Regulatory Commission (FERC) licensed facility?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14	Does the project include a Section 106 of the NHPA effects determination other than a no effect, including archaeological remains?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>Other Considerations (continued)</u>		Yes	No
15	Does the project involve hazardous materials and/or landfills?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16	Does the project require work encroaching and adversely affecting a regulatory floodway or work affecting the base floodplain (100-year flood) elevations of a water course or lake, pursuant to Executive Order 11988 and 23 CFR 650 subpart A?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17	Is the project in a Coastal Area Management Act (CAMA) county and substantially affects the coastal zone and/or any Area of Environmental Concern (AEC)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18	Does the project require a U.S. Coast Guard (USCG) permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19	Does the project involve construction activities in, across, or adjacent to a designated Wild and Scenic River present within the project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20	Does the project involve Coastal Barrier Resources Act (CBRA) resources?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
21	Does the project impact federal lands (e.g. U.S. Forest Service (USFS), USFWS, etc.) or Tribal Lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
22	Does the project involve any changes in access control?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
23	Does the project have a permanent adverse effect on local traffic patterns or community cohesiveness?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
24	Will maintenance of traffic cause substantial disruption?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
25	Is the project inconsistent with the STIP or the Metropolitan Planning Organization's (MPO's) Transportation Improvement Program (TIP) (where applicable)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
26	Does the project require the acquisition of lands under the protection of Section 6(f) of the Land and Water Conservation Act, the Federal Aid in Fish Restoration Act, the Federal Aid in Wildlife Restoration Act, Tennessee Valley Authority (TVA), or other unique areas or special lands that were acquired in fee or easement with public-use money and have deed restrictions or covenants on the property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
27	Does the project involve Federal Emergency Management Agency (FEMA) buyout properties under the Hazard Mitigation Grant Program (HMGP)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
28	Does the project include a <i>de minimis</i> or programmatic Section 4(f)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
29	Is the project considered a Type I under the NCDOT's Noise Policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
30	Is there prime or important farmland soil impacted by this project as defined by the Farmland Protection Policy Act (FPPA)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
31	Are there other issues that arose during the project development process that affected the project decision?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

G. Additional Documentation as Required from Section F

Response to Question 8:

Northern long-eared bat (NLEB): Although not listed for Robeson County, the US Fish and Wildlife Service has developed a programmatic biological opinion (PBO) in conjunction with the Federal Highway Administration, the US Army Corps of Engineers and NCDOT, for the northern long-eared bat in eastern North Carolina. The PBO covers the entire NCDOT program in Divisions 1-8, including all NCDOT projects and activities. The programmatic determination for northern long-eared bat for the

NCDOT program in Divisions 1-8 is “May Affect, Likely to Adversely Affect.” The PBO will provide incidental take coverage for northern long-eared bat and will ensure compliance with Section 7 of the Endangered Species Act for five years for all NCDOT projects with a federal nexus in Divisions 1-8, which includes Robeson County.

Response to Question 16:

Robeson County is a participant in the National Flood Insurance Program, administered by the Federal Emergency Management Agency (FEMA). Based on the most current information available from the NC Floodplain Mapping Program (FMP), this stream crossings is in a designated flood hazard zone, having a regulated floodway.

The proposed bridge replacement will provide equivalent or greater conveyance than that of the existing bridges. The Hydraulics Unit will coordinate with the FMP, the delegated state agency administering FEMA’s National Flood Insurance Program, to determine the status of the project with regard to applicability of NCDOT’S Memorandum of Agreement with FMP, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

This project involves construction activities on or adjacent to a FEMA-regulated stream. Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying the drainage structures and roadway embankment located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

H. Project Commitments

**Robeson County
Bridge Number 434
Carrying SR 1003 (Chicken Road) over Back Swamp
17BP.6.R.91
TIP No. B-5529**

Division Six Construction, Resident Engineer's Office

Robeson County Emergency Services will be contacted at (910) 671-3150 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Robeson County Schools will be contacted at (910) 671-6000 at least one month prior to road closure to allow temporary rerouting of school buses.

This project involves construction activities on or adjacent to a FEMA-regulated stream. Therefore, the Division shall submit sealed as-built construction plans to the Hydraulics Unit upon completion of project construction, certifying the drainage structures and roadway embankment located within the 100-year floodplain were built as shown in the construction plans, both horizontally and vertically.

Hydraulics Unit

The Hydraulics Unit will coordinate with the Floodplain Mapping Program, the delegated state agency administering FEMA's National Flood Insurance Program, to determine the status of the project with regard to applicability of NCDOT'S Memorandum of Agreement with FMP, or approval of a Conditional Letter of Map Revision (CLOMR) and subsequent final Letter of Map Revision (LOMR).

I. Categorical Exclusion Approval

STIP Project No. B-5529
WBS Element 17BP.6.R.91
Federal Project No. _____

Prepared By:

6/9/2017

Date

DocuSigned by:

Stephen C. Greene

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Stephen C. Greene, P.E., Vice President
Ramey Kemp & Associates, Inc.

Prepared For:

Project Development and Environmental Analysis Unit
North Carolina Department of Transportation

Reviewed By:

6/9/2017

Date

DocuSigned by:

Joseph Miller

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Joseph H. Miller, PE, Project Planning Engineer
Project Development and Environmental Analysis Unit
North Carolina Department of Transportation



Approved

If all of the threshold questions (1 through 7) of Section F are answered "no," NCDOT approves this Categorical Exclusion.



Certified

If any of the threshold questions (1 through 7) of Section F are answered "yes," NCDOT certifies this Categorical Exclusion.

6/9/2017

Date

DocuSigned by:

James McInnis, Jr.

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James McInnis, Jr., PE, Project Engineer
Project Development and Environmental Analysis Unit
North Carolina Department of Transportation

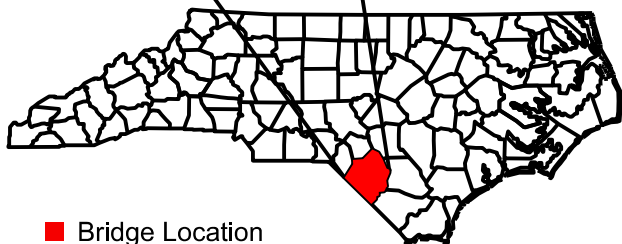
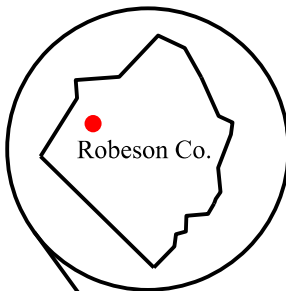
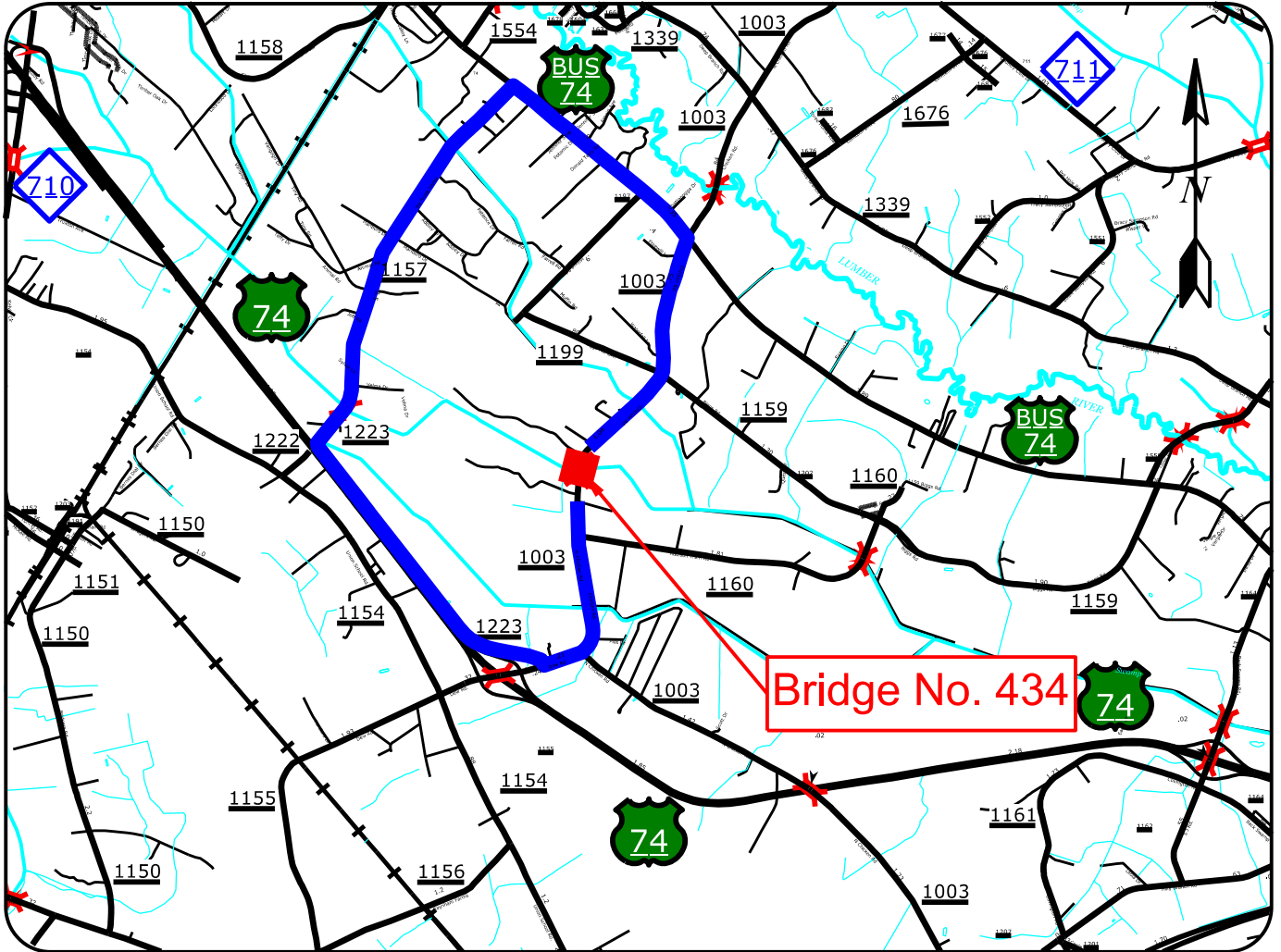
FHWA Approved: For Projects Certified by NCDOT (above), FHWA signature required.

Date

N/A

John F. Sullivan, III, PE, Division Administrator
Federal Highway Administration

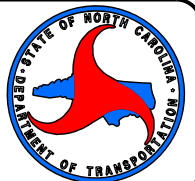
APPENDIX A



■ Bridge Location

— Detour Route

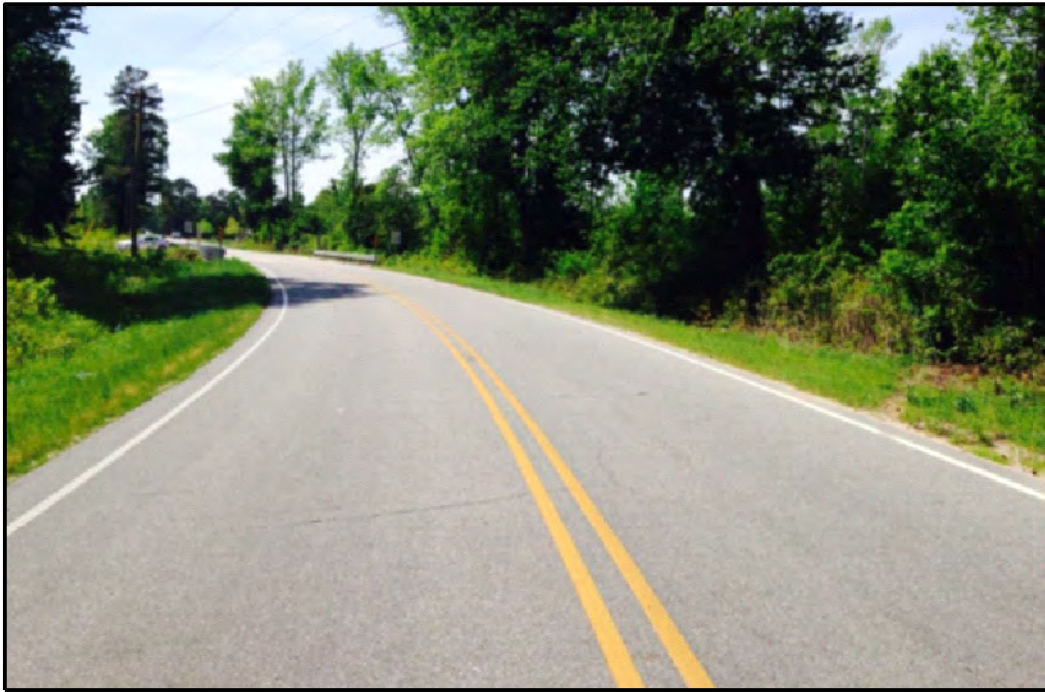
**TIP NO. B-5529
PROJECT
LOCATION MAP**



**Bridge No. 434
on SR 1003 (Chicken Road)
over Back Swamp
Robeson County**

Not to Scale

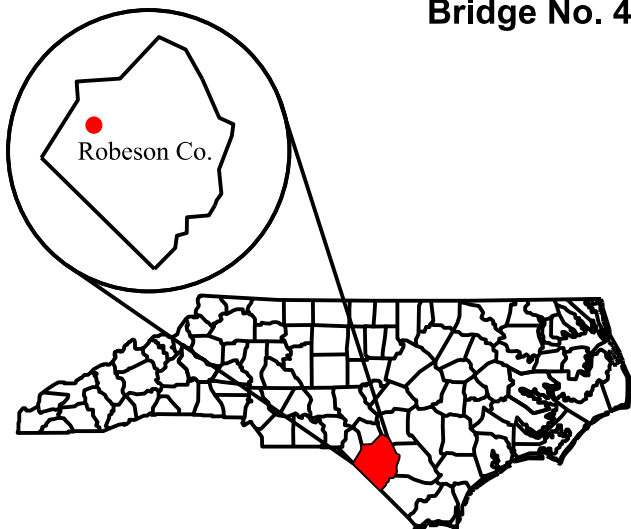
FIGURE 1



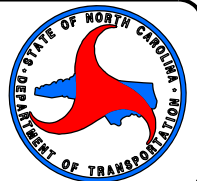
Bridge No. 434 looking South



Bridge No. 434 looking South



**TIP NO. B-5529
Pictures of
Existing Conditions**



**Bridge No. 434
on SR 1003 (Chicken Road)
over Back Swamp
Robeson County**

Not to Scale

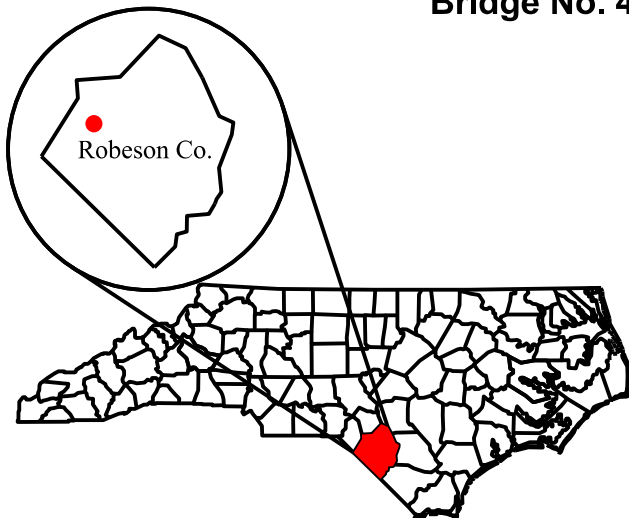
FIGURE 2



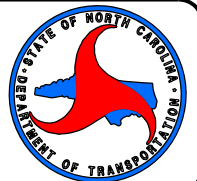
Bridge No. 434 looking North



Bridge No. 434 looking North



**TIP NO. B-5529
Pictures of
Existing Conditions**



**Bridge No. 434
on SR 1003 (Chicken Road)
over Back Swamp
Robeson County**

Not to Scale

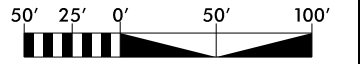
FIGURE 3

B-17/99

PROJECT REFERENCE NO. B-5529	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	

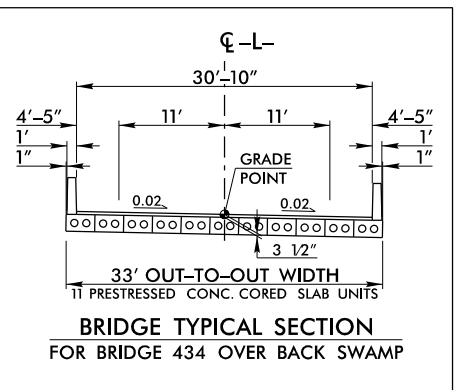
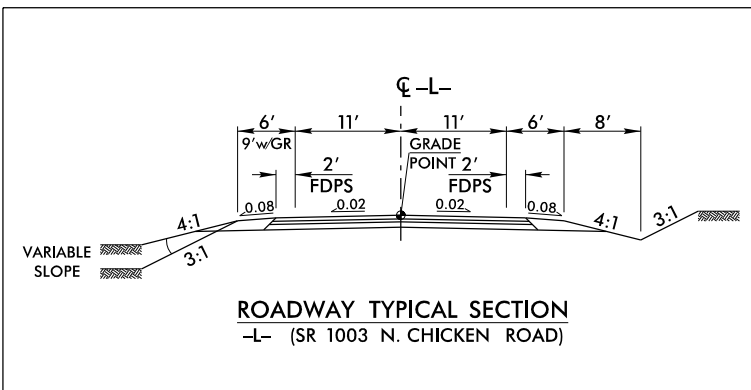
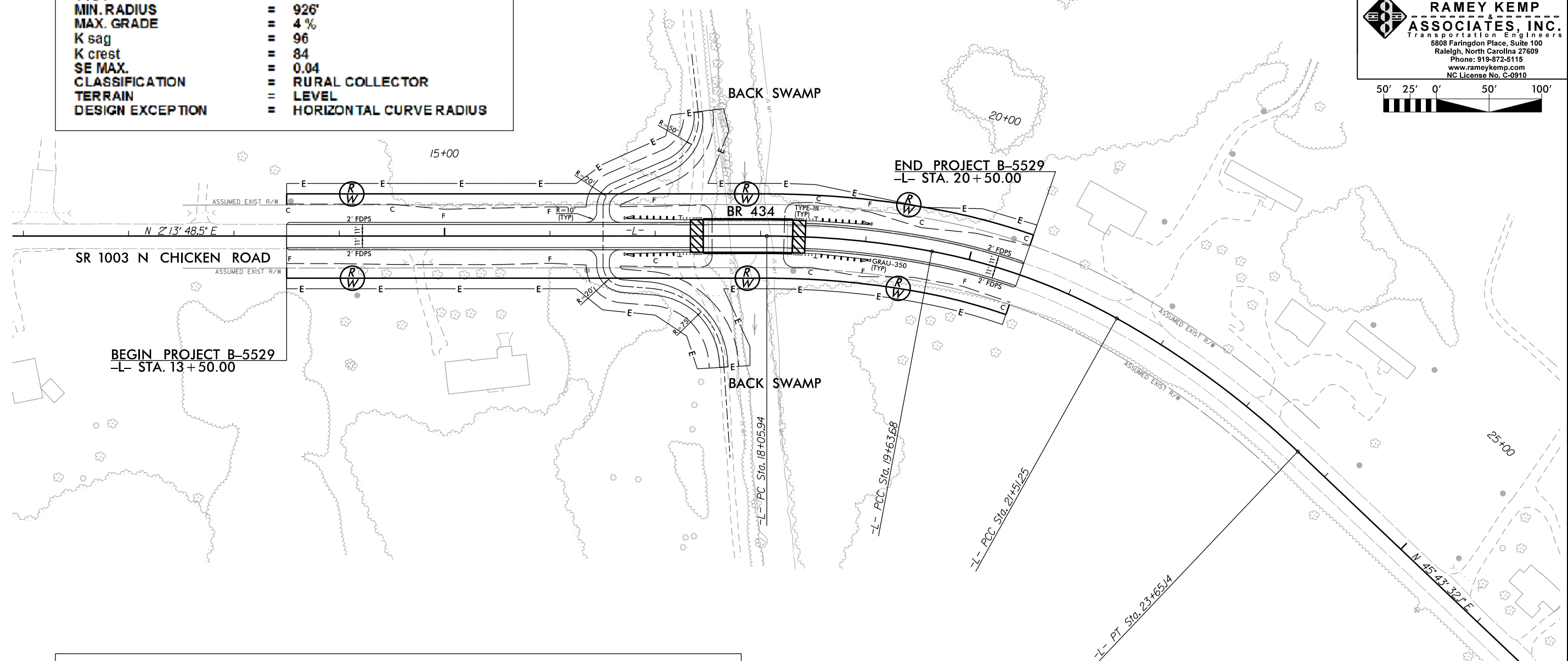
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

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 NC License No. C-9910



ANTICIPATED DESIGN DATA	
DESIGN STANDARDS	= SUBREGIONAL TIER
DESIGN SPEED	= 50 MPH
ADT 2014	= 2,100
ADT 2035	= < 4000
DHV	=
D	=
DUAL	=
TTST	=
MIN. RADIUS	= 926'
MAX. GRADE	= 4 %
K sag	= 96
K crest	= 84
SE MAX.	= 0.04
CLASSIFICATION	= RURAL COLLECTOR
TERRAIN	= LEVEL
DESIGN EXCEPTION	= HORIZONTAL CURVE RADIUS

ROBESON COUNTY B-5529 REPLACE IN PLACE WITH OFFSITE DETOUR



-L-		
PI Sta 18+85.04	PI Sta 20+58.29	PI Sta 22+58.76
$\Delta = 10^{\circ} 37' 59.1''$ (RT)	$\Delta = 18^{\circ} 31' 46.1''$ (RT)	$\Delta = 14^{\circ} 19' 58.4''$ (RT)
D = 6' 44' 26.4"	D = 9' 52' 42.9"	D = 6' 42' 04.5"
L = 157.74'	L = 187.57'	L = 213.88'
T = 79.10'	T = 94.61'	T = 107.50'
R = 850.00'	R = 580.00'	R = 855.00'
e = 0.04	e = 0.04	
DS = 45 MPH	DS = 40 MPH	

BRIDGE APPROACH SLAB
 FOR -L- PROFILE, SEE SHEET NO. 5

REVISIONS

4/5/2017 B5529_Rdy_psh04.dgn
User: cr-que