

MINIMUM CRITERIA DETERMINATION CHECKLIST

TIP Project No. N/A (formerly B-5505)
WBS No. 17BP.6.R.103

Project Location: Bridge No. 151 on SR 1415 (Rawls Church Road) over Hectors Creek in Harnett County

Project Description: The proposed project involves the replacement of Bridge No. 151 on SR 1415 (Rawls Church Road) over Hectors Creek, in Harnett County.

The project is included in the 2016-2025 North Carolina State Transportation Improvement Program (STIP). The project location is shown in Figure 1 in Appendix A. Photos of the site are shown in Figures 2 and 3 in Appendix A. Functional design plans are included in Appendix A as Figure 4.

Right of way acquisition and construction for the project are scheduled to begin in state fiscal years 2018 and 2019, respectively, in the draft 2017-2027 STIP.

The replacement structure will be a bridge approximately 100 feet long providing a minimum 30-foot ten-inch clear roadway width. The bridge will include two 11-foot lanes and four-foot 5-inch offsets. The bridge length is based on preliminary design information and is set by hydraulic requirements. The roadway grade of the new structure will be approximately two feet higher than the existing structure.

Project construction will extend approximately 290 feet from the west end and 260 feet from the east end of the new bridge. The approaches will be 22 feet wide with two 11-foot lanes. Six-foot grass shoulders (two-foot paved) will be provided on each side (nine-foot shoulders where guardrail is included). The roadway will be designed as a Rural Local Route using Sub-Regional Tier Guidelines with a 50 mile per hour design speed.

Traffic will be detoured off-site during construction (see Figure 1).

The total cost for the project included in the draft 2017-2027 STIP is \$1,455,000. Of this total, \$130,000 is for right of way acquisition and \$1,325,000 is for construction. Current cost estimates for the project are as follows:

R/W:	\$ 130,000
Construction:	\$ 925,000
Utilities:	\$ 13,040
Total:	\$1,068,040

Purpose and Need: The purpose of the proposed project is to replace a deficient bridge. The table below presents information regarding the existing bridge.

Bridge No.	151
Crosses	Hector Creek
Year Built	1965
Clear Roadway Width	24.33 feet
Length	90 feet
Sufficiency Rating	29.18
Functionally Obsolete?	Yes (Structural Appraisal=3)
Structurally Deficient?	No
Posted Weight Limit	19 tons SV 25 tons TTST

Anticipated Permit or Consultation Requirements: A Nationwide Permit (NWP) 3 (maintenance) and NC Water Quality Certification No. 4085 will likely be required for impacts to “Waters of the United States” resulting from this project. Other permits that may apply include a NWP No. 33 for temporary construction activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge demolition.

The US Army Corps of Engineers holds the final discretion as to what permit will be required for the project.

Special Project Information:

Environmental Commitments: The list of project commitments are located at the end of the checklist.

Hectors Creek is classified as a WS-IV and as High Quality Water (HQW). There are no Water Supplies (WS-1: undeveloped watersheds or WS-II: predominantly undeveloped watersheds), or Outstanding Resource Waters (ORW) within one mile of the study area. Sediment and erosion control BMPs as described for HQW in *Design Standards in Sensitive Watershed* must be strictly adhered to throughout the design and construction of the project.

Pedestrian and Bicycle Accommodations: SR 1415 is not a designated bicycle route, nor does it have any existing pedestrian accommodations.

Bridge Demolition: In order to protect the water quality and aquatic life in the area affected by this project, the NCDOT and all contractors will follow appropriate guidelines for bridge

demolition and removal. The superstructure of Bridge No. 151 consists of concrete deck on concrete girders. The bridge has three spans and totals 90 feet in length. The end and interior bents are timber with reinforced concrete caps. The bridge demolition will take place without dropping concrete deck or interior bents into Hectors Creek.

Offsite Detour: Bridge No. 151 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 SR 1412, SR 1427, and US 401. The majority of traffic on the road is through traffic. The detour for the average road user would result in 12 minutes additional travel time (six 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.

PART A: MINIMUM CRITERIA

	YES	NO
1. Will the proposed project involve land disturbing activity of more than ten acres that will result in substantial, permanent changes in the natural cover or topography of those lands?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Will the proposed project require the expenditure of more than ten million dollars in public funds?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is the proposed project listed as a type and class of activity which would qualify as a Non-Major Action under the Minimum Criteria rules?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If “yes”, under which category? 9 - Reconstruction of an existing bridge.

(Note: If either Category #8 or #15 is used, complete Part D of this checklist.)

If “yes” is selected for either Question 1 or 2 and “no” is selected for Question 3, then the project does not qualify as a Non-Major Action. A state environmental impact statement (SEIS) or state environmental assessment (SEA) will be required.

PART B: MINIMUM CRITERIA EXCEPTIONS

	YES	NO
4. Does the proposed activity have a significant adverse effect on wetlands; surface waters such as rivers, streams, and estuaries; parklands; prime or unique agricultural lands; or areas of recognized scenic, recreational, archaeological, or historical value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Will the proposed activity endanger the existence of a species on the Department of Interior’s threatened and endangered species list?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Would the proposed activity cause significant changes in land use concentrations that would be expected to create adverse air quality impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Would the proposed activity cause significant changes in land use concentrations that would be expected to create adverse water quality or groundwater impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is the proposed activity expected to have a significant adverse effect on long-term recreational benefits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Is the proposed activity expected to have a significant adverse effect on shellfish, finfish, wildlife, or their natural habitats?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Will the proposed activity have secondary impacts or cumulative impacts that may result in a significant adverse impact to human health or the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Is the proposed activity of such an unusual nature or does the proposed activity have such widespread implications, that an uncommon concern for its environmental effects has been expressed to the NCDOT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Note: If any of Questions 4 through 11 in part B are answered “YES”, the proposed project does not qualify as a Non-Major Action. A SEIS or SEA will be required.

PART C: COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

	YES	NO
<u>Ecological Impacts</u>		
12. Is a federally protected threatened or endangered species, or its habitat, likely to be impacted by the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
13. Does the action require the placement of fill in waters of the United States?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
14. Does the project require the placement of a significant amount of fill in high quality or relatively rare wetland ecosystems, such as mountain bogs or pine savannahs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15. Does the project require stream relocation or channel changes?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16. Is the proposed action located in an Area of Environmental Concern, as defined in the Coastal Area Management Act?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Cultural Resources</u>		
17. Will the project have an “effect” on a property or site listed on the National Register of Historic Places?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18. Will the proposed action require acquisition of additional right of way from publicly owned parkland or recreational areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Question 12:

Marginally suitable habitat for the rough-leaved loosestrife exists within the project study area. A review of the NC Natural Heritage Program records on May 26, 2015 indicates no occurrences of rough-leaved loosestrife within one-mile of the study area. Plant by plant surveys were conducted on May 27, 2015 within the marginally suitable habitat. There were no specimens of the species observed within the study area. The roadside shoulder along Rawls Church Road continues to be frequently maintained. Based on current site conditions and the absence of the specimen within the project area, project implementation will not affect rough-leaved loosestrife.

Habitat for the Cape Fear shiner exists in Hectors Creek in the project area. A review of NC Natural Heritage Program records indicate no occurrences of Cape Fear shiner within one-mile of the study area. Surveys for Cape Fear shiner were conducted on June 17, 2015. No specimens of Cape Fear shiner or any shiner species were found. Based on the survey results, it is expected the project will not affect the Cape Fear shiner.

Although not listed for Harnett 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 Harnett County.

Response to Question 13:

The proposed project will affect less than 0.1 acre of wetlands. It is anticipated a Nationwide Permit (NWP) 3 (maintenance) and NC Water Quality Certification No. 4085 will likely be required for impacts to “Waters of the United States” resulting from this project.

The US Army Corps of Engineers holds the final discretion as to what permit will be required for the project.

PART D: (To be completed when either category #8 or #15 of the rules is used.)

- 19. Project length:
 - 20. Right of Way width:
 - 21. Total Acres of Disturbed Ground Surface:
 - 22. Total Acres of Wetland Impacts:
 - 23. Total Linear Feet of Stream Impacts:
 - 24. Project Purpose:
-

Reviewed by:

6/18/2017	<small>DocuSigned by:</small>  <small>D00AEB023A224C0</small>
Date	Stephen C. Greene, P.E., Vice President Ramey Kemp & Associates, Inc.

6/18/2017	<small>DocuSigned by:</small>  <small>08B0E38DDF8144B...</small>
Date	James McInnis, Jr., PE, Project Engineer Project Development and Environmental Analysis Unit North Carolina Department of Transportation

6/20/2017	<small>DocuSigned by:</small>  <small>E55AEA420FA04D5...</small>
Date	Joseph H. Miller, PE, Project Planning Engineer Project Development and Environmental Analysis Unit North Carolina Department of Transportation

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

Project Commitments

**Harnett County
Bridge No. 151
Carrying SR 1415 (Rawls Church Road) over Hectors Creek
Federal Project No. N/A
WBS No. 17BP.6.R.103
TIP No. N/A (formerly B-5505)**

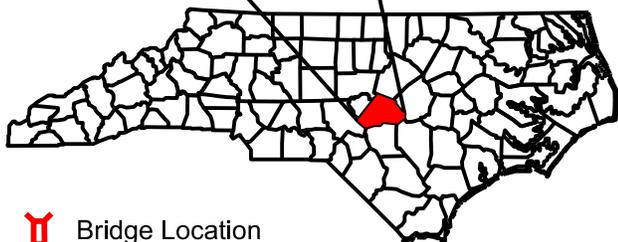
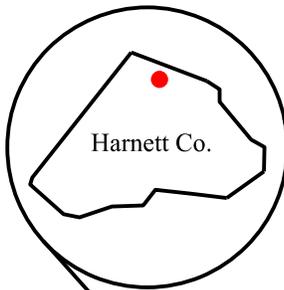
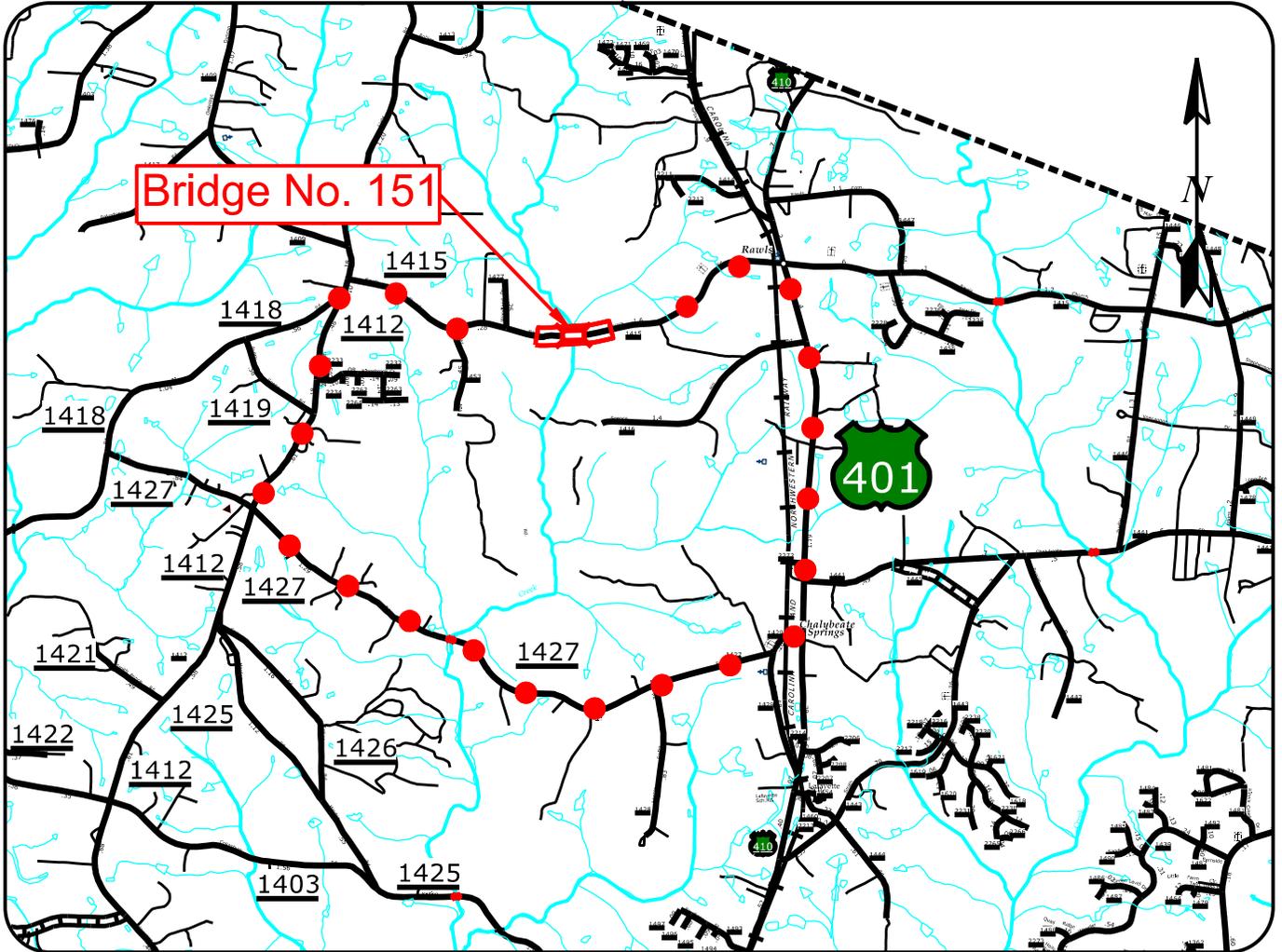
Division Six Construction, Resident Engineer's Office

Harnett County Emergency Services will be contacted at (910) 893-7563 at least one month prior to road closure to make the necessary temporary reassignments to primary response units.

Harnett County Schools will be contacted at (910) 893-8151 at least one month prior to road closure to allow temporary rerouting of school buses.

Sediment and erosion control BMPs as described for HQW in *Design Standards in Sensitive Watershed* must be strictly adhered to throughout the design and construction of the project.

APPENDIX A



-  Bridge Location
-  ● ● ● ● Detour Route

**TIP NO. B-5505
PROJECT
LOCATION MAP**



**Bridge No. 151
on SR 1415 (Rawls Church Road)
over Hectors Creek
Harnett County**

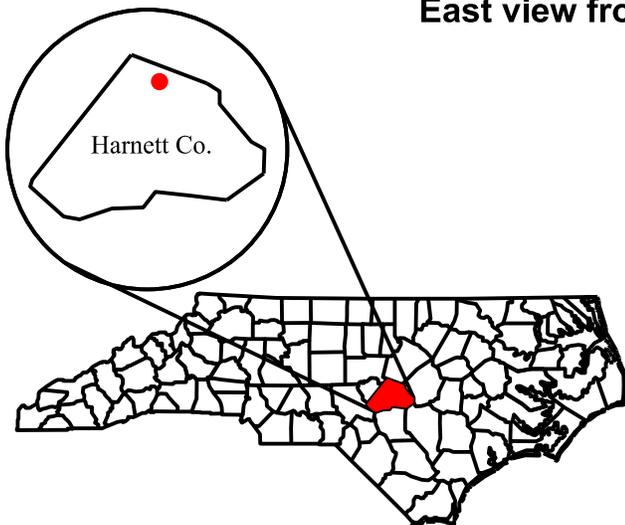
Not to Scale FIGURE 1



East view from Bridge No. 151



East view from Bridge No. 151



TIP NO. B-5505
Pictures of
Existing Conditions



Bridge No. 151
on SR 1415 (Rawls Church Road)
over Hectors Creek
Harnett County

Not to Scale

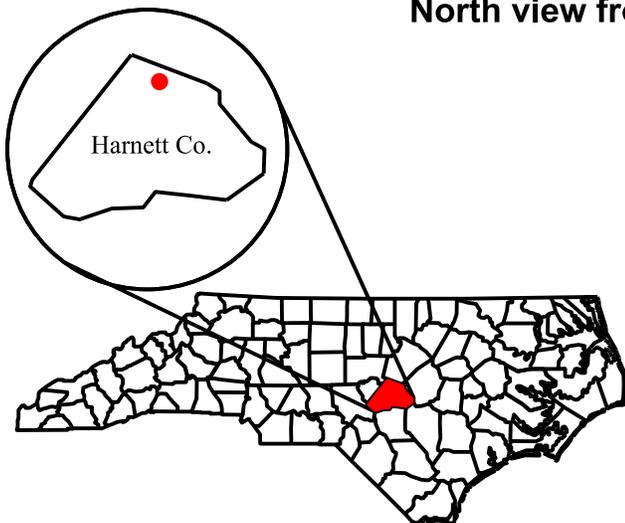
FIGURE 2



West view from Bridge No. 151



North view from Bridge No. 151



TIP NO. B-5505
Pictures of
Existing Conditions



Bridge No. 151
on SR 1415 (Rawls Church Road)
over Hectors Creek
Harnett County

Not to Scale

FIGURE 3

B.17/99

PROJECT REFERENCE NO.	SHEET NO.
B-5505	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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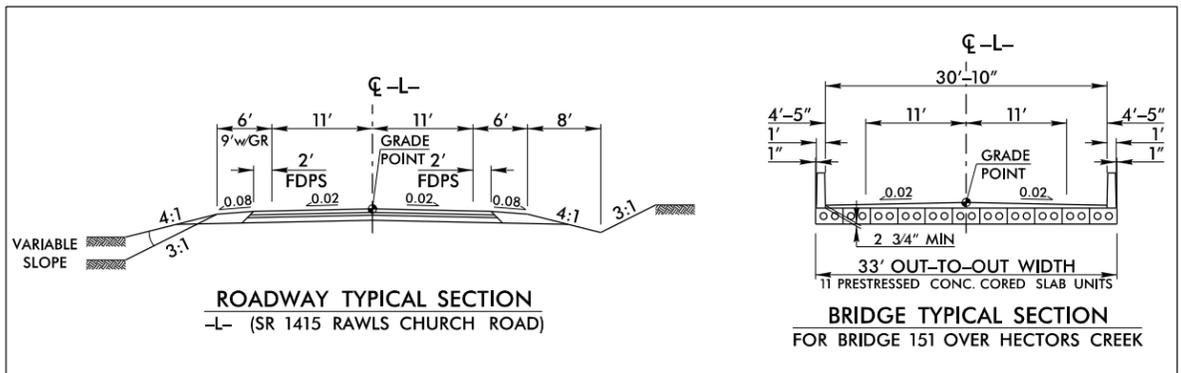
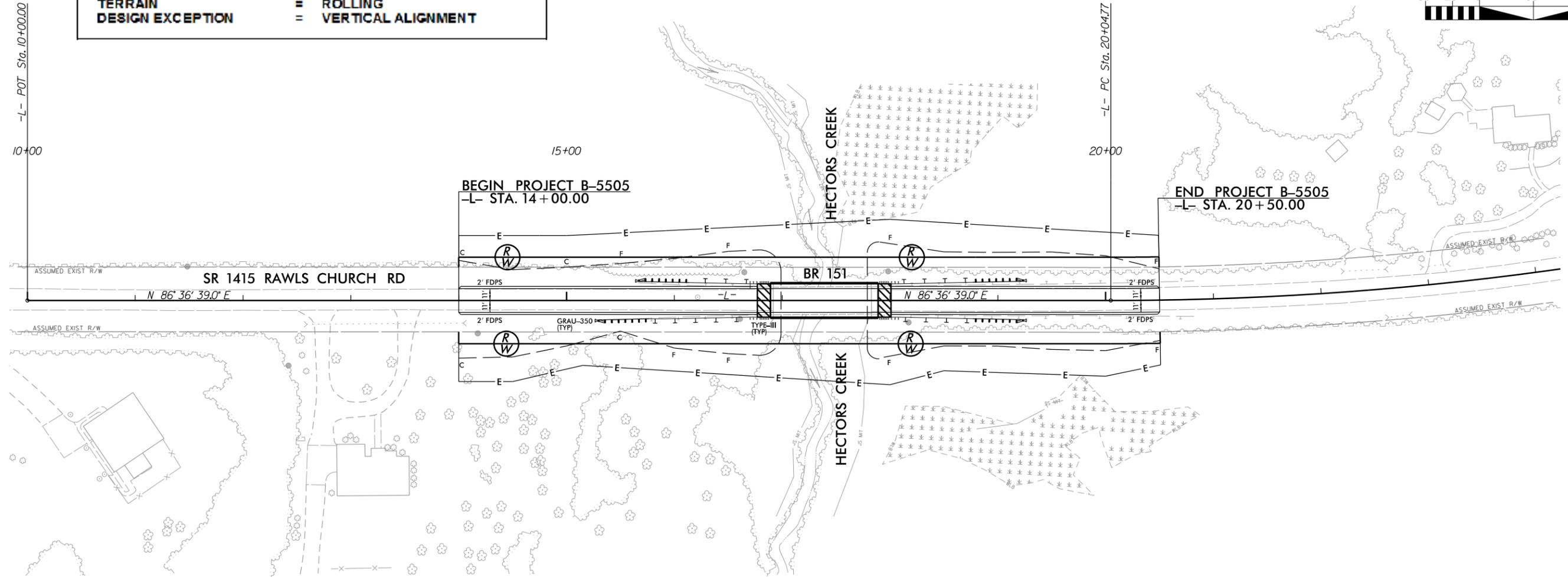
ANTICIPATED DESIGN DATA	
DESIGN STANDARDS	= SUBREGIONAL TIER
DESIGN SPEED	= 60 MPH
ADT 2014	= 1,200
ADT 2035	= > 2000
DHV	=
D	=
DUAL	=
TTST	=
MIN. RADIUS	= 1500'
MAX. GRADE	= 4 %
K sag	= 136
K crest	= 151
SE MAX.	= 0.04
CLASSIFICATION	= RURAL LOCAL
TERRAIN	= ROLLING
DESIGN EXCEPTION	= VERTICAL ALIGNMENT

HARNETT COUNTY B-5505 REPLACE IN PLACE WITH OFFSITE DETOUR

-L-
 PI Sta 22+82.35
 $\Delta = 10^{\circ} 34' 21.9" (LT)$
 $D = 1^{\circ} 54' 35.5"$
 $L = 553.59'$
 $T = 277.58'$
 $R = 3,000.00'$
 $e = 0.04$



REVISIONS



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

3/22/2017
 \\p01\B5505_Rdy_psh04.dgn
 User: cr-que