



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

October 24, 2003

US Army Corps of Engineers
Regulatory Field Office
151 Patton Ave.
Room 208
Asheville, NC 28801-5006

ATTENTION: Mr. Steve Lund
NCDOT Coordinator

Dear Sir:

Subject: **Nationwide 23 and 33 Permit Application** for the Replacement of Bridge No. 16 over Cartoogechaye Creek on SR 1309, Macon County, Federal Aid Project No. BRZ-1309(1), State Project No. 8.2970601, TIP B-3485, Division 14.

Please find enclosed three copies of the project planning report for the above referenced project. Replacement of Bridge No. 16 will be at the same location with a new bridge approximately 160 feet (48.8 m) in length with a recommended 24 foot (7.2 m) clear roadway width. The bridge will have two 10.0-foot (3.0 m) travel lanes and 2.0-foot (0.6 m) offsets on each side. The new approach roadway will include two 10-foot (3.0 m) travel lanes, and 5-foot (1.8 m) turf shoulders on each side. The approach shoulders will be widened to 8 feet (2.4 m) where guardrail is required. The elevation of the bridge and approaches will be 2.2 feet (0.7 m) higher than the existing bridge to match the low superstructure elevation of the existing bridge and satisfy the criteria for maximum grades and vertical curvature using a design speed of 40 mph (65 km/hr).

No jurisdictional wetlands will be impacted by the construction of the bridge. Surface water impacts will be minimal (0.06 ac.) due to temporary fill associated with the temporary causeway.

During construction, traffic will be maintained by an offsite detour using SR 1309, SR 1310, SR 1442, and US 64.

Bridge Demolition

Bridge No. 16 is composed of a wooden deck with an asphalt-wearing surface on steel I-beam girders supported by timber pilings. The existing structure is 121 feet (36.9 m) long with a 19.1-foot (5.8 m) clear roadway width consisting of two 9-foot (2.7 m) lanes. The deck of the bridge is 17 feet (5.2 m) above the streambed. Due to the structural components of the bridge, the potential temporary fill expected to be dropped into the "Waters of the United States" is minimal.

As noted in the project's CE document, NCDOT will observe an in-stream construction moratorium from October 15 to April 15 to avoid impacts to trout reproduction.

Temporary Causeways

There will be 0.06 ac. temporary stream impacts from the construction of temporary rock causeways in Cartoogechaye Creek for the construction of Bridge No. 16. Temporary rock causeways will be required for the construction of the interior bents in order to provide for construction access. The causeways will consist of Class II riprap and are detailed on sheet 5 of 6.

Restoration Plan: No permanent fill will result from the subject activity. The materials used as temporary fill in the construction of the causeway will be removed. The temporary fill areas will be graded back to the original contours. Elevations and contours in the vicinity of the proposed causeways are available from the field survey notes.

Schedule for Construction of Causeways: It is assumed that the contractor will begin construction of the proposed causeways shortly after the date of availability for the project. The Let date is February 17, 2004 with a date of availability of March 17, 2004. One workpad is to be constructed and removed before the other workpad is constructed.

Removal and Disposal: The causeways will be removed within 90 days of the completion of the deck slab for the bridge. The temporary rock causeways will be removed by the contractor using excavating equipment. All materials placed in the stream by the contractor will be removed. The Class II riprap that is removed may be used on end slopes where Class II riprap is required at the discretion of the engineer. All other materials removed by the contractor will be disposed of at an off-site location.

Federally Protected Species

Some populations of fauna and flora have been in, or are in, the process of decline either due to natural forces or their inability to co-exist with human activities. Federal law (under the provisions of the Endangered Species Act (ESA) of 1973, as amended) requires that any action likely to adversely affect a species classified as federally protected be subject to review by the United States Fish and Wildlife Service (USFWS). Other species may receive additional protection under separate state laws. Plants and animals with federal classifications of Endangered (E), Threatened (T), Proposed Endangered (PE) and Proposed Threatened (PT) are protected under provisions of ESA §§7 and 9, as amended.

As of January 29, 2003, the USFWS lists 7 federally protected species for Macon County. Table 2 depicts these species. The project site was visited on July 17, 2003 by NCDOT biologists Chris Underwood, Michael Turchy and Chris Manley. A field survey was conducted for Virginia spirea and, although suitable habitat exists, no Virginia spirea was found. The project site was visited by NCDOT biologists Neil Medlin, Jared Gray, Tom Dickinson, Jeff Burleson, and Tim Howell on October 22, 2002. A field survey was conducted for the spotfin chub, the Appalachian elktoe, and the little-wing pearly mussel and, although suitable habitat exists, no federally protected species were found. The bog turtle is listed as Threatened due to Similarity of Appearance, and incidental taking of bog turtles resulting from lawful activity is not prohibited. The Biological Conclusions for Virginia spirea, spotfin chub, Appalachian elktoe, and little-wing pearly mussel are changed to: "May Affect, Not Likely To Adversely Affect". The remaining three protected species biological conclusion still remains: "No Effect".

Table 2. Federally protected species for Macon County**

Common Name	Scientific Name	Status
Bog turtle	<i>Clemmys muhlenbergii</i>	T(S/A)
Spotfin chub	<i>Ermonax monacha</i>	T
Indiana bat	<i>Myotis sodalis</i>	E
Appalachian elktoe	<i>Alasmidonta raveliniana</i>	E
Little-wing pearly mussel	<i>Pegias fabula</i>	E
Small whorled pogonia	<i>Isotria medeoloides</i>	T
Virginia spirea	<i>Spirea virginiana</i>	T

** Obtained from the US Department of the Interior, Fish and Wildlife Service, Threatened and Endangered Species of North Carolina, Macon County, (January 29, 2003).

Note for Status:

- Threatened (T) denotes a taxon “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.”
- Threatened (T(S/A)) denotes a taxon threatened due to similarity of appearance with other rare species.
- Endangered (E) denotes a taxon “in danger of extinction throughout all or a significant portion of its range.”

Regulatory Approvals

Section 404 Permit: This project is being processed by the Federal Highway Administration as a “Categorical Exclusion” in accordance with 23 CFR 771.115(b). Therefore, we do not anticipate requesting an individual permit but propose to proceed under a Nationwide 23 and 33 as authorized by a Nationwide Permit 23 and 33 (67 FR 2020; January 15, 2002).

Section 401 Permit: We anticipate 401 General Certification numbers 3403 and 3366 will apply to this project. In accordance with 15A NCAC 2H, Section .0500(a) and 15A NCAC 2B .0200 we are providing two copies of this application to the North Carolina Department of Environmental and Natural Resources, Division of Water Quality, for their review.

We anticipate that comments from the North Carolina Wildlife Resources Commission (NCWRC) will be required prior to authorization by the Corps of Engineers. By copy of this letter and attachment, NCDOT hereby requests NCWRC review. NCDOT requests that NCWRC forward their comments to the Corps of Engineers.

A copy of this permit application will be posted on the DOT website at: <http://www.ncdot.org/planning/pe/naturalunit/Permit.html>.

If you have any questions or need additional information, please contact Mr. Chris Underwood at (919) 715-1541.

Sincerely,



Gregory J. Thorpe, PhD., Environmental Management Director
Project Development and Environmental Analysis Branch

cc:

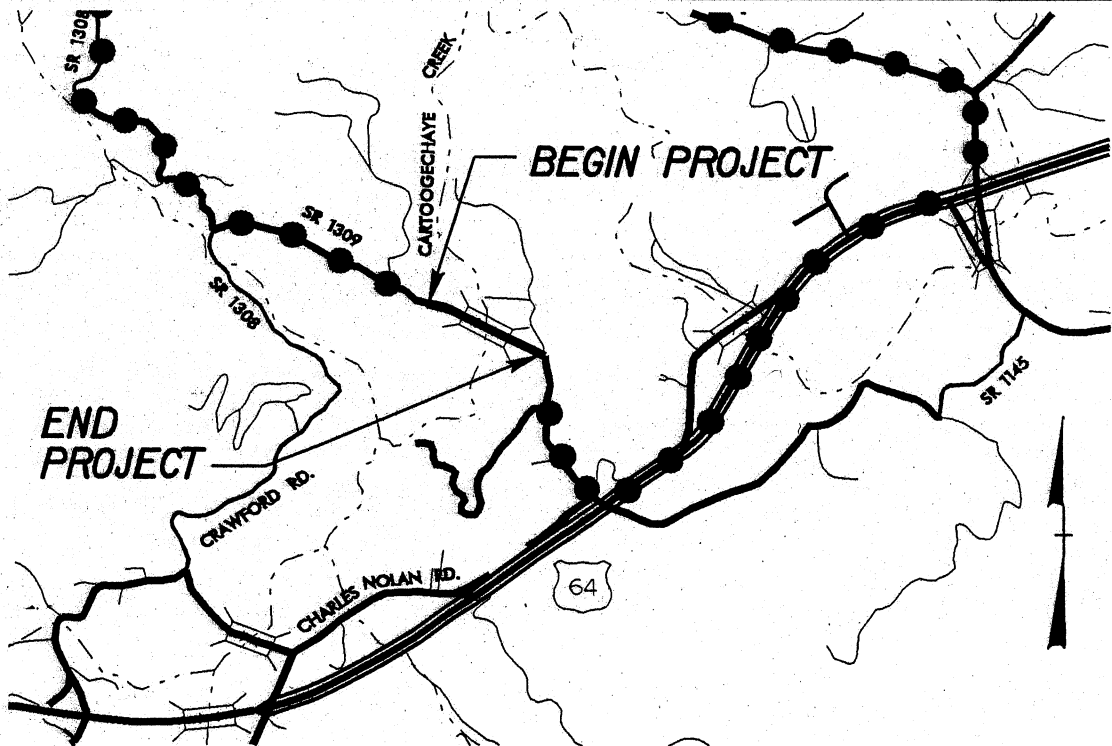
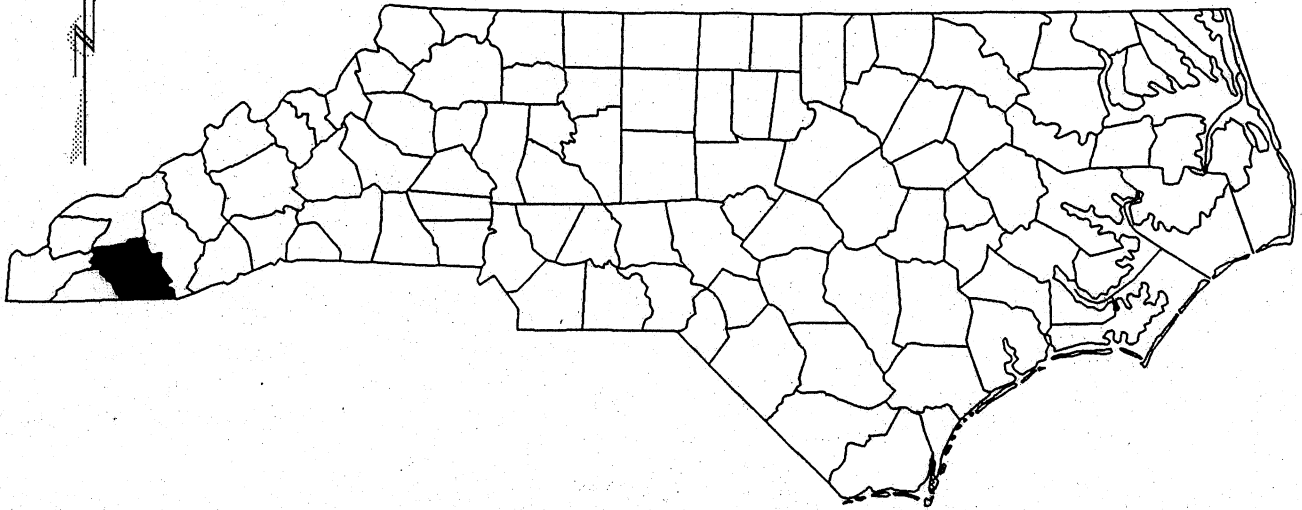
w/attachment

Mr. John Dorney, Division of Water Quality (2 copies)
Ms. Marella Buncick, USFWS
Ms. Marla Chambers, NCWRC
Mr. Greg Perfetti, P.E., Structure Design
Mr. Harold Draper, TVA

w/o attachment

Mr. David Franklin, USACE, Wilmington
Mr. Jay Bennett, P.E., Roadway Design
Mr. Omar Sultan, Programming and TIP
Ms. Debbie Barbour, P.E., Highway Design
Mr. David Chang, P.E., Hydraulics
Mr. Mark Staley, Roadside Environmental
Mr. John Sullivan, FHWA
Mr. Ron Watson Division Engineer
Mr. Mark Davis, DEO
Ms. Missy Dickens

NORTH CAROLINA



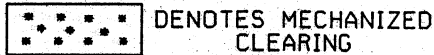
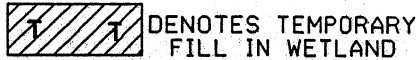
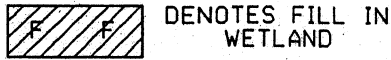
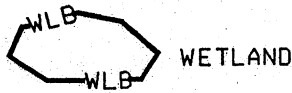
VICINITY MAPS

NCDOT
DIVISION OF HIGHWAYS
MACON COUNTY
PROJECT: 8.2970601 (B-3485)

BRIDGE # 16 ON SR 1309
OVER CARTOOGECHAYE CREEK

WETLAND LEGEND

— WLB — WETLAND BOUNDARY



→ → FLOW DIRECTION

— TB — TOP OF BANK

— WE — EDGE OF WATER

— C — PROP. LIMIT OF CUT

— F — PROP. LIMIT OF FILL

▲ PROP. RIGHT OF WAY

— NG — NATURAL GROUND

— PL — PROPERTY LINE

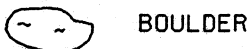
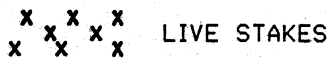
— TDE — TEMP. DRAINAGE EASEMENT

— PDE — PERMANENT DRAINAGE EASEMENT

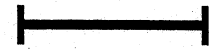
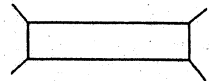
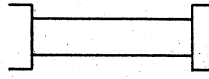
— EAB — EXIST. ENDANGERED ANIMAL BOUNDARY

— EPB — EXIST. ENDANGERED PLANT BOUNDARY

▽ WATER SURFACE

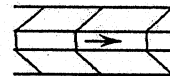
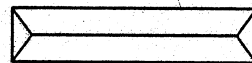
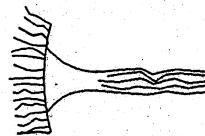
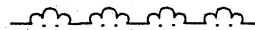


— CORE FIBER ROLLS



(DASHED LINES DENOTE EXISTING STRUCTURES)

12"-48" PIPES
54" PIPES & ABOVE



LEVEL SPREADER (LS)

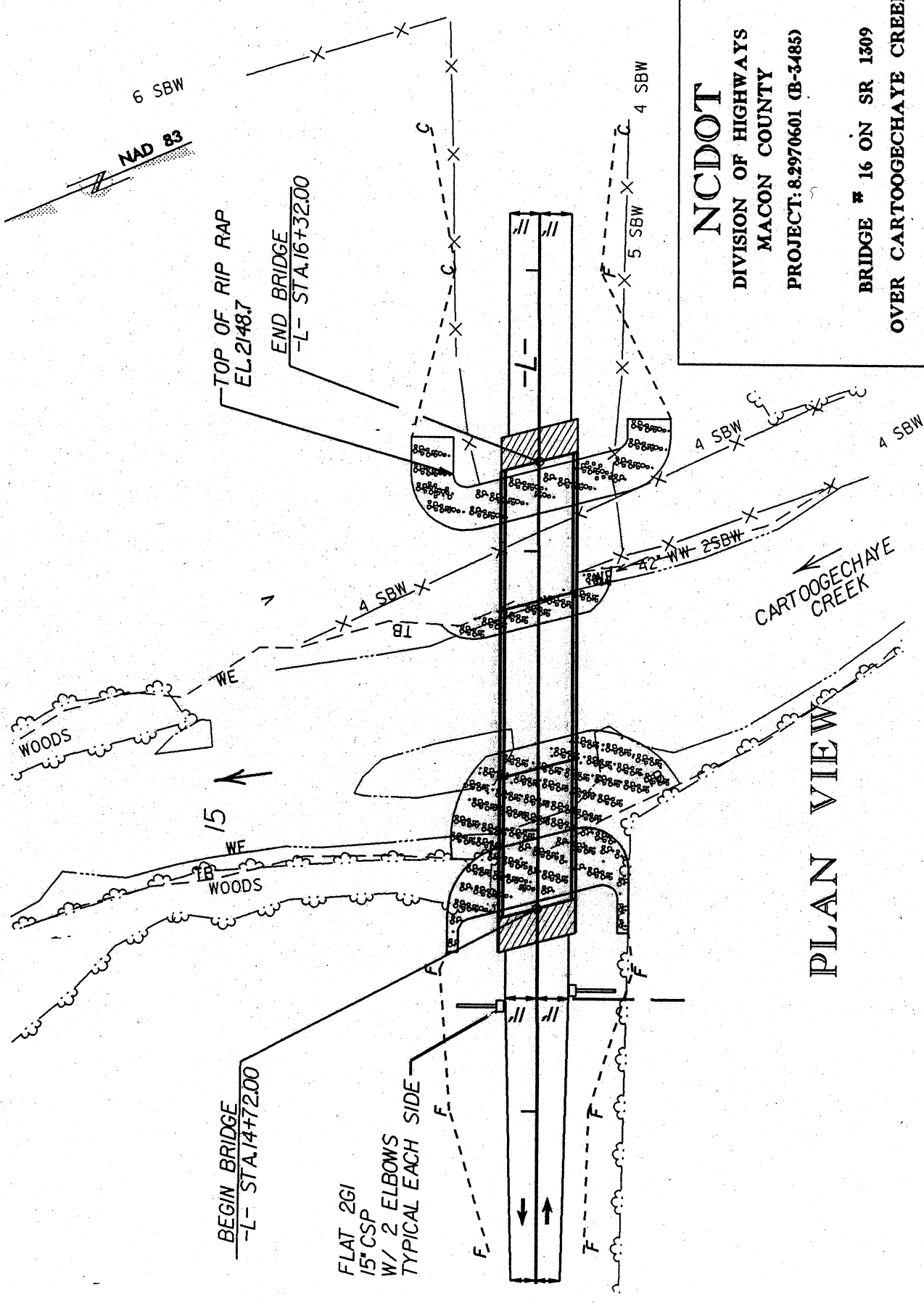
DITCH / GRASS SWALE

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MACON COUNTY

PROJECT: 8.2970601 (B-3485)

BRIDGE # 16 ON SR 1309
OVER CARTOOGEC HAYE CREEK



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 MACON COUNTY
 PROJECT: 8.2970601 (B-3485)
 BRIDGE # 16 ON SR 1309
 OVER CARTOOGECHAYE CREEK

PLAN VIEW

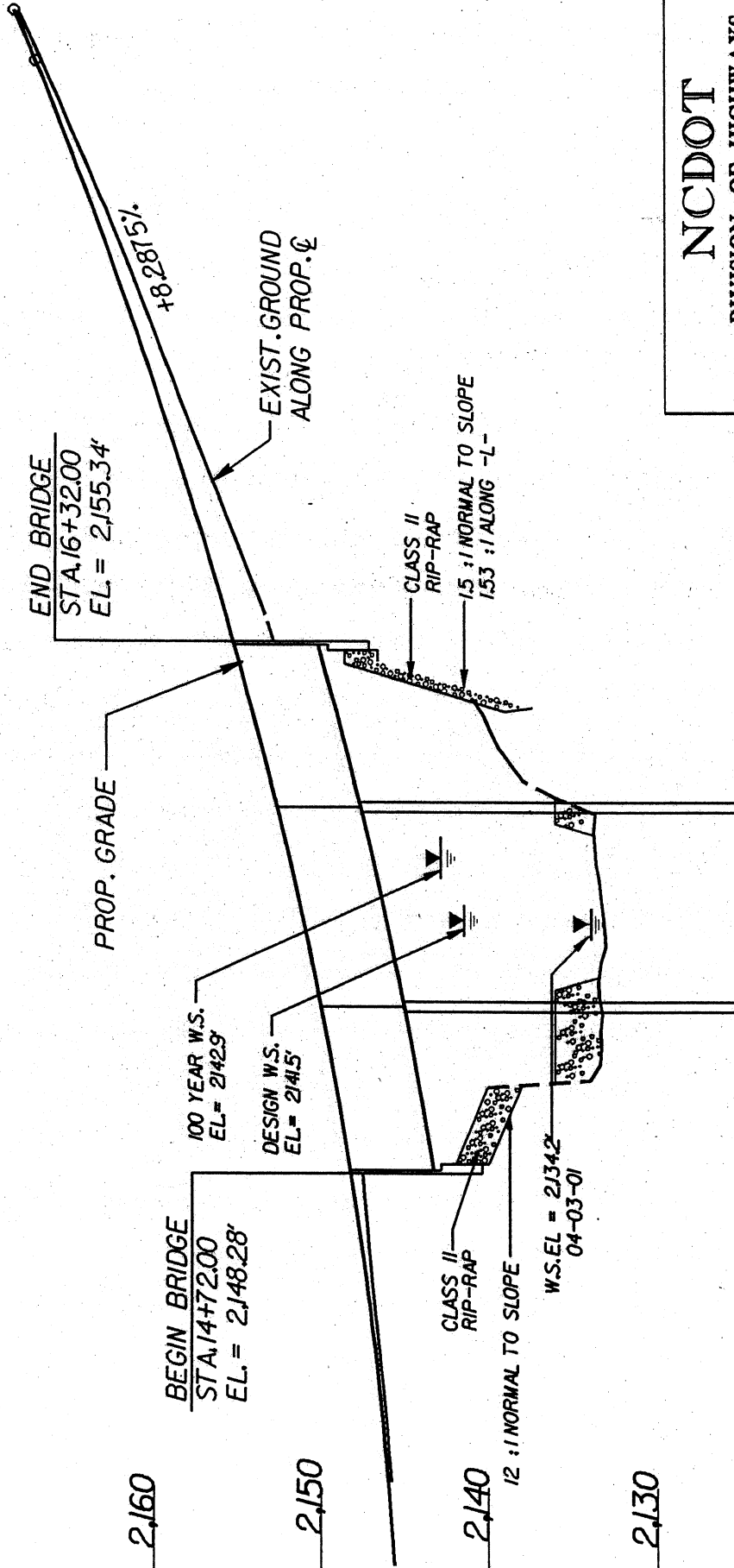
2.170

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DIVISION OF HIGHWAYS
MACON COUNTY

PROJECT: 8.2970601 (B-3485)

BRIDGE # 16 ON SR 1309

OVER CARTOOGECCHAYE CREEK

SHEET 4 OF 6

02/21/03

16

PROFILE

15

14

CAUSEWAY DETAIL (NOT TO SCALE)

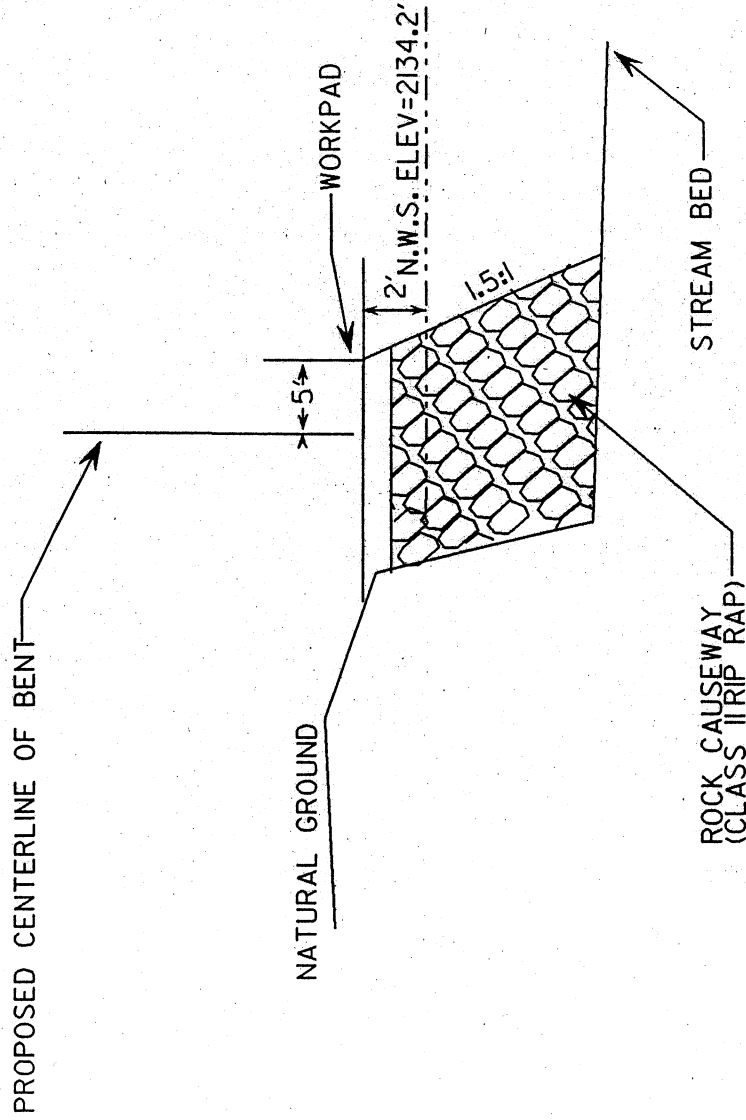
QUANTITIES OF ESTIMATES

BENT 1:

VOLUME OF CLASS IIRIP RAP= 210 yds³
 AREA OF CLASS IIRIP RAP= 0.05 acres
 Estimate 300 Tons Class IIRip Rap

BENT 2:

VOLUME OF CLASS IIRIP RAP= 55 yds³
 AREA OF CLASS IIRIP RAP= 0.01 acres
 Estimate 85 Tons Class IIRip Rap



DIVISION OF HIGHWAYS
 MACON COUNTY
 PROJECT: 82970601 (B-3485)

BRIDGE # 16 ON SR 1309
 OVER CARTOOGECWAY CREEK

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS					SURFACE WATER IMPACTS						
			Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation In Wetlands (ac)	Mechanized Clearing (Method III) (ac)	Fill In SW (Natural) (ac)	Fill In SW (Pond) (ac)	Temp. Fill In SW (ac)	Existing Channel Impacted (ft)	Natural Stream Design (ft)			
1	15+52-L-	BRIDGE									0.06			
TOTALS:			0	0	0	0	0	0	0	0	0.06	0	0	0

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 MACON COUNTY
 PROJECT 8.2970601 B-3485
 SHEET 6 OF 6
 2/21/03

Form Revised 3/22/01