STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

March 22, 2005

North Carolina Division of Water Quality
1650 Mail Service Center
Raleigh NC 27699-1650

ATTN: Mr. Brian Wrenn
NCDOT Coordinator

Dear Sir:

Subject: Request for written concurrence for a Nationwide 14 from NCDWQ for the Replacement of Bridge No. 46 over Catawba River on SR 1223, Burke County, Federal Aid Project No. BRZ-1223(8), State Project No. 8.2852001, Debit work order no. 33046.1.1, TIP B-3419, Division 13.

Project History/ Background

NCDOT originally applied for a Nationwide 23 and section 401 general certification #3403 for this project on March 5, 2004; subsequently, due to additional streams located at the site and utility impacts, a modification was made on June 16, 2004. NCDWQ issued Buffer Certification No. 040373 on the original Nationwide 23 Permit Application dated March 17, 2004. A Nationwide 12 and 14 were issued by the Army Corps of Engineers siting the new streams found were not described in the original Categorical Exclusion document, and therefore no longer qualified for a Nationwide 23 Permit. Therefore, in lieu of the fact that a Nationwide 14 Permit was issued, NCDOT now requires written concurrence from the Division of Water Quality.

This project has already let, and contractors are waiting for the issuance of a 401 certification to begin construction.

Review of Impacts from Previous Applications

Stream Impacts:

There will be 44 feet of permanent linear stream channel impacts in UT-East from the proposed installation of a 30-inch Reinforced Concrete Pipe and 81 feet of permanent linear stream channel impacts in UT-West from the installation of a 48-inch Reinforced Concrete Pipe. These values reflect the length of additional stream channel impacts from the installation of each new structure.

Buffer Impacts:

This project is located on the mainstem of the Catawba River Basin, therefore the regulations pertaining to the buffer rules apply.

The low cord of the bridge deck is expected to be 12 feet (3.6 m) or more above the natural ground. In compliance with the Catawba Buffer Rules, the stormwater from the deck drains will have diffused flow into the buffer area. This project will have 4,791.6 square feet of allowable impact in zone 1 and 5,357.88 square feet of allowable impact in zone 2, resulting in 10,149.48 square feet of total allowable impacts. By removing the old structure and approaches, 1,785.96 square feet of buffer area will be gained in zone 1 and 1,001.88 square feet will be gained in zone 2.

Previous Regulatory Approvals

Section 404 Permit: A Nationwide 12 and 14 was issued August 2, 2004 (Action ID# 200430687)

Section 401 & Buffer Certification: Division of Water Quality Buffer Certification No. 040373 was issued on the original Nationwide 23 Permit Application dated March 5, 2004. No modification to this certification was necessary due to no additional impacts to the Catawba River/ Buffer.

Application is hereby made for written certification form the Division of Water Quality for the above- described activities. In compliance with Section 143-215.3D(e) of the NCAC we will provide $475.00 to act as payment for processing the Section 401 certification application previously noted in this application (see Subject line). We are providing seven copies of this application to the North Carolina Department of Environment and Natural Resources, Division of Water Quality, for their review.

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. Michael Turchy at (919) 715-1468.

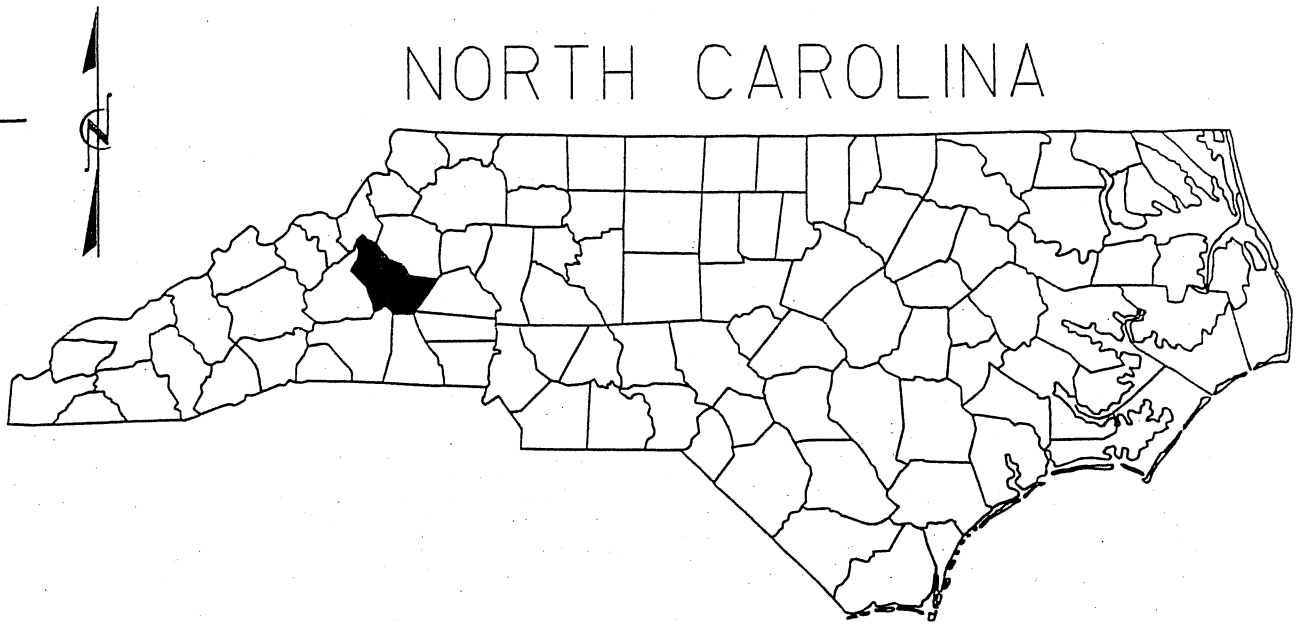
Sincerely,

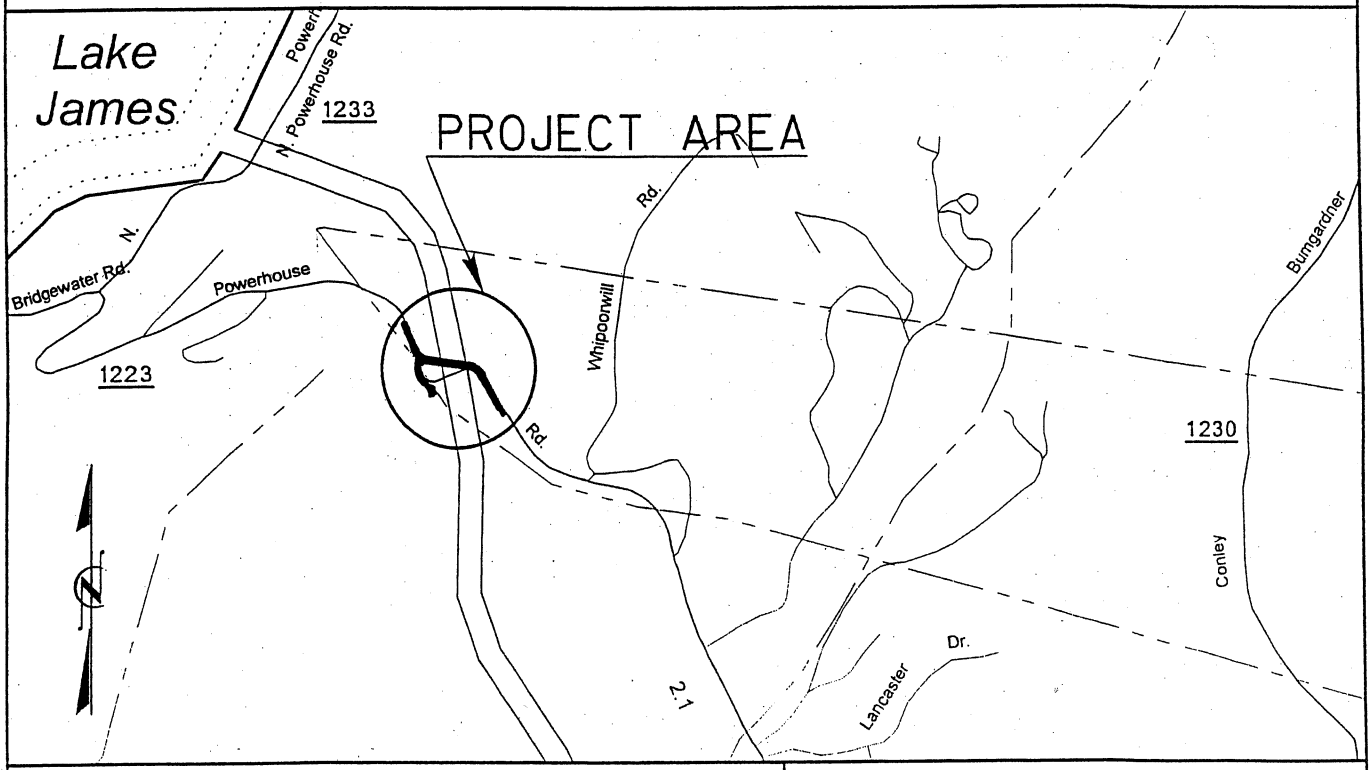
Gregory J. Thorpe, PhD., Environmental Management Director
Project Development and Environmental Analysis Branch

cc:

Cover Letter Only:

Ms. Angie Pennock, USACE, Asheville Office
Mr. J.J.Swain, P.E., Division Engineer
Mr. Roger Bryan, DEO



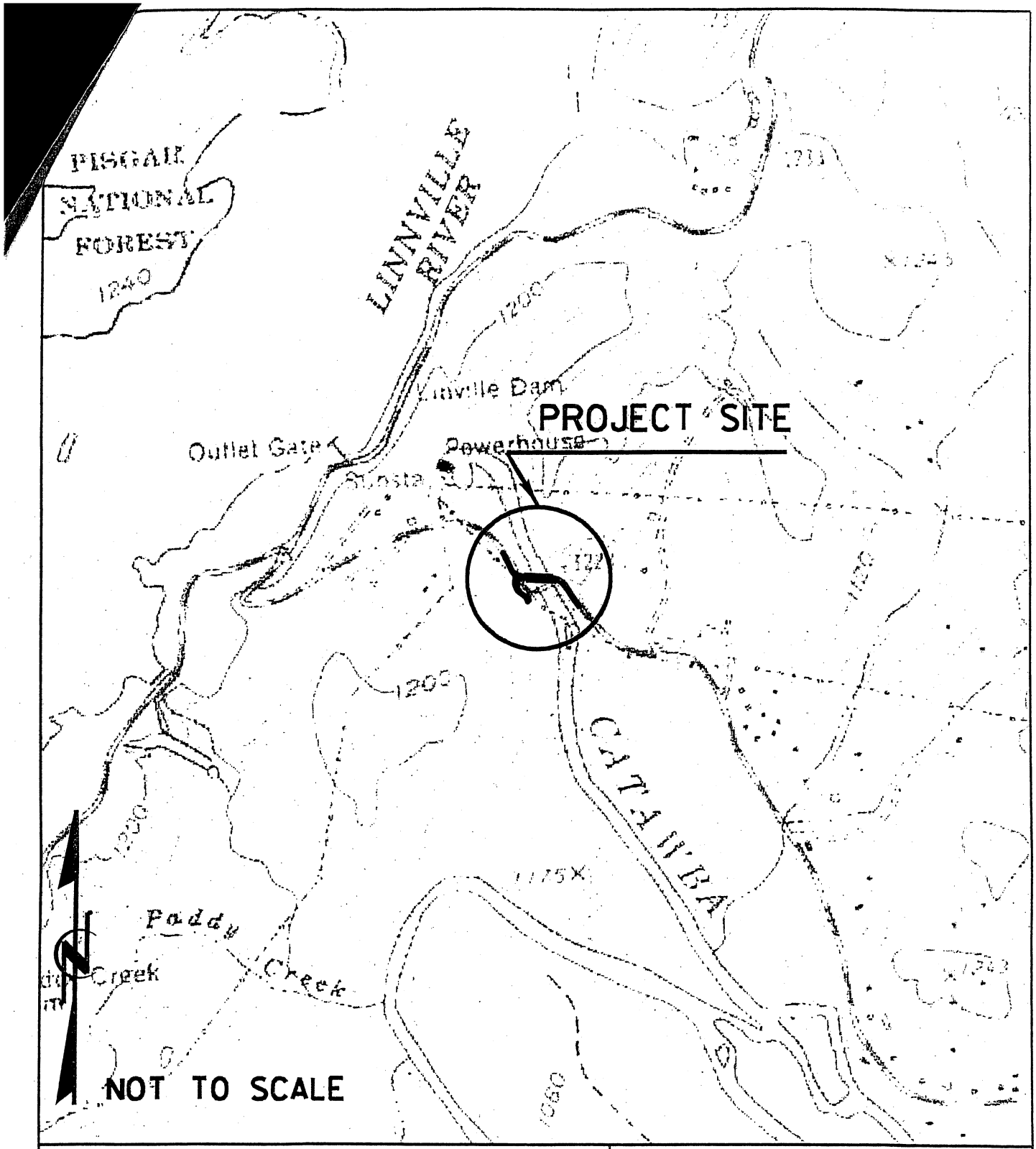


VICINITY MAPS

NCDOT

DIVISION OF HIGHWAYS
BURKE COUNTY
PROJECT: 8.2852001 (B-3419)
BURKE COUNTY BRIDGE #46 ON SR 1223 (POWERHOUSE ROAD) OVER THE CATAWBA RIVER

SHEET 1 OF 6 3/19/03



CATAWBA RIVER WATER SUPPLY BUFFER

LOCATION MAP

NCDOT

DIVISION OF HIGHWAYS

BURKE COUNTY

PROJECT: 8.2852001 (B-3419)

BURKE COUNTY BRIDGE #46 ON SR 1223 (POWERHOUSE ROAD) OVER THE CATAWBA RIVER

SHEET 2 **OF** 6 **3/17/03**

WETLAND LEGEND

WLB WETLAND BOUNDARY

WETLAND

DENOTES FILL IN WETLAND

DENOTES FILL IN SURFACE WATER

DENOTES FILL IN SURFACE WATER (POND)

DENOTES TEMPORARY FILL IN WETLAND

DENOTES EXCAVATION IN WETLAND

DENOTES TEMPORARY FILL IN SURFACE WATER

DENOTES MECHANIZED CLEARING

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

LIVE STAKES

BOULDER

COIR FIBER ROLLS

PROPOSED BRIDGE

PROPOSED BOX CULVERT

PROPOSED PIPE CULVERT
12"-48" PIPES
54" PIPES & ABOVE

(DASHED LINES DENOTE EXISTNG STRUCTURES)

SINGLE TREE

WOODS LINE

DRAINAGE INLET

ROOTWAD

RIP RAP

5 ADJACENT PROPERTY OWNER OR PARCEL NUMBER IF AVAILABLE

PREFORMED SCOUR HOLE

LEVEL SPREADER (LS)

DITCH / GRASS SWALE

NCDOT

DIVISION OF HIGHWAYS

BURKE COUNTY

PROJECT: 8.2852001 (B-3419)

BURKE COUNTY BRIDGE #46 ON SR 1223 (POWERHOUSE ROAD) OVER THE CATAWBA RIVER

SHEET 3 OF 6 3/17/03

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
B-3419	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Prepared in the Office of:
701 Corporate Center Drive, Suite 475
Raleigh, NC 27607
(919) 854-6200 - (919) 854-6259 (FAX)

GRAPHIC SCALE
50 25 0 50 100
PLANS

DUKE ENERGY CORP.
DB 704 PG 369

WOODS

SR 1923
POWER HOUSE ROAD

24" WOOD WITH ½" STEEL CABLE

CATAWBA RIVER

SPECIAL DITCH
(NOT TO SCALE)
Natural Ground, 2:1, D, 4:1, Roadway Shoulder
* SPECIAL DITCH GRADE Min. D = 2 Ft.

-L- 18+01 - 18+31 R
-L- 24+00 - 24+67 R
-L- 24+67 - 27+00 R
-L- 20+95 - 21+85 L
-L- 22+65 - 24+00 L
-L- 24+00 - 24+67 L
-L- 24+67 - 27+14 L
-DRIVE- 10+20 - 11+13 R
-DRIVE- 11+13 - 11+83 R
-DRIVE- 10+84 - 11+47 L
-DRIVE- 11+47 - 11+70 L

(NOT TO SCALE) LOOKING D/S
3', 8', 2', 2'
Medium brush in channel
Heavy brush, trees on banks

EXISTING DRAINAGE DITCH
-DRIVE- 11+50 LT.
(NOT TO SCALE) LOOKING D/S
4', 3', 3'
Heavy brush in channel and channel banks

SHOULDER BERM GUTTER
SEE STRUCTURE SHEET NUMBERS TO

SPECIAL DITCH
-L- 18+01 - 18+31

Utility Impacts

SPECIAL DITCH
10+20 - 11+13

STREAM IMPACTS

2' BASE HEAD DITCH w/CLASS B LINER
75 LF @ 12.0Z
LINER, CLASS B
23 SY FF
20 CY DDE

2' BASE HEAD DITCH w/CLASS B LINER
(NOT TO SCALE)
Natural Ground, 2:1, D, 2:1, Natural Ground, d, B, Filter Fabric
Min. D = 2 Ft.
Min. d = 1 Ft.
B = 2 Ft.
Type of Liner = CLASS B

-DRIVE- 11+13 R

SPECIAL DITCH
11+13 - 11+83

TIE PROPOSED DITCH TO EXISTING DITCH

SHOULDER BERM GUTTER
-L- 18+85 - 19+12.70 RT

SPECIAL DITCH
10+84 - 11+47
D.A. = 0.37 ac
Q2 = 1.1 cfs
V2 = 2.8 fps
Q10 = 1.8 cfs
V10 = 2.3 fps

NOTE, ABANDON EXISTING R/W AT TERMINATION OF PROJECT

SPECIAL DITCH
11+47 - 11+70

PAVED PARKING LOT

GRADE TO DRAIN (NO DITCH)

WOOD FISHING PIER

24" WOOD WITH ½" STEEL CABLE

GR PARKING

D.A. = 0.18 ac.
Q2 = 0.50 cfs
V2 = 1.2 fps
Q10 = 0.66 cfs
V10 = 1.3 fps

SPECIAL DITCH
20+95 - 21+85

② CAROLINA CENTERS LLC
DB 818 PG 767,768

TOE PROTECTION D.A. = 0.20 ac.
21+85 - 22+27
60 SY PSRM
Q2 = 0.55 cfs
V2 = 1.2 fps
Q10 = 0.7 cfs
V10 = 3.7 fps

TOE PROTECTION
22+37 - 22+65
26 SY PSRM

TOE PROTECTION
(NOT TO SCALE)
Fill Slope, d, 4', PSRM, Natural Ground
d = 2 Ft.
Type of Liner = PERMANENT SOIL REINFORCEMENT MATTING

STREAM IMPACTS

-L- 21+60 - 22+35 L
-L- 22+35 - 22+60 L

SPECIAL DITCH
22+65 - 24+00
D.A. = 0.4 ac
L = 135'
Q2 = 1.2 cfs
V2 = 1.2 fps
Q10 = 1.5 cfs
V10 = 1.3 fps

3 TN CLS B
10 SY FF

SPECIAL DITCH
24+00 - 24+67
D.A. = 0.1 ac
L = 67'
Q2 = 0.3 cfs
V2 = 1.9 fps
Q10 = 0.4 cfs
V10 = 2.1 fps

SPECIAL DITCH D.A. = 0.25 ac
24+67 - 27+14
Q2 = 0.7 cfs
V2 = 1.6 fps
Q10 = 0.9 cfs
V10 = 1.7 fps

SPECIAL DITCH
24+00 - 24+67
D.A. = 0.10 ac
L = 67'
Q2 = 0.5 cfs
V2 = 2.0 cfs
Q10 = 0.6 cfs
V10 = 2.1 fps

D.A. = 0.16 ac
= 233'
Q2 = 0.4 cfs
V2 = 1.8 fps
Q10 = 0.5 cfs
V10 = 1.9 fps

SPECIAL DITCH
24+67 - 27+00

② CAROLINA CENTERS LLC
DB 818 PG 767,763

POWER HOUSE ROAD SR 1923

30" DRAIN

CATAWBA RIVER

WOODS

FILL IN SURFACE WATERS

NCDOT
DIVISION OF HIGHWAYS
BURKE COUNTY
PROJECT: 8.2653001 (B-3419)
WETLAND IMPACTS
SITE 1
BRIDGE #46 ON
SR 1222 (POWERHOUSE ROAD)
OVER THE CATAWBA RIVER
SHEET OF 4/29/04

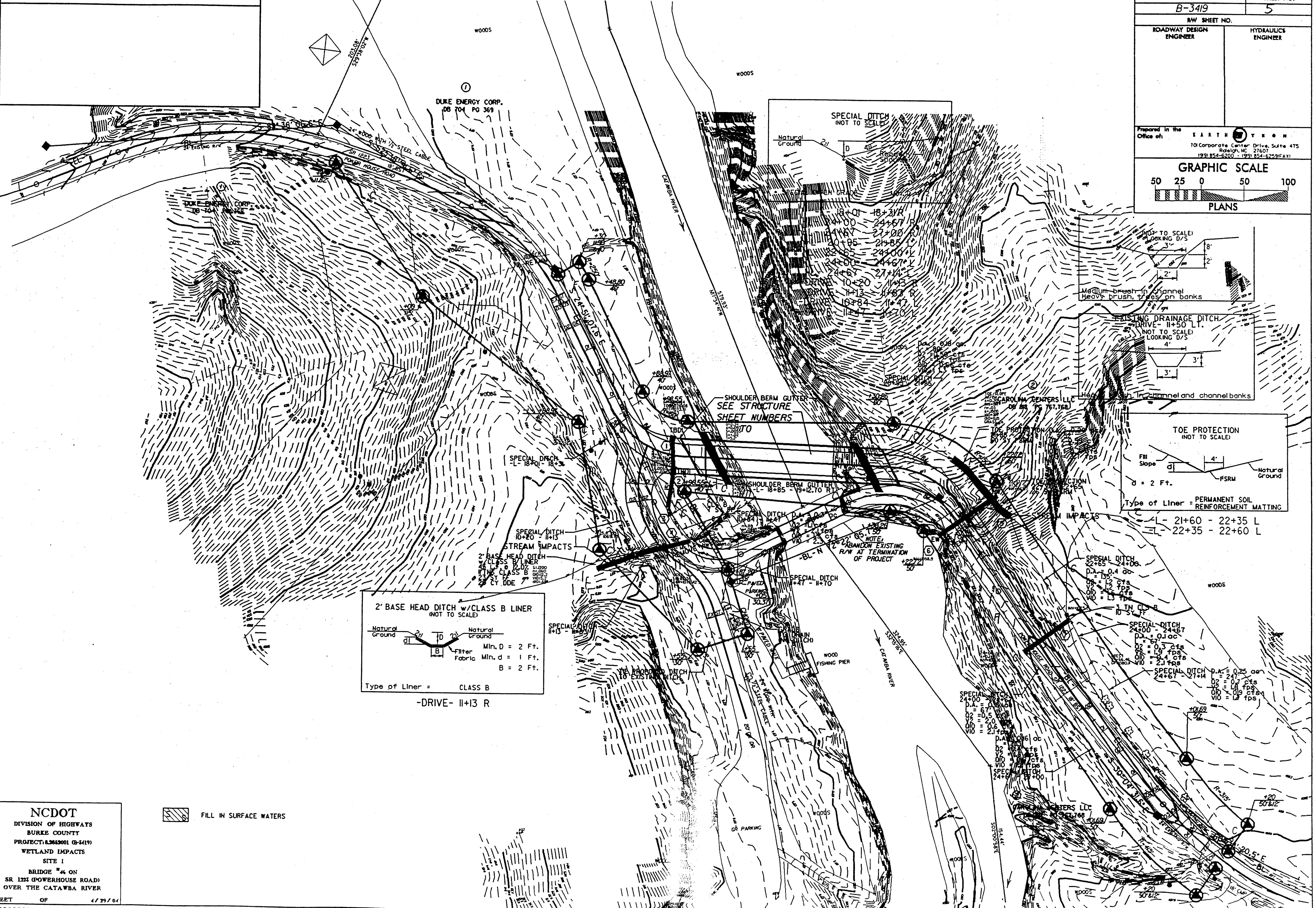
DATE: ##DATE##
TIME: ##TIME##
USER: ##USER##
FILE: ##FILE##

REVISIONS

ENGLISH	PROJECT REFERENCE NO.	SHEET NO.
	B-3419	5
	R/W SHEET NO.	
	ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Prepared in the Office of: EARTH TECH
701 Corporate Center Drive, Suite 475
Raleigh, NC 27607
(919) 854-6200 - (919) 854-6259(FAX)

GRAPHIC SCALE
50 25 0 50 100
PLANS



![FILL IN SURFACE WATERS legend] FILL IN SURFACE WATERS

NCDOT
DIVISION OF HIGHWAYS
BURKE COUNTY
PROJECT: 8.2683001 (B-3419)
WETLAND IMPACTS
SITE 1
BRIDGE #46 ON
SR 1223 (POWERHOUSE ROAD)
OVER THE CATAWBA RIVER
SHEET OF 4/29/04

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS: Fill In Wetlands (ac)	WETLAND IMPACTS: Temp. Fill In Wetlands (ac)	WETLAND IMPACTS: Excavation In Wetlands (ac)	WETLAND IMPACTS: Mechanized Clearing (Method III) (ac)	SURFACE WATER IMPACTS: Fill In SW (Natural) (ac)	SURFACE WATER IMPACTS: Fill In SW (Pond) (ac)	SURFACE WATER IMPACTS: Temp. Fill In SW (ac)	SURFACE WATER IMPACTS: Existing Channel Impacted (ft)	SURFACE WATER IMPACTS: Natural Stream Design (ft)
1	-L- Sta 19+25	180' Single Span Bridge					0			0	
	TO 21+05										
2	-Drive- 11+24	30" RCP					0.004			81	
	UT West (~2' wide)										
3	-L- 22+37	48" RCP					0.004			44	
	UT East (~4' wide)										
TOTALS:			0	0	0	0	0.008	0	0	125	0

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

BURKE COUNTY
PROJECT 8.2852001 B-3419

SHEET 6 OF 6 4/29/04

Form Revised 3/22/01

TIP PROJECT: B-3419

CONTRACT: C200826

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

BURKE COUNTY

LOCATION: BRIDGE NO. 46 ON SR 1223 OVER CATAWBA RIVER

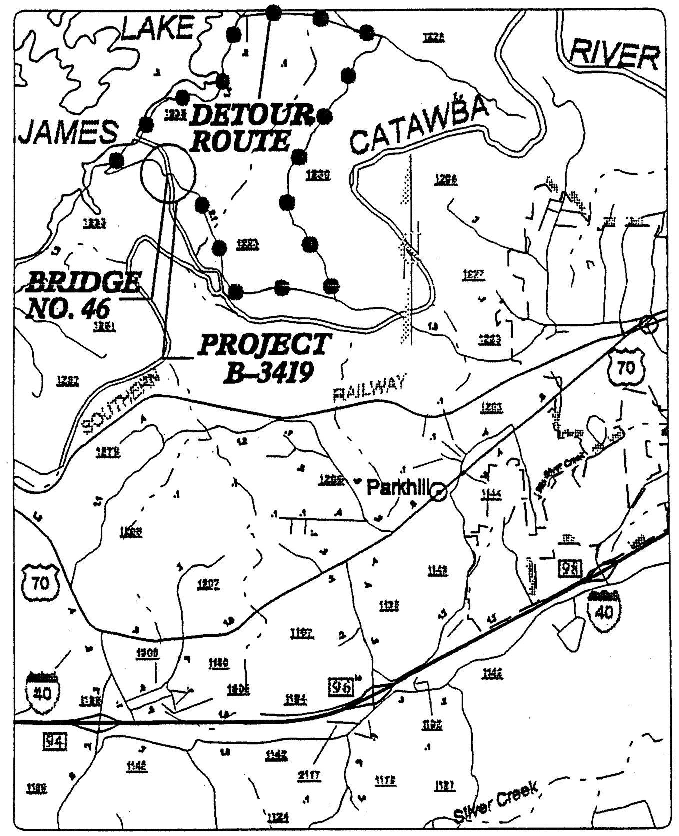
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-3419	1	

STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

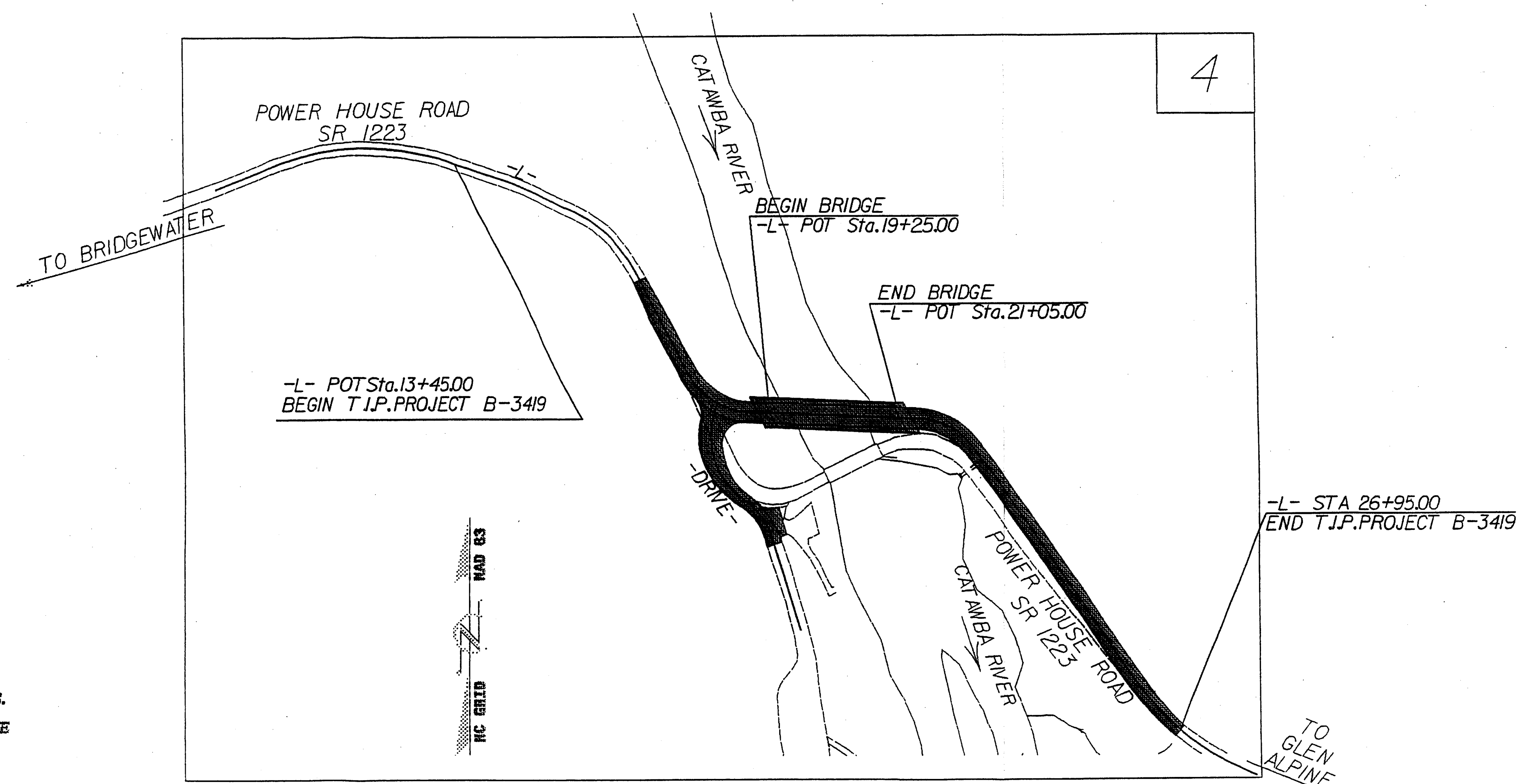
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION



VICINITY MAP OF B-3419

DETOUR



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II

NCDOT CONTACT : CATHY S. HOUSER, P.E.,
PROJECT ENGINEER, DESIGN SERVICES

GRAPHIC SCALES

PLANS

PROFILE (HORIZONTAL)

PROFILE (VERTICAL)

DESIGN DATA

ADT 2004 = [illegible]
ADT 2024 = [illegible]
DHV = [illegible]
D = [illegible]
T = [illegible]
[illegible] DUAL [illegible]
V = [illegible] mph

* DESIGN EXCEPTION FOR HORIZONTAL ALIGNMENT, STOPPING SIGHT DISTANCE, AND SUPERELEVATION IS REQUIRED

PROJECT LENGTH

LENGTH ROADWAY T.I.P. PROJECT B-3419	= 0.222 MILES
LENGTH STRUCTURES T.I.P. PROJECT B-3419	= 0.034 MILES
TOTAL LENGTH OF T.I.P. PROJECT B-3419	= 0.256 MILES

2002 STANDARD SPECIFICATIONS

R/W :	MARCH 31, 2003
LETTING DATE :	MARCH 16, 2004

NEIL J. DEAN, P.E.
EARTH TECH PROJECT MANAGER

Prepared in the Office of:

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY

FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

701 Corporate Center Drive
Suite 475
Raleigh, N.C. 27607
(919)-854-6200
FAX (919)-854-6259

HYDRAULICS ENGINEER

SIGNATURE: JOHN D.R. NICHOLS, P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: NEIL J. DEAN, P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

P.E.
STATE DESIGN ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED
DIVISION ADMINISTRATOR DATE

PROJECT REFERENCE NO.	SHEET NO.
B-3419	2

PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION

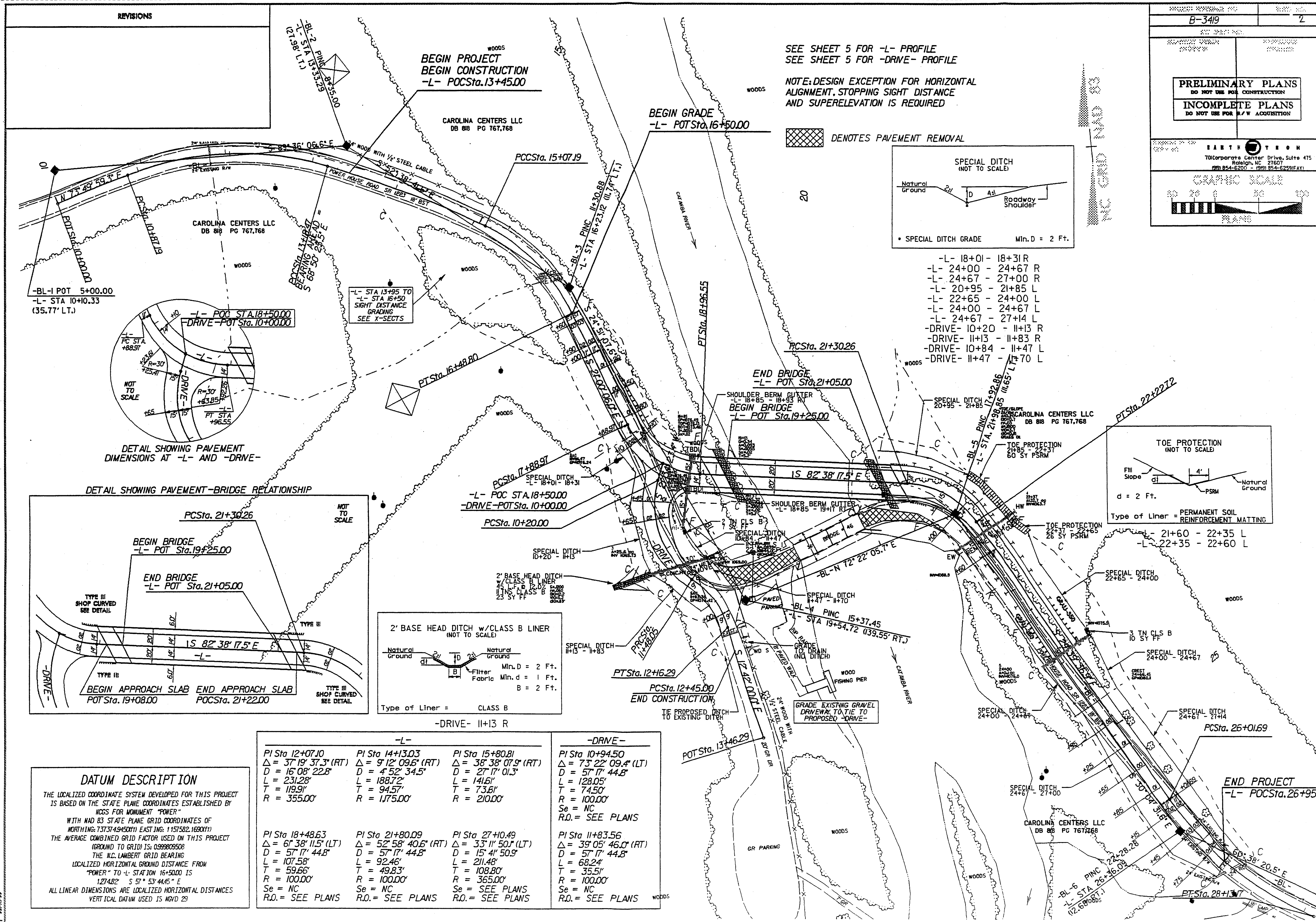
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION

EARTHTECH
701 Corporate Center Drive, Suite 475
Raleigh, NC 27607
(919) 854-6200 - (919) 854-6259(FAX)

SEE SHEET 5 FOR -L- PROFILE
SEE SHEET 5 FOR -DRIVE- PROFILE

NOTE: DESIGN EXCEPTION FOR HORIZONTAL ALIGNMENT, STOPPING SIGHT DISTANCE AND SUPERELEVATION IS REQUIRED

DENOTES PAVEMENT REMOVAL



SPECIAL DITCH (NOT TO SCALE)

Natural Ground — 2:1 — D — 4:1 — Roadway Shoulder

* SPECIAL DITCH GRADE Min. D = 2 Ft.

-L- 18+01 - 18+31 R
-L- 24+00 - 24+67 R
-L- 24+67 - 27+00 R
-L- 20+95 - 21+85 L
-L- 22+65 - 24+00 L
-L- 24+00 - 24+67 L
-L- 24+67 - 27+14 L
-DRIVE- 10+20 - 11+13 R
-DRIVE- 11+13 - 11+83 R
-DRIVE- 10+84 - 11+47 L
-DRIVE- 11+47 - 11+70 L

TOE PROTECTION (NOT TO SCALE)

Fill Slope — d — 4' — PSRM — Natural Ground

d = 2 Ft.

Type of Liner = PERMANENT SOIL REINFORCEMENT MATTING

-L- 21+60 - 22+35 L
-L- 22+35 - 22+60 L

2' BASE HEAD DITCH w/CLASS B LINER (NOT TO SCALE)

Natural Ground — 2:1 — d — B — 2:1 — Natural Ground — Filter Fabric

Min. D = 2 Ft.
Min. d = 1 Ft.
B = 2 Ft.

Type of Liner = CLASS B

-DRIVE- 11+13 R

-L-			-DRIVE-
PI Sta 12+07.10 Δ = 37° 19' 37.3" (RT) D = 16° 08' 22.8" L = 231.28' T = 119.91' R = 355.00'	PI Sta 14+13.03 Δ = 9° 12' 09.6" (RT) D = 4° 52' 34.5" L = 188.72' T = 94.57' R = 1,175.00'	PI Sta 15+80.81 Δ = 38° 38' 07.9" (RT) D = 27° 17' 01.3" L = 141.61' T = 73.61' R = 210.00'	PI Sta 10+94.50 Δ = 73° 22' 09.4" (LT) D = 57° 17' 44.8" L = 128.05' T = 74.50' R = 100.00' Se = NC R.O. = SEE PLANS
PI Sta 18+48.63 Δ = 61° 38' 11.5" (LT) D = 57° 17' 44.8" L = 107.58' T = 59.66' R = 100.00' Se = NC R.O. = SEE PLANS	PI Sta 21+80.09 Δ = 52° 58' 40.6" (RT) D = 57° 17' 44.8" L = 92.46' T = 49.83' R = 100.00' Se = NC R.O. = SEE PLANS	PI Sta 27+10.49 Δ = 33° 11' 50.1" (LT) D = 15° 41' 50.9" L = 211.48' T = 108.80' R = 365.00' Se = SEE PLANS R.O. = SEE PLANS	PI Sta 11+83.56 Δ = 39° 05' 46.0" (RT) D = 57° 17' 44.8" L = 68.24' T = 35.51' R = 100.00' Se = NC R.O. = SEE PLANS

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCGS FOR MONUMENT "POWER"
WITH NAD 83 STATE PLANE GRID COORDINATES OF
NORTHING: 737374.9450(ft) EASTING: 1157582.1690(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999809508
THE N.C. LAMBERT GRID BEARING
LOCALIZED HORIZONTAL GROUND DISTANCE FROM "POWER" TO -L- STATION 16+50.00 IS
1,274.82' S 57° 53' 44.45" E
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NGVD 29

B-3419	3

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

EARTH TECH
701 Corporate Center Drive, Suite 475
Raleigh, NC 27607
(919) 854-6200 - (919) 854-6259(FAX)

-L-

BRIDGE HYDRAULIC DATA

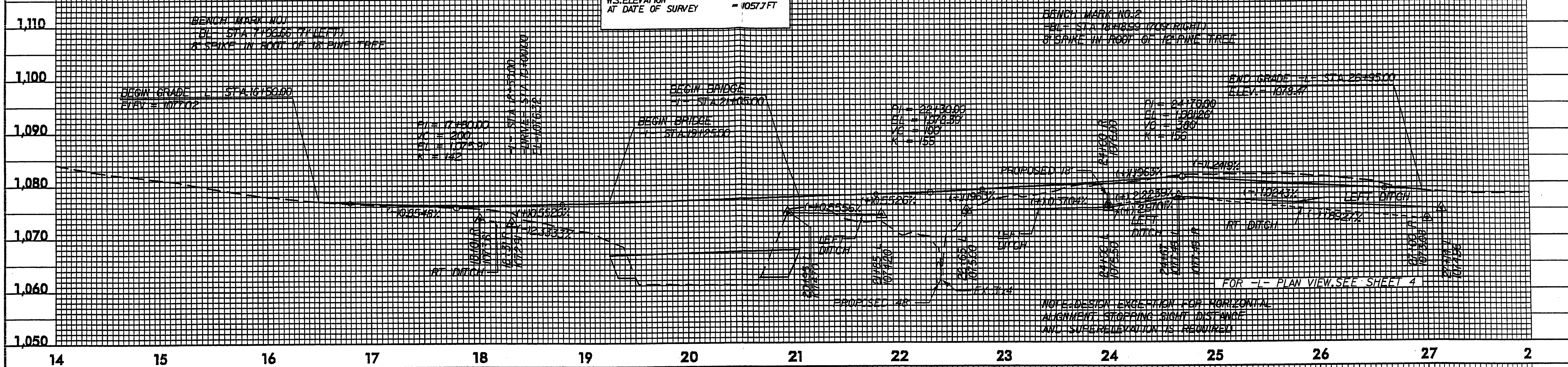
DESIGN DISCHARGE	= 2500 CFS
DESIGN FREQUENCY	= N/A YRS
DESIGN HW ELEVATION	= 1063.5FT
BASE DISCHARGE	= N/A CFS
BASE FREQUENCY	= N/A YRS
BASE HW ELEVATION	= N/A FT
OVERTOPPING DISCHARGE	= 11,080 CFS
OVERTOPPING FREQUENCY	= N/A YRS
OVERTOPPING ELEVATION	= 1076.2FT
DATE OF SURVEY	= 9/16/2002
W.S. ELEVATION AT DATE OF SURVEY	= 1057.7 FT

PIPE HYDRAULIC DATA -L- 22+37 - 48" RCP

DESIGN DISCHARGE	= 21.3 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 1066.4FT
BASE DISCHARGE	= 33.9 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 1067.0FT
OVERTOPPING DISCHARGE	= 138.1 CFS
OVERTOPPING FREQUENCY	= 500+ YRS
OVERTOPPING ELEVATION	= 1074.7 FT

PIPE HYDRAULIC DATA -L- 24+00 - 18" RCP

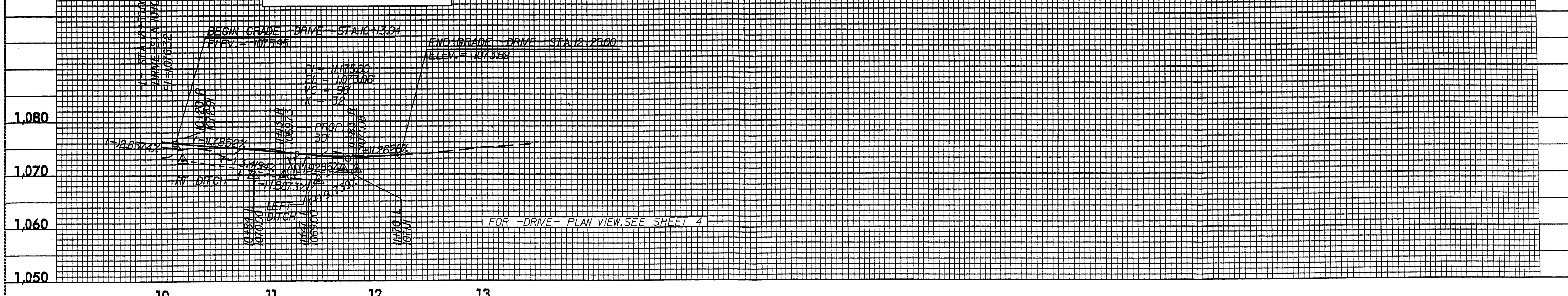
DESIGN DISCHARGE	= 0.7 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 1076.4FT
BASE DISCHARGE	= 0.8 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 1076.5FT
OVERTOPPING DISCHARGE	= 12.6 CFS
OVERTOPPING FREQUENCY	= 500+ YRS
OVERTOPPING ELEVATION	= 1079.0FT



-DRIVE-

PIPE HYDRAULIC DATA -DRIVE- 11+24 - 30" RCP

DESIGN DISCHARGE	= 17.5 CFS
DESIGN FREQUENCY	= 25 YRS
DESIGN HW ELEVATION	= 1071.8 FT
BASE DISCHARGE	= 27.8 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 1072.5FT
OVERTOPPING DISCHARGE	= 35.3 CFS
OVERTOPPING FREQUENCY	= 100+ YRS
OVERTOPPING ELEVATION	= 1073.1 FT



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director
Division of Water Quality
Coleen H. Sullins, Deputy Director
Division of Water Quality

March 17, 2004
Burke County
DWQ Project No. 040373
TIP Project B-3419

APPROVAL of CATAWBA RIVER BUFFER RULES AUTHORIZATION CERTIFICATE with ADDITIONAL CONDITIONS

Mr. Gregory J. Thorpe, Ph.D., Director
NCDOT Project Development & Environmental Analysis
1548 Mail Service Center
Raleigh, NC 27699-1548

Dear Dr. Thorpe:

You have our approval, in accordance with the attached conditions, to impact:

- 4,791.6 square feet of protected riparian buffers in Zone 1 and
- 5,357.9 square feet of protected riparian buffers in Zone 2

for the purpose of replacing Bridge No. 46 over Catawba River on SR 1223 in Burke County. The project shall be constructed according to your application dated March 5, 2004 and any conditions listed below. This approval shall act as your Authorization Certificate as required within the Catawba River Area Protection Rules (15A NCAC 2B .0243). In addition, you should get any other required federal, state or local permits before you go ahead with your project including (but not limited to) Sediment and Erosion Control.

This approval is only valid for the purpose and design that you described in your application. If you change your project, you must notify us and you may be required to send us a new application. If the property is sold, the new owner must be given a copy of this authorization and approval letter and is thereby responsible for complying with all conditions. For this approval to be valid, you must follow the conditions listed below.

1. The outside buffer, wetland or water boundary as well as along the construction corridor within these boundaries approved under this Certification shall be clearly marked by orange fabric fencing for the areas that have been approved to infringe within the buffer, wetland or water prior to any land disturbing activities to ensure compliance with 15A NCAC 2B .0250.
2. This Certification does not authorize the discharge of waste rock and dirt into the stream or riparian zone except for permitted areas associated with culvert conditions.
3. All storm water runoff shall be directed to sheet flow through stream buffers at non-erosive velocities, unless approved otherwise by this certification.
4. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers.
5. No changes to the horizontal or vertical placement of the stormwater outfall locations, the horizontal or vertical placement of the culverts, the horizontal or vertical placement of bridges, the horizontal or vertical placement of grassed swales, or the horizontal or vertical placement of open ditches is permitted without written approval from the NC Division of Water Quality 401 Wetlands Unit. In addition, no changes to the flow spreader locations or designs, preformed scour hole locations or designs are permitted without written approval from the NC Division of Water Quality 401

Wetlands Unit. Any request for changes to the referenced items above will require submittal of a modification request, with seven copies, and corresponding fees will need to be submitted to the North Carolina Division of Water Quality.

6. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials.
7. Pursuant to NCAC15A 2B.0243(6), sediment and erosion control devices shall not be placed in Zone 1 of any Catawba Buffer without prior approval by the NCDWQ. At this time, the NCDWQ has *not* approved the use of sediment and erosion control devices in Zone 1 anywhere on this project. Sediment and erosion control devices shall be allowed in Zone 2 of the buffers provided that Zone 1 is not compromised and that discharge is released as diffuse flow.
8. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction. All protected riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and re-vegetated with native woody species upon completion of the project construction.
9. A post-construction as-built drawing with the restoration activities included shall be submitted to the DWQ no later than 60 days after the project is closed out by the NCDOT.
10. Upon completion of the project, the NCDOT and/or its authorized agents shall complete and return the enclosed "Certificate of Completion" form to the 401/Wetlands Unit of the NC Division of Water Quality upon completion of the project.

If you do not accept any of the conditions of this certification, you may ask for an adjudicatory hearing. You must act within 60 days of the date that you receive this letter. To ask for a hearing, send a written petition that conforms to Chapter 150B of the North Carolina General Statutes to the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, N.C. 27699-6714. This certification and its conditions are final and binding unless you ask for a hearing.

This letter completes the review of the Division of Water Quality under the "No Practical Alternatives" determination required in 15A NCAC 2B .0243(8). If you have any questions, please contact Cynthia Van Der Wiele at 919-733-5715.

Sincerely,

Alan W. Klimek, P.E.
Director

cc: US Army Corps of Engineers Asheville Field Office
DWQ Asheville Regional Office
File Copy
Central Files

Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources

Alan W. Klimek, P.E. Director
Division of Water Quality

DWQ Project No.: _____ County: _____
Applicant: _____
Project Name: _____
Date of Issuance of 401 Water Quality Certification: _____

Certificate of Completion

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401/Wetlands Unit, North Carolina Division of Water Quality, 1650 Mail Service Center, Raleigh, NC, 27699-1650. This form may be returned to DWQ by the applicant, the applicant's authorized agent, **or** the project engineer. It is not necessary to send certificates from all of these.

Applicant's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.
Signature:_____Date:_____ _____

Agent's Certification

I, _____, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.
Signature:_____Date:_____

If this project was designed by a Certified Professional

I, _____, as a duly registered Professional _____ (i.e., Engineer, Landscape Architect, Surveyor, etc.) in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project, for the Permitee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.
Signature _____Registration No. _____Date
_____

B-3414(5) Turchy

DEPARTMENT OF THE ARMY
WILMINGTON DISTRICT, CORPS OF ENGINEERS
151 PATTON AVENUE
ROOM 208
ASHEVILLE, NORTH CAROLINA 28801-5006

REPLY TO
ATTENTION OF:

Action Identification Number: 200430687

Permit Number: NWP 12 and 14
Burke County

Permittee: North Carolina Department of Transportation
Attn: Gregory J. Thorpe, PhD
1598 Mail Service Center
Raleigh, North Carolina 27699-15989

Issuance: August 2, 2004

Project Manager: Angie Pennock

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT
ASHEVILLE REGULATORY FIELD OFFICE
151 PATTON AVENUE, ROOM 208
ASHEVILLE, NORTH CAROLINA 28801-5006

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

_____ _____

Signature of Permittee **Date**

U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT

Action ID. **200430687** County: **Burke** USGS Quad: **Glen Alpine**

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Property Owner / Authorized Agent: **North Carolina Department of Transportation**
Address: Attn: Gregory J. Thorpe, PhD
1598 Mail Service Center
Raleigh, North Carolina 27699-1598

Telephone No.: **(919) 733-3141**

Size and location of project (water body, road name/number, town, etc.): **The project is located at Bridge No. 46 on SR 1223 (Power House Road), east of Lake James, in unnamed tributaries to the Catawba River and over the Catawba River, west of Morganton, Burke County, North Carolina.**

Description of activity: **Discharge of fill material into 125 linear feet of perennial streams for the installation of 2 culverts and a utility line in two unnamed tributaries (UT) to the Catawba River located one each on the eastern and western sides of the river. The impacts can be broken down as follows:**
Western UT: 79 linear feet of impact associated with the installation of a 48-inch RCP culvert and 2 linear feet of impact associated with the relocation of a buried utility line (the final location for the utility line will be under the culvert but impacts will be separated temporally).
Easter UT: 44 linear feet of impact associated with the installation of a 30-inch RCP culvert.

Applicable Law: X Section 404 (Clean Water Act, 33 USC 1344)
_ Section 10 (Rivers and Harbors Act, 33 USC 403)
Authorization: Regional General Permit Number: _____
Nationwide Permit Number: **12 and 14**

Special Conditions

a) All work authorized by this permit must be performed in strict compliance with the plans received in this office on July 1 and August 2, 2004, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

b) Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

c) Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.

d) All conditions of the attached North Carolina Wildlife Resources Commission letter of July 29, 2004 are hereby incorporated as special conditions of this permit.

Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the attached conditions and your submitted plans. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order and/or appropriate legal action.

Corps Regulatory Official (Initial): ASP

This verification will remain valid until the expiration date identified below unless the nationwide authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all modifications. If the nationwide permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Quality (telephone (919) 733-1786) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management .

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Angie Pennock at (828) 271-7980 ext. 226.

Corps Regulatory Official Angie Pennock Date: **2 August 2004**

Expiration Date of Verification: **2 August 2006**

SURVEY PLATS, FIELD SKETCH, WETLAND DELINEATION FORMS, PROJECT PLANS, ETC., MUST BE ATTACHED TO THE FILE COPY OF THIS FORM, IF REQUIRED OR AVAILABLE.

Copy Furnished:

North Carolina Department of Transportation
Mr. Michael Turchy
By Fax: (919) 733-9794

North Carolina Department of Transportation
Attn: J. J. Swain, Jr., PE
Post Office Box 3297
Asheville, North Carolina 2

North Carolina Department of Transportation
Attn: Roger Bryan
Post Office Box 3297
Asheville, North Carolina 28802

Division of Water Quality
North Carolina Department of Environment and Natural Resources
Attn: Brian Wrenn
1650 Mail Service Center
Raleigh, North Carolina 27699-1650

North Carolina Wildlife Resources Commission

Charles R. Fullwood, Executive Director

TO: Steven W. Lund, NCDOT Coordinator
Asheville Regulatory Field Office, USACE

FROM: Marla Chambers, Highway Projects Coordinator Marla Chambers
Habitat Conservation Program, NCWRC

DATE: May 24, 2004

SUBJECT: Review of Categorical Exclusion document and information related to Section 404 Permit application by NCDOT to replace Bridge No. 46 on SR 1223 (Powerhouse Road) over the Catawba River, Burke County, North Carolina. TIP No. B-3419.

North Carolina Department of Transportation (NCDOT) has requested a Section 404 permit from the U.S. Army Corps of Engineers (USACE). Staff biologists with the North Carolina Wildlife Resources Commission (NCWRC) have reviewed the Categorical Exclusion document and information provided. These comments are provided in accordance with the provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661-667d).

The NCDOT proposes to replace Bridge No. 46 on SR 1223 (Powerhouse Road) over the Catawba River with a new spanning structure on new alignment north of the existing bridge. No bents will be placed in the channel and no permanent or temporary fill impacts are anticipated to wetlands or surface waters. Catawba River is classified as WS-IV and Hatchery Supported Designated Public Mountain Trout Water in the project area. It also supports wild brown and brook trout and spring runs of striped bass, v-lip redhorse, yellow perch and walleye. NCWRC has entered an agreement with Duke Power and has built a fishing pier and parking area just downstream of the existing bridge. NCDOT has coordinated with NCWRC and Duke Power to avoid impacts to these facilities. NCDOT has indicated they will observe an in-stream and land disturbance moratorium within the 25-foot trout buffer from October 15 to April 15. In addition, efforts should be made to minimize in-water disturbance during the stocking season from March 1 though July 31. NCWRC appreciates the efforts by NCDOT to avoid and minimize impacts on this project.

Mailing Address: Division of Inland Fisheries • 1721 Mail Service Center • Raleigh, NC 27699-1721
Telephone: (919) 733-3633 ext. 281 • **Fax:** (919) 715-7643

NCWRC can concur with the permit issuance if the following conditions are implemented:

1. In-stream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning seasons of October 15 through April 15 to protect the egg and fry stages of trout.

2. Sediment and erosion control measures shall adhere to the design standards for sensitive watersheds (15A NCAC 4B .0124 (a)-(d)) and be strictly maintained until project completion to avoid impacts to downstream aquatic resources. Temporary or permanent herbaceous vegetation should be planted on all bare soil as soon as possible and within 10 days of ground disturbing activities to provide long-term erosion control. Tall fescue should not be used in riparian areas. We encourage NCDOT to utilize onsite vegetation and materials for bank stabilization when practicable. Erosion control matting should be used in riparian areas, instead of straw mulch and well anchored with 12" staples or 12" wooden survey stakes.

3. Discharge of materials into the river from demolition of the old bridge should be avoided as much as practicable. Any materials that inadvertently reach the river should be removed.

4. The natural dimension, pattern, and profile of the river above and below the crossing should not be modified by widening the river channel or changing the depth of the river.

5. Removal of vegetation in riparian areas should be minimized. Native trees and shrubs should be planted along the riverbanks to reestablish the riparian zone and to provide long-term erosion control.

6. Grading and backfilling should be minimized, and tree and shrub growth should be retained if possible to ensure long term availability of shoreline cover for fish and wildlife. Backfill materials should be obtained from upland sites.

7. Riprap placed for bank stabilization should be limited to the riverbank below the high water mark, and vegetation should be used for stabilization above the high water elevation.

8. Stormwater, including deck drainage, should be directed to buffer areas or retention basins and should not be routed directly into the river.

9. If concrete will be used during construction, work must be accomplished so that wet (uncured) concrete does not contact surface waters. This will lessen the chance of altering the water chemistry and causing a fish kill.

10. Discharging hydroseeding mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is strictly prohibited.

11. Heavy equipment should be operated from the bank rather than in the river channel whenever possible in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into the river. All mechanized equipment operated near surface waters should be inspected and maintained regularly to prevent contamination of surface waters from fuels, lubricants, hydraulic fluids or other toxic materials.

12. The existing roadway that is to be eliminated should be removed back to original ground elevations and the natural floodplain elevations and functions should be restored. Disturbed areas should be seeded or mulched to stabilize the soil and native tree species should be planted with a spacing of not more than 10'x10'.

Thank you for the opportunity to review and comment on this project. If you have any questions regarding these comments, please contact me at (704) 485-2384.

cc: Marella Buncick, USFWS
Brian Wrenn, NCDWQ

Office Use Only: Form Version May 2002

USACE Action ID No. _____ **DWQ No.** _____

(If any particular item is not applicable to this project, please enter "Not Applicable" or "N/A".)

I. Processing

1. Check all of the approval(s) requested for this project:
   - ☐ Section 404 Permit
   - ☐ Section 10 Permit
   - ☒ 401 Water Quality Certification
   - ☐ Riparian or Watershed Buffer Rules
   - ☐ Isolated Wetland Permit from DWQ

2. Nationwide, Regional or General Permit Number(s) Requested: NW 14

3. If this notification is solely a courtesy copy because written approval for the 401 Certification is not required, check here: ☒

4. If payment into the North Carolina Wetlands Restoration Program (NCWRP) is proposed for mitigation of impacts (verify availability with NCWRP prior to submittal of PCN), complete section VIII and check here: ☐

5. If your project is located in any of North Carolina's twenty coastal counties (listed on page 4), and the project is within a North Carolina Division of Coastal Management Area of Environmental Concern (see the top of page 2 for further details), check here: ☐

II. Applicant Information

1. Owner/Applicant Information
   Name: Gregory J. Thorpe, Ph.D., Environmental Management Director
   Mailing Address: 1598 Mail Service Center
   Raleigh, North Carolina 27699-1598
   Telephone Number: (919) 733-3141 Fax Number: (919) 733-9794
   E-mail Address: maturchy@dot.state.nc.us

2. Agent/Consultant Information (A signed and dated copy of the Agent Authorization letter must be attached if the Agent has signatory authority for the owner/applicant.)
   Name: _____
   Company Affiliation: _____
   Mailing Address: _____
   Telephone Number: _____ Fax Number: _____
   E-mail Address: _____

III. Project Information

Attach a **vicinity map** clearly showing the location of the property with respect to local landmarks such as towns, rivers, and roads. Also provide a detailed **site plan** showing property boundaries and development plans in relation to surrounding properties. Both the vicinity map and site plan must include a scale and north arrow. The specific footprints of all buildings, impervious surfaces, or other facilities must be included. If possible, the maps and plans should include the appropriate USGS Topographic Quad Map and NRCS Soil Survey with the property boundaries outlined. Plan drawings, or other maps may be included at the applicant's discretion, so long as the property is clearly defined. For administrative and distribution purposes, the USACE requires information to be submitted on sheets no larger than 11 by 17-inch format; however, DWQ may accept paperwork of any size. DWQ prefers full-size construction drawings rather than a sequential sheet version of the full-size plans. If full-size plans are reduced to a small scale such that the final version is illegible, the applicant will be informed that the project has been placed on hold until decipherable maps are provided.

1. Name of project: B-3419 Replacement of bridge No. 46 over SR 1223

2. T.I.P. Project Number or State Project Number (NCDOT Only): B-3419

3. Property Identification Number (Tax PIN): _____

4. Location
   County: Burke Nearest Town: Glen Alpine
   Subdivision name (include phase/lot number): N/A
   Directions to site (include road numbers, landmarks, etc.): Bridge No. 46 on Power House Road (SR 1223)
   _____
   _____

5. Site coordinates, if available (UTM or Lat/Long): 34 44'26" N 81 50' 06"W
   (Note – If project is linear, such as a road or utility line, attach a sheet that separately lists the coordinates for each crossing of a distinct waterbody.)

6. Property size (acres): _____

7. Nearest body of water (stream/river/sound/ocean/lake): Lake James/ Catawba River

8. River Basin: Catawba
   (Note – this must be one of North Carolina's seventeen designated major river basins. The River Basin map is available at http://h2o.enr.state.nc.us/admin/maps/.)

9. Describe the existing conditions on the site and general land use in the vicinity of the project at the time of this application: Lake/ Recreation, Agricultural
   _____
   _____

10. Describe the overall project in detail, including the type of equipment to be used: Replacement of bridge No. 46 over Catawba River with a new, single span bridge north of the current structure. Earth moving equipment, cranes, etc will be used during construction.

11. Explain the purpose of the proposed work: To replace the functionally and structurally obselete structure.

IV. Prior Project History

If jurisdictional determinations and/or permits have been requested and/or obtained for this project (including all prior phases of the same subdivision) in the past, please explain. Include the USACE Action ID Number, DWQ Project Number, application date, and date permits and certifications were issued or withdrawn. Provide photocopies of previously issued permits, certifications or other useful information. Describe previously approved wetland, stream and buffer impacts, along with associated mitigation (where applicable). If this is a NCDOT project, list and describe permits issued for prior segments of the same T.I.P. project, along with construction schedules.

A nationwide 12 and 14 has been issued for this project (action ID 200430687), as well as a NCDWQ Buffer Certification (No. 040373).

V. Future Project Plans

Are any future permit requests anticipated for this project? If so, describe the anticipated work, and provide justification for the exclusion of this work from the current application.

N/A

VI. Proposed Impacts to Waters of the United States/Waters of the State

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to wetlands, open water, and stream channels associated with the project. The applicant must also provide justification for these impacts in Section VII below. All proposed impacts, permanent and temporary, must be listed herein, and must be clearly identifiable on an accompanying site plan. All wetlands and waters, and all streams (intermittent and perennial) must be shown on a delineation map, whether or not impacts are proposed to these systems. Wetland and stream

evaluation and delineation forms should be included as appropriate. Photographs may be included at the applicant's discretion. If this proposed impact is strictly for wetland or stream mitigation, list and describe the impact in Section VIII below. If additional space is needed for listing or description, please attach a separate sheet.

1. Provide a written description of the proposed impacts:
Two unnamed tributaries to Catawba River will be impacted

2. Individually list wetland impacts below:

Wetland Impact Site Number (indicate on map)	Type of Impact*	Area of Impact (acres)	Located within 100-year Floodplain** (yes/no)	Distance to Nearest Stream (linear feet)	Type of Wetland***
No Wetlands					

* List each impact separately and identify temporary impacts. Impacts include, but are not limited to: mechanized clearing, grading, fill, excavation, flooding, ditching/drainage, etc. For dams, separately list impacts due to both structure and flooding.

** 100-Year floodplains are identified through the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM), or FEMA-approved local floodplain maps. Maps are available through the FEMA Map Service Center at 1-800-358-9616, or online at http://www.fema.gov.

*** List a wetland type that best describes wetland to be impacted (e.g., freshwater/saltwater marsh, forested wetland, beaver pond, Carolina Bay, bog, etc.) Indicate if wetland is isolated (determination of isolation to be made by USACE only).

List the total acreage (estimated) of all existing wetlands on the property: None
Total area of wetland impact proposed:

3. Individually list all intermittent and perennial stream impacts below:

Stream Impact Site Number (indicate on map)	Type of Impact*	Length of Impact (linear feet)	Stream Name**	Average Width of Stream Before Impact	Perennial or Intermittent? (please specify)
UT West	Reinforced Concrete Pipe	81'	UT to Catawba	2'	Perennial
UT East	Reinforced Concrete Pipe	44'	UT to Catawba	4'	Perennial

* List each impact separately and identify temporary impacts. Impacts include, but are not limited to: culverts and associated rip-rap, dams (separately list impacts due to both structure and flooding), relocation (include linear feet before and after, and net loss/gain), stabilization activities (cement wall, rip-rap, crib wall, gabions, etc.), excavation, ditching/straightening, etc. If stream relocation is proposed, plans and profiles showing the linear footprint for both the original and relocated streams must be included.

** Stream names can be found on USGS topographic maps. If a stream has no name, list as UT (unnamed tributary) to the nearest downstream named stream into which it flows. USGS maps are available through the USGS at 1-800-358-9616, or online at www.usgs.gov. Several internet sites also allow direct download and printing of USGS maps (e.g., www.topozone.com, www.mapquest.com, etc.).

Cumulative impacts (linear distance in feet) to all streams on site: 125

4. Individually list all open water impacts (including lakes, ponds, estuaries, sounds, Atlantic Ocean and any other water of the U.S.) below:

Open Water Impact Site Number (indicate on map)	Type of Impact*	Area of Impact (acres)	Name of Waterbody (if applicable)	Type of Waterbody (lake, pond, estuary, sound, bay, ocean, etc.)
N/A				

* List each impact separately and identify temporary impacts. Impacts include, but are not limited to: fill, excavation, dredging, flooding, drainage, bulkheads, etc.

5. Pond Creation

If construction of a pond is proposed, associated wetland and stream impacts should be included above in the wetland and stream impact sections. Also, the proposed pond should be described here and illustrated on any maps included with this application.

Pond to be created in (check all that apply): ☐ uplands ☐ stream ☐ wetlands

Describe the method of construction (e.g., dam/embankment, excavation, installation of draw-down valve or spillway, etc.):_____

Proposed use or purpose of pond (e.g., livestock watering, irrigation, aesthetic, trout pond, local stormwater requirement, etc.):_____

Size of watershed draining to pond:_____ Expected pond surface area:_____

VII. Impact Justification (Avoidance and Minimization)

Specifically describe measures taken to avoid the proposed impacts. It may be useful to provide information related to site constraints such as topography, building ordinances, accessibility, and financial viability of the project. The applicant may attach drawings of alternative, lower-impact site layouts, and explain why these design options were not feasible. Also discuss how impacts were minimized once the desired site plan was developed. If applicable, discuss construction techniques to be followed during construction to reduce impacts.

The selected design was chosen as it completely spans the Catawba River and removes the fill area from the old structure from the river. The western unnamed tributary impact is

necessary to provide adequate access to the WRC public fishing/ access area. The eastern unnamed tributary impact is necessary to replace an obsolete, perched culvert.

VIII. Mitigation

DWQ - In accordance with 15A NCAC 2H .0500, mitigation may be required by the NC Division of Water Quality for projects involving greater than or equal to one acre of impacts to freshwater wetlands or greater than or equal to 150 linear feet of total impacts to perennial streams.

USACE – In accordance with the Final Notice of Issuance and Modification of Nationwide Permits, published in the Federal Register on March 9, 2000, mitigation will be required when necessary to ensure that adverse effects to the aquatic environment are minimal. Factors including size and type of proposed impact and function and relative value of the impacted aquatic resource will be considered in determining acceptability of appropriate and practicable mitigation as proposed. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland and/or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferable in the same watershed.

If mitigation is required for this project, a copy of the mitigation plan must be attached in order for USACE or DWQ to consider the application complete for processing. Any application lacking a required mitigation plan or NCWRP concurrence shall be placed on hold as incomplete. An applicant may also choose to review the current guidelines for stream restoration in DWQ's Draft Technical Guide for Stream Work in North Carolina, available at http://h2o.enr.state.nc.us/ncwetlands/strmgide.html.

1. Provide a brief description of the proposed mitigation plan. The description should provide as much information as possible, including, but not limited to: site location (attach directions and/or map, if offsite), affected stream and river basin, type and amount (acreage/linear feet) of mitigation proposed (restoration, enhancement, creation, or preservation), a plan view, preservation mechanism (e.g., deed restrictions, conservation easement, etc.), and a description of the current site conditions and proposed method of construction. Please attach a separate sheet if more space is needed.
   No Mitigation Required

2. Mitigation may also be made by payment into the North Carolina Wetlands Restoration Program (NCWRP). Please note it is the applicant's responsibility to contact the NCWRP at

(919) 733-5208 to determine availability and to request written approval of mitigation prior to submittal of a PCN. For additional information regarding the application process for the NCWRP, check the NCWRP website at http://h2o.enr.state.nc.us/wrp/index.htm. If use of the NCWRP is proposed, please check the appropriate box on page three and provide the following information:

Amount of stream mitigation requested (linear feet):_____
Amount of buffer mitigation requested (square feet):_____
Amount of Riparian wetland mitigation requested (acres):_____
Amount of Non-riparian wetland mitigation requested (acres):_____
Amount of Coastal wetland mitigation requested (acres):_____

IX. Environmental Documentation (required by DWQ)

Does the project involve an expenditure of public (federal/state) funds or the use of public (federal/state) land?

Yes ☒ No ☐

If yes, does the project require preparation of an environmental document pursuant to the requirements of the National or North Carolina Environmental Policy Act (NEPA/SEPA)? Note: If you are not sure whether a NEPA/SEPA document is required, call the SEPA coordinator at (919) 733-5083 to review current thresholds for environmental documentation.

Yes ☒ No ☐

If yes, has the document review been finalized by the State Clearinghouse? If so, please attach a copy of the NEPA or SEPA final approval letter.

Yes ☒ No ☐

X. Proposed Impacts on Riparian and Watershed Buffers (required by DWQ)

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to required state and local buffers associated with the project. The applicant must also provide justification for these impacts in Section VII above. All proposed impacts must be listed herein, and must be clearly identifiable on the accompanying site plan. All buffers must be shown on a map, whether or not impacts are proposed to the buffers. Correspondence from the DWQ Regional Office may be included as appropriate. Photographs may also be included at the applicant's discretion.

Will the project impact protected riparian buffers identified within 15A NCAC 2B .0233 (Neuse), 15A NCAC 2B .0259 (Tar-Pamlico), 15A NCAC 2B .0250 (Randleman Rules and Water Supply Buffer Requirements), or other (please identify_____)?

Yes ☐ No ☒ If you answered "yes", provide the following information:

Identify the square feet and acreage of impact to each zone of the riparian buffers. If buffer mitigation is required calculate the required amount of mitigation by applying the buffer multipliers.

Zone*	Impact (square feet)	Multiplier	Required Mitigation
1		3	
2		1.5	
Total			

* Zone 1 extends out 30 feet perpendicular from near bank of channel; Zone 2 extends an additional 20 feet from the edge of Zone 1.

If buffer mitigation is required, please discuss what type of mitigation is proposed (i.e., Donation of Property, Conservation Easement, Riparian Buffer Restoration / Enhancement, Preservation or Payment into the Riparian Buffer Restoration Fund). Please attach all appropriate information as identified within 15A NCAC 2B .0242 or .0260.

XI. Stormwater (required by DWQ)

Describe impervious acreage (both existing and proposed) versus total acreage on the site. Discuss stormwater controls proposed in order to protect surface waters and wetlands downstream from the property.

N/A

XII. Sewage Disposal (required by DWQ)

Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility.

N/A

XIII. Violations (required by DWQ)

Is this site in violation of DWQ Wetland Rules (15A NCAC 2H .0500) or any Buffer Rules?

Yes ☐ No ☒

Is this an after-the-fact permit application?

Yes ☐ No ☒

XIV. Other Circumstances (Optional):

It is the applicant's responsibility to submit the application sufficiently in advance of desired construction dates to allow processing time for these permits. However, an applicant may choose to list constraints associated with construction or sequencing that may impose limits on work schedules (e.g., draw-down schedules for lakes, dates associated with Endangered and Threatened Species, accessibility problems, or other issues outside of the applicant's control).

_____

_____

_____

_____ 3/22/05

Applicant/Agent's Signature **Date**

(Agent's signature is valid only if an authorization letter from the applicant is provided.)