



**STATE OF NORTH CAROLINA**  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

December 5, 2003

U.S. Army Corps of Engineers  
Regulatory Field Office  
6508 Falls of the Neuse Road  
Suite 120  
Raleigh, NC 27615

ATTN: Mr. John Thomas  
NCDOT Coordinator

Subject: **Nationwide 33 application.** Avery County, replacement of Bridge No. 40 over Roaring Creek on SR 1132, Federal Aid Project No. MABRZ-1132(4), State Project No. 8.2721101, TIP Project No. B-3303.

The U.S. Army Corps of Engineers (USACE) issued Nationwide Permits 23 and 33 for the above-mentioned project on January 24, 2002 (Action ID 200220449 and 200220450). The tear sheet for these permits is enclosed. These permits expired on February 11, 2002. The purpose of this application is to request a Nationwide Permit 33 for the removal of the temporary detour causeway in surface waters.

A temporary pipe arches causeway was required north of the existing bridge alignment to accommodate local commuters during bridge construction. The causeway consists of two 66 inch corrugated steel pipe arches and Class B rip rap. The construction of the causeway resulted in 0.07 acres (95 feet) of temporary fill of surface waters.

Restoration Plan: All material used in the construction of the temporary detour will be removed. The stream will then be restored to its pre-project contours.

Schedule: All steps will be taken to minimize impacts to Roaring Creek. The Contractor will be required to remove the temporary causeway as soon as is practical, minimizing the time of the temporary impacts to Roaring Creek. All exposed areas will be stabilized to prevent erosion.

Removal and Disposal Plan: The Contractor will be required to submit a reclamation plan for the removal of and disposal of all materials off-site at an upland location. The Contractor will use excavating equipment to remove any materials from the stream. Heavy-duty trucks, dozers, cranes and various other pieces of mechanical equipment necessary for construction of roadways and culverts will be used on site. All material placed in the stream will be removed at that time. The Contractor will have the option of reusing any of the materials that the Engineer deems suitable in the construction of the project. After the temporary causeway is no longer needed, all materials will become the property of the Contractor. It will take approximately two weeks to remove the temporary causeway.

### ENVIRONMENTAL COMMITMENTS

The North Carolina Wildlife Resources Commission requires the following to be implemented to minimize impacts to aquatic resources for a Trout County:

- Instream work and land disturbance within the 25-foot wide buffer zone are prohibited during the trout spawning season of January 1 through April 15 to protect the egg and fry stages of trout from off-site sedimentation during construction.
- Disturbance of the stream channel must be limited to only what is necessary to install the bridge. Bridge replacements should maintain above and below stream conditions at pre-construction widths and depths for bedload self-scouring and aquatic life migration.
- Use of rip rap to armor the inlet and outlet ends of the bridge should be kept to a minimum. Natural bank sloping and native plant revegetation should be used to stabilize disturbed banks where practical.
- Where concrete is used, work must be accomplished so that wet concrete does not contact stream water.
- Sediment and erosion control measures should be installed where soil is disturbed and maintained until project completion. Where possible, heavy equipment will be operated from the bank rather than in the stream channel to minimize sedimentation and reduce the likelihood of introducing other pollutants into the stream.
- Temporary or permanent herbaceous vegetation should be planted on all bare soil within 15 days of completion of ground disturbing activities to provide long-term erosion control.
- The temporary detour road should be removed back to original ground elevations immediately upon the completion of the project. 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' x 10'. If possible, when using temporary structures, the area should be cleared, not grubbed.
- The culverts for the temporary detour should be placed to allow aquatic life passage during bridge removal and construction. The culverts and associated rip rap should be removed upon completion of the bridge for that particular site or at the end of the moratorium period. If stream alternation occurs as a result of the culvert, the stream should be returned to pre-construction conditions.

### **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 33 as authorized by Nationwide Permit 33 (FR number 10, pages 2020-2095; January 15, 2002).

Section 401 Permit: We anticipate 401 General Certification numbers 3366 will apply to this project. In accordance with 15A NCAC 2H .0501(a) we are providing two copies of this application to the North Carolina Department of Environment and Natural Resources, Division of Water Quality, for their records.

If you have any questions or need additional information, please contact Matt Haney at (919) 715-1428.

Sincerely,

A handwritten signature in black ink, appearing to read 'Gregory J. Thorpe', with a stylized flourish at the end.

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

w/attachment

Mr. John Dorney, Division of Water Quality (2 copies)  
Ms. Marla Chambers, NCWRC  
Ms. Marella Buncick, USFWS  
Mr. Harold Draper, TVA  
Mr. Greg Perfetti, P.E., Structure Design  
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. Carl McCann, P.E., Division 11 Engineer  
Mr. Heath Slaughter, Division 11 Environmental Officer

**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:

- |                                                          |                                                             |
|----------------------------------------------------------|-------------------------------------------------------------|
| <input checked="" type="checkbox"/> Section 404 Permit   | <input type="checkbox"/> Riparian or Watershed Buffer Rules |
| <input type="checkbox"/> Section 10 Permit               | <input type="checkbox"/> Isolated Wetland Permit from DWQ   |
| <input type="checkbox"/> 401 Water Quality Certification |                                                             |

2. Nationwide, Regional or General Permit Number(s) Requested: NWP 33

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: NC Department of Transportation

Mailing Address: 1548 Mail Service Center  
Raleigh, NC 27699-1548

Telephone Number: 919-733-3141 Fax Number: 919-715-1501

E-mail Address: \_\_\_\_\_

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: N/A

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: Replacement of Bridge No. 40 over Roaring Creek on SR 1132
2. T.I.P. Project Number or State Project Number (NCDOT Only): B-3303
3. Property Identification Number (Tax PIN): N/A
4. Location  
County: Avery Nearest Town: Valley  
Subdivision name (include phase/lot number): N/A  
Directions to site (include road numbers, landmarks, etc.): Bridge No. 40 over Roaring Creek on SR 1132
5. Site coordinates, if available (UTM or Lat/Long): 36.07°N Lat 82.03°W Long (approx.)  
(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): N/A
7. Nearest body of water (stream/river/sound/ocean/lake): Roaring Creek
8. River Basin: French Broad  
(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: residential and undeveloped

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10. Describe the overall project in detail, including the type of equipment to be used: The proposed project will consist of replacing the existing bridge with a new bridge at the existing location. Traffic will be maintained with a temporary onsite detour to the north during construction. Construction equipment will consist of heavy duty trucks, earth moving equipment, and cranes, etc.

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11. Explain the purpose of the proposed work: Replace substandard bridge over Roaring Creek resulting in safer and more efficient traffic operations.

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**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.

Nationwide Permits 23 & 33 were issued for this project on January 24, 2002 (Action ID 200220449 & 200220450).

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**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.

No

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**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: There will be temporary stream impacts to approximately 0.07 acres (95 feet) of jurisdictional stream.

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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***
N/A					

\* 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: \_\_\_\_\_  
 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)
Detour	Temporary fill	95	Roaring Creek	20 ft	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](http://www.usgs.gov). Several internet sites also allow direct download and printing of USGS maps (e.g., [www.topozone.com](http://www.topozone.com), [www.mapquest.com](http://www.mapquest.com), etc.).

Cumulative impacts (linear distance in feet) to all streams on site: 95

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.)
Detour	Temporary fill	0.07	Roaring Creek	stream

\* 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.): N/A

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

Size of watershed draining to pond: N/A Expected pond surface area: N/A

**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 existing structure will be replaced with a 95 ft long bridge in the existing location.  
Traffic will be maintained with a temporary onsite detour to the north during construction.

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## 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.

N/A

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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): N/A  
 Amount of buffer mitigation requested (square feet): N/A  
 Amount of Riparian wetland mitigation requested (acres): N/A  
 Amount of Non-riparian wetland mitigation requested (acres): N/A  
 Amount of Coastal wetland mitigation requested (acres): N/A

**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	Multiplier	Required
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	(square feet)		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.

No mitigation required.

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**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

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**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

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**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).

N/A

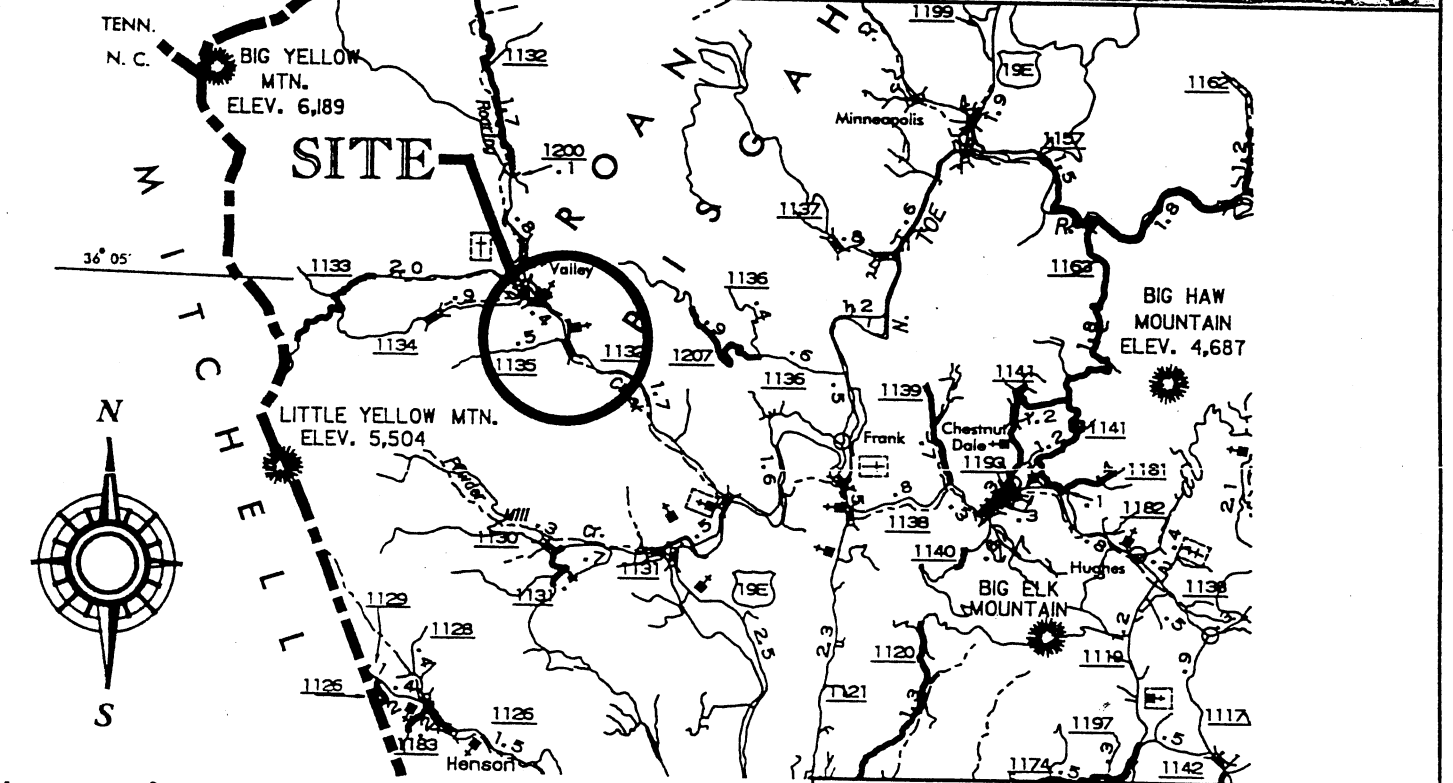
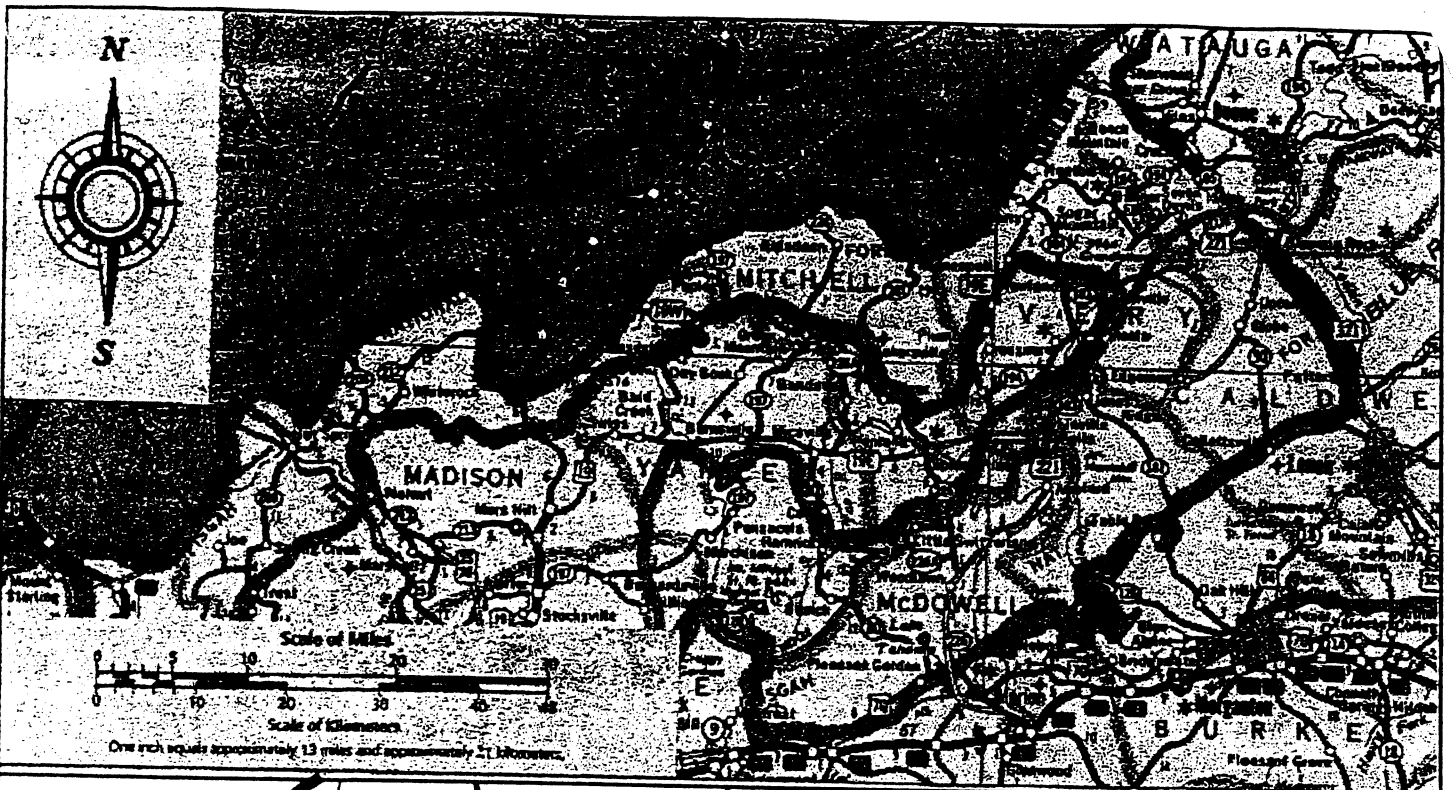
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*[Handwritten Signature]*

*[Handwritten Date: 12/4/03]*

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**Applicant/Agent's Signature** **Date**  
(Agent's signature is valid only if an authorization letter from the applicant is provided.)



# VICINITY MAP

N. C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS

     AVERY COUNTY


PROJECT: 8.2721101 (B-3303)  
REPLACEMENT OF BRIDGE NO. 40  
OVER ROARING CREEK ON SR 1132  
BETWEEN US 19 AND SR 1134

SHEET 1 OF 8                      JULY 2001

2001 DOCUMENTATION BOARD, WASHINGTON, D.C.

# LEGEND


 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

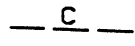
 DENOTES TEMPORARY FILL IN SURFACE WATER

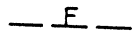
 DENOTES MECHANIZED CLEARING


 FLOW DIRECTION

 TOP OF BANK

 EDGE OF WATER

 PROP. LIMIT OF CUT

 PROP. LIMIT OF FILL

 PROP. RIGHT OF WAY

 NATURAL GROUND

 PROPERTY LINE


 TEMP. DRAINAGE EASEMENT


 PERMANENT DRAINAGE EASEMENT


 EXIST. ENDANGERED ANIMAL BOUNDARY

 EXIST. ENDANGERED PLANT BOUNDARY

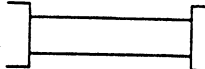
 WATER SURFACE

 LIVE STAKES

 BOULDER

 COIR FIBER ROLLS


 ADJACENT PROPERTY OWNER OR PARCEL NUMBER

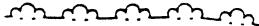
 PROPOSED BRIDGE

 PROPOSED BOX CULVERT

 PROPOSED PIPE CULVERT

(DASHED LINES DENOTE EXISTING STRUCTURES)

 SINGLE TREE

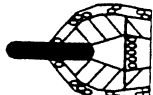
 WOODS LINE

 DRAINAGE INLET

 ROOTWAD

 VANE

 RIP RAP

 RIP RAP ENERGY DISSIPATOR BASIN

 BUFFER ZONE

N. C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS

    AVERY     COUNTY

PROJECT: 8.2721101 (B-3305)  
REPLACEMENT OF BRIDGE NO. 40  
OVER ROARING CREEK ON SR 1132  
BETWEEN US 19 AND SR 1134

SHEET 2 OF 8                      JULY 2001



$PI = 10+48.000$   
 $EL = 975.797 \text{ m}$   
 $VC = 60 \text{ m}$

BEG GRADE STA 10+02.780  
 EL 976.248

END GRADE STA 11+47.604  
 EL 971.64

PROPOSED DETOUR  
 PAVEMENT STRUCTURE

-0.9973%

-4.6514%

WASHED  
 CLASS 'B'  
 RIP RAP

2 @ 3.5m X 2.2m  
 TEMPORARY CSP ARCH

977  
 976  
 975  
 974  
 973  
 972  
 971

10      +20      +40      +60      +80      11

## PROFILE VIEW TEMPORARY DETOUR

NOTE: APPROXIMATELY 2,500 TONS CLASS 'B' RIP RAP

SCALE  
 VERTICAL 1:100  
 HORIZONTAL 1:500

NOTE: MINIMIZE STREAM BED EXCAVATION  
 REQUIRED FOR TEMPORARY PIPE PLACEMENT.  
 MATERIAL EXCAVATED WILL BE STOCKPILED  
 AND REPLACED TO ORIGINAL LIMITS AND  
 ELEVATION WHEN TEMPORARY DETOUR IS  
 REMOVED.

N. C. DEPT. OF TRANSPORTATION  
 DIVISION OF HIGHWAYS

AVERY COUNTY

PROJECT: 8.2721101 (B3303)

REPLACEMENT OF BRIDGE NO. 40  
 OVER ROARING CREEK ON SR 1132  
 BETWEEN US 19 AND SR 1134

SHEET 7 OF 8      JULY

ALUMINUM



