



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

June 1, 2007

MEMORANDUM TO: Mr. Tim Johnson, PE
Division Eight Engineer

FROM: Philip S. Harris, III, P.E., Unit Head
Natural Environment Unit
Project Development and Environmental Analysis Branch

SUBJECT: Randolph County, US 64/NC 49 and NC 42; T.I.P. Number
U-3401; Federal Aid Project No. NHF-64 (58); State
Project No. 8.1572101

Per E. F. Luck

Attached is the U. S. Army Corps of Engineers 404 Nationwide Permit Numbers 23 & 33 and the general conditions for the 401 Water Quality Certification for the above referenced project. All environmental permits have been received for the construction of this project.

PSH/gyb

Attachment

Cc:

Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Jay Bennett, P.E., Roadway Design
Dr. David Chang, P.E., Hydraulics
Mr. Randy Garris, P.E. State Contract Officer
Mr. Art McMillan, P.E., Highway Design
Mr. Greg Perfetti, P.E., Structure Design
Mr. Mark Staley, Roadside Environmental
Mr. John F. Sullivan, FHWA
Mr. Eric Midkiff, P.E., PDEA Central Region Unit Head
Mr. Art C. King, Division Environmental Officer

PROJECT COMMITMENTS

Randolph County
US 64/NC 49 and NC 42
Federal-aid Project No. NHF-64 (58)
State Project No. 8.1572101
T.I.P. No. U-3401

In addition to Nationwide Permit 23 & 33 Conditions, the General Nationwide Permit Conditions, Section 404 Only Conditions, Regional Conditions, State Consistency Conditions, NCDOT's Best Management Practices for Protection of Surface Waters, General Certification Conditions, and Section 401 Conditions of Certification, the following special commitments have been agreed to by NCDOT:

COMMITMENTS DEVELOPED THROUGH PROJECT DEVELOPMENT AND DESIGN

Highway Division 8/ NCDOT Right of Way Branch/ NCDOT Geotechnical Unit

Any unregulated Underground Storage Tanks (UST's) will be removed along with any contaminated soil prior to letting by the Right of Way Branch during initial contacts. The NCDOT Geotechnical Unit will be notified of their presence prior to acquisition in order to determine if the tanks have leaked.

NEU/Highway Division 8/NCDOT Geotechnical Unit

Groundwater resources will be evaluated in the final design stage in order to ensure that measures are taken, if necessary, to avoid groundwater contamination.

NCDOT Utilities Branch/Highway Division 8/NCDOT Right of Way Branch

NCDOT Utilities Branch will coordinate with Highway Division 8, and the NCDOT Right of Way Branch concerning relocation of permanent lighting currently within existing ROW and belonging to the Wayne Thomas Chevrolet dealership.

PDEA/Highway Division 8

The NC Geodetic Survey will be contacted prior to construction, due to the presence of five Geodetic Markers within the vicinity of the project.

NEU

Complete surveys for both Schweinitz's sunflowers and the Cape Fear shiner will be conducted prior to beginning construction activities.

Action Taken:

A survey for the Cape Fear shiner was most recently conducted on December 5, 2004 and a biological conclusion of No Effect was found. USFWS concurrence was received February 1, 2005.

Surveys for Schweinitz's sunflower was most recently conducted on September 6 and 27, 2006. A biological conclusion of May Affect, Likely to Adversely Affect was given due to the presence of Schweinitz's sunflower within the right-of-way. A formal consultation with USFWS has been concluded.

COMMITMENTS DEVELOPED THROUGH PERMITTING

Highway Division 8

Construction phasing shall be in accordance with the attached construction sequence plan dated August 2, 2005 unless changes are approved by the respective resource agency representative.

To allow for the relocation of Schweinitz's sunflowers, the proposed ditch adjacent to Skyline Drive will be constructed no sooner than September 2007

NEU

The Biological Surveys Unit will place highly visible fencing 2-feet outside the boundary of Schweinitz's sunflowers at their current location adjacent to Skyline Drive prior to the project let.

The Biological Surveys Unit will relocate Schweinitz's sunflowers that would be affected by the proposed ditches located adjacent to Skyline Drive by September 2007. Following the relocation of the plants, the fencing will be removed. However, fencing will remain around the boundary of plants that are not relocated until project completion to prevent them from being damaged/destroyed by construction equipment.

**U.S. ARMY CORPS OF ENGINEERS
WILMINGTON DISTRICT**

Action ID: 200101259 TIP No: U-3401 State Project No: 8.1572101 County: Randolph

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

Applicant: North Carolina Department of Transportation

Address: Gregory J. Thorpe, Ph.D.
Environmental Management Director
Project Development and Environmental Analysis
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Telephone Number: (910) 733-7844, extension 307

Size and Location of project (waterway, road name/number, town, etc.): 17 linear feet of 7-foot by 7-foot reinforced concrete box culvert and 20 linear feet of Class I rip-rap in an unnamed tributary to Vestal Creek at centerline station 30+25-Y-RT on NC 42 in Randolph County, North Carolina.

Description of Activity: To replace the existing 5-foot by 5-foot box culvert, 72-inch CMP and 60-inch RCP with a 7-foot by 7-foot reinforced concrete box culvert and extend the culvert 17 additional feet. Approximately 20 linear feet of class I rip-rap is to be placed at the downstream end of the culvert for scour protection. Temporary diversion will be accomplished by the use of a 24-inch pipe placed inside the existing structure and phased construction. Two interior impervious dikes will be used as pipe supports and as sediment reduction baffles. Construction phasing shall be in accordance with the attached construction sequence plan dated 2 August 2005.

Applicable Law: X Section 404 (Clean Water Act, 33 U.S.C. 1344)
 Section 10 (River and Harbor Act of 1899)

Authorization: 23&33 Nationwide Permit Number
 Regional General Permit Number

Your work is authorized by this Regional General (RGP) or Nationwide (NWP) Permit provided it is accomplished in strict accordance with the attached conditions and your submitted plans. If your activity is subject to Section 404 (if Section 404 block above is checked), before beginning work you must also receive a Section 401 water quality certification from the N.C. Division of Environmental Management, telephone (919) 733-1786

Please read and carefully comply with the attached conditions of the RGP or NWP. Any violation of the conditions of the RGP or NWP referenced above may subject the permittee to a stop work order, a restoration order, and/or appropriate legal action.

This Department of the Army RGP or NWP verification does not relieve the permittee of the responsibility to obtain any other required Federal, State, or local approvals/permits. The permittee may need to contact appropriate State and local agencies before beginning work.

This verification will remain valid until 23 May 2009 unless the nationwide authorization is modified, reissued or revoked. If, prior to 23 May 2009 the nationwide permit authorization is reissued and/or modified, this verification will remain valid until 23 May 2009, 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

GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION

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.

If there are any questions regarding this authorization or any of the conditions of the RGP or NWP, please contact the Corps Regulatory Official specified below.

Date 23 May 2007

Corps Regulatory Official  Richard K. Spencer Telephone No. (910) 251-4172

CF: Art King, NCDOT Div 8
John Hennessy, NCDWQ

GENERAL PERMIT SPECIAL CONDITIONS

1. Measures will be taken to prevent live or fresh concrete, including bags of uncured concrete, from coming into contact with waters of the state until the concrete has hardened.
2. The following measures shall be applied when riprap material is used for bank stabilization:
 - a. Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters.
 - b. The placement of riprap shall be limited to the areas depicted on submitted workplan drawings.
 - c. The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities that would not have an adverse environmental effect.
 - d. It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.
 - e. The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.
 - f. A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional condition would result in greater adverse impacts to the aquatic environment.
3. Measures will be included in the construction/installation of the culvert that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below the culvert shall not be modified by widening the stream channel or by reducing the depth of the stream in connection with the construction activity. The width, height, and gradient of the opening shall be such as to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow should be determined from gage data, if available. In the absence of such data, bankfull flow can be used as a comparable level.

The culvert will be buried at least one foot below the bed of the stream to maintain aquatic passage, and every effort shall be made to maintain the existing channel slope. The bottom of the culvert must be placed at a depth below the natural stream bottom to provide for passage during drought or low flow conditions. Destabilizing the channel and head cutting upstream should be considered in the placement of the culvert.

A waiver from the depth specifications in this condition may be requested in writing. The waiver will be issued if it can be demonstrated that the proposal would result in the least impacts to the aquatic environment.

4. Sediment and erosion control measures shall be in place prior to any demolition or land clearing activities.
5. Temporary discharge of excavated or fill material into wetlands and waters of the United States will be for the absolute minimum period of time necessary to accomplish the work. Temporary discharges will be fully contained with appropriate erosion control or containment methods or otherwise such fills will consist of non-erodible materials.
6. Staging areas or the stockpiling of construction material shall not be located in any wetlands.
7. All construction spoil material shall be disposed of on an upland area and shall not be placed in any waterway or wetland.

WQC #3632

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER 23 (APPROVED CATEGORICAL EXCLUSIONS) AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)

This General Certification is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality Regulations in 15A NCAC 2H, Section .0500 and 15A NCAC 2B .0200 for the discharge of fill material to waters and wetland areas as described in 33 CFR 330 Appendix A (B) (23) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200. This Certification replaces Water Quality Certification Number 2670 issued on January 21, 1992, Certification Number 2734 issued on May 1 1993, Certification Number 3107 issued on February 11, 1997 and Water Quality Certification Number 3361 issued March 18, 2002 and WQC Number 3403 issued March 28, 2003. This WQC is rescinded when the Corps of Engineers re-authorizes Nationwide Permit 23 or when deemed appropriate by the Director of the DWQ.

The State of North Carolina certifies that the specified category of activity will not violate applicable portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

Conditions of Certification:

1. Proposed fill or substantial modification of wetlands or waters (including streams) under this General Certification requires notification to the Division of Water Quality. Two copies shall be submitted to DWQ at the time of notification in accordance with 15A NCAC 2H .0501(a). Written concurrence from DWQ is not required unless any standard conditions of this Certification cannot be met;
2. Appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" whichever is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard;
3. In accordance with 15A NCAC 2H .0506 (h) compensatory mitigation may be required for impacts to 150 linear feet or more of streams and/or one acre or more of wetlands. In addition, buffer mitigation may be required for any project with Buffer Rules in effect at the time of application for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A determination of buffer, wetland and stream mitigation requirements shall be made for any Certification for this Nationwide Permit. The most current design and monitoring protocols from DWQ shall be followed and written plans submitted for DWQ approval as required in those protocols. When compensatory mitigation is required for a project, the mitigation plans must be approved by DWQ in writing before the impacts approved by the Certification occur. The mitigation plan must be implemented and/or constructed before any permanent building or structure on

WQC #3632

site is occupied. In the case of public road projects, the mitigation plan must be implemented before the road is opened to the travelling public;

4. Compensatory stream mitigation shall be required at a 1:1 ratio for not only perennial but also intermittent stream impacts equal to or exceeding 150 feet and that require application to DWQ in watersheds classified as ORW, HQW, Tr, WS-I and WS-II unless the project is a linear, publicly-funded transportation project, which has a 150-foot per-stream impact allowance;
5. All sediment and erosion control measures placed in wetlands or waters shall be removed and the original grade restored within two months after the Division of Land Resources has released the project;
6. Measures shall be taken to prevent live or fresh concrete from coming into contact with freshwaters of the state until the concrete has hardened;
7. In accordance with North Carolina General Statute Section 143-215.3D(e), any request for written concurrence for a 401 Water Quality Certification must include the appropriate fee. If a project also requires a CAMA Permit, one payment to both agencies shall be submitted and will be the higher of the two fees;
8. Impacts to any stream length in the Neuse, Tar-Pamlico, Randleman and Catawba River Basins (or any other river basins with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) requires written concurrence from DWQ in accordance with 15A NCAC 2B.0200. Activities listed as "exempt" from these rules do not need to apply for written concurrence under this Certification. New development activities located in the protected 50-foot wide riparian areas (whether jurisdictional wetlands or not) within the Neuse, Tar-Pamlico, Randleman and Catawba River Basins shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B .0200. All new development shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of best management practices;
9. Additional site-specific conditions may be added to projects for which written concurrence is required or requested under this Certification in order to ensure compliance with all applicable water quality and effluent standards;
10. Concurrence from DWQ that this Certification applies to an individual project shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of the corresponding Nationwide and Regional General Permits, whichever is sooner;
11. When written concurrence is required, the applicant is required to use the most recent version of the Certification of Completion form to notify DWQ when all work included in the 401 Certification has been completed.

Non-compliance with or violation of the conditions herein set forth by a specific fill project shall result in revocation of this Certification for the project and may result in criminal and/or civil penalties.

WQC #3632

The Director of the North Carolina Division of Water Quality may require submission of a formal application for individual certification for any project in this category of activity that requires written concurrence under this certification, if it is determined that the project is likely to have a significant adverse effect upon water quality or degrade the waters so that existing uses of the wetland, stream or downstream waters are precluded.

Public hearings may be held for specific applications or group of applications prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Quality.

Effective date: 19 March 2007

DIVISION OF WATER QUALITY

By

A handwritten signature in black ink that reads "Alan Klimek". The signature is written in a cursive, flowing style.

Alan W. Klimek, P.E.

Director

WQC # 3632

WQC #3634

GENERAL CERTIFICATION FOR PROJECTS ELIGIBLE FOR CORPS OF ENGINEERS NATIONWIDE PERMIT NUMBER 33 (TEMPORARY CONSTRUCTION, ACCESS AND DEWATERING) AND RIPARIAN AREA PROTECTION RULES (BUFFER RULES)

This General Certification is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Quality Regulations in 15A NCAC 2H, Section .0500 and 15A NCAC 2B .0200 for the discharge of fill material to waters and wetland areas as described in 33 CFR 330 Appendix A (B) (33) of the Corps of Engineers regulations (i.e., Nationwide Permit No. 33) and for the Riparian Area Protection Rules (Buffer Rules) in 15A NCAC 2B .0200. The category of activities shall include any fill activity for temporary construction, access and de-watering. This Certification replaces Water Quality Certification Number 2727 issued on May 1, 1992 and Certification Number 3114 issued on February 11, 1997 and WQC Number 3366 issued March 18, 2002. This WQC is rescinded when the Corps of Engineers reauthorizes Nationwide Permit 33 or when deemed appropriate by the Director of the DWQ.

The State of North Carolina certifies that the specified category of activity will not violate appropriate portions of Sections 301, 302, 303, 306 and 307 of the Public Laws 92-500 and 95-217 if conducted in accordance with the conditions hereinafter set forth.

Conditions of Certification:

1. These activities do not require written concurrence from the Division of Water Quality as long as they comply with all conditions of this General Certification. If any condition in this Certification cannot be met, application to and written concurrence from DWQ are required. Also, Condition No. 2 is applicable to all streams in basins with riparian area protection rules;
2. Impacts to any stream length in the Neuse, Tar-Pamlico and Randleman River Basins (or any other major river basins with Riparian Area Protection Rules [Buffer Rules] in effect at the time of application) requires written concurrence from DWQ in accordance with 15A NCAC 2B.0200. Activities listed as "exempt" from these rules do not need to apply for written concurrence under this Certification. New development activities located in the protected 50-foot wide riparian areas (whether jurisdictional wetlands or not) within the Neuse, Tar-Pamlico, Randleman and Catawba River Basins shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B .0200. All new development shall be located, designed, constructed, and maintained to have minimal disturbance to protect water quality to the maximum extent practicable through the use of best management practices;
3. Appropriate sediment and erosion control practices which equal or exceed those outlined in the most recent version of the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" whichever is more appropriate (available from the Division of Land Resources (DLR) in the DENR Regional or Central Offices) shall be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to assure compliance with the appropriate turbidity water quality standard;

WQC #3634

4. All sediment and erosion control measures placed in wetlands or waters shall be removed and the natural grade restored within two months after the Division of Land Resources has released the project;
5. If an environmental document is required, this Certification is not valid until a Finding of No Significant Impact (FONSI) or Record of Decision (ROD) is issued by the State Clearinghouse;
6. Placement of culverts and other structures in waters, streams, and wetlands must be placed below the elevation of the streambed to allow low flow passage of water and aquatic life unless it can be shown to DWQ that providing passage would be impractical. Design and placement of culverts including open bottom or bottomless arch culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or stream beds or banks, adjacent to or upstream and down stream of the above structures. The applicant is required to provide evidence that the equilibrium shall be maintained if requested in writing by DWQ. Additionally, when roadways, causeways or other fill projects are constructed across FEMA-designated floodways or wetlands, openings such as culverts or bridges must be provided to maintain the natural hydrology of the system as well as prevent constriction of the floodway that may result in destabilization of streams or wetlands;
7. Measures shall be taken to prevent live or fresh concrete from coming into contact with waters of the state until the concrete has hardened;
8. All temporary fill shall be removed to the original grade after construction is complete and the site shall be stabilized to prevent erosion;
9. Pipes shall be installed under the road or causeway in all streams to carry at least the 25 year storm event as outlined in the most recent edition of the "North Carolina Sediment and Erosion Control Planning and Design Manual" or the "North Carolina Surface Mining Manual" so as not to restrict stream flow during use of this Certification;
10. In accordance with North Carolina General Statute Section 143-215.3D(e), any request for written concurrence for a 401 Water Quality Certification must include the appropriate fee. If a project also requires a CAMA Permit, one payment to both agencies shall be submitted and will be the higher of the two fees;
11. Additional site-specific conditions may be added to projects for which written concurrence is required or requested under this Certification in order to ensure compliance with all applicable water quality and effluent standards;
12. Concurrence from DWQ that this Certification applies to an individual project shall expire three years from the date of the cover letter from DWQ or on the same day as the expiration date of these corresponding Nationwide and Regional General Permits, whichever is sooner;

WQC #3634

13. When written concurrence is required, the applicant is required to use the most recent version of the Certification of Completion form to notify DWQ when all work included in the 401 Certification has been completed.

Non-compliance with or violation of the conditions herein set forth by a specific fill project shall result in revocation of this Certification for the project and may result in criminal and/or civil penalties.

The Director of the North Carolina Division of Water Quality may require submission of a formal application for individual certification for any project in this category of activity that requires written concurrence under this certification, if it is determined that the project is likely to have a significant adverse effect upon water quality or degrade the waters so that existing uses of the wetland, stream or downstream waters are precluded.

Public hearings may be held for specific applications or group of applications prior to a Certification decision if deemed in the public's best interest by the Director of the North Carolina Division of Water Quality.

Effective date: 19 March 2007

DIVISION OF WATER QUALITY

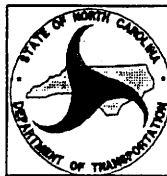
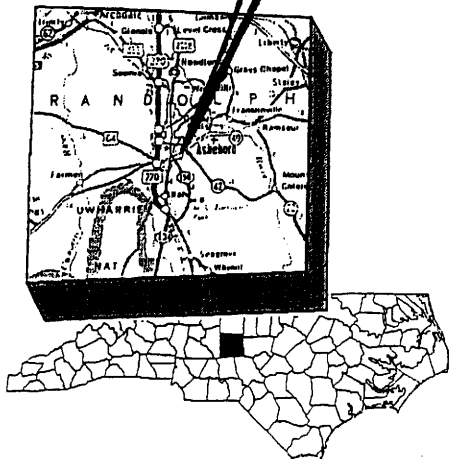
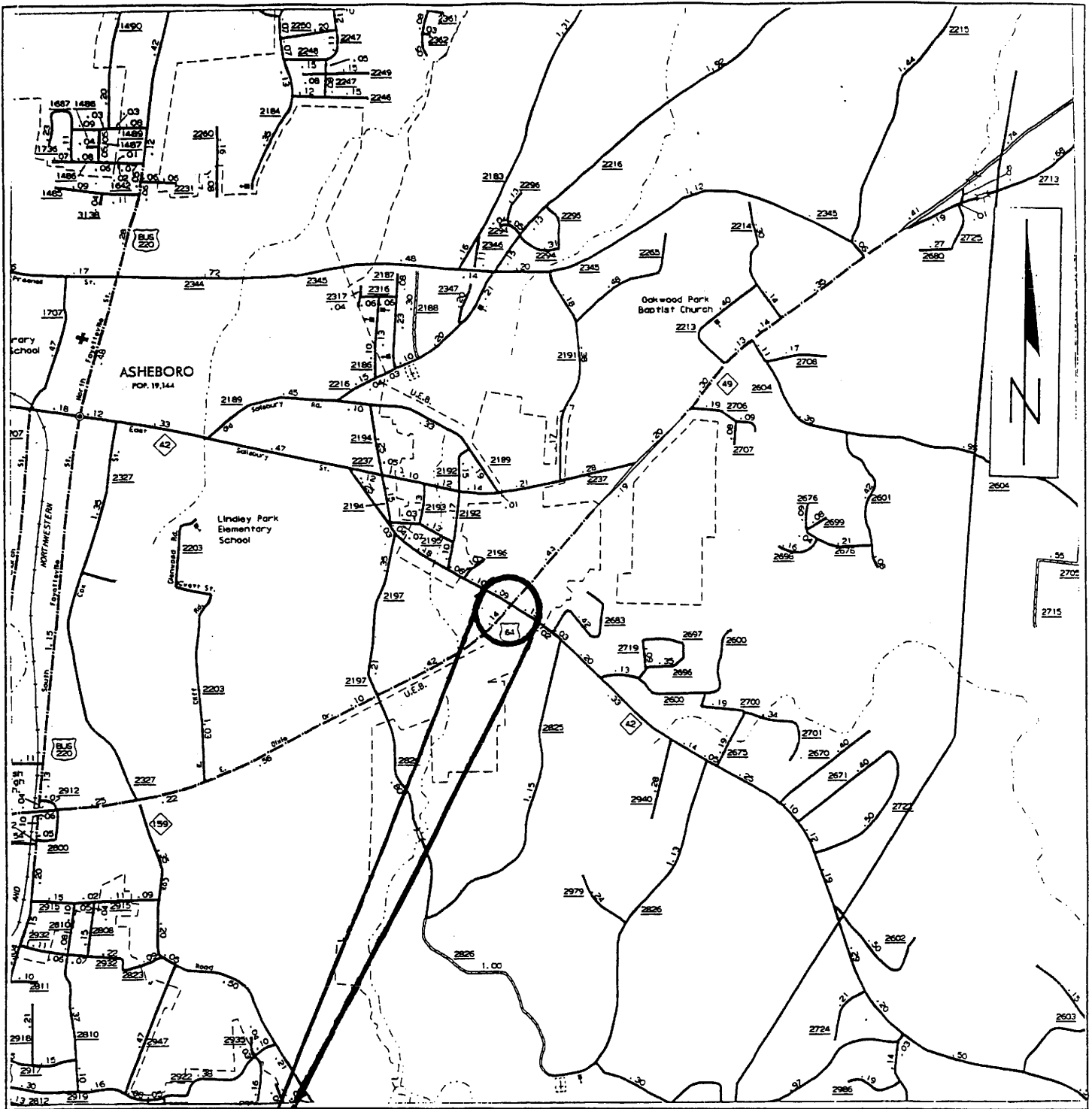
By



Alan W. Klimek, P.E.

Director

WQC # 3634



North Carolina
 Department of Transportation
 Division of Highways
 Project Development &
 Environmental Analysis Branch

Randolph County
 Asheboro Intersection of US 64
 NC 49 And NC 42
 U-3401

SCALE: not to scale

Figure 1 of 10

PROPERTY OWNER CONTACT LIST

Parcel #	Last Name	First Name	Address	City/Town	State	Zip Code
17	ALLEN	RUTH	231 INWOOD RD	ASHEBORO	NC	27205
NO PARCEL #	BRAY	RUTH	352 SHERWOOD OAKS #13	ASHEBORO	NC	27205
10	THOMAS	DANIEL	624 S FAYETTEVILLE ST	ASHEBORO	NC	27203

Project # 34935.1.1
Tip # U-3401
Randolph County

Intersection at US 64 and NC 49 and NC 42
in Asheboro

3/10/2005

Subject: U-3401 NW Condit. 3 waiver

Date: Fri, 01 Jun 2007 11:13:53 -0400

From: Elizabeth Lee Lusk <ellusk@dot.state.nc.us>

Organization: North Carolina Department of Transportation

To: Rachelle Beauregard <rbeauregard@dot.state.nc.us> ,
Erica McLamb <emclamb@dot.state.nc.us>

CC: Greg Thorpe <gthorpe@dot.state.nc.us> ,
"Brenda T. Perry" <btperry@dot.state.nc.us> , Phil Harris <pharris@dot.state.nc.us> ,
"Randy A. Garris, PE" <rgarris@dot.state.nc.us> ,
"Andy Gay, PE" <agay@dot.state.nc.us>

Rachelle & Erica,

I just spoke with Scott McLendon, USACE, regarding the conflict in the May 2007 NW permit issued by Richard Spencer.

The Description of Activity states "*Construction phasing shall be in accordance with the attached construction sequence plan dated 2 August 2005.*" However, Condition 3 contradicts this statement: "*The culvert will be buried at least 1 foot below the bed of the stream to maintain aquatic passage...*" This condition goes on to allow that "*A waiver from the depth specification in this condition may be requested in writing.*" NCDOT feels that our 2005 permit application and attached construction sequence, as well as prior conversations with Richard Spencer in 2005, provided the rationale and written request for waiver.

This morning, Scott confirmed that NCDOT has been waived from the 1 foot culvert burial requirement for U-3401 and we can proceed with construction under our current permit.

Thanks,
Elizabeth

Elizabeth Lee Lusk <ellusk@dot.state.nc.us> Environmental Supervisor Project Development & Environmental Analysis

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

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

ENGLISH N.C.		U-3401	Figure 3 of 10
STATE PROJ. NO.	F.I. PROJ. NO.	DESCRIPTION	
34935.1.1	NHF-65(58)	PE	

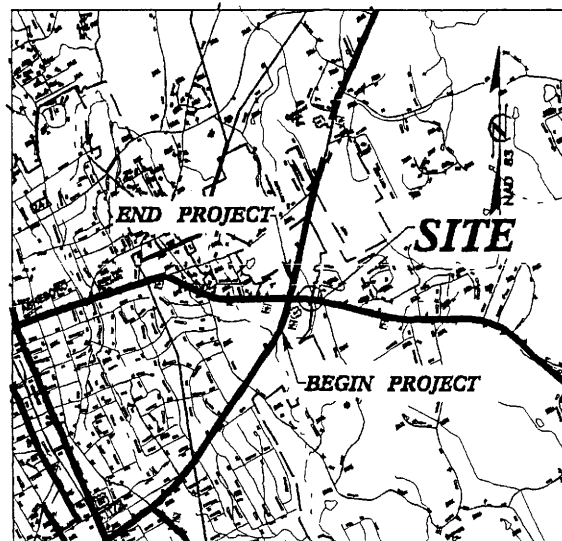
RANDOLPH COUNTY

LOCATION: INTERSECTION AT US 64/NC 49
AND NC 42 IN ASHEBORO

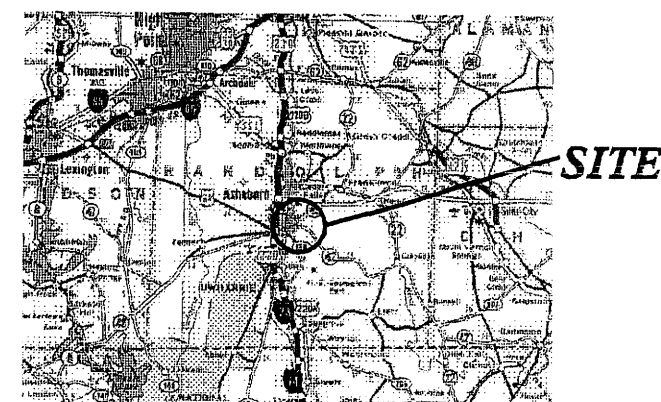
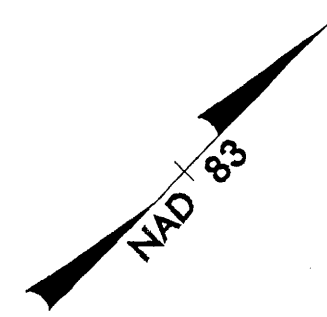
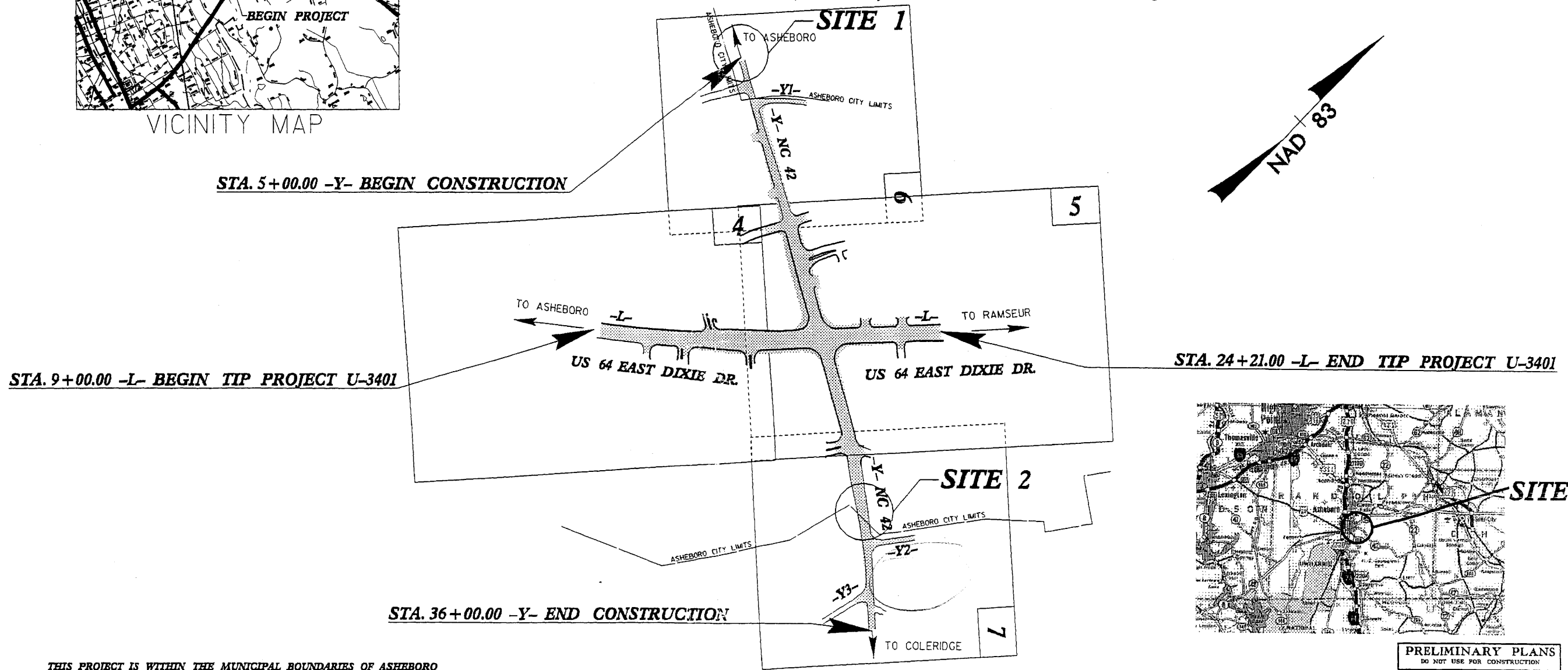
TYPE OF WORK: GRADING, PAVING, DRAINAGE AND WIDENING

PERMIT DRAWINGS

CONTRACT: CONTRACT TIP PROJECT: U-3401



VICINITY MAP



PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF ASHEBORO

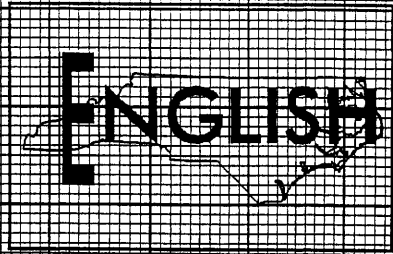
<p>GRAPHIC SCALES</p> <p>50 25 0 50 100 PLANS</p> <p>50 25 0 50 100 PROFILE (HORIZONTAL)</p> <p>10 5 0 10 20 PROFILE (VERTICAL)</p>	<p>DESIGN DATA</p> <p>ADT 2004 = 18,000 ADT 2025 = 32,900 DHV = 10 % D = 55 % T = 10 % * V = 45 MPH</p> <p>* TTST 6% DUAL 4%</p>	<p>PROJECT LENGTH</p> <p>LENGTH ROADWAY TIP PROJECT U-3401 = 0.29 MI TOTAL LENGTH ROADWAY TIP PROJECT U-3401 = 0.29 MI</p>	<p>Prepared in the Office of: DIVISION OF HIGHWAYS 1000 Birch Ridge Dr., Raleigh NC, 27610</p>		<p>HYDRAULICS ENGINEER</p> <p>_____ SIGNATURE: P.E.</p>	<p>DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA</p> <p>_____ STATE DESIGN ENGINEER P.E.</p> <p>DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION</p>
			<p>2002 STANDARD SPECIFICATIONS</p> <p>RIGHT OF WAY DATE: AUGUST 17, 2004</p> <p>LETTING DATE: AUGUST 16, 2005</p>	<p>G. E. BREW, PE PROJECT ENGINEER</p> <p>W. T. BEST PROJECT DESIGN ENGINEER</p>		

I:\MAR-2005_09-44 R:\Hydraulic\PERMIT\U3401_VICINITY_MAP.dgn

5/14/99

09-MAR-2005 14:09
c:\hydr\autics\permt\3401_hyd_permt.pfl.dgn
ashboard

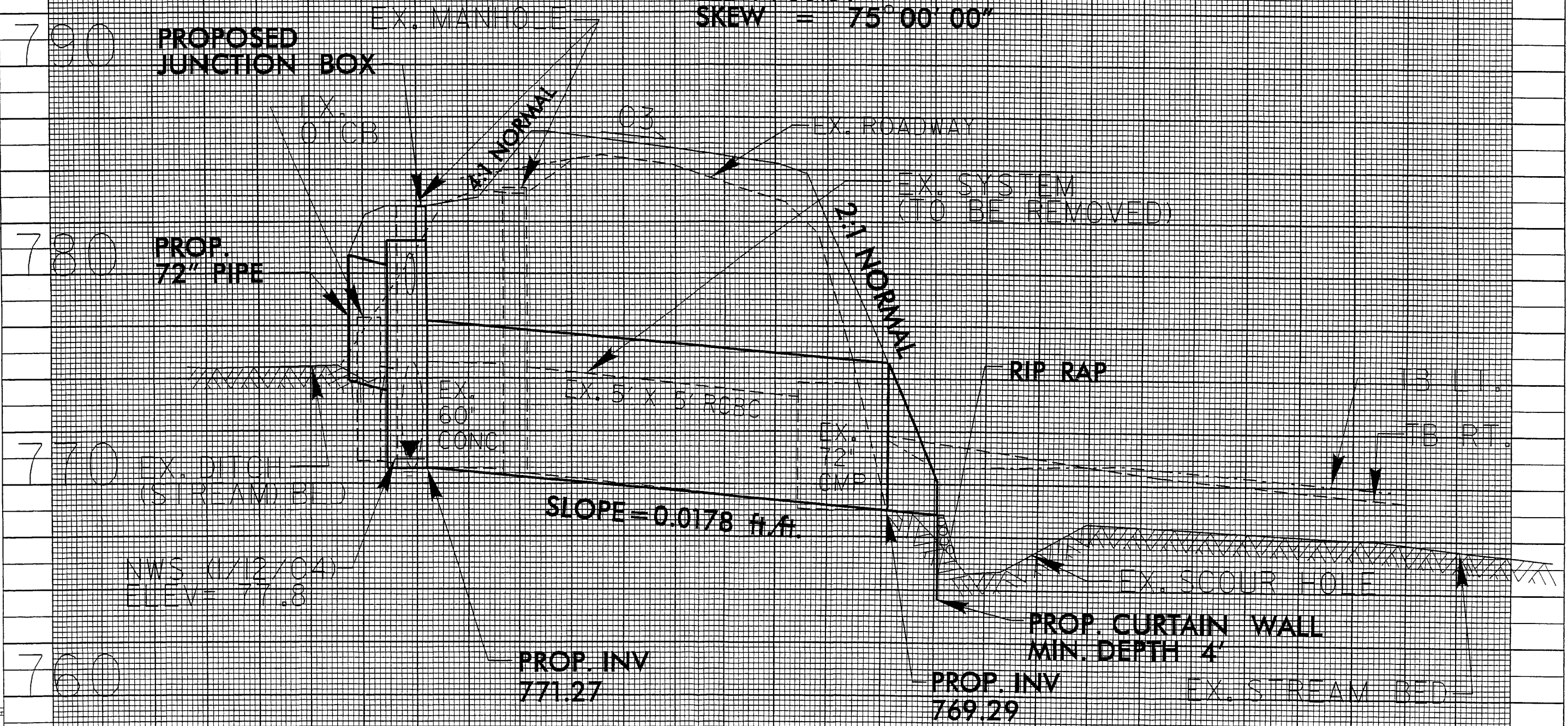
PROJECT REFERENCE NO.	SHEET NO.
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Figure 8 of 10	



25' 0 25'
HORIZONTAL SCALE
VERTICAL SCALE
 1" = 10'

100' LT 50' LT 0 50' RT 100' RT 150' RT

Q STA. 30+24.5 Y-
PROP. 1 @ 7'X7' RCBC
ELEV. 786.51
SKEW = 75° 00' 00"



PROPOSED JUNCTION BOX

PROP. 72" PIPE

NWS (1/12/04)
 ELEV = 77.8

PROP. INV
771.27

PROP. INV
769.29

RIP RAP

PROP. CURTAIN WALL
MIN. DEPTH 4'

EX. STREAM BED

SLOPE = 0.0178 ft/ft.

2:1 NORMAL

EX. SYSTEM (TO BE REMOVED)

EX. SCOUR HOLE

3:1 TB RT.

5/28/99

STA 10+00.00 -Y-
BEGIN GRADE ELEV. 779.84

BMT 3 ELEV. 793.80
N 710.478295 E 1798.5483365
Y = STA 15+82.45 44.5761 FEET
RR SPIKE IN BASE OF TELEPHONE POLE

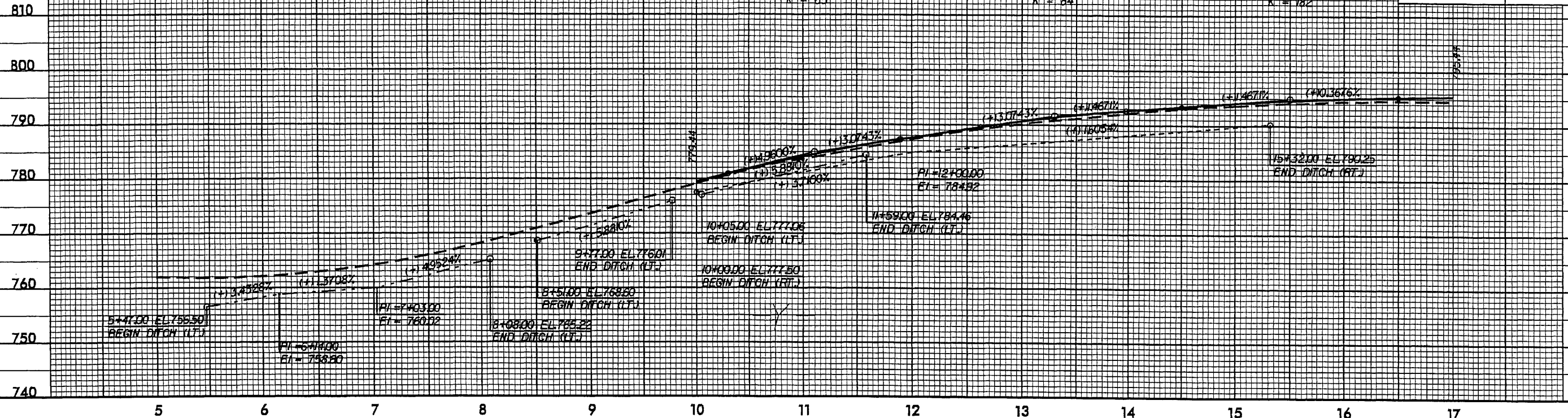
PROJECT REFERENCE NO.	SHEET NO.
U-3401	Figure 9 of 10
ROADWAY DESIGN ENGINEER	ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

PI = 11+00.00
EI = 782.90
VC = 160
K = 85

PI = 13+30.00
EI = 784.66
VC = 185
K = 84

PI = 15+50.00
EI = 784.89
VC = 200
K = 182



STA 22+20.97 -Y- =
STA 18+43.6 -L- (38 RT)
BEGIN GRADE ELEV. 798.63

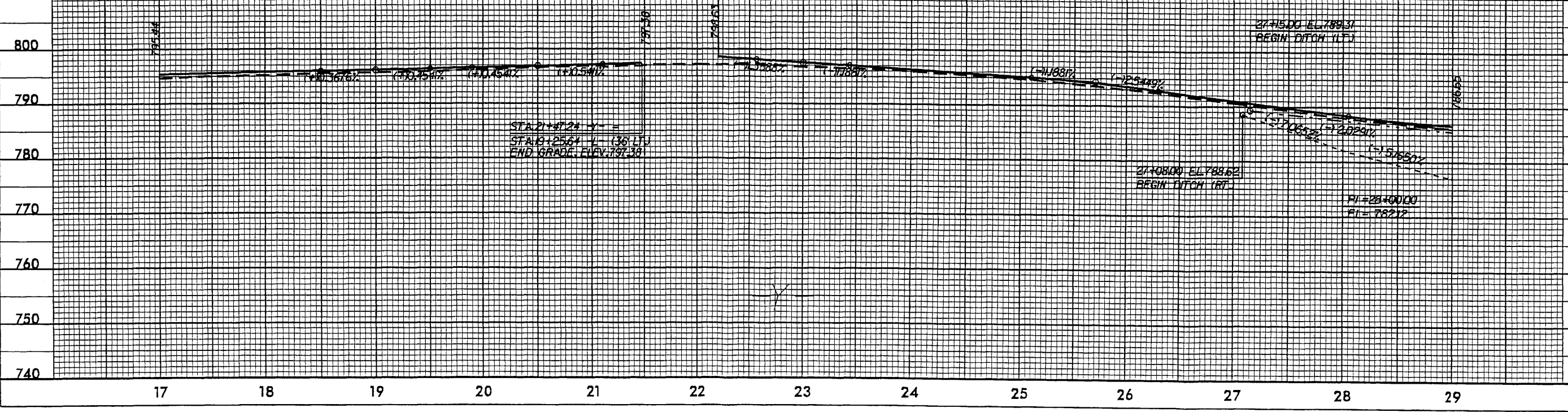
BMT 4 ELEV. 793.80
N 709.832907 E 1785.698503
Y = STA 27+00.54 52.2451 FEET
RR SPIKE IN BASE OF POWER POLE

PI = 19+00.00
EI = 796.07
VC = 100
K = 1156

PI = 20+50.00
EI = 796.86
VC = 120
K = 26476

PI = 23+00.00
EI = 797.56
VC = 87
K = 343

PI = 25+00.00
EI = 794.95
VC = 120
K = 88



09-MAR-2005 12:39
r:\hydr\ajl\p\p\mt\03401_hyd_perm.t.pfl.dgn

